

## **The role of the university incubator in promoting the entrepreneurial spirit among students – The case of the Higher School of Commerce at the University Center of Kolea in Tipaza (Algeria)**

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**ABSTRACT:** Nowadays, entrepreneurial support structures are attracting more and more interest from decision-makers as these structures represent a key determinant for the development of startups. Incubators, which are identified and discussed in detail in the present work, are among these organizations that play a particularly important role in promoting the entrepreneurial spirit and supporting project leaders. For this, it was deemed appropriate to conduct a quantitative study, using an investigation tool, i.e. a questionnaire, on future graduates in their final year of study in the Higher School of Commerce at the University Center of Kolea in the Wilaya (Province) of Tipaza (Algeria). Hence, a business simulation exercise, such as for example an incubation process that integrates the entrepreneurial intention of students and their approach towards entrepreneurial support structures, in particular incubators, was carried out. The main results of this empirical study showed that the incubator provides great advantages and benefits for the future of project holders. In addition, the incubator also allows it to be better equipped in order to gain a deeper understanding of the economic environment in all its complexity.

**Keywords:** Entrepreneurial support structure; Incubators, Entrepreneurial spirit; Project holders; Start-ups.

**JEL Classification Codes :** L26 ; M20 ; M13.

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## 1. INTRODUCTION

Entrepreneurship is generally viewed as a process that consists of identifying, evaluating and exploiting business opportunities. It is widely acknowledged that, most often, exploiting business prospects may lead to the creation of a new enterprise. However, it should be noted that this process is not just about creating the business. Many companies continue to seek and exploit new opportunities that allow them to remain competitive in the market, grow and prosper. Commonly, the entrepreneurial spirit reflects a strong orientation towards the search for opportunities, while taking risks and identifying value-creating initiatives. Above all, the entrepreneurial spirit targets the issue of mentality and state of mind, with a set of ideas and a way of thinking. It is all about the ability to spot, explore, and exploit all possible opportunities.

According to the Global Entrepreneurship Monitor (GEM) report <sup>(1)</sup>, entrepreneurship is quite active in various industrialized countries. In this regard, numerous studies have clearly shown that young companies fully participate in the growth and competitiveness of the economies of several countries. Concerning the case of Algeria, it was revealed that the government is working to mobilize colossal resources to promote entrepreneurship and encourage young Algerian project holders to invest more and more in it, with a view to develop the country's economy and thus allow Algeria to move away from dependence on oil revenue (Lalmas S., 2019). To do this, The Algerian government deemed it necessary to create public and private structures for the purpose of training, helping financially, and supporting young project leaders to set up and launch their own start-ups. The Algerian market structure is characterized by factors that favor and enhance the dynamics of this sector. Indeed, the Algerian market is a fairly young market with strong growth potential. In addition, this market offers an environment with very favorable conditions for the creation of businesses.

In this regard, Verstraete T. and Saporta B. stated that Business creation itself is attracting more and more attention, to the point that its statistics are interpreted as one of the most striking indices of the economic dynamism of a region or a country <sup>(2)</sup>. A large number of studies have highlighted and recognized the important role of small business creation in the generation of jobs, the growth and vitality of the economy, and the social development of a country (European Commission, Green Paper: entrepreneurial spirit in Europe, Brussels, 2003).

It is worth noting that business creation has been supported in various ways in order to meet the different needs of entrepreneurs upstream and downstream of the entrepreneurial act. Therefore, several organizations and systems have been created to support the creation of businesses in several developed and emerging countries with the main objective of, first, encouraging local entrepreneurship in order to enhance the emergence of start-ups and, second, helping existing businesses to adapt to new conditions that are imposed by demand and new technologies.

Among these organizations, business incubators have emerged as support structures and convenient means of welcoming, advising and bringing together young businesses. Indeed, these business incubators make it possible to bring together specialized resources dedicated to supporting and assisting entrepreneurs before the creation of their business, and also supporting them even afterwards. It is noteworthy that the main objective of a business incubator is to design and develop successful companies that would subsequently leave the structure and become entirely autonomous. These new companies will then establish themselves in their environment and thus contribute to the creation of jobs and wealth. Further, business incubators provide young businesses with a structure that is well adapted to their professional development. The present research work, in its theoretical and practical aspect, aims primarily to show the importance of the incubator in

supporting a start-up and also to determine the nature of services it can offer to holders of projects, with a view to guaranteeing the development and enhancement of their start-ups.

The choice of this subject is justified by the fact that university students are generally sufficiently motivated to create their own business because they believe that they are well capable of doing so. It is widely recognized that the university can contribute to developing a large pool of potential and aspiring entrepreneurs by awakening students' interest in business creation and development, while transmitting to the students the skills and attitudes, as well as the behaviors that characterize entrepreneurs. This can be done by conducting an empirical synthesis targeting future graduates in their final year of study at the Higher School of Commerce at the University Center of Kolea, during a business simulation exercise, while integrating their entrepreneurial intention.

In light of the above, it can be asserted that carrying out strategic reflections on the implementation of start-up support practices may contribute to the promotion of support activities, such as incubators. It is important to note that if the accompanying process slows down or stops, the potential for the creation of new start-ups becomes weaker.

The above statement leads to formulating the following research question:

***How do incubators support future graduates in the management of their projects?***

For the purpose of answering this question of paramount importance, it was decided to consider the four sub-questions given below:

- *What is entrepreneurial support?*
- *What is a support structure?*
- *What are the tools and mechanisms to support entrepreneurship?*
- *How to measure the effectiveness of the incubator?*

In order to answer these sub-questions, it was deemed necessary to make the following hypotheses:

- *First hypothesis:* The incubator intervenes to help project holders, in particular future university graduates, throughout the process of creating their businesses before, during, and after, in order to meet all its needs.
- *Second hypothesis:* Incubators play an essential role in promoting the entrepreneurial spirit and supporting project holders, particularly future graduates.

## **2. LITERATURE REVIEW**

This section aims to provide the theoretical bases that contribute to a better understanding of the different concepts of entrepreneurship, the strategic approach to the entrepreneurial ecosystem, the concept of a university entrepreneurial ecosystem, as well as the tools and mechanisms for the support of entrepreneurship. It also presents the different entrepreneurial support structures, and then examines and discusses the concept of incubators and their impact on the economy.

### **2.1. The concept of entrepreneurship**

Over the past few years, entrepreneurship, which is often synonymous with business creation, has become an essential activity for evolution and economic development, whether at the local, regional, national or international level. However, the concept of entrepreneurship is so difficult, and highly complex and

heterogeneous, that it cannot be limited to one single definition, as this same word may have different meanings. Does entrepreneurship refer to the action of undertaking or carrying out a project or to a hunt for an idea where the entrepreneur detects opportunities and seeks the resources necessary to achieve his objectives? The answer to this question remains complex and difficult to be identified. This is probably due to the complexity of the context considered. Indeed, it is quite complicated to find an appropriate term to define the word entrepreneurship in some languages. Fortunately, in the Anglo-Saxon world, there is no serious problem regarding the meaning of the term entrepreneurship which is extensively used and widely adopted.

