

الجمهورية الجزائرية الديمقراطية الشعبية  
République Algérienne Démocratique et Populaire

Ministère de l'Enseignement Supérieur  
et de la Recherche Scientifique  
Ecole Nationale Supérieure de Management  
Koléa



وزارة التعليم العالي و البحث العلمي  
المدرسة الوطنية العليا للمناجمت  
القليعة

## GRADUATION THESIS

To obtain an Academic Master's degree in « Entrepreneurship and project management »

### **The impact of business incubators on startups growth and survival**

*Case of private incubators in Algeria*

**Elaborated by:**

ABDESSELAMYENE Amani

**Supervised by:**

Dr.Mehdi BOUCHETARA

Academic year 2021/2022



## **ABSTRACT**

Among the reasons why business incubators were adopted by the Algerian government was to decrease and minimize the failure percentages of new ventures and startups in the country, this research explores how private business incubators in Algeria can impact the survival and growth of a startup and therefore produce successful startups. This study adopted a qualitative method; where the data was collected through semi-structured interviews with seven incubator founders and seven of their incubatees, the collected data was analyzed by the deductive thematic analysis method. The results of this study indicate that private business incubators in Algeria use the previous experience of the team within the incubator and network, entrepreneurial support and accompaniment, credibility, financial resources, physical infrastructure and their incubation program, along with the entrepreneur's efforts and the entrepreneurial ecosystem to impact and increase the chances of survival of their incubatees.

**Key-words:** Business incubators, Startups, growth, survival

## **RÉSUMÉ :**

Parmi les raisons pour lesquelles les incubateurs ont été adoptés par le gouvernement algérien est de diminuer et de minimiser les pourcentages d'échec et de mortalité des nouvelles entreprises et des startups dans le pays, cette recherche explore comment les incubateurs d'entreprises privés en Algérie peuvent avoir un impact sur la survie et la croissance des startups et produire des startups qui réussissent. Cette étude a adopté une méthode qualitative; ou les données ont été recueillies par des entretiens semi-directifs avec sept fondateurs d'incubateurs et sept de leurs startups incubés, les données recueillies ont été analysées par la méthode d'analyse thématique déductive. Les résultats de cette étude indiquent que les incubateurs d'entreprises privés en Algérie utilisent l'expérience antérieure de l'équipe au sein de l'incubateur, le réseau, le soutien et l'accompagnement entrepreneurial, la crédibilité, les ressources financières, l'infrastructure physique, et leurs programmes d'incubation, avec les efforts de l'entrepreneur et l'écosystème entrepreneurial pour impacter et augmenter les chances de survie de leurs startups incubés.

**Les mots-clés :** Les incubateurs, Les startups, La croissance, La survie.

## الملخص

من اجل تقليل نسب فشل المشاريع الجديدة والشركات الناشئة في الجزائر تبنت الحكومة الجزائرية حاضنات الأعمال ، يهدف هذا البحث إلى استكشاف كيف يمكن لحاضنات الأعمال الخاصة في الجزائر ان تؤثر على استمرارية ونمو الشركات الناشئة وإنتاج شركات ناشئة ناجحة. واعتمدت هذه الدراسة أسلوباً نوعياً ، حيث تم جمع البيانات من خلال مقابلات شبه منظمة مع سبعة من مؤسسي حاضنات الاعمال وسبعة من شركاتهم المحتضنة ، وتم تحليل البيانات المجموعة بطريقة التحليل الموضوعي الاستنتاجي. تشير نتائج هذه الدراسة إلى أن حاضنات الأعمال الخاصة في الجزائر تستخدم الخبرة السابقة للفريق داخل الحاضنة ، الشبكة ، مرافقة الأعمال ، المصداقية ، الموارد المالية ، الموارد المادية و برامج الحضانة جنباً إلى جنب مع جهود رائد الأعمال والنظام البيئي لريادة الأعمال للتأثير وزيادة فرص استمرارية شركاتهم المحتضنة.

**الكلمات المفتاحية:** حاضنات الأعمال ، الشركات الناشئة ، الاستمرارية ، النمو.

## ACKNOWLEDGEMENTS

*{God will create ease after hardship}* Quran, Verse 65:7

All glory to god for enabling me to do this work, and reach this point of my education.

First and foremost I would like to thank my amazing parents who are my rock, for believing in me and always pushing me to do better and be better, and for supporting me through all my decisions and sacrificing so much for me to be here today.

I would like to thank my brother and sister; life would not have been this fun without you.

Secondly, I would like to thank my teacher Dr. Mehdi BOUCHETARA for his help and support as well as his guidance in conducting this work, this would not have been possible without you.

Thirdly, a very big thank you to all my team members at BlueGreen Business, every last one of you has been extremely welcoming and supporting and helpful.

I would also like to thank all the people that I got to call friends, my five years of college were filled with adventure, bonding moments, fun, trust, meeting new people and growth, and I would never have been the same without you.

I would like to also thank my EMP team

And lastly I would like to thank myself for always perusing what I believe in and for always chasing my dreams.

All glory to Allah

## Table of content

ABSTRACT .....	I
ACKNOWLEDGEMENTS .....	IV
LIST OF FIGURES .....	VI
INTRODUCTION .....	1
CHAPTER I: THEORATICAL FRAMEWORK .....	11
Literature review.....	12
The conceptual framework .....	23
Section One: Startup growth and survival.....	23
Section two: Business Incubators .....	40
Section Three: The Impact of business Incubators on startup growth and survival.....	50
CHAPTER II: METHEDOLOGICAL FRAMEWORK .....	57
CHAPTER III: RESULTS AND DISUCUSSION .....	63
1. Results .....	64
2. Discussion.....	74
CONCLUSION .....	78
BIBLIOGRAPHY .....	83
APPENDIX .....	94

**LIST OF FIGURES**

Figure 1: The hypothetical model describes the inputs and outputs to contrast through the DEA technique .....	7
Figure 2: The basic elements of incubation.....	8
Figure 3: Mentoring program and the contingent of founding team prior experience on startup survival through the first year.....	8
Figure 4: Incubation Process model .....	50
Figure 5: Framework by Campbell, Kendrick, & Samuelson, (1985) .....	52
Figure 6: Incubation model.....	53
Figure 7: Relational model explaining factors affecting the graduation rates of tenants in the incubator centers.....	54
Figure 8: Steps to conduct a deductive thematic analysis .....	61
Figure 9: The Relationship between the Themes .....	74

# **INTRODUCTION**

## 1. The context and interest of this research

Startups play a very important and growing role in developing the economy and promoting entrepreneurship (BEKADDOUR, 2021) especially with the constant changes in the global economy along with the fast technological developments. Startups, being characterized by their innovative ideas and high growth potential are essential to job creation and business promotion, making their role inevitable as they can be used as solutions to overcome economical problems. (Irayen & Latroche, 2021)

Moreover establishing and developing startups strongly contributes to the economy through the promotion of the economic and social development of a region, subsequently helping promote the society to better distribute its resources and wealth. (Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, 2020; Thomas & K.I, 2020)

They also have the power to achieve grim levels of growth because they are young companies that carry innovative ideas and therefore they have the potential for rapid growth and to turn into successful companies in record time (Ould safi & Larabi, 2020)

In Algeria, startups are among the proposed alternatives that the country's economy depend on, for that reason it has taken many actions in this regard, the most important of which is the establishment of a special ministry in charge of startups (Aitakkache & Badaoui, 2022)

However startups are also characterized by their lack of resources, their weak legitimacy on the markets and their strong capacity to be a source of disruptive innovation. (DALEX, 2020) Furthermore the innovative nature of startups does not allow them to clearly challenge all components of their market and, in fact, to undertake direct profitable activity. It must necessarily go through a testing and research phase to understand its environment and its clients and thus overcome the uncertainty that comes with any innovative venture, so early support for business creation would increase 50% of startups survival chances and therefore startups will survive three years following their creation, which makes it necessary to the create structures devoted to startups like business incubators. (Irayen & Latroche, 2021)

In addition they are known to be High risk and high failure ventures, startups have a very high rate of bankruptcy during the first five years of activity, 9 out of 10 according to some sources, and around 75% fail according to others, the proportion of failures remain

significant. (DALEX, 2020). For every hundred small businesses that are created, 90 don't survive more than two years of activity (Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, 2020)

The risk of companies disappearing, especially in the first five years of operation, is very high. Studies show that about half of new businesses disappear after five years of their creation in this perspective; entrepreneurial support is used to reduce the chances of the company's disappearance and thus promote its sustainability. It allows the entrepreneur to be in adequacy with his project, and facilitates the acquisition of the suitable social capital and the setting in network between the creator and his partners. (Harrar, 2021)

Subsequently startups need structures that help them face the challenges as well as survive and succeed and therefore reduce their failure especially in their first years of activity. Business incubators contribute to the development of businesses, and help them survive and grow through their early phases especially when they are still vulnerable. Their incubation programs give their client companies trading support services and resources specifically designed for young enterprises. The most common objectives of an incubation program are the creation of employment in the community and region, promote an entrepreneurial climate in the community and region, and build or accelerate growth in local regions and industries as well as diversifying the local economy. (Irayen & Latroche, 2021) Additionally, startups created within incubators generate jobs. (Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, 2020; Thomas & K.I, 2020)

The role of business incubators is emphasized by ensuring the continuity and sustainability of the activity of startups, incubators being a development tool primarily designed to help create and develop start-ups. (Irayen & Latroche, 2021) According to the US National Business Incubation Association, business incubators may be defined as an infrastructure “*designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services*”. (Apa, sedita, & Grandinetti, 2017) Business incubators have the mission to link technology, resources and services and entrepreneurial talent with the objective of accelerating the development of new ventures and technology. (Minshall & Wicksteed, 2005)

Incubators are now recognized as important tools for promoting startup development and innovation in technology, in both developed and developing countries. Pioneered in North America and Western, thousands of incubators exist around the world, the main goal of

which is to stimulate the emergence of a steady stream of successful startups, thereby promoting entrepreneurship and innovation, especially and socio economic development in general. In this regard, business incubators in Western Europe and North America have built a solid track record over the past two decades and are now considered to be one of the most effective means of the promotion of the entrepreneurial activity and the development of local economic. (Adegbite, 2001)

Studies evaluating their performance show that they can reduce startup failure rates to below 10% within three years, compared with 60% to 80% failure rates for small businesses. With this in mind, some developing countries in Africa, including Nigeria, have adopted business incubators to accelerate the development and promotion of SMEs. (Adegbite, 2001)

Business incubators today are recommended as an effective solution to the birth and consolidation of small economic entities. As an instrument of economic promotion, the incubator is the phase of accompaniment of the project holder. It mobilizes a network of human, material and financial skills. It is the combination of the dynamism of a young company with the resources usually available to large companies to create value. (Bendebiche & Boutellaa, 2018)

Algeria registered a very big delay when it comes to adopting business incubators for a multitude of reasons (Belalia, 2015; Mokhnache & Khacef, 2021; BEKADDOUR, 2021; Bouchaour, 2018; Ahmed mili, 2020). However the contry is moving towards the right direction and has taken numerous actions on this matter.

Early support for business creation increases their chances to survive (Irayen & Latroche, 2021) Entrepreneurial support reduces the disappearance chances of startups. (Harrar, 2021) Business incubators can reduce startup failure rate. (Adegbite, 2001) With the goal of understanding by what means an incubator can decrease the degree of startup failure in Algeria, this research has been focused and limited to private incubators in Algeria and, their incubated startups, to better the understaning of the ways that business incubators utilize to help startups reduce their failure rate.

## 2. The aim of this research

The main objective of this thesis is to understand how business incubators contribute to the startups survival and growth, and therefore reduce their failure rate and increase their chance in succeeding especially in the first very critical years, in Algeria.

However other objectives can be derived from the researchs main objective, and the following are mentioned:

Identify which types of support that business incubators offer (for example workspace, coaching and mentoring, funding) impact startup growth and survival.

Help both Algerian startups and business incubators to recognize the factor that contributes to startup growth and survival

Understand to what extent incubators in Algeria can contribute to the development and continuity of startups. (Bendebiche & Boutellaa, 2018)

Gain insights into which services and resources are the most attractive for Algerian incubators as well as Algerian startups.

## 3. Research question

In order to achieve and reach the objectives of this research through articles by these authors (Aissaoui & Elhazzam, 2021; Bouchaour, 2018; Blank, 2020; Lose, 2019; DALEX, 2020; Pettersen, Aarstad, Høvig, & Tobiassen, 2015; Peters, Rice, & Sundararajan, 2004) the research question was constructed and is the following:

**How do business incubators impact startup growth and survival in Algeria?**

## 4. Hypotheses

To answer in the best way the research question, we present the following hypotheses

- **H1: Business Incubators use their mentorship program to impact the survival and growth of the incubated startup**

The program offered by business incubators can help a startup in different areas where they do not have the appropriate expertise and knowledge, the program is considered to be a main ingredient of the incubation system. (Schwartz, 2013) Business incubators have mentors and experienced entrepreneurs who can transfer knowledge about how to properly start and and manage a new venture or business. (Blank, 2020)

- **H2: Business Incubators use the team's prior experience as a mentorship service to help startups grow and survive**

By joining incubators startups enable the mentorship service, where the startup entrepreneur or founder, is supplied with advice in a direct and timely manner, along with, knowledge and, social network, to ultimately increase the startups likelihood of survival and success; all of this is supplied by the incubator's team namely the founder as well as the manager and entrepreneurs at the incubators who have expertise in various areas. (Blank, 2020)

Moreover, according to [Burton, Sørensen, & Beckman, \(2002\)](#) the previous experience of the founder is expected to impact the entrepreneur's basic functions, including scanning and searching the environment for opportunities and building strategies to seize them, in addition to, managing resources and their flow, and build relationships with future partners, customers, suppliers, etc. Furthermore Experience and skills of the founders within the incubator and others interested in the incubator's innovation process underpin the institution's competitive advantage, creating a successful by-product of the jobs created in its context. ([Zapata-Guerrero, Ayup, Mayer-Granados, & Charles-Coll, 2020](#)) All of this leads us to believe that the experience within incubator can impact the growth and survival of the incubated startups and therefore their success.

- **H3: Business incubators use their offered resources to impact startup growth and survival**

Startups are characterized by their lack of resources, ([DALEX, 2020](#)) however resources are very important for the creation of new businesses, which can be assumed that the increase of graduate companies is usually accompanied by a higher level of financial resources managed and received. ([Zapata-Guerrero, Ayup, Mayer-Granados, & Charles-Coll, 2020](#))

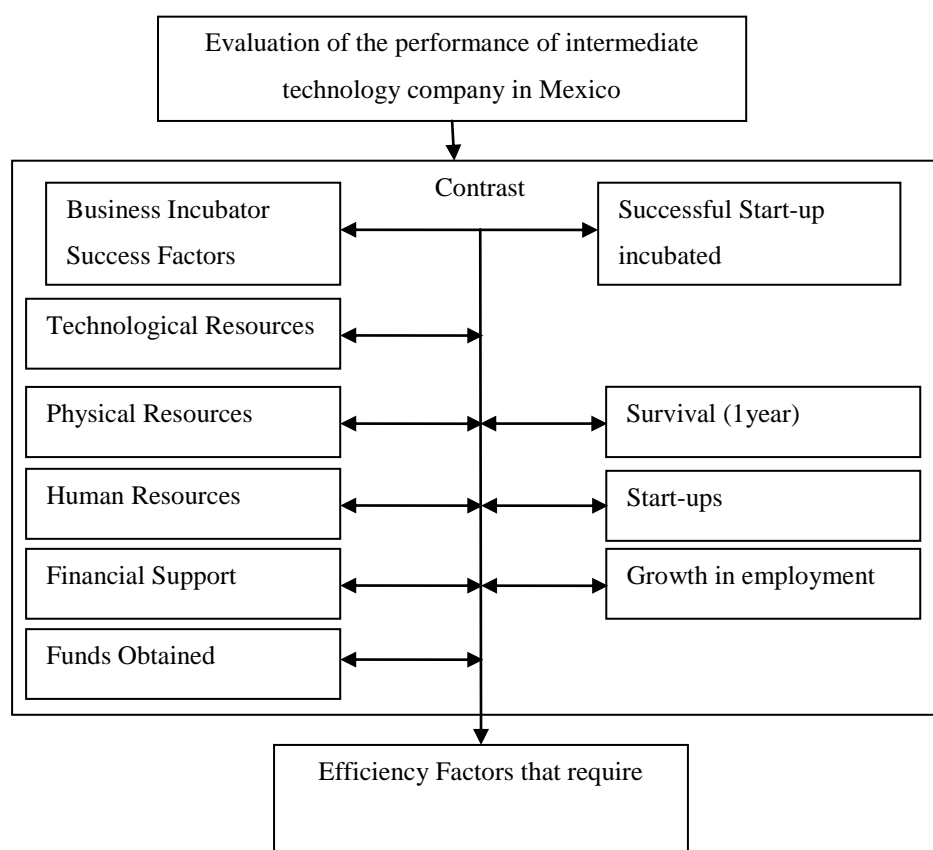
Business incubators provide their tenant companies with different types of resources, financial resources, physical resources, office support, entrepreneurial support, access to network. ([Carayannis & Zedtwitz, 2005](#))

- **H4: Business Incubators use their network to help startups grow and survive**

Incubators should be able to identify and use key people to help their startups succeed. (Carayannis & Zedtwitz, 2005) Startups are characterized by their weak legitimacy on the markets (DALEX, 2020), incubators attract people who are very important to startups success such as, investors, suppliers, prospects, business angel etc. (Carayannis & Zedtwitz, 2005; Centre for Strategy & Evaluation Services, 2002). Further the network of the incubator can be the distinctive factors of one incubators success and others failure. (Centre for Strategy & Evaluation Services, 2002)

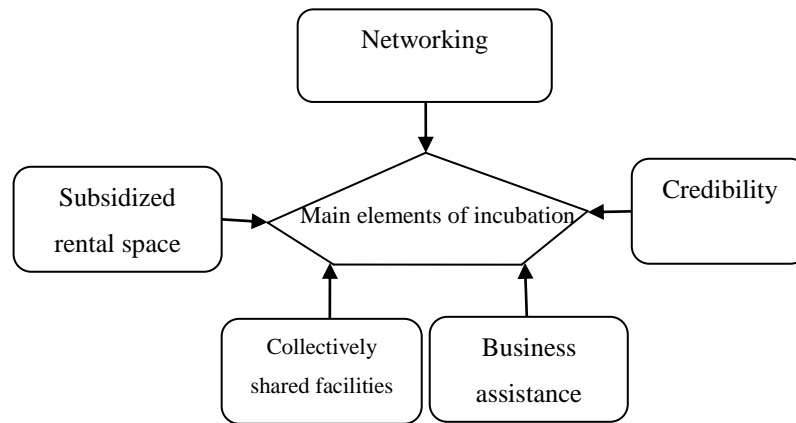
All of the hypotheses were based on the following models:

Figure 1: The hypothetical model describes the inputs and outputs to contrast through the DEA technique



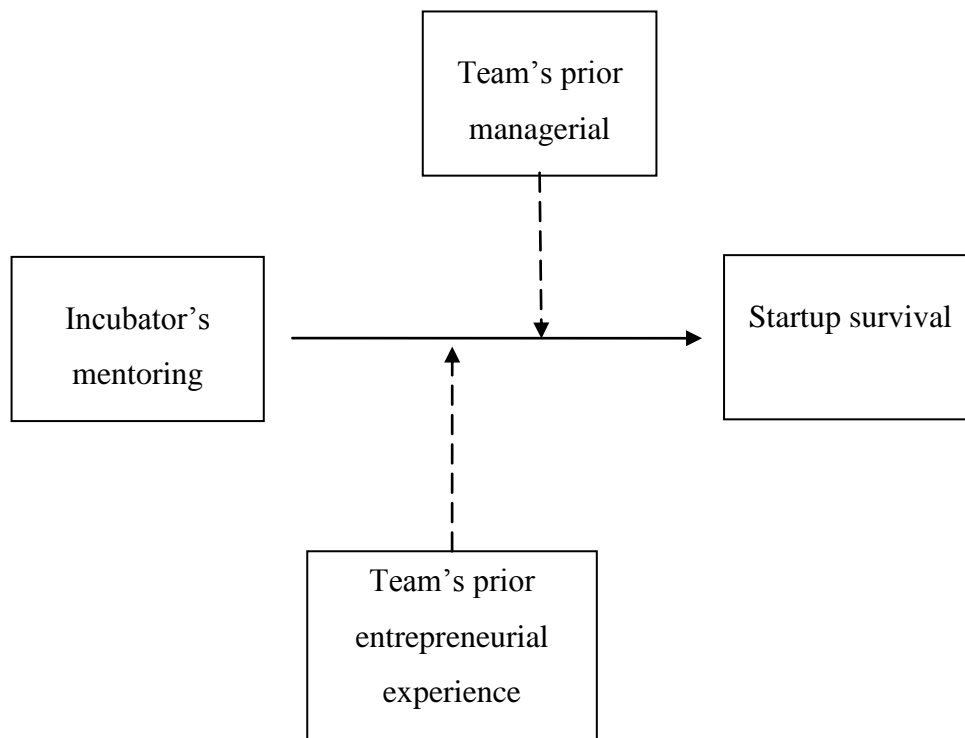
Source: (Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, 2020)

Figure 2: The basic elements of incubation



Source: (Schwartz, A control group study of incubators' impact to promote firm survival , 2012)

Figure 3: Mentoring program and the contingent of founding team prior experience on startup survival through the first year



Source: (Blank, 2020)

## **5. Methodology**

For the purpose of answering the research question in the best way, the method that has been adopted and applied is the qualitative method. This method has been chosen in an effort to provide in depth information about incubators services and resources and their impact on startup growth and survival, and find relationship between the two concepts. (Babbie, 2014)

Our study revolves around 7 incubators (Obaji, Olugu, Obiekwe, & Balogun, 2014) that are private in Algeria and 7 of their incubated startups. As for the collection of data semi-structured interviews were utilized with both Algerian private incubators and their incubated startups.

## **6. Field of research**

The internship was conducted in BlueGreen Business a private incubator.

