

Reference Center for Business Incubation: a proposal for a new model of operation

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1. Introduction

The number of incubators has clearly grown in recent years, especially in developing countries. In Brazil, for example, the number of incubators has been increasing systematically over the past 10 years, reaching 384 incubators in 2012.

This growth has also occurred in other countries around the world, such as Russia, India, China and South Africa. In these countries, incubators are assuming an increasingly important role in the socioeconomic development of different regions.

Besides the increased quantity, a change in the incubators' performance over time in order to meet the needs of entrepreneurs and innovative companies has also been observed.

Therefore, it is important to note that the incubators no longer focus on physical space for tenants, but instead on providing value-added services that promote the rapid growth of the supported companies.

However, there is a lack of operating models of incubators to establish the critical elements for systematic generation of successful innovative companies and, at the same time, allow the integration of the incubator with an innovative environment in the area.

It is within this context that this study is presented, aiming to propose a new operating model for business incubators, which makes the incubation process more agile and also integrated into the regional innovation ecosystem.

2. Business Incubator Concept

The consensus among industry experts is that there is no concept of a business incubator that is accepted by all. This is mainly for two reasons:

a) Evolution: incubators have been evolving rapidly in terms of services offered and the position in the regional innovation ecosystem;

b) Regionality: each region / country has a different understanding of what a business incubator is.

Despite this lack of consensus on the concept of business incubators, it is possible to identify three different generations of business incubators, as proposed by Bruneel¹ (2012):

a) First Generation: the main focus was the provision of physical space, of good quality and at low cost, in addition to offering shared resources such as auditoriums, meeting rooms, common use equipment, among others. Allen proposed a typical definition of this generation: *"a business incubator is defined as a facility that provides affordable rent to new and small firms, shared office and logistical services, and arranges business management and financial assistance"* (ALLEN², 1988). Another important characteristic of this generation is the incubator's role as an environment to transform the technologies generated in universities and business research centers, in a strategy that can be understood as "technology push".

b) Second Generation: the focus of this generation is no longer only in the physical space and shared resources but also in enhancing services to support business developments such as training, mentors, coaching, among others. Duff (DUFF³, 1999) proposed a typical concept of this second generation: *"a business incubator may be defined as an organization which offers a range of business development services and access to small spaces on flexible terms, to meet the needs of new firms. The package of services offered by a business incubator is designed to enhance the success and growth rates of new enterprises thus maximizing their impact on economic development". Therefore, this generation has a clear bias concept of "market pull".*

c) Third Generation: in addition to the concepts provided for the incubators of the previous two generations, the third generation incubators focus on the creation and operation of networks to access resources and knowledge, linking the incubator with the innovation ecosystem in which the business is inserted. A typical concept of this generation is presented in the study by infoDev: *"a business incubator is an organization that accelerates and systematizes the process of creating successful enterprises by providing them with a comprehensive and integrated range of support, including: Incubator space, business support services, and clustering and networking opportunities"* (infoDev⁴, 2010).

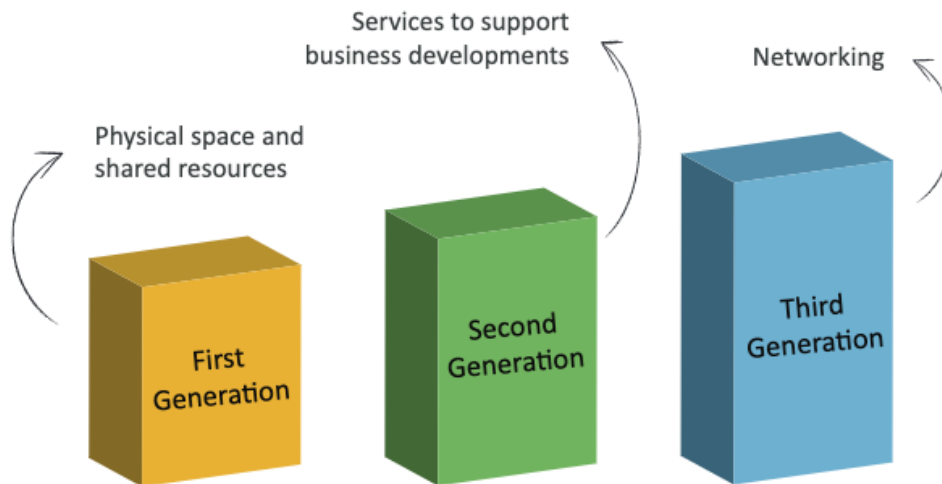
¹ Bruneel J, Ratinho T, Clarysse B, et al., 2012, *The Evolution of Business Incubators: Comparing demand and supply of business incubation services across different incubator generations*, *Technovation*, Vol:32, ISSN:0166-4972, Pages:110-121

