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The Future of Consumer Experience in STPs - Spaces to Interact

Plenary Session 1

"Rethinking space: new habitats of innovation, new space concepts for parks and AOIs"

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Executive Summary

One of the most important value assigned to an innovation environmental is the dynamic of the network and its interaction. Concerned about that, Tecnosinos' startups were invited to evaluate and discuss the interaction and communication of the ecosystem in a Design Thinking workshop. The workshop feedback was crucial for Tecnosinos review its strategy and investments and immediately work on the needs appointed. After the event a group actions were address considering three main approaches: communication efforts, event promotion and physical structure. Through a survey to evaluate these approaches, the startups were questioned about the expectation that entrepreneurs had before entering the Park and the experiences they had after joining the Park. As a results, the Parks have the opportunity to play the role of involving and moving the actors to a qualified interaction through its network. Tecnosinos is building together with the startups and other actors of the ecosystem.

1. INTRODUCTION

What are companies looking for when choosing a Science Technological Park - STP as an ideal place to set up their business? Access to highly qualified human resources from the University? Access to research? Are big companies looking for proximity with startups? Do Startups seek a collaborative environment? Or do they expect to do business with large anchor companies?

Innovation environments, such as Parks and technology incubators, have concentrated an important part of the world's technological development. In the context of organizations that pursue collaborative networks that drive innovation, these environments have been playing an important role in promoting interaction and high-quality connections.

Policies to stimulate science and technology have expanded in recent years in Brazil. Support for the implementation and consolidation of innovation environments has been the target of public policies that encourage the implementation and consolidation of innovation ecosystems in the national territory. In Brazil, incubators as mechanisms aimed at the generation of new technology-based ventures, have the opportunity to act as strategic players into the promotion of a connection network between the startups and other actor of the innovation ecosystem³.

The dynamic of the network and its interaction is one of the most important value assigned to an innovation environmental. The challenge is to consolidate a systematic model of information flow capable of identifying complementarity between business and technology, balancing interests and connecting markets due to promote a virtuous and sustainable interaction between the actors involved.

Assuming that STPs are a business, and resident companies and startups are clients consuming its services, the consumer experience emerges as a crucial point of view of the relation between them.

³ ARANHA, José Alberto Sampaio. Mecanismos de geração de empreendimentos inovadores [Eletronic resource on-line]: Brasília, Anprotec, 2016.

From the point of view of the startups establish at Unisinos University Incubator (Unitec), part of São Leopoldo Tech Park (Tecnosinos), this study aims to elucidate whether the experience of the startups in terms of interactions meets their expectation. The key research question explored is: How startups experience their consumption as clients of Tecnosinos? The answer will provide information suitable to guide the better allocation of Tecnosinos' resources and investments in order to improve interactions in the Park.

The paper commences with an introduction and background for the study provided by a literature review regarding consumer experience and related topics. Secondary the methodology adopted is presented. Next, it is described a series of actions promoted by Tecnosinos focused on the improvement of the interaction relations among entrepreneurs, collaborator and other actors of the innovation ecosystem and its impact on the perception of the entrepreneurs. Finally, the data resulted from a survey focus on the actions described are presented and analyzed. Conclusions are provided and limitations of the study are discussed before outlining areas for future research.

2. LITERATURE REVIEW

According to Carù and Cova⁴, consumers are not only consumers they interact according to situations. They are searching for meaning and consumption is not limited to activities related to buying and post-purchase, but to experiences that extend by various stages, from the desire of consumption to the memory of the experience of consumption after it has been realized. Regarding the consumption as an experiential point of view, the authors assume that the product are not consumed by itself, the consumption is related to attend a certain function enabled by the product meaning and image. In this context, the consumption experience surpass the moment and the purchase the point-of-sale. External and emotional relations are involved as a social economic means of socialization carried out by the imaginary and emotive aspects. The immersion in a thematized framework is part of the process of building the identity of the consumer experience.

Carù and Cova⁵, also point out that consumers are not passive agents from the perspective of consumer experiences, they act within situations reacting to the stimuli and becoming actors and producers of their own consumption experience. The theaters of consumption are created to facilitate the co-production of the desired experience, in order to lead actors to meet their common expectations and interests.

