

## Sustainable Development of Business Incubators and Accelerators in Romania

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**ABSTRACT:** This paper aims to investigate how a sustainable development of business incubators and accelerators might foster and support the Romanian entrepreneurial environment. The key driving force for choosing to approach this research is a lack of thorough knowledge of the insights of this issue in Romania. Even though innovative ideas and business strategies are becoming more and more popular worldwide, the national business environment still has not fully benefited from their features. The mixed-methodological approach of the research combines quantitative and qualitative analyses. Using a case study, a questionnaire and appropriately applying pertinent models for their interpretation, the study produced a collection of recommendations for professionals and decision makers. The major conclusions show that a new ecosystem is developing in which incubators and accelerators add in the upsurge in the success rates of companies in Romania, generally in recent years. Nonetheless, some systematic problems expose themselves as possible roadblocks in the way toward a possible fully operating incubator and accelerator model, as was previously noted in earlier relevant literature. From a lack of access to many sources of capital to an infrastructure unfit for supporting high-growth prospective companies, these challenges vary. The results show that dedicated education investment might serve and better assist the Romanian entrepreneurial sector. These concepts could have great potential to assist government officials and corporate leaders in improving the local conditions and implementing a sustainable development for the business incubators and accelerators environment in Romania.

**KEYWORDS** – Business Mentorship, Collaborative Approach, Entrepreneurship Support, Innovation, Sustainable Development

### I. Introduction

Today's transformed business environment has emerged from a wave of new technologies, especially information technology and communications, ITC, combined with the ever-increasing power of data. For some, this transformation has offered a chance to get in on the ground floor of a newly invigorated entrepreneurial economy. But that economy seems to be a rather exclusive concept, one that is hard to get into and perhaps even harder to thrive in, especially when trying to grow a business under the influences of the large corporations that seem to benefit most in this new scenario.

During this tumultuous time for the economy, incubators and accelerators represent a potential stimulator for the business environment. Both entities provide newly founded companies with the assistance of various resources and the guidance of mentors, offering them a chance to thrive in the business world.

The programs used in the business incubators and accelerators have proven their effectiveness in the international context. However, Romania has yet to tap into this resource and use it to its full advantage. The study seeks to uncover the reasons for and the factors behind this situation, recognized as a concern by the policymakers, and proposes utilizing as a lever of change the programs implemented in the business incubators and accelerators in Romania. It presents successful international practices, while proposing an action plan to effect change in the entrepreneurial ecosystem in Romania.

Thus, the three main pillars for this study are structured and designed as follows:

- *Why?* Comprehensive knowledge of the insights of Romanian business incubators and accelerators trails significantly. Furthermore, Romania's business environment is still not fully matured and evolved even if it is on a positive route. Investigating what distinguishes normal companies from highly performable ones in Romania was a somewhat uncharted topic and evaluating if business incubators and accelerators could prove useful in this process was a significant reason.
- *What?* This paper delves into the idea of business accelerators and incubators, examines how they affect companies and the startup ecosystem in Romania, and identifies the parties involved, paying specific

attention to Romanian business experts and the overall business climate. An interdisciplinary approach was used throughout the investigation to better comprehend the entities' interaction mechanisms.

- *How?* The main pillar of the study was a mixed model methodological approach, including qualitative and quantitative data analyses. Data was gathered via questionnaire and after a quick comparison analysis with the international background investigated in a case study, all the results were triangulated and the fundamental component of the study was constructed.

The research paper follows an understandable strategy in which all the chapters are linked and follow a logical systematization of the results based on the aims of the research. Therefore, the study starts with the introduction in the ideas under investigation. A Brief Literature Review then provides a better knowledge of the background and analyzes the most closely linked ideas to the research. Recent and pertinent literary references gave the chance to pinpoint the main gaps in study that the next chapters will approach.

The study proceeds with a brief questionnaire in which the results are examined. The results are then benchmarked through an international comparative analysis of best practices. Moreover, the most pertinent findings are displayed and discussed together with a set of conclusions.

