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## **UNITEC Incubator and VENTIUR Accelerator Hybrid Model**

Workshop 1
"Rethinking STP services"

## Author:

Luís Felipe Maldaner (fmaldaner@unisinos.br) Tecnosinos São Leopoldo Tech Park Brazil

Co-author(s)
Flavia Siqueira Fiorin (ffiorin@unisinos.br)
Luisa Simon (luisasi@unisinos.br)
Tecnosinos São Leopoldo Tech Park Brazil

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## **Executive Summary**

Tecnosinos has a Hybrid Model between an incubator and an accelerator working as partners to amplify services and bring new startups to the environmental. The innovation ecosystem, which the both actors are in, allow a resident companies and startups work together in innovative projects focused in brings a new product or service to the market. This partnership has grown strong and numerous results were achieved. The Accelerator has installed its operation within the framework of the Incubator, which confirms the success of the partnership. The hybrid model has represented an increase of the creative ecosystem, the birth of new startups, the acceleration of others and the development of innovative methodologies.

#### 1 - Introduction

UNITEC is an Incubator located in Tecnosinos. It was established in 1999, and during these years has improved its activities in order to incentive more and more entrepreneurs to foster their ideas in a business plan. In 2015 another building was inaugurated with 37 more enterprises spaces.

Thus, this increased number of spaces would bring new startups, increasing several kinds of demands from those new entrepreneurs. The better way to offer amplified services for them was to have new partner. The main idea was to make different, to make new. Why not to bring an accelerator to the same environmental?

The hybrid model adopted by UNITEC Incubator and VENTIUR Accelerator consists of a set of actions that aim to strengthen the innovation ecosystem in which the incubator and the accelerator are located, fostering innovative entrepreneurship with focus on prospecting and qualifying sustainable business.

### 2 - Literature review

This section will present a short review of what is published regarding collaborative network as an important part of innovation system, taking in mind that innovation is a cumulative process. Second point in this section is about innovation ecosystem or area of innovation, because it is a new tendency worldwide. There are some cities, such as Barcelona, where there is a large neighborhood, called 22@Barcelona, where a residents companies and startups works together in innovative projects.

Accelerator and incubator will be two follow subjects in this section and later a topic discussing how it is possible to incentive entrepreneurs taking their projects to the market.

## 2.1 - Collaborative network

Shumpeter<sup>149</sup> describe innovation as a process that brings a new product or service to the market. At the same time, innovation is a cumulative process, because it can be radical or disruptive<sup>150</sup> and incremental. Even when disruptive innovation occurs, it can be caused by a cumulative and collaborative process, especially in current times where all information is available to everyone through internet.

<sup>149</sup> SCHUMPETER, J. A. (1942), Capitalism, Socialism and Democracy. Harper Perennial Ed. New York, published in 2008.

<sup>150</sup> Christensen, Clayton M. (1997). The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail. Boston: Harvard Business School Press

Pittaway, L., Robertson, M., Munir, K., Denyer, D. and Neely, A.<sup>151</sup> made a research to find a relation between network and innovation. Their paper presents a systematic review of research linking the networking behavior of firms with their innovative capacity. They find that the principal benefits of networking as identified in the literature include: risk sharing; obtaining access to new markets and technologies; speeding products to market; pooling complementary skills; safeguarding property rights when complete or contingent contracts are not possible; and acting as a key vehicle for obtaining access to external knowledge.

As it is possible to learn from this article, collaborative network is very important to the innovation process, not only for small or startups companies, but also for large companies. Ryan May<sup>152</sup> pointed out that corporate entrepreneurship is especially crucial for large companies, enabling these organizations — that are traditionally averse to risk-taking — to innovate, driving leaders and teams toward an increased level of corporate enterprising. In addition to the obvious benefits obtained through innovation, this approach also provides the organizational benefit of setting the stage for leadership continuity. Network is very important for startups especially in early stage, in order to have access to a new technology and to have access to the market. Most of times they need some advice how to get the market with their new product or service, or how the market will know what new are they doing. At the same time, speed counts. The "speed to market is an admirable goal, and there are many apparently valid reasons that cycle-time reduction should be a priority<sup>153</sup>".