The consumption experience is a complex multi-faceted phenomenon that involves objective and subjective impacts and reactions. Three levels of intervention are considered for the production of experience assigned by Carù and Cova: multisensorial stimulation, related to physical assets like decor, design and staging; the co-production of the experience considering the consumer participation; and the storytelling created to engage the consumer into a unique and unforgettable experience process.

⁴ CARU, Antonella; COVA, Bernard. Consuming experiences. Consuming experience, p. 34-47, 2007.

⁵ CARU, Antonella; COVA, Bernard. Consuming experiences. Consuming experience, p. 34-47, 2007.

According to Desmet⁶ design can influence mood by enabling and stimulating people to engage in a broad range of activities. The mood design can affect motivation, behavior, and evaluation of everyday interactions.

People in a good mood are more inclined to interact. Considering the interaction with a technology or an environment as an example, the mood is able to affect the kind of information that the person process. Linking to the intention of providing a specific consumer experience, the mood design is a tool that can be consider to enable relations with a positive impact.

Prahalad and Ramaswamy⁷ points that the emergence of connected, informed, empowered, and active consumer are rapidly changing the meanings of the market dynamics. Besides that, the increase of product options also represent a challenge for managers where the creation of value has been considered critical. The direct connection between consumers, aside the company communication, also representatives challenges the impact in the creation of value. If in a near past the creation of value were mainly in charge of a firm, nowadays the intensive interaction with and between consumers are changing the traditional system where the firms used to decide the products and services they would produce. The authors also points that the interaction exceed the conventional point of sale or consumer service, it has to be consider in multiple levels.

According to the same authors, building a high-quality interaction with consumers is an opportunity to disclose sources of competitive advantages in a co-creation process. Value lies in the co-creation experience of a specific situation connected to a network. While the consumers engage in the process, the experience of this relation is becoming the locus of the value creation.

3. METHODOLOGY

Design thinking has its origin in the process of designing based on creative strategies. Brown and Wyatt⁸ propose the use of design thinking as a way of reviewing not only products but also company's business models. Centered in human needs, the design thinking orientates the conception of products more service-oriented enabling a stronger customer experience that could be converted into customer value and market opportunity. In a Design Thinking workshop Tecnosinos' startups were invited to evaluate and discuss the interaction and communication of the ecosystem. The workshop took place on 05 and 06 July 2016, with duration of 16 hours in total. Eight startups participated through 17 entrepreneurs and the incubator team.

Based on the concept that one of the main values of an innovation environment is the interactions that take place in it, from the workshop results, a group of actions was addressed in order to foster the interaction between companies and entrepreneurs focusing to improve the consumer experience at Tecnosinos.

⁶ DESMET, Pieter MA. Design for mood: Twenty activity-based opportunities to design for mood regulation. *International Journal of Design*, v. 9, n. 2, p. 1-19, 2015.

⁷ PRAHALAD, Coimbatore Krishna; RAMASWAMY, Venkat. *The future of competition: Co-creating unique value with customers*. Harvard Business Press, 2013.

⁸ BROWN, Tim; WYATT, Jocelyn. Design thinking for social innovation. *Development Outreach*, v. 12, n. 1, p. 29-43, 2010.

In order to validate the impact of the actions after the Design Thinking Workshop, a survey was carried out. The survey considered a universe of 35 incubated startups by the incubator within Tecnosinos. This survey's objective was measuring the expectation that entrepreneurs had before entering the Park and the experiences they had after joining the Park. The questions were directed in relation to participation and experience in events, dissemination of information and relationship with other companies.

The collected data were obtained through a qualitative-qualitative exploratory approach, using an exploratory survey based on a specific questionnaire, which was directed to the entrepreneurs of the startups. The name of the companies studied will not be identified in this paper due to confidentiality, which does not compromise the reliability of the data or the development and veracity of the study.

4. DEVELOPED ACTIONS

When looking for a STP, companies seek an environment where they can innovate, be close to the research, the University's human resources, and take advantage of the business opportunities they can recognize in the startups ecosystem. The startups, seek a cool environment, access to research, mentoring, exposure to investors and large companies, and an office to call their own. However, the most relevant aspect pointed out by both types of company is the expectation of being in a connected and quality innovation network.