## **II. Brief Literature Review**

### **2.1 Education and Academic Influences**

- *Academic Contributions to the Business Environment:* [1] underline that the universities are changing past their normal means, teaching and research aims. According to them, the academic sector now has a third new goal: using company development tools to raise the level of their local and national economies. These writers advocate the idea of international interactions between these entities and the corporate environment.
- *Knowledge Transfer:* [2] surveyed eight main university business incubators for data. Their results draw attention to the requirement of a considerably higher concentrate on entrepreneurship initiatives and a more capacity for academic incubation. Consequently, the knowledge gained by means of the study they undertake emphasizes the importance of assisting young entrepreneurs in more rapid self-education.[3]
- *Sectorial Research Funding:* When it comes to funding received from business incubators and accelerators, several sectors and industries show somewhat different trends. According to [4] government and university financing could close this disparity and enable a homogeneity in industrial relevance. Such incubated businesses strongly urge strong cooperation between them and the academic field.
- *Addressing Resource Scarcity:* While utilizing a short-term vision for their businesses and business models, young entrepreneurs usually are less conscious of their knowledge or resource gaps [5]. Reluctant to venture outside their comfort zones, the founders might concentrate more on using a more forceful approach to run their businesses.

### **2.2 Collaborative and Inclusive Environment**

- *Psychological safety:* [6] consider this of the main ingredients of an inclusive, hazard-free workplace. Working in such surroundings lets team members share their thoughts without worry and as if they were in a safe area. They can accomplish this since the leaders and members of their teams have shown and demonstrated that, without considering consequences, any form of risk taken is well worth it.
- *Collaborative Culture:* [7] underline the need of cooperation inside the incubators and accelerators for reaching a sustainable and productive surroundings. An open environment supports initiatives and consists of all the stakeholders. These kinds of organizations mostly rely on mentoring to support technological-based businesses. Although mentorship is not limited to these initiatives, it is a valuable addition since it greatly raises the possibility that tech startups would flourish and survive [8]
- *Social Surroundings and Values:* When business owners engage with the several types of companies resulting from these networking gatherings, the results usually include removing all kinds of obstacles, including those pertaining to background and gender. Young entrepreneurs can also enhance their social circle, a topic investigated by [9]. The author also addresses the insights of bottom-up incubators and shows the need of using networking possibilities for all the organizational levels, not simply for the founders or leaders.

### **2.3 Business Model Development**

- *Appropriate Models:* Developing the business models of startups on a demand-based strategy is crucial, according to market oriented business models [10]. The authors suggest that founders should first find unsatisfied wants of the consumers before they generate concepts. To have chances of succeeding in the market and validate the models, business incubators and accelerators should evaluate these ideas and only pick to promote feasible ideas.

- *Evaluating Complementary Factors:* According to a performance study of startups in several sectors carried out by [11], success cannot be mostly linked to incubator infrastructure. The chances of a company succeeding are higher the larger it becomes. They regard incubator facilities as merely one component in a large list of elements that might support specific types of companies to flourish.
- *Centers of excellence:* Business incubators and accelerators, together with their affiliated enterprises, could gain from alliances with regional centers of excellence in line with cooperative projects. They significantly affect startups' inclination to integrate innovation as fundamental values of designing their business models and implementation strategies, according to [12].
- *Compatible Guidance:* While developing a five-step model for spotting success elements, [13] emphasizes the need of carefully selecting the suitable incubator or accelerator for the requirements of every firm. [14] further underlines that businesses should search to satisfy their needs at whatever level of their growth and change their operations accordingly. Furthermore mentioned by him are the reliance of most incubator models on industry sponsors and cooperation.

### **III. Questionnaire Interpretation and Findings**

This section of the research seeks to better grasp the experiences and viewpoints of Romanian business sector employees who have interacted with business incubators and accelerators in past years. In this sense, a set of questions designed to gather information on these people was developed. They thus investigate the characteristics of the respondents and their opinions regarding the past, current, and future efficiency of business incubators and accelerators in Romania.

