

Ecole des Hautes Etudes Commerciales d'Alger

EHEC

**A thesis submitted in partial fulfillment of the requirements for
the Degree of Master's in Commercial Sciences**

Major: Management Et Entrepreneuriat

TOPIC:

**THE IMPACT OF INCUBATORS IN THE
DEVELOPMENT OF STARTUPS AND THE ECOSYSTEM.
CASE STUDY: A.N.PT* - SIDI ABDELLAH INCUBATOR.**

*Agence Nationale de Promotion et de Développement des Parcs Technologiques

PRESENTED BY:

BADREDDINE BENFETIMA

SUPERVISED BY:

MR. KAMEL MERARDA

PROMOTION 2021

THANKS

We would like to express, first of all, our gratitude and our sincere thanks to Mr. KAMEL MERARDA, our supervisor, who helped us and guided us during the realization of this research.

Our thanks are addressed, secondly, to Mme. KNATEF WASSILA, the manager of the Incubator Sidi Abdellah, who gave us the chance to join the Incubator as a trainee and who guided us and supported us all along the Internship period.

Finally, we would like to thank all the people who helped, whether remotely or closely, in the realization of this thesis, from my family who supported and encouraged me, to the employees of the Sidi Abdellah Incubator who were friendly and helpful.

Thank you all.

TABLES LIST

N°	TITLE	PAGE
CHAPTER I		
TABLE 1	TYPES OF BUSINESS INCUBATORS	34
CHAPTER II		
TABLE 2	VALUE PROPOSITION OF THE CYBER PARK	44
TABLE 3	THE OFFER DEPENDING ON THE PROJECT CASE	46 - 47
TABLE 4	THE OFFER OF THE INCUBATOR	48
CHAPTER III		
TABLE 5	HISTORY OF ACTIONS COMPLETED BY A.N.P.T	71
TABLE 6	FUTURE ACTIONS OF THE A.N.P.T	74
TABLE 7	NUMBER OF PROJECTS THAT FINISHED INCUBATION	79
TABLE 8	EXAMPLES OF INCUBATED STARTUPS	79
TABLE 9	THE BACKGROUND OF PROJECT HOLDERS	81

FIGURES LIST:

N°	TITLE	PAGE
CHAPTER II		
FIGURE 1	THE INNOVATION SOUGHT BY A.N.P.T	41
FIGURE 2	THE INCUBATION PROCESS	53
FIGURE 3	PRESELECTION PROCESS	54
FIGURE 4	DESCRIPTION OF THE COWORKING PHASE (PRE-INCUBATION)	55
FIGURE 5	INCUBATION PHASE	57
FIGURE 6	POST INCUBATION PHASE	59
CHAPTER III		
FIGURE 7	THE STARTUP ECOSYSTEM	63
FIGURE 8	GENDER OF PROJECT HOLDERS	80
FIGURE 9	CURRENT SITUATION OF INCUBATED PROJECTS	81
FIGURE 10	CURRENT SITUATION OF INCUBATED PROJECTS	82

ABBREVIATIONS LIST

ABBREVIATION	MEANING
A.N.P.T	Agence National de Promotion et de Développement des Parcs Technologique.
ANSEJ	Agence National de Soutien à l'Emploi des Jeunes.
ANADE	Agence Nationale d'Appui et de Développement de l'Entrepreneariat
AI	Artificial Intelligence.
AR	Augmented Reality.
ANGEM	Agence Nationale de Gestion du Micro-crédit.
ACSE	Algerian Center for Social Entrepreneurship
AME	Algerienne Managers et Entrepreneurs.
AITA	Algerian Information Technology Association.
ANVREDET	Agence Nationale de Valorisation des Résultats de la Recherche et du Développement technologique
BEA	Banque Extérieure d'Algérie
BNA	Banque National D'Algérie
BADR	Banque de l'Agriculture et du Développement Rural
BDL	Banque de Développement Local
CNAC	Caisse National d'Assurance- Chômage.
CERTIC	Centre d'Etudes et de Recherche des TIC.
CSS	Conseil de Sélection et de Suivi.
CPA	Crédit Populaire d'Algérie.
CNEP	Caisse nationale d'épargne et de prévoyance-Banque.
EPIC	Enterprise Publique à caractère Industriel et Commercial.
FAUDTIC	Le Fonds d'appropriation des usages et du développement des technologies de l'information et de la communication.
HTL	Hospitality, Tourism and Leisure.
M.P.T.I.C	Ministry of the Post and Technology of Information and Communication.

MVP	Minimum Viable Product.
ONDA	L'Office National des Droits d'Auteur.
R&D	Research and Development.
SME	Small Medium - sized Entreprise.
TIC - ICT	Technologie d'Information et de Communication - Information and Communication Technology.
VR	Virtual Reality.

SUMMARY:

GENERAL INTRODUCTION:	1
The structuring of the Thesis:	4
Research Methodology:	5
CHAPTER I: GENERAL OVERVIEW OF THE TOPIC	8
SECTION 1: ENTREPRENEURSHIP AND ENTREPRENEURS	9
1.1 EVOLUTION OF THE CONCEPT OF ENTREPRENEURSHIP:	9
1.2 DEFINITION OF ENTREPRENEURSHIP:	11
1.3 CHARACTERISTICS OF AN ENTREPRENEUR:	12
1.4 ENTREPRENEUR VS MANAGER:	14
1.5 INTRAPRENEUR VS ENTREPRENEUR:	14
1.6 THE DIFFERENT TYPES OF ENTREPRENEURSHIP:	15
1.7 THE ROLE OF ENTREPRENEURSHIP IN ECONOMIC DEVELOPMENT:	17
SECTION 2: START-UPS	20
2.1 STARTUP HISTORY:	20
2.2 WHAT IS A STARTUP?	22
2.3 WHY DO WE NEED STARTUPS?	22
2.4 WHY STARTUPS MATTER?	24
2.5 CREATIVE DESTRUCTION AND DISRUPTION:	24
2.6 THE STARTUP ECOSYSTEM:	27
2.7 ATTRIBUTES OF A SUCCESSFUL STARTUP:	29
SECTION 3: INCUBATORS	33
3.1 THE VALUE PROPOSITION OF INCUBATORS	33
3.2 TYPES OF BUSINESS INCUBATORS	34
3.3 HOW INCUBATORS SUPPORT YOUNG FIRMS	35
CONCLUSION CHAPTER I:	36
CHAPTER II: A.N.P.T - SIDI ABDELLAH INCUBATOR	38
SECTION 1: PRESENTATION OF THE A.N.P.T	39
1.1 PRESENTATION OF THE A.N.P.T (AGENCE NATIONAL DES PROMOTIONS DES PARCS TECHNOLOGIQUES):	39
1.2 ROLE OF TECHNOLOGY PARKS PROMOTERS:	40
1.3 THE INNOVATION SOUGHT BY A.N.P.T:	41
1.4 THE ORGANIZATION OF A.N.P.T:	42
SECTION 2: PRESENTATION OF THE CYBER PARK SIDI ABDELLAH	43
2.1 DESCRIPTION OF THE CYBER PARK:	43
2.2 THE VALUE PROPOSITION:	44
SECTION 3: PRESENTATION OF THE SIDI ABDELLAH INCUBATOR.	48
3.1 DESCRIPTION OF THE INCUBATOR :	48
3.2 OBJECTIVES OF THE INCUBATOR:	49
3.3 THE INCUBATION PROCESS:	52

CONCLUSION CHAPTER II:	60
CHAPTER III: REALIZATIONS OF THE A.N.P.T & THE SITUATION OF INCUBATED STARTUPS	62
SECTION 1: THE ALGERIAN ECOSYSTEM	63
1.1 THE STARTUP ECOSYSTEM:	63
1.2 DESCRIBING AND LISTING SOME ACTORS OF THE ALGERIAN ECOSYSTEM:	64
1.3 THE VALUE ADDED BY A.N.P.T:	70
1.4 THE NATIONAL YOUTH PLAN (PLAN NATIONAL DE JEUNESSES) 2021/24:	76
SECTION 2: THE CURRENT SITUATION OF FORMERLY INCUBATED STARTUPS.	77
2.1 PRESENTATION OF THE RESULTS:	79
CONCLUSION CHAPTER III:	83
GENERAL CONCLUSION:	85

GENERAL INTRODUCTION

GENERAL INTRODUCTION:

Today, Entrepreneurship research is experiencing rapid growth, associated with the interest of the scientific and political community in the field of entrepreneurship which is constantly increasing, at first glance through the multiplication of colloquiums, conferences, seminars , and by the development of university programs and courses in higher education institutions around the world, but also at the heart of political discourse, and the measures that accompany them, especially in crisis situations.

Entrepreneurship has become an academic field in its own right, which borrows its methods from many disciplines from which arise many varied issues: the business, the entrepreneur, the entrepreneurial process. These results are in the news in the most prestigious academic journals of management, strategy or finance. The themes studied are multiple: business, entrepreneurship, intrapreneurship, new technology companies, companies created from academic results (spin-offs) and start-ups.

These last ones called Startups, now a word that ambitions and makes dream many of us, and is strongly present in our daily language, is a subject that has become major in the media, in companies and in schools, whereas few people referred to it a few years ago.

To create a startup is to put forward dreams and pool ideas. It is idealizing a world where creativity is rewarded, or effort is revalued, or money is uninhibited, it is making mistakes and questioning one's self, it is looking closely, and anticipating the future . It is an adventure for which no school prepares, to find the right direction, to make the right choices.

Startup creators must look to the right people, the right structures so that the entrepreneur is supported and oriented in finding solutions throughout the creation process. To achieve value creation, the startup mobilizes all possible forms of support, however young shoots are faced with a multitude of structures, and support organizations, these measures are based on mechanisms and programs of different natures: financial support, support (incubators, accelerators, mentoring, coaching), training, Networking, access to workspaces and infrastructure.

In Algeria, the creation of startups was supported by the government through support measures which were initially marked by financial and tax assistance, the creation of support systems for business creation (ALGERIA STARTUP FUND, ANSEJ, CNAC, FAUDTIC, etc....).

The entrepreneur is now placed at the center of the Algerian state's policy, the public authorities are aware of the importance of entrepreneurship for the national economy, at the same time of the importance of new technologies, since 2009, multiple cyber technology parks have been built across the country (Sidi Abdellah -Alger, Sidi Amar- Annaba, Bir El Djir- Oran, Ouargla, Constantine, Ghardaia, Boughezoul) in order to promote innovation and job creation.

Today, many initiatives are carried by the Algerian state and even private investors, in order to encourage the birth of young shoots and their development in Algeria, this new dynamic initiated by the actors of the ecosystem, has been translated by structures totally dedicated to incubation, acceleration, coworking spaces and even advice, especially for project leaders. These structures are intended to accompany and support project leaders, with a view to ensuring the emergence of startups, and subsequently contributing to the economic and social development of the country.

In this observation, we wanted to have a look at the support provided by incubators to be able to appreciate its contribution as an actor for the emergence of startups and for the Algerian economy in general.

The object of our study is hence to comprehend how the incubators, more specifically the Sidi Abdellah Incubator by the A.N.P.T, have impacted the development of startups and the algerian ecosystem. The following problematic have been emitted:

What impact did the “Incubator Sidi Abdellah by the A.N.P.T” have on the development of startups and the ecosystem?

From this main question, our first intuition is to wonder how we’re going to measure this “impact”, minimum logic would entail that we define what Incubators are and what they do, what are Startups, then compare the startups that went through incubation with startups that

didn't, whether the incubated startups "do better" than non incubated ones. As for the ecosystem in general, the achievements of the incubator would constitute a good metric of its "impact" and its added value in the ecosystem.

However, and this gets clearer the more one thinks about it, the comparison between incubated startups and non incubated ones to see if the formers "do better" than the latter is a complex quest and an elusive one, because we need to define what "do better" means and that would involve knowing what are the different reasons for failure and success of startups.

The range of potential reasons for failure or success of startups is very large, the reasons may substantially vary from one startup to another, each startup is unique and faces its own problems and challenges, each environment in which a startup is active on is also unique, the reasons of failure or success may be internal to the startup or external -and maybe the responsables of the startup themselves are not aware of-, the reasons may be controllable or uncontrollable, and so on and so forth. Thus, to precise the reasons that make of a startup a success or a failure, a meticulous investigation is necessary for each and every single startup at a time, thing which goes beyond our capacities.

Therefor, and since the emitted problematic is quite complex, we were obliged to chose a moderate research scope that suites the nature of our work and the resources and time at our disposal, the research scope will be chosen in such a manner that it should cover some aspects of the question while preserving its depth and gives some insights at the end of the inquiry regarding the impact of incubators on startups and the ecosystem.

Henceforth, we chose to cover the following 3 aspects of the questions:

First, What are the services provided by the A.N.P.T - Cyber park Sidi Abdellah, since the nature of the services directly impact the development of startups;

Second, What did the A.N.P.T achieve throughout the years since its creation, in order to have an idea on the contribution of this organism in the ecosystem;

and finally, What is the current situation of previously incubated startups and projects (mainly whether they are still in Business or not); answering this question would constitute some evidence that the impact of the Incubator has lasted after the the end of the Incubation.

On this account, we inferred the following 3 secondary questions:

Q1: What major services does the A.N.P.T - Cyber park Sidi Abdellah offer?

Q2: What are the realizations and the achievements of the A.N.P.T - Cyber park Sidi Abdellah since their creation?

Q3: What is the current situation of previously Incubated startups and projects?

In order to answer these questions, the following hypotheses were dictated:

H1: Sidi Abdellah Incubator offered mainly Managerial services;

H2: through its achievements, the A.N.P.T has greatly helped the ecosystem develop in the last decade,

H3: half of the startups and projects incubated in Sidi Abdellah are still in Business.

The structuring of the Thesis:

With the aim of answering the problematic, we decided to devise our work into three chapters; for the purpose of familiarizing the reader with the concepts and notions which will appear in this thesis, we reserved the first chapter exclusively to the theoretical aspect of the problematic, inquires such as the definition of concepts like Entrepreneurship, Startups, Incubators and Accelerators, their respective histories, their roles in the ecosystem, facts and numbers, all will be included in the first chapter.

After that the reader gets acquainted with the material of the thesis, time is to dive deeper into the purpose of this study, that is to answer the main problematic and the secondary questions which will be the content of the second and the third chapter; the second chapter will be dealing with questions surrounding the A.N.P.T - Cyber park Sidi Abdellah like their value proposition and their processes. By the end of chapter II, we should have finished examining the first of our secondary questions **Q1**: “What major services does the cyber park Sidi Abdellah offer?”, and touched partially on the second question **Q2**: “What are the realizations and the achievements of the A.N.P.T since its creation?”.

As for chapter III, we will expand further in the second question **Q2**, and finish our study with an investigation for the third question **Q3**: “What is the current situation of previously Incubated startups and projects?”.

Research Methodology:

In this section, we're going to explore the different factors that shaped this study such as the reason why we chose this topic, how we approached the problematic and the different research methods and tools we've adopted.

The choice of the theme:

Some of the reasons that triggered the choice of this theme is both its newness in the public discourse and the current general interest that both the government and the youth reserve and show with regards to this Business area. The term "startups" have become trendy in recent years, it makes the enthusiastic young people dream of making their own adventure, and the government planning and betting on the capability of this kind of entrepreneurship in transforming and building the country's economy in the years to come. Besides those mentioned reasons, other personal reasons have come into play, I (the author), personally, am interested in entrepreneurship, technology and innovation, so I found it appropriate that I make my end of study thesis around this topic in a first part, and in a second part, it's an opportunity to learn and earn some work experience while I'm doing so, thus tackling two needs at a time.

How did we approach the problematic + research methods and tools used:

In the purpose of understanding the value added by incubators in the ecosystem and the development of startups, we judged it appropriate and necessary due to the nature of the emitted problematic to make sure that we, and by extension the reader, develop a fair enough understanding of the concepts that will appear in the course of the thesis (which is the object of the first chapter). Hence, extensive bibliographic documentation was required to summarize broad concepts (as Entrepreneurship, Startups and Incubators) into small, brief and -more or less- easily understandable paragraphs.

Next, concerning **Q1** and **Q2**, we resorted to a descriptive approach (Qualitative and Quantitative) that entailed the careful gathering and examination of multiple internal documents and sources to be able to fairly represent this organism.

Finally, and with the intention of answering **Q3** regarding the current situation of startups incubated in Sidi Abdellah, we have relied on an investigation by means of phone calls and an online questionnaire, and an online inquiry via the internet.

CHAPTER I

OVERVIEW OF THE TOPIC

CHAPTER I: GENERAL OVERVIEW OF THE TOPIC

In this first chapter of the thesis, we are going to develop an overview of the Business world, we are going to touch on three major concepts that are fundamental with regards to the aim of the Thesis, these three concepts are “Entrepreneurship/Entrepreneurs”, “Startups” and “Incubators”.

Entrepreneurship and Entrepreneurs, as we will show, are the real creators of Value through Innovation, Risk taking, Leadership and other factors.

Startups, which have become a tendency in the Business world, are considered to be a very important creator of wealth in the modern economies.

Incubators are a boost for startups and small businesses, hence their importance in the context of a rapidly growing and emerging economies.

