



THE ENTREPRENEURIAL ACTION OF INCUBATORS IN THE INTERNATIONALIZATION PROCESS OF BRAZILIAN COMPANIES

A ação empresarial das incubadoras no processo de internacionalização de empresas brasileiras

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ABSTRACT

The study aims to describe the action of entrepreneur incubators in the internationalization process, from theoretical formulations to the emergence of the incubators and their main findings in the internationalization process, in the period between 1997 and 2011. Faced with this goal, the problem was thus characterized: Could entrepreneurial actions of incubators contribute to the internationalization process of Brazilian small and micro? The methodological procedures were based on an exploratory research by means of qualitative method, which consisted of documentary analysis and secondary data. As a result, it was found out that with respect to the internationalization process, both the entrepreneurial action and the business incubators have a key role in increasing Brazilian exports. However, there is still not a very intense movement by both entrepreneurship and incubators regarding activities targeting for external market, and particularly in today's world suffering heavy impacts due to Pandemic crises.

Keywords: Brazilian Companies Internationalization; Entrepreneurship; Incubators.

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A AÇÃO EMPRESARIAL DAS INCUBADORAS NO PROCESSO DE INTERNACIONALIZAÇÃO DE EMPRESAS BRASILEIRAS

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RESUMO

O estudo tem como objetivo descrever a atuação das incubadoras de empreendedores no processo de internacionalização, desde as formulações teóricas até o surgimento das incubadoras e seus principais achados no processo de internacionalização, no período entre 1997 e 2011. Diante desse objetivo, o problema foi assim caracterizado: Será que as ações empreendedoras das incubadoras podem contribuir para o processo de internacionalização das pequenas e micro brasileiras? Os procedimentos metodológicos foram baseados em uma pesquisa exploratória por meio do método qualitativo, que consistiu em análise documental e dados secundários. Como resultado, constatou-se que, no que diz respeito ao processo de internacionalização, tanto a ação empreendedora quanto as incubadoras de empresas têm papel fundamental no aumento das exportações brasileiras. Porém, ainda não há um movimento muito intenso tanto do empreendedorismo quanto das incubadoras em relação às atividades voltadas para o mercado externo, e principalmente no mundo de hoje que sofre fortes impactos devido às crises pandêmicas.

Palavras-chave: Internacionalização de Empresas Brasileiras; Empreendedorismo; Incubadoras.

INTRODUCTION

The international scenario already had diversified characteristics, both in Science and business:

1. The technological innovation required by Globalization has become synonymous with competitiveness in the various productive sectors in several countries;
2. Entrepreneurial movements arose every day bringing, on the other hand, the risk of failure;
3. To reduce this risk, the movement of business incubators emerged, supporting new entrepreneurial projects.

As a matter of fact the movement that emerged more than 50 years ago in the USA, characterizing itself as institutional arrangements. Although currently the term used is Business Accelerator, the consulted data sources call this type of activity as Incubators and, for this reason, this name was maintained

In the academic sphere, among the theories that address the process of internationalization of companies and entrepreneurship, we note a connection that opens an important field of study, here called entrepreneurial action in the internationalization of companies.

This study aims to describe the entrepreneurial action of incubators in the process of internationalization of Brazilian companies, starting from theoretical formulations until the emergence of business incubators and their main results in the internationalization process. For this, a qualitative analysis was performed, through bibliographic, documentary and secondary data research.

The entrepreneurial action in the internationalization is presented in an evolutionary way, starting from the first works to the current thinking on the area under study. In this context, incubators have gained ground as promoters of development, stimulating technological innovation and encouraging the transformation of ideas into reality.

A survey on the performance of Brazilian incubators was also conducted, in order to confirm them as an ideal alternative for the insertion and success of Brazilian entrepreneurial companies.

1 THEORETICAL FRAMEWORK

The first concepts of internationalization emerged in the 1960s, in which the company's theory ceased to be studied only from the economic point of view, to become an independent field of research. Thus, the first studies on the internationalization process focused on the theory of organizational behavior were initiated – presented below as the Uppsala Model (Hilal; Hemais, 2001).

