

Implementation model of spinoff incubator in non institutionalized universities

[Modelo de implementación de incubadora spin off en universidades no institucionales]

Jesús Enrique Reyes Acevedo^a, Yuli Novak Ormeño Torres^b,

^aEscuela de Administración, Universidad Nacional Tecnológica de Lima Sur, Lima – Perú

^bDepartamento de Ciencias, Universidad Privada del Norte, Lima – Perú.

bidispe58@gmail.com

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Resumen

La presente ponencia se propone disertar sobre la implementación de un modelo de incubadora de empresas al interior de universidades estatales no institucionalizadas que permitan desarrollar empresas gestionadas por los estudiantes. La propuesta es fruto de un estudio descriptivo y propositivo. Para ello, se ha tomado en cuenta modelos exitosos de incubación que pueden ser adaptados a nuestra realidad académica y pedagógica dentro del sistema universitario. Partiendo de esa adaptación, podemos sostener que es replicable en distintos ecosistemas de emprendimientos regionales del País.

Palabras clave: Emprendimiento, Incubadora de Empresas, Canvas Model, Modelo de Incubación, Spin Off.

Abstract

This paper aims to discuss the implementation of a business incubator model within non-institutionalized state universities that allow the development of companies managed by students. The proposal is the result of a descriptive and proactive study. For this, we have taken into account successful incubation models that can be adapted to our academic and pedagogical reality within the university system. Based on this adaptation, we can argue that it is applied

Keywords: Entrepreneurship, Business Incubator, Canvas Model, Incubation Model, Spin Off.

1. Introduction

Business incubator programs are projects that seek to create new and successful companies, with a variety of services and resources that will be managed by experts. Normally, these types of companies are institutionally sponsored and have the main objective of creating new companies, proposing them the necessary help in the technical and financing aspects (Pascual, w.d., p. 8).

It is not known exactly when business incubators arise; What is known is that, in the United States, towards the 70s of the twentieth century, the creation of the new formal incubation programs by the Economic Development Administration (EDA) and the National Science Foundation (NSF) (Gomez, wd, p. 1). From those years to date, they have been used as development tools, not only in industrialized countries, but also in development. This has been promoted thanks to its potential to create spaces, services, and assistance necessary for the development of a business that

guarantees the growth of the budding company (Ruíz, 2012; Pascual, w.d.; Velásquez, 2011; Ortuño, 2015; Gomez, w.d.)

Become an effective means for the development of a business, business incubators become popular at the end of the 20th century. Its success is directly related to the development factor (Ruíz, 2012; Ortuño, 2015). That is the reason why the governments of many countries adopted it "to reduce the chances of failure and accelerate the business creation process" (Ortuño, 2015, p. 66).

The success of incubators in universities in the United States extended to universities around the world. Hence, the Peruvian University Law New (30220-2014) requires the application of business incubators to increase entrepreneurship among students. In Article 52, it says:

The university, as part of its training activity, promotes the initiative of students for the creation of small and micro-enterprises owned by students, providing advice or facilities in the use of the equipment and facilities of the institution. (Minedu, w.d., p.26).

There are studies on the Peruvian case such as Vela Velásquez (2011), which propose adapting business incubators to the Peruvian reality. Likewise, for the university field, the Master's thesis of Barreto Stein (2008) is suggestive. The author proposes a design methodology for the implementation of incubators of information technology companies in Peruvian universities. Take as an example case its application at the University of San Marcos.

The present investigation, unlike the one proposed by Barreto Stein (2008), focused on the emblematic San Marcos (a consolidated institution with several incubator pilots), tries to respond to the problem of Universities. Nationals in the process of institutionalization.

The Peruvian university contextual reality shows that there are several public universities in the process of constitution. This institutional process in still weak conditions is usually a barrier to the full participation of students and teachers that allow prioritizing entrepreneurial actions within these houses of studies.

The proposal we present analyzes the reality of public universities in the process of constitution. In total 18 universities, there is no incubator project in any of these universities, except at the University of the National Autonomous University of Alto Amazonas, which does have an ongoing project.