Furthermore, Verstraete and Fayolle <sup>(3)</sup> emphasize that entrepreneurship is a domain that is too complicated and too heterogeneous to be limited to a single definition. In this regard, they propose classifying the different definitions, which had been put forward by a number of authors, according to four paradigms <sup>(4)</sup>:

- **The business opportunity paradigm.** Shane and Venkataraman <sup>(5)</sup>, who are the most cited regarding this point, define entrepreneurship as the ability to create or identify opportunities and exploit them. This paradigm is primarily interested in the sources of opportunities, and the process of detecting, assessing and exploiting these opportunities. It is also concerned with the individuals who discover, evaluate and exploit these opportunities. In this regard, Timmons states that entrepreneurship presupposes a cognitive state that leads a person to act in accordance with the type of action called for by the corresponding act, starting from an idea with the detection or construction of business opportunities <sup>(6)</sup>.
- **The paradigm of creating a company.** This paradigm defines entrepreneurship as the creation of a company by one or more people. According to Verstraete T.,

entrepreneurship is seen as a process leading to the creation of a corporation driven by one or more individuals who have joined forces for that purpose <sup>(7)</sup>.

- **The paradigm of value creation.** This defines entrepreneurship as a phenomenon or a process intended for creating individual, economic or social value. Studies conducted on the link between entrepreneurship and economic growth and relating to this paradigm have been carried out by Bruyat C. <sup>(8)</sup>.
- **The paradigm of innovation.** Schumpeter carried out some studies where he gave paramount importance to innovation when defining entrepreneurship. He stated that innovation may come in many forms, while adding that innovation and entrepreneurship are fundamental drivers of the economy. As for Julien and Marchesnay, they affirmed that innovation constitutes the foundation of entrepreneurship which requires new ideas in order to offer or produce new goods or services, or to reorganize the company <sup>(9)</sup>.

## 2.2. The entrepreneurial ecosystem approach

The ecosystem is a physically delimited environment that corresponds to an evolving and interactive relational space, and which involves different actors making up a quite complex fabric. According to Isenberg's model (2011), the entrepreneurial ecosystem includes six domains, namely policy, financing, markets, culture, human capital, and supports (Khalife et al., 2021). The entrepreneurial ecosystem approach is viewed as a way of perceiving and understanding entrepreneurship in the broader context of an economic and social ecosystem. This approach focuses primarily on the interactions between different actors, such as entrepreneurs, companies, investors, academic institutions,

government agencies, customers, and suppliers, within the ecosystem. It aims, first and foremost, to promote collaboration and cooperation between the different actors involved in order to stimulate innovation, economic growth, and value creation. It is worth mentioning that the entrepreneurial ecosystem approach acknowledges that entrepreneurs do not succeed alone. They can be influenced by their environment, but can also have an impact on that environment. This approach highlights the importance of connections and relationships between the different actors within the ecosystem. It also emphasizes the need to develop mechanisms that support entrepreneurship with appropriate infrastructure. It is worth mentioning that this approach has been widely recognized as an effective way to foster entrepreneurship and innovation. It encourages the creation of an environment conducive to the emergence of new businesses and the growth of existing ones while promoting sustainable economic development and improving the quality of life in a given region.

### **2.3. The concept of the entrepreneurial university ecosystem**

The ecosystem approach to entrepreneurship education, as described by Toutain et al. (2014) <sup>(10)</sup>, focuses mainly on understanding all the elements that interact and influence entrepreneurship training. It should be noted that this approach considers that the educational environment as a whole plays a crucial role in the functioning of entrepreneurship training systems.

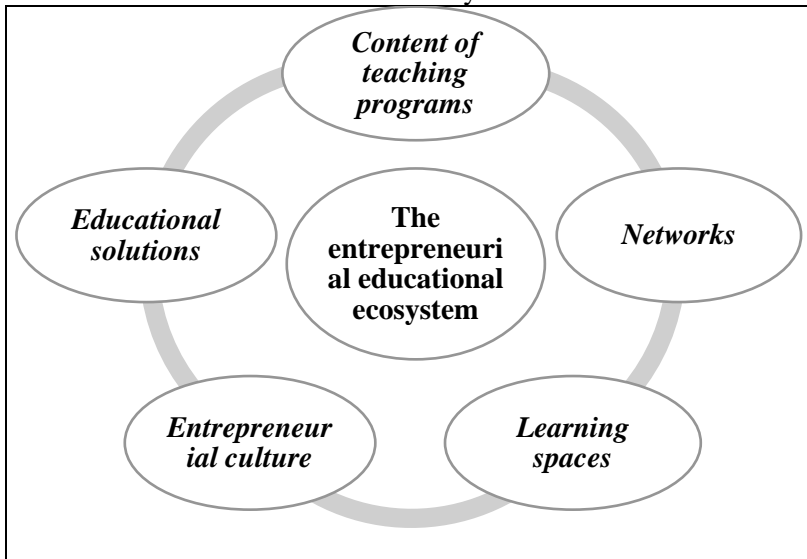
The underlying idea is that learning entrepreneurship is not just about acquiring skills and knowledge directly related to starting and running a business because this type of learning can also be influenced by numerous external factors, such as culture, institutional support, available resources, partnerships with local businesses, mentors, etc.



Moreover, by adopting an ecosystem perspective, educators and those individuals in charge of the entrepreneurial training seek first to better understand the interactions between the five dimensions that make up the entrepreneurial educational ecosystem and second to optimize the educational environment with a view to promoting the entrepreneurial learning.

Furthermore, the approach that aims to foster entrepreneurship and innovation within universities and their surrounding communities is essentially based on the concept of the university entrepreneurial ecosystem. This concept acknowledges the key role played by universities as a driver of research, education, and economic development. It essentially endeavors to exploit these resources for the purpose of stimulating entrepreneurship and creating businesses with high growth potential.

**Figure 01:** The five dimensions making up the entrepreneurial educational ecosystem



Source : Toutian et al. (2014), p. 41.

The concept of entrepreneurial educational ecosystem has been characterized and examined by several authors, based on the five main axes described in Figure 01.

✓ ***Content of teaching programs*** - This axis encompasses the knowledge, skills and abilities that are specific to entrepreneurship and are taught to students. This may include courses on business creation, entrepreneurial management, innovation, marketing, finance, risk management, etc. The content of the programs aims to provide students with the necessary knowledge to effectively develop and manage a company.

✓ ***Networks generated by the teaching system*** - This axis relates to all the networks of links and collaborations that are created thanks to the entrepreneurial teaching system. In this case, students may have the opportunity to connect with entrepreneurs, investors, mentors, and even with other operators in the entrepreneurial ecosystem. These networks provide students with opportunities for mentorship, partnership, funding, and access to resources and entrepreneurial opportunities.

✓ ***Learning spaces housing the teaching system*** - This axis focuses primarily on the physical spaces where entrepreneurial education takes place. They can be business incubators, entrepreneurship centers, coworking spaces, or other types of infrastructures dedicated to entrepreneurship. These spaces provide an environment conducive to hands-on learning, collaboration, and experimentation.

✓ ***Type of entrepreneurial culture produced by the ecosystem*** - This refers to the entrepreneurial culture that is developed and encouraged within the entrepreneurial educational ecosystem. It includes all the values, attitudes, behaviors and entrepreneurial mentalities that are promoted by the teaching system. The entrepreneurial culture promotes creativity, innovation, risk-taking, resilience, and entrepreneurship among students.