In the concept of Dornelas (2018), it became clear that for some time there has been a moment characterized as the age of entrepreneurship. Entrepreneurs eliminate the various barriers, shorten distances, renew concepts, create important labor and employment relationships, breaking paradigms and generating wealth for society.

Therefore, there is an extensive field of study, based on the theoretical basis developed in studies of several areas – of entrepreneurship, internationalization and marketing – in which are documented studies that focuses from the development of theories on international entrepreneurship and the factors that affect international entrepreneurship to the emergence of *Born Globals* – companies that have already been born globalized, as discussed in the item Internationalization of Companies

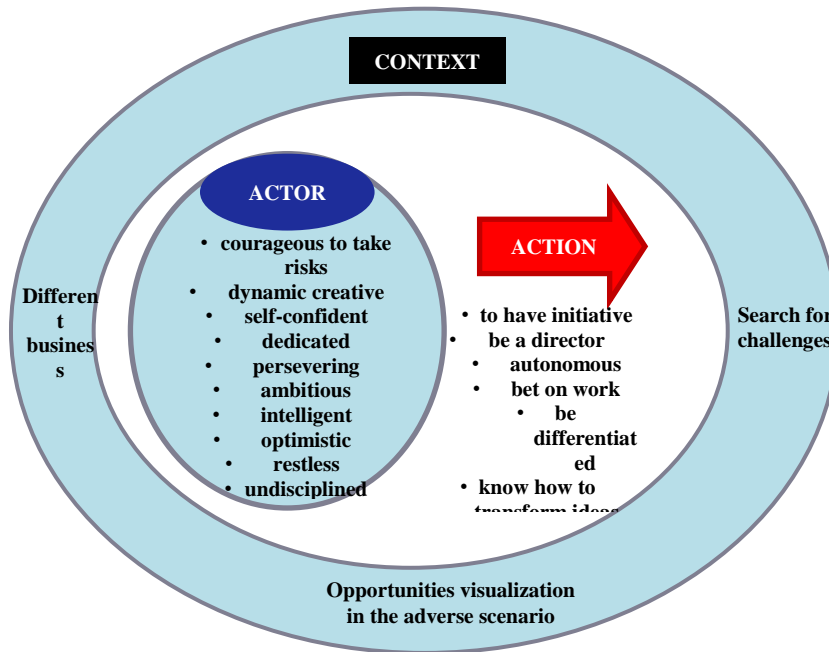
2 ENTREPRENEURSHIP CONCEPT

The concept of entrepreneurship as what it is currently conceived is about 200 years old and has, over that time, accumulated several connotations in different fields of both academic and popular knowledge. It was the object of study of economists (Shumpeter, 1934), who understood entrepreneurship as necessary to comprehend economic development, through what the author called creative destruction. It targets the production of new goods and services that when offered to the market turns the capitalist engine (Dalmoro, 2008). It was also the subject of studies of behavioralists, such as MacClelland (1982), for whom people develop the need for personal fulfillment.

People undertake not only to meet personal demands, but mainly because they feel a deep need to accomplish themselves in what they do. For this, it is necessary to develop personal characteristics that favor the

identification and exploitation of business opportunities (Venkataraman; Shanen, 2001). The academic literature is lavish in listing these characteristics, such as those pointed out by Dornelas (2001, p.19). It states that entrepreneurs have Special features. They are visionary, they question, they risk, they want something different, they make it happen and they undertake. Entrepreneurs are differentiated people, who have a unique motivation, passionate about what they do. They're not content to be one more in the crowd. They want to be recognized and admired, referenced and imitated, they want to leave their legacy. The same also happens with the popular imagination. Amaral, Cerretto, Nassif and Soares (2007) conducted field research with owners of food establishments, who characterized the entrepreneur as Figure 1 shows.