Concerned Tecnosinos might be failing to provide clients with meaningful consumption experiences, the main motivation to trigger the actions was to identify and review the level of interaction of Tecnosinos startups and propose an intervention in co-creation process in order to improve the consumer experience. Before the study were launched, Tecnosinos were assuming that during the events, lectures and courses offered, companies would talk to each other and to the university. It was also assumed that a suitable environment for networking were being provided. The first action addressed pointed that this affirmative was not completely right.

As a first initiative, a Design Thinking workshop was promoted inviting Tecnosinos' startups to evaluate and discuss the interaction and communication of the ecosystem. The result showed they are not experiencing the interaction with the network they expected. The major issue identified as a key experience they were not having as much as expected was the contact and communication with one another. On the other hand, it was possible to identify that the efforts to promote interaction done by Tecnosinos were little perceived by startups.

In fact, as in the allusion made by Carù and Cova⁹, Tecnosinos are constantly creating theaters and stages for customers to interact, but consumer experiences are not happening despite the effort of the production. By this action, a resource allocation problem was clearly identified.

The Design Thinking workshop feedback was crucial for Tecnosinos review its strategy and investments and immediately work on the needs appointed. After the event a group actions were

⁹ CARU, Antonella; COVA, Bernard. Consuming experiences. Consuming experience, p. 34-47, 2007.

address considering three main approaches: communication efforts, event promotion and physical structure.

Regarding the communication effort, the short-term actions involved the revision of the communication strategy adopted in the Tecnosinos channels and the allocation of specialized professionals to conduct the communication initiatives. From this action, the monthly newsletter structure sent to internal and external public was reviewed. The new strategy highlights the technological content developed, achievements and possible market connections of the companies installed in the Park.

The social networking approach has also been completely reformulated. Through a fanpage maintained by Tecnosinos on Facebook, the daily dynamics of the Park's ecosystem became communicated and reported. In this channel, actions, calls and other opportunities of partners related to the ecosystem are also continuously shared. By periodic reports analysis, it is possible to notice the increasing adhesion and engagement of potential costumers and strategic partners to the channel. This dynamic has significantly expanded the interaction of Tecnosinos' actors with the national ecosystem of entrepreneurship and innovation. Nowadays Tecnosinos is often sought to share information from strategic partners.

The last action related to communication effort it was related to internal interaction. Based on the spontaneous initiative of some entrepreneurs, Tecnosinos has adopted an online platform of communication with the startups that allows direct interaction between them and the Park administration. In this platform, channels were created together with the members by topics of interest, including groups focused on the sharing and exchange of technical information, on company profile, HR demand, management, events and even a random group for basic needs in a "friendly neighborhood" context.

The second approach were dedicated to deal with event promotion issues. Focusing to improve the startup interaction experience, besides the lectures and courses already offered by Tecnosinos, two other events were designed and promoted, named Tecnosinos Connections and Meetup. The first chance in the initiative was that the events were co-created with Tecnosinos' startups, since the design unit the promotion of them.

The main objective of the Tecnosinos Connections is to promote the connection between the actors that integrate the ecosystem in a moment of face-to-face interaction. The directors of the 80 companies and representatives of the Park Governance are invited to the event. In happy hour style, guests are welcomed with a cocktail. After that, a formal moment of institutional presentations happens. Lasting around half an hour a consolidated company presents a case followed by 3 pitches of incubated startups. The event continuous with a dynamic of individual meetings, when the participants seek among themselves to discuss demands, technical challenges and sharing of experiences. Throughout the event the Tecnosinos team is available to conduct approximations, but the great strength of the event lies in the spontaneity of the environment in which the entrepreneurs themselves seek their contacts.

Tecnosinos Meetup event has the specific focus of sharing knowledges and experiences between the startups, besides promoting their connection. Inspired by the promotion of a mutual collaboration ecosystem, the Meetup is an internal technical event promoted by a Tecnosinos startup that has as its central theme an expertise to be shared and discussed with other startups in the Park. Besides supporting the mobilization and operationalization of the event, Tecnosinos' main role in the Meetup is to foster identification of topics of common interest and expertise among entrepreneurs who can promote other Meetup editions.