BlueGreen Business is the first incubator in the wilaya of Tipaza created in 2016 as a consulting firm and turned incubator on March 2020, where the ministry of knowledge economy and startups granted it the label of 'Incubator'. It consists of a team of entrepreneurs with different backgrounds and expertise in different fields.

One of the main objectives of this incubator is to promote entrepreneurship in the city of Cherchell especially, and in the wilaya of Tipaza generally and therefore support the youth in creating companies and turning their ideas into reality.

## **7. The interest of this research**

This research will contribute to the literature of incubators, and add to the understanding of how impact business incubators impact startups especially the latter's growth and survival and therefore the success of startups and the reduction of their failure rate. Furthermore comprehend to what extent resources and services provided by business incubators contribute to startups growth and survival.

## **8. The plan of this research**

This research paper has been organized as follows:

This document starts with an *introduction* that contains an overview of the subject of this research and its interest as well as its objectives and research question. The introduction

consists of the method used to answer the research question, the hypotheses in relation to the question and the main interest behind this research along with the field of the research.

*Chapter I* presents the theoretical framework that includes the literature review where previous related work is explored, as well as the conceptual framework that accommodates with the main concepts of this research and contains three main sections, (1) Startup growth and survival, (2) Business incubators, (3) The impact of business incubators on startup growth and survival.

*Chapter II* presents the methodological framework that includes the method used for this research, the collection of data, as well as the method used to analyze the collected data.

*Chapter III* presents the results of this study followed by a discussion of the results that were found.

Lastly, this work ends with the *conclusion* that summarizes the entire work and its main factors and elements, it contains the main results concluded from this research as well as the contribution of this study, at the end of this conclusion a description of limits is found along with possibilities for future research.

# **CHAPTER I: THEORITICAL FRAMEWORK**

## Literature review

Through this literature review, we will expose in a non exhaustive way the current literature related to the theme of this research, for the purpose of placing and situating it on a model of analysis.

### 1. Startups and Incubators

Today's global economy is driven in part by the enthusiasm of entrepreneurs seeking commercial success with technological innovation. They create jobs and contribute to the technological advancement of our society. As a result, the startup was born and now plays a very important in the development of economies and entrepreneurship promotion. [BEKADDOUR, \(2021\)](#) Therefore the establishment and development of startups will contribute to economy through the promotion of economic and social development of regions, subsequently helping promote society to distribute better its wealth and resources. Additionally, those created within incubators generate jobs ([Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, 2020](#); [Thomas & K.I, 2020](#)).

Nevertheless [Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, \(2020\)](#) mentioned in their research that contributed to the knowledge on the efficiency of incubators in Mexico, for a hundred small businesses created, 90 don't survive further than two years of activity therefore, the employment that was generated is not enough to create economic wealth. [DALEX, \(2020\)](#) added that Indeed, even if the statistics remain discussed to date, startups are characterized by a very high rate of bankruptcy during the first five years of activity: 9 out of 10 according to some sources, around 75% of others, the proportion of failures remain significant.

Entrepreneurial support is used to reduce the chances of the company's disappearance and thus promote its sustainability, ([Harrar, 2021](#)). To confront and tackle the obstacles that hinder startups and can cause their failure and bankruptcy, they take refuge in incubators. The latter helps them surpass these challenges and exploit the opportunities available in the market. ([Ahmed mili, 2020](#))

Most researches and literature highlight both startups and business incubators as the most important means for economic development with an emphasis on the role of business incubators in establishing and maintaining startups. (Irayen & Latroche, 2021).

## **2. The role of business incubators in supporting and developing startups in Algeria**

Bouchaour, (2018) Research treats and tries to find the role of business incubators in supporting and launching startups in Algeria, the study draws on the importance of the topic of startups and incubators in the global economy, where incubators are one of the main tools to creating and elevating successful startups. Furthermore to investigate this role the author used a qualitative method thus a descriptive and analytical approach by collecting information and data about the problem through secondary sources such as books, scientific papers and reports as well as articles and then analyzing and classifying them. Bouchaour, (2018) found through this study that although the number of studies in relation to this topic increased, Algeria is still far from the advanced stages reached by other countries, the concept of incubators and startups is still considered as very new and underdeveloped in the Algerian business world, as the majority of startups do not meet the real needs of the market, and most of them are active in the field of digital marketing on the one hand, and on the other hand most of them are just a simulation of past experiences in the world, as is the case for the most successful startup in the country, Oued Kniss.

A delay is noticed in Algeria's interest in establishing business incubators and as far as incubators go although their emergence dates back half a century, they did not have any presence in Algeria except for a short period of about 8 years and their limitations. Since 2009, only one public business incubator has been launched, and the latter suffers from many shortcomings, especially in regard to its geographical location, its distance from urban areas, in addition to its organization of a limited number of programs. As a consequence to this late adaptation incubators face numerous challenges which lead most of the time to startups failing and remain very limited.

Finally this research summed that Algeria still lacks real entrepreneurship, startups in Algeria have a very high level of failure, although it did register an increase in the number of companies, however they suffer from sustainability and survival problems, which can be surpassed by activating in the local economy the role of business incubators. Their role is represented in the services provided for their incubated companies, the author of this article mentions the following: secretarial services, basic infrastructure/facilities and services,

business Services, providing financing and a means of reaching the funders, connecting to people and networking, education and means of accessing knowledge, brand building.

The study ‘The extent of the contribution of business incubators in support of emerging institutions in Algeria’ by [Aissaoui & Elhazzam, \(2020\)](#), is very similar to the one conducted by [Bouchaour, \(2018\)](#) as both strive to showcase and present the role of incubators in supporting startups in Algeria, as well as an attempt to present the realities of both incubators and startups of the country, along with the challenges incubators face whilst supporting startups. Although [Aissaoui & Elhazzam, \(2020\)](#)’s study is more recent the method used is the same as well as the results, as we notice that the results found by both studies are almost identical except for a few changes implemented by the government. The author narrowed down these changes to the eight decisions that follows Creating the Algerian startup fund; Establishing a supreme innovation council; Developing the legal framework that defines the concepts of startups and incubators as well as the terminology of the knowledge economy ecosystem; Creating the ministry of micro enterprises startups and knowledge economy; Provide space for startups and project holders; and Finally, to ensure synergy between sectors for the implementation of the strategy of developing startups, the Minister is tasked with ensuring that the contributions made by all sectors are controlled.

[Aissaoui & Elhazzam, \(2020\)](#) concluded that incubators do play an important role in creating startups and supporting them, but in Algeria this role is absent because of the late interest of the country in the subject. Furthermore [bouchair & Hassiani, \(2021\)](#) focused their study on industrial business incubators in Khenchla and their impact on the success of small and medium enterprises. Using the same descriptive and analytical approach similarly to the studies mentioned above. In conclusions the result of this paper showed that the business incubator studied in khenchla plays a very important role in the success of small and medium enterprises in comparison to their counterparts outside of the incubator, thus incubators represent opportunities for project holders to succeed in creating their businesses.

### 3. The efficiency of business incubators

The research realized by [Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, \(2020\)](#) focused on studying and analyzing the efficiency of 25 business incubators of a university in Mexico from 2012 to 2014, through the envelope data analysis technique.

This paper focuses on two types of variables, the first is output variables that claim that survival can determine the success of new firms by remaining in a competitive market. Although the number of graduates is recommended as a factor in the success of incubators, the authors note that many researchers question the degree of financial success and economic development impact of these graduate firms. Similarly, the success factor of incubators points out that as one of the important indicators of measuring efficiency, the degree of growth of graduate companies is considered as a growth indicator of employment rate. The second is the input variables or resources of the incubation process, which can be identified as valuable tangible and intangible factors related to its success. The types of incubator resources mentioned in this study are: human, physical, financial and technological, which provide the support for the creation and success of both incubators, as well as their incubated companies. They focus on the funding aspect, as access to funding is one of the key factors for SME's performance and survival, using two metrics: the total amount of funding received by new businesses; and the number of incubator-related financial institutions that provide resources for the incubator.

The results found by [Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll \(2020\)](#) can be divided into two positions according to the variable, firstly: incubators for companies in the technology sector, classified according to the economic role of their size and location, which makes it possible to focus on efficiency, and find that smaller incubators are in structure. It is efficient in the case of limited resources and resources, so it can be said that optimizing the resources of the incubator is not a prerequisite for restricting operations, and the same is true for small and micro enterprises.

Also in the second research location, they found that the factors that pushed Mexican incubators to the forefront of efficiency were: physical resources; technical resources; human resources; and revenue to fund the business. In addition, financing for the creation of new businesses is also considered relevant, although the results are contradictory, as the number of financial institutions associated with the incubator is not important, but the management and availability of resources or funding for people starting new businesses.

Nonetheless, the physical and technical resources to carry out the incubation activities, as well as the knowledge, skills and experience of the founders and others interested in the innovation process within the incubator, have consolidated the institution's competitive advantage and have created successful spin-offs for the incubator . The work context created there.

[Thomas & K.I, \(2020\)](#) Conducted a study in India using statistical tools, collecting primary data on 80 startups and 8 incubator managers, as a result they found that the startup owners, are satisfied with the services that exist at their incubator, they also observed that kind of incubation support has opened the way to many benefits for their startup units in the form of training and coaching, marketing, networking opportunities and so on. They also noted that since most incubators depend and rely on government funding, the government needs to augment the funding for technical education and the necessary assistance in order to promote innovation.

#### **4. Incubators, startups, and partners**

Since startups are companies designed to search for a scalable business model according to Steve Blank, the study realized by [DALEX, \(2020\)](#) focused on the importance of startup collaboration for the evolution of their business model, and then analyze how incubators accompany startups in the medical technology field in their inter-firm relations.

The results of this research found that collaboration can be a driver of emerging business model changes or a critical threshold of changes to be reached to bring about a new business model. To obtain this result [DALEX, \(2020\)](#) favored a mainly empirical approach on qualitative data set, 14 interviews conducted with the operational director of a startup in the field of medical technologies and relating to the evolution of the business model of its structure and its implications in the various collaborations since its launch in 2011. The data was obtained through semi-directive interviews conducted between 2016 and 2019, in addition to a set of primary and secondary physical resources in relation to the evolution of the company.

In a second step and while looking to answer the second question of this research ‘How incubators support start-ups in managing their collaborations?’, They noticed that most incubators are based on a foundation of common activities that are: the access to: locals, lower cost services, communities as well as coaching. They also noted that while the first

three activities are the subject of numerous references, the coaching aspect remains relatively unexplored.

Moreover they canvassed the 'Allègre' incubators in France with a questionnaire, more specifically their teams who accompany projects on a daily basis. They also based the second fieldwork on the joint study of 3 dimensions of support: source of expertise, format of expertise delivery and intervention timeframe. As a result they discovered that:

For the first dimension 'the source of expertise' more specifically internal or external source they determined that individual coaching with project leaders (internal expertise) has the highest percentage, subsequently the second dimension 'the format of expertise' focused on internal expertise and found that 63% of the coaches who work on the subject of collaboration do so with projects for which they are responsible as well as those for which they are not. Conversely, 37% of them indicate that they only intervene on the subject of collaboration with projects for which they are responsible.

Lastly 'the timeframe of intervention' dimension the results show the temporality of the incubator's intervention in the collaboration. A significant part of them focuses on the part before the collaboration, corresponding to the identification phase, selection of partners and contracting with the different stakeholders. While 30% of the support actions are carried out after the launch of the collaboration.

In conclusion this research also contributed to the literature of incubators in three different ways by proposing new dimensions that characterize practices (source of expertise, format of expertise delivery and intervention timeframe), by highlighting the absence of a universal coaching practice on the subject of collaboration as well as an absence of a support practice shared by the majority of incubator, and finally by showing the heterogeneity of the different practices of business managers within the same structure.

## **5. The sustainability of entrepreneurial startups**

Sustainability is considered from a long-term perspective, but can also include a short-term perspective, depending on the entrepreneur's goals. There may be groups that form and disband quickly after achieving their goals. Sustainability of a start-up should be viewed as the cumulative relevance gained over time from the products or services and processes offered in the market by continuously responding to changes in the environment according to [Mshenga & Karani, \(2021\)](#).

In addition, entrepreneurial start-ups need agile and stable organizations that can adapt quickly to changes in the environment, which is an indicator of their sustainability. Therefore, to answer 'How can entrepreneurs improve the sustainability of their startups?', the authors conducted a thematic exploratory analysis of 105 articles using an exploratory analysis approach; the majority (85) were peer-reviewed journal articles. Through this study, the results obtained show that, due to their risk-prone nature of start-ups, they can lead to failure, as they are considered to have a higher risk and failure rate than the average entrepreneur. However, the authors also mention that research failures can be a learning opportunity to prevent the potential risks associated with startups from recurring. Further this study detected that 'change' is by far the most critical in determining the survival and sustainability of a venture, which means in order for a startup to survive just like any business; it needs change whether in the form of expansion, merger, acquisition, diversification, or partnership. The startup and decline phase of such an enterprise is highly risky and may result to its death which implies that its lifecycle comes to an end. Further establishing relationships with stakeholders can start the sustainability journey, it is equally important to gain a competitive edge.

[Mshenga & Karani, \(2021\)](#) stressed the need to adopt sustainability approaches that may lengthen their life cycle. The club theory shared resources approach that allows entrepreneurs to start their ideas in a cost effective manner, collaborative and social networks permitting startups to build relationships and augment their social capital, and lastly incubation that provide the support necessary for startup entrepreneurs concretize their ideas.

The purpose of the research by [Ali Al-Damen, \(2020\)](#) is to detect business incubator's services and their level of impact on business success. This study focused on three specific services: infrastructure, business support services and networking services, to identify the level of impact that incubators have on the success of a business. As a means to respond to the question of this research the author sampled for the field study 30 businesses that benefited from business incubator services at Jordan Enterprise Development Corporation, the author also employed various techniques, such as descriptive and analytical methods to test the hypotheses. ([Ali Al-Damen, 2020](#))

The results of this study were very interesting as they showcased that the service with the highest impact is the networking support service followed by the infrastructure support service.

[Ali Al-Damen, \(2020\)](#) Concluded that the services provided by JEDICO incubators have a great impact on business success as well as business creation, and that a positive influence will be registered by improving networking and infrastructure support services.

## **6. Business Incubators and entrepreneurial growth**

[Lukeš, Cristina Longo, & Zouhar, \(2018\)](#) Examine the short and long term effect of business incubators on innovative startups performance regarding job creation and sales revenues in Italy. This study was conducted on a very large sample of 2544 innovative Italian start-ups, among which 606 were incubated, was followed for six years. This empirical analysis is based on Italian innovative start-ups containing performance indicators for companies both incubated and none incubated.

Through this research the authors were able to focus on the change of the effects of incubators over time. It also argued that business incubators should deliver higher growth for incubated innovative startups in comparison to their non-incubated counterparts. Further they highlighted that the multiple stages of selection to enter a business incubator might have an effect on the effectiveness of the incubation. Moreover, companies that stayed in an incubator for many years might not have developed the capacity to survive on their own. Thus the graduation from an incubator results in an instant negative effect on the survival of the firm in the post-incubation period.

The Results found by [Lukeš, Cristina Longo, & Zouhar, \(2018\)](#) show that there is a significant negative effect of incubation regarding sales revenues and no significant effect on job creation of Italian innovative startups. Further the initially negative effect of incubation on sales revenues becomes a positive effect in the long term.

The empirical analysis results also show that despite a slow start in the first two years following their foundation, innovative startups located in a business incubator subsequently increase their sales revenue growth faster than non incubated innovative startups and thus have a good chance of outperforming them.

In their conclusion the authors explain the reason behind the negative effect of business incubation especially considering the immense amounts of money invested in them by both public and private organizations, the first reason being Italian startups in incubators are

pampered and comfortable and protected against the competitive environment, this can show the importance of performance milestones. The second reason is specific to Italian startups; Italy's startup Act provides support measures for non incubated innovative startups as well and may therefore alleviate the positive effects of incubation support.

Finally this study suggests that public policy makers should lower their expectations regarding the numbers of new jobs created by business incubation support.

## **7. The impact of Business Incubators on startup growth and survival**

Pettersen, Aarstad, Høvig, & Tobiassen, (2015) conducted a qualitative study on whether business incubator are able to provide startups with network resources in Norway where they compared incubator's network resources and those of the startup. The data for this study was collected through interviews with tenant startups at a Norwegian incubator. The result of this study showed that the resources acquired by startup's own effort are way more critical in every phase of the development of the enterprise; however the resources provided by the incubator were complementary and very helpful.

Blank, (2020) conducted a study on the resources of an academic incubator and the survival chances of student startups, the author realized this study on a sample of 59 student incubators all were operating within an academic incubator. The results of this study found that the previous experience of the founding team within the incubator produces a positive correlation between the mentoring program of the incubator and the chances of survival of startups especially in the first year. The team inside incubator shares their different experience through a program and the startups by taking advantage of this program the chances of their survival increase, with this the author concluded that the human capital within the incubator has major importance along with the resources of the incubator when it come to the tenant startup survival chances.

Lose, (2019) conducted a mixed method study using both qualitative and quantitative methods on the effectiveness of business incubators in South Africa, the author chose a population that includes business incubator manager, practitioners of enterprise development, project specialists, and coaches. To analyze the collected qualitative data the author used content and thematic analyses, and for the quantitative data he used statistical data analysis using spss.

The results of the qualitative study of this research were as follows: for an incubator to start its operation it needs to have a few key elements, this includes infrastructure, intellect, network, personal skills and traits, social capital, financial resources, managerial competencies and government support. The author added that the model of the incubator has to make provision when it comes to situational analysis (environment conditions, challenges, opportunities, threats). The pre-incubation phase of the business incubator ought to identify potential markets, as well as sector studies and provide tenants with support in a specific area. The results of this study also acknowledge operational processes that are essential for the incubation this includes development, operational strategy formulation, recruitment policy, training, mentoring, coaching, funding, and setting governance structures, exit policy determination, and networking. The results for the incubation involve successful graduate tenants, sustainable growth of both incubatees and the incubator, and good feedback of the performance of the incubatees. Lastly the author mentioned in the results that the government's support is one of the key elements when it comes to building an incubation program. (Lose, 2019)

In summary, the concept of both business incubators and startups is relatively new to the Algerian entrepreneurial ecosystem (Harrar, (2021); BEKADDOUR, (2021); Mokhnache & Khacef, (2021); KOURAICHE, (2019), therefore the literature related to this topic largely utilized the descriptive and analytical approach and a qualitative method to explain both concepts and highlight how business incubators contribute to startups. We note that most of the data collected to study the role, impact or contribution of incubators in Algeria was secondary data and of qualitative nature.

Moreover, academic studies on business incubators reveal the difficulty in answering 'do business incubators have a positive impact?' This is a result of the lack of data, because most incubators measure their impact by the number of startups they produce rather than the number of incubators that survive on their own in the market and continue to grow. (Pompa, 2013) Additionally, the evaluation of incubators favored a qualitative analysis with strong theoretical support; however, efficiency has been gaining strength from the quantitative perspective, taking weight away from the theoretical explanation as stated by Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, (2020). Business incubators have interested a lot of researchers who assumed that the using support institutions for the

creation and development of new companies can have positive repercussions, through the number of ventures created, their growth rate, and their survival rate.

## **The conceptual framework**

Extant literature in business incubation has been criticized for focusing on quantitative measures of success while failing to offer a comprehensive, process-focused understanding of how they actually impact startup growth and survival. This study addresses that gap by linking established theoretical frameworks from both startups and learning to theories the business incubation process and offer a new conceptual framework that captures and explain the impact that business incubators have on startup growth and survival This contributes to knowledge by offering a fresh perspective on how the entrepreneurial process might be studied within a business incubator environment.

### **Section One: Startup growth and survival**

#### **1. Identifying a Startup**

To understand how an incubator truly impacts startup growth and survival one needs to comprehend what a startup is and what type of companies can be identified as one.

##### **1.1 Startup Definition**

The term "start-up" comes from the United States. It began to be widely used in the 1990s when the Internet bubble was created. However, if the use of the term startup is accepted, various definitions exist for the term, the following can be mentioned: (BEKADDOUR, 2021)

Startups as mentioned by Thomas & K.I, (2020) are “Entrepreneurial ventures that are in the initial stages of their operation, where founders develop an innovative product or service with a scalable business model”. Further, they are small projects that just started, ‘businesses that are typically technology-oriented and have high growth potential.

The word startup consists of two parts ‘Start’ that indicates the starting idea and ‘Up’ that refers to the idea of strong growth, as is indicated by (Aissaoui & Elhazzam, 2021).

Additionally and according to Ould safi & Larabi, (2020) Startup companies or entrepreneurship projects are companies that are established by entrepreneurs to launch an innovative product in the market or embody a new idea on the ground, it is different from other projects in that it is characterized by rapid growth and needs to use modern technology. They also added that basically, they are young companies that have an

innovative idea and a possibility to achieve fast growth and turn into big successful companies in record time.

An extra definition for Startups is that they are open organizations, engaged in the innovation processes. Their network can include incubators, universities, big companies, and public sector units interacting forming an ecosystem by their interaction, to help the success of their collective efforts. Ecosystems may be referred to as the general place in which startups operate, as well as research at the intersection between open innovation and startups is gaining momentum (Mamédio, Figueredo Rocha, & Quandt, 2019).

There are also widely repeated definitions that are found throughout the current literature, a very famous one by Ries, (2011) who identified a startup as “a human institution designed to create new products or services under conditions of exorbitant uncertainty”. And another well-known definition by Steve Blank states that "a startup is a company, a partnership or temporary organization designed to search for a repeatable and scalable business model.”

Some definitions found indicate that startup is a phase more specifically an initial phase in a company’s lifecycle, “*the startup phase’ is a vital part of creation, can last a few years but may last more than ten years*”. (Nakara, Jaouen, Vedel, Gbarret, & d’Andria, 2018). Through the startup phase, a new idea is brought to the market and transformed into an economically sustainable enterprise. New firms are artifacts for transforming entrepreneurial judgment into profit (Spender, Corvello, Grimaldi, & Ripa, 2017).

