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Research Article

Role of Circular Start-ups Incubation in the Entrepreneurial Dynamism of Territories

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Abstract

Through this paper, we aim to present the role of entrepreneurial incubators in improving territories through entrepreneurial dynamics. In this paper, we aim to study entrepreneurial incubation based on a broader concept from the theory of organizational learning and the theory of knowledge spillover. Our question regarding the relevance of incubators and its impact on territorial development will be justified by the comparison of two eminent theories, namely the theory of structural contingency in transition to the organizational learning theory. By asking this question, we will explore the role of incubators as a lever for the sustainable development of territories and the creation of value. Our exploration will include case studies of incubators and the structuring of their incubation process as well as circular startups and their appropriate strategic positioning to conclude the impact of relevant entrepreneurial incubation on the sustainable development of territories through learning and the three Paturel models.

Keywords

Entrepreneurship, Entrepreneurial Incubation, Circular Startups, Incubation Efficiency, Territorial Development, Entrepreneurial Dynamics

1. Introduction

In a world characterized by increasingly pressing and turbulent environmental challenges, entrepreneurial innovation is emerging as crucial tool, providing innovative solutions for a more sustainable future. In this paper, we are going to explore the exciting landscape of circular startups, companies that are fundamentally rethinking how we produce, consume and re-use resources. Their impacts are not only limited to the environmental sphere but they represent a tremendous opportunity for local and territorial development. Several questions challenge us, in particular: How are these young innovative companies supported in their growth and development? How can we create an ecosystem conducive to their growth and development? Then, how can their success contribute to the construction of an entrepreneurial dynamism? First, entrepreneurial incubation constitutes a fundamental step in understanding the startup creation process [1]. It is based on a process of support carried out by guides and assistants of the latter by granting the material and immaterial resources. Recently, it has become a crucial element in promoting the sustainable development of territories. Thus, incubators are made up of both business creation incubators and private investment incubators (entrepreneurs, financiers, large companies, banks, business consultancy giants, etc.) and incubators financed by local authorities.

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All these incubation logics are integrated to analyze the scope of the young company's project as well as the risk that is dependent on it. However, incubation takes place in a context where existing challenges depend on the preservation of the environment, the creation of quality jobs and the fight against climate change. According to [2], territories are characterized by a lack of continuous dynamics. In other words, they do not scale easily while respecting the challenges of cost and time. This mainly comes down to the slow progress and implementation of the procedures for establishing projects as well as their continuity over time due to the fact that the major concerns of the territories lie mainly in the survival of profitable projects. This is how entrepreneurial support is an essential step in ensuring this objective.

Then, the role of innovative startups focused on innovative environmental solutions play an essential role in the dynamics of enterprising territories. Hence, the concept of the circular economy promotes sustainability, efficiency and reduction of environmental impact. This is how entrepreneurial support becomes an essential step in overcoming these shortcomings. In a context of territorial development, according to-Kustosz,entrepreneurial incubation plays an essential role in encouraging the circular economy in fact encouraging the territory. Our contribution lies mainly in jointly leading the entrepreneurial incubation of circular projects and one of the most emblematic themes in all contexts as well as in all countries, territorial development. Indeed, the fundamental question of this research is the following: How does the entrepreneurial incubation of innovative startups contribute to the dynamics of entrepreneurial territories? The objective is to understand how these startups, by being drivers of the green economy, influence the transition towards a sustainable future by gradually changing the territories into experimental laboratories in phase with the imperatives of the environment using incubators.

2. Entrepreneurial Incubation of Circular Startups

The work of [3] on the entrepreneurial incubation of innovative startups provides interesting insights for exploring the positive impact of entrepreneurial support and the incubation of innovative startups. To this end, we note that the logic of the business incubator and entrepreneurial incubation necessarily responds to this question. First, we offered multiple insights similar to the structural contingency theory by proposing an organizational learning approach and that of knowledge spilover [4] to explain the interactions of incubators and young companies. Then, we highlighted how incubators respond to the creation of value within innovation processes. Finally, we integrated the three models of [5] to understand these interactions as well as their source of relevance for the success of the incubation process. Indeed, based on organizational and learning theories, we have been able to extrapolate the dynamism of entrepreneurial territories.hus constructing an action. Secondly, industrial incubation influences the choices of the hosted company. Finally, university incubation presents a normative form whose actions come from the university. The disciplinary approach considers entrepreneurial incubation as a value creation tool in the innovative logic of startups [6]. Although the startup considers itself as “a production team, within which the organizational income and the creation of value are due to all the factors of production”. Indeed, according to this approach, incubation is the relationship of exchange of resources (material, financial and human, etc.) linking the incubators with the incubated startups. This relationship intensifies the partnership value and the performance of the startup. The third and last current is the cognitive current which integrates learning dynamism into innovative processes in startups [7] as well as the valorization of human capital. In this current, incubation is defined as the set of mechanisms that allow for the best potential for value creation while prioritizing learning, innovation capabilities and skills, for example, by evaluating the ability of the startup to promote organizational learning. Hence, as part of the innovative process, incubation is integrated into the framework of mothering innovative startups with regard to their financial commitment. In this logic, it allows the mobilization of long-term resources for the realization of innovative projects whose role of incubation is projected on the performance of the company. All the same, incubation promotes organizational learning within the framework of the incentive parameter by integrating each actor belonging to the startup in the contribution to the innovative process.

2.1. Holistic Approach to Startup Incubators

Several definitions have been attributed to entrepreneurial incubation [8] Three theoretical approaches are likely to provide a framework for this concept. The starting point lies in the approach of exchange and organizational learning. According to [9] incubation is: ‘’A structure of support for the creation of the company, which provides specialized resources dedicated to the support and assistance of companies before their creation or during the first years of their lives’’. There are many attempts to define entrepreneurial incubation. Several microeconomic approaches define incubation as governing the selection process, notably the approach based on the contractual theory, the disciplinary and the cognitive approach. The first one defines, first of all, the contractual relationship between the incubator and the manager of the startup through a set of mechanisms put in place to maximize the shareholder value of the startup. The young company finds itself at the center of internal mechanisms including a general meeting of shareholders, board of directors and external mechanisms namely financial market, market of goods and services... The effectiveness of this system results from two essential characteristics, firstly, a preventive character (pro-

tecting against certain conflicts which destroy the value of the company) and a curative character (finding solutions to the conflicts and the challenges faced). Entrepreneurial incubation ensures this essential role [10], it is a crossroads between several "worlds" including government, industry and university. For the first, the incubator exerts a coercive force located at the center of several forces thus constructing an action. Secondly, industrial incubation influences the choices of the hosted company. Finally, university incubation presents a normative form whose actions come from the university. The disciplinary approach considers entrepreneurial incubation as a value creation tool in the innovative logic of startups. Although the startup considers itself as "a production team, within which the organizational income and the creation of value are due to all the factors of production". Indeed, according to this approach, incubation is the relationship of exchange of resources (material, financial and human, etc.) linking the incubators with the incubated startups. This relationship intensifies the partnership value and the performance of the startup. The third and last current is the cognitive current which integrates learning dynamism into innovative processes in startups as well as the valorization of human capital. In this current, incubation is defined as the set of mechanisms that allow for the best potential for value creation while prioritizing learning, innovation capabilities and skills, for example, by evaluating the ability of the startup to promote organizational learning. Hence, as part of the innovative process, incubation is integrated into the framework of mothering innovative startups with regard to their financial commitment. In this logic, it allows the mobilization of long-term resources for the realization of innovative projects whose role of incubation is projected on the performance of the company. All the same, incubation promotes organizational learning within the framework of the incentive parameter by integrating each actor belonging to the startup in the contribution to the innovative process.