Understanding how business incubators and accelerators affect startups and entrepreneurs for a sustainable development is the main objective here. Two specific elements define this knowledge. The first is quantifiable and rather simple: an initial research showing how much, how often, and in what ways entrepreneurs make use of these two kinds of support structure. The second is a bit more elusive and relates to the apparent value added by incubators and accelerators to the startup companies and founders that pass through their doors.

Methodologically, the participants were selected for obtaining the views of a wide cross-section of business incubator and accelerator stakeholders. Another criteria was seeking a valid varied representation of incubator and accelerator users and non-users in corporate support and direct entrepreneurial or managerial roles.

The questions given assess not only the degree of the participants' awareness but also the sources from which informants claim they acquire their knowledge about the resources. How involved are those using business incubators and accelerators? How did they first come into touch? Furthermore, the questionnaire provided insights into current challenges, suggestions and future expectations from the respondents.

Likert scales and ranking questions were used for constructing the structure of the questionnaire, while confidentiality was assured for the protection of the participants.

#### **3.1 Questionnaire Interpretation and Considerations**

- Out of the 227 participants in the study, 53% of them were female and 47% males, which illustrated a balanced perspective representation from all genders.
- With over 41% of all the participants, entry-level professionals have less than ten years of industry experience. This shows that the poll attracted more somewhat fresh professionals in the company than seasoned specialists. The industry analysis shows that mid-career professionals are rather well-represented; approximately 31% have 10–20 years of experience. Of the survey participants, over 23% are seasoned professionals with 20–30 years of experience; 5% have 30+ years. Though there are many more younger professionals nowadays, these figures show a varied mix of industry representatives.
- The responses illustrate that about 39% of the participants have between one and ten years of entrepreneurial experience. Therefore, we can reasonably expect that a sizable number of young, aspirational entrepreneurs emerge from the incubators and accelerators, therefore enabling education, training, and assistance in overcoming future prospective challenges. About 35% of respondents, however, said they had little to no entrepreneurial experience, implying that this group may greatly profit from the advantages provided by company incubators and accelerators and could also find the results of this study quite helpful. Furthermore, practically 18% of the respondents said they have had between 10 and 20 years of entrepreneurship experience. Moreover, around 8% of the respondents had notable experience, more than 20 years.

#### **3.2 Experience Correlation**

By performing a Pearson Correlation on the data, entrepreneurial experience and industry experience have a calculated 0.669 correlation coefficient. As the values approach 1, the strength of the linear path increases, indicating a significant positive association. What this basically indicates is that there is a high favorable connection between entrepreneurial experience and industry experience. So, it stands to reason that

people with greater years of expertise in the field also tend to have more entrepreneurial experiences. It seems that this may be seen as a positive outcome, suggesting that as people gain more experience, they are more likely to apply what they've learned in an entrepreneurial setting.

### **3.3 Awareness and Engagement Correlation**

By performing a Pearson Correlation on the data, there is a strong relationship between awareness and engagement levels with business incubators and accelerators, with a correlation coefficient of 0.770. A high degree of association exists between the two metrics. It means that there is a positive and robust correlation between the two variables, namely, the amount of knowledge of and participation in business incubators and accelerators.

People are more likely to engage and participate in their programs if they are aware of the two notions, which suggests that this conclusion could be relevant to the study's outcome. In order to raise awareness even further, this data might serve as a foundation for new program promotions and the establishment of public-private partnerships.

### **3.4 Engagement Motivation**

The effects of business incubators and accelerators can be better understood if we can deduce what drives entrepreneurs and industry insiders to participate in these programs. Based on this, the study had participants assess the importance of the reasons for connecting with these entities from 1 to 5, with 1 being the most important and 5 the least. From these rankings, we can deduce that accelerators and business incubators have varied effects on the ideas that entrepreneurs may pursue if they joined one of these organizations. Here are the results, which are based on the mean of all the responses:

1. *Access to funding opportunities: 2.64*
2. *Mentorship and guidance: 2.75*
3. *Networking opportunities: 2.98*
4. *Access to resources and infrastructure: 3.14*
5. *Business development programs: 3.48*

Respondents believe that their connection to funding prospects is the most important reason they should interact with business incubators and accelerators. Early, dangerous stage of business development requires financial support since the primary worries of entrepreneurs are to raise the required funds.