Lastly, we mention Paul graham who defined in a very famous article a startup as a company designed to grow fast. Being newly founded does not on its own make a venture a startup, nor working on technology, taking venture funding, or having some sort of "exit." The only essential thing is growth. Everything else we associate with startups follows from growth. (Bouchaour, 2018) Moreover it is very important to note that "Startups are" a temporary organization looking for a profitable and enabling industrial business model, its mission is to become an established company.

### **1.1.1 Startup definition in Algeria**

Algeria has its own definition of the term as well and what is considered and defined as a startup, the country is very late to adopting the culture of startups as well as framing and identifying what one is; it was not until 2020 that Algeria released the ‘executive decree n° 20-254 of 27 Moharram 1442 corresponding to September 15, 2020’ relating to the

creation of the national committee of labeling of "Start-up", "Innovative projects" and "Incubators" and fixing its missions, its composition and its functioning hereinafter referred to as the "national committee", the latter was created by the minister in charge of startups

Through this decree Algeria considers a "Startup" each company of the Algerian law respecting the following criteria ([Startups, 2022](#)):

- The company must not have existed for more than eight (8) years.
- The company's business model must be based on innovative products and services.
- The company must have significant growth potential.

The annual turnover must not exceed the amount set by the national committee.

-At least 50% of the shares must be held by individuals, approved investment funds, or other companies with the "Start-up" label.

-The company must not have more than two hundred and fifty (250) employees.

Every company that contains the previous criteria can get from the national committee the label of a "start-up" and can benefit from some tax exemption that the country provides for startups in order to encourage people to create startups and there for promote entrepreneurship in the country.

## 1.2 The difference between a startup and a small business

Oftentimes startups are confused and mistaken with small businesses; however, the difference between the two was identified in the eight following factors by ([Aissaoui & Elhazzam, 2021](#)):

**Innovation:** The difference between a startup and a small business is the innovation, small businesses don't have factors that differentiate them from other companies they are quite similar to the existing companies in the same field whereas startups are known for their high level of innovation.

**Profit:** the focus for small businesses is to make a profit and if possible from day one, but for startups, it takes months even years for it to make a few dollars.

**Growth Rate:** in general small businesses grow fast where startups have to continuously grow and grow when needed to.

**Funding:** To start a small business it is possible to use savings or friends investments or bank loans, for startups a lot of funding sources are activated such as savings and angel investors and business incubators, capital risk and investors are the most common ways to obtain funding

**Technology:** For small businesses, there are no special technologies needed there already are technologies ready to be used and that they can use to reach their goals. For Startups technology and innovation are the main product to launch for this reason most of them are tech startups as it is considered the only way to achieve fast growth and scaling.

**Life cycle:** some statistics mention that 30% of small businesses fail within the first three years whereas for startups the risks are much higher that 90% of startups fail within the first three years.

**Team:** For small businesses, management does not need exceptional leadership qualities, and employees are hired according to their need that is why they have limited growth levels, as for startups their success depends on growing its team after its growth and managing this growing community the boss needs to have leadership qualities and real experience as a true entrepreneur.

**Lifestyle:** small businesses take on fewer risks and duties which can create a possible balance between work and personal life but for startups, entrepreneurs have to bid Farewell to their personal and social life because of stress and the preoccupation with growth.

### 1.3 Startups and SMEs

Startups are often confused with small and medium enterprises (SME), when comparing the two several similarities are found such as a lack of resources in terms of employees and finance (Paternoster, Giardino, Unterkalmsteiner, Gorschek, & Abrahamsson, 2014).

However, a lot of differences also exist. For example, SMEs have a developed understanding of the product and market. According to Ries, (2011), a small company focuses on creating profits through its venture, whereas a startup focuses on developing an innovative product. Startups that showcase a potential to grow are often acquired by large companies, which is less likely to occur with small non startup companies due to their

focus on traditional product development. However, [Sutton,\( 2000\)](#) mentioned that, as a result of their more-extensive experience, SMEs have some advantages over startups in regards to resolving communication problems, coordination and communication and responding quickly to the market and customers. SMEs also focus on developing a multitude of products because their customers and users are known, whereas the focus for startups is on a single product since their target customers and users are usually unknown. The latter can cause some early-stage survival risk on the startup in comparison to SMEs ([Bajwa, 2017](#)). The main contrast between other companies and startups is that startups mainly focus on innovative product development and are more likely to increase their staff while scaling up. ([Tripathi, Annanperä, Oivo, & Liukkunen, 2016](#))

More fundamental difference between a start-up and an SME is the business model, because while SMEs apply a defined business model, startups search for their business model. Furthermore a startup is generally not structured by an organization chart and is strongly based on a team spirit that encourages creativity. It is also a phase and is bound to evolve and transform into a SME/multinational. ([BEKADDOUR, 2021](#))

Some contradictions are found in the literature in relation to the number of employees, the categorization based on which some use to differentiate between a startup and an SME. According to [Schmiemann, \(2008\)](#) in a definition by the EU the number of employee categorization divides companies to: into microenterprise (one to nine employees), small enterprise (10-49 employees), medium enterprise (50-249 employees), and large enterprise (250 or more employees). Finding that SMEs have a greater number of employees in comparison to startups which generally have from 1 to 100 employee per company

However [BEKADDOUR,\( 2021\)](#) contradicts this idea and according to this author a startup is not characterized by its size or number of employees. For example, Twitter (which is 10 years old and has almost 4000 employees) is no longer a start-up. However, the company still hasn't found its equilibrium point.

## **2. Startup Growth**

### **2.1 Growth**

In the organization definition: *“as an administrative organization and a collection of productive resources with a general purpose to organize the use of its own resources with*

*resources acquired from outside the firm for the production and sales of goods and services at a profit. These resources are considered to be essential in order for the personnel to execute its plans and achieve its objectives while being bound together by a kind of structure*". Shows that an organization is unique configuration of the perimeters mentioned above which means that not every organization has the same pattern of growth, or even for some growth is not an objective. (Penrose & Pitelis, 2009)

Growth is considered in the literature as the sustained increase over one or more years of one or more indicators. Growth has quite a few definitions one of which is the consequence of a management decision for which the company's owner is responsible, which translates into an internal impulse of growth. Further it exist both qualitative as well as quantitative definitions. The quantitative definition of growth in the literature is most often based on the following criteria: number of employees, total assets and company sales. The number of employees can vary from country to country; even within countries and between government programs. The qualitative criteria are divided into four main categories: the origin or ownership of the company, the strategies or objectives of the management, the evolution and stage of development or organization of the company, the sector or type of market. For this reason, some authors define it as "*a stage of transformation in regard to the size and/or activities of a company*" or as "*the increase in sales of the manufactured product*". Or even as "*the increase in size of the company over time*". However the growth process is not easy to measure and the measurement criteria are a multiple. (KAOUTOING, MAI DJANGO, & MADINA, 2020)

According to Graham, (2012) the best way to measure the growth rate of its revenue, followed by its active users, because whenever a startup starts trying to make money, its revenue will probably be a constant multiple of active users.

The growth of a company plays a very important role in any type of organization. Since organizations face constant changes they have to keep trying to meet the objectives they have for themselves. Growth is caused by the change in organizations objectives. These changes can be impacted from both internal and external pressures. External changes can come from requests and demands of conspicuous stakeholders of the organization or from unexpected opportunities. Moreover, organizational objectives can change from within, based on new accumulated knowledge by organizational as well as experiences and learning. These changes will result in renewing the objectives of the organization. If an

organization struggles in adapting, it may impact their growth process which can lead to its existence being threatened. However, if an organization is able to restate its objectives it often leads to growth. The members leading the organization might decide to modify and change the objectives so that the organizations partake in more of the same activities, resulting in new objectives, expansion, resulting in diversification. Nevertheless, whether an organization grows by means of expansion or diversification, it needs more staff, material resources, financial capital and a revised infrastructure. (Padaki & Vaz, 2005) Which bring us to our next point 'startup growth', as one of startups main objectives is to grow, and as seen in the definitions mentioned above growth is one of the most repeated characteristics of a startup.

## **2.2 Startup Growth**

A start-up is an innovative and often technologically oriented company in the seed stage of its development cycle (beginning execution of a business idea, securing capital, launching operations, and selling). According to Blank's definition, a start-differentiating up's feature is the search for its business model, which should be scalable and globally focused on a broad range of clients (not local customers only). The startup period ends when a company has identified its business model and has begun to generate regular revenue, or when an exit event occurs (IPO, acquisition or fusion). As a result, we can accept the following definition for further consideration: A start-up is a small business that is up to five years old looking for a scalable business model or an innovative product/service, and open for alternative financing. (Zajko, 2017)

Startup is a company designed and intended to grow fast, as the newness nor being in the technology field make a company a startup nor is taking venture funding, or having an "exit." According to Graham, (2012) the most essential thing that makes a company a startups is growth, furthermore "startup" is the word created and used for companies that grow fast. Everything associated with startups follows its ability to scale. However a specific growth rate that makes a company a startup does not exist, as a startup is not a threshold. The growth of a successful startup generally goes through three phases: the first is an initial period characterized by a slow or no growth while the startup tries to figure out what it's doing. The second is while the startup figures out how to produce a product or service for a lot of people and how to reach; this phase is characterized by rapid growth. And lastly a successful startup will grow into a big established company however growth

slows, due to internal limits and the company bumping up against the limits of its markets. Furthermore the phase of growth that defines startups is the second one as it determines how big the company will be.

Fast-growing start-ups are defined as “start-ups designed to scale very quickly (at least 15% growth per year compared to their peers) with their focus on global growth, unhindered by their geographical base and fuelled by new organizational techniques and accelerating technologies”. (Zajko, 2017)

### **2.2. 1 Scaling up**

Start-up and scale-up are key terms used in the discussions and documents on the issues of rapid growth of start-ups. In a company’s life cycle startup is the beginning and a first phase, in this phase a startup aims to grow and scale to reach the phase that follows which is the scaling phase, but it can only progress into this second phase if it survives the first very critical 2 to 3 years and if its internal as well as external conditions allow it and are favorable. In this case a startup can develop its growth potential and become a high growth company generating revenues and well paid jobs. The scaling up Phase, means developing a powerful marketing and sales, building an organization by managing and hiring diverse groups of people, and knowing how to acquire strategic inputs such as the right kinds of capital and suppliers. M. Andreesen defines scale-up as a company that has identified its product/market fit and has reached notable proofs of market traction Zajko,(2017). Scaling-Up focuses on four major areas of decision in the company’s process of scaling up: Strategy, people, Execution, as well as Cash. (Harnish, 2014)

Moreover when a startup initiates its activity it starts with promoting and marketing the product in a limited manner in order to get a suitable number of visitors as a trial and to test the product and develop it and therefore build it gradually based on the collected remarks and what is noticed and then it progresses from promoting it in a limited manner to hacking growth until it reaches a product market fit focusing on hacking growth before reaching a product market fit will be a huge waste of effort budget, but if you reach this with enough users or customers this means your product is a must have (El-Jenbaz, 2019)

Product /market fit according to ELLIS & BROWN, (2017) is to analyze whether or not the product is optimized for its offering what they called a ‘must have’ experience and whether it has figured out how to deliver that experience to the right customers. One of the

most common misconceptions is that: growth hacking is often characterized as being specifically about bringing in new users or customers. But in reality it is related to a lot more one of which is customer activation, by making those new customers more active users and buyers, and figure out how to turn them into evangelists. (ELLIS & BROWN, 2017)

## 2.3 Startup growth stages

The number and the name of each stage changes from a source to another.

### 2.3.1 The Pré-Startup stage

The Pre-Startup phase's definition according to Sexton & Bowman-Upton, (1991) is: *“the process by which the entrepreneur, in exploiting an opportunity, creates a vision of the future and develops the necessary objectives, resources, and procedures to achieve that vision”*.

Here the project holder or the entrepreneur focuses first on finding and discovering an idea that can satisfy a customer's need and solve an existing problem, so this idea can translate to an opportunity that he or she can exploit. (Salamzadeh & Kesim, 2015) Then the entrepreneur starts planning and creating a vision for this opportunity. This stage can vary from no planning, to developing a very detailed and comprehensive, long term plans; it can also consist of collecting data and analyzing it before launching the business or the startup and further develop the business plan through this knowledge. In spite of the mixed reviews when it comes to startup or new venture planning in relation to survival, this phase is considered to be very important especially when trying to bring in investors to the business or convincing financiers, as they often need convincing of the potential of success of one's idea. Financiers need to study details in order to determine business's ability to succeed so they can give the funding, they often demand a business plan, and here is where planning plays an important role and help project holder as well as new ventures obtain financing, moreover it can be considered to have a direct impact on access to financing. (Castrogiovanni, 1996)

In this phase also called 'bootstrapping' by Salamzadeh & Kesim, (2015) the entrepreneurs realized a bunch of activities of which we mention identifying the resources (technical, financial...) and their availability est. in order to start and initiate the venture and accentuate the product's feasibility as well as the potential growth of the startup. Moreover

Creativity, prior experience as well as intuition are some of the traits that can help the entrepreneur in this stage. Further this phase is identified as the discovery stage according to [Kumbhat & Sushil, \(2018\)](#), because of it being the stage where the entrepreneur discovers and determines not only their opportunity market but its value proposition and its competition as well as identifies their customer base, ways to fund the business...

### **2.3.2 The Seed Stage**

Entrepreneurs focus in this phase on transforming the idea into a business. It is very crucial here to verification and validation of the market opportunity where prospects show interest in the idea. This phase is characterized by: market entry, team work, development of the prototype, venture valuation, and pursue and search help from support mechanisms including incubators and accelerators as well as development centers, Technology Transfer Offices (TTOs) and business centers, to accelerate the process, in this stage the startup should have an average investment to develop the product or service and grow. It is also considered to be quite of a messy and uncertain stage. A great number of startups fail in this stage, on one hand those that succeed at finding support mechanisms (incubators, accelerators...) have a higher chance of turning into established successful companies, on the other hand those who were not successful in finding support mechanisms risk turning into a low profit companies or even fail. ([Salamzadeh & Kesim, 2015](#); [Passaro, Quinto, Rippa, & Thomas, 2016](#))

In the case where the financiers don't give an entrepreneur financing, because usually the venture is considered to be high risk and have a high uncertainty level, thus in this very early stage the entrepreneur often starts small with personal funds or that of family or friends, in addition to options of seed funding and crowd funding. As for the business model in this stage usually it is developed along with a finalized business plan as well as the name and a legal entity is incorporated. As for the revenues here the startup usually has minimal initial revenues for its first paying consumers, this revenue is to validate the business model. Also in this stage the first critical and key employees are hired, and work alongside the entrepreneur and do anything to deliver. ([Kumbhat & Sushil, 2018](#))

Also in this phase the entrepreneur has to develop formal and informal relationships with different actors from the startup ecosystem to get the needed resources and support. Finally, the key traits of the entrepreneur of this stage are motivation, risk evaluation and

propensity, and self confidence. This phase can be considered concluded when a prototype has been developed. (Passaro, Quinto, Rippa, & Thomas, 2016)

According Kumbhat & Sushil, (2018) to this stage is identified as the validation stage because the startup validates the product and verify of it is market fit and there is an interest from people when it comes to the solution this product or service are offering through an exchange of attention or money.

### 2.3.3 The Early Stage

Telch, (2021) in his study focused on the early stages of the life cycle of a startup, considering this phase is the most critical and during which the failure risk is higher. Further in this stage the founder's characteristics have a major impact, the human capital and their ideas being the main resources.

While the definitions and measurements of early-stage success vary, they all share a common criterion: the survival of the company. In order to successfully survive the early stages of its existence—which are characterized by high pressures and limited funds—a start-up must avoid some critical mistakes, with the wrong business model and team related issues being the most common reasons for failure. Achieving growth is an indication that a start-up's product or service has the potential to attract customers or, at least, create interest, or that the company has, at a minimum, succeeded in convincing investors or the market of the probability of that scenario

The first part of this study focused on the early stages of the life cycle of a start-up, as the most critical phase and the one during which the risk of failure is greater. Moreover, it is the stage at which the founders' characteristics have the greatest impact, as their ideas and human capital still constitute the start-up's main resource

Business angels who are private investors that grant risk capital to new and growing ventures in which they don't have a family connection, they are considered to be important investors because they invest 16 times more than venture capitalists in seed ventures (Sohl, The angel investor market in 2008: a down year in investment dollars but not in deals, 2007)

At this early stage, it is identified by many researchers the importance of the entrepreneur and at times even the team in making positive investments decision. (Sudek, 2006; Feeney, Haines JR, & Riding, 1999) Although precise characteristics in this stage are very difficult to determine in an objective manner or rank by importance, the critical factor model does contain one very broad category, and that is the relevant entrepreneurial experience.

(Maxwell, Jeffrey, & Lévesque, 2009) However according to Passaro, Quinto, Rippa, & Thomas, (2016) some of the features that the entrepreneur should have since the product or service are in already in the market are risk-taking orientation, leadership as well as confidence because the product is already is in the market. Further Glaveckaitė, (2020) argues that from a theoretical point of view, the three dimension phenomenon of the team, the capital and the product as the right team and the personal qualities of the entrepreneur, innovation, experimentation, access to capital as well as a promising business model can contribute to the success and development of the startup.

Here the required resources can be technical, financial, as well as managerial. As for some of the activities that are considered to be essential are business planning, searching additional financial resources, commercial and product development. Since one of the required resources are managerial resources, incubators, accelerators as well as co-working spaces can play an important role in helping the startup as well entrepreneurs with physical and technical resources but as well as managerial resources.

In this stage the startup should be able to efficiently gain customers, suppliers along with, additional external partners eventually. (Passaro, Quinto, Rippa, & Thomas, 2016)

Entrepreneurs at this stage should be able to measure, the success probability of the business idea and identify the necessary tangible and intangible resources.

An early stage startup can have the following characteristics: the right team, an innovative product or service that has not has a market yet and that allure venture capitalists or other ways of funding, in addition to a fast growing profitable business model and a clear way of monetization. Glaveckaitė, (2020)

The results found by Glaveckaitė, (2020) in her research even show that a new approach to solve the development problems of a startup are: acquiring the right team that will contribute with their knowledge, experience, personal qualities and skills. As most startup 'deaths' happens because of the lack of the proper team.

During this stage the focus is on getting ready to scale which is the following stage, so the startup refines its business model according to the analysis that is done on the environment of the startup and everything that is around it.

By the end of this phase the startup should be ready to scale its business model to be the leader of the market, the startup has stable revenues enough to confirm its scalability and validate its business model. (Kumbhat & Sushil, 2018)

### 2.3.4 The Expansion Stage: scale-up & exit strategy

#### a. The expansion & scale up

The firm requires capital to grow. Private equity finances growth for and until next cycle. The firm will seek another round of financing or sell itself to a strategic player.

This stage is characterized by its scalability, consolidation as well as self sustainability, the startup needs financial physical and managerial along with technological resources, as for the qualities that the entrepreneur ought to have in this stage are strategic orientation, coordination, leadership. The main activities realized are new personnel and first executive employment, back end scalability improvements as well as internalization.

The millstone in this phase is to scale up which can be executed by the help of incubators that offer the acceleration service, accelerators, venture capitalists, in addition to partners that range from suppliers to SMEs, customers, large firms, and startups. (Passaro, Quinto, Rippa, & Thomas, 2016) According to the authors in the expansion stage the startup is a new born firm that was able to scale up and sustain itself, for that the entrepreneur or as called by the authors the ‘startupper’ ought to develop new abilities and skills such as the ability to motivate and correlate employees, handle a greater turnover, relate with suppliers and new customers, search for international markets and partners, as well as the ability to delegate tasks and activities.

In accordance with (Kumbhat & Sushil, 2018) the startup in this stage is characterized by An aggressive growth through aggressive customer acquisition, with a product market fit and a validated business model. It should have established revenues and focuses on transforming projects to products, ownership to partnership, opportunistic to strategist, and relationship to brands. *“It is in a transition from an entrepreneurial high speed and risk, to one of planning, management and fine turning of operations”*.

#### b. The exit

The focus the exits increases in the later stages for both entrepreneurs and investors as it becomes more prominent. Vinturella & Erickson, (2002) defined exist strategy as follows: *“the component of the business plan that describes a method by which investors can realize a tangible return on the capital that they have invested in the venture. Investors consider the “how”, “when” and “how much” related to converting their share of the profits of the venture to a more “liquid” form”*”. According to this definition investors search for a way

to turn their shares into a liquid form, implying that they'll get a return on their investment which can be done through an acquisition, a public offering for example management or an employee buyout . [Vinturella & Erickson, \(2002\)](#) Adds that the most likley exit is considred to be acquisition, the latter refers to a sale to strategic buyer or a financial buyer.