Types of Incubators

Following the example of these approaches, [11] have defined a typology of incubators. The incubator then constitutes a transition from a stimulator of initiatives towards an accelerator in the construction of the manager's team for a very limited period. We thus note that numerous criteria can be highlighted to define the incubator independently of the classic definitions discussed. To this end, these authors propose a typology of incubators (Table 1):

Table 1. *Types of incubators.*

Types of incubators	Functions
A "business creation" incubator	These are groups whose main objective is: The development of new products or services offered by entrepreneurs from the angle of related diversification. Conduct market studies using results from research and development units. They are remunerated through a participation in the capital of the company created, so specialization in the core business is part of their specificity compared to other incubators.
A "public" incubator	It is mainly interested in researchers and project leaders coming out of universities and public scientific laboratories. They are mainly interested in innovative companies in various fields of research, mainly public research. Their main objective is to support the remaining entrepreneurs backed by a university research laboratory.
"Private investment" incubators	Constitutions and structures launched by entrepreneurs, financiers, large companies characterized by the following criteria during their operation: 1) A team of experts in management science and areas of business creation. 2) Private investment funds. 3) Strong accommodation capacity. This type of incubator has partially disappeared in recent years due to the fact that they have been bought by banks or even business consulting giants.
Incubators of a research structure or establishmenthigher education	Organizations linked to higher research schools or universities. This is personalized monitoring by teacher-researchers or project racks or a network intended for entrepreneurs.
"Local economic development" incubators	These are incubators financed by local authorities. Their assistance takes the form of logistical services offered, accommodation and assistance services similar to those offered by nurseries. They build links with research laboratories, higher education schools or large industrial groups.

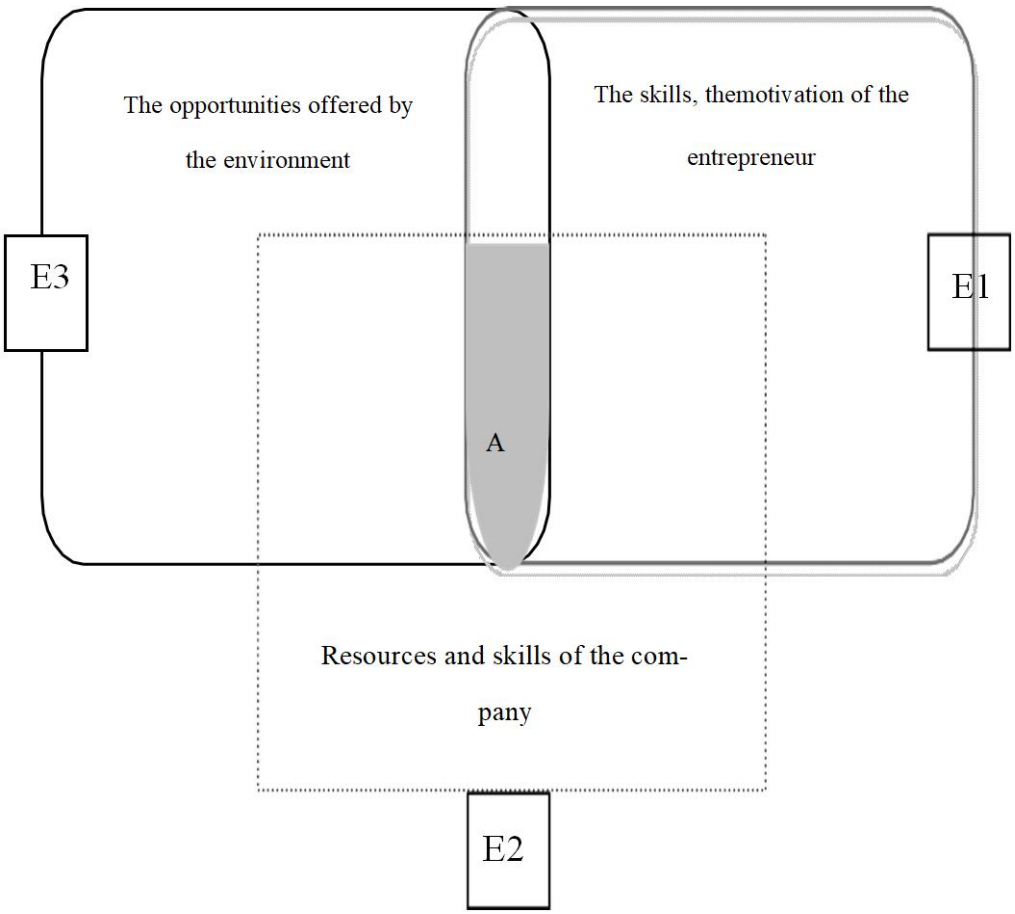
According to Lazonick (1998), business incubators have two essential missions in common, in particular: Promote organizational learning. Thus, simplify the integration of financial and human capital within startups capable of en-

gaging in organizational learning.

