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From ideas to post incubation: Generating global-born companies at TECNOPUC and RAIAR

Parallel session

Micro-multinationals: born to be global

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From ideas to post incubation: Generating global-born companies at TECNOPUC and RAIAR

Executive Summary

The presence of a Science and Technology Park – TECNOPUC and a Business Incubator – RAIAR at the Pontifical Catholic University of Rio Grande do Sul (PUCRS) represents the strengthening of an innovation ecosystem that is constantly fostering the interaction between university, industry, government and society. Both the Park and the Business Incubator were inaugurated in 2003, becoming a multi-industry ecosystem focused on information technology and communication, energy and the environment, life sciences and creative industry. Also, the significant growth as an ecosystem of innovation increased the relationships, especially in the international context. Therefore, in the last years both the park and the incubator have put a lot of efforts in the global dimension, including collaboration, networking, open innovation and internationalization, with the purpose of developing the global mindset since the early stage, meaning the idea. For this reason, in this paper we present the process of generating global-born companies at TECNOPUC and RAIAR. This process starts with an idea and is supported by activities related to pre-incubation, incubation and post-incubation, representing a stronger integration between RAIAR and TECNOPUC

Introduction

Tecnopuc is a STP owned by PUCRS - Pontifical Catholic University of Rio Grande do Sul, a University founded in 1948, located in the city of Porto Alegre, in the most southern state of Brazil – Rio Grande do Sul. PUCRS is a benchmarking University in higher education and research in Brazil and abroad. PUCRS current strategic position is oriented towards innovation and development, in order to promote economic and social development of its surrounding community. Moreover, the University has internationalization as one of the main focus for the future. TECNOPUC is part of this strategy, and was launched in 2003. The park is the product of joint efforts by PUCRS, the government and the industry with the purpose of creating an environment for interdisciplinary research and innovation in order to make stakeholders more competitive, improve quality of life and bring the academic competence of the university to society, thus promoting science and technology development.

Following the entrepreneurship and innovative mindset of the university, RAIAR – PUCRS Business Incubator was also inaugurated in 2003, located at Tecnopuc. Therefore, in order to insert PUCRS into the techno-economic-social development process of the nation, RAIAR has been working with the following objectives:

- Support and promote the development process of innovative ideas;
- Support and promote the development process of innovative startups;
- Provide physical space, infrastructure and value added solutions to the startups;
- Train and develop skills and entrepreneurial attitudes, such as global mindset;
- Prospect and attract new entrepreneurs and new startups.

Since 2003, RAIAR incubated 85 companies and graduated 65 companies. More than 110 new products and 98 services were launched throughout this period. The total intellectual property records of the incubated companies are 52. In the last two years, RAIAR supported 26 incubated companies. Nowadays, Tecnopuc gathers a total of 120 organizations (of which 26 companies incubated at RAIAR), representing more than 6,400 people involved and more than 80,000 square meters in built areas.

Giving this context, in this paper we describe the process of generating global-born companies at TECNOPUC and RAIAR. This process starts at RAIAR, from an idea to an incubation process, and follows a post-incubation process taking the advantage of the entire Tecnopuc ecosystem.

RAIAR Incubator – A Brief History

In 2003, RAIAR started its operations in a 500 sqm total built area. Since the beginning, RAIAR's mission was defined as *encouraging the entrepreneurial position of PUCRS community and the society, transforming innovative idea into competitive businesses, by supporting infrastructure and business management*. In order to achieve this mission, the vision was then defined as *serving as a relevant reference for technology based companies, focusing on the development of entrepreneurial culture and innovation*.

In 2006 the Incubator moved to a refurbished office building of 1,500sqm. In this new three times larger area, interaction spaces were designed based on the concept of non-territorial offices, which allows and encourages synergy among people. The idealization of these physical spaces and "relationship areas" was created by the purpose of mobility and relaxation, providing new opportunities for exchanging experience, networking and emergence of new ideas among entrepreneurs.

In order to foster the innovative and entrepreneurial spirit since the early stage of a potential entrepreneur, RAIAR has initially divided its services in a pre-incubation and an incubation process. In order to improve the procedures regarding the **pre-incubation phase**, RAIAR created in 2014 a program called *Startup Garage*. This program involves a business modeling activity that includes a welcoming environment of ideas and technology and innovation-based projects. *Startup Garage* also offers an environment for the development and specification of the projects presented, encouraging the business creation. In the first edition more than 100 projects were submitted and 20 selected

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for support. Due to the success of the initiative, the program was broadcasted in the mainstream media in our region, entitled "*A proxima grande ideia*" (Figures 1 and 2).

Figure 1   Figure 2

In the end of the four-month program an event called Pitch Day was offered, having the participation of potential investors.

