

35th IASP World Conference
on Science Parks and Areas of Innovation 2018
Isfahan, Iran

**Collaboration for Internationalization: The case of TECNOPUC, TECNOSINOS
and FEEVALE Techpark in the south of Brazil**

*Parallel session 2:
Global alliances for internationalization*

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Collaboration for Internationalization: The case of TECNOPUC, TECNOSINOS and FEEVALE Techpark in the south of Brazil

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Executive Summary

In the last years STPs have put a lot of effort in the global dimension, including networking, open innovation and internationalization, with the purpose of attracting new businesses and partnerships. As the concept of STPs evolves from a physical area with borders to become part of areas of innovation, make sense to think that STPs located in the same area could collaborate to become stronger as an area of innovation. In this paper we report from an initiative carried out by three STPs located in the South of Brazil. Having a distance of 45 km among them and with a community of 12,000 people from more 250 companies, Tecnopuc, Tecnosinos and Feevale Techpark decided to take the advantage of this unique context to sign an agreement in order to stimulate internationalization of companies and experience exchange. This agreement represents an important step towards the development of mature areas of innovation.

1. Introduction

In the last years STPs have put a lot of effort in the global dimension, including collaboration, networking, open innovation and internationalization, with the purpose of attracting new businesses and partnerships. As the concept of an STPs evolves from a physical area with borders to become part of areas of innovation, including an urban area of a city or neighborhood, make sense to think that STPs located in the same area could collaborate to become stronger as an area of innovation.

This is the case of three well established STPs located in the metropolitan area of Porto Alegre, which is de capital city of Rio Grande do Sul State in Brazil: Tecnopuc, Tecnosinos and Feevale Techpark. The parks are located within a distance of 45 km (located in Porto Alegre, São Leopoldo and Novo Hamburgo respectively) and have together around 12,000 people from more than 250 organizations. This represents 60% of total people and 30% of total organizations located at STPs in Brazil. Two of the parks received together five awards as the best science and technology park of Brazil (Tecnopuc in 2004, 2009, and 2016 and Tecnosinos in 2011 and 2014), promoted by Anprotec (the Brazilian Association for Science Parks and Business Incubators). The three parks are also part of the land2land platform developed by Anprotec to promote the internalization of companies installed in STPs.

Feevale Tech Park and Tecnosinos are located in Sinos Valley, which is a region where German immigrants first arrived in Brazil in past 1824. Tecnopuc is located in Porto Alegre. The distance from Porto Alegre (Tecnopuc) to São Leopoldo (Tecnosinos) is about 32 km, and from São Leopoldo to Novo Hamburgo (Feevale TechPark) is about 12 km. Thus, the total distance from Porto Alegre to Novo Hamburgo is about 44 km.

Tecnosinos works in a triple helix model, including the municipality of São Leopoldo, the Association of Industry and Commerce of the city (ACIST) and Unisinos University. There are around 80 companies (35 of them are startups) in five different fields: IT, digital convergence and communication, automation and semiconductors, technology for health, and clean technology. Those companies employ around 4.5 thousand people.

Tecnopuc was officially established in 2003 in Porto Alegre and works in four different fields such as information technology and communication, energy and the environment, life sciences and creative industry. It is the product of joint efforts by PUCRS University, government, society, and industry with the purpose of creating an environment for interdisciplinary research and innovation and to make stakeholders more competitive, improving quality of life and bringing the academic competence of the university to society, thus promoting science and technology development in the region. It houses 120 organizations in 83 thousand square meter of built area. There are a total of 20 buildings located in two different sites that generate more than 6.5 thousand job positions.

Feevale Techpark works in five fields such as IT and communication, creative industry, material and nanotechnology, life sciences and biotechnology and removable energy. It is located in

Novo Hamburgo and Campo Bom, which is a border city. There are 50 companies and a total of 700 people.

In order to take the advantage of this unique context the three parks have signed an agreement in August of 2016 in order to stimulate internationalization of companies and experience exchange in this area. This topic is a challenge issue both for companies and STPs. Reaching markets abroad is very difficult and very often companies fail due to the absent of support or strategy. In the case of STPs is the same. No matter if it is softlanding, take off or matchmaking, internationalization of STPs and its companies is a hard task. The first step is to take part in an international organization, such as IASP and have mechanisms to promote internationalization, such as the land2land platform provided by Anprotec. But if a STP starts an international road show to release a project or to attract companies, the approach will be stronger by showing an area of innovation, such as the Metropolitan area of Porto Alegre.