✓ *Educational solutions* - This is all about the educational approaches and teaching methods used in the entrepreneurial teaching system. This could be project-based learning, case studies and business simulations, work placements, mentoring, coaching, or other. It is noteworthy that the educational solutions aim to actively engage students, promote experiential learning, and develop their entrepreneurial skills.

In this regard, Albertini et al. <sup>(11)</sup> carried out research that was mainly aimed at identifying the key elements that should be taken into consideration when developing an entrepreneurial educational framework. Some of these elements that are worth mentioning are the innovation and personalization of teaching, consultation and mobilization of internal university stakeholders, adaptation of the educational project to the local context, co-construction, and stimulation vectors. This research revealed that the co-construction of a university entrepreneurship education project mobilizes internal consultation as well as the exchange with external stakeholders in the area (businesses, local authorities and professional associations). Furthermore, it highlighted the importance of some university stimulation vectors, such as the university foundation, which play a significant role. All these elements would certainly contribute to creating an environment conducive to entrepreneurship and to promoting the development of entrepreneurial skills among students as well.

It was revealed that the ultimate goal of the university entrepreneurial ecosystem consists of developing a dynamic entrepreneurial culture within universities and academic communities by fostering the creation of innovative businesses, economic growth, and job creation. This undoubtedly helps to strengthen links between universities, businesses, and society as a whole, while promoting the transfer of knowledge and valorization of research.

## 2.4. Presentation of the Algerian ecosystem

It is quite reassuring to know that the Algerian government has put in place a certain number of measures aimed at promoting entrepreneurship in Algeria, which has led to the emergence of several actors who have contributed to the advent of an ecosystem that intervenes at different stages of the creation of a company. Among these measures, it is worth mentioning the:

- **Government institutions** - These are government bodies that play an essential role in promoting entrepreneurship in Algeria through the establishment of policies and programs aimed at facilitating the creation of businesses, simplifying administrative procedures, offering tax incentives, and providing financial support to entrepreneurs through youth support schemes such as ANSEJ(National Agency for Support to Youth Employment), CNAC( National Unemployment Insurance Fund) and ANGEM (National Agency for the Management of Micro Credits).
- **Support structures** - These structures offer support to entrepreneurs by providing services such as workspace, advice, training, networks, and access to financial resources. In addition, they can help entrepreneurs turn their ideas into viable businesses and accelerate their growth with the help of business incubators and accelerators.
- **Investors and venture capital.** Investors are financial actors who can provide capital to entrepreneurs and enable them to start and grow their businesses. They play a key role in financing start-ups and promoting innovation and economic growth.
- **Universities and research centers** - These academic institutions and research centers can boost the entrepreneurial ecosystem in Algeria by providing training and support for entrepreneurship, encouraging research and

technological development, and facilitating transfer of knowledge and technology to the private sector. These institutions may hence play the role of university incubators.

- ***Entrepreneur networks*** - These are forums where entrepreneurs can be in constant contact to share experiences, exchange ideas, and establish partnerships. These networks can be formal or informal, and may provide opportunities for networking, mentoring and collaboration among entrepreneurs.

Promoting collaboration and coordination between these different actors of the entrepreneurial ecosystem in Algeria is highly important for maximizing the advantages that entrepreneurs could benefit from. This objective can be achieved through awareness initiatives, networking events, strategic partnerships, and consistent support policies. It is essential to recall that the ultimate objective is to create an environment that is favorable to entrepreneurial activity, stimulate innovation, promote job creation, and contribute to the economic development of the country.

## **2.5. Support for entrepreneurship**

Nowadays, a significant number of economists agree on the existence of direct links between the number of businesses created and their degree of innovation, on the one hand, and economic growth, on the other. It has been revealed that the performance of support structures for business creation depends on multiple sociological, economic, financial, technological, fiscal, legislative and institutional factors. For this reason, the public authorities in most industrialized countries and some emerging countries are now paying increased attention to these factors, because they are making entrepreneurship a priority for their economic policy.

Furthermore, the increased interest of public authorities in the development of new businesses, i.e. a guarantee for economic and social progress, is the primary reason for stimulating and encouraging research on the theme of business creation mechanisms *ex-nihilo* and mobilizing various support organizations. The results of this research show that, over the last twenty years, entrepreneurship support systems have gradually become established to address the collective challenges in terms of employment, renewal of the economic fabric and to handle the individual concerns of new entrepreneurs <sup>(12)</sup>.

## **2.6. Tools and mechanisms to support entrepreneurship**

Regarding this practical point, Masmoudi Raef <sup>(13)</sup> found out that support tools are generally the responsibility of both private and public structures and organizations. In general, these tools make it possible to define the objects of the organization or the support structure. On the other hand, the support mechanisms are the responsibility of the public authorities and are generally of a political, such as financial support mechanisms (donations, subsidies, credits, development bonuses), regulatory (guarantees, one-stop shop, flexibility procedures), social (exemption from social charges), financial (tax rebate, tax exemption, free zone), logistics (construction of public business hotels, construction of public business incubators, construction of technological poles and incubation centers) nature.

### **2.6.1. Awareness**

According to Chelly A. (2006), entrepreneurship awareness is defined as the willingness to act on a person's acquired knowledge in order to infuse and encourage the act of entrepreneurship. The aim of raising awareness is therefore to influence the entrepreneurial intention of the people concerned <sup>(14)</sup>, particularly

university students. It should be noted that awareness raising is the primary mission of entrepreneurship houses at the university level. This generally occurs through awareness programs and dissemination of entrepreneurial culture. Raising the awareness of students helps them to better understand themselves and their entrepreneurial potential. This may be achieved through entrepreneurial events like study days, educational actions (courses, internships) and seminars on entrepreneurship, by inviting stakeholders from the entrepreneurship community to provide a clear vision on the opportunities for business creation.

### **2.6.2. Support and advice**

Support is usually viewed as a way of helping individuals to create their company, based on the relationship that is established between an entrepreneur and a third party, over time. This assistance approach helps prepare university students to take their ideas and theories towards the design and development of their own business through assistance schemes, such as NESDA (National Entrepreneurship for the Support and development Agency) or ANSEJ. It should be noted that this channel through which university students must go before embarking on entrepreneurship.

It is useful to mention that the name and reorganization of the above mentioned support scheme, i.e. ANSEJ, were officially changed to NESDA by the Executive Decree 20-329 of November 22, 2020.

According to NESDA statistics <sup>(15)</sup>:

- Since its creation, the registration rate of university graduates has increased from 10% in 12/31/2010 to 18% in 12/31/2016.
- A total of 87 Entrepreneurship Houses have been established within the various university centers and Higher

Schools (specialized top-level educational institutions) throughout the national territory.

- An annual action plan was initiated and implemented by NESDA for the creation of entrepreneurship houses. This initiative enabled the completion of 1 623 activities during the period extending from January 1, 2013 to the end of the first half of 2017.
- The rate of micro-enterprise creation by university graduates increased from 6% in 2013, to 13% in 2015, and 18% in 2016.

### **2.6.3. Training**

It is widely admitted today that entrepreneurial training is highly essential for successfully realizing new entrepreneurial projects and for improving students' skills. Training seeks to develop the skills associated with the entrepreneurial spirit. The primary purpose of training is twofold. It first consists of training students and preparing them for future professional situations, through the implementation of specific courses in the field, and second of assisting already established entrepreneurs by meeting all their specific practical demands in management, strategy, accounting, marketing, and others.