As an example, the first Meetup edition were promoted by an incubated startup that has experience in Amazon Web Service Solutions. Nine incubated startups participated through 18 entrepreneurs in a deep and qualified technical discussion. One important result is that the interaction was not restricted to the event occasion. The discussion was kept in course in a channel created in the internal platform.

The last approach addressed as short-term action was related to physical structures. The basis for this strategic pillar was a project engaging the University's Strategic Design Graduate Program. In partnership with the Creative Industry School of Unisinos University, Tecnosinos designed a challenge for the master students to present to Tecnosinos new disruptive ideas that would help the Parks to promote a better communication not only between the companies, but also between the various campus of the University, the students, the teachers and researchers. The challenge was presented to be worked on 4 different aspects, including intelligent communication tools and concepts and physical structures.

Considering the interaction as the main focus of the project, concepts of mood design suggested by Desmet¹⁰ guided an evaluation of the installed structure in the Tecnosinos and the proposal of spaces interventions. The positive influence that design exerts in engaging people for an activity was explored in the proposal.

In addition to shared areas such as meeting and training rooms, Tecnosinos offers other two structures to companies: a maker space and a permanent showroom. From the point of view of functionality, the maker space is focused on digital and physical product prototyping, while the showroom is focused on finished products expositions. From these two extremes, the study carried out pointed the need of providing an environment between these two structures, where the environmental design would promote a lighter atmosphere, mobilizing users for an extended stay, and stimulating a creative interaction between users.

To meet this objective, an area was designated to host this environment and an interior design project was developed. Funding raise for its implementation is currently underway. Besides that, as an immediate intervention "without-wall" areas were implemented by rearranging internal resources: a coworking office, where startups can work together in joint projects; meeting points for quick meeting along the circulating areas; and a mini-auditorium in an arena format.

¹⁰ DESMET, Pieter MA. Design for mood: Twenty activity-based opportunities to design for mood regulation. *International Journal of Design*, v. 9, n. 2, p. 1-19, 2015.

5. SURVEY RESULTS AND DISCUSSION

The survey was applied to the 35 incubated startups in Tecnosinos and it presented a return of 19 startups, representing 54% of the universe, considered adequate by the number of respondents. The presented results are divided in expectation that the entrepreneurs had before entering the Park, in the experience lived after the entrance and the relation between these two scenarios.

1.1 Expectation

The results about the entrepreneurs' expectation had before entering the Park were obtained through questions about the priority aspects considered as the choice to incubate in Tecnosinos. In this sense, in relation to the interaction with Unisinos University, the most outstanding aspect was the access to the qualified mentorship from professors that the university offers to the incubated companies followed by access to the qualified human resources and by the proximity of the academic research, respectively.