According to Chesbrough e Rosenbloom<sup>154</sup> companies have more difficulties to innovate whether they are far from their core business. Their capacity to innovate could be related to an innovative environmental, such as a Tech Park or an innovation ecosystem. At the same time, Edquist<sup>155</sup> pointed out that companies innovate most of the time from their interactions with other companies in some especial environmental in a virtuous circle of learning. Hodgson<sup>156</sup> mentioned that knowledge depends not only from an individual intellectual capacity, but also from the interactions with other people and partners in a physical or virtual environmental.

According to Jasit Singh<sup>157</sup> the overall evidence is consistent with a view that interpersonal networks are important in determining observed patterns of knowledge diffusion. In addition, Silverberg, Dosi &

<sup>151</sup> Pittaway, L., Robertson, M., Munir, K., Denyer, D. and Neely, A. (2004), Networking and innovation: a systematic review of the evidence. International Journal of Management Reviews, 5-6: 137–168. doi:10.1111/j.1460-8545.2004.00101.x.

<sup>152</sup> May, Ryan – Corporate Entrepreneurship and its importance in Large Companies http://www.businessdictionary.com/article/726/corporate-entrepreneurship-and-its-importance-in-large-companies, on internet: 2017. April. 25th.

<sup>153</sup> COOPER, Robert G. Winning at New Products – Creating value through innovation. 4th. Edition. Basic Books, New York, 2011.

<sup>154</sup> CHESBROUGH, Henry; ROSENBLOOM, Richard S. The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin off companies. Industrial and corporate change, v. 11, n. 3, p. 529-555, 2002.

<sup>155</sup> EDQUIST, C. The systems of innovation approach and innovation policy: an account to the stat of the art. DRUID Conference, Aalborg University, June 12-15, 2001.

<sup>156</sup> HODGSON, G. M. Evolution and institutions: on evolutionary economics and the evolution of economics. Cheltenham, UK: Northampton, MA, USA, Edward Edgar, 1999.

<sup>157</sup> SINGH, Jasit, (2005), Collaborative Networks as Determinants of Knowledge Diffusion Patterns. IN: Management Science Journal, p. 756 -770, May 2005. (http://pubsonline.informs.org/doi/pdf/10.1287/mnsc.1040.0349)

Orsenigo<sup>158</sup> mentioned, "the diffusion of new products and new processes of production within and between business enterprises is clearly one of the fundamental aspects of the growth and transformation of contemporary economies, (p.253)". Follow this statement, it is possible to extent it to the relationship between incubator and accelerator as part of the innovation process and creation of startups, because people are the main capital of those kind of small companies. Thus, the hybrid model emerges from this network structure, taking in mind that it is a gain-gain story, to the incubator, for startups, also to the accelerator.

## 2.2 - Tech Park and Innovation Ecosystem

The concept of Technological Park has been discussed inside organizations such as IASP, which is an International Association of Science Park. The role of Tech Park to increase the opportunity for innovative companies to develop new products or services and to deliver them to the market continue to be important, especially for small and medium size companies. Even though, there is a discussion taking place that the concept of Tech Park could be expanded to an area of innovation.

According to Jackson<sup>159</sup>, a feature of innovation ecosystem is that entities within the ecosystem are geographically localized and strategically linked to focus on developing a specific technology. Silicon Valley is the best-known example of a geographically localized ecosystem.

Another important point is that investment in R&D is fundamental to increase the economic spillover<sup>160</sup>, as it is shown by figure 1. The main aspect of innovation is to have a final product or service going to the market, generating profit that will be reinvested in R&D again in a virtuous circle.