### **3. Startup Survival**

#### **3.1 Firm Survival**

In the long run, the profitability, growth, and survival of firms depend on them establishing 'relatively impregnable "bases" from which to adapt and extend their operations in an uncertain, changing, and competitive world. Survival in this sense is sometimes as much determined by the legal framework within which a firm operates as by the economic 'viability' of the firm. Its profitability and very survival as a firm are imperiled by adverse changes in demand for the type of products it produces and by increased competition from other producers. The profitability and even survival of a firm which fails to concentrate on the intensive development of any of its existing fields, and instead jumps from one type of production to another in response to changes in external conditions, depends entirely on the ability of its entrepreneurs to make shrewd financial deals, to judge correctly market changes, and to move rapidly from one product to another in response thereto. Growth are impeded if the manager continues to run his firm on a one-man basis. If at that juncture the chief executive is able to bring along other men to take over some of his management responsibility, we have the beginnings of an executive organization and increased chances for growth and survival. [\(Penrose & Pitelis, 2009\)](#)

#### **3.2 Startup Survival**

When a venture ceases its operation it means the venture has failed; therefore survival is necessity when it comes to venture performance, the latter depends on the ability of an enterprise to operate on its own and becomes independent and a self-supporting economic entity. Performance of a small business can be studied from two different points of views: survival or the degree of success. [\(Barney, 1986\)](#) It is an essential thing for startups to survive as most of startups that do survive can turn into successful companies which plays a very important role in the economy. [\(Martinsons, 2002\)](#) In addition, rather than growth off sales, or earning of a venture survival is often of primary concern considering the high levels of failure. [\(LeBrasseur & J. & Zinger, 2005\)](#)

For a startup to turn from a research or a simple idea and into a successful venture according to (Hudson & Khazragui, 2013) it needs to cross the phase in between also known as the 'valley of death'. Becoming a successful company is a journey of constant growing and evolvement as the strategies as well as the best rules change depending on the present stage of the business model in the lifecycle. (Appelo, 2019)

### **3.3 Factors & reasons that can impact the survival**

A great amount of literature in relation to startups and small ventures survival, attributes the impact on survival and small ventures to numerous perspectives, reasons and factors. And that includes utilization of the external support system, owner and or manager traits as well as background Reuber, Dyke, & Fischer, (1990), ability to access the requisite resources, networking, and the technical expertise of the founder. Moreover companies that start their endeavor in developing and growing fields have a greater chance at staying in the market and succeeding. Another factor that can be linked to firm survival is international trade, firms that export acquire characteristics (higher innovation intensity, higher productivity and efficiency, etc), that can help them survive in comparison to companies that do not export. Size can also play an important factor for survival, and according startup size has a positive impact on its survival. Lastly we mention incubators as factors that can play an important role when it comes to startup survival although the literature is quite lacking when it comes to this topic especially survival of incubator graduate firms. (Hackett & Dilts, 2004)

Poor management is often accounted for business failure; there is a difficulty in defining this syndrome by both academics and practitioners. As reported by (LeBrasseur & J. & Zinger, 2005) management capability can influence the survival of the new venture particularly in the early stages, as an example they used the capacity to overcome and surpass technical, financial, physical difficulties often faced by new ventures. This can play a role and impact the survival of startups. *“Greater capability in key management activities is associated with higher likelihood of small firm survival.”* (LeBrasseur & J. & Zinger, 2005)

### **4. Startup growth and survival**

Certain key management activities on which the ability of micro enterprises ability to survive the startup stage depends on are grouped into functional areas of, operation management, marketing, financial, human resources, in LeBrasseur & J. & Zinger, (2005) study focuses on these functional areas with the some additional factors considered

relevant to startups and SMEs that include the effective use of technology as well as enhancing the image of the company and adeptness of management.

In [Tshwete, \(2020\)](#) study to explore the strategies used by leaders in the information and technology small and medium enterprises where the research focused on business leaders from three different small and medium enterprises (SMEs), the findings of this study shows three major factors that influence the sustainability of the SMEs in the information and communication technology industry were: the strategies of innovation, the team, individual as well as organizational strategies of learning and lastly the integration of technology. This research also focused on dynamic capabilities as according to [Ambrosini & Bowman, \(2009\)](#) are organizational behaviors or patterns that the companies use to acquire, change, and reconfigure the resources in order to adapt to the changes of the environment. And as mentioned by [Zahra, Sapienza, & Davidsson, \(2006\)](#) the dynamic capabilities can manipulate organizational assets to achieve growth and survival. The results found by [Tshwete, \(2020\)](#) research show that small and medium enterprises leaders who invest resources to develop an innovation in particular the innovation of the business model and learning culture in their organizations could sustain and develop competitive advantage that can ensure the survival and growth of the business for more than five years.

[Miozzo & DiVito, \(2016\)](#) joined [Penrose & Pitelis, \(2009\)](#) in identifying paths that unravel declining growth, gradual growth and rapid growth, while focusing on principally on the external environment, as a conclusion they found a considerable role in how institutions including intermediaries, assist new startups to develop their venture. For example technology transfer offices support startups with collecting funds from capital investors as well as help them to develop a management team that is functionally diverse. The authors added that environment where these types of institutions have a strong presence; they seem to be determinants of startups rapid growth. ([Miozzo & DiVito, 2016](#))

Furthermore the external factors that influence the firm such as the politics, economy as well as the general business environment were proven to not have a big importance when it comes to explaining startup growth. However the factors that do explain startup growth are the internal factors such as the idea of the startup, its strategy along with the founding team's expertise and commitment. Customer relationships, in addition to the overall management were identified as factors that can impact the growth of a startup but they are not crucial. ([Penrose & Pitelis, 2009](#) ; [Miozzo & DiVito, 2016](#) )

Most research classifies the success factors of new ventures into three categories: the entrepreneur, the firm, and the business environment. These categories effectively distinguish between successful and unsuccessful ventures and they are frequently referred to as the most important effectiveness indicators for incubators. This is not surprising, given the fact that survival and growth measures are often used to evaluate venture success. In the long run, the profitability, growth, and survival of firms depend on them establishing 'relatively impregnable "bases", from which to adapt and extend their operations in an uncertain, changing, and competitive world (Penrose & Pitelis, 2009). Its profitability and very survival as a firm are imperiled by adverse changes in demand for the type of products it produces and by increased competition from other producers. Its growth is limited by the growth of the market for its existing products or by the share of the existing market it can succeed in obtaining growth is impeded if the manager continues to run his firm on a one-man basis. If at that juncture the chief executive is able to bring along other men to take over some of his management responsibility, we have the beginnings of an executive organization and increased chances for growth and survival to a considerable extent the survival and growth of a small and new firm depends on superior entrepreneurial ability, and just as prospective entrepreneurs with considerable financial resources have a wider choice of possible activity than do those without capital, so prospective entrepreneurs with unusual ability, original ideas, and considerable versatility have a wider choice of activity than does the 'average' citizen. (Penrose & Pitelis, 2009)

In the company scaling up process (Harnish, 2014) focused on four major decision areas: cash, strategy, execution, and people.

One of the characteristics of a startup is a low level of resources. Nevertheless for them to grow and survive, they need social, human and financial capital for that numerous startups choose to develop their idea with incubators

Because this reduces the so-called "liability of newness". The term "liability of newness" refers to the high risk of failure that young companies face early on because they don't have the necessary resources to survive (Stinchcombe, 1965 as cited in Blank, 2020). This is because the formation process of a new venture takes time and involves considerable costs. (Blank, 2020)

## Section two: Business Incubators

### 1. The Entrepreneurial Support Ecosystem

#### 1.1. The concept of entrepreneurial support

The risk of companies disappearing, especially in the first five years of operation, is very high. Studies show that about half of new businesses disappear after five years of their creation in this perspective; entrepreneurial support is used to reduce the chances of the company's disappearance and thus promote its sustainability. It allows the entrepreneur to be in adequacy with his project, and facilitates the acquisition of the suitable social capital and the setting in network between the creator and his partners. (Harrar, 2021) The definitions of entrepreneurial support vary according to whether the authors are interested in the structure (incubators, accelerators, etc.) or the people and the forms of support (coaching, tutoring, counseling, etc.).

#### 1.2. Definition of the entrepreneurial ecosystem

There is not yet a widely shared definition KOURAICHE, (2019), This is partly because these ecosystems are defined in very different ways, at different scales, and with different research models and data. As a result, many different definitions have been proposed (BEKADDOUR, 2021):

Vogel. P defines it as “an interactive community within a geographic region, composed of diverse and interdependent actors (entrepreneurs, institutions and organizations) and factors (markets, regulatory framework, support framework, entrepreneurial culture, etc.), which evolves over time and whose actors and factors coexist and interact to promote the creation of new businesses”.

Similarly, Mason, C. and Brown, R. (2014) define ecosystems as “an interconnected set of entrepreneurial actors (potential and existing), entrepreneurial organizations (companies, venture capitalists, business angels, banks), institutions (universities, public sector agencies, and funding agencies) and entrepreneurial processes (rate of business creation, number of high-growth companies, number of serial entrepreneurs, level of entrepreneurial ambition) that intertwine in a formal and informal ways to connect, moderate and manage performance within the local entrepreneurial environment.”

KOURAICHE, 2019; Spilling, (1996) note that these definitions highlight two things: first, the diversity of the components of the entrepreneurial ecosystem, and second, the interaction between the components of the system. We deduce that the entrepreneurial ecosystem is composed of all the economic actors and environmental factors existing in a geographical area that contribute to the creation and development of businesses.

It is found that the support ecosystem is a subsystem representing a key element and a strong component in the entrepreneurial ecosystem. (Harrar, 2021)

### **1.3. The startup ecosystem**

CUKIER & KON, (2018) Describe a startup ecosystem as “a limited region, roughly within a 50 km (or 1h travel) range, formed by people, their startups, and various types of supporting organizations, interacting as a complex system to create new startup companies and evolve existing ones.”. These interactions and exchanges are necessary to gain access to the financial, technological, and human resources that come from it, which is a matter of alleviating the obstacles facing Startups. (Mokhnache & Khacef, 2021)

Moreover Tripathi, Oivo, Luikkunen, & Markkula, (2019) add that a startup ecosystem operates in the environment of a specific region. It involves actors that can act as stakeholders, such as entrepreneurs, investors, and other groups of people who have some self-interest in the ecosystem. They collaborate with supporting organizations, including funding agencies, government, and educational institutions. Further, they establish organizations to create an infrastructure in which a common network capable of supporting and building startups on a smaller scale is established, increase domestic product development, and create new jobs in the country on a larger scale”.

### **1.4. The Entrepreneurial Ecosystem in Algeria**

(Harrar, 2021; BEKADDOUR, 2021; Mokhnache & Khacef, 2021; KOURAICHE, 2019) all show that Algeria was late in developing an ecosystem that supports entrepreneurship in the country, but this was rectified in recent years. More specifically in 2020 as several measures have been taken to strengthen the development of ecosystems carried by the new ministry of micro-enterprise, start-ups, and the knowledge economy. The government has drafted a bill for the creation and the definition of the institutional label of the startup and incubators as well as innovative projects.

The actors are the main components in an entrepreneurship ecosystem, and their interactions, as well as their interdependent relationship, contribute to the creation and the survival of startups [Tripathi, Oivo, Luikkunen, & Markkula, \(2019\)](#), these actors are structures that in Algeria take the form of: Incubators accelerators or facilitation centers. From the studies that treated the Algerian entrepreneurial ecosystem, we conclude that they can be classified into three categories and each category includes different actors and structures: Devices of Assistance and support for business creation (The National Unemployment Insurance Fund (CNAC), National Agency for Support and Development of Entrepreneurship (ANADE), The National Microcredit Management Agency (ANGEM), The National Agency for the Promotion and Development of Technology Parks (ANPT), The Fund for the Appropriation of the Uses and Development of Information and Communication Technologies (FAUDTIC)). Incubation structures (Business incubators, Technology park incubators, Academic Incubators, Privet incubators), And Other private structures and Programs of support such as accelerator and investors, etc ([BEKADDOUR, 2021](#)).

In conclusion the entrepreneurial ecosystem in Algeria is very vulnerable, weak, and lacks maturity all due to its newness, nonetheless it is moving towards the right direction, and the government is aware of the various difficulties that hinder the development of startups and their ecosystem, and has implemented measures accordingly such as the launch of the Algerian startup fund est.

In conclusion startups contribute to the promotion of entrepreneurship and economic development, but they need an ecosystem that allows and helps them to grow and one of the key components of this ecosystems is business incubators, the latter nurtures the startup from the beginning phase until its maturity phase.

## **2. Incubators**

Incubators are considered key elements in the entrepreneurial ecosystem as a result they have a crucial and important role in business creation as well as promotion and development of entrepreneurship. ([Harrar, 2021](#))

Project leaders or entrepreneurs, who are considering transforming their idea into a profitable business but perhaps lack experience in commercializing, financing, or managing their projects integrate incubators. The latter support, coach, and mentor them,

along with providing network services permitting them to connect with multiple facilities that help the creation of their business such as funding organizations, investors, or venture capitalists. In addition to pairing them with the right human resources for their team. And because incubators can share the risk with startups they help them grow and ensure their survival, especially in the first very critical years through which a company can either survive or fail. (Mokhnache & Khacef, 2021)

Startups face many challenges while launching, such as financial and commercial challenges, the lack of qualified human resources, production tools, and the difficulty of market entry. All of these challenges hinder the startup especially in its initial stages. To confront and tackle these obstacles they take refuge in incubators. The latter helps them surpass these challenges and exploit the opportunities available in the market. (Ahmed mili, 2020)

To summarize what an incubator is and its role Thomas & K.I, (2020) define it in their article titled ‘Incubation Centers and Start-ups: A Study on Kerala’s Start-up Ecosystem’ as follows: *“Incubators are organizations that offer various services and facilities required for the start-ups to survive and grow. They provide office space, IT infrastructure, and mentoring, legal services, and so on. Apart from this, they often assist start-ups in raising funds under various government schemes and at a later stage, incubators support the innovator by providing him with networking facility and also mold them to pitch before an investor in future”*. Moreover incubators nurture and supervise the projects admitted throughout their different life stages employing a program that can be divided into three main phases: the pre-incubation phase, the incubation phase, and the acceleration phase. The program can change from one incubator to another, but the most common programs contain these three phases. (Ahmed mili, 2020; Bouchaour, 2018)

According to Hackett & Dilts, (2004) the definition of an incubator is *“A business incubator is a shared office space facility that seeks to provide its incubatees (i.e. “portfolio-” or “client-” or “tenant-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 the incubatees while simultaneously containing the cost of their potential failure”*. The authors also add that an incubator is not only a shared office space but also a network of individuals as well as organizations, that includes the team at the incubator and the manager, the advisory board of the business incubator, companies, local universities

employees, lawyers, accountants, specialists in marketing, venture capitalists, consultants, volunteers and angel investors.

### **In Algeria:**

#### **The definition of a Business Incubator**

According to the 'executive decree n° 20-254 of the 27<sup>th</sup> of Moharram 1442 corresponding to September 15, 2020' relating to the creation of the national committee of labeling of "Start-ups", "Innovative projects" and "Incubators" and fixing its missions, its composition and its functioning hereinafter referred to as the "national committee", the latter was created by the minister in charge of startups

Algeria considers eligible for the "Incubator" label any public, private or public-private partnership structure that offers support to startups and innovative project holders in terms of accommodation, training, advice and financing.

The national committee Accepts demands to obtain the incubator label only if participants provide the following documents:

- The detailed layout plan of the incubator
- A list of the equipment made available to the incubated startups
- A presentation of the various services offered by the incubator to the incubated startups
- A presentation of the different training and coaching programs offered by the incubator
- The CV of the incubator's staff, trainers and coaches;
- And eventually, the list of incubated startups

The success of business incubators in supporting startups in different countries around the world pushed Algeria to adopt this mechanism to increase employment and create companies and achieve economic development. While there are incubators currently producing startups every year nonetheless the quantity is still considered low in comparison to the government's objectives ([bouchair & Hassiani, 2021](#))

The majority of literature in relation to the topic of incubators in Algeria indicates that Algeria is quite late in regards to adopting incubators, for many reasons we mention: the low conscience of incubators in the country, the late diffusion of the laws regulating

incubators, the unavailability of competent human resources to manage such institutions, etc. As a result, the concept of incubators as well as startups is still not fully grasped by the majority of Algerians, as well as the number of incubators that is considered relatively low. (Mokhnache & Khacef, 2021; BEKADDOUR, 2021; Bouchaour, 2018; Ahmed mili, 2020) Both startups and incubators being new concepts to the Algerian entrepreneurial scene face numerous challenges. (Mokhnache & Khacef, 2021) The challenges faced by Algerian startups are in relation to financing and funding the project, the small market size, the inexperience of startup owners and the members of the team. So to confront these challenges Algeria adopted incubators. (Ould safi & Larabi, 2020) Moreover, there are three main categories and types of incubators in Algeria: Business incubators Technology incubators, and Academic Incubators. (bouchair & Hassiani, 2021)

Investing in startups has become a necessity implemented by the economic reality of the country, especially with the decrease in petroleum revenues and the corona virus pandemic. (Ould safi & Larabi, 2020)

Lastly, not all companies need incubation the need for incubation is in relation to very specific ones, for the soul reason that there would be no enterprise creation without incubators. (Chandra, Srivastav, & Shah, 2003) Startups being high risk and high growth companies they need support and guidance as well as funding and incubators, are based on creating startups and insuring their growth and survival. (Irayen & Latroche, 2021)

### **2.1. Types of incubators:**

Since the creation of the first incubator, numerous changes have occurred due to the role they have had in the creation of new firms along with the mechanisms for achieving the technological development that they have been utilizing. At first, the majority of incubators were positioned, on the one hand, as public tools for the creation of jobs, urban rehabilitation, commercialization of university innovations and, on the other hand, as private organizations for the incubation of new high growth firms. (Grandi & Grimaldi, 2006) Joined (Hackett & Dilts, 2004) and divided incubators to two different types:

Incubators with a profit objective, including private incubators, as well as incubators with a not-for-profit purpose, such as public incubators, have the primary objective of reducing the cost of doing business by providing a range of services, venues, infrastructure, technical expertise and help with business plans. In addition to the changes and development of the market, this positioning has also begun to change due to the vigorous

development and great success of private incubators. These have as main purposes the creation of new firms and the acquirement of profit from incubatees as a result of fees charged for new endeavors. Throughout time incubators have had the role of supporting the development of the startup with a wide range of services. This led to the detriment of the passive behavior of just offering physical space, basic infrastructure and channels of communication to incubatees. (Grandi & Grimaldi, 2006)

According to Bergek & Norrman, (2008) the services provided by an incubator within a typology centered in the provision of physical space and administrative services resemble the concept of hotel and not of incubation. Based on the needs of the current market and the growing needs and complexity of innovation, incubators should be prepared to see themselves as drivers of innovation, supporting and nurturing potential entrepreneurs, empowering them with potential growth capabilities and equipping them with the business tools that they usually don't have and lack to achieve potential or current opportunities.

A large percentage of potential entrepreneurs are neither able to start their own businesses nor prepare their business plans because they lack managerial skills, business contacts as well as financial resources. They reveal a need of a mentor that is able to support and guide the new firm towards the right position, in the right moment. (Bergek & Norrman, 2008; Moreira & Carvalho, 2012)

(Peters, Rice, & Sundararajan, 2004, as cited in Moreira & Carvalho, 2012) Defend that incubators must assume the role of organizational developers by contributing to the training, networking and assistance of incubatees in the initial phase. Incubators, by training entrepreneurs can accelerate the learning process and develop their management capabilities.

There is often confusion between Accelerators and incubators, accelerators are a recent addition to the entrepreneurial ecosystem, the first accelerator being Y Combinator that was founded in 2005. Accelerators provide ventures with mentorship, education, connections through an intensive compressed temporally programs, during three months in which the venture meets with over fifty mentors and develop new services or products. Further the managers at the accelerator as mostly experienced business owners or investors. In exchange for the services provided by the accelerators as well as funding, new businesses usually have to provide a 6 percent equity stake. Mostly at the end of the program a demo day is held where the founders can pitch their business concept and idea to a big audience of investors. With that accelerators are destined for fast growth companies wanting to grab the attention of investors quickly. (Lange, 2018)

As mentioned by [Lange, \(2018\)](#) it exists Four types of incubators, with diffret exists and objectives:

**Public-sponsored:** the main objective of this type or incubator is job creation, and they are organized by a public party for example city economic development, regional planning and development commission.

**Non Profit sponsored:** the objectives for this type of incubator is the development of the area they are sponsored usually by the chamber of commerce, community organizations...

University Incubators: their major goal is to turn research findings into new products of technology.

**Private incubators:** managed and organized by private owners, its main objective is profit.

## 2.2. Incubation Program

Business incubation programs as well as initiatives are very common especially over the last decade, with various degrees of success

Business incubation catalyzes the process of starting and growing companies, providing entrepreneurs with the expertise, networks and tools they need to make their ventures successful. Incubation programs diversify economies, commercialize technologies, create jobs and build wealth. The incubation programs has some critical characteristics as it offers to tenant companies a full range of business assistance services tailored to them; ([ARABECHE, 2022](#))

### 2.2.1. Pre-Incubation

Some of the core in house services that incubators provide are business planning, pre-incubation, assistance in raising funds, and lastly networking.

The term Pre-incubation is used to describe support services to future entrepreneurs before launching their business. These services may include proactive identification of future entrepreneurs, helping them in developing a business plan, advice and training on forming and building a company. With some incubators programs the emphasis on pre-incubation varies considerably but the majority not doing so. With pre-incubation services, entrepreneurs usually will be offered desk space with other basic support for example computer and telephone while they prepare their business plan. Moreover incubators can provide the entrepreneurs or the pre-incubatees with advice and help with company registration procedures. The duration required to compete this phase

with its complexity is very different across the EU. In some countries the legal formalities and other procedures are straightforward and a company can be formed in a few days or weeks, in other countries this can take months ([Centre for Strategy & Evaluation Services, 2002](#))

### **2.2.2. The Incubation Phase**

Upon the completion of the establishment of the project, the incubator's contract is conducted, and under this contract benefits the project from a place of activity, and it is available on the requirements activity such as: offices, fittings, in addition to the availability of support services for cleaning and maintenance and security, all for a reasonable financial contribution from the startup. After the contract come the stage of work and development one of the most important stages of the start-up's life, as you embark on it. The institution operates with the assistance of the business incubator during the incubation period, which usually ranges from two to six months' incubation Maximum months, during this stage the incubator offers a full range of services that fit with the needs and future aspirations of the embraced institution. By the end of this phase comes the graduation stage.

### **2.2.3. The Post-Incubation Phase**

This stage is characterized by the company's endeavor to prepare for confrontation new economic challenges and orientation towards a market economy through a review of their policies and administrations, so the incubator had to intervene to help these institutions raise their performance according to a contemporary perspective to enhance their capacity, coherence, expansion and sustainability through:

- Monitoring the performance of graduating institutions to ensure their functioning according to the planned direction, and making sure that they do not Its exposure to any problem hindering its growth, with the need to focus on two main aspects of the follow-up process: substantive financial;
- Assess the performance of these institutions by analyzing the final results of the work, and assess their incompatibility with objectives in various administrative and financial aspects, productivity and marketing. ([Ahmed mili, 2020](#))

The graduation stage or the post incubation phase is usually related to the latest stages of the expansion phase once the incubation program is over. At this stage, tenant companies have acquired the necessary skills for being a mature firm and in addition, most of the tenant firms need more space for keep expanding after their business expansion phase (Centre for Strategy & Evaluation Services, 2002)

For some incubator the third stage of the incubation program can be called the acceleration phase where the companies that went through the incubation phase can continue into the acceleration stage to grow and expand their business but this stage can also host companies that were not already incubated by the incubators, but are simply companies that want to expand but don't how or lack the experience or the resources to do so.