### **2.7. The support structure**

Nowadays, a support structure is seen as highly important for the sponsorship assistance of project holders throughout the process of creating their own businesses.



## Definition of the support structure

The support structure is the establishment that is supposed to assist project leaders during the creation of their business. A support structure is generally defined as *an organization that offers entrepreneurial and managerial support, services, and even accommodation* <sup>(16)</sup>. In addition, this structure can also help the entrepreneurs acquire legitimacy that allows them to have access to the resources they need. The main function of these structures is to choose the best coaches who must be able to meet the needs of the people being supported. They also ought to clearly determine the needs of future entrepreneurs.

### 2.8. The incubator

To the best of our knowledge, no universally accepted definition of an incubator has been stated to date. However, several attempts have been made by researchers and practitioners to define this term. Indeed, there are no homogeneous or similar definitions for the word incubator. This term can generally be defined from different angles, depending on its functions and missions, since the concept of incubator is a completely new field that has not yet reached its maturity phase. Furthermore, there is no standardized definition of business incubation because this concept may be associated with various fields (Hamdani, 2006) <sup>(17)</sup>.

- The National Business Incubation Association (NBIA) <sup>(18)</sup> states that *business incubation is a dynamic process of business development*. Incubators nurture young businesses. Incubators support and encourage young businesses. They help new companies to survive and develop during the start-up period, i.e. when they are most vulnerable. They also provide them with practical management assistance, access to financing, and orchestrated exposure to critical business or technical support services.

- According to the AFNOR X50.770 Standard (October 2003), the business incubator is perceived as a reception, accommodation, accompaniment and support structure for project leaders, business creators or business managers of a company less than five years old.
- When the incubator intervenes upstream, i.e. before the creation of the company, certain authors, such as Hackett and Dilts (2004), define the business incubator as a specifically organized environment that is intended to stimulate the growth and development of new businesses. In the same perspective, Carayannis and von Zedtwitz (2005) suggest that *an incubator is a facility that offers project holders, before or after creation of the company, five types of services: access to physical resources, secretarial services, access to financial resources, start-up assistance, and finally networking* <sup>(19)</sup>.

## **2.9. The role of support structures in business creation**

As reported by Paturel and Masmoudi, the effectiveness of a system intended for supporting business creation can be analyzed over three complementary phases, depending on the incubation phases <sup>(20)</sup>. These phases are as follows:

- Before incubation - This is a crucial stage during which the support structures have the main mission of raising awareness, as well as detecting and guiding project leaders. The effectiveness of these structures can be evaluated first on the basis of the capacity of the participants to carry out a proper diagnosis of the project and its leader, and then on the basis of their ability to guide the project leader towards the solutions best suited to his/her needs.

- During incubation - The support structures have the primary mission of supporting, hosting, training, advising and helping project holders throughout the process of bringing their entrepreneurial project to fruition. This phase essentially aims to support the project leader in the effective creation of his company. The performance of the incubation structure at this stage can then be assessed based on its ability to meet the specific needs of the incubated projects, while taking into account their individual positions.
- After incubation - At this stage, effectiveness may be assessed in terms of preparing entrepreneurs for leaving the incubator and also in regard to their successful integration into the broader entrepreneurial ecosystem. This can include establishing measures, such as the survival rate of companies after leaving the incubator, their ability to obtain additional financing, their growth, and their contribution to the local economy. Performance can also be assessed in terms of incubator reputation, entrepreneur satisfaction, and overall success of the incubation program.

It is worth noting that the evaluation of effectiveness, at these different levels, may require specific indicators that are adapted to the local context and to the objectives of the support system. In addition, it is important to take into account the specifics of different industries and business areas in which entrepreneurs operate. The combination of the three above-mentioned evaluation levels makes it possible to have an overall vision on the performance of the system of support for business creation, and also to identify the areas where improvements are required.

## 2.10. Impact of incubators on the economy

Incubators play an essential role in the economic development through the promotion of entrepreneurship and business creation <sup>(21)</sup>. The impact of these two factors on the economy can be highly significant on several levels:

- ***Creation of jobs*** - Incubated businesses have the potential to create new jobs. By supporting and accompanying entrepreneurs, incubators promote business growth and thus contribute to the creation of jobs locally. These jobs can be direct, for employees of incubated companies, but may also be indirect. This may be achieved by stimulating the local entrepreneurial ecosystem.
- ***Innovation and technology development*** - Business incubators are often more focused on innovation and technology industries. They promote and encourage the creation of companies that primarily focus on research and development, new technologies and emerging sectors. These companies can bring disruptive innovations, improve productivity and competitiveness, and contribute to long-term economic development.
- ***Business growth*** - Incubators provide support and resources to entrepreneurs who want to scale up their business and aspire to reach external markets. Incubators may provide access to finance, management advice, specialist training, infrastructure and professional networks. By helping businesses grow to become more competitive, incubators promote economic growth.
- ***Attracting investments*** - Incubators can attract investments into their entrepreneurial ecosystem. Investors, such as venture capitalists and business

angels, are often interested in incubators due to the quality of the projects and investment opportunities they offer. This can stimulate investment in the region and strengthen the local economy.

- ***Outreach and regional attractiveness*** - Incubators help to strengthen the influence and attractiveness of a region or a city as an innovation and entrepreneurship hub.

They can promote the creation of a dynamic ecosystem that brings together entrepreneurs, investors, experts and research institutions. This may help to attract talent and resources, stimulate collaboration, and strengthen regional competitiveness.

### **3. METHODOLOGY**

A descriptive-analytic methodology based on a hypothetico-deductive approach was adopted in our study.

#### **3.1. Hypothetico-deductive approach**

This approach involves hypothesizing, collecting data, and then testing the results to refute or support the hypotheses.

#### **3.2. Data collection**

It is widely acknowledged that the questionnaire is the most powerful tool in collecting the desired information, whether qualitative or quantitative. For this, it was deemed appropriate opt for this tool for the purpose of testing the hypotheses to achieve the set objective.

#### **3.3. Documentary investigation**

Documentary research made it possible to define the entrepreneurship, entrepreneurial ecosystem approach, and

entrepreneurial university ecosystem concepts. It also contributed to determining the different supports and mechanisms for entrepreneurship, identifying incubators, and confirming the impact of incubators on the economy as well. It is worth indicating that the empirical study was developed through a quantitative survey.

### **3.4. Quantitative survey**

The quantitative study was carried out using the data collected online using Google Forms, with single-choice questions, multiple-choice questions, and pre-business start-up needs, based on the Five-Point Likert Scale ranging from *Not important at all* to *Very important*. The respondents are future graduates from a sample of 124 students majoring in different specialties at the Higher School of Commerce. The questions focused on their entrepreneurial approach, the difficulties they faced during the business creation simulation exercise, and the knowledge they acquired from incubation as well. It should be noted that the targeted objective is to highlight the relationship between, on the one hand, the success of entrepreneurial projects, whether in an academic simulation context or in reality, with well-established startups with marketed products/services and, on the other hand, the need for support, particularly that of incubators.

