

The Effects of Business Incubator Services on Start-ups Development: A case study of iceaddis

A Thesis Submitted to the School of Graduate Studies of Jimma University in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Business Administration (MBA)

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DECLARATION

I declare that the research report entitled “The Effect of Business Incubator Services on Its Startup Development: A case study of iceaddis” submitted to Research and Postgraduate Studies’ Office of Business and Economics College is original and it has not been submitted previously in part or full to any university.

Date: _____

“CERTIFICATE”

We certify that the Research Report entitled “The Effect of Business Incubator Services on Its Startup Development: A case study of iceaddis” was done by Mr. Adisu Kurabachew for the partial fulfilment of Master’s Degree under our Supervision.

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Abstract

Business Incubation is a process of helping entrepreneurs in developing their business idea into a viable business. Even if the incubation industry began sixty years ago in the USA, it is at the infant stage in Ethiopia. Due to this newness, the availability of previous researches is very limited. Therefore, the main objective of this research paper is to investigate the effects of services of Business Incubator on the Startup's development. A single organization case study research method with multiple embedded subcases was used, and due to the smallness of the population and experts in the field, the sampling method was total population purposive sampling, then to accurately investigate such focused activity the data was analyzed qualitatively. Interview was the primary source for the research data. Application form and business canvas model were used as a secondary data to understand the strength of the startup before joining iceaddis. Selected startups and staff of iceaddis who closely work with the startups were interviewed to gather primary data. In order to generate a holistic answer for the main research question the analysis of the collected data was made in two ways. The first analysis per startup aimed at pointing out which provided service contributed the most. The second analysis per activity investigates which entrepreneurial activity was completed with the direct or indirect support of the incubation center. The analysis result of this research shows that about 80 percent of the entrepreneurial activities were completed by the direct or indirect contribution of the incubator, pointing that the service provided by the incubator are significantly important for the startup's development. The result of the first analysis indicates that business support service counted the most important service of incubation service for the startup's development followed by shared physical space and infrastructure and access to network. The second analysis yielded 21 entrepreneurial activities that are being completed with the help of the incubator. The research concludes that the business incubation center has provided essential services that helps for the startups development. The research also recommends that the business incubator should give more emphasis on creating network resources especially for financing the startups and the government must put emphasis on funding, decrease taxes, improve infrastructure, as well as launch the training program in collaboration with the business incubators.

Key Words: Business Incubator, Startup, Incubatee, Business Incubation, Entrepreneurship

CHAPTER ONE:INTRODUCTION

1.1. Background of the Study

Entrepreneurship is a way of creating value and making profit from certain activities. It is a process and not a static phenomenon UNDP, (2004). It has been an engine for most country's economic development Pompa, (2013). The study of Smith, (2010) confirms that the level of economic growth in a given country has a significant positive relationship with the level of entrepreneurship in that country through fostering innovation.

An entrepreneur is an individual who creates a new business, bearing most of the risks and enjoying most of the rewards Hayes, (2020). Supporting entrepreneurs through different methods will undeniably reduce unemployment, improve the wealth of the nation, and improve non-material welfare (happiness) of the nation Mirza & Rahmani, (2017). The problem is only a few entrepreneurs succeed to grow due to lack of knowledge. That is a problem for everyone who involves in the process. Only a few entrepreneurs succeed means a few jobs will be created and unemployment will increase.

Business incubation is a public and/or private, entrepreneurial, economic and social development process designed to nurture businesses from idea generation to start-up companies and, through a comprehensive business support program, help them establish and accelerate their growth and success infoDev, (2010).

Business incubators create value by combining the entrepreneurial spirit of start-ups with the resources that are typically available to new businesses Li et al., (2020). It is an entity that supports new entrepreneurs and startups to achieve their goals or facility that accommodates a business incubation process infoDev, (2010). The support is delivered mostly through providing physical infrastructures, management advice, financing, and networking UKSPA, (2015).

Startups need infrastructure to develop their idea into a business. Infrastructure such as office space, computers, internet, meeting room, etc. are provided by business incubators. Startups need guidance on how to compete successfully with well-established industry players. To find such

knowledge startups need to find professional advisers, which is most of the time costly. Business Incubators provide industry knowledgeable advisors at a low cost Azriel & Laric, (2008). Startups also need finance or funding to cover their initial operating costs, which is challenging. Here, business incubators play their role by connecting their startups to the potential funder and also customer. Business incubators do this to all their startups by implementing economies of scale. All startups share most of the components. It's very clear that such an incubator is necessary to foster growth and to decrease the failure of new startups UKSPA, (2015).

Through different part of the world, Business Incubation initiatives have shown success. Some countries experiment with a business incubator to foster entrepreneurship Mirza & Rahmani, (2017). In the western countries, one of the well-established methods of supporting entrepreneurship activities comes from Business Incubation centers. The 2013 Indian government white paper report shows that Business Incubators help new and early-stage startups to take a calculated risk and guide them to increase the rate of success and to reduce challenging times towards growth NEN, (2013).

Comparative to other continents Business Incubation is a new phenomenon for Africa. Due to this, most business incubators are established by government institutes and universities. In Ethiopia, there are few business incubation centers established by government (Ministry of Communication and Information Technology and Government-owned Universities), non-government (UNDP) and private centers (Blue Moon, iceaddis and the X-hub) Desalegn, (2016).

For the second populous country in Africa with more than 100 million population where the majority live under poverty, entrepreneurship vitally plays the role in the creation of employment and reduction of poverty. To create a successful entrepreneur, support both from government and Business Incubators are very important. But as most of African countries Business incubation concept in Ethiopia is underdeveloped and little is known about the few privately owned Incubation centers and their effect on the startups they served.

Thus, the aim of this research is to assess the effect of business incubator services that are provided to the startups for the startups development.

1.2. Statement of the Problem

The importance of providing support to startups is long recognized by its stakeholders. The cause for the establishment of for profit business incubators is this, to give support and grow together. The management consultation, low-cost infrastructure, funding, and networking are keys to minimizing failure and maximizing success in startups.

Business Incubators must have knowledgeable advisers who knows about a single startups industry trend, who can guide in developing a business plan, financial and market forecasting. They also must have accessible office space that can accommodate as many startups, internet and/or computers, meeting and brainstorming rooms and the infrastructure which are needed by the startups Azriel & Laric, (2008). Helping in finding finance for the startup is also expected from Incubators. For this purpose, business ideas have to be pitched to the potential investor and must be ready for commercialization. That means there is a lot to be done in advance. Taking a new idea to the public and knowing where to look for help also need networking access and skill, which mostly is not easy for new entrepreneurs especially for introvert by nature. Here, Incubator plays a great role in breaking the ice. Thus, business incubators have to provide these and similar services in order to graduate their startups Goddard, (2008).

In developing countries business incubation help to improve entrepreneurship and is a pivotal wheel of industrialization, national competitiveness and SME development Mutambi (2010), which all are essentials for economic growth, poverty reduction as well as self-sufficiency of the countries. This finding supported by another study which shows that there is a positive correlation between economic development and the number of incubators found in a given country Ogutu & Kihonge (2013). The more a startup or an entrepreneur the country have the richer the country becomes. If that is the case why didn't more developing countries adopt this strategy, will be the question.

M'Chirgui, (2012) studied the performance of business incubators in France covering the period 2000-2009 and reveal that business incubators creates and continue to create innovative entrepreneurial firms. In their wide literature review of AL-Mubarak et al., (2013)

which focused on the identification of the incubators as a tool for economic development, found that business incubators provide support for start-up companies, the graduated companies also tend to have a greater probability of success and graduated companies have a significant positive impact on economic development. Mungai & Njeru, (2015) also studied a single Kenyan business incubator work and found out that physical infrastructure, networking and business management are positively correlated with performance of new business ventures. The study concludes that business incubation services should be provided in variety to improve business performance.

Well, very little known about the effects of the business incubator's supports in Ethiopia. It is essential to analyze the work of one of the Business Incubators to see whether they achieve their envisioned goal. In summary, there is a need for a better understanding of the effect of business incubators support in Ethiopia. Thus, this research aims to answer the research questions of what does the services of a Business Incubator looks like and what does it contribute for the startup's development?

1.3. Objectives of the Study

The main objective of this study is to investigate the effect of the services provided by the Business Incubator in startups development in Addis Ababa.

The specific objectives are:

- To examine the effect of shared office spaces in iceaddis
- To investigate the effect of the business support service
- To the examine effect of access to network and finance in iceaddis

1.4. Significance of the Study

It's important to understand the services of business incubators. For this purpose, there are plenty of previous researches in the cases of Business Incubation in different countries. But, there is little known about the impact of these centers in Ethiopia. Thus, the main aim of this research is to build

literature that will stimulate further research on Business Incubator Services and their effect on startup development in Ethiopia.

Due to the fact that the majority of Ethiopian community lives in rural areas where infrastructure is less developed, the government will play the biggest role in providing incubation services to those. Even if the case in this study is a privately-owned incubation center the lesson that will be learned from the processes they implement can be used as a reference for the government-owned Incubation Centers and regulators.

Due to the newness of the business incubator concept in Ethiopia, Incubators, who aim to produce independent, successful and financially viable firms, are not widely visible even to their customers or startups. This lack of information to the potential startup, not knowing that there is help outside, kept many ideas in the dark without commercializing them. Therefore, this research will be informational to those startups, who will take time to read it, by promoting that help is out there waiting in incubation centers if they have great ideas and no support.