In the end of this first chapter, we would have developed some insights on the nature of services and value that Incubators usually offer, thing that will help us to answer the first of our secondary questions **Q1**: “What major services does the cyber park Sidi ABdellah offer?”.

SECTION 1: ENTREPRENEURSHIP AND ENTREPRENEURS

Entrepreneurship is a popular subject among students of business as well as among management scholars and researchers. University courses, books and academic journals on entrepreneurship abound. Many governments around the world, believing that entrepreneurship is the key to economic development, offer Entrepreneurship Development Programs (EDPs). Amidst all this frenzy of activity stands a fundamental question: who is an entrepreneur? The answer to this question is more elusive than one might suspect.

1.1 EVOLUTION OF THE CONCEPT OF ENTREPRENEURSHIP:

The word “entrepreneur” is a French coinage. So, it is appropriate that the story starts with contributions from early French writers on entrepreneurship. The earliest writer to recognize the role of entrepreneurship is Richard Cantillon. Cantillon’s entrepreneur is someone who engages in exchange for profit; specifically, he is someone who exercises business judgment in the face of uncertainty. This uncertainty (of future sales prices for goods on their way to final consumption) is rather carefully circumscribed, as Cantillon describes it, entrepreneurs buy at a certain price to sell again at an uncertain price, with the difference being their profit or loss.¹

This idea of entrepreneur facing uncertainty casts a long shadow over the literature. its influence can be felt all the way to Frank Knight who wrote about profit in the 1920s. Following Cantillon, Francois Quesnay, the founder of the Physiocratic School formulated large-scale farmers as entrepreneurs. Jean-Baptiste Say broadened the concept by putting the entrepreneur at the core of the entire process of production and distribution. However, Say’s entrepreneur ends up as a superintendent and an administrator.²

In contrast to the French writers, the English classical economists saw entrepreneurs as suppliers of financial capital. Adam Smith himself seemed to have identified the entrepreneur as a prudent man who “is frugal (i.e. he accumulates capital) and is an agent of slow but

¹ HEBERT, (Robert) and LINK (Albert): **A History of Entrepreneurship**, London Routledge 2009, P.8

² Ibid, p.9

steady progress". Jeremy Bentham, on the other hand, saw the entrepreneur as an agent of economic progress. English classical thought "preserved a somewhat sterile notion of entrepreneurship".³

The German writings are represented by J.H. von Thunen and H.K. von Mangoldt. Thunen made the important distinction between the provider of capital and the entrepreneur. Mangoldt brought in the notion of risk-taking as essential for entrepreneurship.

In the late nineteenth century, classical economics evolved into neoclassical economics with its emphasis on mathematical and scientific precision and its preoccupation with resource allocation and pricing decisions. Neoclassical economics had three versions: the Austrian School, led by Carl Menger, the Lausanne School led by Leon Walras and the English school led by Alfred Marshall. The neoclassical school which, except for the Austrian School of thought, downplayed, even eliminated the role of the entrepreneur in the market economy⁴. In the world of mathematical general equilibrium models, there was no place for the entrepreneur.

The Austrian School legacy, however, culminated in the work of Joseph Schumpeter, the superstar proponent of the role of the entrepreneur. While Americans abandoned the classical English idea of entrepreneur as capitalist, many early writers did not associate risk with entrepreneurship, the old idea of Cantillon. It was Frank Knight who brought risk back into the picture, added uncertainty to it and produced the classic theory of profit. He was also influenced by many other currents of economic thought.

Schumpeter combined ideas from Marx, Weber, and Walras, along with insights from his Austrian forebears, Menger, von Weiser, and his teacher von Bohm-bawerk. Rather than slavishly imitate the work of others he melded these elements into something uniquely his own.⁵ In Schumpeter's vision, the entrepreneur is the consummate innovator and earns his profits, however temporary, from successful innovations. In this, Schumpeter rejected the risk-taking attribute as inherent to entrepreneurs, assigning it to capitalists. In taking this view, Schumpeter has come under critical review. Instead of stopping research on its track, the dazzling work of Schumpeter stimulated more work. Arthur H. Cole established the Research Center in Entrepreneurial History in Harvard University.

³ HEBERT, (Robert) and LINK (Albert): **A History of Entrepreneurship**, London Routledge 2009, P.35

⁴ Ibid, P.35

⁵ Ibid, P.70

Throughout most of the twentieth century, theories about the nature and role of entrepreneurship have focused on one issue or the other: either the cleavage between risk and uncertainty or the issue of equilibrium versus disequilibrium. These issues remain mostly unresolved as we enter the twenty-first century.

1.2 DEFINITION OF ENTREPRENEURSHIP:

“Entrepreneurship involves such a range of activities and levels of analysis that no single definition is definitive”. – Lichtenstein (2011, p. 472).⁶

“It is complex, chaotic, and lacks any notion of linearity. As educators, we have the responsibility to develop our students’ discovery, reasoning, and implementation skills so they may excel in highly uncertain environments.” – Neck and Greene (2011, p. 55)⁷

It is necessary to be able to determine exactly who entrepreneurs are before we can, among other things, study them, count them, and calculate how and how much they contribute to the economy.

Let's try to ponder a little bit on the following interrogations:

1. Does entrepreneurship involve entrepreneurs (individuals with unique characteristics)?
2. Does entrepreneurship involve innovation?
3. Does entrepreneurship involve resource acquisition and integration (new venture creation activities)?
4. Does entrepreneurship involve creating value?
5. Does entrepreneurship involve uniqueness?
6. To be entrepreneurial, does a venture need to be owner-managed?

Gartner (1990) have worked on answering those questions by interviewing a number of Entrepreneurs and other experts on the field ⁸, he came up with the following:

1. **The Entrepreneur:** The entrepreneur theme is the idea that entrepreneurship involves individuals with unique personality characteristics and abilities (e.g., risk-taking, locus of control, autonomy, perseverance, commitment, vision, creativity). Almost 50% of

⁶ <https://www.coursehero.com/file/96157419/Entrepreneurship-theorydocx/> (consulted in 28/04/2021 at 17h)

⁷ Ibid.

⁸ GARTNER, (William): **Journal of Business Venturing**, 1990, P. 25- 26

the respondents rated these characteristics as not important to a definition of entrepreneurship.

2. **Innovation:** The innovation theme is characterized as doing something new as an idea, product, service, market, or technology in a new or established organization. The innovation theme suggests that innovation is not limited to new ventures, but recognized as something which older and/or larger organizations may undertake as well. Some of the experts Gartner questioned believed that it was important to include innovation in definitions of entrepreneurship and others did not think it was as important.
3. **Organization Creation:** The organization creation theme describes the behaviors involved in creating organizations. This theme described acquiring and integrating resource attributes (e.g., Brings resources to bear, integrates opportunities with resources, mobilizes resources, gathers resources) and attributes that described creating organizations (new venture development and the creation of a business that adds value).
4. **Creating Value:** This theme articulated the idea that entrepreneurship creates value. The attributes in this factor indicated that value creation might be represented by transforming a business, creating a new business, growing a business, creating wealth, or destroying the status quo.
5. **Uniqueness:** This theme suggested that entrepreneurship must involve uniqueness. Uniqueness is characterized by attributes such as a special way of thinking, a vision of accomplishment, ability to see situations in terms of unmet needs, and creates a unique combination.
6. **The Owner-Manager:** Some of the respondents questioned by Gartner (1990) did not believe that small mom-and-pop types of businesses should be considered to be entrepreneurial. Some respondents felt that an important element of a definition of entrepreneurship was that a venture be owner-managed.

1.3 CHARACTERISTICS OF AN ENTREPRENEUR:

The characteristics of entrepreneurs are numerous, a successful entrepreneur possesses a combination of traits that show both innovation and leadership qualities. Scholars from around the world have worked tirelessly to discover just what characteristics make a good

entrepreneur; what exactly makes up a business founder's x-factor? Gartner (1990) identified 90 attributes that showed up in definitions of entrepreneurs and entrepreneurship provided by entrepreneurs and other experts in the field⁹. While a lot of the findings are still pretty much open to debate, there's no questioning that great entrepreneurs have the following traits:

Ambition: A good entrepreneur is driven to make something of himself. He knows what he wants, and he sets a course to get it. His motivation to achieve something can sometimes be overwhelming, and the urge to establish himself can be quite consuming. An entrepreneur's ambition is often the key ingredient that gets him off of his chair and puts him into action, turning his daydreams into reality.

Enthusiasm: Often coming hand-in-hand with ambition, enthusiasm plays a great role in the entrepreneur's motivation. While ambition may be the key to the entrepreneur's ignition, enthusiasm is the gas. Every successful entrepreneur has a positive outlook giving him the energy to pursue his endeavors. Without enthusiasm, an entrepreneurial project will slowly wither into inactivity and failure.

Creativity: When problems do arise, you can count on creativity to bail you out. Creativity is probably what led you to envision your company in the first place, and it'll be creativity that will help you realize the possible solutions to any hitches that might come your way. Successful entrepreneurs find inspiration throughout the entire process, and often discover ways to turn roadblocks into opportunities.

Decision Making: Entrepreneurs call all the necessary shots. While their creativity makes them men of ideas, it's their ability to make decisions that will make them men of action. The decisions that entrepreneurs make will determine the fate of the company, and it's only through decision making that things will actually happen. An entrepreneur with poor decision-making skills will have his company caught in a state of inactivity and degradation; good decision-making skills, on the other hand, will ensure that the best possible measures in putting up the business will be enforced.

Perseverance: Perhaps the most important of all the characteristics of entrepreneurs is the ability to withstand the troubles that come with starting a business. Beginning a new enterprise is an immensely difficult task, and as an entrepreneur, you'll have to stick through

⁹ Gartner, (William): **Journal of Business Venturing**, 1990, P. 15

the storms and stress if you want your venture to be a success. It sometimes takes years for a good idea to start making you money, but when it does, you'll be glad you stood strong in the face of adversity.

1.4 ENTREPRENEUR VS MANAGER:

The terms Entrepreneur and Manager are considered one and the same. But the two terms have different meanings. The following are some of the differences between a manager and an entrepreneur. The main reason for an entrepreneur to start a business enterprise is because he comprehends the venture for his individual satisfaction and has a personal stake in it whereas a manager provides his services in an enterprise established by someone. An entrepreneur and a manager differ in their standing, an entrepreneur is the owner of the organization and he bears all the risk and uncertainties involved in running an organization whereas a manager is an employee and does not accept any risk. An entrepreneur and a manager differ in their objectives. Entrepreneur's objective is to innovate and create and he acts as a change agent whereas a manager's objective is to supervise and create routines. He implements the entrepreneur's plans and ideas. An entrepreneur is faced with more income uncertainties as his income is contingent on the performance of the firm whereas a manager's compensation is less dependent on the performance of the organization.

1.5 INTRAPRENEUR VS ENTREPRENEUR:

Meaning of Intrapreneur: "A person within a large corporation who takes direct responsibility for turning an idea into a profitable finished product through assertive risk-taking and innovation"¹⁰

- Entrepreneurs provide the spark. Intrapreneurs keep the flame going.
- Entrepreneurs are found anywhere their vision takes them. Intrapreneur work within the confines of an organization.
- Entrepreneurs face many hurdles, and are sometimes ridiculed and riddled with setbacks. Intrapreneurs may sometimes have to deal with conflict within the organization.

¹⁰ <https://www.yourdictionary.com/intrapreneur> (consulted in 29/04/2021 at 10 am)

- Entrepreneurs may find it difficult to get resources. Intrapreneurs have their resources readily available to them.
- Entrepreneurs may lose everything when they fail. Intrapreneurs still have a paycheck to look forward to (at least for now) if they fail.
- Entrepreneurs know the business on a macro scale. Intrapreneurs are highly skilled and specialized.

1.6 THE DIFFERENT TYPES OF ENTREPRENEURSHIP:

Entrepreneurship through financial ownership

Let's start with the traditional dimension of entrepreneurship, which is through financial ownership. One thing to point out is that owning a part of a company doesn't automatically mean that the person is an entrepreneur. The person should also have an operative role in the company or for example be an active board member.

To discuss entrepreneurship through financial ownership we should cover the different types of companies.

- One-person companies are entities owned by solo entrepreneurs (often called freelancers) who make their living doing projects here and there and have registered a company for billing purposes.
- Boutiques can be cafes, restaurants, clothing stores, barber shops, and so on. They are often local and it's common that the owner works as an entrepreneur or is at least very close to operations. These kinds of businesses rarely aim for high growth.
- Small and medium-sized companies (SMEs) are mostly groups of people who provide services or sell a relatively niche product. SMEs usually aim for moderate growth. In many cases there are entrepreneurs through financial ownership but there can be many variations – for example the entrepreneurs, a wealthy family or a private investor can be the financial owner.
- Large corporations are often international and have a wide offering. Decision making is dispersed between the owners, the board, the executive team and other governance structures. Financial ownership is divided among shareholders in many cases on the

public market and there are often no entrepreneurs based on financial ownership. Even though an employee of a big company could own a tiny fraction of the company shares it doesn't mean they are entrepreneurs based on that. One needs to own a significant percentage. Sometimes there might be a few individuals like a family who own a major part of the company and are acting as entrepreneurs.

There are many different ways to categorize companies and the listing above is just one example. For instance, you can also categorize companies into service/consulting companies and product companies. For service/consulting companies, the value the company can produce is (in most cases) almost directly tied to the amount of people working there – meaning growth is dependent on the number of employees. Product companies can sell more products without necessarily needing to add a large number of employees.

Entrepreneurship through intrapreneurship

An intrapreneur is an employee acting like an entrepreneur inside of a company, even if the person doesn't possess significant financial ownership of the company. They take responsibility, are proactive, look for solutions to problems and take calculated risks like other entrepreneurs.

One can be an intrapreneur in any kind of a company if the company creates an environment where that is possible. Often in SMEs, many employees are intrapreneurs because there are no rigid structures and the roles are wider, meaning employees have many responsibilities.

Today, some companies have actual intrapreneur roles, but a critical thing to remember is that these employees are not the only ones who can and should be intrapreneurs. If the company environment allows it, almost any employee can be an intrapreneur. Actually many great employees might not realize that they can be categorized as intrapreneurs.

Every company needs an entrepreneur to get started, but to grow the business and survive when conditions change, intrapreneurs are needed. Companies need people to take proactive action when unexpected problems and possibilities come up – at some point, the original entrepreneur(s) can't take care of everything.

Entrepreneurship outside of companies

As entrepreneurship is not tied to financial ownership, you can also work like an entrepreneur outside of companies, including at associations, clubs, or public entities. Many students work like entrepreneurs in student clubs and associations, parents might work like entrepreneurs in their children's sports clubs, and there are countless other places where people can act like an entrepreneur.

Startup entrepreneurship

Startups are a special company type and being a startup entrepreneur is also different from other types of entrepreneurship. In section 2 of the chapter, we will focus on startup entrepreneurship: what it means, what is the impact that startups have on individuals and society.

1.7 THE ROLE OF ENTREPRENEURSHIP IN ECONOMIC DEVELOPMENT:

The entrepreneur who is a business leader looks for ideas and puts them into effect in fostering economic growth and development. Entrepreneurship is one of the most important inputs in the economic development of a country. The entrepreneur acts as a trigger head to give spark to economic activities by his entrepreneurial decisions. He plays a pivotal role not only in the development of the industrial sector of a country but also in the development of the farm and service sector. The major roles played by an entrepreneur in the economic development of an economy are discussed in a systematic and orderly manner as follows.

Promotes Capital Formation:

Entrepreneurs promote capital formation by mobilizing the idle savings of the public. They employ their own as well as borrowed resources for setting up their enterprises. Such types of

entrepreneurial activities lead to value addition and creation of wealth, which is very essential for the industrial and economic development of the country.

Creates Large Scale Employment Opportunities:

Entrepreneurs provide immediate large-scale employment to the unemployed which is a chronic problem of underdeveloped nations. With the setting up of more and more units by entrepreneurs, both on small and large-scale numerous job opportunities are created for others. As time passes, these enterprises grow, providing direct and indirect employment opportunities to many more. In this way, entrepreneurs play an effective role in reducing the problem of unemployment in the country which in turn clears the path towards economic development of the nation.

Promotes Balanced regional Development:

Entrepreneurs help to remove regional disparities through setting up of industries in less developed and backward areas. The growth of industries and business in these areas lead to a large number of public benefits like road transport, health, education, entertainment, etc. Setting up more industries leads to more development of backward regions and thereby promotes balanced regional development.

Reduces The Concentration Of Power:

Economic power is the natural outcome of industrial and business activity. Industrial developments normally lead to concentration of economic power in the hands of a few individuals which results in the growth of monopolies. In order to redress this problem a large number of entrepreneurs need to be developed, which will help reduce the concentration of economic power amongst the population.

Wealth Creation and Distribution:

It stimulates equitable redistribution of wealth and income in the interest of the country to more people and geographic areas, thus giving benefit to larger sections of the society.

Entrepreneurial activities also generate more activities and give a multiplier effect in the economy.