Figure 1 – Social Representation of the Entrepreneur Concept



Source: Amaral; Cerretto; Nassif; Soares, 2007, p. 6.

Also, in Figure 1, the relevant characteristics of an entrepreneur are highlighted: to visualize, dare, transform and perform, which suggests the ability of the entrepreneur to achieve results through a process that aims to realize his motivation to undertake.

3 INTERNATIONALIZATION OF COMPANIES

As the company gains experience, its commitment to the foreign market increases, taking a step forward in its internationalization process (Johanson; Wiedersheim-Paul, 1975). The pioneer in explaining the internationalization process was the Uppsala Theory. According to Uppsala's model, it is likely that the company will start its external sales via export and with a limited commitment to these markets, usually geographically close to the company's host country (Hilal; Hemais, 2001). The basic mechanism of internationalization, according to Uppsala's perspective, may be characterized as dynamic in nature, in which a greater knowledge of the market and a greater mastery and control of current activities in the destination country leads to a greater commitment to the market. Similarly, the compromise of resources follows the same logic (Johanson; Vahlene, 1977).

Johanson and Wiedersheim-Paul (1975) also identified in their studies two other factors capable of influencing the internationalization process: the "psychological distance" and the "dimension of the potential market". By psychological distance they named the set of factors that cause disturbance or hinder the flow of information between the company and the market, such as language, culture, political-institutional systems, level of industrial development, trade practices and others. Regarding the dimension of the potential market, the

concept refers to the size and potential of the market, which could influence the firm's interest in extending its operations to the country in question.

In Brazil, the process of internationalization of companies is still very recent, dating from the late 1960s, and was motivated by tax incentives and credits granted by the governments of the time. These incentives were available to companies, and thus the decision to use such instruments to start or even expand operations in foreign markets depended on each company (Goulart; Brazil; Arruda, 1996). Rocha (2002) confirmed that the process of internationalization of Brazilian companies had its *boom* in the 1970s, due to the export incentive policy inaugurated in the 1960s and progressively reduced, due to the high costs, in the 1980s. From the criteria of Lorga (2003) to define the motivations that induce internationalization – proactive, when companies are more protagonists; reactive, when internationalization is a response to competitive pressures – Rocha (2002) stated that, in general, the reasons for the internationalization of Brazilian companies were more reactive than proactive.

4 INTERNATIONAL ENTREPRENEURSHIPS

Dalmoro (2008) understands by *Born Globals* those organizations that operate internationally, which, therefore, have a significant percentage of their revenue from sales made outside their country of origin, in the first three years of their creation and that obtain a competitive advantage in the use of resources and sales of products in several countries. Also informs that this understanding broke a stigma that this type of company should first build its business in its country of origin and, only after consolidating its condition in this market, venture internationally. The emergence of new opportunities in distant markets and the possible connections between them stimulated the emergence of entrepreneurs willing to explore them. Dib and Rocha (2009)¹, when researching Brazilian Born Globals in the software sector, confirmed that they have a greater share of revenue from abroad than traditional companies.

The refinement of this understanding encouraged even entrepreneurs with a more local vision to be aware of the performance of companies that operate internationally, since they can become competitors locally (Oviatt; McDougall, 2005). These companies have aggressive strategies, sometimes using investments and external resources that enable them to enter various markets (Dalmoro, 2008). For this reason, Oviatt and McDougall (2005) consider that international entrepreneurship is a combination of activities related to innovation, proactivity and risk aversion, confronted between national borders. In this sense, it is independent of the age, size or characteristic of the company to undertake internationally.

Macrostructural aspects added to strategic and internationalization issues refer to the concept of entrepreneur. It means that the process of internationalization will only be obtained with the entrepreneurial action of an individual who contemplates opportunities and has the skills to create and exploit them, is endowed with resources and a desire for realization which enables him to build, without risk aversion, a behavior that enables him to undertake internationally (Dalmoro, 2008).