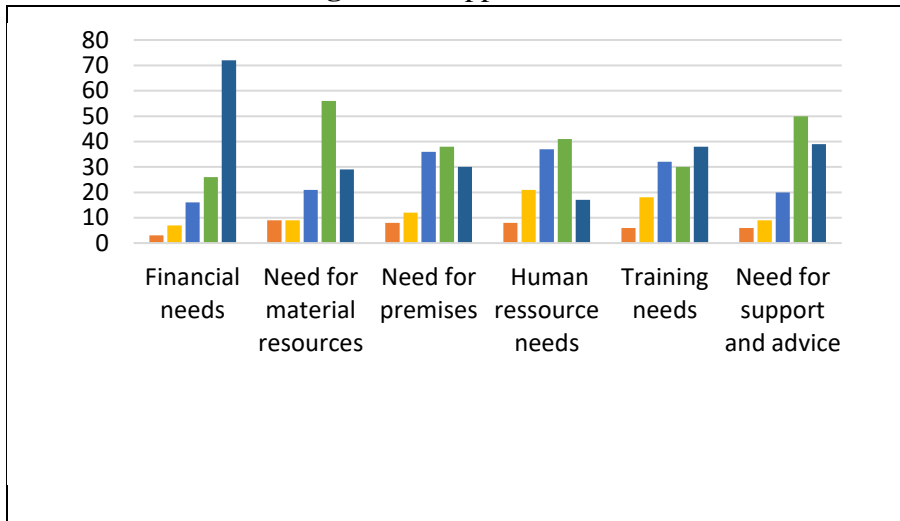
## **4. RESULTS**

Once the necessary data had been collected, they were then analyzed using SPSS (Statistical Package for the Social Sciences) software. The results obtained were then investigated in reference to the state of the art.

Afterwards, the collected data was processed. The findings were then presented in the following:

**Section 01:** Before starting a business

**Figure 2:** Support needs



**Source:** Figure established based on the statistical results of the empirical study.

Close examination of the figure allows concluding that the needs before starting a business are very important for future project leaders, in particular for students at the Higher School of Commerce. The main needs that were identified are:

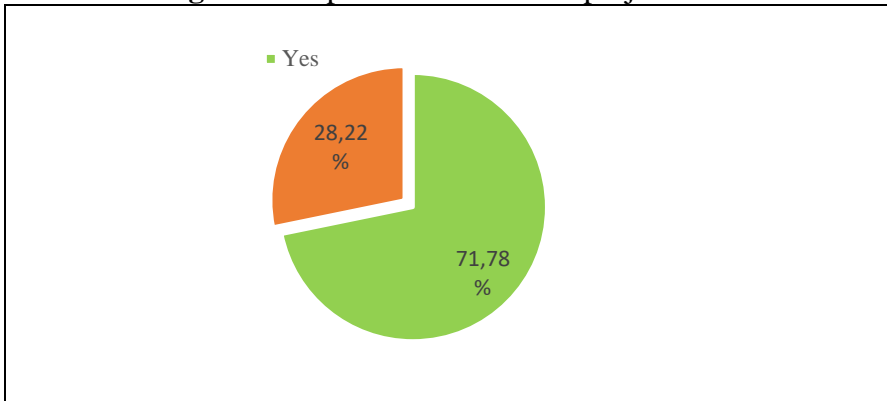
- **Financial needs** - These are considered as the most important needs by the majority of respondents, because it is necessary to have sufficient financial resources in order to be able to start a business, cover initial expenses, invest in infrastructure and marketing, etc.
- **Training needs** - It is highly important that future project leaders benefit from adequate training that allows them to acquire the skills and knowledge necessary to manage a company, and to better understand the financial, marketing, legal aspects, etc.

- **Needs for material resources** - Respondents consider that access to material resources, such as equipment, technologies, premises, is essentially important for the creation of a business.
- **Need for support and advice** - Future project leaders believe that it is imperative to have access to support and expert advice. This may include support from consultants or organizations specializing in mentoring. These can guide entrepreneurs in their decisions and actions.
- **Need for premises** - The majority of respondents consider it essentially important to have suitable premises for their business. A suitable work space with a strategic location is indispensable.
- **Human resource needs** - Some of the respondents indicated that the need for human resources is important. They stated that it is necessary to build a competent and motivated team to support the development and growth of the company.

Furthermore, the different needs were classified by future project leaders. It turned out that most of them preferred to create their startups with the support of the National Entrepreneurship for the Support and development Agency (NESDA). In conclusion, one may state that it is highly important to provide adequate support to entrepreneurs, particularly in terms of financing, training, material resources, accompaniment and advice, access to premises, and human resources.



**Figure 3:** Implementation of the project idea



**Source:** Figure established based on the statistical results of the empirical study.

It was found that 71.78% of a sample of 124 third-year students at the Higher School of Commerce encountered difficulties in turning their ideas into reality. The problems they faced are mainly attributed to two factors. The first one is linked to the lack of orientation, while the second is due to the fear of not having enough support and backing, particularly from the government.

It is noteworthy that 28.22% of the students surveyed did not encounter any difficulty in implementing their entrepreneurial ideas, which suggests that some elements of the sample were sufficiently prepared and supported to successfully carry out their entrepreneurial projects.

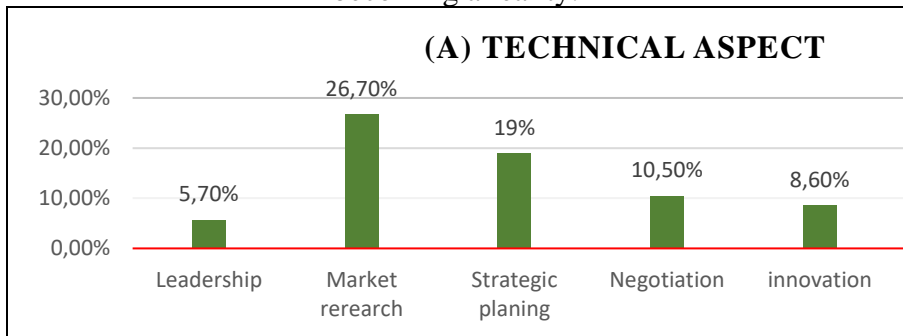
It was found that the lack of guidance may identify as the absence of counseling, resources or clear guidelines regarding the approach the project holders should take to transform his/her ideas into concrete projects. This may engender some uncertainty with regard to the steps to follow and the resources to use.