Increasing Gross National Product per Capita Income:

Entrepreneurs are always on the lookout for opportunities. They explore and exploit opportunities, encourage effective resource mobilization of capital and skill, bring in new products and services and develop markets for growth of the economy. In this way, they help increase gross national product as well as per capita income of the people in a country. Increase in gross national product and per capita income of the people in a country, is a sign of economic growth.

SECTION 2: START-UPS

2.1 STARTUP HISTORY:

Before taking a deep dive into startup entrepreneurship, it makes sense to discuss how the whole startup world originated. If we think of a startup as a highly scalable tech company aiming for rapid growth (we will discuss the definition of a startup more), we can start to look for the first startup in history.

For example, Edison General Electric company (now GE), could be thought of as one of the first startups. The growth and difficult path to victory for that company is similar to a typical startup journey. Many companies like Nokia could also be thought of as a startup in their early days.

However, none of these companies could be considered a startup in their current state as they are now large corporations.

The rise of Silicon Valley

Startups are often linked with the rise of Silicon Valley. This tech company concentration around Stanford University has had a huge impact on the technological development of the world since the 1970s. The term Silicon Valley was first coined in 1971 in a magazine called *Electronic News*¹¹, when it mainly referred to the companies in the area that were manufacturing semiconductors (for which the main ingredient was silicon). In the 1980s, the term Silicon Valley was used to refer to the whole area of Palo Alto, Cupertino, Sunnyvale and Mountain View, among others.

The startup boom in the area didn't really start until the end of the 1990s when the dot.com boom took over. The belief in technology and the possibility that the internet could change the world grew to unparalleled heights. Companies like Amazon and Netscape were paving the way and created the sense that success was waiting for everyone who knew how to register a domain. Things got out of hand and the dot.com bubble burst, causing one of the biggest crashes in the global economy in recent decades.

¹¹ <https://www.computerhistory.org/revolution/digital-logic/12/328/1401> (consulted in 29/04/2021 at 11h30)

Even though the dot.com bubble showed that every idea doesn't have value just because it's on the internet, the belief in technology and the internet didn't die out.

Technology companies in the 2000s

After the dot.com bubble, the startup community learned from it, moved on, and even accelerated their speed. If we look at the American major technology companies like Facebook, Uber, Airbnb, Twitter, LinkedIn, Tesla or Dropbox, none of them existed 20 years ago – even Google was founded only 21 years ago.

The internet and other modern technologies have created huge business opportunities and the possibility to grow companies rapidly. All of the above-mentioned companies have grown into billion-dollar valuations in just a few years.

These companies have had a fundamental impact on our world. The world's largest media company, Facebook, has no content creators on their payroll. The world's largest hotel chain, Airbnb, owns no hotels. The world's largest taxi company, Uber, doesn't own a single taxi. And so forth. Technology companies have shaken many industries and captured markets from traditional companies.

The startup world today

The startup phenomenon is no longer confined to Silicon Valley or even the US, but rather it has become a fully global phenomenon with growth centres all over the world, such as Stockholm, Berlin, London, Helsinki, Singapore, Beijing, and Tokyo. Even many developing countries have startup centres and active incubators and accelerators, enabling thus a fertile ground for new kinds of entrepreneurial ideas to grow.

Not all startup hubs are similar. For example, the startup scene in Finland has been driven by students¹². Around 2009, at the same time when Aalto University was founded, a group of students formed AaltoES, the Aalto Entrepreneurship Society, which has been a driving force in the growth of Finnish startup activities¹³. The society has been changing attitudes and also

¹² <https://www.businessfinland.fi/en/do-business-with-finland/startup-in-finland/startup-environment>
(consulted 1/5/2021 at 15H30)

¹³ https://en.wikipedia.org/wiki/Finnish_startup_scene (consulted in 1/5/2021 at 15H40)

created Slush, the world's leading startup event, and Junction, the largest hackathon in Europe. The whole Nordic startup scene is different compared to others – for example, there is more and more emphasis on having a net positive impact on our world. Another example of a rapidly growing startup movement is in Asia, where many cities are active startup hubs today.

After the 1970s, when companies were manufacturing semiconductors in Silicon Valley, the startup world has changed quite a bit. Despite the bursting of the dot.com bubble and the financial crash of 2008, the startup ecosystem is alive and constantly developing. Hopefully in the future, we'll have even more startup hubs around the world as having a chance to become a startup entrepreneur should not be dependent on anyone's background.

2.2 WHAT IS A STARTUP?

A startup isn't like a regular company. Actually, we should probably start by asking if a startup is even a company in the first place.

A startup can be defined in many different ways – Eric Ries, the author of the famous “The Lean Startup” defines the Startup as “a human institution designed to deliver a new product or service under conditions of extreme uncertainty”.¹⁴

A startup isn't a normal company because its primary goal is to find a business model through trial and error. A startup is a group of trials, through which a company is born – or isn't. This makes the risk profile of a startup high. It's not worth becoming a startup entrepreneur unless someone is willing to dedicate a lot of time to it and take risks.

2.3 WHY DO WE NEED STARTUPS?

Startups are perhaps the most interesting form of company because they offer a unique opportunity for global influence and growth – an opportunity that many people could only dream about a few decades ago.

¹⁴ <https://leanstartup.co/managing-extreme-uncertainty-the-startup-way/> (consulted in 1/5/2021, at 16H)

However, startup culture creates mixed opinions. It seems like people are either ecstatic about startups or can't stand them. Startups are often a target for unfounded arguments. The hype around them is easy to perceive as wishful thinking or even lies. This has resulted in many wrong assumptions regarding startups.

Part of the issue may come from the fact that startups thrive on hope. Startup entrepreneurs create stories about how the future could look and try to make these visions come true. They have a strong belief that they can have an influence on the world and that their actions have consequences that can make the world a better place. In the startup world, a business that's still in the idea phase can potentially have a remarkable impact in the next five years – maybe even with a turnover of a billion dollars. This hope is often perceived as hype, and it's a fair point. There is a lot of unnecessary hype around startups. For those who have worked a long time in the startup scene, they're often just annoyed about the hype because they are doing what they do because they want to affect what the future looks like.

The difference between hope and wishful thinking

Startup culture is about shaping the future, not just passively accepting what's coming. This is the main difference between wishful thinking and hope: a true belief in what one is doing. The future isn't something that one waits for. It's something we all create with our actions, choices and decisions.

For example, artificial intelligence (AI) has lately begun to change the world in unforeseen ways. When the fear of AI was at its highest, many people in Europe feared that AI would “take over”, while the startup entrepreneurs in Silicon Valley had an entirely different attitude summed up as follows: “Why should we fear the AI future? We're the ones creating it and deciding how it's done.”

Failures in startups

Because hope is the most important factor in startups, this can also lead to failure. This is one of the fundamentals of startup thinking. As startups take great risks, there will also be misses. But by learning from them, startups can create the kind of value that no other kind of organization can.

That's why startup culture highlights the importance of failure as an opportunity to learn. Startups in their best form are machines for learning very quickly and trying to find solutions for problems. The pace at which startups can learn is something that is very hard to achieve in any other setting.

2.4 WHY STARTUPS MATTER?

This leads to the one single most important answer to the question "Why startups matter?". The answer is simple: startups are one of the best ways to solve problems and implement solutions rapidly on a global scale. Whether it's a huge global problem like climate change, inequality between different countries or something more casual like cheaper transportation options or better payment solutions, in many cases startups are the best organizations for solving problems.

There are many examples of how startups can shift the business landscape. For example, none of the traditional car manufacturers started a major shift towards electric cars before Tesla. None of the existing food producers really started the movement towards alternative protein sources until Beyond Meat, Impossible Foods and many others entered the scene.

Critics could point out the problems the companies above suffer from. While it's true that many of these companies and their products have issues, they still are in many ways acting like startups – learning rapidly, iterating and trying to find solutions for significant problems – which means failure is part of the process. And they are doing this faster and with better success than any other organizations at the moment – while also trying to solve important problems.

Startup entrepreneurs help to keep the society moving forward, while more traditional organizations are typically focused on maximizing existing value. Society needs both startups and traditional organizations.

2.5 CREATIVE DESTRUCTION AND DISRUPTION:

Change and development increase creative thinking, which leads to better and more efficient ways of working. On the other hand, they also lead to old ways of working dying

out. In history, creative destruction has altered the lives of people who used to make a living doing such things as driving horse carriages, developing photos and operating telephones professionally.

Innovation and change go hand in hand

It's clear that the ability to create and innovate will shake the world. A study conducted by the University of Oxford suggests that over the coming decades, 47% of today's professions could cease to exist.¹⁵

This doesn't mean that half of the working population will be unemployed in 2030, but rather that these people don't have the required skill set for any existing job at that time. Having mastered the skills needed to be a chauffeur, electrician or insurance analyst might be worthless when a car drives itself, a robot does all the electrical work and artificial intelligence is in charge of data collection and analysis.

The situation can only be solved by developing new and innovative ways of educating people and developing methods for continuous learning – while also updating social security systems to support the changing environment. Creativity destroys, but it has always been followed by progress.

Automation and robotics may have an effect on many jobs, or it might be that the effect will be radically smaller than predicted. The only thing we know for sure is that automation, AI, 3D printing, nanotechnology, VR, AR, platform technologies, biotechnology and many others will have an effect on how we work, send messages and live our everyday lives.

Seeking disruption

Many startups are looking for disruption. Disruption means to do something radically better and more cost efficiently to such a degree that the old ways of working have no chance

¹⁵ FREY, (Carl Benedikt) and OSBORNE (Michael A.): **THE FUTURE OF EMPLOYMENT: HOW SUSCEPTIBLE ARE JOBS TO COMPUTERISATION?**, the Oxford Martin Programme on Technology and Employment, September 17, 2013, P.1

of survival. Often a disruption arises from a product that is inferior to what is offered to the mass market, but services a niche audience better. In the past decade, many disrupting companies based on digitalization and removing the middleman now exist.

For example, the music business has been disrupted many times. First vinyl records were replaced by CDs. Carrying a CD player around started to feel foolish after the iPod was introduced. The most recent wave of disruption has come in the form of streaming services like Spotify, where you can listen to any music anywhere.

These examples have all disrupted their industries by simply understanding that things can be done in a smarter and more efficient way. The technology itself is not groundbreaking in these cases, but what is groundbreaking is how the technology is used. Disruption can also be achieved through technical innovation – for example, the company Beyond Meat actually developed new technology to create their food products.

Slow and steady doesn't win the race

Bigger companies and government organizations are often very slow to react to these changes. Sometimes their slowness results in the 'Goliaths' of the corporate world being defeated in record time. Digital cameras destroyed the film giant Kodak. Smartphones removed Nokia from its leading position as a mobile phone producer. Spotify destroyed the CD business and Netflix did the same for the movie rental business. These kinds of radical changes are caused by fast and agile startups, which big corporations find extremely difficult to compete with.

However, it's not impossible for big companies to survive and also drive change. Recently, Apple has mainly been successful thanks to iPhone sales but it is now seeing stagnation in the mobile phone market. In response, they are already focusing on several other products – for example, iPads and wearables – while also launching many new services. Apple's core purpose has stayed the same, but they are changing their product focus.

Another example is Nokia. Their famous slogan is "Connecting people". Previously, Nokia connected people through phones, but now it's one of the largest network infrastructure providers in the world. Big companies can drive change by shifting their culture and working methods to become more entrepreneurial and innovative. However, it's not easy.

2.6 THE STARTUP ECOSYSTEM:

A startup ecosystem is formed by people, startups in their various stages and various types of organizations in a location (physical or virtual), interacting as a system to create and scale new startup companies¹⁶. Startup ecosystems are formed often in a relatively limited area with a center of gravity like a university or a concentration of technology companies. This ecosystem draws together key actors and stakeholders that gravitate towards growth ventures, including new entrepreneurs, mentors, incubators, sources of talent such as universities and corporations, investors and supporting services like startup-savvy law and accounting agencies.

The startup ecosystem for an entrepreneur

The startup ecosystem supports all individual entrepreneurs. Some startups relocate to new locations simply because the ecosystem there is better. It's the responsibility of the entrepreneur to be proactive and utilize the benefits of the ecosystem, if the entrepreneur is proactive he will definitely get support.

The startup ecosystem can, of course, support the entrepreneur with capital from investors and other entities providing funding if he is able to create something that is attractive for them. But we would argue that even more valuable is knowledge and experience the ecosystem entities can provide for an entrepreneur. This is especially important for first time entrepreneurs.

The ecosystem also supports failed entrepreneurs. Even though the first try may be a catastrophic failure, it doesn't mean that the same mistakes will be made again – the next try may succeed, or maybe the one after that. A failed entrepreneur is an experienced entrepreneur. Many startups also prefer hiring entrepreneurs (even if they failed) because in the early stages of a startup all employees should be intrapreneurs.

¹⁶ https://en.wikipedia.org/wiki/Startup_ecosystem (consulted in 30/04/2021 at 13h)

When more is better

There are many sayings in the startup world and their truthfulness can be questioned. One of these sayings is “nine out of ten startups fail.” While the nine-out-of-ten estimate of how many startups fail might be a little pessimistic, statistically it’s more likely your startup will fail than succeed. But in the startup world, a single startup isn’t the most important unit. The ecosystem is.

The ecosystem needs a great number of companies to have a chance to produce success. Startups are such high risk businesses that even the smartest and most skillful team might fail. But if there are for example 20 startups with great teams and ideas supporting each other (and even some other ecosystem entities supporting them), it’s already quite likely that some of the startups will grow to be international successes.

This is why the startup ecosystem should be looked at as a whole and not through individual startups and their success or failure.

What makes an ecosystem thrive?

In order to thrive, an ecosystem needs a number of things to happen at the same time. There needs to be ideas and entrepreneurially minded people to pursue them, which often requires some kind of academic backdrop. The ecosystem also needs access to talent who want to work in growth ventures. Access to capital is also critical. Ecosystems should also somehow be close to the type of customer the startup serves.

Within an ecosystem, key actors are all close enough to make fast progress possible. Entrepreneurs meet to exchange ideas and interact with universities and other talent pools to attract employees. Support functions like legal firms and accountants learn by interacting with entrepreneurs and startups. Investors learn to understand which types of entrepreneurs, teams and startups are most likely to succeed and, by enabling radical growth, also increase the number of large-scale exits. This in turn pumps new capital and knowledge into the ecosystem from startup entrepreneurs and employees after exit, who are likely to feed both money and knowledge back into the ecosystem, creating a positive feedback loop.

2.7 ATTRIBUTES OF A SUCCESSFUL STARTUP:

A good idea does not necessarily result in a good product. A good product does not necessarily result in a successful company.

To succeed, a company needs more than a good idea. Its success is largely due to how the idea is executed and whether it addresses a real market need. A talented staff and management team can ensure that the right decisions are made along the way. Capital is also essential to make everything come together and push the venture ahead. In order for a business to succeed in the long term, it should be able to scale up. One way to scale is to design not one but a pipeline of products. Below, some of the essential criteria that lead to a successful business are listed.

Innovative products, innovative services

Startups should be based on innovative services or products that bring unique value to the customer. Academic discoveries, however, are usually embryonic concepts and not fully developed products, often making it difficult to determine the real value of such discoveries in the marketplace right away. Nonetheless, startups should take steps to secure intellectual property rights associated with core technology associated with services or products as soon as possible, to help create and preserve value in the company.

Intellectual property

There is no requirement to have intellectual property rights to start a company, but protecting intellectual property that is key to the business is an essential element of the commercialization process. Holding intellectual property rights in technology serves as a barrier to entry against competing companies that might want to replicate a startup's product. For this reason, the majority of investors usually prefer that the core technology is protected. For example, in the case of a patent, technology that is protected can help give the startup an edge over competitors because once a patent issues, the startup can prevent others from making, using, or selling a product that is claimed in their issued patent.

Some academic companies are founded on intellectual material that lies within the public domain and for which no intellectual property protection is available. If this is the case, there may not be a need to secure a license from the academic employer. Companies without intellectual property assets ordinarily do not attract large amounts of outside investment capital, however.

Modest-investment companies do not need intellectual property in order to get off the ground. Most often, the importance of intellectual property becomes apparent later on, when the company sells the product or service and knock-off competitors arise. Strong intellectual property protection helps a young company to put its stake in the ground and gives the company a way to defend their market position against those who may try and copy their products.

The management team will have to decide what sort of intellectual property protection is needed based on the market for their product and relative cost to secure the rights compared with the ability to recoup those costs. Some intellectual property rights are expensive to secure, like patents, and others are relatively inexpensive, like copyrights. Trademarks are another way a company can begin to create value when customers associate the trademark or ‘brand’ with their products or services. Where a company may have know-how or information that would be better kept behind closed doors, maintaining trade secrets is another way to build value for the company in the form of intellectual property. Many times, there are opportunities to use different protection strategies at the same time. For example, a product brand name might be protected by a registered trademark, and the product itself may also be protected by securing patent rights in the underlying technology.

Product pipeline

Discoveries that could lead to multiple products or product lines, or “platform technologies,” are what many investors look for when funding a startup. Often, investors ask, “Is it a product or a company?” - implying that single-product ideas (also referred as “one-pony shows”) are not suitable for the formation of an equity-investment company. One can certainly start a new business around a single product, but it is unlikely that the company will be attractive to institutional investors unless the product represents a very large market

opportunity. For these cases, the inventor might want to consider licensing the product for further development to one or more established companies, rather than creating a startup.