In a more advanced stage, the **incubation process** was developed to be very comprehensive, aiming to give the necessary support for the incubated companies regarding process management, legal and financial mentoring. Another added value to its incubated companies is to serve as a shortcut to the services provided by different players of the innovation ecosystem. Therefore, the incubation used to encompasses many actions that foster interaction among stakeholders. For instance, RAIAR offered dozens of events with the aim of promoting integration and training for personal and professional growth of the incubated companies (Figures 4, 5 and 6):

- *"Encontro de Talentos"*: created to promote the integration of the incubated entrepreneurs with entrepreneurs already renowned in the market;
- *"Café do Pé Direito"*: created in order to generate interaction between Raiar, entrepreneurs and partners;
- *"RAIAR do Conhecimento"*: designed to provide training in areas of interest to our entrepreneurs: marketing research, financial plan, internationalization, etc.;
- "RAIAR in Drops": created to provide services and opportunities offered by PUCRS and by RAIAR National and International Partners.

Figure 4   Figure 5   Figure 6

Representatives of the incubated companies were also usually invited to attend monthly meetings with the purpose of talking about matters of mutual interest and offer the opportunity to participate of national and international awards.

At the end of the incubation process, the main criteria for the **graduation** of the company used to be the verification of the successful accomplishment of the whole process of the business plan, reviewed and updated during the incubation period (usually 2 years). In this analysis, the RAIAR team assesses the potential competitiveness of the products and services developed and placed in

the market, analysis of the financial resources generated, the number of jobs generated as well, paid taxes, billing, among other items.

From the operational perspective, it was always one of the main concerns to provide an individual room for each company in order to facilitate the development of projects. In addition, meeting rooms and auditoriums - areas shared and used for interaction were always available for them to make reservations. In this context of 12 years, RAIAR offered management, finance, design and communication advisory services. The incubated companies always had access to the University, including the support of the innovation ecosystem that gathers actions, mechanisms and players to foster innovation and entrepreneurship among the university community. For instance, in this network, incubated companies could be supported by the Office of Technology Transfer (ETT), could access the specialized laboratories of Idea Institute, among others.

From the quality system perspective, within the framework of qualification and professional structure, RAIAR joined the program called Reference Centre to Support New Ventures (CERNE) in 2012. This program encompasses a solution platform in order to expand the possibility of generating significant improvements in the incubators' results and consequently of projects developed in this environment. Moreover, in accordance with CERNE guidelines, in 2014 and 2015 workshops, courses and training programs for entrepreneurs were intensified. These qualifications meet the needs of entrepreneurs, especially in new areas of management methods, creativity, fundraising and fostering, finance and innovation projects. In the international context, RAIAR was the first business incubator in the Americas to get the quality certification of Business and Innovation Centre (BIC), a title granted by the European Business Innovation Centre Network (EBN). This title was provided in the beginning of 2015 after EBN has audited RAIAR, and it implies the incubator operates according to the "EU|BIC" quality system.

By treading the path described, RAIAR has achieved a prominent place in Brazilian innovation environments and has started its internationalization story.

RAIAR Incubator: An Improved Incubation Process

RAIAR already has a proven story of achievements and accomplishments. In order to constantly offer qualification and develop a challenging and innovative environment, RAIAR has been improving its operations based on intensive technologies. A variety of actions and projects have been undertaken to provide interaction and closer relationships within the Incubator environment, which includes dissemination of entrepreneurial culture, training programs, events and inter-company relationships within the entire TECNOPUC ecosystem.