The knowledge from this research paper is also helpful in understanding how the incubation centers are operating, and address the gap in its effectiveness and also efficiency. This will be helpful for the case Incubation Center to develop better ways of the incubation process, which in return produce more graduated and independent firms.

Knowing the effect of the Business Incubators services in reducing the startup's failure rate, will encourage regulatory bodies to make favorable rules and incentives to the incubation centers. This will attract more opening of new Business Incubation centers. Thus, this research will be helpful for the regulators by providing insights on how the private incubation industry operates.

1.5. Scope of the study

The study is focused on the service of the privately-owned business incubator which is established for-profit purpose and operating in Addis Ababa. There are a few incubation centers which are not for profit operating in and out of Addis Ababa. Due to cost and time limitations they are not the

focus of this study. Thus, the scope of this study is only limited to a single, privately owned, for profit Incubation Center and the qualitative research method was implemented.

1.6. Definition of Keywords

“A startup is a company that is in the first stage of its operations. These companies may or may not initially be bankrolled by their entrepreneurial founders as they attempt to capitalize on developing a product or service for which they believe there is a demand.” (Grant & Kenton, 2019)

“Business incubator is a physical space or facility that accommodates a business incubation process” (infoDev, 2010)

“Incubatee is the client part of the incubation process (resident or non-resident) and may participate in the process on or off-site” (infoDev, 2010)

“Business Incubation is a public and/or private, entrepreneurial, economic and social development process designed to nurture businesses from idea generation to start-up companies and, through a comprehensive business support program, help them establish and accelerate their growth and success.” (infoDev, 2010)

1.7. Organization of the Paper

This paper will consist of five chapters. Here is an overview of the content of each chapter:

- Chapter One: this chapter will introduce the problem, give an overview of the study and describe the needs of study of incubators. This chapter will also discuss the scope of the study, the significance of the study and its objectives.
- Chapter Two: this chapter will cover the literature review which is the previous related works that had been done before. Moreover, this chapter will represent relevant information for understanding the study more

- Chapter Three: this chapter will explain the details of the selected methodology, sampling data collection and analyzing that is going to be used in the research. It will also discuss the implication of the findings.
- Chapter Four: will be the discussion of data analysis and results.
- Chapter Five: this chapter discusses the conclusion, recommendations, and future works to improve this study.

CHAPTER TWO: LITERATURE REVIEW

2.1. Theoretical Literature

2.2.1. What is a Business Incubator?

The term incubator is a name for a device where a premature newborn is kept warm and safe until they get strong. Business incubators are also a comfortable place where new startups are kept safe until they walk by themselves Shlomo et al., (2008). According to Ayatse et al., (2017) a Business Incubator is a unique institutional arrangement primarily designed to develop an entrepreneurial culture in the community.

Most definitions of incubators shared the same essence of ideas which are shared by both practitioners and academician. The definition by National Business Incubation Center which is found on infoDev, (2010) Business Incubation Basics Training Manual says “*Business incubators nurture the development of entrepreneurial companies, helping them survive and grow during the start-up period when they are most vulnerable. Their programs provide client companies with business support services and resources tailored to young firms. The most common goals of incubation programs are creating jobs in a community, enhancing a community’s entrepreneurial climate, retaining businesses in a community, building or accelerating growth in the local industry and diversifying local economies.*” infoDev, (2010). Similarly, Hackett & Dilt, (2004) define business incubator as a shared space facility that seeks to provide its incubate (i.e. “portfolio-” or “client-” or “startup –companies”) with a strategic value-adding intervention system (i.e. business incubation) of monitoring and business assistance. This system controls and links resources with the objective of facilitating the successful new venture development of incubates while simultaneously containing the cost of their potential failure.

Researches indicate that there are different types of business incubators. Most of them use institutional models. According to Munkongsujarit, (2016) the notable examples include the identification of different sources of primary financial sponsorship for business incubators, namely, publicly-sponsored, nonprofit sponsored, university-sponsored and privately-sponsored.

The other proposes four types of incubators based on a value-adding continuum from the least value-adding to the most value-adding, i.e. for-profit property development incubators, non-profit development corporation incubators, academic incubators, and for-profit seed capital incubators Munkongsujarit, (2016). Grimaldi & Grandi, (2005) map business incubators into four categories: business innovation centers, university business incubators, independent private incubators, and corporate private incubators; the former two categories mainly have non-profit purposes while the latter two categories usually have for-profit purposes.

The selection decision for some suitable startups is made by the Incubators themselves from the application poll. Then the selected startups pass through a development phase, where they are provided with business support and mediation. This support includes various business development activities, such as coaching and entrepreneurial training, as well as being provided access to various services concerning general business matters, such as office space, accounting, legal advice, advertising, and financial assistance. The incubator acts as an intermediary between incubates and the external environment that includes external networks and institutions. That is, they try to develop robust business and social networks to bring value to the startups in the form of intellectual and material resources. The startups are required to exit the business incubator at some point in time Nair & Tomas, (2018).

The first Business incubator founded in Batavia, NY, the USA in 1959 by a real estate developer who acquired an 850,000 ft² of the building after large corporations exited in the area. Since no one person or company afford to rent it all, the developer then started to rent the building by dividing in a partition and starts giving business advice to its startups Hackett & Dilts, (2004). In 2011 there were over 1400 business incubators in the USA alone Zehner, (2014).

According to Mutambi, (2010) Business Incubation in Africa is on the beginning stage comparative to the rest of the globe. In this research paper by Mutambi, (2010) mentioned in Africa, according to the study carried by Irwin et al, (2009), 21 countries well spread from around the continent have attempted to establish business incubators of which many are providing business development services, sometimes described as virtual incubation, rather than providing physical space. The countries with their percentages include; Angola (3%), Botswana (2%),

Djibouti (2%), Ethiopia (6%), Ghana (5%), Kenya (6%), Madagascar (2%), Mauritius (2%), Morocco (2%), Mozambique (3%), Namibia (2%), Nigeria (13%), Rwanda (3%), Senegal (2%), South Africa (27%), Sudan (5%), Swaziland (2%), Tanzania (5%), Tunisia (2%), Zambia (2%) and Uganda (6%).

In Ethiopia, according to Desalegn, (2016) Business Incubators are new concepts, mostly found within Government Ministry, Regional Governments and Universities such as the Ministry of Communications and Information Technology and Amhara, Tigray, Oromia, SNNPR and Addis Ababa, and Addis Ababa University, Hawassa University and Bahir Dar University, respectively. There are also a few privately-owned Incubation centers. Blue Moon, X-Hub and iceaddis are well-known in the industry.

2.2.2. Services of Business Incubator

The provided services of business incubator vary in range. In most cases though, the following are the most commonly provided essential services for the startups.

Physical Infrastructure Service

Incubators provide well-furnished offices, internet, shared meeting rooms, reception, and business centers Mungai & Njeru, (2015). According to Hackett & Dilts, (2004) incubators optimize the common space to foster informal networking between startups which leads to skill transfer and knowledge share, and provides incubates with a strategy and business support which will add value. Sharing the space reduce overhead cost and create economies of scale and reduce the burden of managing every day administrative work to the Incubatee Mungai & Njeru, (2015).

Networking

Business Incubators not only provide shared space, office facility or physical infrastructure but also the network of individuals, organization including the incubator manager and staff, incubator advisory board, Incubatee companies and employees, local universities and university community

members, industry contacts, and professional services providers such as lawyers, accountants, consultants, marketing specialists, venture capitalists, angel investors, and volunteers Hackett & Dilts, (2004), Ratinho, (2011). The extraneous factor that leads to early-stage failure of business ideas is the lack of finance due to the unproven business model or lack of connection with investors. Mungai & Njeru, (2015) discuss that Business Incubators help incubates by providing small scale seed financing and by building contacts and networks with angel investors, partners, and financial sectors. They will also provide advice on how to ask for investments.

Mentoring

Business Incubators provide mentorship service regarding business planning, patenting, provide dynamic proactive feedback and encouraging Incubatee to introduce control systems during the early stages of Incubatee development Hackett & Dilts, (2004). Management advice provided to specific problems by incubator experts help reduce starting costs and risk of failure of the Incubatee Mungai & Njeru, (2015).

2.2.3. Value creation by Incubator

This part discusses the values created by the incubators for the Incubatee and why it's important for their development. The World Bank Report World-Bank, (2014) views Business Incubation as a valuable tool for SME development, which is the main solution for unemployment reduction.

The basic function of a Business incubator is value creation for the startups and their stakeholders. There are three levels of analysis for value creation. When the individual is the source of value creation, value arises from creativity, ability, motivation, intelligence, and interaction with the environment. When the organization is the source of value creation, issues regarding innovation, knowledge creation, invention, and management gain prominence. At the societal level, macroeconomic conditions in the external environment, government policies, laws and regulations influence value creation. However, new venture creation is a gestalt of variables from four dimensions: the individual(s) involved in starting the venture; the organization or the kind of venture being started; the environment in which the new venture is immersed; and the process of

new venture creation. The value should, therefore, be arising from the interaction of all of these multi-dimensional aspects of new venture creation. Value creation has both content and process components to it. The content side refers to 'questions regarding what is value/valuable, who values what, and where value resides' while the process side refers to 'how value is generated, and the role, if any, of management in this process' Nair & Tomas, (2018).