2.2. Incubator, Development Tool for Enterprising Territories

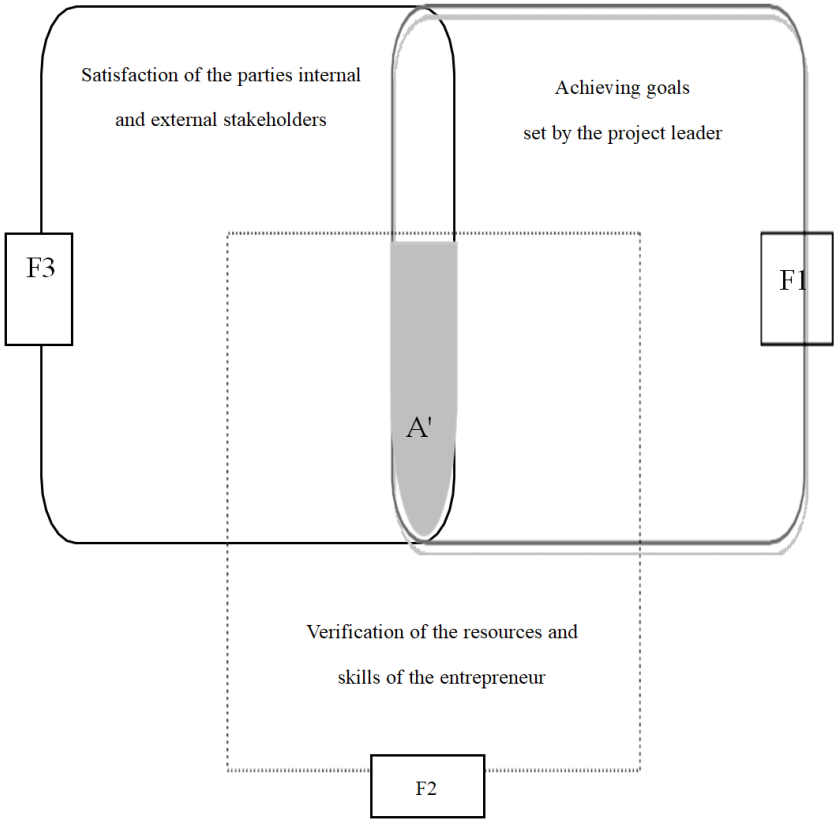
According to [12] the questioning of incubation remains essential and mainly comes from a multitude of interdependent factors linking the company and its environment. This development relating to startup innovation has an indispensable interest for innovative startups in economic growth as well as the market challenge to meet the expectations of innovative startups. According to the work of Etzkowitz (2002), three institutions including government, industry and university influence the startup whose incubator is located in the middle of the three streets. Which understands the confluence of the environment as well as the context on the incubator. According to Paturel (2007), several contingency factors are observed in this sense, including the institutional context [Chabaud et al., 2004], which impact the efficiency, effectiveness and effectivity of this type of structure (3F). As well as, the scope of the project is still influenced by the stakeholders who are dependent on it (project sponsors, namely bankers, incubators, customers, suppliers, etc.). These impact the expectations and the objectives of the startup (3P). For the entrepreneur, the internal organization is impacted by general arrangements and practices emanating from the environment within the framework of mimicry and the profession (3E). By focusing on innovation processes, this interaction is explained by the theory of organizational learning and the theory of structural contingency to achieve a homogenization of practices and arrangements between different institutions (university, government and industry).Thus, according to Paturel (2007), these paradigms better explain the logic of incubators to the extent that the project leader must position it in a coherence between three components for each model, the environment, the entrepreneur and the company. While ensuring effectiveness, efficiency and effectivity.

E1 represents the entrepreneur or the carrier of the circular startup, his motivations, which requires a diagnosis of potential creator. Then, E2 refers to the company or the skills to be integrated into the organization. Finally, E3 integrates the environment that resembles the opportunities offered, whether global, specific or local.



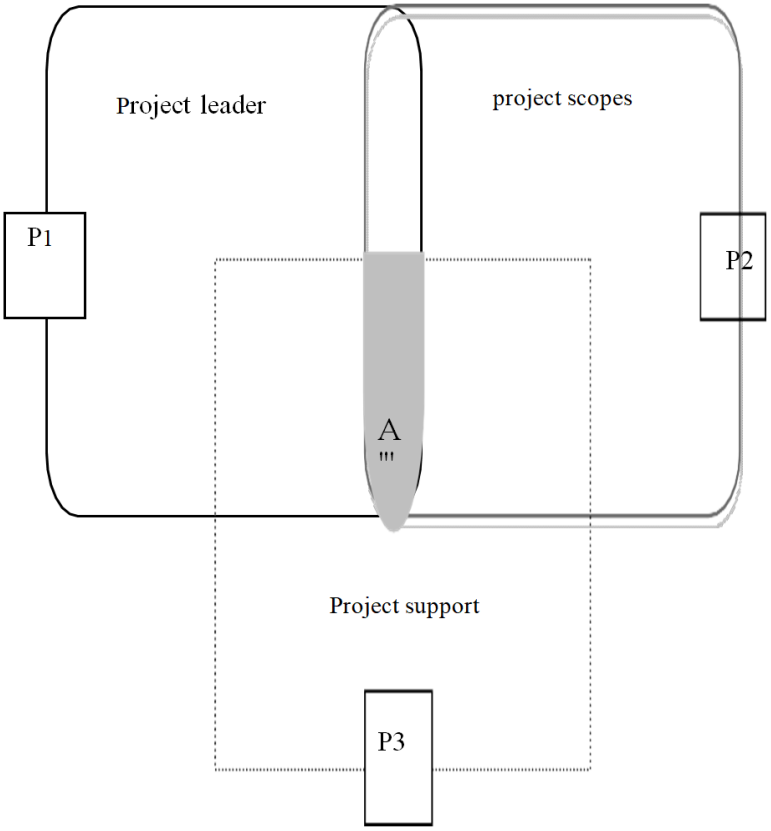
Source: Adapted by Paturel et al., 2007.

Figure 1. *The model of 3E.*



Source: Adapted: Paturel et al., 2007. 3F model

Figure 2. *Paturel et al., 2007. 3F model.*



Source: Adapted: Paturel et al., 2007. 3P model

Figure 3. *Paturel et al., 2007. 3P model.*

This model is explained in the same way as the 3E model. This is a combination of three performance indicators including effectiveness (F1), efficiency (F2) and effectivity (F3). This model also developed by Paturel identifies the Business Plan and the Business model necessary for the realization of the project performance represented in the same way as the 3E model, zone A' constitutes the zone of coherence between the 3Fs.

Finally, the exercise of the power of the project leaders (incubators or bankers, etc.) (P3) over the project leaders expressed by (P1) is carried out by the classic configuration called 3P. This power is reinforced in the situation of novice entrepreneurs and in starting a debit business. Indeed, the expert (incubator) takes ownership by developing a useful business plan for the entrepreneur of the circular startup.

These three models interact in order to respond to the issue of the relevance of incubators in the development of entrepreneurial practices within innovative startups. Etzkowitz notes that the institutional relationship between the environment is positively correlated with the company and its development. This link promotes the growth of locally anchored startups, especially those oriented towards sustainable practices. Indeed, startup incubation offers resources and a network of partners, it allows entrepreneurs to realize their ideas while integrating several economic, social and environmental considerations. These startups in turn generate entrepreneurial vitality for the territories by limiting their ecological footprint and responding to their local needs.

However, Chabaud (2004) questions the effectiveness of this proactive approach advocated by incubators as well as the relevance of this intervention in sustainable and territorial development. Is the projection of these practices transposable? the Knowledge Spillover theory of Entrepreneurship fundamentally explains it. It states that entrepreneurial activity varies from one geographic space to another. These efforts to relativity spatial variations with local characteristics specific to the territory are appropriate to particular regional factors [13]. In the context of innovation, virtual consensus in entrepreneurship is based on the recognition of opportunities and the pursuit of these opportunities [Shane and Eckhardt, 2003]. To this end, according to Sarasvathy et al., (2003, p. 142), "An entrepreneurial opportunity is, thus, constituted at the base of a set of ideas, beliefs and actions allowing the creation of goods and future services in the absence of current markets for them". However, these multiple registrations can become inefficient according to Phan et al (2005), due to the agency problem between the stakeholders of the structure. The intervention of incubator governance makes resource allocation and organizational learning effective.