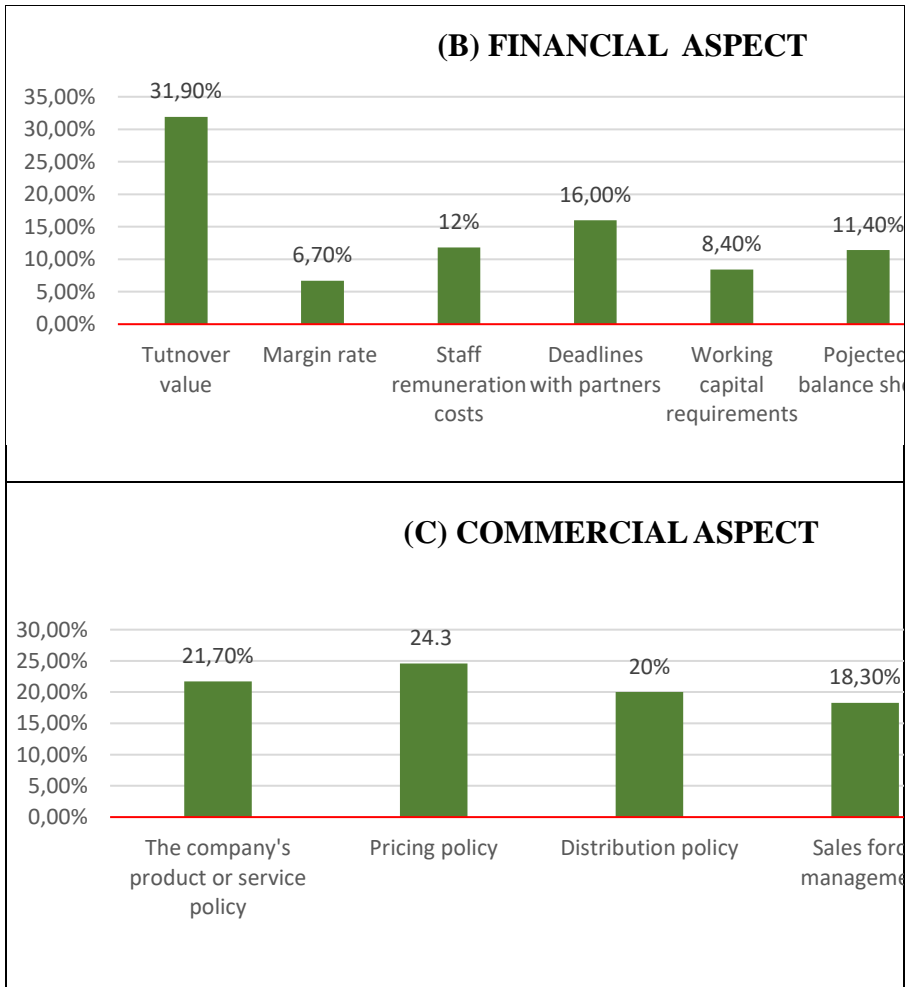
It was revealed that future project leaders may sometimes fear the lack of support and assistance. They may in some cases have

doubts about the availability of financial resources, support structures, mentoring programs, or support policies from the government or other key actors. This fear can be a serious obstacle to entrepreneurship and to the implementation of business ideas as well.

These findings suggest that it is particularly important to provide adequate guidance to students regarding entrepreneurship and to enhance the existing support and assistance, particularly from the government in order to encourage and facilitate the realization of entrepreneurial ideas.

**Figures 4:** The obstacles that prevent the project idea from becoming a reality.





**Source:** Figure established based on the statistical results of the empirical study.

These obstacles can be associated with the following three main aspects.

## **A. The technical aspect**

The results of the study indicate that 71.78% of the students surveyed (future project leaders) encounter obstacles when trying to realize their projects.

It is interesting to mention that 105 of the students interviewed identified some technical obstacles in carrying out their projects. Market research was mentioned as the most common obstacle, with 26.7% of students considering it a major challenge. Then, 19% of these students indicated that it is difficult to strategic planning, which represents a significant obstacle to the realization of their projects.

Other barriers were also mentioned, but with relatively lower levels of importance. For example, 11.4% of students reported that developing a business strategy is an obstacle, while 10.5% of them mentioned negotiation as a critical challenge that must be overcome.

These findings come to point out the different challenges that future project leaders may generally face. Among these challenges, it is worth mentioning market research, strategic planning, building a network of contacts, and other aspects related to commercial strategy and negotiation. This information is required to better understand areas where novice entrepreneurs need support and skill building to succeed in their ventures.

## **B. The financial aspect**

The results obtained show that future project leaders (31.9%) consider that, in the financial aspect, the turnover value is the main obstacle to turning their ideas into reality, which suggests that the students perceive the level of income generated by their project as a major challenge, which may possibly be due to their high

expectations in terms of profitability and financial viability. Next, 22.7% of students surveyed identified the forecast budget as an obstacle to implementing their projects, which means that establishing a realistic budget and managing the necessary financial resources can represent significant challenges for future project leaders.

Regarding other aspects, such as the working capital requirement (WCR), staff remuneration costs, and deadlines with partners, the students interviewed do not consider them as major obstacles to the realization of entrepreneurial ideas, which suggests that the financial aspects are generally viewed as less critical or less alarming in the process of implementing projects.

Hence, these outcomes highlight the importance of financial management in the entrepreneurial process, particularly regarding revenue generation and the establishment of realistic forecast budgets. They also emphasize that it is highly necessary to make future project leaders aware of these financial aspects and to help them acquire the necessary skills that will allow them to effectively manage the financial resources of their projects.

### **C. The commercial aspect**

The results obtained indicate that, in the commercial aspect, the vast majority of future project leaders (92.74%) encounter hindrances during the creation of their projects. One may mention in this respect the obstacles that are due to certain features of trade policy. Indeed, it was revealed that 24.3% of students stated that the pricing policy is a major obstacle, which suggests that future project leaders find it difficult to develop a pricing strategy that is both competitive in the market and profitable for their business. In addition, 21.7% of students consider that the product policy or service of their company represents an important challenge. This may reflect shortcomings in product design and in development or

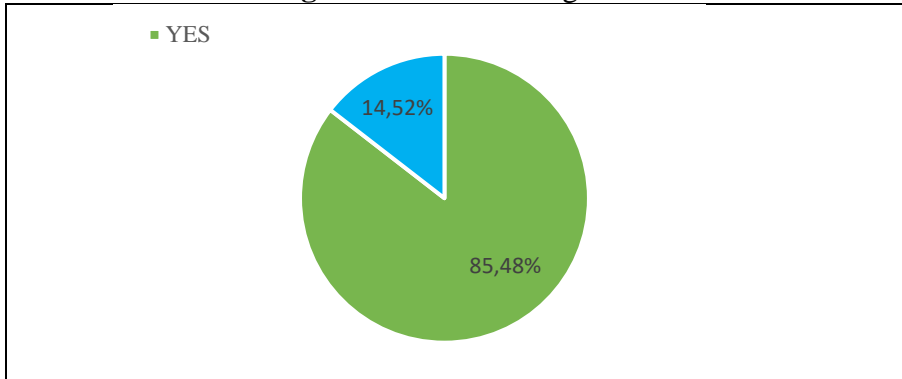
management, in addition to difficulties in identifying the market needs and delivering products that meet those needs effectively. Moreover, 20% of students asserted that the distribution policy is also an obstacle to the realization of their projects, which draws attention to the challenges faced in setting up effective distribution channels, ensuring product availability in the market, and reaching target customers optimally and efficiently.

Finally, 18.3% and 15.7% of students respectively indicated that the management of the sales force and the organization of successive commercial services are serious obstacles, which may suggest the existence of problems regarding the management and coordination of sales teams, as well as difficulties in providing quality sales services to customers.

These findings bring attention to the important role that the marketing and commercial policy plays in the success of entrepreneurial projects. Additionally, they highlight students' gaps in these areas and confirm the need to strengthen their skills in marketing, product design, distribution management, and sales force management. Proper training and support in these domains is very important because it can help future project leaders overcome these obstacles and develop solid business strategies for their projects.