Market need

Deciding on the company's first product is often very difficult—especially for platform technologies, which may have many different applications. An important criterion is that it serves real-world needs. Individuals starting companies must provide compelling answers to questions such as: What market does this product serve? What products are already in this market? How is this product different from those? Who are the competitors, and how are their products better or weaker than yours?

Specialized personnel

Perhaps the most common reason for a startup to fail is lack of adequate management and governance structure. Early stage technologies will invariably encounter many hurdles before they reach commercialization. Being able to manage the hurdles and raise capital while building a motivated team requires experience, a sophisticated network and unique business talents.

Capital

A startup's demand for cash depends on the costs to take the product to market. The faculty member creating a modest-investment company in his or her garage, funded by personal savings, does not need to seek investment capital from business "angels" (wealthy private investors) and venture capitalists. In contrast, the researcher who plans to start a new pharmaceutical company will spend countless hours trying to secure large amounts of investment capital. Once the company is started and the initial capital is secured, founders will immediately start planning when and how to secure the next "round" of financing. Such firms are voracious in their appetite for cash, so raising money is a never-ending process, they are at the mercy of the investment community. The decision on how much money to raise is largely dependent on the timeline to launch and the nature of the product. While the desire to

preserve ownership and control of the venture through modest-investment is understandable, many commercial opportunities require extensive partnering, both in investment and strategy, if they are to be successful.

SECTION 3: INCUBATORS

3.1 THE VALUE PROPOSITION OF INCUBATORS

Business incubators offer a combination of affordable workspace, strong community partnerships and critical business advisory services that support entrepreneurs and their businesses. Firms typically apply to join and participate in the incubator for a predetermined amount of time before moving into the community. There is room within this definition for different incubator models with varying amounts of space dedicated to different functions, services and types of business assistance. Research indicates that business incubators have a positive effect on job growth in participating firms, and that firms in incubators receive more business services than firms not associated with an incubator.¹⁷

¹⁷ STOKAN, (E.), THOMPSON, (L.), & MAHU, (R. J). : **Testing the Differential Effect of Business Incubators on Firm Growth**. *Economic Development Quarterly*, 29(4), 2015, P.317–327.

3.2 TYPES OF BUSINESS INCUBATORS

	Main philosophy: dealing with	Main Objective	Secondary	Sectors involved
Mixed Incubators	Business gap	Create startups	Employment creation	All sectors
Economic Development Incubators	Regional or Local Disparity gap	Regional Development	Business creation	All sectors
Technology Incubators	Entrepreneurial gap	Create Entrepreneurship	Stimulate innovation, technology startups and graduates	Focus on technology recently targeted, e.g., IT, speech, biotechnology
Social Incubators	Social gap	Integration of social categories	Employment creation	Non profit sector
Basic Research Incubators	Discovery gap	Blue sky research	Spin Offs	High tech

Table 1; source¹⁸

Business incubators are frequently confused with coworking spaces and business accelerators — all three of which have grown in prominence in the last decade. Coworking spaces provide office space and basic amenities (e.g., printers, shared kitchens, etc.) at a low cost, with little to no programming. Business accelerators are aimed at high-growth startups and generally provide more structure and programming for a fixed term, usually ending with a pitch competition or demo day with potential investors.¹⁹

¹⁸ AERNOUDT, (R.): **Incubators: Tool for Entrepreneurship?**. Small Business Economics, 23, 2004, P.127-135

¹⁹ UNC Entrepreneurship Center: Trends in Entrepreneurship. Frank H. Kenan Institute of Private Enterprise, 2020.

3.3 HOW INCUBATORS SUPPORT YOUNG FIRMS

Business incubators support young businesses through three primary mechanisms — buffering, bridging, and curating. Through buffering, incubators protect young firms from competition and external threats. For example, shared basic business services help offset costs. Bridging connects firms to outside resources, knowledge and social capital. This often includes networking with mentors, investors with industry expertise, and early buyers and suppliers.²⁰ When firms need help sifting through many available resources, curating connects them to the most appropriate ones.

Business incubators' success can vary widely from community to community. As one study notes, “simply mimicking successful incubators in one region may not lead to success for incubators in other regions.”²¹ First, the ability of an incubator to support businesses can be dependent on the type of community — rural versus urban — and the needs of the businesses within that community. Research shows that incubators are most likely to increase firm survival in highly specialized urban areas or diversified rural areas.²² In urban areas with strong industry specialization, firms benefit from knowledge spillovers, resource sharing, more affordable office space and better resource matching. Since firms in these areas can suffer from intense local competition and congestion, incubators can help protect young firms and provide valuable business connections. In rural economies, the opposite tends to be true. Incubated firms are more likely to survive than non-incubated firms in rural areas with little industry specialization. The buffering and bridging support mechanisms are most relevant in this context.

²⁰ AMEZCUA, (A. S.), GRIMES, (M. G.), BRADLEY, (S. W.), & WIKLUND, (J.): **Organizational sponsorship and founding environments: a contingency view on the survival of business-incubated firms**, *Academy of Management Journal*, 1994–2007, 56(6), 2013..

²¹ AMEZCUA, (A.), RATINHO, (T.), PLUMMER, (L. A.), & JAYAMOHAN, (P.): **Organizational sponsorship and the economics of place: How regional urbanization and localization shape incubator outcomes**. *Journal of Business Venturing*, 105967, 2019.

²² Ibid

CONCLUSION CHAPTER I:

The purpose of this first chapter was to acquaint the reader with some important concepts that are necessary to grasp before moving on for the rest of the study. We've highlighted three major concepts in the business world which are Entrepreneurship/Entrepreneurs, Startups and Incubators.

We have seen that the concept of Entrepreneurship is rather subtle and complex, we have covered some history and evolution of the conception of Entrepreneurship, we have tried to define it as well as to define who is the Entrepreneur, a thing which has turned out to be not as evident as one may think. We have covered some of the characteristics of the Entrepreneur, the difference between it and some other close concepts as Managers and Intrapreneurs, the different types of entrepreneurship and its important role in the economy as a whole.

Next, we moved on to the second important concept which is Startups; we've seen its history, characteristics and attributes of a successful Startup, some other closely related concepts such as the Ecosystem and Innovations.

Finally, we talked about Incubators, what they are, their value proposition, their Types and how they actually help the young firms to develop.

This first chapter has helped us shed some light, on one hand, on values and services usually offered by Incubators which are much more than mere managerial services, on another hand, helped us see that Projects that went through Incubation do actually have better business results than projects that didn't.

CHAPTER II

A.N.P.T* - SIDI ABDELLAH INCUBATOR

*Agence Nationale de Promotions des Parcs Technologiques.

CHAPTER II: A.N.P.T - SIDI ABDELLAH INCUBATOR

In this second chapter of the Thesis, we are going to dive deeper on our main problematic and secondary questions.

And for this, we judged it reasonable to dedicate this second chapter for the presentation of the principal subject of our study which is the **A.N.P.T - Sidi Abdellah Incubator**. Hence, we'll first begin to present the A.N.P.T (Agence National de Promotion des parcs Technologiques), then move to the Sidi Abdellah cyber park, then finally talk specifically about the Incubator inside the cyber park.

At the end of this chapter, we should have finished undertaking the first of our secondary questions **Q1**: “What major services does the A.N.P.T and the cyber park Sidi Abdellah offer?”. Answering this question will also partially cover some aspects of the second question **Q2**: “What are the realizations and the achievements of the A.N.P.T since its creation?”, knowing that the services provided by this organism are in themselves an important value added in the algerian ecosystem.

SECTION 1: PRESENTATION OF THE A.N.P.T

1.1 PRESENTATION OF THE A.N.P.T (AGENCE NATIONAL DES PROMOTIONS DES PARCS TECHNOLOGIQUES):

Technology parks in Algeria are considered a new dynamic, hired by the state for the take-off of information communication technologies (TIC). The A.N.P.T is the spearhead of this dynamic.

Creation of A.N.P.T:

The National Agency for the Promotion and Development of Technology Parks A.N.P.T is an Industrial and Commercial Public Enterprise (Entreprise Publique à caractère Industriel et Commercial - EPIC), created by Executive Decree n ° 04-91 of March 24, 2004 under the supervision of the Ministry of the Post and information and communication (M.P.T.I.C).

It was set up in 2007 and its head office is located at the cyber park level of Sidi-Abdallah.

Mission of the A.N.P.T:

The ANPT is the State instrument for the design and implementation of a national policy for the development of technological parks. As a result, the A.N.P.T is charged of:

- Develop and propose the elements of a national promotion strategy and development of technological parks;
- To design and set up technological parks intended to strengthen national capacities to ensure the development of information technologies and communication and contribute to economic and social development;
- To build or have the infrastructure of technological parks built;
- To put in synergy the national institutions of higher training and research, industrial development as well as the user institutions of information and communication technologies for development programs of technological parks;
- To ensure, in conjunction with the institutions concerned, the implementation, monitoring and evaluation of the commitments arising from the State's obligations in

terms of regional and international agreements within the framework of the activities of technological parks.

Objectives of the A.N.P.T:

This agency aims to:

- Stimulate a strong and vibrant ICT cluster;
- Serve as a physical and virtual HUB for ICT activities in Algeria;
- Provide quality technical and business support for companies in Algeria;
- Accelerate the rate of training and expansion of start-ups and SMEs;
- Diversify the ICT value chain;
- Stimulate an ICT export sector.
- Increase private sector investment.
- Stop the brain drain and promote business creation.
- Diversify sources of national income.
- Improve the competitiveness of Algeria by improving productivity through technological progress.

1.2 ROLE OF TECHNOLOGY PARKS PROMOTERS:

The promoters of technology parks have an important role which could be summed up in the following points:

a) Critical mass of ICT players: this is likely to increase the individual competitiveness of ICT companies and ensure the attractiveness, sustainability and growth of technology parks.

b) Collaboration between actors: this is decisive for increasing the capacity and individual competitiveness of companies.

c) Innovation: this is about favoring collaborative innovation by creating synergies between interactions and the innovation capacities of companies.

d) The massive development of entrepreneurship: which is an economic and social necessity with all its implications in terms of wealth creation, territorial revitalization and job creation.

1.3 THE INNOVATION SOUGHT BY A.N.P.T:

The ANPT seeks to develop innovative products, the following figure shows the innovation sought by this agency:

<p>Product innovation: Corresponds to the introduction of a new good or service. Added to this are significant improvements in technical specifications of ideas, components and materials, integrated software, see other functional or visual characteristics.</p>		<p>Process innovation: Which corresponds to the implementation of the new or significantly improved production or distribution method introduced into the business model of the startup. This notion implies significant changes in techniques, hardware or software.</p>
	<p>Innovation sought by A.N.P.T</p>	
<p>The innovation of marketing: Which corresponds to the implementation of a marketing method involving significant changes in the design or packaging from a marketing point of view, placement, promotion and pricing of a product or service to produce a good startup business plan.</p>		<p>Organizational innovation: Which corresponds to the implementation of an organizational method in practices with an administrative approach, the organization of the workplace as well as the external relations of the startup.</p>

Figure 1; source: internal documentation.

1.4 THE ORGANIZATION OF A.N.P.T:

The technological parks for which the ANPT is in charge are: Sidi Abdellah -Alger, Sidi Amar- Annaba, Bir El Djir- Oran, Ouargla, Constantine, Ghardaia, Boughezoul.

SECTION 2: PRESENTATION OF THE CYBER PARK SIDI

ABDELLAH

Algeria has bet on information and communication technologies (ICT) as the new engine of growth. The construction of technological parks in Algeria marks this new dynamic initiated by the State to promote the development of (ICT).

2.1 DESCRIPTION OF THE CYBER PARK:

The Sidi Abdellah cyber park is the first technological park in Algeria and constitutes the hub of ICT development, occupies a space of 100 hectares which is located 25 km from Algiers, it is one of the 20% largest technological parks in the world.

It represents the heart of the ICT ecosystem in Algeria, aims to bring together commercial activities and ICT-based research and development where there are 3 districts:

- Technopolitain park
- Innovation district
- Support center

Different establishments and companies have the capacity to be accommodated by the cyber parks: public and private companies, education and training establishments, a business incubator, R&D centers as well as service and business support companies.

This cyber park aims to:

- Develop synergy with the entrepreneurship environment by welcoming multiple skills and ICT professionals.
- The establishment of state-of-the-art infrastructures and specific ICT incentives in order to create a quality environment conducive to the development of the ICT field.
- Participation in economic activity and the promotion of innovation thanks to its smart buildings.
- Bringing together the main industry players and research centers in a delimited area with adequate incentive packages to make it an ICT powerhouse in Algeria.

Development of the cyber park:

2006 - 2008: foundation: launch of the project, creation of the A.N.P.T

2008 - 2010: priming: commun spaces, Incubators, bureaus.

2010 - 2012: development: research centers, integrated projects.

2012 + : Off shooting and centers, research projects and realizations.

2.2 THE VALUE PROPOSITION:

The cyber park offers a unique value proposition on several levels:

Ease of doing business	<ul style="list-style-type: none"> ● Tax advantages; ● Employment area.
Physical infrastructure of quality	<ul style="list-style-type: none"> ● Quality telecom infrastructure; ● Intelligent buildings of high stranding + ● land bases.
An enjoyable work environment	<ul style="list-style-type: none"> ● Services and amenities; ● Pleasant environment.

Table 2; Source: internal documentation.

The work Environment:

The cyber park offers a particularly studied environment that is dedicated to the park's tenants, and put at their disposal various services and amenities in order to offer a high quality of life:

- Single administrative window
- Services related to the operation of the cyber park
- Restaurant services

- Banking services
- Transportation services
- Post office
- Shopping / recreation centers

Quality physical infrastructure:

These are the infrastructures available in the cyber park:

→ The multi tenant:

It is an intelligent building built in February 2009 that provides ICT companies with a real estate solution to increase their performance, thanks to high-standard, modular and ready-to-use offices. Its surface is 20,000 m² divided into two buildings:

- Business Center: houses the administration, office space from 22 to 70 m², logistics and all services used to operate the multi-tenant.
- The business hotel: it offers useful services to the park's residents and is fitted out with modular office spaces from 150 to 400 m².

In these last two buildings, companies find a quality professional life based on synergy, exchanges, collaboration, and especially creativity and innovation, the provision of high standing spaces at good rental rates, a quality telecom infrastructure (FTTH, VSAT, WIMAX, WIFI, EVDO, ADSL with high connection speeds), multiple infrastructures that facilitate the meeting with professionals and experts.

→ The incubator:

It is an intelligent building of 9800 m², of a high-tech architecture, its objective is to accompany the carriers of projects of creation of innovative companies, it evaluates the relevance of the projects by the means of a very experienced team, it specifies the technical and financial means necessary for the new entrepreneurs to help them to increase their chances of success.

→ **CERTIC: the Center for ICT Studies and Research: (le centre d'études et de recherche des TIC)**

Is a focal point of research laboratories hosting key ICT projects, it focuses all studies and research in the field of ICT. It meets the needs of the sector's organizations in terms of R&D.

→ **Two business towers:**

They are equipped with intelligent office spaces, have a capacity to accommodate a very large number of people, in addition to an auditorium to ensure a quality development of events, seminars and conferences.

→ **Land bases :**

It is the allocation of land to innovative investment projects from a land of 70 hectares. For the innovative project to benefit from land, it must be endowed by criteria set by the ANPT:

- Solidity of the company;
- Compliance with the orientation of the cyber park;
- Degree of innovation;
- Job creation potential ;
- Export potential;
- Impact on the ICT economy.

Ease of Doing Business:

In addition to the fact that the cyber park is located within an ICT employment area close to major engineering training institutions, it offers investors tax incentives that range from 5 to 10 years depending on the project case:

	description	conditions
Package 1	- Tax exemption for 5 years - Training subsidies	- ICT companies investing in a new activity or an extension;

		- or relocation of an existing activity with a new investment.
Package 2	- Tax exemption for 10 years - Training subsidies	- If the previous case, but in an activity with high added value (R&D software development, engineering, etc.)
Package 3	- Tax exemption for 10 years	- Ad hoc analysis for players proposing office buildings in line with the spirit of the park (intelligent building, dedicated to hosting or supporting ICT activities)

Table 3; Source: internal documentation.

SECTION 3: PRESENTATION OF THE SIDI ABDELLAH INCUBATOR.

3.1 DESCRIPTION OF THE INCUBATOR :

The " Technobridge " incubator is a support structure for the creation of innovative companies which was set up in the framework of the call for projects and thus to be a device of aid to the innovation in the field of technology of information and communication ICT, its mission is to host and accompany entrepreneurs during their process during their process so that they can realize their innovative ideas and arrive at the their innovative ideas and launch their companies.

The role and the offer of the incubator of Sidi Abdellah :

The incubator of Sidi Abdellah has as main role to:

- Promote the creation of innovative companies in ICT, by enhancing the research results of project holders in partnership with universities, colleges and leaders High Tech;
- To help the carriers of innovative projects, in the field of the ICT and their uses, to transform their projects into viable companies;
- Promote the entrepreneurial spirit of start-ups in the ICT market segment and enable their development.