### **2.3. The Incubation Process**

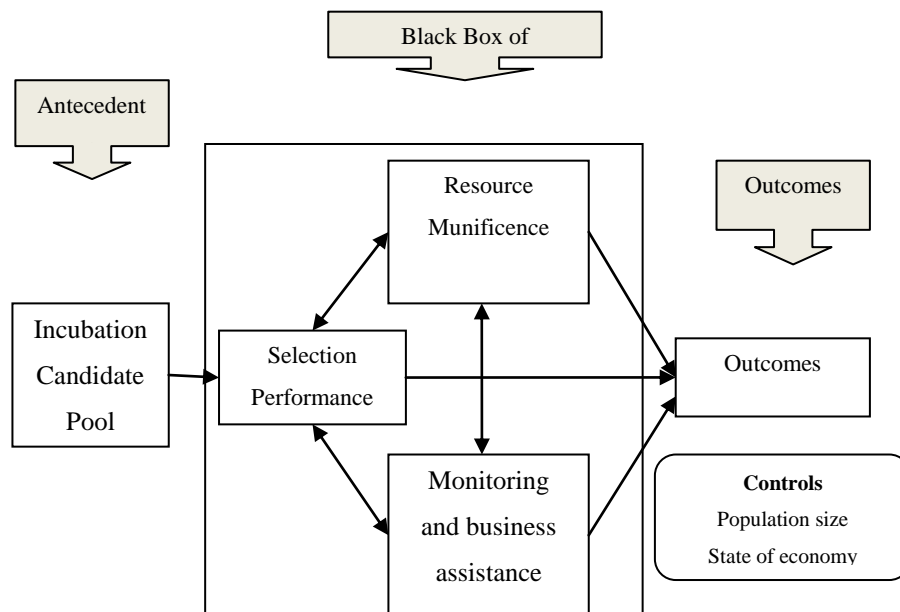
After the inherent concepts of the incubator and the incubation process, we now turn our attention to the process itself. Through the analysis of different concepts of the incubator, we can conclude that the incubation process can include business development support, including: the formulation of business plans, the identification of business potential, the planning of business activities, and the preparation of the market Learning, Market Access and Corporate Sustainability. Carter & Jones-Evans (2000) propose a generic five-step incubation process, as shown in the figure that follows. One feature of the Carter & Jones-Evans' (2000) model is that the steps put forward are focused on the needs of the incubatee, which will be supported by the service provided by the incubators during the incubation process. Despite the validity of the services provided and of the model proposed by Carter & Jones-Evans (2000) and Carayannis & Zedtwitz (2005), it is possible to question not only if all incubators perform the whole range of steps and services, but also if they are effectively carried out and properly assessed in the incubation process. One of the criticisms put forward regarding the model is that it does not answer how an in what way incubators provide their support. As most of the incubators were developed as a response to the challenge posed by technological pressures, namely university business incubators, business innovation centers, science parks, etc. it is also questionable if the model is suitable in rural areas where pace technologies are rare and there is a scarcity of human capital.

Moreira & Carvalho, (2012) identifies the five key steps in the process of incubation, the first step is idea formulation followed by post entry development, opportunity

regognition, entry and launch and the last step in this process is the pre-start planning and preperation. the figure realized by the authors for the steps of this incubation process is found in the appendix section of this research.

We mention another incubation process model by [Hackett & Dilts \(2004\)](#):

Figure 4: Incubation Process model



Source: ([Hackett & Dilts, 2004](#))

## Section Three: The Impact of business Incubators on startup growth and survival

### 1. Introduction

Incubators are tools that gather and orchestrate forces that already exist in order to facilitate the creation of companies, further they add value to the companies and entrepreneurs who go through the incubation program in which they are interested, which makes them a powerful concept. Moreover incubators are instruments for creating self employment opportunities; they develop innovation, and transfer technology. In addition to spurring development of the regional economy, they can also be used as to develop international networks. ([Al-Mubaraki & Busler, 2011](#))

### 2. The impact of incubators on startup growth and survival

Incubators generate successful firms; the latter can leave the incubator when they are financially viable and independent and they can self sustain. At this moment companies are

able to graduate from incubators. The objective of incubators is therefore to produce successful firms along with, stimulating innovation and regional development. Subsequently a main function of the incubators is to help future entrepreneurs while they are initiating their business and activity. This includes a wide range of services and information crucial for creating startups. Granted the 'main' objective is to create new business, although literature related to this topic accentuates the success or survival of the graduate firms, for that reason the survival of firms measures the success of an incubator (Schwartz, 2013). According to Phan, Siegel, & Wright, (2005) in spite of all the existing literature on the matter, only a few studies systematically analyze the effectiveness of incubators as well as their impact on startup survival and growth.

Hackett & Dilts, (2004) call the topic a black box and argue the reason being the absence of a competent theoretical framework analyzing systematically incubators impact.

Incubators can contribute to the survival and growth of startup through many factors, as mentioned by Schwartz, (2008) since startups are new young firms that do not possess any reputation or even they are associated with a negative image because they have a new product or because of their novelty and need time to acquire legitimacy in the market. As mentioned by (Hannan & Freeman, 1984 as cited in Schwartz, 2008) Firms with a low level of accountability and reliability will be eliminated from the population, for that young firms need to show that they are in fact reliable as well as trustworthy business partners in regards to their environment that includes investors, customers, and suppliers. So by providing a variety of support elements and components, business incubators focus on compensating the resources lacking in the early stage in order to insure entrepreneurial stability, business survival long term, and sustainable economic growth. As an example the author mentioned an important mechanism of support of business incubators is obtaining image benefits associated with an incubator location as well as acquiring credibility, by which the support works as a symbol of the firm's equality (Ferguson and Olofsson 2004; McAdam & Marlow, 2007, as cited in Schwartz, 2008).

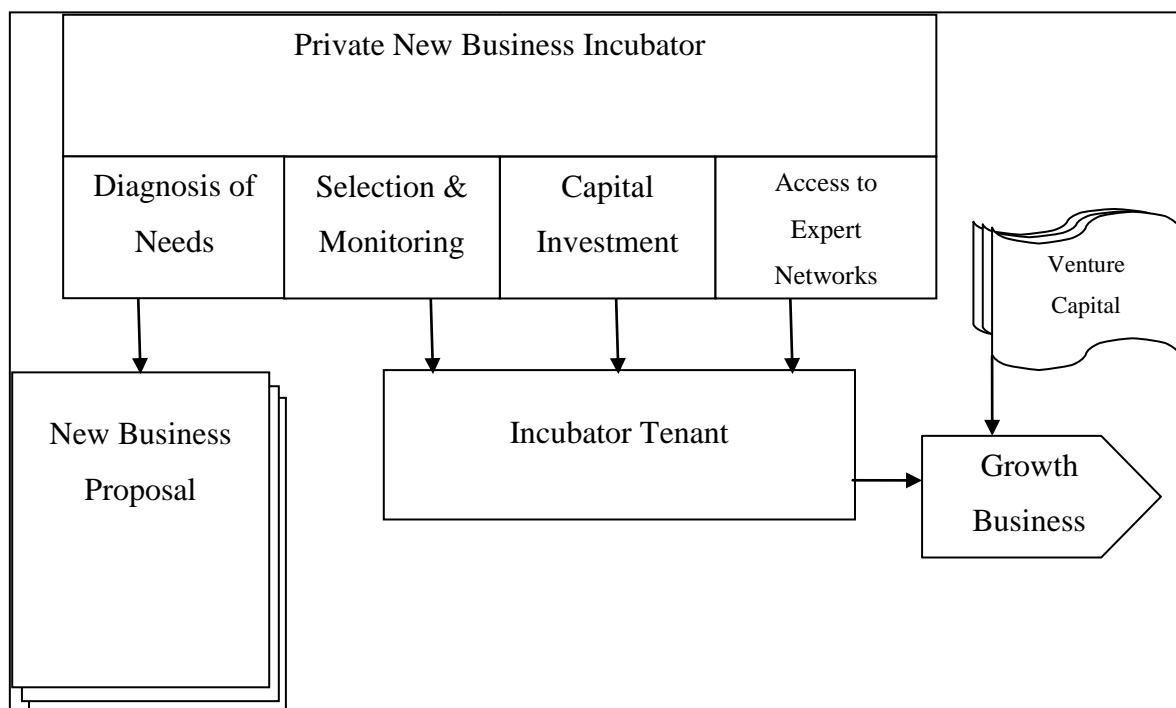
Moreover, the components of the physical infrastructure (inexpensive rental space, conference rooms, communication infrastructure) help to reduce costs fixed in the early stage through co-location, shared utilization, as well as a variety of business assistance and support services that help the incubated firms in areas where there is an absence of knowledge and expertise for example human resources, marketing, and accounting.

By the interaction of the mentioned support mechanisms it is expected that business incubators support may reduce the ‘liability of newness’ as mentioned by the author, which means that firm survival rate during the incubation period and beyond graduation should be substantially high (Schwartz, *Beyond incubation: an analysis of firm survival and exit dynamics in the post-graduation period*, 2008)

## 2.1. Incubation Models

We mention the following incubation on the one hand to better the understanding of the concept of incubator-incubation and on the other for the purpose of further explaining how incubators can impact startup growth and survival.

Figure 5: Framework by Campbell, Kendrick, & Samuelson, (1985)

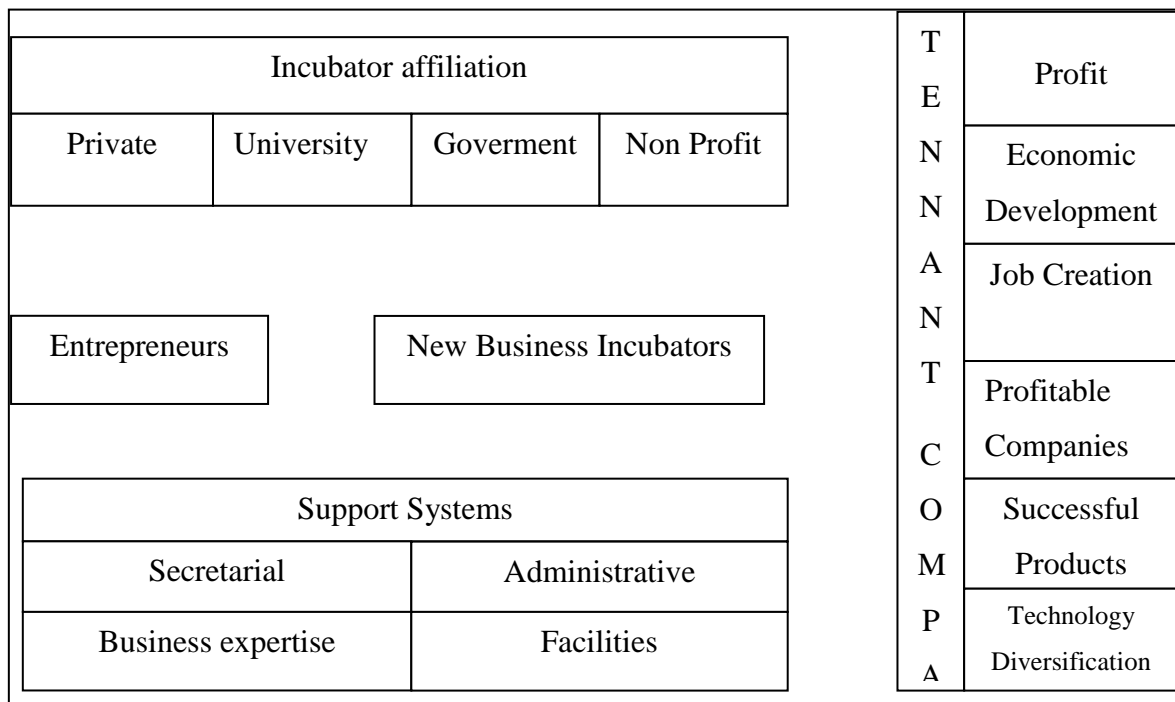


Source: (Campbell, Kendrick, & Samuelson, 1985)

Campbell, Kendrick, & Samuelson, (1985) developed a framework that offers the first explicit linkage of the business development process to the incubator-incubation concept. This framework was reproduced in the figure above propose four areas where incubator-incubation construct and create value: diagnosis of needs, selection & monitoring, capital investment and lastly access to expert networks. According to Hackett & Dilts, (2004) this framework is useful because for the first it suggested, in detail how different components

of the incubators as well as activities within, are used to facilitate the transformation into a viable business from a business proposal. However the authors also mention the weakness in this framework, is that it assumes that all incubatees will succeed and that it is only attributed to private incubators.

Figure 6: Incubation model

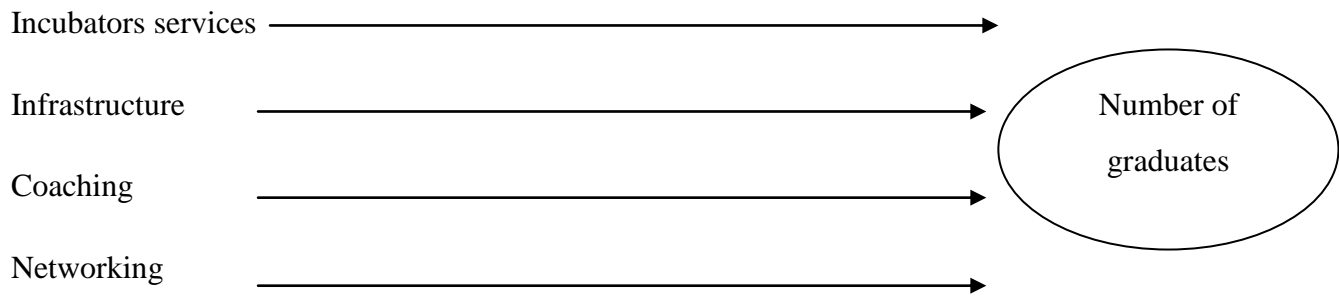


Source: (Smilor, 1987)

Another famous incubation model by Smilor, (1987) in which he extends Campbell, Kendrick, & Samuelson, (1985)'s framework through elaborating different components: impact of tenant companies, incubation affiliation and support systems. And according to Hackett & Dilts, (2004), the framework by Smilor, (1987) takes an external perspective and does not account for the incubation process that is occurring internally.

In This Study we will be focusing on four main criteria that an incubators uses that can have an impact on startup growth and survival those being.

Figure 7: Relational model explaining factors affecting the graduation rates of tenants in the incubator centers



Source: (Peters, Rice, & Sundararajan, 2004)

Following this figure by [Peters, Rice, & Sundararajan, \(2004\)](#) we will focus on networking (the incubator's network), coaching (training and learning offered by the incubators to tenants); infrastructure, the services offered by the incubator and lastly we add the incubation program as it was mentioned quite often in the literature related to this topic to study if these factors are what incubators use to impact the survival and growth of a startup, and therefore its success.

## 2.2. Business incubators Services

The types of support services provided by incubators are usually in-house and can include advice on accessing capital and obtaining finance, business planning, marketing, suitable business partners identification as well as, strategic advice.

Furthermore, support services also include legal services specialists, market research as well as accounting are usually provided by external specialists that are part of the incubators network and that it has established relationships with.

The management at the incubator are business people who have experience, which makes them very crucial to the new ventures as they support and nurture them building their business. The authors found evidence these incubator support services, is capable of helping bridging the failure of traditional market in the provision of support services to the market of SMEs. ([Centre for Strategy & Evaluation Services, 2002](#))

[Carayannis & Zedtwitz \(2005\)](#) identify five defining services provided by incubators that are crucial for the incubatees:

### **2.2.1. The access to physical resources**

Incubators offer physical resources such as furniture, office space, sports facilities, computer network and other physical infrastructures as well as real estate. The authors did emphasize that some incubator focus too much on their role as landlords, ignoring the other services. In this case incubators compete with science and technology parks and sometimes even real estate firms. (Carayannis & Zedtwitz, 2005)

### **2.2.2. Office support**

Business incubators help the tenant companies maintain operation of basic office support efficiently; this includes reception and secretarial services, fax and copying services, handling mail in addition to book keeping. Although this operation are far from complex they help startups make sure that the basic organizational resources are in place, they also save time especially for entrepreneurs who want to start quickly. (Carayannis & Zedtwitz, 2005)

### **2.2.3. The access to financial resources**

Incubator can also offer their incubatees funds and venture capital that can be a combination between both private and outside funds by business angel. (Carayannis & Zedtwitz, 2005)

### **2.2.4. Entrepreneurial startup support**

According to Carayannis & Zedtwitz (2005) usually entrepreneurs may have a business vision and be really good in technology, however they lack management, legal and organizational skills. Incubators guide entrepreneurs through the essentials Steps that new companies sometimes have to take even help define a business plan, but more often Provide accounting, legal and other professional services Advise on company formation and tax issues as well as the design of ownership and employee option plans.

In addition, the incubator provides valuable managerial mentoring support to help entrepreneurs develop and apply leadership and management skills. However, a lot of managers at the incubators cannot provide any real added value in entrepreneurial coaching - an area where they compete with law, accounting and consulting firms. (Carayannis & Zedtwitz, 2005)

### **2.2.5. The access to the networks of the incubator**

Good incubators are able to identify and use key people to help their startups succeed. Entrepreneurs often don't have the networks that incubators have built over the years. Incubators attract people who are critical to a startup's business: potential customers, leading programmers, new CEOs, interested venture capitalists. The key tools are the incubator manager's address book and his instinct to make the right call at the right time. Access to these networks is also sometimes provided by staffing firms, consulting firms, business angels or networking organizations. (Carayannis & Zedtwitz, 2005)

## **2.3. The incubator Network**

As mentioned in a study conducted by Harvard Business School, the main distinctive characteristic of a networked incubator is its capability to offer startups beneficial access to a network of potential collaborators and partners. Incubators as such put in place a system that encourages networking and therefore help entrepreneurs or startups meet and connect with potential business allies or strategic partners. (Centre for Strategy & Evaluation Services, 2002)

### **2.3.1. Internal Networking**

The encouragement of networking between the incubatees themselves is another feature of business incubators. It is quite frequent for tenants to develop a business relationship between themselves. Further this research indicates that "Another perspective of the internal networking that incubators encourage is informal cross-fertilization of advice and ideas among incubatees. The development of these types of synergies deduces a level of homogeneity. (Centre for Strategy & Evaluation Services, 2002)

### **2.3.2. External Networking**

In Italy, for example, there seems to be a strong emphasis on external networks, where customers have access to a range of external support services. Here, the majority of incubator tenants surveyed contributed at least in part to the cost of the company support services provided (especially those provided externally). In contrast, in France, where incubator services are mainly provided in-house, few respondents indicated that tenants are required to bear the full cost of support services. (Centre for Strategy & Evaluation Services, 2002)

# **CHAPTER II: METHEDOLOGICAL FRAMEWORK**

## **Introduction**

In this chapter it is presented the key elements in relation to the methodology of this research, this includes: the method chosen for this research, in addition to the sample of our study, the means of data collection and lastly we will present the method that has been chosen to analyze the collected data.

### **1. Methodology**

This research can be defined in a qualitative or a quantitative manner (Blumberg, Cooper, & Schindler, 2011), however only a qualitative method has been adopted for this research because the literature that has been identified is in relation to mature ecosystems for that reason a qualitative approach is more appropriate and will allow and enable us to understand the actors experience and therefore meet the purpose of this research in obtaining insights and understanding how business incubators can impact the survival and growth of startups. Moreover a qualitative inquiry provides in depth and small samples unlike the quantitative method, additionally the sample that is investigated is chosen according to the researcher's judgement. (Babbie, 2014)

### **2. Research sample**

Purposeful sampling has been used in this research to select the proper units to analyze for the reason of providing an understanding and identifying incubator's impact on startup growth and survival. (Coyne, 1996; Palinkas, et al., 2015) Moreover in this method the researchers depend on their own judgement in selecting the units of the sample to study. In our study the data was collected through this method. Further Convenience sampling is one of the types of non random sampling where the units of the sample or the population meet specific criteria to receive the wanted data. (Etikan, Musa, & Alkassim, 2015)

In regards to the criteria applied in this study the following were used, availability referring to the state of being that includes not being occupied and the will to participate and accessibility the capability to reach the members of the population. (Etikan, Musa, & Alkassim, 2015)

All of the above considered, and in order to gain insight to both business incubators perspective as well as that of incubated startups, both parties had to be interviewed. However the focus of this study is specifically on private incubators in Algeria from which

7 were selected to interview, and therefore to gain insight into the perspective of incubated startups 7 were also selected to be interviewed.

### 3. Data collection

A small sample size can be very informative when including new finding areas. However a proper sample size is highly necessary to answer the research question in the best way possible. (Marshall, 1996)

The collection of qualitative data necessary for this study, was conducted through semi-structured interviews with the founders of the private incubators selected and, semi-structured interviews with 7 of their incubated startups.

Interviews are one of the most common methods in qualitative research, and one of their benefits is the ability to maintain flexibility during the interviews, which is often required for exploratory approaches, and because of the exploratory nature of this research, flexibility is quite beneficial in capturing as much insight as possible. (Bryman & Bell, 2005)

Semi-structured interviews were chosen following previous studies in relation to business incubators, we mention Pettersen, Aarstad, Høvig, & Tobiassen, (2015) who used semi-structured interviews in their qualitative research to investigate networks as well as resources that business incubators in Norway provide. Semi-structured interviews are meetings where the interviewer does not strictly follow a formal list of questions, but instead asks open-ended questions for discussion with the interviewee. These interviews are great for understanding the opinions and impressions of the interviewees. Furthermore, this method allows the use of probes to obtain interpretations about specific responses, resulting in complete and ideal data. (Leech, 2002) Semi-structured interviews provide flexibility and allow questions to be added to better understand the research question (Fylan, 2005)

Focusing this study on private incubators, in Algeria according to the official website of the Ministry of Knowledge Economy and Startups data base in relation to incubators; 27 private incubators exist in the country.