Depending on the institutional maturity of the aforementioned bodies, the insertion of incubation in the sustainable and economic development of the territory becomes more or less advanced. This embeddedness allows for a conjunction between the three institutional spheres which comes from local productive systems (called LPS). Thus, "The productive dynamic is therefore not induced by a phenomenon of polarization around a large company". The success of some depends on that of others, cooperation, negotiation, but also divergence and conflict allow the actors a typical production [14]. The LPS can be distinguished by the attraction of the most "advanced" skills and the capture of informational rent, these are learning regions [15]. Finally, it can promote learning and innovation as an innovative environment [16].

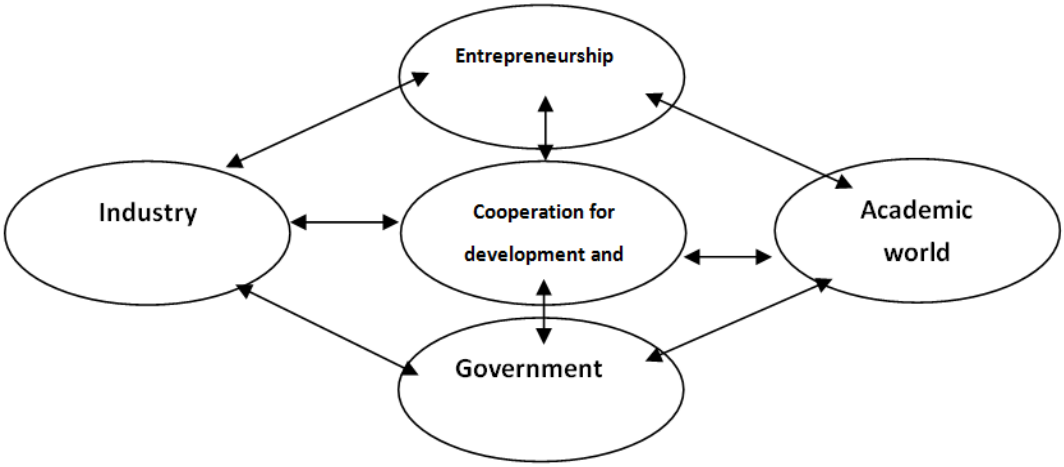
Table 2. *Trilateral cooperation model for developing countries.*

Technopole	Information Technopole service space	Industrial district	Learning region	Innovative environment
Set of heterogeneous actors (public laboratories, technical research centers, financial organizations, users and public authorities) who collectively participate in the design, development, production and distribution of production processes, goods and services (Callon, 1991, p. 196).	Knowledge production center with territorial affiliation (geographical proximity) whose initiatives are supported by local authorities. It maintains numerous partnerships which pushes back boundaries by creating organized proximity in the sense of Rallet, Torre, 2004;Dupuy, Gilly, Lung, 2007).	Socio-spatial entity in a given geographical and historical space (Becattini, 1992, p. 36), collaborating on a typical production or the same product (Garofoli, 1992).	System capable of attracting the most sought-after skills and capturing informational income. The flexibility of its production is linked to its significant intangible capital (Florida, 1995; Maillat, K ébir, 1999;Edquist, Rees, 2000).	Territorialized set in which interactions between economic agents develop through their learning of multilateral transactions generating externalities specific to innovation and through the convergence of learning towards increasingly efficient forms of joint management of resources (Maillat, Qu évit, Senn, 1993, p. 6).

Source: Author.

This model of cooperation places the entrepreneur at the top of this cooperation to highlight that in any policy that concerns him, he must be placed in first position [17]. The interests of entrepreneurs take precedence and guide the rest

of the strategy. The government is placed below the pyramid because it must be involved in the development of appropriate policy. Then, the resources are made available. Without forgetting universities and the academic world. As a result, the startup incubator presents itself as a reflection of this trilateral cooperation.



Source: Author adapted by Brundin et al, 2008, p 94...

Figure 4.*Trilateral cooperation model for developing countries.*

3. Learning Process as a Prism of Analysis

Incubators confirm the organizational relationships between circular startups and their environment of existence. Philips (2002) specifies that despite the problems that can overwhelm the level of trilateral cooperation between the university, the government and the incubator, it remains essential insofar as it allows, firstly, to enrich the territory through job creation by attracting talented entrepreneurs, innovative projects and transforming them into viable businesses [18]. Founders hire employees to help them develop and execute their ideas. For example, a circular technology-focused startup may need engineers, developers, marketers, product managers, etc. Thus, incubation promotes job creation by providing support to entrepreneurs and enabling them to realize their ideas. Then, economic growth so when emerging companies develop successfully, they contribute to economic growth based on their successful development. By attracting investors, circular startups attract funds to develop their products as well as expand their market presence. Through the ripple effect, this consequence makes it possible to increase income, demand a greater quantity of goods and services as well as additional investments in the local economy.

This perspective enriches our approach to explaining the role of entrepreneurial incubation in the dynamics of entrepreneurial territories. Except that the cooperation of the incubator and the university although it enriches the startup in terms of multiple learning as well as the sharing of material and intangible resources. the latter faces some frequent problems such as the cost and loss of time linked mainly to the use of university equipment while still lacking understanding between the parties. This strong adequacy between the three institutional parties means that the valorization of the entrepreneurial territory is one of the major challenges of the dynamic and evolving process based mainly on the process of organizational learning of which human capital and social capital constitute the two cornerstones. Incubation thus constitutes a risk-reducing lever within the framework of this process.

3.1. Learning Process: Relational Prism Between Innovative Startups and Incubators

As part of the entrepreneurial dynamism logic, Deakins and Freel (1998) underlined the interactions likely to exist between the learning process and the training processes. They demonstrated that experience and education influence startup creation performance. This knowledge is then the basis of human and social capital. The latter is fundamentally based on a set of a priori creative actors and networks contributing to the success of the project.

3.1.1. Characteristics of Incubators

Incubators constitute a major vector providing business advice, a business network and technical support. The specificity of incubators lies mainly in this contribution. According to Lewis (2003), this influence lies in the recognition of innovative startups as well as their contributions in economic

terms. This means that this efficiency, although it faces shortcomings, is based on economic and social advantages. Models for evaluating this effectiveness describe this process of learning and value creation well. According to Abetti (1999), these advantages materialize in the simplification of procedures for access to investors and venture capitalists interested in investment opportunities in innovative companies with high growth potential. Thus, it provides a secure environment for entrepreneurs, where they can test their ideas, validate their market and refine their business model advice from the incubator's experts helps minimize risks and costly errors. A wide range of benefits theoretically and practically identified through the intervention of incubators. All the same, entrepreneurs can push the boundaries of technology and explore new business ideas. It promotes innovation by creating a dynamic ecosystem where ideas can be tested, developed and transformed into innovative products and services [19].