Mentoring and direction as well as networking possibilities are the next two reasons for interacting with company incubators and accelerators - very much closely related. Both ideas consider the professional orientation by guiding entrepreneurs toward always improving a culture of excellence by means of constant learning and exploration of ways to build a profitable business model, as well as by teaching them behaviour in the corporate environment.

Though not a major consideration for the respondents, availability of infrastructure and resources is crucial. Common resources are office space and technology tools; a founder might be upfront in stating that access to such resources would help immensely in creating a business, but not to the point where it is a main issue if these resources cannot be easily obtained. "Business development programs," which provide well controlled chances for learning, training, and skill development required to manage a firm, could also be another option. According to the business professionals who took part in the study, such chances have less worth than tools like mentoring and financial support.

### **3.5 Examining Recommendations for Support Systems of Romanian Startups**

From 1 to 5, participants were asked to score five categories; 1 was the most crucial and 5 the least significant. Their rankings provide information on the funding sources entrepreneurs most value. Calculated from average ranks, the following sequence emerged:

1. *Fostering an Improved Educational Background: 2.32*
2. *Addressing Societal Challenges: 2.72*
3. *Facilitating International Collaboration: 2.83*
4. *Fostering Entrepreneurial Spirit: 3.38*
5. *Accelerating Technological Innovation: 3.74*

Almost all respondents chose first the most important recommendation to encourage cooperation between industry and the academic sector. This proposal emphasizes on developing an all-important research innovation agenda that the academic sector can offer and on creating solid alliances between educational institutions and the business sector. Startup businesses can be more ready to reach their objectives and get market validations if the missing information can be combined with insights from educational sector experts.

The respondents really value increasing worldwide cooperation by means of alliances and platforms. Many business experts so appreciate it and search for it as a means of generating more chances for startups to interact with investors, mentors, and indeed other entrepreneurs for their development and success.



Governments may be very helpful in fostering the startup ecosystem, an environment still developing in many nations, let alone one that ensures a canon of startup success stories.

The well-toned advice to increase the entrepreneurial spirit programs could result from a conviction that companies have to have access to seasoned, guiding, and advisory personalities. The business owners themselves sense the need of a mentoring department. Startups working with the appropriate type of incubator or accelerator and impact-oriented entrepreneurs can combine that starting point into a network and that access to resources with an eye toward long-term development, on society effect and not only on a noteworthy return on investment.

#### IV. Case Study

Analyzing one of the most effective accelerators in the European area helps one to fully grasp the international background and apply the power of example to develop a very relevant best practices guide. This provides an international comparative study since its most pertinent reasons support the emphasis of the analysis on corporate performance and the culture of excellence. Both components are regarded to obtain a meaningful final formulation of the best practices.

##### **Techstars**

Established in 2006, this accelerator is constantly expanding in terms of social and geographical scope as well as monetarily. One of the best-funded organizations of its sort with branches almost at every major European financial center-like London, Berlin, Paris, Amsterdam, Stockholm, Dublin, and Oslo is About 3,000 successful graduates make up its firm portfolio. These companies have \$213 billion in overall financing. The first round of funding following "graduation" from the accelerator averages well over \$1 million; the greatest "successful exit" among their graduated companies has a market valuation of \$71 billion. Among their graduates are nineteen "unicorns," each with a market cap more than \$1 billion. [15]

Although these extraordinary results make this university among the most successful in the world, the goal of the research was to investigate and understand the causes of its success. From first knowledge, the organization gives developing a certain culture in its teams, which spans several fields as top priority. This is an attempt to organize the circumstances and provide a quick summary of Techstars' best practices, which would operate as a model for the Romanian surroundings.