5 BUSINESS INCUBATORS

Medeiros (1998) considered the incubator must prepare incubated companies to compete inside and outside the country, facing competition from the globalization of the economy. According to the Support Service for Micro and Small Enterprises of São Paulo - SEBRAESP², on its page dedicated to Incubators, the movement of business incubators has always been linked to the entrepreneurial movement, when projects of creation of companies and support to entrepreneurs are emphasized. It emerged more than 50 years ago in the Silicon Valley region and Route 128 in the United States of America, with the first institutional arrangements similar to what are now considered "business incubators". Also according to SEBRAESP, the current model of incubator emerged in 1959 in New York City, when a significant number of people were unemployed due to the closure of one of Massey Ferguson's factories. But it was only from the 1970s that this type of venture took its current format.

¹ http://www.anpad.org.br/diversos/trabalhos/3Es/3es_2009/3ES187.pdf

² <http://antigo.sp.sebrae.com.br/principal/sebrae%20em%20a%C3%A7%C3%A3o/incubadoras/historico.aspx>

The definition of incubator, according to Dornelas (2002), is related to mechanisms maintained by government entities, universities, community groups and others that use an environment in which facilities are offered for the emergence and growth of new enterprises. In addition to advising on the technical and business management of the organization, it also offers the possibility of shared services such as laboratories, telephone, internet, security, physical space, providing users greater flexibility in a motivating and encouraging climate.

For the Incubator Center of Technological Companies - CIETEC, an institution that was constituted through an agreement between the Secretary of State for Science, Technology and Development (government of the state of São Paulo), the Support Service for Micro and Small Enterprises of São Paulo - SEBRAESP, the University of São Paulo - USP, the National Commission of Nuclear Energy - CNEN (through the Institute of Energy and Nuclear Research - IPEN) and the Institute of Technological Research - IPT, incubators are organizations that have a production model that brings together the essence of entrepreneurship with the dissemination of knowledge.

6 METHODOLOGICAL PROCEDURES

Thus, this study chose to use the qualitative research method, according to Godoy (1995), of exploratory character. It was chosen as a research question: how the entrepreneurial action of incubators collaborates with the process of internationalization of Brazilian micro and small companies. To solve this issue, the general objective was defined: to describe the entrepreneurial action of incubators in the process of internationalization of Brazilian micro and small companies, from 1997 to 2011. As specific objectives: verify if the incubators of companies in Brazil had an effective participation in the internationalization process; identify which activity sectors of the incubator participated in the internationalization process; analyze the degree of contribution that the internationalization process can offer to incubators. To obtain data, a bibliographical research was initially performed, in order to locate studies that would allow a better direction of the subject, preferably sectors of activity more prone to entrepreneurial action in internationalization. Based on the set of these data, a comparative analysis was elaborated that, according to Schneider and Schmitt (1998), allowed the reproduction of the facts with a focus on the theoretical perspective and with analytical precision. Thus, a comparative data analysis was chosen in order to direct the study to a conclusive definition close to the studied reality.

7 ANALYSIS OF COLLECTED DATA

In his analysis of the Brazilian export policy for small and medium-sized enterprises, within the studied period, Guimarães (2002) considered that incubators distinguished themselves by the activity of each company: technological; traditional; mixed. In addition, he outlined a topic on the incubators of exporting companies and stated that, although stimulated by strong institutional action, there was still no record of effective participation of incubators in the internationalization process (specifically in the export of goods and services). The maximum that could happen was the supply from incubated companies to companies specialized in foreign trade (*trading companies*), with domestic sales equated to export.

Oliveira Jr. (2013) found that only 25% of the incubators interviewed by him stated that international export trade is a priority strategic focus (for 46.4% it is secondary and for 28.6% it does not apply). Another significant finding of the Oliveira Jr.'s survey (2013) is the degree of satisfaction of the incubators interviewed in relation to the objective achieved in export promotion: 42.8% declared themselves dissatisfied/very dissatisfied; 10.7% satisfied; 10.7% neutral; 35.7% do not apply. Also according to Oliveira Jr.'s survey (2013), 56% of the incubators interviewed do not agree/partially agree that the incubator contributes to the internationalization of incubated companies (23% totally agree; 11% do not know/do not apply).