However, as mentioned in the section that preceded the sample of this research is 7 private business incubators, this sample was not chosen randomly but by following Obaji,

Olugu, Obiekwe, & Balogun, (2014), where they chose 7 incubators to study ‘business incubators national program in Nigeria, the success factor landscape’

Moreover the 7 private incubators selected in this study were the ones who agree to be interviewed for the purpose of this research. All 7 incubators founders were interviewed for the reason of acquiring the incubator’s point of view in this research. In addition 7 of their incubated startups were interviewed in order to obtain the perspective of startups.

These incubator founders were contacted by through phone calls using the number provided by the data base available in the official web site of the ministry of knowledge economy and startups. The startup owners were also contacted through phone calls; however their information were found on each incubators website or social media.

Every participant was asked prior to the start of the interview to participate in the interview, and at the start of each interview every participant was asked for their permission to record the interview in order to be able to analyze the collected data at a later time.

#### **4. Data Analysis**

Analyzing the collected data was conducted through a hybrid method called deductive thematic analysis. This method combines between two approaches namely the deductive approach and thematic analysis.

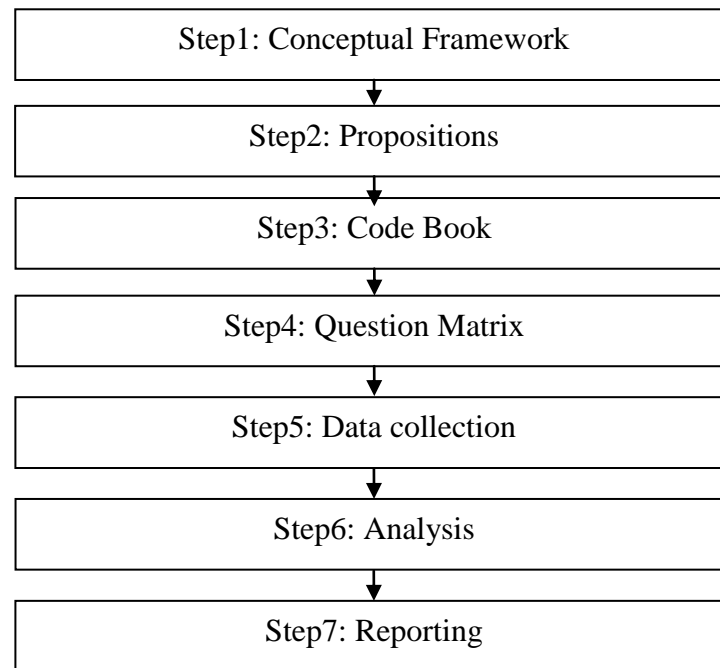
Firstly the deductive approach takes the existing theory as a starting point, guiding the empirical research collection where the researcher attempts to confirm or disapprove its accuracy. A possible limitation of the deductive approach is focusing too much on theoretical perspectives, which can lead to aspects outside of the theoretical scope being missed. However this risk can be minimized by conducting interviews. (Bryman & Bell, 2005)

Secondly we mention a very famous definition of thematic analysis: “*Thematic analysis is known as a method for identifying systematically, organizing, as well as offering insight into patterns of meaning also known as themes, across a data set.*” (Braun & Clarke, 2012) The authors also add that by focusing on meaning across a data set, thematic analysis enables the researcher to observe and make of experiences, shared meanings or collective. Where unique and distinctive meanings and experiences are identified, however detected

only within a single data item is not the focus of thematic analysis. Further, this method is considered to be a way to identify commonalities and understanding those commonalities is the way the topic is written or talked about. (Braun & Clarke, 2012)

Pearse, (2019) suggests seven steps to follow in order to combine between deductive and thematic analysis, we illustrated these steps in the figure bellow:

Figure 8: Steps to conduct a deductive thematic analysis



Source: Realized by the author based on what was mentioned by (Pearse, 2019)

**Step one:** is to have a conceptual framework explaining either in graphic or narrative manner the essential points to be studied. The conceptual framework can be casual, simple, elaborate, theory driven, commonsensical or descriptive, it also forces the author to be selective towards variable and which relationships are presumably the most meaningful. As a result, the information that needs to be collected and analyzed is decided. (Pearse, 2019)

**Step two:** is called ‘propositions’, in this step we identify the propositions to be researched. (Pearse, 2019)

**Step three:** namely the code book where a code book is developed according to the propositions identified in the previous step, it can be developed from the conceptual framework. (Pearse, 2019)

**Step four:** this step is the ‘question mark’, where the data is collected through interviews; the code book can be relied on in order to develop questions for these interviews. (Pearse, 2019)

**Step five:** is the collection of data. (Pearse, 2019)

**Step six:** the sixth step is called ‘analysis’, and in this step the data is analyzed through three stages, the first is the application of the code book to analyze the collected data, this includes reviewing and confirming that the codes are apparent in the collected data. Furthermore it is promoted to extend the analysis beyond the propositions, where it is distinguished between ‘confirmed themes’ as well as ‘added themes’.

In the second stage, the themes of this analysis are identified where a theme represents a certain level of patterned meaning or response in the data connecting codes. In the deductive approach identifying themes includes finding evidence in data for patterns expressed in the study’s propositions, here we apply pattern matching.

Lastly, for each theory proposition, we keep a record of ‘hits’ and ‘misses’ in order to identify which theory fits best to the data, theoretical triangulation is also used to analyze how theories complement each other. (Pearse, 2019)

**Step seven:** the last step in the application of the deductive thematic analysis method is called ‘Reporting’, in this step we write our findings at first, focusing on one theory or one theme at a time and then showing in an integrated section how these themes or theories work together; in addition to the acknowledgment of any tensions or contradictions that may derive between them. (Pearse, 2019)

# **CHAPTER III: RESULTS AND DISUCUSSION**

## **Introduction**

This chapter is divided into two sections the first is a presentation of the results obtained through analyzing the collected data, and the second section is a discussion of the results of this study with those identified from previous studies.

### **1. Results**

#### **1.1. The previous experience of the business incubator's team**

*'...an incubator is an ensemble of entrepreneurs...'*

The previous experience of the human resources within the incubator is very crucial for the success of both the incubator and the tenant companies. Multiple of services that an incubator provides can derive from the experience of the team, this includes the network of the incubator, the contacts, the entrepreneurial accompaniment and support as well as managerial support, and assistance in obtaining funds, all of these can be a result of the prior experience of the team available in the incubator.

Business incubators help the entrepreneur to define the objectives to be reached, the strategy to be implemented and the necessary resources. To do this, the entrepreneur has access to people with multiple skills in the scientific, industrial (former production managers, engineers...) and business (former marketing manager...) fields. These people bring their competences in terms of risk advice, help in the elaboration of the project of company creation and ensure a follow-up and a reframing, within a project team.

In this study the founders of the incubators have been interviewed and all seven of them mentioned that it is through their experience that they can help launch, build and develop projects. As for the survival and growth of a startup, all participants agreed that it is very important to share prior experience with tenants, as this experience can contribute immensely in helping the startup and the entrepreneur to plan and organize, penetrate the market, detect and diagnose needs, face and predict problems and challenges along the way, manage crisis, obtain and gain customers and suppliers, unlock future partners, manage a team and hire people and learn how to strategize.

*"...our team consists of people from various fields..."; "... I have more than 17 years of experience in the business world, in various fields..."; "... I have more than 20 of experience working in a company, I got to work different potions which lead me to acquire*

*different competences and skills, and by working in the incubator I shared my experience...”; “... for example, I worked as a human resources manager and through my experience in this field I helped startups recruit the right elements for their team and showed them how to manage a team...”*

The interviewed incubated startup owners, also mentioned the importance of sharing experience and knowledge and background of the incubator’s team, as one of the main problems faced by startups that can lead to their failure is the entrepreneur’s lack of experience, and when the human resources within the business incubator share their experience they help startups and therefore entrepreneurs avoid making errors and mistakes when launching, developing and growing their business.

*“...the reason why I joined the incubator was my lack of experience in developing my startup...”, “... I would say one the things that I really appreciated whilst in the incubator are the fact that I always have somebody with enough experience to guide me through everything that I needed or simply to ask a question...”*

However both of the incubator founders and the owners of the incubated startups did mention that if they needed an expert in a field that surpasses the incubator’s team, the incubator outsources the expert that the incubatee needs. *“...I needed an accountant which, and rather for me to go look for one and ask if it is good or not the incubator, contacted one for me from their network which really saved me a lot of time...”*

## **1.2. The Network of the incubator**

*“...Network is what differentiates between an incubator and another...”*

Network is a result of the prior experience of the incubator’s team.

Business incubators provide relational capital; this includes giving entrepreneurs access to a network of ecosystem actors and partners likely to intervene in the development of the startup. *“...The right contact at the right time...”*

Through the network, incubators can be intermediaries between the entrepreneur and various contacts and networks such as management experts, funders, job seekers and other entrepreneurs. When a startup needs a specific contact Incubators provide two or three contacts and conduct price negotiation on behalf of the entrepreneur.

The majority of incubators conducted networking events to bring their tenants closer to their contacts and build a community around the incubator that can be at their availability whenever they need them. *“... yes we do have networking events, we are actually preparing the second edition of our event startup day...”*

### **1.2.1. The External Network of the incubator**

Here, business incubators have various contacts in various fields, so when a tenant startup needs an expert in a certain field they call on contacts, people, and companies from their network in order to help the entrepreneur, this reduces the time that the entrepreneur has to spend in searching for the contact by him/her self where sometimes the newness of the startup can cause a lack a credibility.

*“...We have partnerships with some of the biggest companies in Algeria, that express their needs and through our challenges startups can contribute in responding to their needs and unlock a major client...”*

Moreover through the network incubators can unlock a lot of elements for the entrepreneur and the startup such as clients, customers, suppliers, lawyers, accountants, and human resources to add to their teams, partners, investors, business angels, in addition to all the contacts of the ecosystem, through this the chances of growth and survival of the startup increase. In some cases incubators have events where their tenants can meet people from their network that can become future partners or even investors in their startups.

*“...through an event hosted by the incubator I won a challenge and obtained funding for my startup...”, “...I joined the incubator because of their network...”, “...if I needed something and it was not available within the incubator, it was provided for me though the network of the incubator...”*

Business incubators can provide their incubatees with information through their network.

*“...They also used the network to provide information...”*

### **1.2.2. The Internal network of the incubator**

The internal network of the incubator consist of all the tenant companies of the incubator, where incubated startups can network with each other.

When asked about internal networking both incubator founders and the startup owners said that it was encouraged among them, especially within incubators that provide an open co-working space. One of the founders answered as follows: *“...Yes we do encouraged our tenants to communicate with each other, sometimes they even become each other’s clients where one responds to another one’s needs...”*

Where the answer of an interviewed startup owner when asked about internal networking was the following: *“...It was encouraged yes; I even got a contact just by talking to a fellow tenant when we were working at the same time in the incubator’s co-working space...”*

Moreover the graduated companies stay within the incubators network. *“...Startups that leave the incubator stay in the incubator’s network either for their future needs or simply as one of our contacts...”*

### **1.3. Credibility**

*“...The credibility of the incubator is in the credibility of the team inside, especially when taking into consideration the novelty of the concept of an incubator in Algeria...”*

Business incubators provide startups with intangible resources such as its reputation which contributes to the credibility of startups. Due to their high risk nature and their newness, people tend to have a negative perspective on startups, but by joining an incubator usually this help increase their credibility and better their reputation.

3 out of the 7 interviewed incubator founders mentioned credibility as a way to impact startup growth and survival, as an incubated startup has more credibility and a better reputation among investors, clients, customers, future partners, venture capitalist...

*“...The credibility of the incubator can be of a big help for startups, for example going with credible people can help a startup unlock its first big client...”*

As for startups when they were asked about this point, similarly 3 out of 7 mentioned it, one of these incubators specified that it was the credibility of the incubator that permitted him to obtain funding. *“...joining the incubator gave me credibility which helped me gain funding from the Algerian Startup Fund...”*

#### 1.4. The Entrepreneurial accompaniment and support

All of the fourteen interviewed participants mentioned entrepreneurial support in one way or another.

Business incubators acknowledged the importance of the support and accompaniment they provide the tenants whether that is in launching developing or growing a startup but especially in the business's attempt to survive in the market. This support is in everything that a startup may need, especially if the entrepreneur has more of a technical experience or expertise and lacks knowledge on how to create manage and grow a business. This accompaniment that the incubator provide include supporting their incubatees with financial management, the minimization of financial risks, business management, negotiating, building strategies and strategizing, the detection and exploitation of opportunities, diagnosis of their needs, accounting, hiring, team management, they also teach them how to sell their product or service, as well as communication with investors and future partners. The Responses from incubators in relation to this theme were as follows:

*“...we help entrepreneurs organize and secure their startup, and help with financial risks so the entrepreneur can truly focus on the product or service they are trying to sell. We also help them with crisis management, marketing solutions, and business administration...”, “...One of the essential resources at our incubator is accompaniment and support along with coaching and learning especially when it comes to the ecosystem in Algeria, the entrepreneur needs coaching and information...”, “...we have human resources to accompany tenants through all their development stages...”, “...When a startup first joins our establishment it is in need of orientation...”, “...We help startups grow and scale...”, “...It is those who have experience and a good network who are able to truly accompany startups...”*

As for the interviewed startups, the entrepreneurial support was identified as an element they were lacking and therefore it was a reason for them to join the incubator. No matter the phase that a startup has reached entrepreneurial support is important for them; this can include their development and growth, market penetration, the obtaining of funds, customer attraction, building credibility and so on. The responses from startups were as follows:

*“...I needed accompaniment in the field, that’s why I joined the incubator...”, “...the incubator helped me with administrative management, financial management, how to learn and how to train a team...”, “...the resources that I needed were legal support especially with the creation of the startup as well as accounting...”, “...I needed help with organizing matters within my startup and orientation on how to grow...”, “... The incubator helped me in the detection my startup’s needs and problems...”*

#### **1.4.1. Training, coaching, mentoring and learning**

When asked about entrepreneurial support, the interviewed incubators brought up a very important point and that is, learning and coaching and mentoring their tenants whilst supporting and accompanying them so with time they can do it themselves and the startup can be independent from the incubator. Some of the related responses are the following:

*“...entrepreneurs are the most important asset to the startup, so by teaching and coaching them on how to deal in different situations and how to solve problems avoid errors, at a certain point entrepreneurs can deal on their own...”*

*“...if we focus only on the startup, I mean a startup can either succeed or fail, but if we focus on the entrepreneur he/she can create multiple startups...”*

While the incubator can help launch and grow a startup, and even help it survive the first critical years of its lifecycle, the startup cannot always depend on the incubator in needs to reach an independence level where it can grow and survive on its own. For that reason incubators work closely with entrepreneurs, through coaching them on how to communicate, how to face problems and challenges, how to seize opportunities and avoid errors, they also help them develop soft skills, and teach them how to sell their product or service, and how to talk to investors and future partners. All this so they can become ‘true entrepreneurs’ and lead their startup to independence from the incubator.

*“...While yes we help them in the first years of their activity, the startup reaches a point where its growing and it has a qualified team that can lead and guide it in its growth phase and through all this help it survive, at this point the startup is independent and can graduate from the incubator...”*

From the interviewed startups point of view training was mentioned as well but with the experience of the team within the incubator, they mentioned that the team by share their

experience and advice with startup owners, help them learn all sorts of skills in relation to managing a business as well as acquiring knowledge on various aspects.

*“...The team within the incubator has a lot of experience especially in working within a company, and as I didn't have a lot of experience on how to build a business they helped me immensely...”*

### **1.5. Financial Resources**

Six out of seven interviewed business incubators said that they help their tenants in obtaining funds and for certain cases they even are the ones that do the funding, however one incubator mentioned that it is not among their functions to fund the tenants, they do help them find funding but unfortunately none of their tenants have reached this point.

The incubators that did help the startups in looking for financing and funds had this to say about financial resources within their respectful incubators:

*“...first of all they have access to the incubator's network which provides direct contacts to potential investors; this along with the credibility of the incubator represents a short cut for our tenants to obtain funding...”, “...We help startups build proper presentations of their business, so it appears attractive to investors...”*

Funds are very important for a startup to grow however, none of the interviewed incubated have financed a startup with their own money *“...No we have not financed a tenant company with our own resources...”*, *“...financing with our own resources has yet to be done...”*

Business incubators assist and help startups to gain funds through their experience, network and credibility.

Startups when asked about financial resources, the ones that did obtain funding, did it through the help of the incubator on everything, how to present their business, how to talk to potential investors, and how to convince people to invest in their startup.

*“...I did obtain funding last month to be exact, and it is the incubator that told me about the Algerian Startup fund and helped me prepare for my presentation to the committee...”*

## **1.6. Incubator's Physical Infrastructure**

### **1.6.1. Physical Resources**

All 7 incubators stated that they provide their tenants with physical resources such as an office space, a desk, a computer, and instead of renting an office space to have an address the startup can have that of the incubator through domiciliation. The access to these resources is available for startups either for a very cheap price or for free after the payment of the access fee. This helps startups reduce their charges especially in the first year where they may or may not be generating any profit.

*"...We do offer a co-working space and we do domiciliation..."*

When startups were asked about the physical resources provided to them by the incubator they also mentioned the same point however some of them did incubation remotely, these startups did not benefit from the physical infrastructures except for days where they were in the vicinity of their incubators. *"...a co-working space is very beneficial not only does it help reduce charges but in addition to that we get to communicate with other incubated startups which can be very motivating..."*

### **1.6.2. Office support**

Incubators stated that indeed they do offer office support in copying and fax services, secretarial services however were not mentioned.

This also contributes to minimizing the costs of startups especially in their first very critical years.

## **1.7. Incubation program**

All interviewed incubators stated that they do have an incubation program through which they provide all of their resources and services, namely the team's previous experience, entrepreneurial accompaniment, mentoring coaching and training, network, financial resources, credibility, and physical infrastructure. The startup owners that were interviewed confirmed that by stating that they went through an incubation program. However the phases of this program are different from incubator to another. *"...we do have a program..."*, *"...Our program contains two main phases pre-incubation and incubation..."*, *"...yes we do have a program, this program includes three phases, a pre-*

*incubation phase, an incubation phase, and an acceleration phase...”, “...Our program has three phases, pre-incubation phase, a boot camp phase, and an incubation phase...”*

### **1.8. The Entrepreneur’s effort**

This is an added theme as it was identified while interviewing the participants and not an expected theme.

It was mentioned by 4 of the interviewed business incubators and all of the startup owners, the incubator can help the entrepreneur, but it all comes down to the entrepreneurs to seek information and knowledge to develop their business, in addition to that they have to better themselves before they can better their businesses and the incubator allows them to both simultaneously.

*“...if we focus only on the startup, I mean a startup can either succeed or fail, but if we focus on the entrepreneur he can create multiple startups...”, “...The entrepreneur is very important to the success of the startup...”, “...we are training the entrepreneur, because it is he who works on the startup...”*

However when we asked the startup owners for any addition in relation to the theme of this research, they all emphasized the importance of the entrepreneur to the startup because without the entrepreneur the startup will not go anywhere. Some of their Responses were as follows:

*“...No matter how the incubator provides help for the entrepreneur, if he does not do the work there won’t be any advancement in his business...”, “...the entrepreneur needs to push the startup to grow...”, “...The entrepreneur has to do everything to develop his business, especially if he does not have a team to help him in his activities...”, “...But the entrepreneur is the one that contributes to the survival and growth of the startup because at the end of the day it is he that is working on the startup...”, “...The entrepreneur is very important for the success...”, “...We always expect more from the incubator, however the incubator is not here to do the work for the entrepreneur...”, “...The efforts of the entrepreneur are what makes a difference...”*

### **1.9. The Entrepreneurial Ecosystem in Algeria**

All participants without exception mentioned that the entrepreneurial ecosystem in Algeria is still very new and fresh, and there is a lot of confusion and cloudiness surrounding both

concepts of business incubators and startups, as people in the country still do not fully grasp the idea of business incubators and startups, and they mentioned that this also applies to people within the ecosystem.

This was one of the reasons that made incubators focus on regional development, while aiming to grow on the national territory.