2. Internationalization

According to Rocha (2010)¹, the decision to internationalize should be considered as an innovation for the company. Planning and market research are essential for new entrants and should be considered before deciding to internationalize. According to Ricupero and Barreto (2007),² the decision for internationalization is perhaps one of the most important in international business.

Several authors have studied the process of internationalization. For Hilal and Hernais (2003)³, this is a new process for the firm full of uncertainties, which resembles walking cautiously in unfamiliar terrain. For Kovacs, Moraes and Oliveira (2011)⁴, internationalization is of recognized importance to nations and companies, in the sense that it contributes to the economic development of one country and promotes the company to another level, becoming a global company.

Among the motivating factors for foreign investment, we can mention the search for new markets, taking into account the facilities of access to those markets, installing a factory, instead of simply exporting. In this sense, the size of the market is extremely relevant. According to Dunning's (1980)⁵ Eclectic Paradigm, foreign direct investment provides advantages over competitors, including the ability to own, control, and optimize value chain activities in research and development, marketing, promotion, and sales in the most advantageous locations of the global market.

For Johanson and Vahlne (1977)⁶, the most important point in the process of internationalization is the knowledge acquired through experience. It seems logical, but the more a market is known, the less uncertainty will be present in the operation, generating incentives for greater investment, including for a gradual increase in the performance in that third country.

Rio Grande do Sul has an acknowledged diversified economy and seeks to be increasingly internationalized in order to increase its competitiveness. The universities of Rio Grande do Sul are among the best in the country and, in proportion to the number of students, we train more engineers, masters and doctors than in any other Brazilian state (MEC, 2013). The state has the largest number of technical schools per capita, an advantage for the industry that needs skilled labor. Only in the three largest technological parks in Rio Grande do Sul, the number of companies in 2016 was 250, giving employment to more than 12 thousand people and forming an ecosystem focused on innovation and technology.

¹ Rocha, Licia Regina Medeiros. "O Processo De Internacionalização Para O Brasil-Estratégias Aplicadas Às Empresas Da Indústria De Petróleo E Gás." *Revista Gestão Organizacional* 3.2 (2010): 197.

² RICUPERO, Rubens, and F. Mello Barreto. "A importância do investimento direto estrangeiro do Brasil no exterior para o desenvolvimento socioeconômico do país." *Almeida, A.(organizador): Internacionalização de empresas brasileiras, Elsevier-Editora Campus* (2007).

³ Hilal, Adriana, and Carlos A. Hemais. "O processo de internacionalização na ótica da escola nórdica: evidências empíricas em empresas brasileiras." *Revista de Administração Contemporânea* 7.1 (2003): 109-124.

⁴ Kovacs, Erica Piros, Walter Fernando Araujo de Moraes, and Brigitte Renata Bezerra de Oliveira. "Characteristics of location in the firm internationalization process." *RAE* 51.4 (2011): 320-336

⁵ Dunning, John H. "Toward an eclectic theory of international production: Some empirical tests." *Journal of international business studies* 11.1 (1980): 9-31.

⁶ Johanson, Jan, and Jan-Erik Vahlne. "The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments." *Journal of international business studies* 8.1 (1977): 23-32.

The excellent training of human resources in the universities of Rio Grande do Sul is historical and remains one of the main assets of the State. Thus, the State has the ideal atmosphere and environment to conduct scientific and technological development and foster innovation. Considering that Rio Grande do Sul does not have a large consumer market compared to other Brazilian regions, it is necessary to invest heavily in the development of the Knowledge Economy and in competitiveness based on innovation. The Program of Technology Parks of Rio Grande do Sul is an example of this new approach.

Rio Grande do Sul is strategically positioned in the center of South America, covering in a 1500 km radius of Porto Alegre, about 70% of the GDP of South America. Even with all these competitive advantages, most investors interested in doing business with Brazil do not even get to Rio Grande do Sul. Foreign delegations prospecting business opportunities continues to land on the Rio de Janeiro, São Paulo and Brasília to develop their network.