3.1.2. Challenges and Opportunities

Several studies have demonstrated the influence of incubators on the positive performance of startups. Colombo and Delmastro (2002) demonstrated, based on a study carried out on 45 incubated technology companies, the importance of the characteristics of the founding manager as human capital in the success of their business project. Based on the knowledge Spillover theory which states that location plays an essential role for the incubator and the incubated company. Namely, local proximity to universities reduces the search costs of incubators and incubated startups. This makes it possible to have a competitive advantage compared to other companies which are not close to universities by mobilizing a workforce with high potential [20]. Incubators, thus, begin by selecting promising startups with strong growth potential by evaluating criteria such as entrepreneurial profile, founding team, business model, target market and viability of the project. Then, they help access financing by establishing partnerships with investors [21], venture capital funds, financial institutions or even government subsidy programs. According to Pena (2004), the results confirm the importance of organizational learning enabled by incubation structures (by influencing employment growth). Incubators help in the formation of human capital and not in the formation of the entrepreneur social capital. This fundamentally involves the provision of a broader business network illustrated by the meeting between all the investors and bankers... Indeed, the learning values of incubators make it possible to develop the opportunities made available to them in collaboration with the human capital of the entrepreneur himself and his determinants [22].

The perception of the project can only be subjective when incubators seek long-term value creation. Indeed, any support and incubation process begins, first, with the analysis of the entrepreneur himself (the project leader). Indeed, the cognitive aspect plays an essential role during the first phase of any project selection. However, the selection of incubated projects is becoming more formalized and regular.

3.2. Incubator: Risk Reduction Tool and Territorial Development Actor

The incubation process is understood as a basis for cooperation and coordination between stakeholders and innovative companies. They can have a positive impact on their local community by responding to unmet social needs, solving local problems or creating innovative products and services. They can help improve quality of life, stimulate local economic activity and attract other talent and investment to the region as well as reduce unemployment and stimulate the local economy. According to Cable (1997), the incubator improves personal similarities between actors by reducing time pressure for future investors through the enhancement of human capital and the transcription of information [23].

The role of incubation is then part of intermediation between actors belonging to the same entrepreneurial territory. Despite the difficulties that entrepreneurs face in terms of financing, this intermediation should reconstitute the missing link between all the designers who do not have the necessary determinants to access bank financing and investors capable of risking at high rates [Geoffron, 1990]. Indeed, the existing relationship between the incubator and the entrepreneur is legitimately based on trust. Incubators ensure a reduction in time and costs due to the fact that the key ingredient of any start-up entrepreneur is to avoid maximizing the initial stages of the project analysis and evaluation processes. This learning process is therefore based on a cognitive aspect ensuring:

Partnerships: Incubators promote networking between startups, mentors, investors and other actors in the entrepreneurial ecosystem [24]. This can be achieved by organizing regular events, conferences or networking sessions, as well as creating synergies with other incubators or similar organizations.

Mentoring and coaching: Startups need solid support and mentoring to succeed. Incubators provide a network of experienced and knowledgeable mentors [25] capable of guiding entrepreneurs in different areas such as business strategy, product development, marketing and legal aspects.

Duration of incubation: Some startups may require more time than expected to reach maturity and growth [26]. Incubators should be flexible and adaptive, offering incubation period extensions where warranted. They can also explore long-term incubation models or post-incubation programs to support startups in the long term.

Impact assessment: It can be difficult to measure the real impact of incubators on the growth and success of startups. Incubators can set up key performance indicators to track the progress of incubated startups, such as revenue generated, jobs created, partnerships established or funding obtained.

According toPlosila and Allen (1985), incubators manage to overcome these obstacles given their experience when they manage to provide an environment favorable to the growth

and success of startups by maximizing their chances of prospering in the market.

4. Case Studies

Our exploration of the impact of incubators relevance on territorial development is based on a qualitative study of different multi-sector circular startups operating in multi-sites. The objective being to explain, refine and complete the literature review in entrepreneurship. Thus, we explored revealing cases to strengthen our knowledge of the phenomenon. First, these are a few startups dealing with different products and services operating in the moroccan context regardless of their wealth or their economic growth. Then, these cases succeeded in their hybrid missions of achieving social and responsible stability and viability while creating significant social value within their home territory through entrepreneurial incubation despite all the difficulties and challenges overcome. Since their creation, these startups have experienced growth and a significant presence in the circular environment as evidenced by the continuous improvement of consumers and applicants for their products and services benefiting from their entrepreneurial activity, as well as their geographic presence and their diversified products. According to (Eisenhardt et al, 2016), such examples present more opportunities to examine unique and isolated cases in depth.

4.1. Sample and Data Collection

Our data collection is based on discovery and exploration. Its importance is confirmed when we are in the presence of a phenomenon rarely studied in the literature but also in empirical phases. We carried out a description [27]. This is a completeness of existing knowledge [28].

To improve the credibility or validity of this qualitative research, we used multiple sources of primary data (interviews) and secondary data (Documentation) throughout: (i) Semi-structured direct interviews with guides (experts) (ii) Archived documents (public personal profiles and media) (iii) Direct semi-structured interviews with startup project leaders.

4.1.1. Sample Description

To explore this phenomenon in more details, we've interviewed incubators and startup project leaders (Table 3). To answer the problem that we are striving to satisfy, we've studied cases using the non-participant observation method. Our focus is materialized in the study of the impact of entrepreneurial incubation of startups on the development of territories whose explanatory variables are the effectiveness of entrepreneurial incubation as well as the incubation process relevance of the innovative startups incubated and the variable to be explained lies in territorial development. To ensure an exhaustive vision of the functioning of incubation, we chose a restricted sample of 6 cases respectively 3 cases of incubators including Near East Foundation, Emerging Business Factory and Bidaya as well as 3 cases of incubated startups multi-sectors and multi-sites, namely Beldi Soul (textile, clothing and sewing sector), Bel Y Partners (international export sector of local products) and Fastoosh (IT sector, software, information systems and websites).

Table 3. *Sample of territorial incubators.*

Three incubators interviewed							
Case: Code	**Sector of activity**	**Years of creation**	**Size**	**Training of manager**	**Gender**	**Types of projects incubated**	**Duration of interview**
Emerging business factory(EBF)	Digital, E-commerce, Media, Connected objects	2015	Up to 15 companies (5 to 6 per year)	DESA (History of science)	M	Telemedicine, E-Commerce, Media Agency, Precision Agriculture	30min
Near east foundation(NEF)	Training Networking and support	-	130 companies in 8 provinces in the region	ISNTIC (Technical manager specializing in business management)	M	Tourism, construction, craftsman, service, industry	1H
Bidaya(B)	Social and environmental entrepreneurship	2015	22 Startups per year	Management	F	Leather: Making leather goods using fish waste; domain support for artisans (especiallyin rural areas).	1H

Table 4. Sample of incubated startups.