The following figure shows the timeline of universities in the process of incorporation:

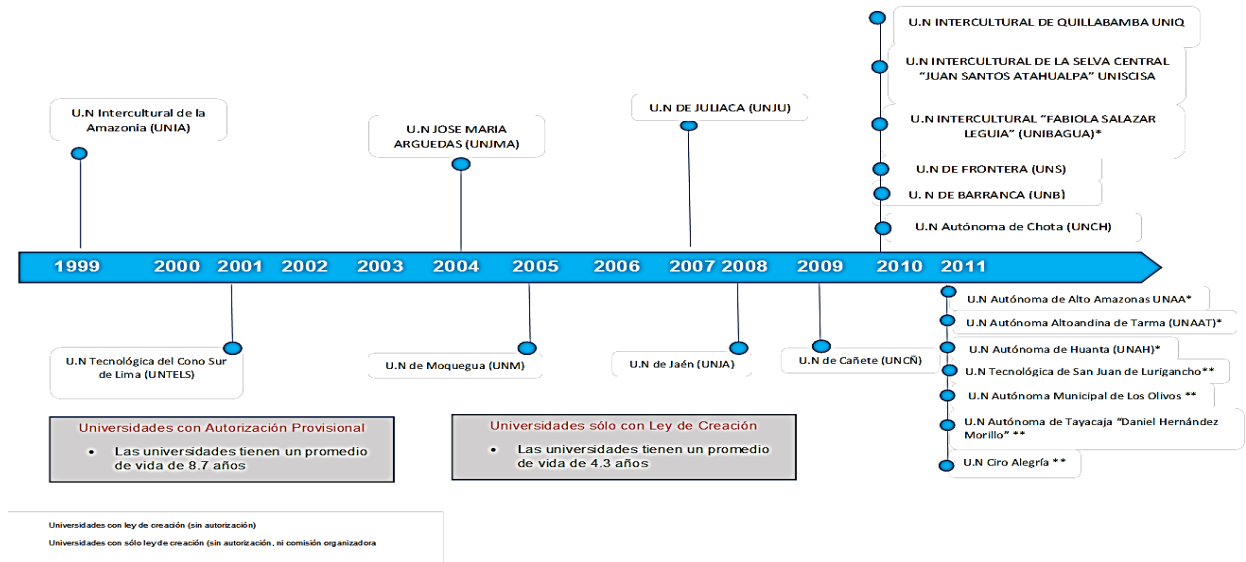


Figure 1. Timeline of universities in the process of constitution (in Spanish)
Source: Minedu. Perú

This research proposes the following questions: How to implement an incubator program in non-institutionalized or precariously institutionalized public universities to boost entrepreneurship and reduce the mortality rate of businesses both inside and outside of the universities?

The main objective of the project. Propose an incubator program in precariously institutionalized public universities and thus contribute both to the organization of new ventures, as well as to the decrease in the mortality rate of businesses inside and outside the universities.

An investigation like the proposal makes use of several elementary concepts. One of them is Entrepreneurial Ecosystem. This concept refers to a set of agents that favor, enhance, or impede the possibilities that a person has to become an entrepreneur. The ecosystem is presented as a device capable of creating interest groups that operate in a social and geographical environment. Within these devices we can identify public entities such as schools, job training centers or universities. While this public environment can be decisive, no less important is the private sphere such as the business world that governs a country, investments, the financial system, entrepreneurs, social leaders, research centers, workers' representatives, students, foundations, international aid agencies, etc. (Isenberg, 2010). Emphasizing this environment, created by devices, whether public or private, or market-specific, is essential to know the reality of the phenomenon we seek to analyze.

Another concept that is capital for this project is: Spin Off companies. The concept refers to the university as a mediating element in the transfer of knowledge and scientific research to the business field that, finally, channels knowledge for its application in productive and commercial processes (Naranjo, 2011)

It is important to emphasize the mission of the university linked to teaching, research and society. The university, however, is also called to create strategies and actions that support the generation and development of a Spin Off. Entrepreneurship is an important factor closely linked to teaching in which students are directly involved. This generates a positive impact on the consolidation of innovative projects. However, the entrepreneurial environment fostered by the academy is only

possible when intellectual property policies are encouraged within their campuses in order to regulate the appropriation of scientific knowledge (Jiménez, A. 2016).