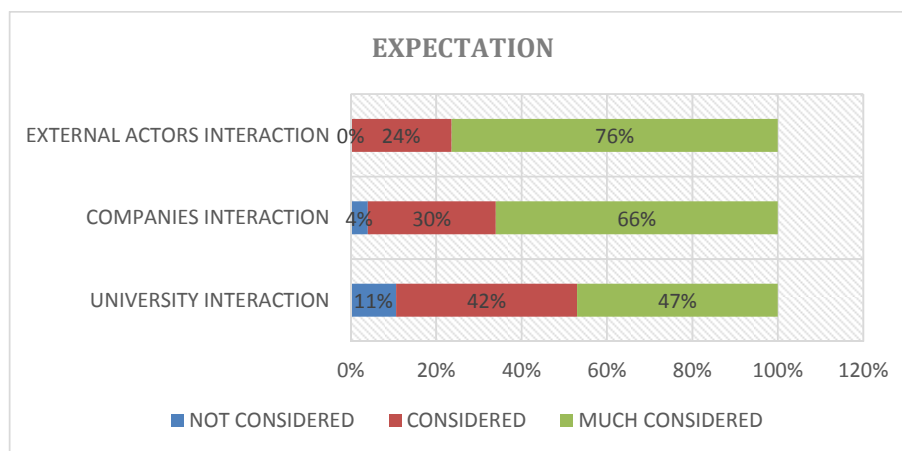
Table 1 – Answers about expectation

		NOT CONSIDER ED	CONSIDER ED	MUCH CONSIDER ED
UNIVERSITY INTERACTION	Access to qualified human resources	2	11	9
	Access / proximity to academic research	4	12	6
	Qualified Mentor	1	5	16
COMPANIES INTERACTION	Collaborative environment between startups	0	7	15
	Exchange of experiences between startups	0	5	17
	Connection and business with other companies of the Park	1	9	12
EXTERNAL ACTORS INTERACTION	Access to the network of contacts as investors and / or partners	0	3	19
	Access to events and calls to incubated companies	0	4	18
	Proximity/possibility of doing business with consolidated companies	0	9	13
	Brand recognition of the incubator and Park	0	5	17

When considering the expectation of interaction with other companies in the Park, as it is shown by table 1, the exchange of experience between startups was the most considered aspect, followed by the collaborative environment between startups and the connection and possibility of doing business with other companies in the Park.

When questioned about the expectation of interaction with actors outside the Park, the exposure or access to the network of contact with investors or partners and access to events and calls to incubated companies was considered the most important, as it is shown by figure 1.

Figure 1 – Expectation about interaction



Next, in order of priority, we identified the connection with the startup ecosystem, the visibility of the startup by the brand recognition of the incubator and Park and, finally, the proximity / possibility of business with consolidated companies and interaction with the University.

1.2 Experience

In this session focused on experiences lived after installing the startup in the Park, questions about the experience between the entrepreneur and the startup together with the incubator and Tecnosinos. This stage of the survey was divided into experiences in general events, experiences in the Tecnosinos Connections event and experiences about the internal connections in the Park.

About the general events, the results show that 86% of the respondent incubated startups usually participate in events promoted by Technology Park. Among these companies, the strong point that motivates the participation in the events is the opportunity to interact with the other companies in the Park, followed by the knowledge acquired, and finally the visibility of the business. The remaining 14% of incubated startups that do not participate in the events stated that the reasons are, respectively, availability of time to participate, theme of interest in the events offered and time at which events take place.

Considering the results about Tecnosinos Connections, entrepreneurs point out that the most significant opportunity is to get to know and exchange information with other entrepreneurs, followed by the opportunity to learn about other companies' products and technologies, the visibility of the business and the possibility of having an idea or generate new business. Startups survey's respondents are satisfied with this event, feel that it is important, and establish relationships with other companies in the Park.

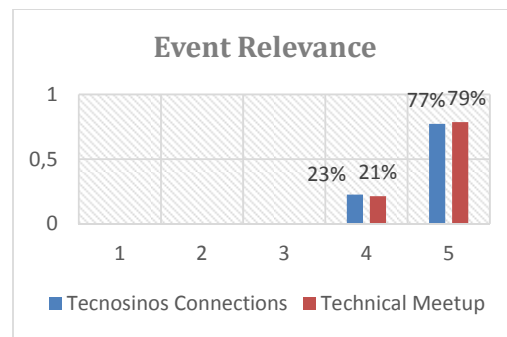
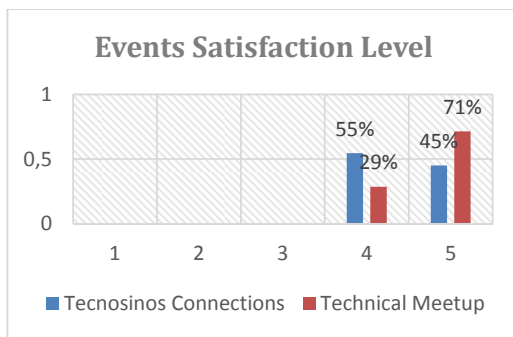
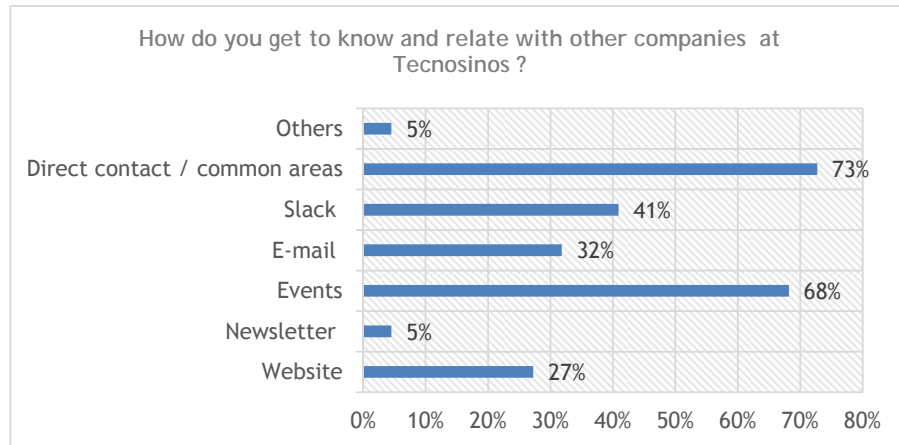
Still regarding the Tecnosinos Connections, the incubated companies were questioned as to the continuity in the relations initiated in the event. 70% of the respondents stated that yes, through sponsorship of consolidated companies of the Park, exchange of services between incubated, knowledge of the product of other startups in order to be able to indicate them in future demands, among others.