Figure 1 – Virtuous circle of innovation into economy



Source: Jackson<sup>161</sup>., available on internet: <a href="https://www.researchgate.net/publication/266414637What">https://www.researchgate.net/publication/266414637What</a> is an Innovation Ecosystm.

<sup>158</sup> SILVERBERG, G., DOSI, G., ORSENIGO, L. (1988). Innovation, Diversity and Diffusion: a self-Organization Model. Originally published in The Economic Journal in Great Britain, p. 1032-1054. IN: REVISTA BRASILEIRA DE INOVAÇÃO - RBI - Finep-Unicamp, v.11, n.2 jul/dez 2012. P. 253 - 275. 159 Jackson. (2015), What innovation ecosystem? Available internet:  $https://www.researchgate.net/publication/266414637\_What\_is\_an\_Innovation\_Ecosystem.$ 160 SCHUMPETER, J. A. (1942). Capitalism, Socialism and Democracy, Harper Perennial Ed. New York, published in 2008. (2015). What Jackson. an innovation ecosystem? Available internet: on https://www.researchgate.net/publication/266414637 What is an Innovation Ecosystem.

According to Jackson<sup>162</sup>, to reinvest in R&D is an important aspect of the innovation ecosystem in order to produce a good result in terms of companies' profit. The author pointed out that an innovation ecosystem is known to be thriving and healthy when the resources invested in the research economy (either through private, government, or direct business investment) are subsequently replenished by innovation induced profit increases in the commercial economy.

Resources can be provide by several different actors such as Government, Industry, Investors, even in the early stage as it is shown on figure 2, which combine the virtuous circle with the level of innovation development from the discovery stage to the commercialization.

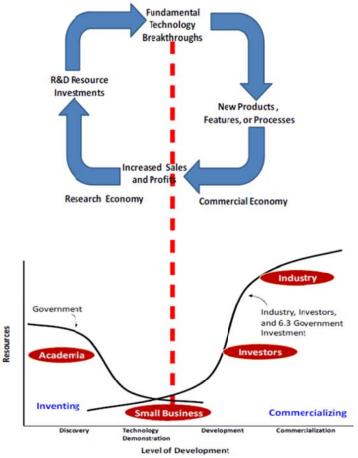


Figure 2 – Linking innovation to the virtuous circle.

Source: Jackson, D. (2015), available on internet:

https://www.researchgate.net/publication/266414637What is an Innovation Ecosystm.

Figure 2 links the innovation spectrum to the two economies in the virtuous cycle; thereby illustrating the projection, along the different development stages, of the available resources within an ecosystem for discovery, technology development, and commercialization.

162 Jackson, D. (2015), What is an innovation ecosystem? - Available on internet:

The main challenge, still according to Jackson<sup>163</sup>, is "to creating growth in an innovation ecosystem is figuring out how to turn the breakthroughs of R&D efforts into products that lead to profits. Achieving this goal is complicated by the fact that the two economies operate on different reward systems, thereby making it challenging to link discoveries derived from fundamental research with innovative products that can translate into profits in the market place." (p. 5).

This is the main reason for a company, especially a startup, to be inside a Tech Park or incubator is a key issue. There is a productive and a collaborative network among companies and people that cover and overpass difficulties and pave the way to innovative results.

#### 2.3 - Accelerator and Incubator

Accelerator is a term that design a some kind of advisor or a consulting company, that include mentorship and educational components conducting an entrepreneur from his idea to a business plan which will be present in a public pitch event, or demo-day. Accelerators can be either privately or publicly funded and focus on a wide range of industries.

A business incubator is an organization that offers support to startups companies to develop their business plan in order to get the market with a new product or service. Incubators provide office space, sometimes in a private room or in a coo-working space. There are other services includes in the incubation fee such as management training, marketing advices and mentoring. According to The National Business Incubation Association (NBIA) incubators also host events to provide networking and learning opportunities for both member companies and the local community. Incubators usually have graduation policies based on achievement of agreed-upon milestones, growth metrics or time-based stipulations. NBIA defines business incubators as a catalyst tool for either regional or national economic development<sup>164</sup>.