In their research Hackett & Dilts, (2004) show that Business incubators are the means to the end by providing a logical framework of the Business incubation process. The incubator is a manufacturer of new firms. A dominant design for the incubator facilities has been articulated by the incubator configuration stream of research Hackett and Dilts, (2004). The focus of competition in the incubator-incubation industry is the production process (i.e. the incubation process) occurring within the incubator.

According to Hackett & Dilts, (2004) incubators with an entrepreneurial environment, economies of scale and network access are more likely to have successful Incubatee. The question then will be how the above components work together towards startup's growth.

Table 1 Business incubation logic model

Antecedents	Inputs	Activities	Outputs	Initial Outcomes	Intermediate Outcomes	Long-Term Outcomes
Pre-venture Initiation Activities	Entrepreneurs	Incubation: New venture Development + Selection + Monitoring & Business Assistance + Resource Munificence		Incubatee is surviving & growing profitably.		Increased Organization Population Churn
Community Support for Entrepreneurship	Enabling Technologies / Innovations (including Incubator)		Incubated Companies	Incubatee is surviving and growing but not yet profitable.	Viable/Becoming Viable Companies	
Exogenous Conduct of Basic Research	Critical Technologies / Innovations			Incubatee is surviving but not growing and not profitable/marginally profitable.	Dead/Dying Companies	
Events Increasing Individual Entrepreneurial Orientation	Strategic Technologies / Innovations			Incubatee operations terminated while still in the incubator; losses minimized.		
Incubator Feasibility Study				Incubatee operations terminated while still in the incubator; large losses.		

Source: Adopted from Hackett & Dilts (2004)

2.2. Empirical Literature

The quantitative study of Mungai & Njeru, (2015) aimed to examine the effects of business incubation services on performance of business venture creation found that physical infrastructure, networking, business management are positively correlated with performance of business venture and conclude that business incubation services should be provided in variety to improve business performance.

Carvalho & Galina, (2015) takes a comparative study about the features, services and network offered by the business incubator for the start-up development in two countries qualitatively and finds out that there is no significant difference with process but mainly in the characteristics of the Business Incubator (technological or non-technological) concerning the type of innovation developed by tenant's profile selection criteria and entrepreneurship.

The study of Pettersen, (2016) aimed at weather the incubator provides critical networking resources for the start-ups. The research conducted through qualitative interviews and analyzed by comparing the networking resources provided by the incubator and the start-ups own effort. The finding was that network resources acquired by the start-ups own efforts were most critical for overall development of the start-up. The research concludes that even if the incubators provide internal and external networking resources, but they are not tailored to individual start-ups need. On the other hand, Njau et al., (2019) aimed to assess the effects of access to network support provided by business incubator on technology based new venture creation quantitatively and found out that access to networks support had a positive significant effect on technology based new venture creation.

In order to provide an overview of an existing knowledge on the role and effectiveness of business incubation in supporting the development of new small start-ups businesses Lose et al., (2016) conducted a study by reviewing peer reviewed qualitative and quantitative studies and categorizing in to themes of the role and contribution of incubators, success factors for business incubation, obstacles, and the relationship between incubators and entrepreneurship. Finally, the study suggest that future research should be conducted on creation of model and self-sustainability of BI.

A qualitative case study research by Allahar & Brathwaite, (2016) examines the experience of business incubation as an innovation developmental instrument finds that there is growing acceptance of business incubation as a potential tool for promoting business development and innovation although most incubators are at the early stage. The data was collected through face to face semi structured interviews.

The study by Rizzi et al., (2017) seeks to qualitatively analyze the importance of the incubation process for the viability and development of micro and small enterprises based on the perspective of incubated and graduated companies, in a technological incubator and found out that the

incubator was of great importance in the formation and implementation of the companies, providing greater viability and continuation for these companies on the market.

Fararishah et al., (2018) conducted a study on the components that are critical to the business incubation process which are monitoring and business assistance intensity and its impact on the performance of incubates. They examined quantitatively through online questioner and concluded that the start-ups have better chance of graduation and performance when monitoring and business assistance are provided.

To define the components in every stage required in business incubator that's consist of pre-incubation, mid-incubation and post-incubation Amelia et al., (2018) study qualitatively and concludes that the core process in business incubator is not similar towards each other, even though there are minimum requirement that must be fulfilled for a decent quality business incubator. A good business incubator for start-up digital is an incubator that who provide preparation procedures (before-during-after) to accelerate a start- up business, design incubation model and finally create value related to regulation, market dynamic, macro-environment and related factors.

Alpenidze et al., (2019) conducted a study aiming to determine the factors affecting success of business incubators and identify the impact level of those factors through quantitative analysis and fund out that business incubators are if vital during the start-up and growth of business where the main factors such as availability and access to external financial resources, strong social and business networks, and internal strength including resources and capabilities positively affect and have a strong relationship with the success of business incubators.

Empirical study of Ahmed et al., (2020) which aims to develop a conceptual model that examine the role of BIs in entrepreneurship development, especially on the impact of services offered by BIs, namely networking services, capital support and training programs found that networking services have a positive impact on entrepreneurship. Whereas, capital support has a positive impact on entrepreneurship development. Meanwhile, training programs has a positive impact on entrepreneurship development. Based on our quantitative findings, we conclude that our model is effective, in the sense that it can fully explain the role of the incubators in facilitating entrepreneurship. Hence, these services should be provided to a greater extent, and the level of

other services should be improved to further help entrepreneurs in developed and developing countries to survive and develop entrepreneurship.

Li et al., (2020) qualitatively examine the role of business incubators in providing greater services (networking services, capital support, and training programs) in entrepreneurship development and found that that the business incubators are playing an effective mediating role in providing networking services, capital support, and training programs to individuals and entrepreneurs, which are significant for entrepreneurship development, whereas business start-up positively mediates the relationship between networking services, capital support, training programs, and entrepreneurship development.

Overall the reviewed pieces of literature emphasized the importance of business incubators to foster the economic growth of the nation by helping entrepreneurs or and startups achieve the goals they set and sustain it. The impacts of successful startups also emphasized as wealth generation, employment creation and innovations.

The main drawback of this review was there is no literature to be found on the case of Ethiopian incubator services and their impact of the startup's success. Due to this need this research will try to fill this gap and will only be limited to identify the services provided by business incubators and investigate the effects they produce.

2.3. Conceptual framework

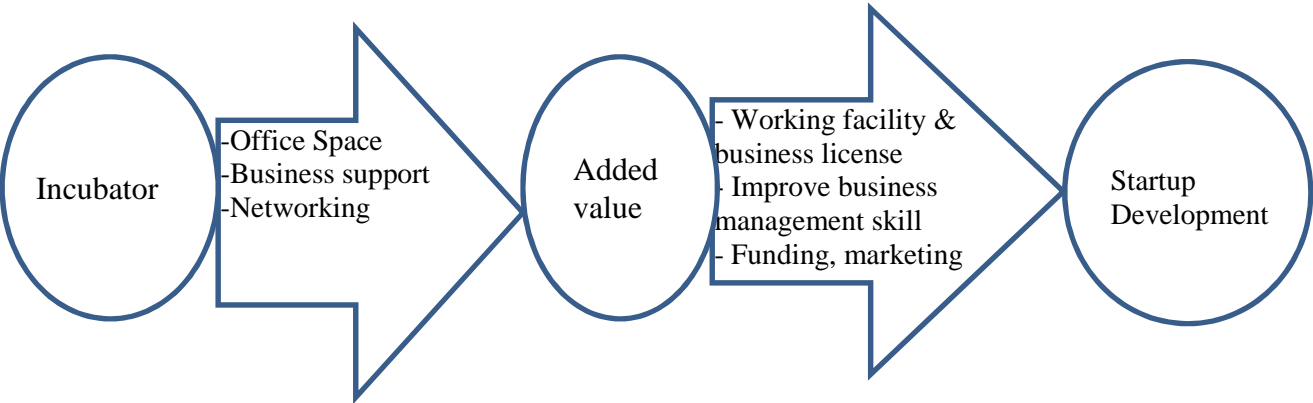


Figure 1: The Conceptual framework

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1. Description of the Study Area

Iceaddis is the first privately owned for-profit innovation hub & tech startup incubator which is established in May 2011 in Addis Ababa, Ethiopia. According to the company's official website, it is partly open community workspace, vector for investors and incubator for the young energetic tech- entrepreneurs and creatives. Its collaborators share ideas, pool resources, use ICTs effectively, make effective use of product development projects, access business, and life skill training, and transform ideas into viable businesses iceaddis, (2019).

Shared Space and Resource: iceaddis have beautiful office space which has a great view. It provides a collaborative workspace with a flexible arrangement for all types of work needed from one person setting to team gathering. The workspace is equipped with all infrastructures such as a printer, internet, and phone lines, conference areas and everything an entrepreneur needs to work. Secretarial support, copying services, and computer network support are all part of the Iceaddis service package. This is done by the project manager and the office secretary. The other permanent staff of the incubator is also providing advice and guidance to startups for daily issues.