As a way to separate respondents belonging to CIETEC (one of the largest incubators in Brazil and with self-financing capacity) and confirm/diverge from the results obtained in the total set of interviewees, the survey of Oliveira Jr. (2013) obtained an even more significant finding (regarding the internationalization of companies): 67.6% of the respondents stated that they do not agree/partially agree that the incubator contributes to the internationalization of the incubated companies; 18.9% totally agreed and 13.5% do not know/do not apply.

Therefore, it is worth returning to Guimarães (2002)³, who established a new conception for the exporting incubator company.

Table 1 - Distinction between Traditional Incubator and Export incubator

FOCUS	TRADITIONAL INCUBATOR	EXPORTING INCUBATORA
Vision	Focused on the domestic market (absolute advantages)	Focused on the international market (relative advantages)
Operationalization	Company selection - product with a view to increasing efficiency and productivity, having as parameter the home environment	Company selection - product from the company's cognitive vision, in view of the potential exporter
Policy	Wide use of public resources for business management and entrepreneurship	Addition of portion of export revenue to strengthen the incubator
Results	Local and regional development with preservation of vocational values	Local and regional development with internationalization of its local values

Source: Guimarães, 2002, p. 48.

Table 1 makes it possible to verify the distinction between a traditional incubator and the exporting incubator from various approaches: in the vision approach, the traditional incubator focused on the domestic market has absolute advantages in its activity (without direct competition), while the export incubator focused on the international market will have relative advantages (due to the fierce competition of the market); under the focus of operationalization, the selection of companies will be due to the increase in efficiency and productivity (in the case of the traditional incubator in the domestic market) and the knowledge and perception of the external market in relation to the export potential of each company (in the case of the exporting incubator); the political focus aims to the use of public resources in business management (traditional incubator) and to the addition of part of the revenues obtained from exports to strengthen the business (in the case of the export incubator); in the results focus, the two forms of action aim to local and regional development, and the traditional incubator preserves vocational values and the exporting incubator internationalizes local values. The great challenge, for all actors with business incubators, became the real perception of the companies' ability to act, together with the perception of the foreign market as an option to expand activities.

CONCLUSION

Given the limitations, due to the restriction only to the CIETEC data and the research with technological-based incubators in the state of São Paulo, the overall objective of the study was achieved by verifying that there was not, within the period studied, a more intense movement of both entrepreneurship and incubators with regard to the direction of activities to the foreign market.

As for the specific objective of verifying the effective participation of incubator companies in the internationalization process, it was clear that there was a limitation by exporting incubators with regard to the incipient stage in which the surveyed companies, in relation to technological and market aspects, are located. Issues such as quality audit processes, adaptations to international standards and certifications, as well as alliances and partnerships with suppliers and distribution channels are prerequisites under development in the incubation period. With the successive development of these capabilities, the companies will achieve greater maturity and competitiveness, which often occurs only sometime after the company graduates.

Therefore, there is a great challenge, to be faced with greater propriety and objectivity, both for institutions responsible for the formation and graduation of incubated companies (inclusive governments) as well as, and

³ http://www.bndes.gov.br/SiteBNDES/export/sites/default/bndes_pt/Galerias/Arquivos/conhecimento/livro_desafio/Relatorio-10.pdf

especially, for higher education institutions. With the impact caused by COVID-19 in Brazil and in the world, we had practically the anticipation of 10 years, reinforcing greater importance of the entrepreneurial practice. Reinventing the processes and procedures mainly of small and medium-sized enterprises that are the most sensitive to economic effects.