Incubators and Tech Parks are also being part of cooperation system to innovation. The incubators constitute a space to host and support startups, especially on tech basis sector, most of them related to University research<sup>165</sup>.

In the case of Tecnosinos, Unitec incubator is located inside the Tech Park and many startups graduate and move to a different building, which is inside Tecnosinos. Normally the process of acceleration is provide by mentoring and by angel investment (seed capital). In the case of Incubator there is mentoring, but not investment. What normally happens in Tecnosinos is that incubated startups receive investment from an accelerator and continue to be incubated until their graduation. Periodically this startup have a check meeting with the angel investor in order to have an update of their stage of development.

<sup>163</sup> Jackson, D. (2015), What is an innovation ecosystem? - Available on internet https://www.researchgate.net/publication/266414637\_What\_is\_an\_Innovation\_Ecosystem.

National Business Incubator Association - NBIA, 2017, available on internet: https://inbia.org/wp-content/uploads/2016/09/InBIA-Industry-Terms.pdf?x84587.

<sup>&</sup>lt;sup>165</sup> STAL, Eva, CAMPANÁRIO, M. de A. & ANDREASSI, T. - Inovação - como vencer esse desafio empresarial. CLIO Editora - São Paulo, 2006.

The main reason for a startup company to be incubated is to receive mentoring and to stablish connections to the market, or to important people that can open doors to reach important clients, in sum to reach the market. Other important point for those startups is to be known as a company that have been selected to be part of an Incubator and, at the same time, to be chosen by an angel investor to receive seed capital, meaning that its business plan have good chance to succeed.

Accelerators do not necessarily need to include a physical space, but many do. In United Incubator, startups companies continue to be incubated, even whether Accelerator choose them and receive seed capital from it. The process that startups go through in the Accelerator can be divided into five distinct phases: awareness, application, program, demo day, and post demo day.

#### 2.4 – Incentive to innovate

To be an entrepreneur is not an easy task. At the same time it is not possible to teach someone how to become entrepreneur. What it is possible to do is to provide some tools and advices to someone who shows some interesting on that. That's why an incubator is so relevant, because it offers tools, advices, even office space and good structure for those who are trying to follow this way.

Apart of that, Universities can offer some disciplines that teach how to use a tool like CANVAS, or business model generation. Incubators can provide some awards or challenges for students to show their new ideas, explaining them in projects, or even in a business plan. When new ideas come out, the entrepreneurship spirit spread among students generating a virtuous circle that can be very positive to this environmental. This is exactly what happens in Unisinos University inside its entrepreneurship hub connected to Unitec.

Either, Incubators can offer some award for those students in order to incentive them to take their projects into a business plan for incubation. Also incubators can work together with Universities in order to incentive students to visit incubators and have the first contact with this innovation ecosystem.

In the coming section it will be described the hybrid model that is in place in Tecnosinos, between Unitec incubator and Ventiur Accelerator.

## 3. Hybrid model: Unitec - Ventiur

#### 3.1 UNITEC Incubator

UNITEC is the incubator of Universidade do Vale do Rio dos Sinos (UNISINOS) and it is located at TECNOSINOS, São Leopoldo Tech Park. São Leopoldo is part of the metropolitan area of Porto Alegre, capital of Rio Grande do Sul. Today, UNITEC has 35 incubated companies. Last year, 7 companies were graduated, considering the maturity of their processes in entrepreneurship, technology, market, finance e management. The incubator is focused on 5 sectors: Information Technology, Semiconductors, Automation and Engineering, Communication and Digital Convergence, Technologies for Health, Renewable Energy and Environmental Technologies.