Usage	Number of halls	Total area (m ²)
startup	7	1154
Innovation center	3	370
formation	3	226
total	13	1750

Table 4; source: internal documentation.

The incubator offers 7 rooms for start-ups, with 7 cubicles each, for a total surface area of 1154 m², 3 rooms for the innovation center and 3 training rooms for project leaders with a total surface area of 226 m².

The main functions of the incubator of Sidi Abdellah :

The incubator's main function is to host and accompany project holders and start-ups. This is through the proposal of a training cycle for entrepreneurship, as well as the provision of the center for innovation, entrepreneurship and education for HTL companies, as it offers a space for training and conferences in ICT and development workshops.

Field of intervention of the incubator of SIDI ABDELLAH :

The incubator intervenes in the field of accompaniment and this by :

→ Incubation for project leaders:

In the case of project carriers, the incubator is responsible for raising awareness, accompanying, financing, training and promoting innovative business creation projects;

→ Hosting and development of start-ups:

In the case of start-ups, the incubator intervenes :

- In the direction of ICT start-ups of less than 5 years, for their development and their training in business strategy;
- The incubator constitutes a platform of services for start-ups in the launching phase, i.e., companies in creation, entrepreneurs seeking to create their companies and small companies just established.

3.2 OBJECTIVES OF THE INCUBATOR:

The incubator's mission is to detect business creation projects within universities, colleges and universities, high schools and self-taught people. Then the accommodation and the logistic support of the carriers of projects of companies. In order to train and accompany these creators in the elaboration of their business plans of the project of creation of companies, and to put them in and to put them in touch with all the partners for the fund raising. So, the incubator fulfills its mission through the following components:

Reception and accommodation :

- Welcoming project leaders and providing them with the resources (premises, computer equipment, documentation, telecommunications, secretariat, etc.) they need.
- Above all, it means "living together", working on their project with an experienced team in suitable premises, during a more or less long incubation period (24 to 30 months).
- It also means "exchanging" with other innovative project leaders.

Coaching:

- The position of the innovation in relation to technologies and its competitive advantage;
- The solidity of the intellectual protection ;
- Demonstration of technical and economic feasibility;
- Identification of market sectors and strategy;
- The business plan is structured until it can be presented to investors.
- The incubator and its partners also look for funding to start the company.

A steering team:

To help projects become companies:

- The incubator's team is multidisciplinary, consisting of coaches, professors and engineers with dual skills to support project holders.
- The support is provided by a management team that offers daily monitoring of projects, combined with a range of services: adapted training, consulting, coaching, market research, and financing assistance.

Training:

In order to promote the spirit of entrepreneurship and grasp management techniques, the incubator offers both internal and external training:

- Internal trainings :

They are organized by the incubator and given by external speakers, the internal trainings make it possible to approach the following topics: project management, accounting, marketing, labor law, human resources management...

- External training :

- They concern participation in seminars and conferences.
- As well as a training cycle on entrepreneurship which focuses on : Corporate strategy, business planning, accounting, financial management, intellectual property law, case studies;
- A short cycle in partnership with universities;
- Members of the Algerian diaspora who participate in its training courses on site or at a distance.

Funding:

The State provides support to the incubator in the form of subsidies to finance internal and external expenses directly related to its missions and objectives through FAUDTIC.

The incubator, thanks to its partners, helps in the preparation of project presentation files and accompanies the project leaders until the search for financing (fund raising).

Incubator Partners:

The incubator has links with various partners who help it accomplish its mission:

→ Research and teaching partners:

This is the set of universities, institutes and high schools "ESI" that give advice and expertise to project holders, they participate in business plan competitions and in training sessions for new entrepreneurs.

→ Financial partners:

Are the banks, ANSEJ, business angels that finance the projects of creation of enterprises, either in the form of a refundable financial aid or in the form of shareholding by the purchase of shares of these small enterprises.

→ Innovation Partners:

This is the set of high-tech companies that offer training courses, promote and encourage research and help small businesses overcome their obstacles and reduce the fear of taking the risk of innovating.

→ Partners in expertise:

Are the professionals, advisors, lawyers, accountants, managers who train entrepreneurs in everything related to the organization and management of their new businesses.

→ Other partners :

These are the various associations (AITA, AME ...) that can be one of the members of incubator and participate in the selection of business plans, as well as Algerians settled abroad which are based on the help of companies have the vocation of exporting their products and services outside the country, which also give the importance of training in the system of electronic education.

3.3 THE INCUBATION PROCESS:

The incubation process in this incubator begins with the call for proposals, which precedes the other incubation phases:

Call for projects and access to the coworking space:

The call for projects lasts throughout the year allowing any project leader in the development potential to access the pre-incubation phase to benefit from entrepreneurial support. This strategy has been adopted to allow, even project leaders with ideas that are not necessarily innovative, but who have technical skills, to integrate the incubator and to rub

shoulders with other project leaders with a view to for possible partnerships. This call is made on the basis of "project sheets" sent by the project leaders.

The project sheet :

The project leader, candidate for incubation, responds to the call for projects by filling out and sending to the ANPT the "Project Sheet". It is a mini business plan, which leads the candidate to present his project and to ask himself fundamental questions for its development (intellectual property, potential market, technological innovation of the product or service, expectations of the incubator, etc.). This project sheet follows the project leader throughout the selection process.

The purpose of this sheet is to give a chance to those who have the potential, and to help them to identify and overcome the obstacles that could block them in their entrepreneurial steps.

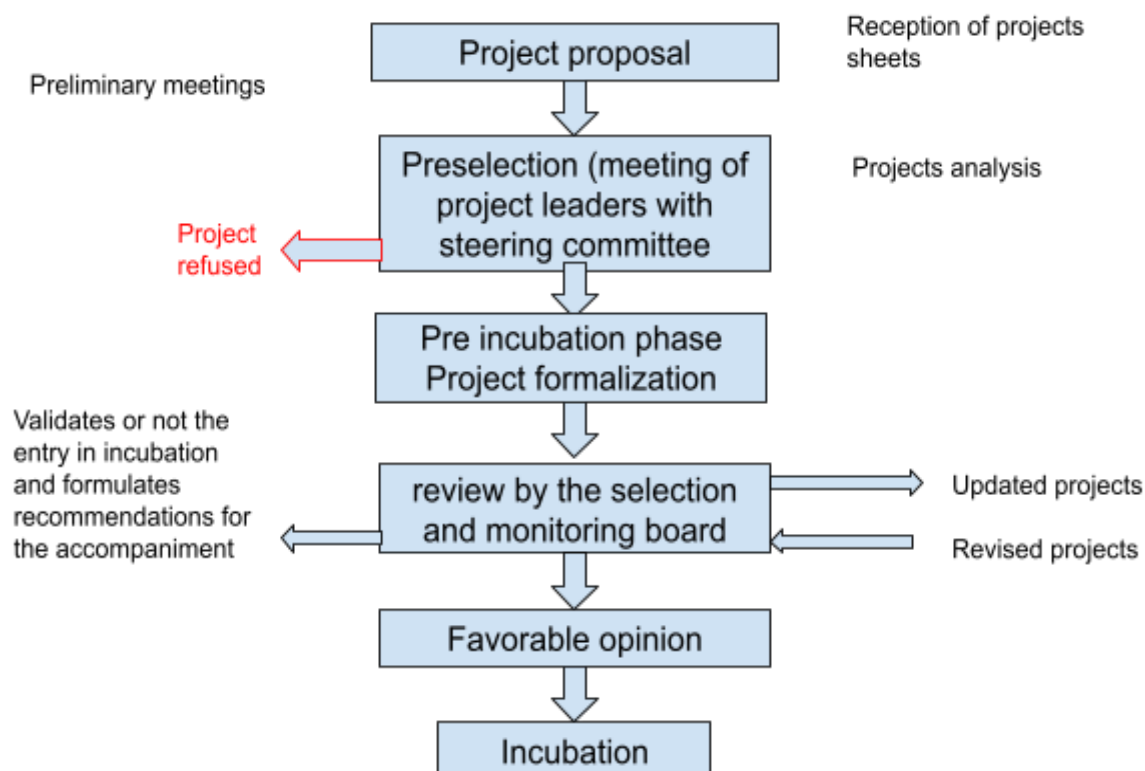


Figure 2; source: Internal Documentation.

The Steering Committee:

The Steering Committee is composed of the incubator's business managers (the coaches).

This stage consists in pre-selecting the projects that are candidates to the call for projects to enter the pre-incubation phase.

The projects that are qualified take into consideration the following pre-selection criteria:

- The innovative character and originality of the idea;
- The potential market;
- The motivation and skills of the project leader;
- The quality of the documents submitted.
- Technical, scientific, legal or economic experts may be called upon if necessary.

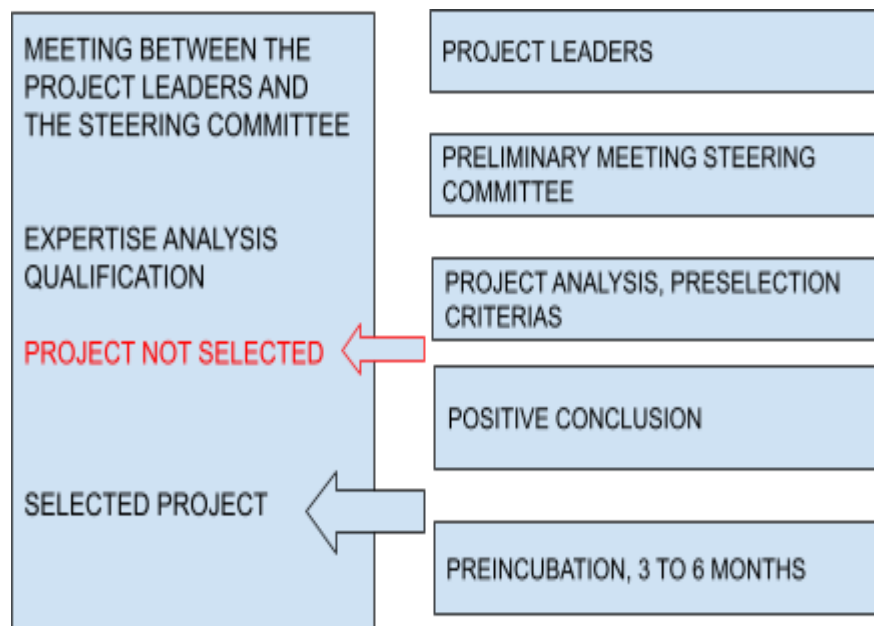


Figure 3 (preselection process) ; source: Internal Documentation.

Incubation phases:

The three phases of incubation are explained in detail as follows:

→ Coworking phase:

This is the initial phase after project preselection:

➤ a) Conditions of access:

The access is open to all project leaders, start-ups in ICT that have been selected and retained during the call for projects.

➤ b) Description of the coworking phase (pre-incubation):

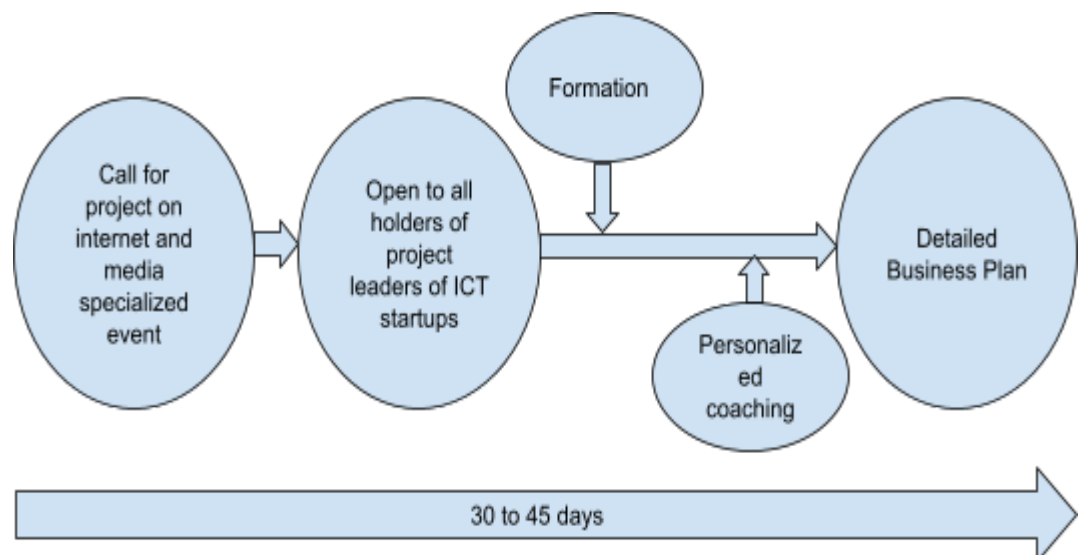


Figure 4; source: Internal Documentation.

This space is a place of exchange and mutual aid between project leaders, this phase is marked by the establishment of monitoring mechanisms provided by business managers, the organization of team building to strengthen the links between project leaders and an animation program including workshops and conferences of entrepreneurial inspiration.

During this phase, the project leaders must meet weekly with the business managers, to assess their progress and set objectives for the following meeting. for the following meeting.

- **c) Coaching:**

As for coaching, two sessions are scheduled, the first is an introductory session and the second is a one-to-one personalized coaching session.

It is the phase of initiation of the project leaders to entrepreneurship and more particularly to the business plans, each coach provides a part of his specialty (business, finance, technical...). It is also animated by a team building session whose objective is to weave and reinforce the links between the project leaders.

This section concerns one-to-one coaching sessions, which take place after 15 days of entrepreneurial initiation. This coaching aims to refine the business plans. This section also recognizes the integration of a "personal branding" session whose objective is to sensitize project leaders to the benefits of teamwork as well as to the culture of co-founding.

- **d) Workshop:**

The workshops scheduled during this first phase are designed to introduce project leaders to public speaking and to speak in public and to work as a team.

- **e) The achievements of project leaders at the end of this phase:**

At the end of this phase, the project leaders must deliver a rigorous and detailed business plan, to be presented to the steering committee after the agreement of the business manager concerned. This will provide them with a budgetary and temporary roadmap for the product prototyping.

→ **Incubation phase:**

This is the phase that follows the pre-incubation phase, when the project leader is selected to benefit from the support of the incubator.

a) Access conditions:

- Rigorous business plan and clear vision of the project with medium and long term objectives;
- Project with high added value;
- Innovation;
- Appreciation of the business manager.

b) Incubation phase:

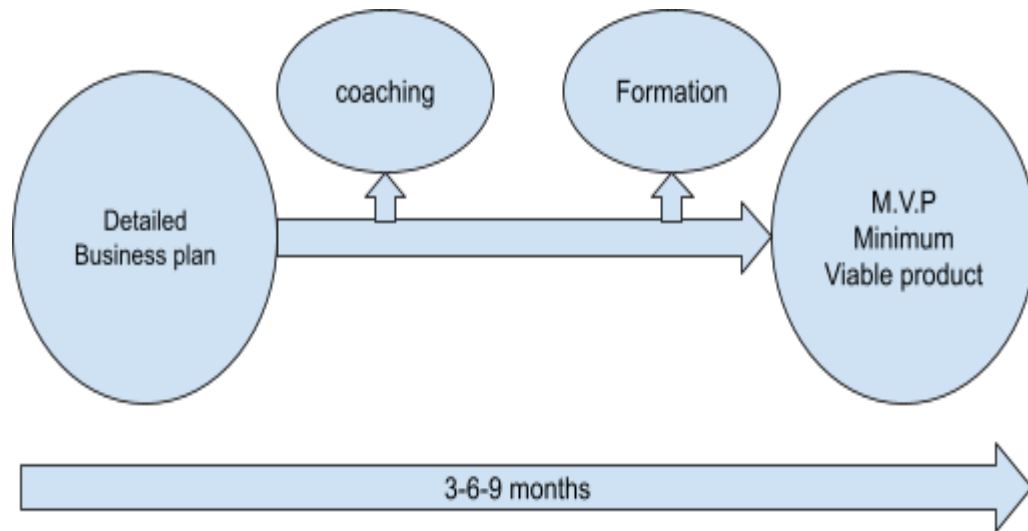


Figure 5; source: Internal documentation.

It is mainly the prototyping phase, in fact, the project leaders are called to prototype their projects with the assistance of the coaches, this phase represents the body of the process, it is characterized by the flexibility of the passages which will be repeated every months, allowing the project leader to present himself before the CSS (Conseil de Sélection et de Suivi), when their MVP (Minimum Viable Product) is ready.

The reports generated by the monitoring mechanisms make it possible to follow the evolution of the projects and provide feedback on the incubation process.

c) Important event organized for the incubates:

- Info-Day: It is an event that aims to present all the mechanisms of assistance to the creation such as ANSEJ, CNAC, as well as ONDA for intellectual property. intellectual property.

d) Achievements at the end of the incubation phase:

At the end of this phase, the incubatee must give a good presentation for his MVP and project, as well as acquire the "entrepreneurial profile" so that he/she has the ability to launch his entrepreneurial project.