This lack of interest by the State is not only the result of the discomfort of including another flight to the already long itinerary of connections that entrepreneurs and investors must manage to optimize their business trips in Brazil. It is most likely lack of knowledge. Rio Grande do Sul is not yet an internationally known state and the initiative of a cooperative work between the three parks have a clear objective: placing our innovation environment in the map of global companies, and taking our technology-based companies together in this endeavor.

3. The Cooperation Agreement

The concept begun to take shape in 2015, during IASP International Conference in Beijing, where the discussions about the evolution of STPs had highlighted the necessity of spreading over physical barriers and connecting to cities, regions and the community. The three STPs turned this conference discussion into to plan and started shaping this agreement.

The key reality that drives the necessity for cooperation in STPs is the fact that, in spite of their differences of operations and business models, they usually share commons challenges. One subject that is always on the spot when discussing about resources is the cost of international presence and visibility. The immediate benefit that accrues to any STP as a result of international actions will inevitably be less than the costs that the STP incurs. This reality means that it is not interesting for STPs to pursue unilateral actions at international arenas, and cooperation seems to be a strategic decision to improve those results.

With international cooperation as a drive, the outcome of the agreement that was draft by six hands has the following set of commitments:

- ✓ Promotion of events and missions organized by each participant;
- ✓ Promotion of softlanding of micro and small businesses on a reciprocal basis;
- ✓ Creation of joint internationalization programs for companies located in their parks;
- ✓ Prospecting of companies and businesses in Brazil and abroad;
- ✓ Share market information;
- ✓ Exchange information on the processes and technical aspects of the attraction and installation of companies, clustering, technology transfer, project construction, specific regulations and local markets and good practices;
- ✓ Stimulate the exchange of technology, partnerships between companies and synergies between actors located in their respective regions and clusters;
- ✓ Support the creation of joint technology transfer projects and collaboration between institutions associated with the parties;
- ✓ Common assembly of projects and programs aimed at raising funds at all levels of government and in international institutions;
- ✓ Qualified training of their managers.

The Cooperation Agreement was signed in August 2016 at Tecnopuc.

4. From Paper to Action

Formulating and signing a Cooperation Agreement is fairly easy. It might take some time between the conceptualization phase to the bureaucracies of legal and administrative departments, but putting action in place is the most challenging task in this kind of agreement. Immediately after the formalization, an operational team was set up to work on an action plan focusing on internationalization, the main scope of the document. This work group has come up with the four main joint activities to focus on this preliminary phase: the design of a Softlanding Program; the

presentation of the Agreement at international events; the articulated reception of foreign delegations; and the joint organization of international events. Each activity is detailed next.

4.1 Softlanding Program

For insertion in the foreign market, technology-based companies adopt as an entry strategy the establishment of international partnerships. These partnerships take place in two main areas, commercial and development. The development partnership consists of the transfer of technology, the development of complementary solutions or the joint development of a solution. The commercial partnership involves sales and relationship and, depending on the product, the company will need partners for after sales processes, technical assistance, technical support, replacement, upgrades, among others. When the technology-based companies decide to open greenfield ventures in other markets, the need for knowledge and support is magnified, specially in Brazil where there area very complex tax constitution and heavy bureaucracy for opening a company.

The joint Softlanding Program was designed to attend those international innovative companies that want to learn about doing business in Brazil. The idea is to have the participants receiving exposure to key areas including Marketing & Sales, Legal, Intellectual Property, Financial and Human Resources and an intensive agenda of visits to the Entrepreneur Ecosystem of the region. The goal is to provide the knowledge and the connections necessary for international companies to partner with Brazilians or to establish their business in Brazil.

This program offers a week of intense immersion on how to do business in Brazil, with no cost for the participant, apart from flight and accommodation. The companies that want to extend the visit, should have a station to work up to 30 days with no cost in any of the three STPs and extra consulting service to be charged accordant to the specific necessity.

The one week program described below is organized by the work group, having one park as the main host at each edition. The main host is responsible for 3 days of the program while the 2 other working days of the week will be organized by each of the other parks.