As part of TECNOSINOS Technology Park, UNITEC has structured an Expansion Plan aligned with the park growth strategy. Over the past years, UNITEC has been operating at full occupancy of its business spaces. In order to supporting the development of new companies and enable the incubator's Expansion Plan, which goal is to achieve 100 companies incubated by 2019, UNITEC invested in projects to expand its

physical infrastructure, seeking to expand its reception capacity on two fronts: the construction of UNITEC II and a coworking area.

The newly inaugurated building UNITEC II has 37 business modules, meeting room, auditorium and other areas of support to incubated companies. The coworking area was thought not only to increase the capacity to accommodate new companies, but to accommodate the ones in the pre-incubation process, while developing the projects through a more mature process.

In addition to the physical expansion plan of the incubator, UNITEC has been working on the strategy and implementation of actions to support the financial sustainability plan for the incubator, through the design of services within their managerial and technical skills, aimed to support the development innovation in products and processes, as it is shown on figure 3.

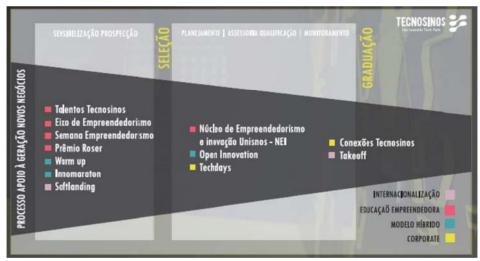


Figure 3 - Unitec model

Source: Unitec action plan, 2017.

In the first part of figure 3, is described several initiatives provided by Unitec in order to incentive students and entrepreneurs to develop their ideas intro projects and business plan. On the second part, there are activities with partners such as the Unisinos University and Ventiur (open innovation and techdays).

Given this expansion scenario, throughout the process of expanding the physical infrastructure and upgrading the services, UNITEC is strengthening its strategic alliances, structuring and intensifying the prospection of new businesses, so that the expansion process continues to advance, supported by a sustainable financial structure. The challenge of incubator in this new stage is not only to attract new technology-based companies to occupy the spaces, but to attract and select the ones with innovative products backed by robust business plans in previously tested markets.

## 3.2 - VENTIUR Accelerator

Ventiur Accelerator was established in early 2013 as an initiative of Venti Intelligence Project, a company that since 2009 develops consulting projects, mainly related to innovation, strategic management, business plans and models, internationalization and fund-raising. It is one of the main accelerator of the country, and an Open Innovation solutions company as well. Its mission is "transforming ideas in highly

profitable business" and they believe it is the entrepreneurial attitude that makes the difference for a new business take off.

VENTIUR believes also that the advice to entrepreneurs, the validation of business models through experimentation and interaction with the market as well as the effective use of their business network are more important than the simple financial input. VENTIUR's greatest value is their network. They work with more than 30 partners-investors, supported by the executive team and 20 mentors. In addition to the operational base in TECNOSINOS, VENTIUR has offices in Porto Alegre and support units in Sao Paulo and Miami. One of the challenges faced by the Accelerator is to identify projects that have high degree of innovation. The proximity to the University and the participation in joint actions with the incubator means broadening their potential to identify and support disruptive projects.

## 3.3 - Joint Action

As there was a clear convergence between the purpose and challenges faced by UNITEC and VENTIUR, it was evident, for both institutions, that they had the opportunity to promote actions aimed at fostering innovative entrepreneurship in an integrated manner, primarily focused on prospecting, qualifying and developing new sustainable businesses. This partnership has grown strong and numerous results were achieved. Today, the Accelerator has installed its operation within the framework of the Incubator, which confirms the success of the partnership.

#### 3.3.1 - WARMUP

One of the solutions created, as an example of the hybrid model adopted by UNITEC and VENTIUR, was the WARMUP, which occurred in 2015, during the months of June, July and August. The WARMUP is a pre-acceleration program consisting of five workshops covering the following areas: entrepreneurship, business modeling, pitch, legal and financial, mentoring, running one after another in a logical sequence. Normally each workshop was two days long, and occurred week by week. Therefore, the entrepreneurs have time to work by themselves to finish each part of their business plan. During this period they received mentoring and advise from Unisinos professors and from VENTIUR consultants. At the end and before the pitch section, Entrepreneurs had a meeting with VENTIUR and UNITEC to finalize and prepare their presentation.