² ALLEN, D.N. "Business Incubator Life Cycles". *Economic Development Quarterly* 2 (1), 19-29, 1988

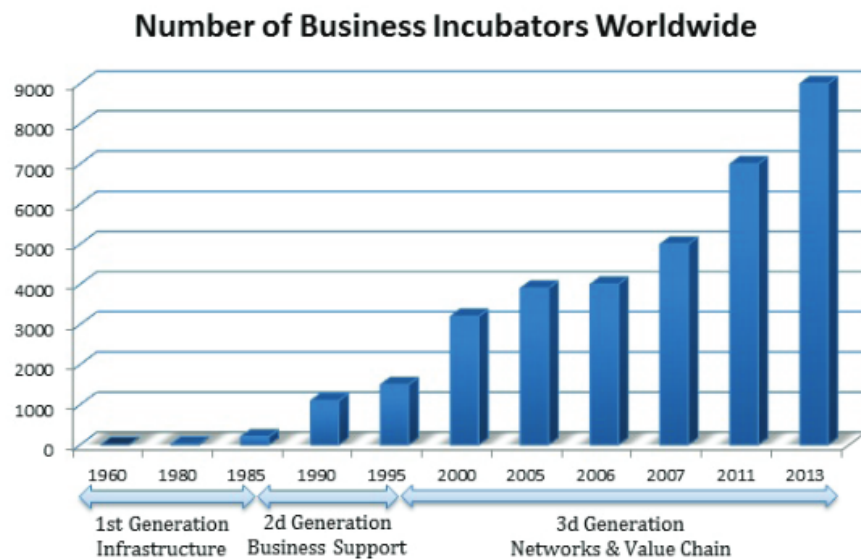
³ DUFF, Andrew. "Best Practice in Business Incubator Management". Available at http://www.eifn.ipacv.ro/include/documentations_files/bestpracprt.pdf

⁴ infoDEV. "Global Good Practice in Incubation Policy Development and Implementation". Available at http://www.infodev.org/infodev-files/resource/InfodevDocuments_834.pdf

The following figure shows the three generations of incubators described above, highlighting the focus in each one of them.



According to Ryzhikov (2013), as shown in the following figure, the first generation of incubators took place between 1960 and 1985, the second generation was from 1985 to 1995 and the third generation started in 1995.



Source: Vasily Ryzhonkov, 2013
(<https://worldbusinessincubation.wordpress.com/2013/12/24/review-of-20-business-incubation-models-summary-of-the-series-problems-of-business-incubation/>)

3. Business Incubators Operation Models

According to Dory⁵ (2002), a model “is an abstract representation of some aspects of interest of a system under study or development, aimed at understanding, communicating, explaining, or designing these aspects”.

Therefore, it is necessary for the incubator model to be in line with the evolution of the concept, as discussed above. In addition, it should be a representation of how the incubators should operate to achieve their goals.

Vasily Ryzhikov (2013) did an extensive study on proposals for incubators operating models, involving the analysis of about 20 models created by researchers, consultants and incubator managers from 1985 to 2013.

As a result of this study, Ryzhikov proposes that the business incubators’ operating models are, in general, aligned with one of the three dimensions shown in the figure below.



- **Operation:** in this dimension, models vary according to the focus in the incubator (structure) or the incubation (processes). Although the tendency is to focus more in the incubation process, as noted earlier, it is important that the incubator has a good structure to fit their companies.

- **Abstraction:** while some models have a high level of abstraction (black box), others detail the processes that the incubators must take to achieve their goals (white box).

- **Interaction:** traditionally, the incubator operating models have focused on business incubators (operations) without considering their interaction with the regional innovation ecosystem (development).

Therefore, a business incubator operating model needs to consider the three dimensions proposed by Ryzhonkov and at the same time, be in line with the characteristics of a third generation incubator.

⁵ Dori, D., *Object-Process Methodology – A Holistic Systems Paradigm*, Springer Verlag, Berlin, Heidelberg, New York, 2002