Business Support Service: this service delivered by business consultant and advisor that Iceaddis outsourced. Many seminars and training are hosted by Iceaddis. Boot camps are organized in collaboration with stakeholders. Recently, there was a pitch competition held where the awards up to One Million ETB was transferred to the winners.

Access to Network: many networking events held at Iceaddis space. The startups got the opportunity to meet the most influential business founders in the world with Iceaddis help and space. The most notable ones are Alibaba's founder, Jack Ma and Twitter's founder Jack Drossy who visited Iceaddis and meet the startups. There are an individual venture capitalist and interested parties who meet the startup founders at Iceaddis workspace.

3.2. Research Design

To assess the main research question, a literature review is conducted in the previous chapter, forming the basis for the qualitative research approach that is used to conduct the empirical part.

In order to accurately investigate such focused activity, a Case study research method was used. To examine the data more extensively a qualitative and a single case study research approach and an incubator level unit of analysis was used from the list of analysis Hackett & Dilts, (2004). The design of research question, in this case, is arranged with the nature of research questions that should be answered with case study research methods, in line with Yin R, (2011) exploratory questions are appropriate in these cases, hence mainly the research questions answer ‘the what’ and ‘the way’ of activity completion.

In accordance with Yin R. (2011), the next step in case study methodology is picking out the more effective case study design from the four types of case study designs for the research setting. Whether the case study consists of a single case or multiple cases (single- or multiple-case study) and the choice between a holistic case and having embedded subcases, result in a two-by-two matrix with four different case study designs. In this case, research is done in a business incubator framework, so as to find how it contributes to the development of its startups. So, the incubator forms the study area and acts as a case study. The incubated firms are the units of analysis, examining those firms brings to an answer to the main research question. As a result, these businesses function as embedded subcases, resulting in a single case design with multiple embedded subcases.

3.3. Source of Data and Data Collection Technique

This thesis findings were drawn from qualitative using both primary data collection method semi-structured interviews with startups founders and incubator individuals and secondary data from application form and business canvas models which are filed by the startups up on joining the incubator. When startups apply for iceaddis, they have to hand in a business canvas model and an application form in which they have to describe their business. The documents, in this case, are

the business canvas models and application forms of the startups that participate in the research. These are analyzed so as to define the number of entrepreneurial activities that had been completed before joining iceaddis.

Interviews give a large number of an immediate and straightforward method of gathering detailed and rich data regarding a particular phenomenon Barrett & Twycross, (2018). The interview questions are from the data set of Reynolds & Curtin, (2008) Panel Study of Entrepreneurship Dynamics (PSED I and PSED II), longitudinal research on startups development activities.

Semi-structured interviews with all the startups and key individuals that fit the requirements for this study took place, serving as the main part of data collection. There are two main objectives of the interviews. Initially, the development of the selected startups was figured out. The phase of a startup before becoming a member of iceaddis can be identified by looking at the number of gestation tasks that had been completed when entering. The phase after at least one year of incubation is identified by identifying how many of these tasks have been completed. After having determined the number of entrepreneurial activities before admittance and after one year, the improvement can be assessed from an entrepreneurial activity perspective. Furthermore, the way in which the activities have been completed in the one year at iceaddis is the second point of interest, whether iceaddis had an effect or not on the finalization of the activity and which service led to this. Here is where the in-depth part of the interview comes into effect. Aside from the interviews with the chosen startups, key individuals were also interviewed. Since the main purpose of this data set is to compare it with the data produced from the interviews with the entrepreneurs, the same questions were used once again but developed slightly differently so as to suit the requirements of the research. A face to face data collection through an interview with both the entrepreneurs and the key individual took place between 15th and 28th of January 2020.

3.4. Target Population & Sampling Methods

Defining the research sample from the targeted population is the next measure. From the total population of six startups, five and three key individuals were interviewed. Due to this the study was consisting of two groups: the startups of the incubator and individuals that were directly

related to the incubator. Regarding the first group, every single startup was an entrepreneur responsible for a new venture, and the data obtained from them form the foundation for the end results of this research. The data obtained from the second group, the individuals related to the incubator, was used to verify the data derived from the startups. Consequently, for the sampling method non-probability, total population purposive sampling method was used.

The startups discussed in this study can be described as nascent entrepreneurs. The name ‘nascent entrepreneur’ has been used in many entrepreneurship studies and many different ways have been used to separate them from other entrepreneurs Reynolds & Curtin, (2008). According to the PSED II of Reynolds & Curtin, (2008), an active nascent entrepreneur was identified as a person who (a) regarded themselves in the firm creation process; (b) had been engaged in some behavior to create a new firm — such as having looked for a bank loan, prepared a business plan, looked for a business location, or taken other similar actions; (c) expected to own part of the new venture; and (d) the new venture had not yet become an operating business. Due to the significant scientific importance of the PSED database and the fact that the PSED studies are considered to have the highest number of participating nascent entrepreneurs, these criteria are also used in this study.

The above-stated criteria are combined with more distinct criteria that apply to the research sample of iceaddis, completing the criteria used for this study. The program offered by iceaddis to the startups is expected to last one year. As soon as the one year, the startups will have had the chance to acquire enough help and advice and knowledge in order to make a considerable improvement and leave the program, since the program is set up in such away. After one year, the startups can still make use of the services at a discounted rate. As a result, only nascent entrepreneurs who have been in the program for at least 12 months and have been given the chance to fully use the provided services qualify for this study. To sum up, nascent entrepreneurs that meet the requirements for this study are the ones that:

1. consider themselves in the firm creation process
2. are engaged in some behavior to implement a new firm
3. expect to own part of the new venture
4. the new venture is not yet an operating business

5. have been a part of the incubation program of iceaddis for at least 12 months

Key individuals, which are directly related to this incubator are also interviewed. In the following chapters, they will be referred to as 'key individuals', due to their critical position in the incubator. The objective of the use of this supplementary data is to cross-check the data derived from these individuals, with the answers of the entrepreneurs.

Iceaddis had 25 startups. from which 24 percent are currently in the program iceaddis, (2019). The background of these startups varies from agro-food to app-building. Due to the unavailability of the startup and the adequacy, five from six startups and three from four key individuals in total eight interviews, were conducted for this study. The researcher selects all active startups who were with the incubator for 12 months and three key individuals who are actively work with the startups purposively.

3.5. Method of Data Analysis & Presentation

Specifying the level of analysis employed helps to limit the scope of an investigation by focusing the research efforts. Hackett & Dilts, (2004) list all possible levels of analysis in incubator incubation research with the corresponding generic management research label given in parentheses as a guide for future research efforts: Entrepreneur (individual) level, Incubator manager (individual) level, Incubatee group/firm) level, Incubator (firm) level, Community (local) level, and Incubation industry (industry) level.

In this study, research was done on an incubator level and the startups of this incubator were used to examine the impact of the services provided by this incubator on their development. This implies that the incubatee firms form the units of analysis for this research. To create tables and percentages MS Excel is used.

CHAPTER FOUR: DATA ANALYSIS AND RESULT

Following the completion of data gathering, the results were reviewed in two different ways; (i) per startup (number of activities completed and how) and (ii) per activity (number of startups that completed an activity and how), in order to fully grasp the contribution of an incubator in the entrepreneurial processes. In the second (per activity) analysis, the data from the interviews with the key individuals were used, so as to find potential overlap or significant differences between how a startup and how an individual standing for iceaddis believe that the incubation program contributes. Two different ‘perspectives’ were generated, which were analyzed and compared: the ‘Entrepreneur’s perspective’ and the ‘Incubator’s perspective’.

For the examination, a total of five entrepreneurs representing five different startups and three individuals that have a key position in iceaddis, who are directly involved in a day to day practice of the entrepreneurial activity, were interviewed. The reason for this investigation was to inspect the offered type of assistance of entrepreneurial activities impact for the improvement of a startup along with the enterprising procedure. The aftereffects of the experimental piece of this investigation are displayed below.

4.1. The effects of Office Space, Support, and Networking per Startup

As mentioned earlier this is the first way of examining the data. During the interviews, the selected entrepreneurs were asked about their improvement after one year of incubation by addressing whether they had completed the entrepreneurial tasks discussed earlier. If that was the case, whether and how iceaddis contributed considerably to the completion of each task was the next point of interest. After every interview, a transcription was made. If answers could be linked to components of the three identified offered services, therefore the conclusion was drawn that iceaddis contributed to the completion of that activity.

The response to the questions was coded and labeled after every transcription was ready. The coding was as an activity completed:

Before joining iceaddis – X

After one year of incubation - Y

- Because of Shared Space and Resources of iceaddis - R
- Because of Business Support Services of iceaddis - S
- Because of Access to Networks of iceaddis - N
- Without the support of iceaddis - D

The coding of the transcription shows the development of each startup before joining iceaddis (X) and after joining iceaddis (Y) by counting the number of gestation activities of PSED that were completed in both time frames. The other thing is the way the incubator support in completing that gestation activities are clearly shown after coding each service contribution of the incubator.

In the initial segmentation of the outcome area, the primary objective was to discover which of the three principal services of iceaddis had the most noteworthy effect on the development of the selected startups. In the table underneath, a review of the information with the entrepreneurs can be found. Before that below is a clarification of the various variables that speak to every column of this table.