The objective of the program is to support the improvement of ideas, turning them into profitable businesses. The participants have the privilege of participating in an entrepreneurial behavioral assessment while improving their business modeling and testing their ideas. Most important of all it is offered to the participating companies the opportunity to present their business to the VENTIUR investor's group. UNITEC has provided and prepared in their facilities a dynamic space, specially designed to host this activity, and this venue was available for use by potential entrepreneurs throughout the period in which the program ran. The participants had the opportunity to experience for three months the dynamics of the innovation environment surrounding the incubator and TECNOSINOS Park.

## 3.3.1.1 - WARMUP's results

WARMUP's disclosure plan was delivered to the UNISINOS University community, social medias and press through several channels, such as spots at TV UNISINOS, websites releases (Infomoney, StarSe and Jornal do Comércio), blogs (Business Destination), and social medias (Twitter, LinkedIn and Facebook – sponsored and voluntary).

The effectiveness of the disclosure strategy resulted in more than about 70 registered projects. From this initial number, 20 projects were selected to be pre-accelerated. Those entrepreneurs, who have their projects approved, participated in 6 workshop, totalizing 45 hours of work. Additionally they received individual mentoring and a especial advice for the Demo Day meeting. The workshops were based on the quality delivered on each of the criteria: entrepreneurial, business modeling, legal, financial, visual and oral presentation of the pitch and the limit of time set out in each workshop that 10 projects were selected to be presented to the examining board. As a result, all of the 10 projects had their projects presented to VENTIUR investors, six of them are on the pipeline to receive investments and one is in incubation process at UNITEC.

#### 3.3.2 - ROSER AWARD

The second model is the Roser Award, which consists in to award projects and business plan coming from Unisinos students and/or professors researchers. This is an annually event that occurs in October, in order to connect the University with Tecnosinos Tech Park. It works in this way. All applied projects receive the same mentoring and advises as the Warmup, but in a shorter period of a weekend. The students and professors works from Thursday night until Saturday night, and at the end of the day, finalists have the opportunity to pitch in front of a committee that select the winners.

#### 3.3.2.1 - Roser Award results

Roser award offers 6 months of grant incubation to the first place and three months grants for the second and the third places. Additionally both, second and third place, received a free of charge participation in the coming warmup.

As it is possible to see on table 1, an expressive number of projects applied on both years. In 2015 there were more succeed startups incubated at Unitec. Even though, in 2016 only one startup was incubated, the other four finalist continue to develop their business plan. Additionally they have participated in activities in Unitec and some of them received advice from Unisinos Business School Professors in order to improve their projects.

Table 1 – Roser award numbers – 2015 to 2016.

ROSER AWARD		
	2015	2016
APPLIED PROJECTS	58	33
SELECTED PROJECTS TO FINAL PITCH	10	10
AWARDED PROJECTS	5	5
INCUBATED PROJECTS/STARTUPS	3	1

Source: Unitec register, 2017.

Roser award was implemented in 2012. Since there the number of projects have been increased. In 2015 Ventiur joined this event as a partner, into the hybrid model, bringing in the acceleration methodology. The numbers above are a clear demonstration of the success of this initiative and partnership.

## 4 - Final consideration

The partnership with Ventiur started in 2015 with the main objective to develop and implement a methodology that can help startups to have a shortcut to go to the market with their new products or service. From that time, it was organized several different activities, such as Warmup and Roser Award, with success, as it is shown in this article.

The hybrid model with Ventiur has represented an increase of the creative ecosystem, the birth of new startups, the acceleration of others and the development of innovative methodologies that help us to seek new sources of revenue to support and stimulate innovation in our companies' products and processes. The expectation is to improve this partnership for the coming years.