The future of the innovation ecosystem integrated by TECNOPUC and RAIAR is strongly represented by the internationalization dimension, which is a key aspect of the process of generating global-born companies. It seeks global reach and enhances the planned strategies in order to allow for a global position of the innovation ecosystem through its companies and its employees, expanding opportunities to the intellectual capital available in the university and its surroundings. Therefore, aiming at consolidating continuous improvements process, RAIAR has improved its incubation process so that startups can receive the necessary support to reach maturity levels and at the end of the incubation process this can present a solid structure that will allow higher flights. This improved incubation model provides 6 months sprints (1 to diagnostic / planning, 4 for execution and 1 used for evaluation of results). Figure 7 shows these sprints represented by a pre-incubation step and five additional stages.
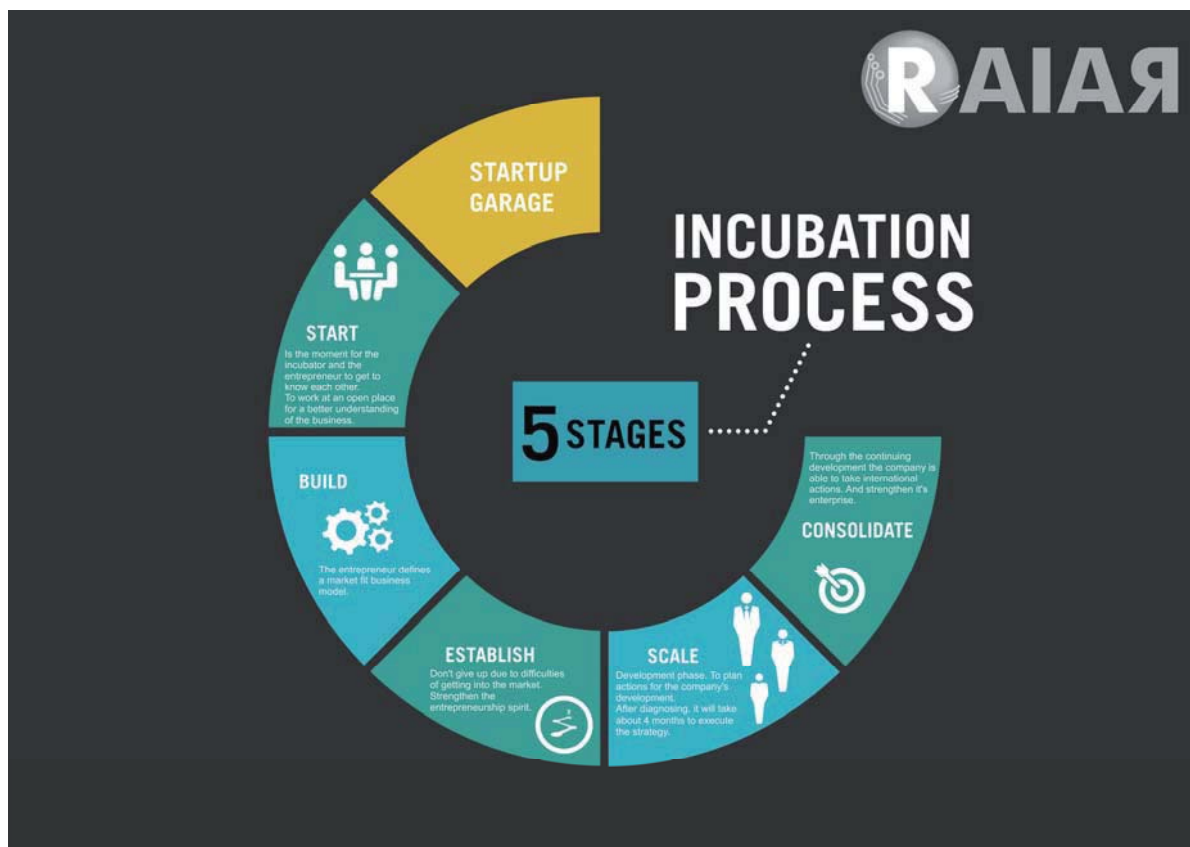
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Figure 7 – RAIAR improved business incubation model

STARTUP GARAGE remains as the pre-incubation program. Then, the next stage of the incubation process is called START. It is when the business incubator gets to know the entrepreneur and the venture (maturity, ambition, strategies, etc.). It is also the moment for the entrepreneur to recognize the dynamics of the business incubator. The next stage is called BUILD, when the entrepreneur seeks to validate the assumptions of his business model. The ESTABLISH stage is where the entrepreneur seeks to strengthen business and market segment. The SCALE stage is the time to put scale strategies into practice. Finally, the CONSOLIDATE stage is where the startup is turning into a company and aims at scaling the mix of products / services and internationalize its business.
Giving the necessity for a wide support regarding the continuous support of a company, there is also a **Post-Incubation** stage, covering additional important services in order to assure a successful journey for the graduated companies.

The post-incubation: Growth Services and Integration between RAIAR and TECNOPUC

The Smart Guide to Innovation – Based Incubators (IBI)[1] say that "the post-incubation relates to the activities to be carried out when the company has reached the maturity phase, and therefore is ready to walk on its own feet. It is the time when, if it has been physically incubated, the company will leave the incubator. Various services might still be needed by the SME, for example, to increment its sales or improve its productive processes, such as internationalization services or innovation introduction through scouting and detection activities. Incubators positioned as post incubators sometimes rename themselves as accelerators". Thus, the companies' retention strategies arise as a relevant tool to assure not only the growth of the graduated companies, but also to help them to effectively become global. Therefore, the post-incubation services at RAIAR include progressive transition from the incubator to Tecnopuc in a soft landing strategy, strengthening the entrepreneurial capability, more interaction with the University and the entire park ecosystem, increasing the attraction of venture capital investments and effective research and development interaction, and global orientation (internationalization).

[1] The Smart Guide to Innovation – Based Incubators (IBI) – Luxembourg: Publications Office of the European Union, 2010.