- Number of activities completed before joining iceaddis - X
- Total number of activities completed after one year in iceaddis – Y
- Activities completed in one year of incubation (Y-X)
 - Completed due to the ‘Shared Space and Resources’ of iceaddis - R
 - Completed due to the ‘Business Support Services’ of iceaddis - S
 - Completed due to the ‘Access to Networks’ of iceaddis - N
 - Completed without the contribution of iceaddis - D

$R+S+N$ = the total number of activities completed with the contribution of iceaddis

% = Average percentage of the total number of activities completed with the contribution of iceaddis, in relation to the total number of activities completed after one year in iceaddis (X) (Y), per startup. $(R+S+N)$,

Table 2 Overview of data from interviews with entrepreneurs

Startup Name	Completed before joining Iceaddis (X)	Total completed activity after incubation (Y)	Completed in one year of incubation Y-X	Shared space & resources (R)	Business support services(S)	Access to Network (N)	Not Iceaddis Contribution(D)	R+S+N	% of activities completed through R, S or N
A	1	24	23	7	13	3	1	23	100%
B	0	29	29	6	15	8	0	29	100%
C	2	18	16	6	7	0	5	13	81%
D	2	22	20	6	4	0	12	10	50%
E	5	26	21	6	11	2	7	19	90%
Total	10	119	109	31	50	13	25	94	
Percentage relative to R+S+N				33%	53%	14%			
Average Startups A to E									84%

Overall, the above table shows that on average iceaddis adds to the entrepreneurial development of its startups, since the normal level of the aggregate sum of activities completed with commitment of iceaddis (R+S+N), aggregate sum of activities finished following one year in iceaddis (Y-X), per startup, is around 84 percent.

The general commitment of the incubator was likewise reflected in the transcription of the entrepreneurs from the interview. The following statement summarizes, not explicitly about how a particular help potentially adds to the accomplishment of a particular action, what most of the research sample argued about the overall contribution of iceaddis.

“First of all, I learn to use WordPress (a free website builder) in iceaddis to start my first blog page. I also learn graphic design skills, through workshops and training in iceaddis. That decrease my initial startup cost. I had a blog called freedom bloggers. When we develop the app, we use the

help of other startups from iceaddis and we also provide our service to them” Startup B

“Iceaddis provide me the infrastructure and expertise I need. Networking here helps me to learn about the business environment since I am a computer engineer. One startup connection can be a connection for the other startup. Every founder in iceaddis has different skills. We fill each other’s gaps. That’s because we are together and help each other.” Startup C

However, the primary objective of this study was to investigate how the provided services can influence the development of nascent entrepreneurs in the startup stage. When looking at table 2, we observe that practically in a large portion of the case, the business support services were responsible for the fulfillment of entrepreneurial activity or had the most elevated effect when contrasted with the other two provided services. This calls attention to that the business support service is essentially responsible for the development of the entrepreneurs after they have been chosen for the incubation program. The interview transcript shows some distinct ways were discovered where these services figure out how to contribute, directly or indirectly, in finishing some activities for entrepreneurs and assist them with reaching a milestone.

Besides that, about 15 percent of the activities were completed due to the access to several networks of Iceaddis, both internal and external, or even both in some cases.

“Because we are part of the Iceaddis incubation program we get discounts on software products from Microsoft. Iceaddis network helped us to find a market for our main and side products as well as help (which are developers). By the collaboration created within the Iceaddis community, we sell our products to each other. The collaboration was the best thing that is happening now”.
Startup A

“Pitch competition between startup is going on worldwide. When the competition comes to Ethiopia most of the time it’s going to be in iceaddis. That helps us to participate and to be featured on different platforms. For example, Irish tech news featured us as the top five problem solving local startups. Investors and researchers also visit iceaddis and the word of mouth and one to one help us. Recently, when the tweeter founder comes to Addis he visits iceaddis and tweets the place.

Because of that the affiliation increase”. Startup B

The highest percentage (53 percent) of entrepreneurial gestation activity completion reflected here is due to the highest degree of the business support service that the incubator provides for entrepreneurial development.

“I had no idea about the business plan before I came to iceaddis. The business canvas model gives me the knowledge I lack in this regard.” Startup C

“Iceaddis provide workshops that we have participated in marketing (social media marketing graphics design). This was a very helpful skill to sell our products which we don’t have before us we are more to coding. In some training, the startups got a very business incubator g discount on the training that is provided” Startup A

“There was a training that was very helpful for our business that I take. Some of them were about marketing and business plan and some were more motivational with guest speakers” Startup D

“Yes, I take important workshops from iceaddis business consultants, about finance, management, marketing and business plan” Startup E

The Shared Space, Resources and infrastructure (R) that are provided by the business incubator, represent an immediate or indirect commitment of about one-third of the completion of the gestation activities by the nascent entrepreneurs. The following statement catches how this provided service contributes to development.

“Our first problem was working space which is solved by Iceaddis. Since our products were mainly internet-based, the other major need, equal to the working space, was the internet which was also provided by Iceaddis, great help” Startup A

“Even if we are here for more than a year we still use iceaddis facility but currently we are thinking of having our own studio. Even if staying in iceaddis is very comfortable they are helping

us to move out in order for us to grow and leave the space for the coming startups.” Startup B

“Before, when I think about making an appointment with customers my first problem was the Office space and affordable internet. I’ve got that here” Startup C

When comparing the three services provided by the business incubator, the Business Support Services ‘B’ account for more than half of the entrepreneurial gestation activities completed (53 percent,) followed by the Shared Space and Resources ‘R’ (33 percent), and the Access to the incubator Networks ‘N’ (14 percent).

Business Support Service found to be the main contributor for the startups development which is in difference with the study of Ratinho, et al, (2009) who found out that the startups do not experience many problems and when they do business support is not necessarily sought and business support is not preferentially sought within incubator environment. When this happens, support provided by the BI does not contribute to problem solving. Breivik-Meyer et.al, (2020) also suggest the network support was the major service of the incubator followed by business support and access to resources.

4.2. The effects of Office Space, Support, and Networking per Activity

This method of data analysis emphasis on the investigation of the gestation activities completion method to find out which provided service of the incubator contributes the most. With that in mind, the three key individuals of iceaddis were approached to give their knowledge on how iceaddis can add to this gestation activities. After coding the gathered data, the identification of the important factor for the completion of each activity becomes clear. Based on their experience of working with iceaddis, the answers of the key individuals who have everyday direct contact with the startups were coded and labeled as iceaddis can or has contributed in finalizing this activity with the help of:

- Shared Space and Resources - R
- Business Support Services – S
- Access to Networks - N

In order to acquire strong results for this research, investigating the two different perspectives on how the incubator contribute to the development of the startups by conducting two different interviews with startups and key individuals by focusing on similar gestation activities, was important. The two points of view framed the premise for the data examination.

The second way of analyzing the alternate perspective on the data is argued. The investigation of entrepreneurial gestation activities was done, which brings two points of views. The first point of view is one of the nascent entrepreneurs, where the contribution of iceaddis per activity can be seen. The other point of view is simply one of the incubation centers where the three key individuals who are closely related with nascent entrepreneurs and to the gestation activity the incubator provides, states how they accept that iceaddis can help its startup in completing those activities. The two points of view on how the services of an incubator can assist its startup with developing the entrepreneurial process were compared and analyzed where required.

The primary reason for the first point of view was to call attention to the activities with the most noteworthy level of contribution by the incubator, as indicated by the entrepreneurs. The utilization of the collected secondary data, which is the basis for the second point of view, which has two principal goals. The first is to investigate whether the method by which these activities featured by the nascent entrepreneurs are completed, is revealed in how these three key individuals believe that the incubator can add value. Furthermore, it is likewise fascinating to investigate whether the incubator serves its purpose. This should be possible by looking at the way the activity completed in a different way. This implies the activities where the incubator can essentially contribute as indicated by the key individuals of iceaddis, are compared with whether and how these activities were actually completed by the startup because of the services provides by iceaddis.

These two primary objectives of the second data set, structure the basis if the manner in which the data from the interview with the three iceaddis key individuals was analyzed.

a) The entrepreneur's perspective

In this way, in the next table, it turns out to be evident whether and how iceaddis helped its startups per gestation activity. To start with, as in the past part, the various variables that represent every section of the table are clarified below.

Activities completed:

- Before joining Iceaddis - X
- Due to the 'Shared Space and Resources' of Iceaddis - R
- Completed due to the 'Business Support Services' of Iceaddis - S
- Completed due to the 'Access to Networks' of Iceaddis - N
- Completed without the contribution of Iceaddis – D

After all the transcripts of the interviews with the entrepreneurs were prepared, the contribution of the incubator per activity was mapped and recorded in the underneath table. All the different variables in the table are included to explain potential exemptions and were likewise used to compare this table with the one created for the second perspective.