The return has been quite positive and the connections are happening. As an example, a startup that works with artificial intelligence was able to close three deals with companies in the Park that were looking for the same technology. Another startup that is developing a wheelchair established a partnership with a consolidated company interested in social projects.

In terms of experiences with the internal connections in the Park, around 86% of the startups have relationships with other companies in the Park, whether incubated or consolidated. Among these, the most outstanding type of relationship, accounting for 89% of the responses, was the sharing of experience, be it market, technical or network relationship. The other relationships identified were, respectively, partnership in product development and business signed through contracting and/or sales.

When questioned about how they seek to interact with other companies in the Park, it is evident that entrepreneurs prefer actions that involve personal contact, as it is shown by figure 2. When questioned about the level of satisfaction regarding the Meetup technical event and Tecnosinos Connections market event, entrepreneurs expressed great satisfaction in both events, with a percentage above 70%. All interviewees (100%) would recommend to other entrepreneurs participation in the events promoted by Tecnosinos.

Figure 2 – Experience about events



In this respect, there is a strong relationship between the companies in the Park, specifically among startups. The relationships identified were based on support services for market insertion of products and product development.

1.3 Relation between these two scenarios

It was possible to observe that, when questioned about the expectations of entering the Tecnosinos, the relations between the University and the Park were less considered. However, in the section intended to experiments, it was noticed that 27% of respondent startups have a research partnership with Unisinos and 13% have access to University’s laboratories to develop their products and prototypes.

It was possible to perceive that the experience of startups in terms of interaction meets their expectation through the exchange of experience between startups when the research showed great sharing of experience among the incubated startups evaluated.

6. CONCLUSION

At the last IASP Conference, one of the most present discussions was new business models for innovation environments and the interaction of the Parks with the city and the community. Today, the growth in demand for collaborative and coworking spaces is arising.

Assuming that the network and interaction is one of the biggest value of a Park ecosystem, Tecnosinos is reviewing its strategy of growth considering the consumer experience approach.

Whether in the past Tecnosinos invested in expanding its physical area and building individual business modules to support the development of startups, currently the focus is to provide spaces that promote visibility, sharing, cooperation and interaction between players.

Moving in the same direction, the communication and events strategy is being review. From this point of view, the entrepreneurs are being call to make part of the actions since its planning. The active participation, by sharing individual expertise and experience is being deeply fostered and promoted in a regular calendar.

Tecnosinos is working to create places with a good mood to encourage the interaction, stimulating startups to engage in a broad range of activities inside the Park enabling relations with a positive impact. In this scenario, from Tecnosinos Connections, Tecnosinos Meetup and the joint project with

the Strategic Design Graduation Program, it was possible to guide the best allocation of resources and investments of Tecnosinos to improve the interactions in the Park.

In order to plan the future of the Park, the new trends must be understood. Besides listening the actors, the Parks have the opportunity to play the role of involving and moving the actors to a qualified interaction through its network. New concepts for spaces, new ideas for intelligent communication. That is what Tecnosinos is building together with the startups and other actors of the ecosystem.