→ Post Incubation phase:

After the incubation phase, this incubator directs its project leaders to the post incubation phase in order to launch their projects and make them real and to be able to follow them during the first stages of creation.

a) Access requirements:

The access conditions are summarized as follows:

- Rigorous business plan and clear vision of the project;
- Prototype;
- Good presentation of the project;
- Entrepreneurial profile;
- Project team;
- Project roadmap ;
- Project financing strategy ;
- Market positioning and penetration strategy;
- Appreciation of the business manager.

b) Description of the post incubation phase:

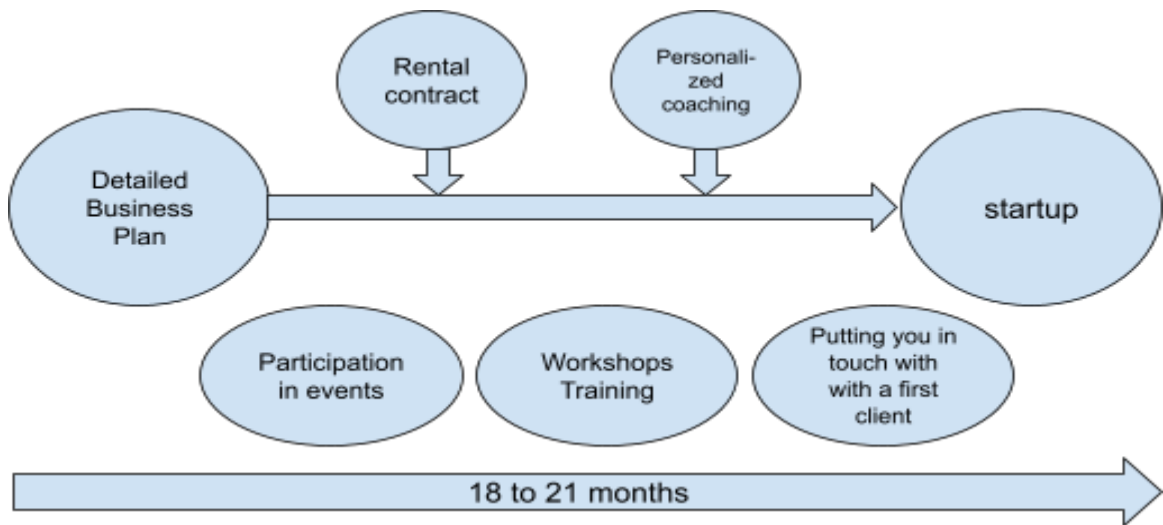


Figure 6; source: Internal Documentation.

After validation by the committee of experts, project leaders who have demonstrated satisfactory project development will be admitted to post-incubation. The main objective of this phase is the creation, the project holders will benefit from a rental contract and the same support policy (training, coaching, mentoring and network development). This said, the support and assistance will have an adjusted and personalized configuration according to well-defined needs.

In order to facilitate the main objective of this phase which is the creation, generally characterized by the lack of information and the heaviness of the administrative procedures, the first workshop will consist of a "serious game" that aims to simulate the creation of the company with the participation of all the institutions involved.

As for the incubator, its role will be to provide the necessary support to the project leader in the marketing of its products, by identifying, first, the products of these start-ups and, second, by finding potential customers in the market products of these start-ups and then, in a third step, by finding potential customers in the case if these products target companies or institutions.

CONCLUSION CHAPTER II:

The purpose of this second chapter was to touch upon the services provided by the A.N.P.T - Sidi Abdellah Incubator, we covered an important area in the description of the components of the offer provided by this organism, from the different missions and objectives of their diverse departments, to the outline of their large infrastructures adapted to meet the needs of project holders, to the steps followed in the incubation process and incubation programs.

CHAPTER III

ACHIEVEMENTS OF THE A.N.P.T

&

THE CURRENT STATE OF STARTUPS

INCUBATED IN SIDI ABDELLAH.

CHAPTER III: REALIZATIONS OF THE A.N.P.T & THE SITUATION OF INCUBATED STARTUPS

In this last chapter, first we are going to outline the achievements and realizations of the A.N.P.T since its instauration by the state, and this in order to verify the validity or falsehood of our second hypothesis **H2**: “through its achievements, the A.N.P.T has greatly helped the ecosystem develop in the last decade”.

Second, we will be dealing with our last Hypothesis **H3**: “half of the startups and projects incubated in Sidi Abdellah are still in Business” to verify to what extent this claim can be true or false.

SECTION 1: THE ALGERIAN ECOSYSTEM

In this first section, we will be talking about the contribution and the value added by the A.N.P.T on the algerian ecosystem in order to have an idea of its impact on the environment of startups as a whole.

1.1 THE STARTUP ECOSYSTEM:

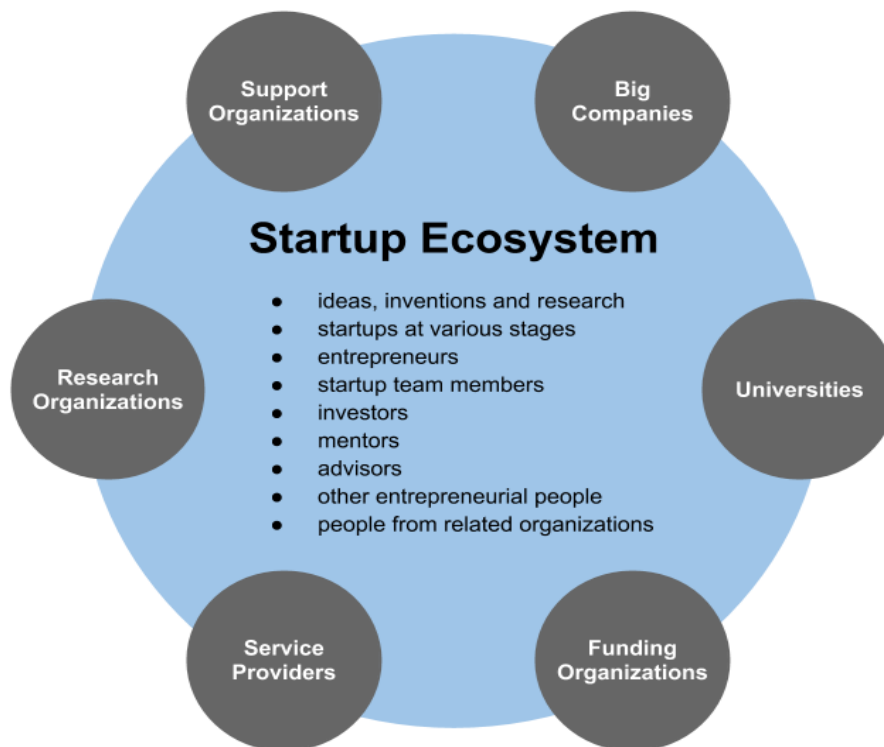


Figure 7; source²³

A startup ecosystem is formed by people, startups in their various stages and various types of organizations in a location (physical and/or virtual), interacting as a system to create new startup companies.

These organizations can be further divided into categories: universities, funding organizations, support organizations (like incubators, accelerators, co-working spaces etc.), research organizations, service provider organizations (like legal, financial services etc.) and

²³https://en.wikipedia.org/wiki/Startup_ecosystem#:~:text=A%20startup%20ecosystem%20is%20formed.and%20scale%20new%20startup%20companies.

large corporations. Different organizations typically focus on specific parts of the ecosystem function and/or startups at their specific development stage(s).

1.2 DESCRIBING AND LISTING SOME ACTORS OF THE ALGERIAN ECOSYSTEM:

We can not develop the economy in a country without providing an entrepreneurial environment conducive to the emergence and development of startups.

The Algerian government has made available to young entrepreneurs several initiatives and various support programs in order to achieve the realization of their innovative ideas (including incubators, cyber technology parks, funding assistance, .. etc). In this section we will bring some examples of the different actors that make up the ecosystem of startups in Algeria.

→ Legal framework:

The "Startup" Label:²⁴

The startup label is an institutional document that will serve as a "passport" to access all the facilities (fiscal, parafiscal and others) that the state makes available to startups, a person can benefit from this label only if he has already created his company and he meets a number of criteria:

- Age: the company should have existed for more than 8 years
- Innovation: the Business Model of the company should be Innovative.
- Scalability: the company should have a high scalability potential.
- Size: the company should dispose of less than 250 employees.
- Social Capital: At least 50% of the shares must be held by individuals, approved investment funds or other companies with the "Start-up" label.
- Turnover: the annual turnover must not exceed the amount set by the national committee.

²⁴ <https://startup.dz/pour-les-startups/> (consulted 15/05/2021 at 15H20)

→ **The structures of accompaniment, incubation, acceleration and accommodation:**

With the evolution of the Algerian economic environment, a dozen of public and private support structures are set up at the national level, in order to promote the creation and development of startups and innovative projects.

We are going to present you the different some support structures of the Algerian ecosystem:

➤ **The A.N.P.T (Agence National de Promotion des Parcs Technologiques).**

➤ **ALGERIA DISRUPT:²⁵**

The Algeria Disrupt program is a legal and regulatory framework that aims to promote startups and accelerate their growth, the program also introduces a new public investment fund dedicated to startups, as well as a startup accelerator "A-venture".

➤ **Algeria Venture:²⁶**

A-venture offers coaching and training programs for startups, organizes calls for applications to select the most economically viable projects, and supports startups throughout the acceleration period.

Financed and implemented by Sonatrach, this first accelerator will have the advantage of being located in a strategic area and will eventually consolidate the ecosystem of startups in Greater Algiers, the progress of the project is at 90% and it will be received early 2021.

²⁵ <https://startup.dz/pour-les-startups/> (consulted 15/05/2021 at 15H30)

²⁶ <https://startup.dz/algeria-venture/> (consulted 15/05/2021 at 13H 42)

➤ **ANVREDET:**

(Agence Nationale de Valorisation des Résultats de la Recherche et du Développement Technologique - ANVREDET), It was created on May 3, 1998 by Executive Decree No. 98-137 and placed under the supervision of the Ministry of Higher Education and Scientific Research, it is a public institution of an industrial and commercial nature (EPIC) with autonomy it is constituted as an adequate link between the socio-economic world and that of scientific research. Thus, it must mobilize knowledge in favor of economic growth and national development.²⁷

First, ANAVREDET's main mission is to promote the results of scientific research and technological development in order to create innovative startups. Secondly, it allows the project owner to protect his innovation through: the drafting of the descriptive memorandum of the invention, the payment of the costs of filing and applying for a patent as well as all the procedures with the INAPI. Finally, through innovation, the agency aims to boost the country's economic growth.

It has an incubator that offers the following services:

- Putting project leaders in touch with different organizations in order to financially support their project or acquire their innovation;
- A free domiciliation during the two years of the creation of the startup;
- To set up training programs according to the needs of the project leaders;
- Regular coaching and advice sessions for the framing of innovative ideas;
- Helping entrepreneurs formulate their business plan.

➤ **Private Incubator Ooredoo:**

The mobile operator Ooredoo has created its own startup incubator. Ooredoo thus offers young start-ups all the favorable conditions to reach economic viability through its incubator and I'InnovLab (Ooredoo laboratory for innovation) equipped to international standards with the latest technologies (cards, electronics, sensors, 3D printer).

²⁷ <https://www.anvredet.org.dz/qui-sommes-nous/> (consulted in 15/05/2021 at 16H30)

The Ooredoo incubator provides free accommodation to start-ups until they reach economic viability. Ooredoo currently has two incubators in Algiers and Annaba that are already operational, to which will be added an incubator in Oran and another in Constantine under development.

The start-ups benefit from follow-ups and coaching, a monthly business follow-up, Business Review, training in HR, finance, entrepreneurship, marketing, legal and other targeted training. Ooredoo, a company resolutely focused on innovation, has placed the encouragement of the spirit of initiative and entrepreneurship of young Algerians at the heart of its development strategy.

➤ **ENP incubator by Djezzy :**

To strengthen the offer of incubation in Algeria, djezzy launched its ENP incubator within the national school of polytechnic, this project which is part of the company's policy of support to young promoters is the result of intense efforts to achieve the realization of this space by increasing its reception capacities and by putting in place the conditions of blooming of young university skills.

Furnishing, equipment in powerful data-processing material, necessary Internet connectivity, meeting room which can accommodate up to 10 people, a TV screen, video projector as well as the conveniences of air-conditioning and heating, the incubator thus presents a favorable framework for the promotion of the creativity, the innovation and an exchange of the know-how.

The incubator is open to all students from all universities and is not limited to the Ecole Polytechnique which, it should be remembered, has been organizing an innovation competition for project leaders for ten years. Djezzy also intends to develop activities of the incubator by providing an acceleration program to deliver various trainings.

➤ **ACSE:**²⁸

Another coworking space to distinguish itself from a particular element: ACSE. The Algerian Center for Social Entrepreneurship is, as its name suggests, only interested in startups and social enterprises.

The incubation is accompanied by an acceleration and all the tools to make a success of its project with social scope.

➤ **Sylabs:**²⁹

Sylabs is a startup incubator, founded in late 2015. It provides entrepreneurs with a range of services to facilitate business creation. From customized support to technical and business training, and offers coworking spaces to startups at a price of 25000 DA/month, with a potential of organizing 9 events per month.

➔ **The government's aid schemes :**

The weakness of the private capital and the lack of experience of the young carriers of projects, to direct the public authorities towards a policy of accompaniment, in order to stimulate the entrepreneurship by the means of the modes of supports and helps, it is what we are going to treat in this under section:

➤ **Algerian Startup Fund:** ³⁰

ASF is a public venture capital company that provides equity and quasi-equity financing to companies with the Startup label.

ASF was born from the collaboration of the Ministry of Startups and the 6 public banks (BNA, BEA, BADR, CNEP, BDL, CPA)

²⁸ <https://www.africinnov.com/fr/annuaire/acse> (consulted in 15/05/2021 at 13h)

²⁹ <http://sylabs-dz.com/about-us/> (consulted in 15/05/2021 at 13h)

³⁰ <https://startup.dz/asf/> (consulted 15/05/2021 at 14H00)

➤ **ANADE:**³¹

Previously called ANSEJ, Created in 1996, the ANADE device is aimed at young unemployed people aged between 19 and 35 years. It allows them to benefit from a financing of a maximum amount of ten million dinars (10.000.000DA). Its mission is to promote the creation of value by young promoters, as well as to encourage all forms of actions and measures that tend to promote the creation of youth employment.

➤ **ANGEM:**³²

Created in 2004, this agency offers a solution for entrepreneurs and artisans without age limitation but on a smaller scale, the funds granted can not exceed 1 million Algerian dinars, the loan of the device ANGEM in are not remunerated and can be repaid over 8 years.

Objectives:

- To contribute to the fight against unemployment ;
- Develop the spirit of entrepreneurship;
- Train project holders and beneficiaries of micro credits in the techniques of setting up and managing income-generating activities and very small businesses. - To support, advise and accompany the beneficiaries in the implementation of their activities, particularly with regard to the financial set-up of their projects.

➤ **CNAC:**³³

The CNAC was initially created to take care of unemployed people who were laid off from public companies. In 2004, it was transformed into a system that supports unemployed people who have an investment project.

³¹<https://promoteur.ansej.dz/> / (consulted 25/06/2021 at 11 am)

³² <https://www.angem.dz/> (consulted 15/05/2021 at 15h 40)

³³ https://www.cnac.dz/site_cnac_new/Web%20Pages/Fr/FR_PresentationCNAC.aspx (consulted in 16/05/2021 at 12h30)

The CNAC device is aimed at unemployed people aged between 35 and 50 years old, who invest in industrial and/or service activities, except for the resale in the state for investment amounts up to 5 million dinars.

➤ **FAUDTIC:**³⁴

In addition to these devices intended for any type of project, there is a special fund created following the recommendations of the famous e-Algeria program, it is well FAUDTIC, Fund of Appropriation of the Uses and the Development of the Technologies of the Information and the Communication, this fund, which is under the authority of the ministry of the post of the TIC, is intended to grant a total or partial financing to the companies and the startups activating in the sector of TIC, the nature of the projects financed by this fund relates to:

- Acquisition of computer equipment and software;
- Development and management of access portals to services;
- Technical support and expertise;
- Development of educational and multimedia content;

1.3 THE VALUE ADDED BY A.N.P.T:

Outline of completed, ongoing or future actions in favor of Algerian youth, in terms of entrepreneurship, employability, training and appropriation of ICT.

34

<https://www.nticweb.com/a-propos/14-dossiers/9491-quels-financements-pour-les-startups-en-alg%C3%A9rie.html> (consulted in 16/05/2021 at 13h)

1. History of actions completed and/or initiated by the A.N.P.T during the period from 2010 to 2020:

Table 5; Source: Internal Documentation.