The orange-colored rows demonstrate which of the activities were completed by the half or more than the nascent entrepreneurs interviewed, with assistance from the incubator. Every one of these activities has a sum of three or more cases in the first sum column, indicating that at least three out of the five cases completed the specific activity with the help of the three aforementioned services provided. Altogether, 21 of the 35 entrepreneurial activities meet this requirement. These 21 entrepreneurial activities concern:

- Business plan preparation
- Team organizing
- Prototype/model development
- Marketing and promotion
- Regulatory requirements
- The legal form of the business
- Using any physical space for the startup
- Identifying market opportunity
- Doing competitors analyses
- Save money for the business
- Devote full time
- Legal service

- Open separate business bank account
- Talk to potential customers
- Take class and workshops
- List business
- Separate phone line
- Trade name
- Develop software
- Accounting service
- Fill tax returns

Table 3 Overview of data from entrepreneurs per activity

Entrepreneurial activity	R	S	N	D	X	R+S+N
Idea	-	-	1	-	4	1
Business plan	-	4	-	-	-	4
Team	2	-	1	1	1	3
Prototype/model	2	1	1	1	-	4
Marketing/promotion	-	3	1	1	-	4
Patent /copyright	-	1	-	1	-	1
Regulatory requirements	-	3	-	1	-	3
Legal form	-	3	-	1	-	3
Liability insurance	-	-	-	-	-	-
Raw materials/ Inventory	1	-	-	-	-	1
Equipment/ facility	-	-	-	3	1	-
Physical space	5	-	-	-	-	5
Market opportunity	-	2	2	1	-	4
Competitors	-	3	-	2	-	3
Financial Projection	-	1	-	2	-	1
Save money	5	-	-	-	-	5
Invest own money	1	-	-	-	1	1
Ask for funds	-	1	1	1	-	2
Receive funding	-	-	1	2	-	1
Supplier credit	-	-	1	-	1	1
Child care/help	-	-	-	-	-	-
Full time devotion	3	1	-	1	-	4
Hire employee/manager	-	2	-	-	-	2
Accounting services	-	4	-	-	-	4
Legal services	-	4	-	-	-	4
Bank account	-	3	-	1	1	3
Talk customers	2	-	2	1	-	4
Receive money	-	1	1	1	-	2
Take classes/workshop	-	5	-	-	-	5
List business	3	1	-	1	-	4
Phone line	5	-	-	-	-	5
Fill tax returns	-	3	-	-	-	3
Trade name	-	3	-	1	1	3
Trade association	-	-	-	1	-	-
Develop Software	2	1	1	1	-	4
Total	31	50	13	25	10	

This analysis shows that the 60 percent of the entrepreneurs confirm that about 60 percent of entrepreneurial activities that are listed in PSED are completed with the help of the business incubation center which is contrary to (Meru & Struwig, 2011) study which conclude that entrepreneurs received less business incubation service than they had perceived due to incubators high need for profit. Dhochak et al., (2019) also conclude that tenants prefer access to financial resources as more beneficial to establish and suggest that both the incubators and tenants consider network as one of the most important criteria to grow.

The total for R, S & N in color yellow are 29, 44 and 8 respectively. This makes the contribution it 36 percent, 54 percent and 10 percent in respective order.

Not every one of the 21 activities were described by being completed for the most part by one sort of service. As found in the table above, there was a moderately even distribution of the contribution per service in many cases. Though, there were also activities where one type of service was dominant. Following, how these 21 activities were found to be completed are shown through explicit pieces of the transcripts.

“Business canvas model makes me understand the business plan process easily and makes me draft my own business plan. It helps me to gather my ideas for the business in an organized way”

Startup B

“When we start it was somewhat like a hobby. But when the idea grows and when we see the opportunity the consultants advise us to have support. Because of that we add more founders in our team and have more private like space in iceaddis.” Startup A

“Our app is fully developed by using iceaddis infrastructure its ready to be shown the potential investor.” Startup D

“Learning how to sell is as equally important as getting ready for the product to sell. I learn that skill mainly from iceaddis business advisor and workshops that are held in this space” Startup A

“Here most of us have a technology background. We lack the understanding of how the business should set up, in what term and which business form is better. The registration was also requiring physical space for the business. Iceaddis help us by signing a contract on the tablespace. The government now allows us to have a business license by table space contract.” Startup B

“On the business canvas model, there is a part which asks ‘who our competitors are’. This forced me to think about who can be the potential competitor. There is also a part that says who may be the customer for the product. It’s very helpful.” Startup D

“Using iceaddis space for much-discounted price helps me save my money which in return I use it to fill the gap on the other part of the business. One time I got business that requires some cash that I don’t have. Then I went to the iceaddis manager. With a few papers work, I got an informal loan from the iceaddis account. I am so grateful.” Startup B

“Lack of working area which includes the Internet and working space were my problems before I join iceaddis. Because of that, I had a problem with finishing work. Now that problem is gone. We can even come by midnight or on holiday. Our main door can be opened electronically using a password.” Startup C

“If I have a question about taxation or law I can ask the office (iceaddis) accountant or the business consultant. Everyone is cooperative here. There are also workshops about accounting, which I participate in” Startup A

b) The incubator’s perspective

As expressed in the presentation of the ‘analysis per activity’ segment, the utilization of the data of the interviews with the three chosen individuals that represent iceaddis has a dual purpose. First, the primary objective of the data from these interviews is to identify whether the real contribution of the incubator, right now 21 gestation activities that were brought up above by the entrepreneurs, are lined up with what the key individuals claim about the activities. The second focal point is to see whether what these key individuals believe the incubator should offer in general, is lined up

with how the entrepreneurs really performed at these activities. Along these lines, just activities that meet one of the two or both the following requirement are displayed.

1. Activities that are completed with the significant contribution of the incubator according to the entrepreneurs (the 21 from the previous section, table 3)
2. Activities where the incubator can add significant value. Activities, where at least two out three individuals argue that a specific type of service can lead to completing an activity, are included here.

Iceaddis can or has contributed:

- In completing this activity through the Shared Space and Resources - R
- In completing this activity through the Business Support Services - S
- In completing this activity through the Access to its Networks – N

Table 4 Overview of data from key individuals per activity

Entrepreneurial activity	R	S	N
Business plan	-	3	-
Team	2	1	-
Prototype/model	1	2	-
Marketing/promotion	-	2	1
Patent /copyright	-	3	-
Physical space	3	-	-
Market opportunity	1	2	-
Competitors	-	3	-
Financial Projection	-	2	-
Ask for funds	-	2	1
Receive funding	-	1	2
Full time devotion	1	2	-
Hire employee/manager	-	2	-
Accounting services	-	3	-
Legal services	-	3	-
Bank account	-	3	-
talk customers	1	2	-
Take classes/workshop	1	2	-
List business	-	3	-
Phone line	3	-	-
Fill tax returns	-	2	-
Develop Software	2	1	-

The sum total of the R, S and N is 15, 44, and 4 and percentage contribution is 24 percent, 70 percent and 6 percent respectively. Here, business support service outshines the rest which is in contrary to Ahmed et al.,(2020) empirical result where the networking service have the most impact on the entrepreneurs.

The key individuals pointed out that 22 out of the 35 activities which is 63 percent of all activities can be seen as activities where the incubator can add value, meeting the second requirement (green cells). From these 22, the orange-colored rows are the ones that were pointed out by the entrepreneurs, meeting the first requirement.

When looking at the 17 activities (in orange), it becomes clear that in all cases the two perspectives have a complete overlap. In other words, for all the 17 activities where startups argued that the incubator contributed significantly, at least two of the three individuals agree and actually believe that Iceaddis can contribute to completing the activity (in green).

Also, when taking into consideration by which service each activity was completed, it becomes clear that in most cases the view of these three individuals is reflected in how the startups actually managed to complete these milestones. This can be seen in the next table, where the data for these 17 activities as compared to the view of the key individuals about these activities.

Table 5 Overview of the 17 entrepreneurial activities selected by the entrepreneurs, compared to the key individuals

Entrepreneurial activity	Key Person			Entrepreneur				
	R	S	N	R	S	N	D	X
Business plan	-	100%	-	-	80%	-	-	-
Team	67%	33%	-	40%	-	20%	20%	20%
Prototype/model	33%	67%	-	40%	20%	20%	20%	-
Marketing/promotion	-	67%	33%	-	60%	20%	20%	-
Physical space	100%	-	-	100%	-	-	-	-
Market opportunity	33%	67%	-	-	40%	40%	20%	-
Competitors	-	100%	-	-	60%	-	40%	-
Full time devotion	33%	67%	-	60%	20%	-	20%	-
Accounting services	-	100%	-	-	80%	-	-	-
Legal services	-	100%	-	-	80%	-	-	-
Bank account	-	100%	-	-	60%	-	20%	20%
talk customers	33%	67%	-	40%	-	40%	20%	-
Take classes/workshop	33%	67%	-	-	100%	-	-	-
List business	-	100%	-	60%	20%	-	20%	-
Phone line	100%	-	-	100%	-	-	-	-
Fill tax returns	-	67%	-	-	60%	-	-	-
Develop Software	67%	33%	-	40%	20%	20%	20%	-

Both key individuals and entrepreneurs believed that all activities are completed by the help of similar services provided by the incubator except the four activities which are **prototype modeling, talking to customers, full-time devotion** and **list business**. For the prototype, modeling entrepreneurs believe that both business support and networking contribute equally to where working space contributes the most. While the individuals see no contribution to the networking and more contribution to business support service. Full-time devotion was the second difference where the key individuals believe business support contribute the most. Whereas, it's the workspace that contributes the most to entrepreneur's full-time devotion, according to the entrepreneurs. Regarding talking to customers, the entrepreneurs believed that business support service has no contribution while the key individual gives it the most value. Finally, listing the business to the phone book and internet domain was supported by workspace facility as per the entrepreneur's response and business support services were credited by key individuals for similar activity. Rather than these four activities the service most contribute to complete each activity matched on the response of key individuals and entrepreneurs.