*“...The concept is still very new, the country should encourage incubators in order to have a positive impact...”, “...The concept is still rather new...”, “...The ecosystem is still very new and delicate...”.*

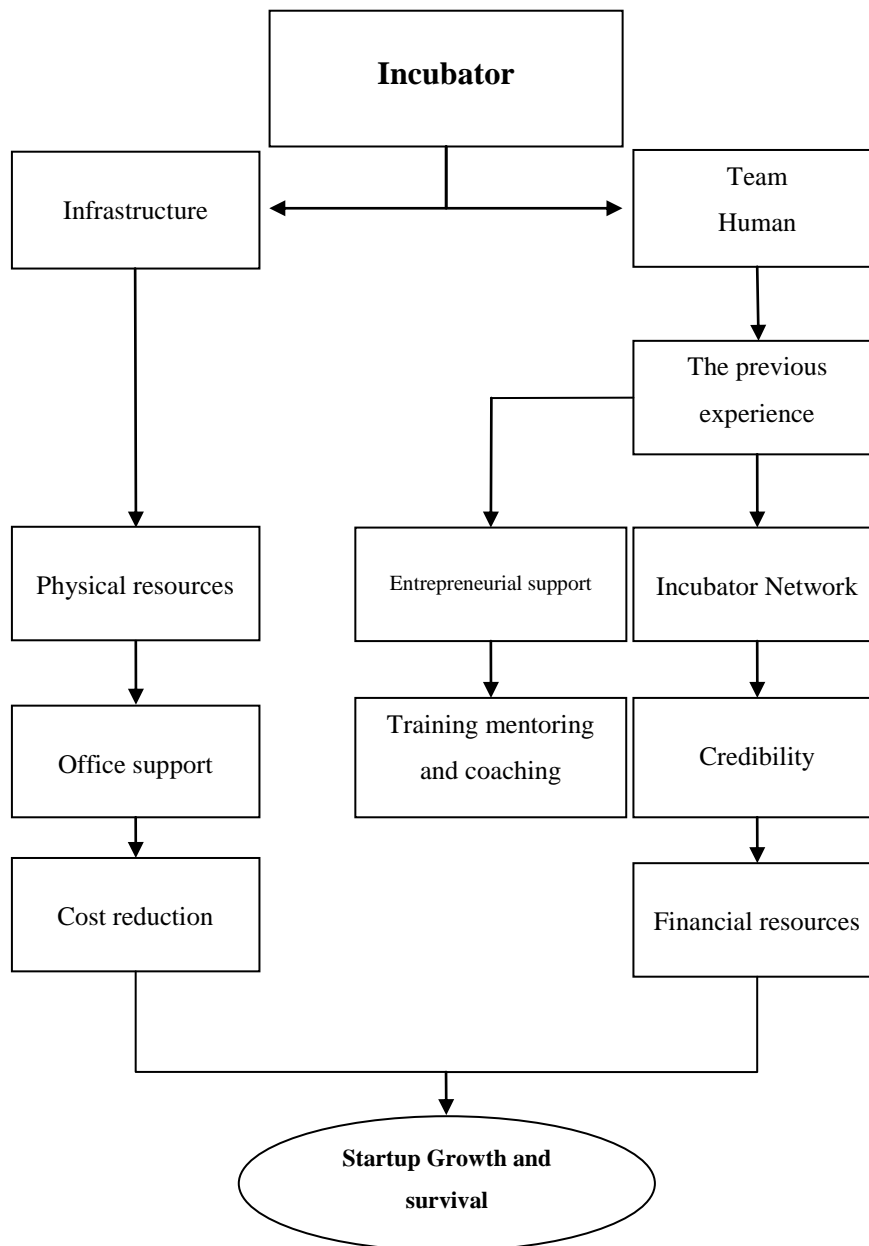
Participants also declared that the laws in relation to incubators and startups although they improved they are still not clear and underdeveloped. *“...Clarity on the Algerian market as well as legal clarity is needed immensely...”, “...The laws in relation are obstacles because they are not clear...”.*

Some participants brought up a very interesting point in relation to incubators in Algeria indicating that incubators play a very crucial role especially in Algeria, they are considered to be key actors in the ecosystem for the information that they provide. Not only do they transfer information from the ecosystem to startups but in addition to that they provide the entrepreneurial ecosystem with information about startups contributing to the development of the ecosystem. *“...The ecosystem is still very new and delicate, and incubators play a main role in it especially with transferring and exchanging information between the ecosystem and startups...”, “...Through providing information they can contribute to the startup, because if the right information comes at the right time this can be the cause of success for a startup...”.*

While one of the startup owners that was interviewed stated that in his opinion incubators don't necessarily impact the sustainability of startups directly however they do it indirectly through a good launch of a startup. The statement was the following: *“...The incubator also helps in launching a startup, and a very good launch can be a reason for the success of a startup...”*

Lastly we present the following figure to showcase the relationship between the detected themes and the survival and growth of startups.

Figure 9: The Relationship between the Themes



Source: Realized by the author

## 2. Discussion

In this research we explored how business incubators can impact startup survival and growth and therefore increase their chances of success.

As per our results we join the opinions of (Harrar, (2021); BEKADDOUR, (2021); Mokhnache & Khacef, (2021); KOURAICHE, (2019), that Algeria is late in adopting an entrepreneurial ecosystem and therefore is also late in adopting startups and incubators,

which resulted in an ecosystem that is still rather new and fresh to the business environment in Algeria, with that being said in this research we shed light on business incubators and startups in an exploratory manner by contributing to the understanding of these new concepts in Algeria.

The objective of this research is to understand how incubators can further the survival and growth of a startup and for that the results found will be discussed with those found in the literature review.

The results of this research indicate that business incubators can contribute to the survival and growth of a startup in Algeria through the different resources and services that they offer in addition to the entrepreneur's own efforts, which are all connected with one another.

All the themes expected were identified along with two added themes that were mentioned frequently by participants and thus added with our results.

In accordance with the results found by [Blank, \(2020\)](#); [DALEX, \(2020\)](#) in addition to [Lose, \(2019\)](#) and [Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, \(2020\)](#) who also mentioned the importance of the human capital of the incubator for tenants. the prior experience of the team within the incubator can further the chances of growth and survival of the incubated startup in Algeria, furthermore, the experience of the team is of high importance to both incubator and the startup as it can result in many other services that an incubator can provide for its tenants, namely the network, the entrepreneurial support, credibility, training, coaching, and financial resources.

The network of the incubator is also one of the key elements for business incubators to increase the startup and growth chances of the tenants, this result found in this research is in accordance with [Lose, \(2019\)](#) and [Ali Al-Damen, \(2020\)](#) as the network is a crucial criteria for incubators because through network, incubators could unlock a lot of elements including contacts for their tenants such as potential clients, partners investors, business angels, venture capitalists, and experts in different domains that their tenants may need.

Although [Pettersen, Aarstad, Høvig, & Tobiassen, \(2015\)](#) did touch upon the point of the incubator's network however along with that the authors also focused their study on the network of the startup outside of the incubator, in our results personal network of startup

owners or that of the team was not mentioned. The participants identified network as a need among startups and interviewed startup owner even mentioned that they joined the incubator because of the network it provides.

Since startups tend to have a negative image especially being characterized by high risk and high failure rates as a consequence startups suffer from a lack in credibility. In our results we found that by joining an incubator a startup can gain credibility with that our results are in correspondence with those of [Lose, \(2019\)](#) and [Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, 2020](#))

Another element detected throughout the interviews and was one of most mentioned points, as all 14 participants did not fail to mention and that is entrepreneurial support, this can also be a result of the previous experience of the team of the incubator, because you have to have the knowledge in order to be able to transfer it and for that reason our results join those of [Lose, \(2019\)](#) In stating that entrepreneurial support is a key element in increasing the chances of startup's growth and survival. Through entrepreneurial support incubators can help their tenants to identify potential markets, seize opportunities, build strategies, manage a business, avoid mistakes and face challenges and support them in whatever they need. However incubators cannot support startups forever for that reason they train and coach the team within the startup so they can be able to reach independence.

For a startup to grow it needs financial resources, in accordance with [Lose, \(2019\)](#) our results show that financial resources provided by an incubator can have an impact on startup's survival and growth, where the incubator can finance directly a tenant startup or provide it through their contacts of potential investors, business angels, venture capitalist... other authors that also mentioned financial resources as one of the key elements for incubators are ([Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, 2020](#); [DALEX, 2020](#); [Bouchaour, 2018](#))

Physical infrastructures supplied by incubators to their tenants help them reduce their charges especially in the first years by providing them with physical resources and office support. With that we join the results of ([DALEX, 2020](#); [Bouchaour, 2018](#); [Aissaoui & Elhazzam, 2020](#); [Ali Al-Damen, 2020](#); [Zapata-Guerrer, Ayup, Mayer-Granados, & Charles-Coll, 2020](#); [Lose, 2019](#))

Lastly we also detected during our research two themes that were added namely the entrepreneur's effort and the entrepreneurial ecosystem in Algeria, and for that our results are similar to (Harrar, 2021; BEKADDOUR, 2021; Mokhnache & Khacef, 2021; KOURAICHE, 2019). Algeria was late in adopting an entrepreneurial ecosystem which resulted in the concepts of both business incubators and startups to not be fully grasped and clear to people from both within and outside the ecosystem. As for the efforts of the entrepreneur at the end of the day it is the entrepreneur that is building and developing his startup so everything from the prior experience of the team to network to entrepreneurial support is in relation to the entrepreneur. These results are in accordance with (Blank, 2020; Lose, 2019)

All this leads us to confirm our hypotheses in relation to the research question, and therefore produce the same hypotheses for private business incubators in Algeria.

The hypotheses are the following:

**H1:** Business Incubators use their mentorship program to impact the survival and growth of the incubated startup

**H2:** Business Incubators use the team's prior experience as a mentorship service to help startups grow and survive

**H3:** Business incubators use their offered resources to impact startup growth and survival

**H4:** Business Incubators use their network to help startups grow and survive

# **CONCLUSION**

## **Introduction**

In this chapter, the thesis will be concluded through a summary and an overview of the document along with, the main results that were found as well as theoretical contributions and managerial contributions, and lastly limits and possible points for future research.

### **1. Summary and overview**

This thesis studies how private business incubators impact startup's growth and survival in Algeria. To this end, a conceptual framework was developed and data was collected and analyzed using qualitative methods all of which were used to answer the following research question:

#### **How do business incubators impact startup growth and survival in Algeria?**

This document can be summarized as follows:

This document starts with an *introduction* that contains an overview of the subject of this research and its interest as well as its objectives and research question. The introduction consists of the method used to answer the research question, the hypotheses in relation to the question and the main interest behind this research along with the field of the research.

*Chapter I* presents the theoretical framework that includes the literature review where previous related work is explored, as well as the conceptual framework that accommodates with the main concepts of this research and contains three main sections, (1) Startup growth and survival, (2) Business incubators, (3) The impact of business incubators on startup growth and survival.

*Chapter II* presents the methodological framework this includes the method used for the research, the collection of data, as well as the method used to analyze the collected data.

*Chapter III* presents the results of this study followed by a discussion of the findings.

Lastly, this work ends with the *conclusion* that summarizes the entire work and its main factors and elements, it contains the main results concluded from this research as well as the contribution of this study, at the end of this conclusion a description of limits is found along with possibilities for future research.

## 2. The main results of this research

To obtain the results of this research, we adopted a qualitative method, the sample of this research was selected through purposeful sampling, and the data for this sample was collected by conducting semi structure interviews with business incubator founders and incubated startups owners as for the analysis of the collected data, it was done through the deductive thematic analysis and this resulted in seven themes detected with two added themes.

The results of this research are the following:

Seven themes were detected that match those found in the literature and built in the conceptual framework, with three themes mentioned the most during the interviews this includes network, entrepreneurial accompaniment and support, and physical infrastructure.

This leads us to believe that business incubators in Algeria use the team's previous experience, network, entrepreneurial accompaniment and support, credibility, financial resources, and physical infrastructure to increase the chances of survival of their incubatees. In addition to these themes other elements that can contribute the survival and growth chances of incubated startups in Algeria are the entrepreneur's efforts for the reason that everything the incubator provides revolves around the human capital of the startup and the entrepreneurial ecosystem in Algeria as startups are related directly to this ecosystem.

This also led us to confirm the hypothesis related to the research question for the case of private business incubators in Algeria:

**H1:** Business Incubators use their mentorship program to impact the survival and growth of the incubated startups

**H2:** Business Incubators use the team's prior experience as a mentorship service to help startups grow and survive

**H3:** Business incubators use their offered resources to impact startup growth and survival

**H4:** Business Incubators use their network to help startups grow and survive

### **3. Theoretical Contributions**

This thesis contributes to the literature in relation to the topic and the question of the research, how incubators can increase the chances of survival and growth of startups in Algeria. In our opinion there is a lack in the literature treating this exact topic directly, for the reason that Algeria was late in adopting an entrepreneurial ecosystem which was introduced officially less than two years ago, so both the concepts and their legal definitions are still fresh to business environment in the country. Subsequently this research contributes to the insight and understanding of how an incubator can increase startup's growth and survival chances, more specifically private incubators in Algeria. Moreover this research also can help startups choose which incubators they should join taking under consideration the results that were found in this study.

### **4. Managerial Contributions**

Because this research contributes to the insight and understanding of how incubators can impact startups growth and survival, business incubators can use the results obtained by our qualitative study in bettering their practices and adopting services or resources, or simply adjust them, furthermore The findings of this thesis can provide a broader understanding of the most valuable aspects of a business incubator from the startup's perspective.

### **5. Limits**

This work was based on a limited number of interviews, although it does show both perspectives (private Incubators and startups) however a broader sample for example interviewing all the private incubators in Algeria would have weighted more to the drawn conclusions. The interviews were conducted through phone calls except for three; therefore conducting in person interviews would have allowed the interviews to be more in depth.

### **6. Suggestions for future research**

Even with the limitations of this research the results contribute to the understanding and showcasing of the reality of private incubators in Algeria from both incubators and startups perspectives, however future researches can build on the results and develop them more with a broader sample by interviewing all the private incubators and their tenant startups in Algeria. Furthermore it will be very interesting to compare the survival and growth of

incubated startups and non incubated startups in the country, in addition to that researching how many startups survive after graduating from an incubator is also a very interesting point of view.

# **BIBLIOGRAPHY**

## BIBLIOGRAPHY

- Adegbite, O. (2001). Business Incubators and Small Enterprise Development: The Nigerian Experience. *Small Business Economics*, 157-166.
- Ahmed mili, S. (2020, october 01). The role of business incubators in establishing small and medium enterprises (the case of Algeria). *الأفاق للدراسات الاقتصادية*, pp. 39-57.
- Aissaoui, F., & Elhazzam, M. (2021). extent of the contribution of business incubators in support of emerging institutions in Algeria. *حوليات جامعة بشار في العلوم الاقتصادية*, 49-63.
- Aitakkache, S., & Badaoui, M. (2022). المؤسسات الناشئة ومصادر بناء الأفكار الستحدثاتها. *مجلة الاقتصاد الجديد*, 123-145.
- Ali Al-Damen, R. (2020, December 30). Business Incubator and Its Impact on Business Success: A Case Study. *Journal of Management and Sustainability*.
- Al-Mubarak, H. M., & Busler, M. (2011). The incubators economic indicators: Mixed approaches . *Journal of Case Research in Business and Economics*, 1-12.
- Ambrosini, V., & Bowman, C. (2009). What are dynamic capabilities and are they a. *International Journal of Management*, 29-49.
- Apa, R., sedita, s. r., & Grandinetti, r. (2017). The social and business dimension of a networked business incubator:.. *Journal of Small Business and Enterprise Development*, 42.
- Appelo, J. (2019). *Startup, Scaleup, Screwup: 42 Tools to Accelerate Lean & Agile Business Growth*. Hoboken, New Jersey: John Wiley & Sons Inc.
- ARABECHE, Z. (2022). THE ACTIONS CARRIED OUT BY THE CYBERPARC INCUBATOR OF SIDI ABDELLAH DURING THE PERIOD OF 2010–2020: STATE OF PLAY AND PERSPECTIVES. *Economics and Business*, 17-33.
- Babbie, E. R. (2014). *The basics of social research*. Belmont, California: Wadsworth, Cengage Learning.
- Bajwa, S. S. (2017). Ph.D dissertation, Free university of Bozen-Bolzano.

- Barney, J. B. (1986). Organizational Culture: Can It Be a Source of Sustained Competitive Advantage? *The Academy of Management Review*, 656-665.
- BEKADDOUR, A. (2021). Start-up et écosystème d'accompagnement en Algérie. *ANNALES DE L'UNIVERSITE DE BECHAR EN SCIENCES ECONOMIQUES*, 532-547.
- BEKADDOUR, A. (2021, janvier 31). Start-up et écosystème d'accompagnement en Algérie. *ANNALES DE L'UNIVERSITE DE BECHAR EN SCIENCES ECONOMIQUES*, pp. 532-547.
- Bendebiche, N., & Boutellaa, M. (2018). L'impact de l'utilisation des incubateurs d'entreprises sur la durabilité des PME Algériennes. *مجلة اقتصاد المال و الأعمال JFBE*, 511-520.
- Bergek, A., & Norrman, C. (2008). Incubator best practice: A framework. *Technovation*, 20-28.
- Blank, T. H. (2020). When incubator resources are crucial: survival chances of student startups operating in an academic incubator. *The Journal of Technology Transfer*.
- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2011). *Business research methods*. London: McGraw-Hill Higher Education.
- bouchair, I., & Hassiani, A. (2021, January 04). Industrial Business Incubators as a New Orientation for the development of Small and Medium Enterprises in Algeria. A Case Study of the Industrial Incubator in Khenchla. *المجلة الجزائرية للعلوم الاجتماعية والإنسانية*, pp. 701-717.
- Bouchaour, C. (2018). The Role of business Incubators to support and Develop StartUps: The Case of Algeria. *مجلة البشائر الاقتصادية*.
- Braun, V., & Clarke, V. (2012). Thematic analysis. In V. Braun, & V. Clarke, *APA handbook of research methods in psychology* (pp. 57-71). American Psychological Association.
- Bryman, A., & Bell, E. (2005). *Företagsekonomiska forskningsmetoder*. Malmö: Liber ekonomi.

- Campbell, C., Kendrick, R. C., & Samuelson, D. S. (1985). Stalking the latent entrepreneur: business incubators and economic development. *Economic Development Review*, 3(2), 43-49.
- Carayannis, E. G., & Zedtwitz, M. v. (2005). Architecting gloCal (global–local), real-virtual incubator networks (G-RVINS) as catalysts and accelerators of entrepreneurship in transitioning and developing economies: lessons learned and best practices from current development and business incubation. *Technovation*, 25, 95-110.
- Castrogiovanni, G. J. (1996). Pre-Startup Planning and the survival of new small businesses: Theoretical Linkages. *Journal of Management*, 801-822.
- Centre for Strategy & Evaluation Services. (2002). *Benchmarking of Business Incubators*. Brussels Belgium: European Commission Enterprise Directorate-General.
- Chandra, P., Srivastav, S., & Shah, B. (2003, January 04). Innovation, Incubation, and incubator. *sage journals*, pp. 89-94.
- Coyne, I. (1996). Sampling in Qualitative Research. Purposeful and Theoretical Sampling; Merging. *Journal of Advanced Nursing*, 623-630.
- CUKIER, D., & KON, F. (2018, October 30). A maturity model for software startup ecosystems. *Journal of Innovation and Entrepreneurship*.
- DALEX, K. (2020). Incubateurs, start-up et partenariats. *Gestion et management, Université de Strasbourg*. HAL open science.
- Diochon, M., Menzies, T. V., & Gasse, Y. (2005). Exploring the relationship between start-up activities and new venture emergence: a longitudinal study of Canadian nascent entrepreneurs. *International Journal Of Management and Enterprise Development*, 408-426.
- El-Jenbaz, A. (2019). أليف ستارت أب باختراق النمو.
- ELLIS, S., & BROWN, M. (2017). *Hacking Growth: How today's Fastest-Growing Companies Drive Breakout Success*. New York: Crown Business.

- Etikan, I., Musa, S. A., & Alkassim, R. S. (2015). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 1-4.
- F, F. (2005). A Handbook of Research Methods for Clinical and Health Psychology. In Oxford University Press (Eds.). *Semi-structured interviewing*, 65-77.
- Feeney, L., Haines JR, G. H., & Riding, A. L. (1999). Private investors' investment criteria: Insights from qualitative data. *An International Journal Of Entrepreneurial Finance*, 121-145.
- Fylan, F. (2005). A Handbook of Research Methods for Clinical and Health Psychology. In Oxford University Press (Eds.). *Semi-structured interviewing*, 65-77.
- Glaveckaitė, Ž. (2020, December 9). Early stage startup development: the critical success factors perspective. *Early stage startup development: the critical success factors perspective*. Vilnius, Management Science Council, Lithuania.
- Graham, P. (2012). *Startup=Growth*. Retrieved from Paulgraham.com: <http://www.paulgraham.com/growth.html>
- Grandi, A., & Grimaldi, R. (2006). Business Incubators and New Venture Creation: Assessing Different Incubating Programmes. *Technovation*, 111-121.
- Hackett, S. M., & Dilts, D. (2004). A Systematic Review of Business Incubation Research. *The Journal of Technology Transfer*, 55-82.
- Hannan, M. T., & Freeman, J. (1984, April). Structural Inertia and Organizational Change. *American Sociological Review*, 49(2), 149-164.
- Harnish, V. (2014). *Scaling Up: How A Few Companies Make It And Why The Rest Don't*. Ashburn, Virginia: Gazelles Inc.
- Harrar, S. (2021, Juin 30). The Entrepreneurial Support Ecosystem in Algeria: State of Play. *Revue Abaad Iktissadia*, pp. 397-418.
- Hudson, J., & Khazragui, H. (2013). Into the valley of death: Research to innovation. *Drug Discovery Today*, 13-14.

- Irayen, N., & Latroche, A. (2021). START - UP COMPANY AND BUSINESS INCUBATORS. WHAT ECONOMIC VALUE? *European Journal of Social Law*, 38-48.
- KAOUTOING, S. K., MAI DJANGO, T. W., & MADINA, R. (2020). GROWTH OF CAMEROONIAN START-UPS: AN ANALYSIS BY GOVERNANCE MECHANISMS. *Revue Internationale du Chercheur*.
- KOURAICHE, N. (2019, mai 05). LE RÔLE DE L'ÉCOSYSTÈME DE L'ACCOMPAGNEMENT ENTREPRENEURIAL DANS LA PROMOTION DE L'ENTREPRENEURIAT EN ALGÉRIE. *Les Cahiers du Cread*.
- Kumbhat, A., & Sushil, P. (2018, June 10). Development Stages and Scaling Issues of Startups. *Development Stages and Scaling Issues of Startups*. Delhi, Management Studies, India.
- Lange, G. S. (2018, June 5). The Value of Business Incubators and Accelerators from the Entrepreneurs Perspective . "*The Value of Business Incubators and Accelerators from the Entrepreneurs Perspective*" *Dissertation Georgia state university*.
- LeBrasseur & J., R., & Zinger, T. (2005). Start-up Survival and Management Capability: A Longitudinal Study of Micro-enterprises. *Journal of Small Business & Entrepreneurship*, 409-422.
- LeBrasseur, R., & Zinger, T. (2012). Start-up Survival and Management Capability: A Longitudinal Study of Micro-enterprises. *Journal of Small Business & Entrepreneurship*, 409-422.
- Leech, B. L. (2002). Asking Questions: Techniques for Semistructured Interviews. *political Science & Politics*, 665-668.
- Lose, T. (2019). A FRAMEWORK FOR THE EFFECTIVE CREATION OF BUSINESS. *A FRAMEWORK FOR THE EFFECTIVE CREATION OF BUSINESS*. FACULTY OF MANAGEMENT SCIENCES LOGISTICS DEPARTMENT, South Africa: VAAL UNIVERSITY OF TECHNOLOGY.