**Section 02:** During incubation

**Figure 5:** The coaching role



**Source:** Figure established according to the statistical results of the empirical study

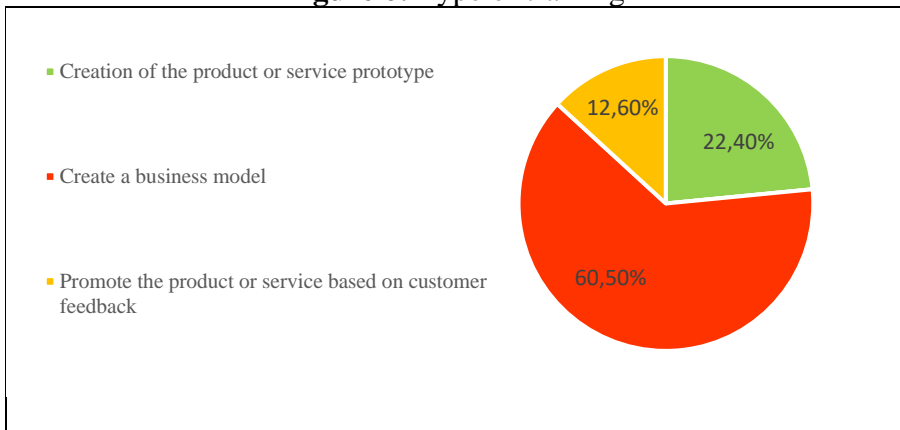
Close analysis of the figure allows observing that the majority of future student project leaders (85.48%) consider that coaching is necessary and beneficial during the incubation phase of their projects.

Coaching refers to the personalized tutorship and support that are provided by experts, mentors or professionals with extensive experience in the entrepreneurship field. The main purpose of coaching is to help project leaders develop appropriate skills, acquire practical knowledge, and overcome obstacles encountered throughout the business creation process.

It is worth noting that the vast majority of students recognize the importance of coaching and therefore show a great willingness to benefit from additional support and external expertise in order to maximize their chances of success. Additionally, they acknowledge that coaching can help them make strategic decisions, develop their vision, refine their business model, and acquire the skills needed to effectively manage their business.

These findings confirm the importance of including coaching and support programs in incubation and support courses offered to entrepreneurs. They also highlight the need to develop partnerships with experts and professionals in the field of entrepreneurship in order to provide future project leaders with the resources and support necessary to transform their ideas into successful businesses.

**Figure 6:** Type of training



**Source:** Figure established according to the statistical results of the empirical study

Based on the preferences expressed by future project leaders, it turns out that the majority of them (60.5%) wish to receive training in the creation of a Business Model, which shows they are all willing to develop skills in designing strong, sustainable business models that define the value proposition, revenue streams, distribution channels, as well as the key partnerships of their company. Likewise, 22.4% of students expressed their desire to receive training in modeling a prototype, a product, or a service, which stresses their interest in acquiring practical skills in creating and visualizing prototypes. This can be critical for testing and validating their ideas before bringing them to fruition.



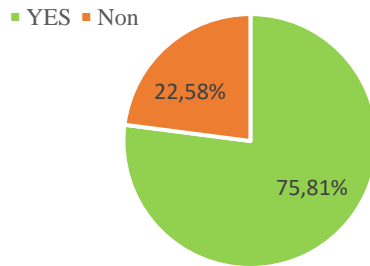
Furthermore, other preferences, such as data science training that can help future project leaders understand and analyze data to make informed decisions, were also mentioned by students. In addition, some of them wished to receive some specific training in their field of activity because they believed that this would allow them to develop in-depth expertise in their specific sector of activity.

It should also be pointed out that promoting a product or a service based on the customer's feedback was mentioned by a small percentage of students only. This could suggest that some of them either view this skill as less of a priority or that they have not yet realized its importance in the business development process.

These results underline that it is highly important for future project leaders to acquire specific knowledge and skills to realize their ideas and projects. They highlight the need for tailored and suitable training courses in areas such as creating a Business Model, prototype modeling, data science, and aspects specific to the field of activity. These training courses can play a vital role in preparing future entrepreneurs and enabling them to turn their ideas into viable and successful businesses.

### Section 03 : Post incubation

**Figure 7:** Notoriety of support structures (incubators)



**Source:** This figure is established according to the statistical results of the empirical study

It is highly interesting to note that the majority of students have some knowledge about entrepreneurial support structures, such as incubators, which confirms the importance of these structures in the entrepreneurial environment and shows the recognition and appreciation of their role in the development of projects.

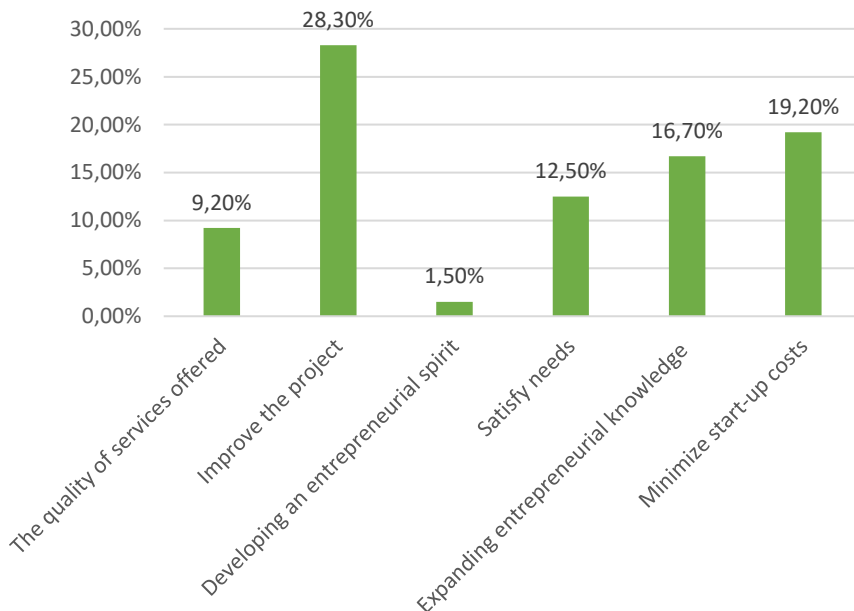
Furthermore, the fact that the students have a critical vision on the development of a project and on the relevance of the actions to be carried out for good support testifies that they understand the importance of possessing adequate support throughout the entrepreneurial process. It should also be noted that incubators often provide project leaders with personalized support, along with advice and resources that allow them to strengthen their professional career and ensure the success of their projects.

In addition, it has also been revealed that incubators play a major role in promoting the experience and professional background of project leaders. These structures often provide opportunities for learning, networking, and skills development,

which can be extremely valuable to budding entrepreneurs. They allow project leaders to acquire hands-on experience, benefit from expert advice, and create connections with other actors in the entrepreneurial ecosystem.

The above findings indicate overall that students acknowledge the fact that entrepreneurial support structures, such as incubators, are significantly important and indispensable. They also appreciate their role in the development of projects and in the professional advancement of project leaders, which underlines the importance of promoting and supporting these structures in order to encourage entrepreneurship and ensure the success of projects.