Three incubators interviewed						
Case: Code	**Sector of activity**	**Size**	**Training of the manager**	**Gender**	**Years of incubation entry**	**Duration of interview**
Beldi Soul (BS)	Creation of clothing and fashion accessories for men and women "Manufacturing of fabric masks in Morocco Covid19"	Small	Mediterranean house of fashion professions (Marseille) fashion	F	2020	45min
BEL Y Partners (BYP)	Marketing organic Moroccan drawer products internationally (export)	Small	French school of technical education (strategic management and business management)	M	2017	1H
Bidaya(B)	Online sale of video animations	Startup	ISTA HH1 DTS in IT development	M	2018	1H

4.1.2. Description of the Incubation Process Within the Incubation Structures

We've developed the interview guide for incubates in the same way as for incubators. Through their life stories, we seek to know how the incubation process is understood. As well as, the variables which contribute to the understanding of the latter and these models but also the impact of relevant incubation on the development of the territory.

We prepared our open questions in advance while classifying them in a logical order and by theme. Their questions must deepen the description of situations through their life stories. In other words, the interlocutors must respond and describe their experience in depth. Which just justified the explanatory objective of our research. The aim is to give the interlocutors chance to develop their answers and broaden their field of reflection. This is how we put in place two interview guides addressed to the 3 incubators (Managers of the incubation structures) and the 3 incubated project leaders (Entrepreneurs). Based on their life stories, we can understand the processes of business creation based on the three phases of incubation. In particular, pre-incubation phase (phase of triggering the idea), incubation phase (Entry into force and creation of the company) and post-incubation phase (Placement of products on the market).

4.2. Coding of Qualitative Data

4.2.1. Pre-structuring Categories

Coding or even codification mainly involves a simple principle, in particular that of attaching to each category or subcategory a theoretical variable with which we work. This requires a unit of discourse analysis. In our approach (cited by Lincoln and Guba; 1985), we will focus on the smallest unit making sense in itself. In other words, codification refers to fractions of verbatims having a similar meaning or which refer to the same theme. In this case, depending on the verbatim segments, the unit of meaning corresponds to segments of very different sizes. There is a set of coding families proposed. Coding includes two levels: open coding and selective coding. However, another type of coding was added in this regard by [Strauss and Corbin, 1998], notably axial coding which is grouped with selective coding in general coding. On the other hand, Charmaz (2006) demonstrated, drawing inspiration from the coding techniques of Strauss and Glasser (1967), that axial coding offers an analytical framework that can be more rigid and can give a limited vision of the phenomenon. The two qualitative data analysis software adopted are Atlas ti and Nvivo.

4.2.2. Parent Categories of Incubates

We opted for weak pre-structuring of the codes. We opted for three main key categories based on the interviews distributed to incubators the main categories are: (2) Project leader or entrepreneur, (3) capacities and (5) Network (Environment). However, it proved essential to add a fourth category, notably Process. Due to the fact that in our interview, we focused on the appreciation (or criticism) of the procedures and approaches carried out during the incubation process. At the same time, complementary parent categories can appear including (6) Motivations to refer to the impulses which can stimulate the entrepreneur to have the idea of creating the project and entering into incubation. The isolation of this category comes down to the fact that the interlocutors consider their motivations in a field elsewhere far from their characteristics as entrepreneurs. (7) The role of the incubator constitutes an essential element for the realization of the entrepreneur's project, which will allow him to achieve coherence between his intentions and his environment. However,

with regard to (1) The introduction, in this category it concerns all the necessary information relating to the activity of the company, profile of the entrepreneur, year of creation of the company, company size, sector of activity, name of the incubator and year of entry into incubation.

4.2.3. Parent Categories of Incubators

Starting with the parent category dedicated to ((1) the introduction, in this category resembles all the necessary information linked to the incubation structure in particular the year of creation, sector(s) of targeted activity, type(s) of companies and/or projects incubated (Examples of projects), size, incubation or hosting capacity, types of partners and nature of relationships).

It follows three other parent categories falling within the scope of the incubation phases, notably (2) engagement in the face-to-face network, in our case this is the pre-incubation phase, referring to the theoretical side of our 3P study; project leaders/project scope and project sponsor. (3) incubation process, it is a question of discussing the sequence of the incubation phase in terms of contributions and interest of this process. (4) Post-incubation, this is the last stage mainly relating to the judgment of the interlocutors on the 3Fs linked to effectivity, efficiency and effectiveness; in other words, it is about the time and performance that incubators devote to their incubates, but this category is linked to that of territorial development.

Towards the end, we finished our categorization with two complementary categories namely knowledge (5) Network, we prioritized this parent category over that linked to post-incubation due to the fact that it is essential to treat external contributions from stakeholders as well as the advice required from them to develop the incubation process. Subsequently, it was essential for us to link our research theme in particular entrepreneurial incubation to territorial development to then trigger our complementary category that linked to (6) territorial development through the realization of performance and the contribution of incubators to the community. Like the previous categorization at the level of incubates, the methodology is the main framework for triggering the perception of incubators in this regard.

The coding strategy being grounded theory. As it is a method of qualitative analysis «aimed at inductively generating theorization about a cultural, social or psychological phenomenon, by proceeding to the progressive and valid conceptualization and linking of qualitative empirical data». Due to the inductive nature of our research, we opted for the Bottom/up strategy. There is a coding strategy which begins with the categories, followed by the extrapolation of the data and then the coding of the latter; this process is called "Top/down". The opposite for the "Bottom/up" strategy, It goes from the qualitative data received then the coding, towards the end of the categorization of the latter.