“Without the business plan canvas, it would be very hard for me to see how business overall stands by itself. It was a great tool that I use so far in order to understand my business well.” Startup A

“The physical workspace is a great part of the service that I am getting from Iceaddis. Without it, I couldn’t imagine how I could survive this far.” Startup C

“Almost all of the startup founders have ideas when they come here but don’t have the overall picture of what business looks like. After boot camps and seminars, they become a lot better than when they first join.” Individual 2

“I think Markos, the co-founder of Iceaddis, is very friendly and help you anytime you have problems. There are also the others who helped me tremendously with increasing my knowledge of the business world.” Startup D

The second purpose of the use of this second data set was to examine if the activities that are supposed to be completed by the three types of provided services of the incubator, seem as important for the entrepreneurs. Comparing the two data sets results in four activities where the incubator individuals seem to believe that entrepreneurs can benefit from the incubator, while this was not the actual cause for the startups. In the table below, an overview of these four activities can be found.

Table 6 Overview of the remaining four entrepreneurial activities indicated by the key individuals, compared to the entrepreneurs

	Key Person			Entrepreneur						
	R	S	N	R	S	N	D	X	R+S+N	R+S+N+D+X
Patent /copyright	-	100%	-	-	20%	-	20%	-	20%	40%
Financial Projection	-	67%	-	-	20%	-	40%	-	20%	60%
Ask for funds	-	67%	33%	-	20%	20%	20%	-	40%	60%
Receive funding	-	33%	67%	-	-	20%	40%	-	20%	60%

Table 6 shows the differences in the two perspectives mainly due to the entrepreneurs accomplish

the works while they are in the incubation center but without the help of the incubator. For patenting or copyright, the key individuals believe business support service contributes the most while the one fifth of the entrepreneurs believed or accomplish with little support from the incubator while they were in the incubator. The financial projection was made mainly without the help of the incubator according to the entrepreneurs. But key individuals believed business support service will contribute greatly. For asking for funds, business support service, networking and without the help of the incubator plays an equal role as per the entrepreneur's opinion. Key individuals though, emphasize business support for the accomplishment of this activity. Regarding the receiving of funding the entrepreneurs found no value on business support service while some of the key individuals believe it does have value. These four activities were mainly accomplished mostly by the entrepreneurs without the incubator support while they are in the incubator.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

5.1. Summary

The main question of the research, assessing the effects of business incubator services on the development of the startup, is analyzed where the result indicates that there is a positive relationship between the incubator support and the development of the startup. In line with Bone et al., (2019) and Li et al., (2020) the analysis of this research shows that about 80 percent of the entrepreneurial activities are completed by the direct or indirect contribution of the incubator, pointing that the service provided by the incubator are significantly important for the startup's development. Even though, Meru & Struwig, (2011) study which conclude that entrepreneurs received less business incubation service than they had perceived due to incubators demand for high profit.

The research specific objectives which are to understand the activities provided by the business incubator center, to identify the contribution of each service to the startup, and investigate the effects of the business incubator support on startups growth were answered by the analysis. According to existing works of literature working space and infrastructure, business support service and access to the network are the main services of business incubators.

This study's analysis per start up shows that, business support service found to be important with the resulting of more than half (53 percent) of the entrepreneurial activities accomplishment. Incubator's office space and resource was the second important incubator service which helps to complete a third (33 percent) of the entrepreneurial activities. According to Hausberg & Korreck, (2018) business support services gained increasing prominence and relevance in the business models of incubators, where the provision of office space and facilities today is mostly secondary, which was aligned with this research findings. Access to network was the third important facility that helps a few (14 percent) completion of the entrepreneurial activities, though Dhochak et al., (2019) conclude that both the incubators and tenants consider network as one of the most important criteria to grow.

The analysis per activity finds entrepreneurial activities are the second way of analysis. Both the entrepreneurs and key individuals claim that seventeen of the entrepreneurial activities (over 48 percent) were completed with the help of the business incubator. On the other hand, the business incubator failed to support four entrepreneurial activities (over 11 percent) which are liability insurance, mainly because of the nature of the start-up and the risk they are involved in. Purchase or lease equipment/ facility was the next failed activity which was related to lack of network resource for financing, child care/help and register trade association are also the failed activities mainly because almost all start up founders are relatively young to have a family and it is not common practice in this country to have such facility since the space and running costs are is an issue.

Both analysis shows that in line with Hausberg & Korreck, (2018) business support services that was the most helpful for the completion of the entrepreneurial activities was the second important service in Ahmed et al., (2020) study. Dhochak et al., (2019) also conclude that tenants prefer access to financial resources as more beneficial to establish and suggest that both the incubators and tenants consider network as one of the most important criteria to grow.

5.2. Conclusion

This research sees how the Ethiopian incubator helps to its start-ups to accomplish the entrepreneurial activities. To examine the influence of the provided services of an incubator, incubate development was used as a measure. In order to capture the development of the start-ups during their incubation period, gestation activities proposed by PSED I & PSED II were used.

In order to capture the development of the startups in depth a single case study with multiple embedded subcases, using the incubator as a research domain and the incubated firms as a unit of analysis, is used.

For such type of qualitative research design Yin R. , (2011) listed possible data collection methods which this research use documents, interviews and direct observation for the startups that stayed at least one year or more in the incubation center.

The collected data were analyzed in two ways, as per the startup and as per the activity so as to see the two perspectives.

The previous literary works shows that there are mainly three services that the incubator provides for the startups it has. Due to this, the first assessment was analysis per startup which assists to see the contribution of the services provided by the incubator for startup improvement. The second assessment was analysis per activity, where the interview of both entrepreneurs and key individuals of the incubator was examined. The intention of creating these two points of view was twofold. First of all, this happened to examine whether the way in which these activities were performed by the entrepreneurs, is reflected in how these interviewed three key individuals believe that the incubator can add value. Next, looking at whether the incubator provides its purpose was the next point of interest. The activities where the incubator can considerably contribute according to the key individuals of iceaddis were compared to whether and how these activities were actually completed by the startup through the services provided by iceaddis.

All in all, this analysis generates that 21 gestation tasks, out of the 35 used in this study, were accomplished by the majority of the startups through the immediate assistance of the incubator, this was confirmed by the selected individuals mentioned above. These tasks are the following:

- Business plan preparation
- Team organizing
- Prototype/model development
- Marketing and promotion
- Regulatory requirements
- The legal form of the business
- Using physical space for the startup
- Identifying market opportunity
- Doing competitors analyses
- Save money for the business
- Devote full time
- Accounting service
- Legal service
- Open separate business bank account
- Talk to potential customers
- Take class and workshops
- List business
- Separate phone line
- Fill tax returns
- Trade name
- Develop software

In this research, most of the entrepreneurial gestation activities are completed by the help of almost all services that are provided by the incubator and holds the belief that incubators are a proven strategic tool for small start-up businesses. Though, there were activities where one type of service was dominant. Contrary to Bone et al., (2019) who claims that access to network is the most important of all, this research finds out that Business Support Services (S) contributed the most in business planning, marketing, market opportunity detection, competitor's analysis, legal and accounting services, tax reporting and mentorship activities. The Shared Space and Resources (R) was argued as being responsible for team and prototype building, in using any physical space for the startup and devoting full time to the business, talking to customers, access for a phone line and developing software. Access to a network (N) found to be the most important for receiving of funds, talking to customers and marketing & promotion.

5.3. Recommendation

Recent studies of Bone et al., (2019), Ahmed et al., (2020) and Dhochak et al., (2019) concludes that Access to Network (N) is the most useful service of the incubator but based on the above findings it is the list utilized service of the incubator. Thus, it's recommended that the business incubator should give more emphasis to the network resources in order to perform better towards graduating the startups. Business incubators also should work with financial institutions and other sources of finances for getting funds.

Shared office space was a well utilized resource of the incubator. Though, there need to be discouragement, by the incubator for the startups who pass the graduation period, of staying.

Business incubators can be used with other variables to perform the role of mediator Ahmed et.al. (2020). Furthermore, the social capital, value creation, funding, consultancy services as well as training and development can be used with business incubators. Hence, the government must put emphasis on funding, decrease the tax on import of technology, improve infrastructure, as well as launch the training program in collaboration with the business incubators.

5.4. Limitation of the study

This study is not without its limits. Due to the fact that the case incubation center character is a privately owned for Profit Company, the findings may not apply for the different categories of incubation centers such as University and NGO incubation centers. Lack of previously conducted researches in Ethiopian Business Incubators service makes it difficult to cite secondary data for this paper literature review. The study sample size, which was very few in order to generalize the findings. The study was also focused of incubators services to entrepreneurs while in the incubator which excludes the non-incubator support while in the incubator.

5.5. Further research

It would be interesting if future researchers would conduct similar research in different incubator setup such as NGO or University incubators. There is also an opportunity to improve the research by collecting a larger sample and include different elements that are not included here. Further research on a business incubator with a bigger sample size from multiple incubation center may generate a more reliable finding. It's also worth mentioning that there should be a further research on the relationship between the incubator company and the stakeholders such as government and financial institutions.