Finally, we return to the concept of business incubators. We have already mentioned this concept as a project that seeks to create new and successful companies. But, it is important to emphasize that its implementation is promoted both from the governmental and private spheres. In any case, business incubators encourage the creation and growth of new companies through training processes and business advice. Likewise, they provide the basic elements for the creation, management and development of new companies (Isenberg, 2010)

2. Materials and Methods

The methodological proposal proposed by this research is the Canvas method. The Canvas model, created by Osterwalder in 2009, proposes to analyze a company as a whole (Oliván, 2015, p. 18). As Ferreira-Herrera (2015) argues, the Canvas model was created to establish a logical relationship between the components of the organization and the factors that influence whether or not it is successful (Ferreira-Herrera, 2015, p. 71).

Ferreira-Herrera (2015), describes the Canvas method as a canvas in which it is detailed from the business idea, to the different factors that will influence it when it is launched (Ferreira-Herrera, 2015, p. 71). This method, which in turn is a model, can identify problems and needs, propose solutions and identify the potential customer. This means that this methodology helps to know how organizations create value. In that sense, the Canvas method requires a concurrence of multidisciplinary professionals. The success of the project depends on the quality of these personnel (Oliván, 2015, p. 18). The method requires, at a first level, to understand the stages of incubator implementation. These are: Preincubation, Incubation, Acceleration, and Postincubation.

In Peru, the Canvas method has been developed in research such as Vela Velásquez (2011) and Barreto (2008). The proposal we develop is guided by the scheme proposed by this author. The scheme to follow can be summarized as follows:

- The generation and brainstorming, through the creative technique of brainstorming.
- Description of the market adjacent to the universities analyzed.
- Identification of strategic allies inside and outside the universities.
- Modeling of the incubator business to be implemented.
- Preparation of the business plans of each of the incubators to be implemented.
- Determination of the necessary infrastructure.
- Implementation and training of potential consultants and business advisors inside the incubators.
- Management of incubated companies.
- Monitoring and evaluation of incorporated companies

The Components of the business model of the proposed incubator are:

Desired clientele

To create an effective business model, a university incubator must identify which clients it is going to target. A university incubator must then create its own clientele.

Customer relationship

To ensure survival and success, we must identify the type of relationship we want to establish with customers.

Creating communication channels:

Externally, the university incubator needs to build communication channels in different areas to attract mentors and service providers, connect them with investors to support new startups and generate positive rumors that attract new investors.

Value proposition

The value proposition reflects the set of services offered by the university incubator to meet the needs of its customers (sponsors and users). A value proposition clearly identifies what advantages our customers will receive. They are supposed to be in line with broad purposes and the main objectives of our incubator

Channels to reach the desired customers

The university incubator offers its value proposition to its clients (sponsors and users) through different channels. Effective channels will distribute value proposition and attract the collaboration of partners quickly, effectively and efficiently. An incubator can reach its customers through its own channels, partner channels (main distributors), or a mixture of both.

Key Partners

They are those that, while essential, contributing to success, giving us greater strength and reinforcing the effectiveness of our business model.

Key Activities

The key activities cover the most important activities when executing the value proposition of an incubator.

Key Resources

Resources are considered an asset of our university incubator, necessary for the sustainability and support of the existence of the incubator. These resources can be personal, financial, physical, intellectual, etc.

Cost structure

Fixed costs. These are related to personnel, infrastructure, technology platform and payment of services.

Variable costs. These are associated with the hiring of experts, advisors and specific studies, etc.

Sources of income

We distinguish two sources of income: a) the benefits obtained by the incubator (for the rental of services and facilities, organization of events for clients, for the public or delivering services under contract to large clients); b) the financing of both public and private entities that will be the engine of this project.

3. Results

The business model for the university incubator that we propose is a tool that describes the components on which a company creates and provides value.

This project indicates the elements that, depending on the analysis, structure a business model proposal for university incubators. The expected results are as follows:

- a. Promotion, identification and selection of ideas, projects and entrepreneurs.
- b. Support in the management of sources of initial financing (seed capital) and access to sources of risk and credit capital.
- c. Specialized training in topics such as: business training, management development, design of marketing campaigns and development and registration of trademarks, trade names and patents

4. Conclusions

The incubation model Canvas Model that is proposed, considers all the necessary aspects to be able to have profitable companies within the university communities. This model poses a promising scenario for students, teachers and community adjacent to non-institutionalized universities. The model helps to identify the shortcomings and strengths of budding projects and from these changes are made so that at the time of investing no losses are incurred, but successful projects.

The incubation model is replicable in newly created and precariously institutionalized universities.

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