5. Results and Discussion

5.1. Pre-incubation Phase (3P: Project Leader, Project Support and Project Scope)

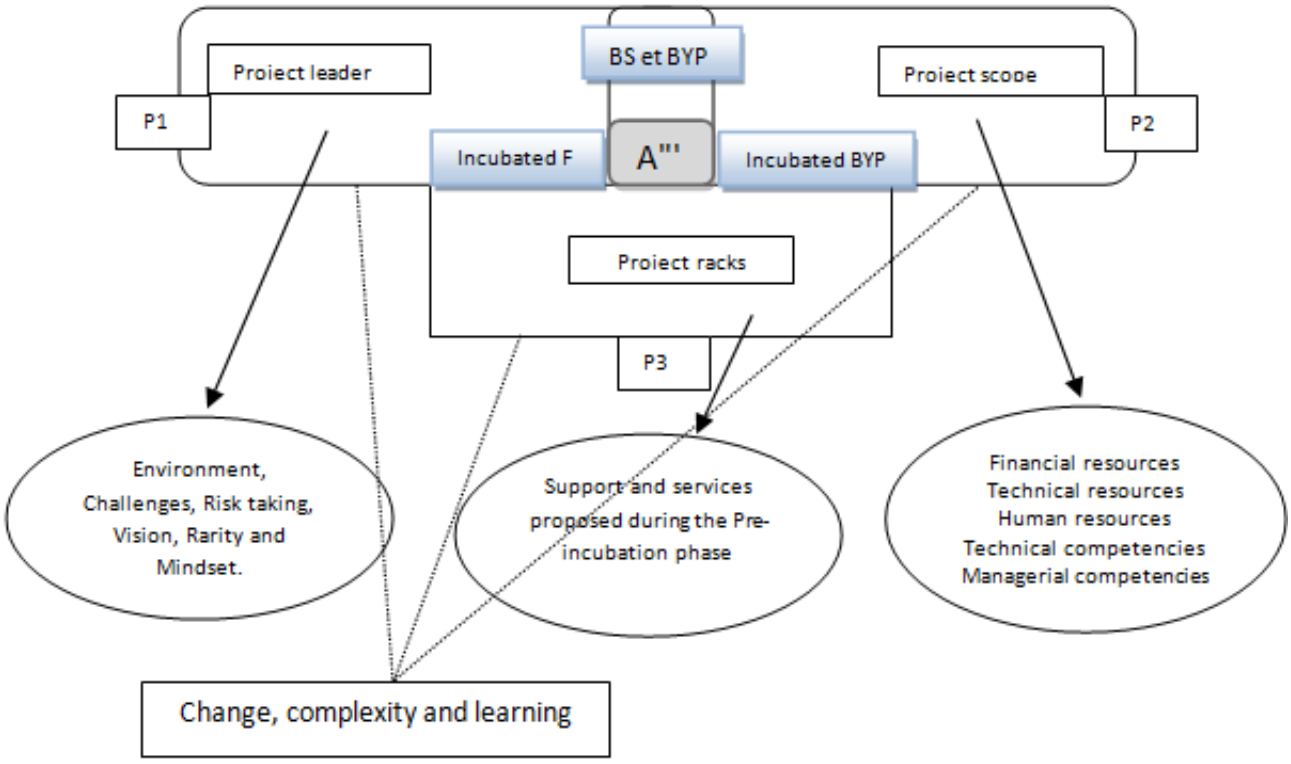
The starting context within the incubation structure. Answers For P1 to which we associated the idea of creation and motivation at the level of our coding, it is based on variables explaining the triggering of the idea in particular: Environment, Challenges, Risk Taking, Vision, Rarity and Mindset. For P2, we associated it with the technical skills linked to the project, through our analysis, it emerges: Financial resources, Technical resources, Human resources, Managerial competencies and Technical competencies. The responses of the incubates interviewed expressed below with ((+) = Possession and (-) = Non-possession).

Table 5. *Perception matrix of incubates in the pre-incubation phase for P1 and P2.*

	E	C	RT	V	R	M	FR	TR	HR	MC	TC
BYP	-	+	+	-	-	-	+	+	+	-	+
BS	+	-	+	+	+	+	+	+	+	-	-
F	+	+	+	+	+	+	-	-	-	-	-
	Motivation and Idea creation						Technical competencies linked to the project				

Project Technicality in the Pre-incubation Phase

The three incubates face four obstacles: Salary comfort, resource needs, lack of skills, restricted network. Their reasons for accessing incubation: Take advantage of the opportunities offered by the environment in terms of suppliers, customers, attractiveness of the sector, the legal and tax domain simplified for beginner entrepreneurs. The solution is concretized then by: Tangible and intangible change and learning.



Source: Author.

Figure 5. *The variables perceived by the BYP, BS and F incubates of P1 and P2.*

PROPOSAL 1:At the start of incubation, no project can be in suitability in the zone A"

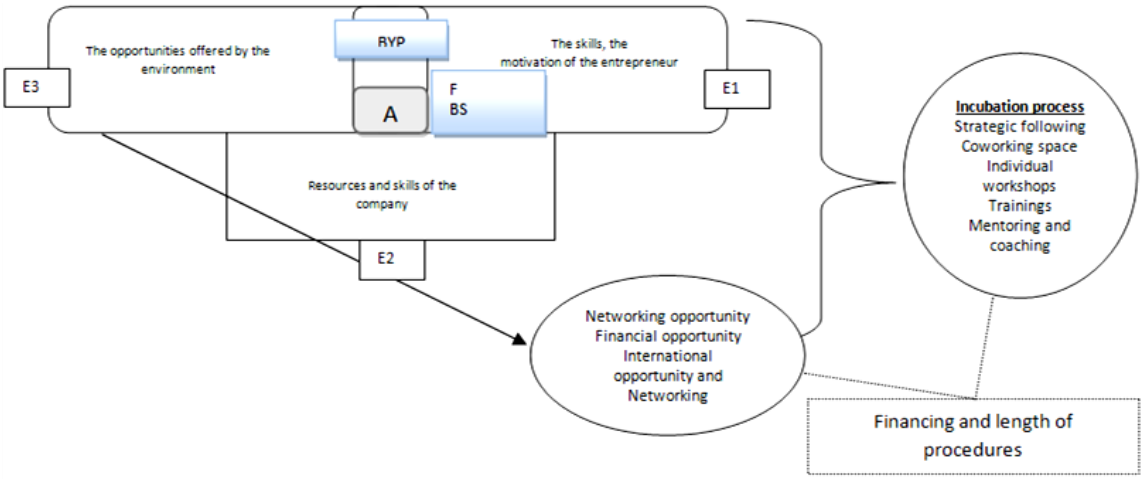
5.2. Incubation Phase (3E: Entrepreneur, Business and Environment)

Entering the incubation phase improves the project into a business because the incubates acquire enough services that allow them to enter the incubation phase. By reproaching this to the 3E model, we will find that E3 reflects the network or the external environment of the incubatee. We find there, following the analysis of the verbatims of our incubates, the following elements: Networking Opportunities, Financial Opportunities, International Opportunities and Relationship Building. As well as for the incubation process, through our analysis of the results, we emerge: Strategic Monitoring, the Coworking Space, Individual Workshops, training and Mentoring and Coaching.

Table 6.*Perception matrix of incubates in the incubation phase for environment and incubation process.*

	SF	CS	IW	T	MC	ON	OF	IO	N
BYP	+	+	+	+	+	+	+	-	+
BS	+	+	+	+	+	-	-	-	+
F	-	-	-	+	+	+	-	-	+
	Process and incubation process steps					Environment opportunities			

Perception regarding the incubation process: Financing difficulties and length of procedures or timing.



Source: Author.