Axis	Actions	Objectives	Results	Budget	Barriers & difficulties	Period
Supporting young project holders and innovative startups and strengthening the ICT and digital entrepreneurial ecosystem at the national level: All the listed actions are free of charge for the benefit of young project holders and Startups.	<p>Incubation and support programs for young project holders and startups, consisting of</p> <ul style="list-style-type: none"> - Accompaniment and incubation process spread over several phases. - Elaboration of training programs in the fields of ICT and digital entrepreneurship for young project holders and startups. - Development of the network of incubators and Technoparks, distributed throughout the national territory. - Promotional events on the contribution of entrepreneurship to innovation. - Realization of technological experience centers in partnership with major publishers or on own funds such as a Pre-5G test platform 	<ul style="list-style-type: none"> - To offer an adequate training in the technical fields but also in the creation and management of the company. - To facilitate the creation of companies and to reinforce the reception capacities of students and young ICT project holders and startups. - To develop the network of partners of the young project holders and startups supported. - Dealing with the major topics of the day in the field of entrepreneurship, ICT and digital. - Technological appropriation for the benefit of students, startups and project leaders - Reinforcement of the technical capacities of students and project holders and ICT startups 	<ul style="list-style-type: none"> - Incubation of more than 500 young project holders. - More than 150 events organized with more than 10,000 participants, including: <ul style="list-style-type: none"> • 15 Hackatons in the field of development of digital solutions and applications • 25 workshops and seminars on technology popularization. • 10 international workshops on advanced technologies (ICT) - More than 350 days of training for students, young project leaders and startups. - Realization of 4 incubators and 4 Technoparks specialized in ICT and digital (3 of which are under development, including an accommodation center for project holders and startups). - More than 15 agreements of cooperation and partnership ANPT-Universities/research 	<ul style="list-style-type: none"> - FAUTIC 2010-2012 - Own funds 2012- to date - Financing Partners 	<ul style="list-style-type: none"> - Stopped FAUTIC funding since 2012 and lack of funding. - Stopped activities due to containment 	2007-2020

	<p>and a recording studio.</p> <ul style="list-style-type: none"> - Launching of calls for tender for the realization of ICT projects, financed by the FAUDTICRSFR, with alleviation of the procedure for Startups 	<ul style="list-style-type: none"> - Contribution of young project leaders and ICT startups in the development of partners (access to the order) 	<p>centers signed and applied.</p> <ul style="list-style-type: none"> - More than 10 agreements of cooperation and partnership in the ANPT-Socio-economic sector signed and applied. - Launching of 2 calls for tender financed by the FAUTIC, with pre-award to 2 Startups. - Participation of the ANPT in the capital of 2 Startups. 			
	<p>Development of international cooperation programs, e.g. Algeria/Tunisia, Algeria/EU, Algeria/Germany, ..., consisting of :</p> <ul style="list-style-type: none"> - Signature of several cooperation agreements with foreign companies and technological institutions. - Soft landing program. - Organization of several events and workshops. 	<ul style="list-style-type: none"> - Technology and skills transfer. - Strengthening the technical capacities of project leaders and ICT startups. - Establishment of international synergy between Algerian startups and their foreign counterparts. - Strengthening the mobility of startups with partners 	<ul style="list-style-type: none"> - Organization of more than 10 trips of Algerian startups abroad (Germany, Tunisia, France, Spain, Asia, ...) - Signature of a cooperation agreement with the German Ministry of Economy and with foreign companies and technological institutions. - Organization of more than 25 study days, workshops and events. 	<ul style="list-style-type: none"> - Partner funding - Own funds 	<ul style="list-style-type: none"> - Lack of funding - Coronavirus pandemic and containment shutdown 	<p>2016-2020</p>
	<p>Program 'e-Commerce & e-Payment' consisting of :</p> <ul style="list-style-type: none"> - Partnership agreement with Algeria Post and GIE Monétique. - Organization of events dedicated to the subject. - Training of Startups in the integration of online payment. 	<ul style="list-style-type: none"> - Promotion of online payment and e-Commerce - Inclusion of startups and project leaders to take care of national needs in terms of adapted solutions. 	<ul style="list-style-type: none"> - Signature of 2 partnership agreements with Algeria Post and GIE Monétique. - Organization of 5 days of studies around e-Payment and Electronic Commerce. - Training of 10 startups in the integration of e-payment. - Realization of 4 projects. 	<ul style="list-style-type: none"> - Own funds - Partner funding 	<ul style="list-style-type: none"> - Coronavirus pandemic and containment shutdown. 	<p>2018-2020</p>
Development of training programs in line	<p>.Full Stack Web Developer' program consisting of :</p> <ul style="list-style-type: none"> - A complete training course 	<ul style="list-style-type: none"> - Train young graduates in the field of ICT in Web and mobile development, and 	<ul style="list-style-type: none"> - Realization of 3 training sessions of 40 days spread over 6 months, with more than 200 	<p>Own funds</p>	<ul style="list-style-type: none"> - Lack of funding. 	<p>2018-2020</p>

<p>with the needs of young project holders and innovative startups, as well as those of the ICT and digital entrepreneurial ecosystem and the labor market:</p> <p>All the listed actions are free of charge for the benefit of young project holders and Startups.</p>	<p>in Web development (40 days spread over 6 months)</p> <ul style="list-style-type: none"> - Dedicated recruitment days 'Digital Job Day'. - Recruitment/training program for upgrading and pooling of developers 	<p>ensure their employment.</p> <ul style="list-style-type: none"> - Retain this important resource for the ICT and digital entrepreneurship ecosystem and facilitate its employability by Algerian startups and companies. - Provision of trained resources to startups and project leaders. 	<p>participants.</p> <ul style="list-style-type: none"> - Organization of 3 recruitment days dedicated to digital, with the participation of more than 1000 candidates. - 20 young engineers recruited by ANPT in the framework of the Recruitment/Training program. 		<ul style="list-style-type: none"> -Coronaviruses pandemic and shutdown due to containment 	
	<p>ICT training program (100 days spread over 6 months) of high level for the benefit of students, project leaders and ICT startups at the ICT experience center of the ANPT</p>	<p>Technological appropriation for the benefit of students, startups and project leaders.</p>	<ul style="list-style-type: none"> - Realization of 100 days of training with the participation of more than 100 learners. 	<ul style="list-style-type: none"> - Partner funding - Own funds 	<p>Shutdown of activities due to containment</p>	<p>2017-2018</p>
	<p>SAP Young Professional Program.</p>	<p>Retention of new graduates, and facilitate the employability of Algerian talent</p>	<ul style="list-style-type: none"> - 2 training sessions organized. - 60 consultants trained, certified and placed in Algerian companies 	<ul style="list-style-type: none"> - Partner funding - Own funds 		<p>2019-2020</p>
	<p>IoT/Arduino/LoraWan program, consisting of:</p> <ul style="list-style-type: none"> - Arduino training program 	<ul style="list-style-type: none"> - Development and promotion of projects and startups specialized in the 	<ul style="list-style-type: none"> - Organization of a study day around LoRaWan Technology and its applications in the field 	<ul style="list-style-type: none"> - Partner funding - Own 	<ul style="list-style-type: none"> - Pending authorization 	<p>2018-2020</p>

<ul style="list-style-type: none"> - Organization of events dedicated to the subject. - Development of inter-institutional, national and international partnerships related to the IoT field. 	<p>field of IoT.</p> <ul style="list-style-type: none"> - Encouragement and orientation of startups for the development of smart city solutions and optimization of production means. 	<p>of IoT with more than 300 participants.</p> <ul style="list-style-type: none"> - More than 100 participants in the Arduino training program - More than 10 IoT projects incubated 	funds	n for the frequencies concerned.	
<p>Digital Transformation' program consisting of :</p> <ul style="list-style-type: none"> - Training courses dedicated to the subject - Organization of events and workshops - Coaching and support 	<p>Technological appropriation for the benefit of startups and project leaders</p>	<ul style="list-style-type: none"> - More than 30 days of training organized, with the participation of more than 100 learners. 	Own Funds	Shutdown of activities due to containment	2019 - 2020

2. Future actions proposed by A.N.P.T for inclusion in the National Youth Plan (Plan National de la jeunesse) 2020-2024:

Table 6; Source: Internal Documentation.

Axis	Actions	Objectives	Budget	Period
Supporting young project holders and innovative startups and strengthening the ICT and digital entrepreneurial ecosystem at the national level:	<p>Incubation and support programs for young project holders and startups in virtual mode, consisting of</p> <ul style="list-style-type: none"> - Digitization of the incubation process and its procedures. - Creation of an e-learning platform and a digital library. - Development of training programs 	<ul style="list-style-type: none"> - Facilitation of business creation and reinforcement of the reception capacities of young project holders and ICT startups, throughout the national territory, without the need to be near an incubator. - To offer adequate training in the technical fields but also of creations and management of the company, to a significant number of young project carriers and Startups. 	Own Funds	2020 - 2024

<p>All the listed actions are free of charge for the benefit of young project holders and Startups.</p>	<p>focused on business creation and management, in virtual mode.</p> <ul style="list-style-type: none"> - Organization of online events to promote the contribution of entrepreneurship to innovation. 	<ul style="list-style-type: none"> - To facilitate the creation of companies and to reinforce the reception capacities of students and young project holders and ICT startups. - To treat the major subjects of the current events in the field of entrepreneurship, the TIC and the digital, thanks to the on-line events. 		
	<p>Realization and implementation of a FabLab.</p>	<ul style="list-style-type: none"> - Facilitate prototyping and mock-ups for students and ICT projects and startup developers. - Reinforcement of the technical capacities of students and project leaders and ICT startups. - Technological appropriation for the benefit of startups and project leaders. 	<p>- FAUDTIC Own Funds</p>	<p>2020 - 2024</p>
	<p>Development of international cooperation programs with African countries.</p>	<p>Development of the Algerian ICT entrepreneurial ecosystem to achieve the following objectives:</p> <ul style="list-style-type: none"> - Signature of several cooperation agreements. - Soft landing program. - Organization of several events and workshops. 	<p>Own Funds</p>	<p>2020 - 2024</p>
	<p>Women's Entrepreneurship' program consisting of :</p> <ul style="list-style-type: none"> - Organization of events dedicated to the subject. - Training of young women project holders and startups managed by young women. 	<p>Develop female entrepreneurship in the field of ICT and Digital.</p>	<p>Own Funds</p>	<p>2020 - 2024</p>

1.4 THE NATIONAL YOUTH PLAN (PLAN NATIONAL DE JEUNESSES)

2021/24:

The Minister of Youth and Sports proceeded on January 19, 2021, to the launch of the project of participatory management of youth house - youth associations.³⁵

This project aims to establish a new phase of partnership between the MJS and the Associative Movement as one of the most important results and axes of the National Youth Plan 2020/2024.

This process includes, initially before its generalization, the allocation of the management of 25 youth centers to youth associations of different wilayas. These associations were selected on the basis of a call for projects launched by the Ministry of Youth and Sports during the months of October and November 2020, with the participation of 622 local and national associations; which resulted in the funding of 92 youth projects in youth centers.

The objective of this project is to reform and modernize the youth centers in order to become true spaces of citizenship, to develop the capacities of the young people, to emancipate the talents and energies of the young people in all the fields on the one hand, and to promote the associative movement by giving it spaces of activities on the other hand.

³⁵<https://www.mjs.gov.dz/index.php/fr/actualites-4/visite-de-travail-et-d-inspection/3632-plan-national-de-jeunesse-projet-de-gestion-participative-maisons-de-jeunes-associations> (consulted in 16/05/2021 at 15H30)

SECTION 2: THE CURRENT SITUATION OF FORMERLY INCUBATED STARTUPS.

In this section, we are going to investigate the current situation of formerly incubated startups in Sidi Abdellah (Q3) in order to appreciate its impact on project holders even after the Incubation process has ended.

We will explain the research methods and tools used, present the results and then draw conclusions.

Presentation of the Inquiry:

To understand the impact of the Sidi Abdellah Incubator on Startups it has worked with, one logical way is to verify whether those startups had more “success rate” than the average success rate of startups that didn’t go through the Incubation.

However, as we have explained in the Introduction, the scope of this inquiry is very large and the required data is hard to obtain, thing which goes beyond the context of our Thesis.

We have thus opted to reduce and narrow down the scope of the inquiry in a manner that it should preserve the depth of the question and give some insights on the impact of Sidi Abdellah Incubator.

We will hence be investigating how many of the previously incubated startups are still in business along with other types of information like the profile of project leaders.

The methodology:

A methodology is a particular and systematic procedure of accomplishing or approaching something.

In this regard, and in order to best approach this inquiry quantitatively and qualitatively, we have gathered all the possible information relating to startups that have made the Incubation journey in Sidi Abdellah. After the gathering of the information, we resorted, firstly, on phone

calls in order to have a direct touch with those project holders, we relied secondly on an online questionnaire and finally on online research via the Internet.

The sample of the study:

Since the Incubator Sidi Abdellah became active, exactly 117 project holders have finished the Incubation.

We aimed at questioning at least 20 or 30 of them, the greater the sample the better, but at least 20 project holders would represent a good sufficient sample in our estimation.

Difficulties encountered during the process:

The major obstacle encountered during our investigation is the cooperation of project holders and their willingness to answer the questionnaire or the questions via the phone calls.

We have in fact planned to ask the questions we prepared directly and only through phone calls and not via an online questionnaire, but this method turned out to be unproductive since all of our first calls with our interlocutors were negative under the reason that they were busy to talk, and some of them recommended us to send a questionnaire instead.

We have then resorted to a questionnaire, sent it to all emails available to us (around 110 - over 20 addresses and phone numbers were nonexistent or false). We furthermore notified more than 30 of them via phone calls to ask them to answer the questionnaire. All the answers were positive, assuring us that they will check it and answer it once they have time.

We were surprised to get only 4 answers in 48 hours. We resent the email again and recalled many of them to ask them to answer the questionnaire. We got only 6 answers in one week.

Considering the situation we were in, we were obliged to use another research tool to answer the question of whether those startups were still in business or not, we have then relied on the internet research to check if those startups were in fact still active or not.

2.1 PRESENTATION OF THE RESULTS:

NUMBER OF PROJECTS THAT FINISHED THE INCUBATION PROCESS FROM 2010 TO 2019:

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	total
candidat-es	55	65	77	42	40	40	42	30	15	90	496
Phase 1	20	30	32	33	25	28	33	13	11	40	256
Phase 2	15	12	17	14	--	7	10	10	7	25	117
Startups	6	3	3	5	3	4	4	6	8	9	54

Table 7, Source: Internal Documentation.

From 117 projects that finished the Incubation process, 54 of those projects have become fully independent businesses, 16 startups are still active inside the Incubator (coworking space rent) although they are completely independent, while the others are active outside.

The remaining projects could have been independently concretized into real businesses later after the Incubation.

Some examples of Startups created in Sidi Abdellah:

Startup name.	Description of the project.	Date of entry and end of accompaniment.
Guidini	Electronic Store	2011 - 2014.
Ecostat algerie	Website for Economic Information.	2011 - 2014
Overgen	Multimedia and communication agency.	2012 - 2014
Numedia IT Business	Application development.	2012 - 2014
Infos tools solutions	Secured e-paiement.	2013 - 2015

Table 8, Source: Elaborated by us.

PROFILE OF PROJECT HOLDERS:

THE GENDER:

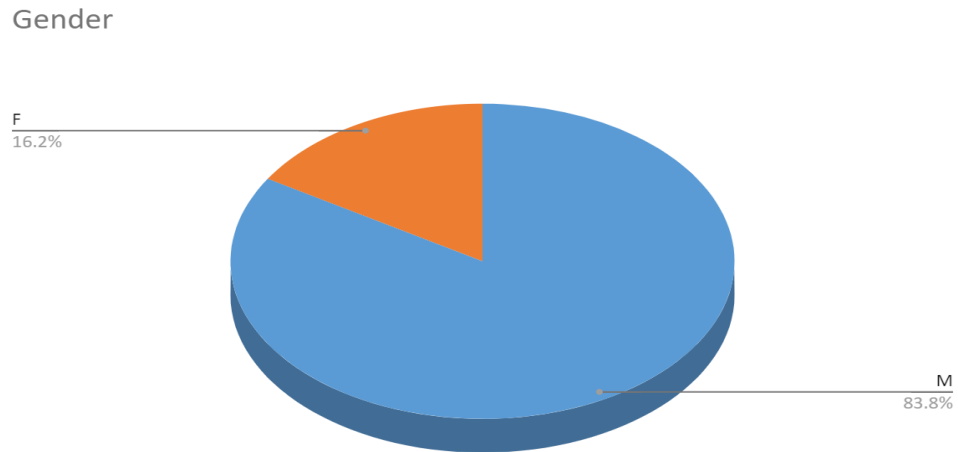


Figure 8, Source: Elaborated by us.

Amongst 117 project holders, only 16.2% (20) are females, whereas 97 are males. This may be explained with regards to the higher number of males in the domain of IT compared to females.

THE BACKGROUND:

Using some Internal Documents, we were able to determine the background of 19 project holders.

Picking a random sample of 19 projects holder out of 118 gave us the following results:

	education			Experience in Entrepreneurship	
	<Bac+2	Bac+2/+5	>Bac+5	Yes	No
Number	3	15	1	10	9
In %	15%	78%	7%	52.6%	47.4%

Table 9, Source: Internal documentation.

Considering that this data can be representative of the whole sample (to some degree of error), we can see that an important number of project holders have prior experiences in entrepreneurship and the majority of them have a Bac+5 educational background.