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Internationalization[2]

Reinforcing the new approach aimed at internationalization, it is relevant to mention that PUCRS considers the internationalization process as one of the most important actions to state excellence in the global dimension of universities. For that reason, the university, gathering the Park and the Incubator has been developing actions to encourage the academic mobility of students and teachers and also to encourage the consolidation of strategic alliances for the development of high quality research, which allows the expansion of international opportunities for academic and management experience. Therefore, enhancing the future plans, RAIAR's internationalization projects are directly linked to the Internationalization Program of TECNOPUC and to the process of positioning PUCRS in the international research community. These projects are created to gather everything related to the global dimension, encouraging incubated companies to think globally since the beginning.

Characterized to be a long-term plan, integrating the procedures since the idea stage and helping to develop the ultimate global mindset, the internationalization of the Park and the Incubator is currently based on five pillars: international cooperation, soft landing program (to support the set up of new international companies), take off program (to support the entrance of partner companies into new markets), exchange of entrepreneurs and the attendance in international events, trade mission and roundtables. Therefore, the global dimension has been gradually explored throughout all the stages described since the pre-incubation and it will be even strongly considered during the post-incubation.

It is worth mentioning that RAIAR's internationalization activities are directly linked to the Internationalization Program of TECNOPUC and to the process of positioning PUCRS in the international research community. For this reason, incubated companies are encouraged to think globally since the beginning. Examples of activities include partnerships for international cooperation, inclusion in innovation networks recognized worldwide, tap into new markets, and exchange for entrepreneurs and international missions. For instance, the participation in the Land2Land Platform, created by ANPROTEC (Brazilian Association of Science Parks and Business Incubators) in partnership with APEX (Brazilian Trade and Investment Promotion Agency) and also the fact of being an associate member of EBN (European Business Innovation Centre Network), and also member of the EBN Internationalization SIG committee. In addition, RAIAR and TECNOPUC also took part of the EBN's CONNECT Program, hosting entrepreneurs from Europe and allowing them to experience and establish new partnerships. RAIAR also stimulate the participation of the entrepreneurs in round tables, thus promoting a closer relationship between the companies and the Incubator (as an example, three incubated companies from RAIAR participated in the business matchmaking session of the IASP 2015 in Beijing).

Success histories: Pandorga and Radiopharmacus[3]

Pandorga is a software development company originated at RAIAR. It is a real case of generating global-born companies. Pandorga´s flight took off in 2007, in the home of one of the shareholders, in Porto Alegre. The operation joined professionals who used to advise in technology projects in the tax area in the public sector. The opportunity came after the founders worked in a program supported by the Inter-American Development Bank (IDB) aiming at improving systems in the Department of Treasury of the state of Rio Grande do Sul. During the incubation process, the company had the opportunity to reflect about its business model in order to build a global-born company. At that time, the owners of Pandorga fine-tuned the type of business they wanted to develop in the customized software area. After the incubation, they become a resident company at Tecnopuc. In addition, the coexistence of Pandorga with IT global players within the Park gave the company the ambition to win the world. They entered the global market in 2013, arriving in

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[2] The Global Dimension In Science And Technology Parks: The Case Of Tecnopuc/ Simone Torrescasana, Rafael Prikladnicki, Eduardo Giugliani, Clarice Schneider Lamb - 32nd IASP World Conference on Science Parks and Areas of Innovation - 2015 - Beijing, China. 7pag.
[3] Tecnopuc: PUCRS´ Science and Technology Park: people, creativity and innovation/ Jorge Audy, Patricia Knebel - Porto Alegre: EDIPUCRS, 2016.159p.

London/United Kingdom. The founders of Pandorga aimed at detaching the company from being defined as having a particular nationality.

Radiopharmacus is another company originated at RAIAR. The company has innovated in the pharmaceutical industry. Essential in the undertaking of diagnostic imaging tests, radiopharmaceuticals are extremely specific drugs that depend on a conducting substance to take radioactive elements to the investigated areas in the organism. The project´s creation started in 2003 and the company has benefited from the incubation at RAIAR in order to improve its business model. The company had the products began to be developed in 2007. Following the quality standards of multinational corporations and already developing a global mindset, Radiopharmacus (currently RPG Group) started to compete with big companies around the world. The price offered and the quality of the product ensured a market reach for RPH, and the first financial results that would support the next steps towards new markets.

Final Thoughts

In this paper we have presented the process of generating global-born companies at TECNOPUC and RAIAR. This process starts with an idea and is supported by activities related to pre-incubation, incubation and post-incubation. Pandorga and Radipharmacus are some examples of companies that took its first steps at RAIAR, then grew joining TECNOPUC and entered the global market. The success stories have inspired us in improving our model by proposing additional steps such as post-incubation and a stronger integration between RAIAR and TECNOPUC. Companies are already experiencing this improved process. As an example, in 2016 at least three RAIAR graduated companies will take the advantage of the post-incubation phase and we also aim to have at least two RAIAR incubated companies taking the advantage of the TECNOPUC Internationalization Program.