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Appendix A - Interview Questions

For Entrepreneurs

Interviewee name:

Date:

Entrepreneurial activities

1. Have you spent time on thinking about your business idea?
 - A. **If yes**, was this before you joined Iceaddis or did it take place while you were participating in the program of the incubator?
(If it was completed in the past year and not before joining Iceaddis, the next question is asked)
 - B. If the program of Iceaddis has contributed to this activity in any way, directly or indirectly, how did that happen?
(Questions A and B will be asked after every question)
2. Has a business plan been prepared for?
3. Has a startup team been organized?
4. Have you developed models, prototypes of the service/product?
5. Have marketing and promotional efforts been started?
6. Have you applied for a patent/copyright/trademark?
7. Have you determined regulatory requirements?
8. Has the legal form of the business been registered?
9. Has the liability insurance been obtained for the startup?
10. Have you purchased any raw materials, inventory or supplies?
11. Have you purchased/leased/rented any equipment/facilities/property?
 - A. **If yes**, was this before you joined Iceaddis or did it take place while you were participating in the program of the incubator? (If it was completed in the past year and not before joining Iceaddis, the next question are asked)
 - a. If the program of Iceaddis has contributed to this activity in any way, directly or indirectly, how did that happen?
 - B. **If no**, have the shared services of Iceaddis contributed to this by already providing this?
12. Have you used any physical space for your startup until now?
13. Have you defined your market opportunities? (Defined the market for your product, service)
14. Have you began collecting information on your competitors?
15. Have you developed projected financial statements?
16. Have you saved money to invest in the business?
17. Have you invested your own money in the business?
18. Have you asked financial institutions or other people for funds?
19. Have you received any outside funding? (Funding that comes from outside of the startup)
20. Have you established credit with a supplier?
21. Have you arranged child care or household help to allow more time on business?
22. Have you devoted full time to the business? (>48 h/week)
23. Have you hired any employees/managers?
24. Have you hired an accountant? Or used accounting services for the startup?
25. Have you hired a lawyer? Or used legal services for the startup?

26. Have you opened a bank account exclusively for this business?
27. Have you began talking to customers?
28. Have you received money for the sales of goods/services?
29. Have you taken classes/workshops on starting a business?
30. Listed new business in the phone book or the Internet (domain name)?
31. Installed a separate phone line for business?
 - A. **If yes**, was this before you joined Iceaddis or did it take place while you were participating in the program of the incubator? (If it was completed in the past year and not before joining Iceaddis, the next question are asked)
 - a. If the program of Iceaddis has contributed to this activity in any way, directly or indirectly, how did that happen?
 - B. **If no**, have the shared services of Iceaddis contributed to this by already providing this?
32. Have you filled a tax return?
33. Have you registered for Trade name?
34. Have you joined a trade association?
35. Is your proprietary software fully developed (if applicable)?

Interview for Iceaddis key individuals.

Interviewee name:

Date:

General

Tell me something about yourself, your role within Iceaddis.

Entrepreneurial activities

Based on your experience with Iceaddis and its startups, and the way you have helped them until now, do you think that Iceaddis can help its tenants, directly or indirectly, to:

1. Spend time on thinking about the business idea?

a. If **yes**, how do you believe that this can take place?

(Question a will be asked after every question, if the answer is yes)

2. Prepare the business plan?

3. Organize the startup team?

4. Develop models, prototypes of the service/product?

5. Start marketing and promotional efforts?

6. Apply for a patent/copyright/trademark?

7. Determine regulatory requirements?

8. Register the legal form of the business?

9. Obtain any liability insurance for the startup?

10. Purchase any raw materials, inventory or supplies?

11. Purchase/lease/rent any equipment/facilities/property?

If yes, how do you believe that this can take place?

If no, have the shared services of Iceaddis contributed to this by already providing this?

12. Use any physical space for the startup?

13. Define the market opportunities? (Define the market for the product, service)

14. Begin collecting information on the competitors?

15. Develop projected financial statements?

16. Save money to invest in the business?

17. Invest money in the business?

18. Ask financial institutions or other people for funds?

19. Receive any outside funding?

20. Establish credit with a supplier?

21. Arrange child care or household help to allow more time on business?

22. Devote full time to the business? (>48 h/week)

23. Hire any employees/managers?

24. Hire an accountant? Or use accounting services for the startup?

25. Hire a lawyer? Or use legal services for the startup?

26. Open a bank account exclusively for this business?

27. Begin talking to customers?

28. Receive money for the sales of goods/services?

29. Take classes/workshops on starting a business?

30. List the new business in the phone book or the Internet (domain name)?

31. Install a separate phone line for business?

If yes, how do you believe that this can take place?

If no, have the shared services of Iceaddis contributed to this by already providing this?

32. Fill in a tax declaration?

33. File for a trade name?

34. Join a trade association?

35. Fully develop the proprietary software (if applicable)?

Appendix B - Overview of analysis per activity (Entrepreneurs)

Entrepreneurial activity	Startup 1			Startup 2			Startup 3			Startup 4			Startup 5			Total			R+S+N+D+X															
	R	S	N	R	S	N	R	S	N	R	S	N	R	S	N	R	S	N		D	X	R+S+N												
Idea	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	4	1	1	5												
Business plan	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4												
Team	1	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	2	1	1	3												
Prototype/model	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	4												
Marketing/promotion	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	1	5											
Patent /copyright	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	2											
Regulatory requirements	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	3	1	4												
Legal form	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	3	1	4												
Liability insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
Raw materials/ inventory	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
Equipment/ facility	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	1	1	1											
Physical space	1	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	5	1	3	4											
Market opportunity	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	1	5											
Competitors	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2	3	5											
Financial Projection	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	3											
Save money	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	5	5											
Invest own money	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	2											
Ask for funds	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	2											
Receive funding	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	3											
Supplier credit	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	2											
Child care/help	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
Full time devotion	1	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	3	1	1	4											
Hire employee/manager	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	2											
Accounting services	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	4	4											
Legal services	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	4	4											
Bank account	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	3	4											
talk customers	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	1	5											
Receive money	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	3											
Take classes/workshop	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	5	5											
List business	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	1	5											
Phone line	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	5	5											
Fill tax returns	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3	3											
Trade name	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	1	4											
Trade association	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1											
Develop Software	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	4											
Total	7	13	3	1	1	6	15	8	-	12	2	6	4	-	6	7	-	5	2	6	4	-	12	2	6	11	2	7	5	31	50	13	25	10

Appendix C - Overview of Analysis per activity (Key Individuals)

Entrepreneurial activity	Key P 1			Key P 2			Key P 3			Total R	Total S	Total N
	R	S	N	R	S	N	R	S	N			
Idea	-	-	-	-	-	-	-	1	-	-	1	-
Business plan	-	1	-	-	1	-	-	1	-	-	3	-
Team	1	-	-	-	1	-	1	-	-	2	1	-
Prototype/model	1	-	-	-	1	-	-	1	-	1	2	-
Marketing/promotion	-	1	-	-	1	-	-	-	1	-	2	1
Patent /copyright	-	1	-	-	1	-	-	1	-	-	3	-
Regulatory requirements	-	-	1	1	-	-	-	1	-	1	1	1
Legal form	-	-	-	-	1	-	-	-	-	-	1	-
Liability insurance	-	-	-	-	-	-	-	-	-	-	-	-
Raw materials/ Inventory	-	-	-	-	1	-	-	-	-	-	1	-
Equipment/ facility	-	-	-	-	-	-	-	-	-	-	-	-
Physical space	1	-	-	1	-	-	1	-	-	3	-	-
Market opportunity	-	1	-	-	1	-	1	-	-	1	2	-
Competitors	-	1	-	-	1	-	-	1	-	-	3	-
Financial Projection	-	-	-	-	1	-	-	1	-	-	2	-
Save money	1	-	-	-	1	-	-	-	1	1	1	1
Invest own money	1	-	-	-	1	-	-	-	1	1	1	1
Ask for funds	-	-	1	-	1	-	-	1	-	-	2	1
Receive funding	-	-	-	-	-	1	-	1	1	-	1	2
Supplier credit	-	-	-	-	-	1	-	-	-	-	-	1
Child care/help	-	-	-	-	-	-	-	-	-	-	-	-
Full time devotion	1	-	-	-	1	-	-	1	-	1	2	-
Hire employee/manager	-	1	-	-	1	-	-	-	-	-	2	-
Accounting services	-	1	-	-	1	-	-	1	-	-	3	-
Legal services	-	1	-	-	1	-	-	1	-	-	3	-
Bank account	-	1	-	-	1	-	-	1	-	-	3	-
talk customers	1	-	-	-	1	-	-	1	-	1	2	-
Receive money	-	-	-	-	-	1	-	-	-	-	-	1
Take classes/workshop	1	-	-	-	1	-	-	1	-	1	2	-
List business	-	1	-	-	1	-	-	1	-	-	3	-
Phone line	1	-	-	1	-	-	1	-	-	3	-	-
Fill tax returns	-	-	-	-	1	-	-	1	-	-	2	-
Trade name	-	-	-	-	1	-	-	-	-	-	1	-
Trade association	-	-	-	-	-	-	-	-	-	-	-	-
Develop Software	-	1	-	1	-	-	1	-	-	2	1	-
Total										18	51	9
										23%	65%	12%