WORKSHOPS	VISITS	NETWORKING
<ul style="list-style-type: none"> • Cultural <u>Diversity</u> • Marketing & Sales • Legal • Intellectual <u>Property</u> • <u>Immigration</u> • <u>Human Resources</u> 	<ul style="list-style-type: none"> • <u>Techparks and Incubators</u> • <u>Universities</u> • <u>Companies</u> • <u>Entrepreneurship Ecosystem</u> 	<ul style="list-style-type: none"> • <u>Match-making</u> • Business meetings • <u>Informal sessions</u>

Results achieved

Although each STP may have its own Softlanding Program, the joint program may allow additional initiatives such the one articulated in partnership with the Rio Grande do Sul Federation of Industries (FIERGS). FIERGS is an important connection to the industry network and they became a partner to the Softlanding initiative in the context of an important international event they organized in November of 2017, the 35° Brazil-Germany Economic Forum. In this event the three parks together have shown their capabilities and opportunities for having Germain companies expanding to Rio Grande do Sul state. We also had similar activities with delegations from Spain, Canada, and Denmark.

4.2 Participation on International Events

Participating in international events is one of the most effective ways of expanding international networks and immersing in diverse cultures and environments. It is also a way of getting in touch with new trends and learning best practices. Although the importance of being present internationally is unquestionable, the costs involved in such events are usually high. Once it

is difficult to strategically choose which events to prioritize considering one's budget, it becomes easier when this international presence can be thought within the resources of the three parks. The goal here is to take every opportunity of international presentations to reinforce the ecosystem present in the South of Brazil.

Results achieved

Since August 2016, there were several opportunities to present this active ecosystem. In September of 2016 during the AURP International Conference in Oklahoma City (USA), and in March of 2017 during the InBIA Internacional Conference in Seattle (USA). In 2018 there is a plan to make the network more visible during the IASP Conference in Isfahan.

4.3 Reception of Foreign Delegations

The work group has been committed to share information and coordinate the international actions. One example is the coordination of agendas for the reception of international delegations that arrive in region. The coordination does not relate only to accommodating dates and hours on the agenda, but also to formulating a similar visit program and match-making with the parks startups and resident companies.

Results achieved

There has been two coordinated agendas already: a) a delegation from Durham Region - Canada. Two officials from regional Government came here to present business opportunities in Canada for Brazilian companies. The visit included individual attendance to over 20 startups, graduated and consolidated companies. An important effective result of this activity is that one startup is working in the process to establish an office in that region; b) a delegation from Switzerland. Two officials from Switzerland Commercial Trade Department came to know the innovation ecosystem formed by those mentioned three parks. The main perspective of this activity is to have a follow event in which a matchmaking will be organized between companies from Brazil and Switzerland.

4.4 Organization of International Events

Not infrequently, STPs are responsible for receiving external requests for events (training, courses, exchange, visits, meetings, etc.) in Brazil, sometimes involving the participation of foreign authorities or delegations. Under the scope of the agreement, the plan is to jointly articulate this sort of events between the three parks.

Results achieved

The first event that is being organized together is a Seminar that will take place in October 2017, sponsored by Spain's Embassy in São Paulo and ICEX - Spain Exports and Investment. For this event, the venue definition was made in agreement, having Tecnosinos as the first host for an international event. Even having one of the parks as the venue host, all parks will be involved in the organization, operation and promotion of the event.

Another event that the three parks will participate together is EBBA (Brazilian Germany Economic Forum), which took place in November of 2017, at FIERGS (Federation of Rio Grande do Sul Industry). In this event, each Park presented its five most important startups at the same fair stand.

5. Conclusions

The internationalization process of STPs is irreversible, becoming also an attractor of new creative and innovative actions, assuring the global dimension actions. For this reason this agreement expects to expand the global operation of each park and the entire area mainly allowing external companies to have the South of Brazil as their entry door in the Brazilian market. Expectations of this collaboration are to improve this metropolitan area as an innovation and technology region, making it known internationally in order to facilitate the attraction of multinational tech companies. Companies located at the three STPs may also benefit from this

agreement in order to plan their strategy in a foreign country. Moreover, in the future the three STPs may seek for additional collaboration opportunities and other consolidated STPs could also join this agreement to make an even stronger area of innovation.