Regarding the specific objective of identifying the participation of the sectors of activity of the incubated companies (Nuclei, in the CIETEC specification), within the studied period, which stood out the most in the internationalization process, it cannot be inferred that a particular sector, within the CIETEC company centers, had a differentiated performance. That is, the best or worst export result depended more on the maturity stage of some companies than on the sector in which they operated.

For the broader objective of evaluating how the entrepreneurial action of business incubators can help companies in their internationalization processes, it was possible to verify that the results were unsatisfactory and highly dependent on several external factors, notably the activation of the entire ecosystem of innovation and entrepreneurship. This includes interaction with universities and government, the latter articulating public policies to encourage SMEs such as access to finance, tax relief and reduction of bureaucracy. Thus, the research problem has an eminently emblematic solution in order to request a joint action of several institutions, and, at the same time, direct actions of the various actors in the integration of actions for greater participation in the internationalization process.

REFERENCES

- AMARAL, D. J.; CERRETTO, D. C.; NASSIF, V. M. J.; SOARES, M. T. R. C. The Different Views on the Brazilian Entrepreneur and the Exercise of Leadership in Business Management. [M] Annals of the XXXI ENANPAD, 2007 (In Portuguese).
- ANDERSSON, S. Internationalization of the firm in an entrepreneurial perspective. [J] International Studies of Management and Organization, spring, v. 30, n.1, p. 65-94, 2000.
- DALMORO, M. International entrepreneurship: Convergence between the internationalization process of the company and the entrepreneurial activity. [J] FACEF PESQUISA - v.11 - n.1 – 2008 (In Portuguese).
- DORNELAS, J. Empreendedorismo, transformando ideias em negócios. [B] Empreende/Fazendo Acontecer. 7^a ed. 2018.
- DORNELAS J.C.A. Planning Business Incubators - How to develop a business plan for incubators. [B] Rio de Janeiro: Ed. Campus, 2002 (In Portuguese).
- GOULART, L.; BRAZIL, H. V.; ARRUDA, C. Internationalization of Brazilian Companies. [B] 1st ed. Rio de Janeiro: Qualitymark Editora, 1996 (In Portuguese).
- HILAL, A.; HEMAIS, C. A. P. G. From Uppsala School to Nordic School of International Business: An Analytical Review. [M] In: XXV National Meeting of Graduate Programs in Administration - ENANPAD 2001. Campinas: Annals ENANPAD, 2001 (In Portuguese).
- JOHANSON, J.; WIEDERSHEIM-PAUL, F. The Internationalization of the Firm-Four Swedish Cases. [J] Journal of Management Studies, v. 12, n. 3, p. 305-322, 1975.
- JOHANSON, J.; VAHLENE, J. The mechanism of internationalization. [J] International Marketing Review, v. 7, n. 4, p.11-24, 1977.

- LORGA, S. The Internationalization and Network of Companies: Concepts and Theories. [B] Lisbon: Verbo, 2003 (In Portuguese).
- MACCLELLAND, D. C. Human Motivation. [B] CUP Archive, 1987.
- MEDEIROS, J. A. Business incubators: lessons from international experience. [J] São Paulo: USP Management Journal, v.33, no. 2, p.5-20, Apr/Jun, 1998(In Portuguese).
- OLIVEIRA JR. M. DE M. (Coord.). Mapping of Technology-Based Incubators of the State of São Paulo. [M]: Secretariat of Economic Development, Science and Technology, São Paulo, 2013 (In Portuguese).
- OVIATTI, B. M.; MCDOUGALL, P. P. Global start-ups: Entrepreneurs on a worldwide stage. [J] Academy of Executive Management, 1995 v. 9, n.2, p. 30-43, 1995.
- ROCHA, A. DA. The Internationalization of Brazilian Companies. [B] Rio de Janeiro: Mauad, 2002 (In Portuguese).
- SCHUMPETER, J. A. Theory of economic development. [B] São Paulo: Cultural April, 1982 (In Portuguese).
- VENKATARAMAN, S.; SHANE, S. The promise of entrepreneurship as a field of research. [J. Academy of Management Review, 2001.