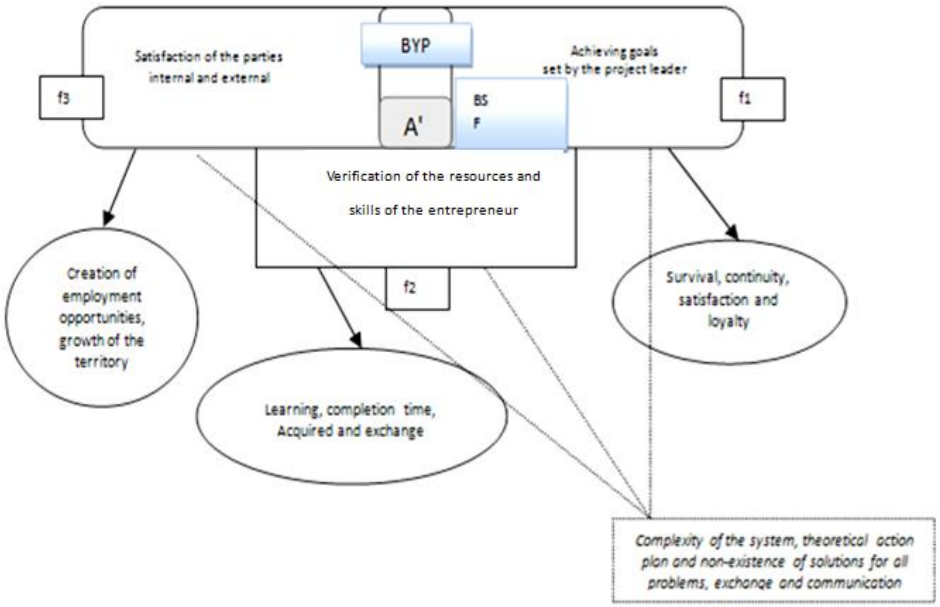
Figure 6.*The variables perceived by the BYP, BS and F incubates for the 3E model.*

PROPOSAL 2: Some projects can be in coherence with zone A thanks to the incubation process

5.3. Post-incubation Phase (3F: Effectiveness, Efficiency and Effectiveness)

The aim is to see if the incubates were actually able to develop their projects via entrepreneurial incubation.

Through our qualitative study, we demonstrated that the incubation process varies from one structure to another depending on the objectives, resources and their areas of specialization. However, the final and primary objective of incubators is to improve business growth and maximize profitability. Indeed, the stimulation of innovative processes plays a crucial role in the transformation of a region into an entrepreneurial territory. This, by promoting economic growth and entrepreneurship. Through market research, sector analyzes and consultations with local experts, incubation often begins with the identification of economic opportunities and promising innovation areas in the region. Developing business plans, accessing initial funding and networking with other entrepreneurs and investors improves the viability of innovative startups, which in turn improves the economic growth of such a region. Without forgetting that by supporting the development of these innovative startups, several jobs are created and therefore improve the quality of life territories so in the world.



Source: Author.

Figure 7. *Perception of performance of BYP, BS and F incubates for the 3F model.*

6. Conclusion

6.1. Research Contribution

The process of entrepreneurial incubation within structures such as business incubators or accelerators is generally understood as a means of supporting and promoting the growth and development of young companies, particularly startups. The main purpose of incubation is to help entrepreneurs turn their ideas into viable and successful businesses. We contributed to the construction of knowledge regarding the discussion of a less developed theme, namely territorial development and incubation practices for circular startups. Indeed, we answered the following questions: How is the incubation process understood within incubation structures? What variables are needed to understand this process and these models? What is the impact of relevant incubation on the development of the territory? In summary, incubation promotes job creation by helping entrepreneurs develop their ideas into viable businesses. It stimulates economic growth by enabling startups to grow, attract investment and contribute to the local circular economy.

Finally, it promotes innovation by providing a collaborative environment conducive to the exchange of ideas and experimentation. Thus, incubation is a catalyst for collaboration between key players in territorial development, namely entrepreneurs, universities and the government. By addressing the key success factors of incubators, we emphasize its essential role in fostering a dynamic ecosystem of innovation and economic and social development. Taking action remains a vital point in the realization of any circular business project. And, that any project leader would not have to develop their project without the full participation of the incubation during the start-up. Our interviews with incubators also demonstrate that strengthening the role of incubation in territorial development constitutes an effective strategy:

First, incubators must work closely with key players in local economic development such as governments, universities, businesses and community organizations. Creating strong partnerships will provide access to additional resources, benefit from expertise and maximize growth opportunities.

Next, access to financing is crucial to support startups in the incubation phase. It is important to explore different sources of funding, including government grants, private investments, venture capital funds, and incubator-specific funding programs. Public and private organizations should be encouraged to invest in innovative startups by recognizing their potential economic impact.

Then, incubators must strive to create an environment conducive to entrepreneurship and innovation. This can be achieved by organizing networking events, conferences, workshops and training to promote the exchange of ideas and knowledge. Incubators can also help facilitate partnerships between startups and established businesses and entrepreneurial supporters in the region.

In the meantime, startups need support and advice specific to their needs. Incubators should provide personalized support to entrepreneurs, providing them with experienced mentors, technical experts and business advisors. This may include advice on product development, growth strategy, marketing and human resource management.

Subsequently, incubators must offer adequate work space and technological infrastructure to support startups. This may include access to offices, laboratories, specialist equipment and support services such as high-speed internet connectivity by facilitating access to these resources, incubators allow entrepreneurs to focus on developing their ideas and products.

Finally, incubators can play a crucial role in the internationalization of startups by helping them access new markets and establish international partnerships. This may include organizing trade missions abroad, participating in international trade shows and fairs, and connecting with potential investors and partners globally. Concluding that incubation is an engine of transformation for communities, a means of unlocking entrepreneurial potential and building a sustainable and prosperous future.

6.2. Prospects for Future Research

This study allowed us to formulate research perspectives. First, we offer a first perspective that integrates a larger sample. Then, it would be possible to conduct a quantitative study to test and analyze this impact quantitatively as a continuation of our study. Then, a longitudinal analysis could well constitute a processual analysis demonstrating the improvement in the intelligence of a specific territory over time and placing the main emphasis on the development of support relationships linked to the three aforementioned phases. Despite the fact that our research cannot be exempt from the limitations noted, linked to qualitative research, the data collection approach, the analysis of the results, the semantic analysis further providing better reliability to the results obtained.

Abbreviations

3F	Efficacy, Efficiency and Effectiveness
3E	Entrepreneur, Entreprise and Environment
3P	Project Leader, Project Scopes and Project Support

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Author Contributions

Hakkou Dounia: Conceptualization, Writing – original draft, Methodology, Funding acquisition, Resources, Visualization, Investigation, Formal Analysis

Elabjani Abdelaziz: Supervision, Software, Data curation, Writing – review & editing, Validation, Methodology, Project administration, Formal Analysis

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Conflicts of Interest

The authors declare no conflicts of interest.

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