THE CURRENT SITUATION OF INCUBATED STARTUPS AND PROJECTS:

From 117 startups and projects Incubated in Sidi Abdellah since its creation, we were able to confirm, through online internet research, that 29.1% (34) are in fact still in business, 19.7% (23) are inactive, while we could not confirm nor infirm the state of 51.3% (60) of the projects due to a lack of information (no project name).

current situation

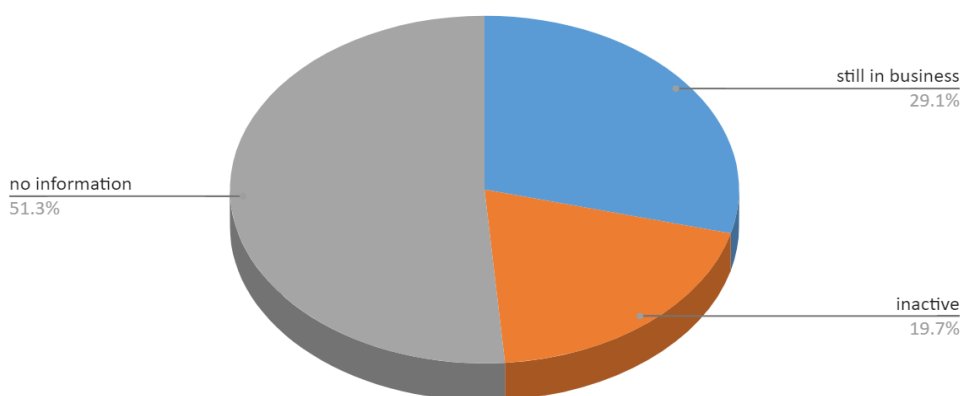


Figure 9, source: Elaborated by us.

When we clear our data from projects which we could not obtain information about, our new cleared sample would consist of 57 projects and startups in which 34 of them are still active, while 23 are not.

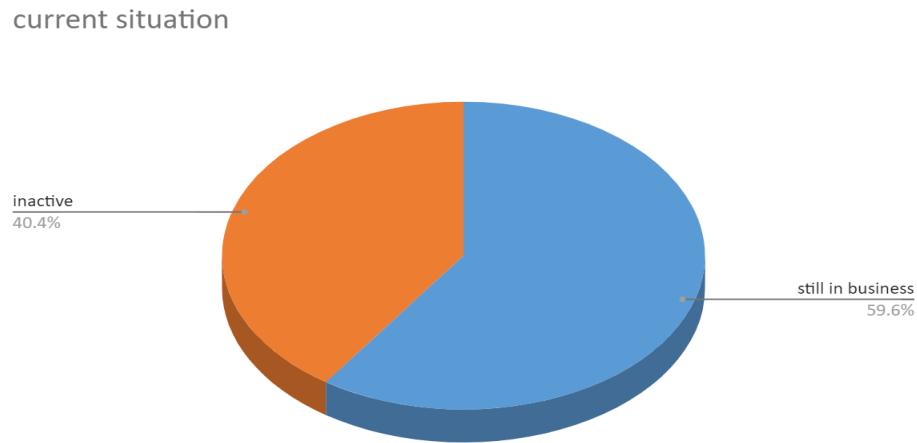


Figure 10, Source: Elaborated by us.

Given this sample of 57 projects Incubated in Sidi Abdellah, we can draw a conclusion regarding our 3rd hypothesis **H3**: “half ½ of the startups and projects incubated in Sidi Abdellah are still in Business” is actually valid.

This hypothesis doesn't tell us much about the health of these businesses, the most important one is the financial health indicator, nevertheless, this data convey an important indication that these businesses could survive long enough (since many of them finished their Incubation before 2015) where normally a business would not have survived this long if it wasn't in fact profitable.

CONCLUSION CHAPTER III:

In this last chapter, we tried to answer our **H2** and **H3** hypothesis.

We saw, in a first time, a full list of achievements and realizations concretized by the A.N.P.T throughout the years of its activity and in years to come, subsequently, one can safely assert that the A.N.P.T has brought a great value to the Algerian startup ecosystem.

We also dealt, in a second time, with our hypothesis **H3**, where we came to witness that, in a sample of 57 projects incubated in Sidi Abdellah, more than half of these projects are still in business, thing which can indicate that those projects are profitable given that they have survived relatively for a long time.

GENERAL CONCLUSION

GENERAL CONCLUSION:

A startup is an emerging business that is constantly looking for a profitable and sustainable model and structure, it is a risky endeavour where the rate of failure is very high.

Choosing to embark in a startup adventure is not an easy decision, it is a journey filled with obstacles and challenges and where only passionate people are able to confront, passion is a true fuel for startup creation. Creating a startup is about risk taking, vision and courage to transform an innovative idea into a real project.

Startups as a wealth creation entity, can be a true economic leverage for emerging economies such as Algeria's, due to their fast scalability and innovations.

The Algerian government in the past two decades have made the Entrepreneurs and Startups the focus of its economic policies, enforcing many laws and creating many structures to improve and enhance the Business climate to suit the needs of Entrepreneurs and for startups to emerge.

The A.N.P.T - Cyber park Sidi Abdellah is one of those structures dedicated to help Entrepreneurs create their Startups.

The object of this study was therefore to assess the impact of the A.N.P.T - Sidi Abdellah Incubator in the development of startups and the ecosystem.

We chose the following three 3 metrics to assess this impact:

The first is the kind of services that the Cyber park offers, since the nature of services directly impact the experience of startups inside the incubator, hence our first secondary question **Q1** and our first Hypothesis **H1**.

The second is the history of realizations and achievements of this organism, to understand its added value in the ecosystem, thus **Q2** and **H2**

The third one is the current situation of Incubated startups and projects, since answering this question can constitute some evidence on the long lasting effect of the Incubation on project leaders and therefore the quality of Incubation, thus our **Q3** and **H3**.

In this regard, we structured our work into 3 chapters; the first chapter dealing with the theoretical aspect of the problematic in order to acquaint the reader with the material of the

thesis; the second chapter being the presentation of the A.N.P.T - Cyber park Sidi Abdellah which is the object of **Q1-H1**; the third chapter in which we tackled question **Q2-H2** and **Q3-H3**.

H1: “Sidi Abdellah Incubator offered mainly Managerial services”;

We have highlighted in Chapter **II** the components of the offer provided by this organism, from the different missions and objectives of their diverse departments, to the outline of their large infrastructures adapted to meet the needs of project holders, to the steps followed in the incubation process and incubation programs.

Given what we saw in this chapter, we can conclude that the main services that the cyber park offers revolves around **accompaniment** or **companionship** in favor of Project Leaders, it’s not up to the Incubator to make of a project a failure or a success, rather the failure or success rests overwhelmingly upon the shoulders of the project leader and his team.

The Incubator’s first task is to help and boost the project, to train, coach and mentor the project leader and his team to develop Managerial skills, the Incubator however is not responsible for any other outcome.

Henceforth, we can say that the first hypothesis **H1** is valid since the Project Leader can find help in his Managerial duties but not till the point of putting all the work on the incubator.

H2: “through its achievements, the A.N.P.T has greatly helped the ecosystem develop in the last decade”;

We proceeded in **Chapter III** to unpack the value added by this organism in the Algerian startup ecosystem in general, we saw an extensive list of past achievements and realization of this organism since its creation and a list of future intended actions under the program “National Youth Plan” created by the government.

Startups can't succeed or emerge in an underdeveloped Business climate, they need a system where many other types of institutions need to be involved such as universities, advice institutions and accompaniment structures.

The organisation of the A.N.P.T - Cyber Park Sidi Abdellah is among the top 20% largest technological parks in the world, the list we provided of its achievements indubitably makes it one of the most important elements of the algerian startup ecosystem in the domain of IT. Hence the hypothesis **H2** is correct.

H3: "half of the startups and projects incubated in Sidi Abdellah are still in Business";

We dealt in **Chapter III** with our last hypothesis, to understand the current situation of projects and startups incubated in Sidi Abdellah, we resorted to a qualitative and quantitative inquiry by means of phone calls, an online questionnaire and internet research. The inquiry process by phone calls and the questionnaire didn't go as we hoped for (as we have explained the reasons in chapter III) and that resulted in a weak data sample compared to the number of projects incubated in Sidi Abdellah (117).

We were able, nonetheless, through online Internet research to confirm the current situation of 57 projects, where 34 (59.6%) of them are in fact still in business, and 23 (40.4%) are not in business.

If we would assess the validity of **H3** through the sample of 57 projects, we can say that **H3** is actually valid. The validity of the hypothesis **H3** can be regarded as evidence of the quality and the effectiveness of the Incubation in Sidi Abdellah.

All of the three 3 hypotheses are valid, providing us with some insights on the impact of the A.N.P.T - Sidi Abdellah Incubator on startups and the ecosystem in general.

BIBLIOGRAPHY

BOOKS AND REVIEWS:

- AERNOUDT, (R): **Incubators: Tool for Entrepreneurship?**, Small Business Economics, 23, 2004.
 - AMEZCUA, (A. S.), GRIMES, (M. G.), BRADLEY, (S. W.), & WIKLUND, (J.): **Organizational sponsorship and founding environments: a contingency view on the survival of business-incubated firms**, Academy of Management Journal, 1994–2007, 56(6), 2013.
 - AMEZCUA, (A.), RATINHO, (T.), PLUMMER, (L. A.), & JAYAMOHAN, (P.): **Organizational sponsorship and the economics of place: How regional urbanization and localization shape incubator outcomes**. Journal of Business Venturing, 105967, 2019.
 - FREY, (Carl Benedikt) and Osborne (Michael A.): **THE FUTURE OF EMPLOYMENT: HOW SUSCEPTIBLE ARE JOBS TO COMPUTERISATION?**, the Oxford Martin Programme on Technology and Employment, September 17, 2013.
 - GARTNER, (William): **Journal of Business Venturing**, 1990.
 - HEBERT, (Robert) and LINK (Albert): **A History of Entrepreneurship**, London Routledge 2009.
 - UNC Entrepreneurship Center: **Trends in Entrepreneurship**. Frank H. Kenan Institute of Private Enterprise, 2020.
 - STOKAN, (E.), THOMPSON, (L.), & MAHU, (R. J.): **Testing the Differential Effect of Business Incubators on Firm Growth**. Economic Development Quarterly, 29(4), 2015.
-

WEBSITES:

- <https://www.nticweb.com/a-propos/14-dossiers/9491-queles-financements-pour-les-startups-en-alg%C3%A9rie.html> (consulted in 16/05/2021 at 13h)
- <https://www.coursehero.com/file/96157419/Entrepreneurship-theorydocx/> (consulted in 28/04/2021 at 17h)
- <https://www.yourdictionary.com/intrapreneur> (consulted in 29/04/2021 at 10 am)
- <https://www.computerhistory.org/revolution/digital-logic/12/328/1401> (consulted in 29/04/2021 at 11h30)
- <https://www.businessfinland.fi/en/do-business-with-finland/startup-in-finland/startup-environment> (consulted 1/5/2021 at 15H30)
- https://en.wikipedia.org/wiki/Finnish_startup_scene (consulted in 1/5/2021 at 15H40)
- <https://leanstartup.co/managing-extreme-uncertainty-the-startup-way/> (consulted in 1/5/2021, at 16H)
- https://en.wikipedia.org/wiki/Startup_ecosystem (consulted in 30/04/2021 at 13h)
- <https://startup.dz/pour-les-startups/> (consulted 15/05/2021 at 15H20)
- <https://startup.dz/algeria-venture/> (consulted 15/05/2021 at 13H 42)
- <https://www.anvredet.org.dz/qui-sommes-nous/> (consulted in 15/05/2021 at 16H30)
- <https://www.africinnov.com/fr/annuaire/acse> (consulted in 15/05/2021 at 13h)
- <http://sylabs-dz.com/about-us/> (consulted in 15/05/2021 at 13h)
- <https://startup.dz/asf/> (consulted 15/05/2021 at 14H00)
- <https://promoteur.ansej.dz/> (consulted 25/06/2021 at 11 am)
- <https://www.angem.dz/> (consulted 15/05/2021 at 15h 40)
- https://www.cnac.dz/site_cnac_new/Web%20Pages/Fr/FR_PresentationCNAC.aspx (consulted in 16/05/2021 at 12h30)

ANNEXES

ANNEXE 1: Project sheet (fiche de projet).

AGENCE NATIONALE DE PROMOTION ET DE
DEVELOPPEMENT DES PARCS TECHNOLOGIQUES



PROMOUVOIR L'INNOVATION DANS LES
TECHNOLOGIES DE L'INFORMATION ET DE LA
COMMUNICATION « TIC »

INCUBATEUR de SIDI ABDELLAH

FICHE-PROJET

CRÉATION D'ENTREPRISE DANS LES

TECHNOLOGIES DE L'INFORMATION ET

DE LA COMMUNICATION (TIC)

LA PRESENTE FICHE SERA TRAITEE EN TOUTE CONFIDENTIALITE. SA
DIFFUSION SERA LIMITEE A L'EQUIPE DE L'INCUBATEUR, AUX EXPERTS ET AU
CONSEIL DE SELECTION.

N° PROJET (interne incubateur) :.....

LE PROJET

A- CARACTERISTIQUES ET COMPETENCES DU PORTEUR OU DE L'EQUIPE

PROJET

Identification du Porteur de projet principal

Nom :

Prénom :

Né(e) le : à Nationalité : Age :

Adresse :

Code postal /Ville :

: Portable : E-mail :

Niveau de formation (joindre CV) :

BAC / BAC + 2 / BAC + 3 / BAC+4/5 / DOCTORAT / AUTRES

Préciser:

Situation professionnelle : Etudiant / Salarié / Demandeur d'emploi / Chercheur
Enseignant-chercheur / Doctorant/post-doctorant / Autre

.....

L'équipe créatrice

Allez-vous créer en équipe ? Non Si oui

Combien de personnes :(joindre les CV)

Nom & prénom Compétences/Formation Rôle prévu dans le projet

1.

2.

3.

B- LE CONCEPT

Décrire succinctement le projet et son origine, objet de l'entreprise et les cibles principales

.....
.....
.....
.....

C- CARACTERISTIQUES TECHNIQUES ET FONCTIONNELLES DU PRODUIT

/ SERVICE / DANS LE CADRE DU PROJET :

Donner une description détaillée du produit ou service:

.....
.....

Caractère innovant de la technologie ou service proposés :

.....
.....

Travaux de recherche ayant abouti à l'innovation :

.....
.....

Laboratoires ou organismes impliqués:

.....

Titres de propriété Intellectuelle:

.....
.....

Niveau de maturité du produit /service :

Preuve de concept / Prototype /Test en interne /Test chez le client /Commercialisable

Etat d'avancement du projet et démarches entreprises (Ex : création juridique, demandes subventions, étude de marchés, etc.) :

Moyens financiers:

.....
.....

LE MARCHÉ:

Cibles de marché identifiées :

.....
.....

La Concurrence :

.....
.....

Les avantages :

1- L'innovation du produit ou service :

.....
.....

2- Du produit ou service par rapport à la concurrence, à tous les niveaux (technique, économique, organisationnel) :

.....
.....

Les clients potentiels:

.....
.....

L'INCUBATION

Les attentes du Porteur de projet de l'incubateur :

.....
.....

.....
.....

.....
.....

.....
.....

**LISTE DES INFORMATIONS CONSIDEREES PAR LE PORTEUR COMME INFORMATIONS
CONFIDENTIELLES :**

.....
.....
.....
.....

Je, soussigné(e),..... atteste sur l'honneur que
l'ensemble des déclarations ci-dessus sont exactes.

Date :

Signature :

ANNEXE 2: the questionnaire (le questionnaire).

Enquête sur les Startups Incubés à Sidi Abdellah.

Bonjour/Bonsoir;

Je me présente, Mon nom est Badreddine Benfetima, je suis étudiant en fin de cycle à l'EHEC Alger option management et entrepreneuriat;

Je fais une enquête sur l'incubation au cyberparc Sidi Abdellah dans laquelle je vais principalement essayer de comprendre la situation actuelle des startups qui ont été incubées à Sidi Abdellah.

Sur ce, je sollicite votre amabilité pour que vous consacriez un peu de votre temps à répondre à ce questionnaire, nul besoin de trop réfléchir, soyez spontanés dans vos réponses.

Merci!

Information sur le Projet:

Le nom et prénom du Leader du Projet:*

Le nom de votre projet par lequel vous êtes passé à l'incubateur de Sidi Abdellah:*

Ce projet est-il encore en activité?*

Si non, veuillez mentionner les raisons qui vous ont poussée à arrêter le projet:

Si vous êtes encore en activité mais vous avez changé de projet, veuillez dire brièvement pourquoi vous l'avez changé, ensuite décrivez votre nouveau projet:

Comment jugez-vous votre expérience à Sidi Abdellah?*

Très bonne - bonne - neutre - mauvaise - très mauvaise.

Si vous avez des recommandations ou des commentaires concernant l'incubation à sidi abdellah, mentionner les ici:

Combien d'employés avez-vous recruté dès l'entame de votre projet?*

Le profile du Leader du projet:

Votre Background:*

Universitaire sans diplôme - Licence - Master / Ingéniorat - Doctorant - Autre.

Votre expérience professionnelle: (décrivez brièvement votre parcours Professionnelle):*