**Figure 8:** Choosing the incubator



**Source:** Figure established according to the statistical results of the empirical study.

The data shown in the figure suggest that future student project leaders mentioned several reasons for choosing support from an incubator. The main reasons mentioned for that choice are for:

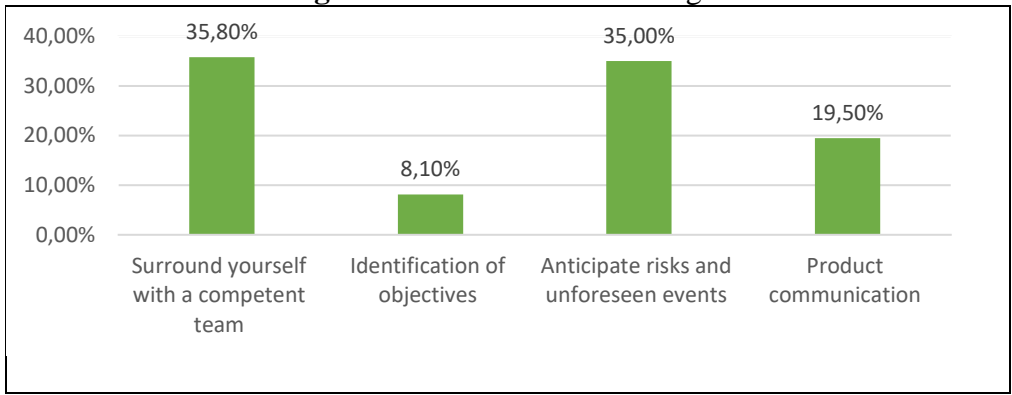
- **Improving their projects** - A rate of 28.3% of respondents mentioned this reason, which implies that students agree that support from an incubator can significantly help improve the quality and viability of their projects. They are also aware that it is highly important to obtain advice, feedback, and additional resources that can help them develop their ideas and bring them to fruition in a solid and more sustainable way. Then, 19.2% of respondents mentioned the reason of insufficient project launch costs because they believe that innovative projects can probably require significant financial resources for their development. It should be noted that, by opting for support from an incubator, students hope to benefit from financial support, subsidies, or shared services, which could help reduce the costs of launching their business.

- **Expanding entrepreneurial knowledge** - This reason was mentioned by 16.7% of respondents, which suggests that students agree that the incubator can offer significant potential for learning and skills development. Students wish to acquire in-depth knowledge in the entrepreneurial field, to understand the principles of business management, and to develop the necessary skills that allow them to succeed as entrepreneurs. Finally, 12.5% of respondents mentioned the reason to develop their entrepreneurial spirit and satisfy their needs. This suggests that some students are looking for an environment conducive to entrepreneurship, in which they can feel supported and encouraged in their entrepreneurial aspirations. They also want to benefit from services and resources that meet their specific needs as project leaders.

The observations mentioned above underline the real motivations of future student project leaders in choosing support

from an incubator. They highlight the perceived importance of improving projects, reducing costs, acquiring entrepreneurial knowledge and personal development. These factors can play a key role in students' decisions to engage with an incubator to support their entrepreneurial projects.

**Figure 9: Post-creation challenges**



**Source:** Figure established according to the statistical results of the empirical study.

The data presented in the figure clearly show the needs of future student project leaders during the post-creation phase of their projects. The main observations are given below:

- ***Surround yourself with a competent team*** - This preference was mentioned by 35.8% of the respondents, suggesting that students consider it highly important to build a competent and complementary team that can help improve their innovative ideas. They understand that teamwork and collaboration are essential for making their projects evolve and for taking them to a higher level.

- ***Anticipate risks and unforeseen events*** - This aspect was cited by 35% of respondents. They consider this issue as their main post-creation challenge, which indicates that project leaders are well aware of the existence of risks and uncertainties after the creation of a company. They also recognize that it is absolutely necessary to

develop skills in risk management and strategic planning in order to face potential challenges and ensure the sustainability of their projects.

- ***Product communication*** - This issue was mentioned as an important challenge by 19.5% of respondents, meaning that they all recognize the importance of communication and marketing in order to promote and market their products or services. They clearly acknowledge that effective communication is essential to reaching their potential customers and ensuring the success of their business.

- ***Identification of objectives*** - The need to define clear objectives was expressed by 8.1% of respondents, indicating that some students consider that determining precise objectives is a serious post-creation challenge. They recognize the importance of setting strategic and measurable objectives for the purpose of guiding their actions and evaluating their progress.

To sum up, one may say that the results obtained clearly present the needs of future student project leaders in the post-creation phase of their projects. These needs include building a competent team, anticipating risks and unforeseen events, communicating about the product, and setting clear objectives. These observations underline the challenges that entrepreneurs may face after establishing their business and confirm the need to develop specific skills to meet these challenges successfully.

## **5. CONCLUSION**

The primary purpose of entrepreneurship consists of building wealth throughout the creation of business. Entrepreneurship plays a fundamental role in stimulating employment, encouraging innovation, promoting economic growth, and creating social connections.

The Algerian University, like many other foreign universities around the world, has launched many entrepreneurship training programs with the intention of improving the entrepreneurial approach through the establishment of entrepreneurship and innovation support schemes.

It is widely admitted that embarking on entrepreneurship is not an easy task. In general, novice entrepreneurs are often faced with a journey strewn with pitfalls, regardless of the strength of the idea or project. It is important to know that ignoring these challenges can lead to problems that will be difficult to overcome and that could endanger the entrepreneurial project.

No one denies that incubation can provide future graduate entrepreneurs with the necessary support that can certainly allow them to be better prepared in order to understand the economic environment in all its complexity. Indeed, the support offered by the incubator to the project leader during the process of business creation is of great benefit to his future.

The present research work was carried out with this vision. Its primary purpose consists of clearly showing the role of the incubator in entrepreneurial support for project leaders. Therefore, this practical study was carried out based on a questionnaire survey. Interesting findings were obtained and made it possible to test the two hypotheses proposed below.

The first hypothesis, which states that the incubator intervenes to help project leaders, in particular future graduates, throughout the business creation process, before, during, and after creation of the business, by trying to meet all their needs, has been confirmed. Then, the present study allows deducing that support from the incubator provides project leaders with personalized support, resources, advice, access to networks, and financing opportunities, with a view to promoting the success of their entrepreneurial projects throughout the entire business creation process, that is from the initiation phase, by providing support during the design and development process, until the last phase, which is the start of the project.

Likewise, the second hypothesis, which specifies that incubators play a particular role in promoting the entrepreneurial spirit and supporting project leaders, particularly future graduates, is fully verified. Indeed, incubators offer personalized support, access to resources and networks, as well as opportunities for validation, risk reduction, and financing. Their contribution is essential to support project leaders in their entrepreneurial journey and increase their chances of success.

Incubation support aims to achieve the objectives given below:

- Make the entrepreneurial project successful,
- Assist project leaders and support them in their entrepreneurial journey,
- Provide them with the various resources that are necessary for the realization and development of their business projects,
- Help them acquire the necessary skills and know-how to make them more autonomous and better qualified to manage their business and succeed,
- Guide these project leaders and satisfy their needs in order to successfully achieve their goals.



The findings of this study allowed drawing the following remarks:

- The incubator is highly important for helping young entrepreneurs to develop and grow new businesses and startups,
- It is possible to create a Venture Capital industry ex nihilo with the assistance of the government. In this case, the State invests in the creation of Venture Capital companies and takes a percentage of incomes and entrusts a part to private professionals who are responsible for managing the activities and profitably reselling the shares <sup>(22)</sup>,
- The Start-Up Chile program, which is a start-up incubator or accelerator funded by the Chilean government, may be taken as a model. This government program selects start-ups from around the world and supports them in their development by offering them capital participations without compensation, support, investors and advisors to start the business and work visas to facilitate their establishment in the country <sup>(23)</sup>.

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