- Mamédio, D. F., Figueredo Rocha, C., & Quandt, C. O. (2019). Startups and the innovation ecosystem in Industry 4.0. *Technology Analysis & Strategic Management*.
- Marshall, M. N. (1996). Sampling for Qualitative Research. *Family practice*, 522-526.
- Martinsons, M. (2002). Electronic commerce in China: Emerging success stories. *Information & Management*, 571-579.
- Maxwell, A., Jeffrey, S., & Lévesque, M. (2009). Business Angel Early Stage Decision Making. *Journal of business Venturing*, 212-225.
- Minshall, t., & Wicksteed, b. (2005). University spin-out companies: Starting to fill the evidence gap, A report on a pilot research project commissioned by the Gatsby Charitable Foundation. St. John's Innovation Centre Ltd. *St. John's Innovation Centre Ltd*.
- Miozzo, M., & DiVito, L. (2016). Growing fast or slow?: Understanding the variety of paths and the speed of early growth of entrepreneurial science-based firms. *elsevier*, 964-986.
- Mokhnache, Y., & Khacef, D. e. (2021, september 26). Innovation ecosystems for startups : highlighting Algeria's efforts to build an ecosystem for startups (2003-2020). *مجلة اقتصاديات العمال والتجارة*, pp. 29-43.
- Moreira, A. C., & Carvalho, M. F. (2012). Incubation of New Ideas: Extending Incubation Models to Less-Favored Regions. *Entrepreneurship - Creativity and Innovative Business Models*, 41-58.
- Nakara, W. A., Jaouen, A., Vedel, B., Gbarret, I., & d'Andria, A. (2018). Examining the startup phase of an incubator from a bricolage perspective. *Revue de L'entrepreneuriat* , 103-137.
- Obaji, N., Olugu, M. U., Obiekwe, B. C., & Balogun, K. O. (2014). A Qualitative Research on Business Incubation national Programme in Nigeria: The Success Factor Landscape. *3rd International Seminar on Entrepreneurship and Business (ISEB 2014)At: Hotel Perdana, Kota Bharu, Kelantan, Malaysia*. Kota Bharu.

- Ould safi, O., & Larabi, M. (2020). The challenges facing startups in Algeria and the mechanisms for supporting and accompanying them. *حوليات جامعة بشار في العلوم الاقتصادية*, 483-469.
- Padaki, V., & Vaz, M. (2005). *Management Development in Non-Profit Organizations: A Programme for Governing Boards*. SAGE Publications India Pvt Ltd.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Adm Policy Ment Health*, 533-544.
- Passaro, R., Quinto, I., Rippa, P., & Thomas, A. (2016). *The start-up lifecycle: an interpretative framework proposal*. Bergamo, Italy.
- Paternoster, N., Giardino, C., Unterkalmsteiner, M., Gorschek, T., & Abrahamsson, P. (2014). Software development in startup companies: A systematic mapping study. *Information and software technology*, 1200-1218.
- Pearse, N. (2019). Deductive thematic analysis. *Proceedings of the 18th European conference on Research Methodology for business and Management Studies Wits Business School* (pp. 264-271). Johannesburg, South Africa: Academic Conference and Publishing International Limited.
- Penrose, E., & Pitelis, C. N. (2009). *The Theory of the growth of the firm*. New York: OXFORD University Press.
- Peters, L., Rice, M., & Sundararajan, M. (2004). The Role of Incubators in the Entrepreneurial Process. *The Journal of Technology Transfer*, 83-91.
- Petterson, I. B., Aarstad, J., Høvig, Ø. S., & Tobiassen, A. E. (2015). Business incubation and the network resources of start-ups. *Journal of Innovation and Entrepreneurship*, 1-17.
- Phan, P. H., Siegel, D. S., & Wright, M. (2005, March). Science Parks and Incubators: Observations, Synthesis and Future Research. *Journal of Business Venturing*, 20(2), 165-182.

- Pompa, C. (2013, february). *Literature Review on the Impact of Business Incubation, Mentoring, Investment and Training on Start-up Companies*. Retrieved march 02, 2022, from GOV.UK: [www.gov.uk](http://www.gov.uk)
- Reuber, A. R., Dyke, L. S., & Fischer, E. M. (1990). Experiential acquired Knowledge and entrepreneurial venture success. *Academy of Management Best Paper Proceedings*, 63-73.
- Ries, E. (2011). *The lean startup: how today's entrepreneurs use continuous innovation to create radically successful business*. New york: Crown Business, an imprint of the Crown Publishing Group, a division of Random House, Inc.
- Salamzadeh, A., & Kesim, H. K. (2015, January). *Startup Companies: Life Cycle and Challenges*. Belgrade, Serbia.
- Schwartz, M. (2008). Beyond incubation: an analysis of firm survival and exit dynamics in the post-graduation period. *The Journal of Technology Transfer*, 403-421.
- Schwartz, M. (2012). A control group study of incubators' impact to promote firm survival . *Journal of techonolgy transfer* , 302-331.
- Schwartz, M. (2013, June). A control group study of incubators' impact to promote firm survival. *The Journal of Technology Transfer*, 38(3), 302-331.
- Sexton, D. L., & Bowman-Upton, N. B. (1991). *Entrepreneurship : creativity and growth*. New York: Macmillan.
- Smilor, R. W. (1987). Managing the Incubator System: Critical Success Factors to Accelerate New Company Development. *IEEE Transactions on Engineering Management*, 146-155.
- Sohl, J. (2007). The angel investor market in 2008: a down year in investment dollars but not in deals. In J. Sohl, *Handbook of Research on Venture Capital* (pp. 347-370). Cheltenham, UK: Edward Elgar Publishing.
- Sohl, J. (2009). The angel investor market in 2008: a down year in investment dollars but not in deals. *Center for Venture Research*.

- Spender, J.-C., Corvello, V., Grimaldi, M., & Rippa, P. (2017). Startups and open innovation: a review of the literature. *European Journal of Innovation Management*.
- Startups, M. o. (2022, février 21). *Pour Les startup*. Retrieved Février 21, 2022, from startupDZ: startup.dz
- Sudek, R. (2006). Angel Investment Criteria. *Journal of Small Business Strategy* , 89-103.
- Suri, H. (2011). Purposeful Sampling in Qualitative Research Synthesis. *Qualitative research journal*, 63-75.
- Sutton, S. M. (2000). The Role of Process in a Software Start-up. *IEEE software*.
- Telch, N. (2021, MAY). THE ENTREPRENEURIAL TEAM AND EARLY STAGE SUCCESS OF START-UPS. *THE ENTREPRENEURIAL TEAM AND EARLY STAGE SUCCESS OF START-UPS*.
- Thomas, J., & K.I, G. (2020). Incubation Centres and Start-ups: A Study on Kerala's Start-up. *SEDME (Small Enterprises Development, Management & Extension Journal)*, 43-52.
- Tripathi, N., Annanperä, E., Oivo, M., & Liukkunen, K. (2016). Exploring processes in small software companies: a systematic review. *International Conference on Software Process Improvement and Capability Determination*, 150-165.
- Tripathi, N., Oivo, M., Luikkunen, K., & Markkula, J. (2019, june 08). Startup ecosystem effect on minimum viable product development in software startups. *Information and software technology*.
- Tshwete, L. M. (2020, August). Strategies for the Growth and Survival of Small- and MediumSized Businesses. *Strategies for the Growth and Survival of Small- and MediumSized Businesses*. Minneapolis, Minnesota, Management and Technology, United States Of America: Walden University.
- Vinturella, J., & Erickson, S. (2002). *Raising Entrepreneurial Capital*. Academic Press.
- Vinturella, J., & Erickson, S. (2003). *Raising Entrepreneurial Capital*. Academic Press.

Westhead, P., & Birley, S. (1995). Employment Growth in New Independent Owner-Managed Firms in Great Britain. *International Small Business Journal: Researching Entrepreneurship*, 11-34.

Zahra, S. A., Sapienza, H. J., & Davidsson, P. (2006). Entrepreneurship and dynamic capabilities: A review, model and research agenda. *Journal of Management Studies*, 917-955.

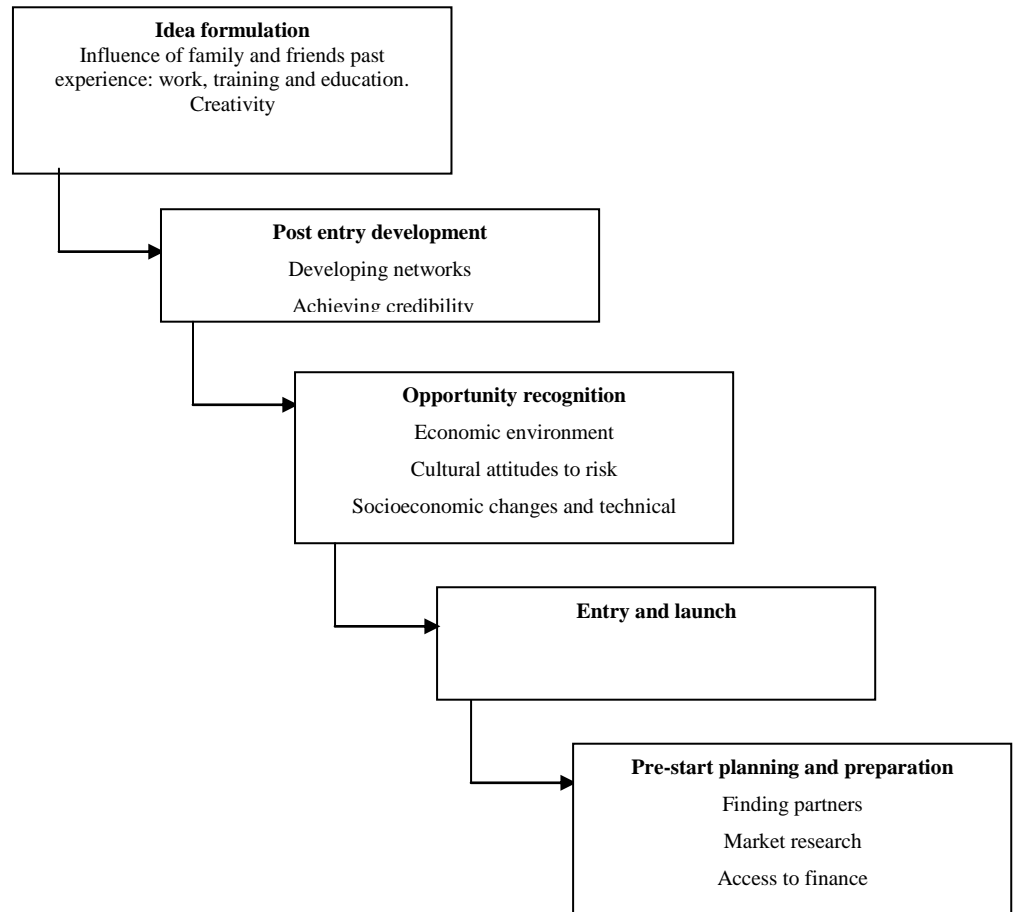
Zajko, M. (2017). Challenges of scaling-up process for start-ups. *De Gruyter Open*.

Zapata-Guerrero, F. T., Ayup, J., Mayer-Granados, E. L., & Charles-Coll, J. (2020, March 16). Incubator efficiency vs survival. *RAUSP Management Journal*.

# **APPENDIX**

**APPENDIX A: FIGURE: INCUBATION  
STEPS**

Figure: Key Steps of Incubation Process



Source: (Moreira & Carvalho, 2012)

**APPENDIX B: INTERVIEW  
QUESTIONS**

## **Interview**

### **Interview Introduction**

Thank you so much for taking the time to do this interview. My name is ABDESSELAMYENE AMANI and I am a master student in the HIGHER NATIONAL SCHOOL OF MANAGEMENT ENSM, and this interview is part of my research to obtain a master's degree. All the questions in this interview will help me answer the research question: **how do business incubators impact startups growth and survival?**

Before we start do I have your permission to record this interview so I can analyze the data better at a later time.

### **Interview questions**

#### **1. Questions for business incubators**

##### **Information about the incubator**

Please state your name as well as your role and responsibilities in the incubator?

Do you mentor and manage tenant companies?

When was your incubator created?

What are the purpose and the main objective of your incubator?

How many employees do you have in the incubator?

What are the selection criteria for the admitted incubatees?

How many incubatees do you currently have in the incubator?

How do you evaluate the success of your incubator? (Profit? Number of graduates?...)

How long does a startup stay within your facility?

Can you explain the process from the point a startup or the entrepreneur apply to your incubator?

##### **Question Related to the problem of this research**

Do you offer an incubation program if so what are the main phases of this program?

What resources and services does your incubator currently offer the tenant companies (startups)?

Follow up questions:

What kind of financial services or resources do you offer? (Financial resources: investment, starting capital, venture capitalists, business angels...)

What kind of physical resources do you offer? (Physical resources: Office space, computer network, and other physical infrastructure)

What kind of Office support do you offer? (Secretarial services, fax and copying services, book keeping)

What kind of human resources do you offer? (Types of experts available at the incubator)

What entrepreneurial startup support do you provide your incubatees? (management, legal, organizational skills, advice on company formation and tax issues, mentoring.)

How do these offered services impact startup survival and growth?

Do you invest in a startup? If so how often?

Do you have a support services that is offered but not used by the incubatees?

How does your incubator support startups? And how does it provide this support?

What types of expertise can be used by your tenants?

What is the communication/collaboration process between Experts and managers within the incubator and the tenant companies?

Do you encounter problems with regard to the interaction between the managers and the tenants that can impact negatively the growth and survival of the startup?

To what extent is the incubators network used? Do you offer access to incubator network to tenants?

Do you encourage startups to network among other incubated startups?

To what extent is external network used? (External support services)

Between external and internal network which is the more preferred?

Do you have any networking events? If so how often do they occur?

How does expertise affect startup growth and survival?

Do you receive feedback from your incubated startups? If yes how often?

What do you understand by the survival and growth of a startup?

How do the resources offered by your incubator impact startups survival and growth?

Which of the elements (resources or services) offered are most important to the survival and growth of the startup?

To what extents are the services offered by your incubator important to startup growth and survival?

What is the success rate of your incubation facility?

How many startups have graduated from your incubator?

How can you tell that the tenant company is ready to graduate from your incubator?

What is the return on investment of your incubator? How do you ensure a return?

How many of your graduated startups do you consider successful?

Do you have any additions of your own to the interview that might be of interest to this study?

## **2. Questions for incubated startups**

The startup has to be labeled by the ministry of knowledge economy and startups as well as has been active for at least 8 to 12 months and incubated for at least a portion of these months.

### **Introduction questions**

How long have you been active?

When did you get the startup label?

What was the main reason behind your application to this incubator?

At what phase in your business cycle did you apply to enter a business incubator?

What were the selection criteria for your admission to the incubator?

Can you tell us about the process of your incubation?

### **Questions related to the research question**

Did you go through a program?

How did the incubator support your startup?

What are the resources that you needed? and did the incubator provide them?

Financial resources: investment, starting capital, venture capitalists, business angels...

Physical resources: Office space, computer network, and other physical infrastructure

Office support: secretarial services, fax and copying services, book keeping

Entrepreneurial startup support: management, legal, organizational skills, advice on company formation and tax issues, mentoring.

The access to network of the incubator

Which of the resources offered by the incubator did you use? (Financial, human, technology, infrastructure, network...)

How did the resources and services offered by the incubator impact your startup growth and survival?

What kind of expertise was offered to you?

How did the expertise impact your startup growth and survival?

If the experience needed is not available in the incubator were outside sources used?

How was the collaboration between you and the manager or expert at the incubator?

Did you face any difficulties?

Which of the resources and support services offered would you say impacted the survival and growth of your startup the most?

To what extent is networking important to you?

What can you tell us about the network capability of the incubator?

Between external and internal networking which was preferred during your incubation period?

Were there any networking events?

How did the incubator network impact your startups growth and survival?

Is there any other support that the incubator gave to your company that was not talked about beforehand?

According to you what is a successful startup?

Which of the offered elements are the most important? Or had the most affect on your startup success (survival and growth)?

Do you think the incubator could help you more than it did?

Comparing where your startup was and where it is now, would it be where it is today without the incubator?

Do you have any additions of your own to the interview that might be of interest to this research?

**APPENDIX C: QUALITATIVE DATA  
ANALYSES**

Table: Identified and Added themes

	Expected Themes							Added Themes	
Themes	Previous experience of the incubator's team	The Incubator's Network	Entrepreneurial support and accompaniment	Credibility	Financial resources	Infrastructure	The Incubation Program	Entrepreneur's effort	Entrepreneurial ecosystem
Number of Business Incubators that mentioned the theme	<b>7</b>	<b>7</b>	<b>7</b>	<b>3</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>4</b>	<b>6</b>
Incubated Startups that mentioned the theme	<b>6</b>	<b>7</b>	<b>7</b>	<b>3</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>5</b>

Source: Realized by the author

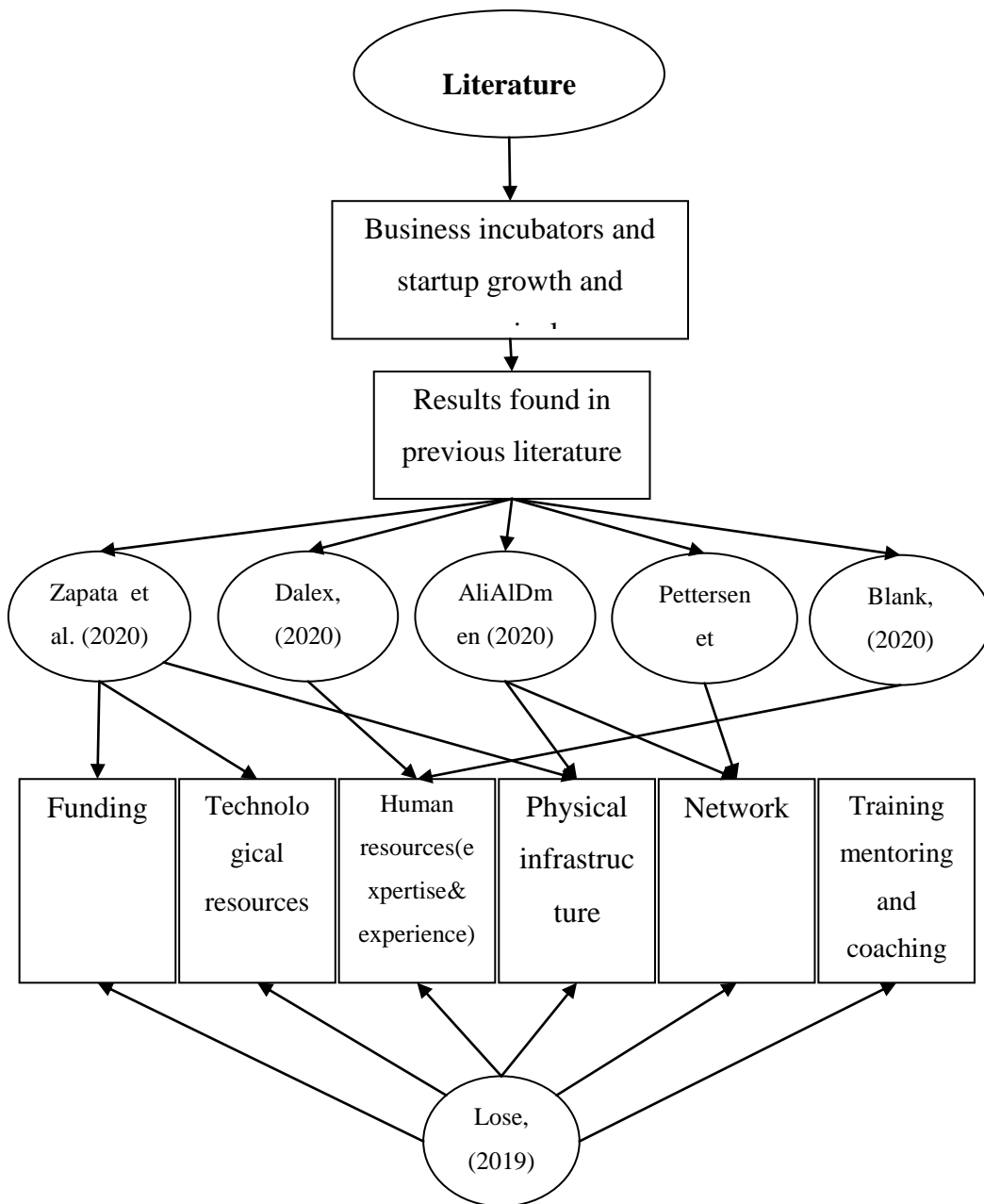
Table: Code Book

Physical resources codes	Office support codes	Financial resources codes	Entrepreneurial accompaniment and support codes	Network codes	Experience codes	Credibility codes
<p>OS: Office space</p> <p>CN: Computer network</p> <p>FR: Furniture</p>	<p>SS: Secretarial services</p> <p>F&amp;C: Fax and copying</p> <p>BK: Book keeping</p>	<p>IPF: Incubator provided funds</p> <p>AOF: Assistance in obtaining funds</p>	<p>MS: Management support</p> <p>CS: crisis support</p> <p>SP: support with problems</p> <p>LS: Legal support</p> <p>AS: accounting support</p> <p>HRS: HR support</p> <p>AS: Administrative support</p>	<p>AC: Access the network</p> <p>EN: External network</p> <p>IN: Internal network</p>	<p>PETI: The previous experience of the team at the incubator</p>	<p>Giving credibility to the tenant</p> <p>FCH: Helping them with their first contracts</p>

Source: Realized by the author

**APPENDIX D: RESULTS FROM THE  
LITERATURE REVIEW**

Figure: Results From the literature review



Source: Model Realized by the author