- *Orientation Towards Mentorship Programs:* This group includes a spectrum of knowledge that few accelerators have worldwide and that is difficult to come by. It consists in providing guidance for emerging innovators as well as those trying to close the concept phase gap between development and execution. Some focus in particular sectors and offer particular analysis on what works and what doesn't in particular domains. Many times, those industry experts and consultants provide access to the next level of knowledge, that of networking contacts. In either case, the development of a new firm benefits much from the availability of more than 10,000 mentors in this accelerator.
- *Interdisciplinary Communities:* Techstars is innovating in this industry by creating a kind of unusual sequence whereby knowledge, culture, and technique are shared among program participants and candidates. With an astounding number of participants, more than 400,000, they have compiled more than 7,000 programs in more than 150 countries. This is part of the study since it reveals another sustainable approach to carry out what is seen to be socially productive: raising knowledge of and participation in the entrepreneurial surroundings. The previous questionnaire interpretation shows that this is required to lower the hesitancy many individuals seem to have toward it.
- *Promoting a Clear Mission and Organizational Culture:* The company's member companies operate within a mandatory Code of Ethics and conduct themselves according to this principles and values, not only in terms of sustainable development, but also in terms of social inclusion.
- *Promoting Innovation and Inclusion:* Through varied programs, such as *Techstars Sustainability Accelerator*, *Techstars Anywhere*, *Foundation of Techstars* or the *Techstars Alumni Program*, the accelerator manages to impose values to their accelerated companies and their stakeholders, thus setting an example for the premises of sustainable development and assure the continuity of their companies.

#### V. Discussions

Romania's business incubators are still in their early years when compared to those in more developed economic sectors. Still, they support recently launched businesses most in need of them and fit their specific requirements. Usually, incubators and accelerators provide a greater degree of interaction with a medium-term perspective. Startups in areas needing significant premarket Research and Development before they can go public benefit directly from this lengthy engagement to narrow in on their business concepts, develop prototypes, and create a market presence.

The incubators in Romania have several benefits. Still, they deal with some serious issues. Financing

comes first and most importantly among these. Our nation's incubators lack the same financial tools as those of our more developed neighbors. Apart from financial constraints to make investments in the businesses they assist, incubators here cannot afford to attract the kind of service providers who enhance the incubation process. Therefore, even though Romanian incubators might have the advantage in terms of instructional materials, their lack of funds and access to service providers limits the incubation experience and procedure.

The results of the investigation also exposed a sequence of crises about the application of a sustainable development culture inside the concepts of the studies and the national business environment. All the participants in the study deal with challenges related to current restricted means of financing, bureaucracy obstacles and inadequate infrastructure.

### **5.1 Recommendations**

Apart from the major aims of the research, one of the goals of this paper was to perhaps offer value for legislators, corporate leaders and the whole entrepreneurial ecosystem of Romania.

Should any stakeholder be interested in understanding and applying any degree of implication, a small set of actions are recommended:

- One of the key pillars of discussion during the entire process included promoting and applying public-private partnerships. Via business incubators and accelerators, this indirectly results in finding more pertinent sources of funding for businesses. Once funding is acquired on the entrepreneurial path, the research showed that the business community prefers a more laid-back and simplified legal system. Founders can thus concentrate on raising their degrees of efficiency and on strengthening their business concepts and themselves.
- Drawing on the case study analysis, the research advises following international best practices and emphasizes first and foremost principles of human development. The results show that one of the main foundations of development is high-quality mentoring.
- The findings of the study underlined cultural development. Before motivating on a community level, dedicated educational programs, social inclusion, and success story exhibiting help each company to achieve the goal promotion of a sustainable development.

## **VI. Conclusions**

The goal of the study was offering a further in-depth examination on the influence of business incubators and accelerators to the Romanian environment and add to academic insights. Moreover, the pragmatic approach advises appropriate and reasonable actions the experts could take. It comprises particular projects and policies meant to enhance the business environment of Romania and support a different, inclusive way of thinking.

Through its presentation of the results and recommendations, the study also reveals various possible directions for future potential research directions. In this perspective, one may approach long-term research and sectorial analyses on the effects of business incubators and accelerators on startup success and the Romanian business climate.

Finally, the findings indicate an excellent opportunity to change Romania's entrepreneurial scene in the surroundings of business incubators and accelerators. By removing the obstacles found by the results, the responsible bodies could help the whole business sector and guide it towards a notable, inclusive and sustainable development.

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