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# **ORIGINAL RESEARCH ARTICLE**



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# CREATION OF COMPANIES` INCUBATOR IN THE LIGHT OF CERNE: INCUBATOR NOVUS'CASE

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The general objective of the article is to present the process of creating an incubator of companies from CERNE (Center of Reference for Support to New Ventures), and for this, the key processes of the creation of the incubator NOVUS Development of Innovative Enterprises), of the Innovation Secretariat of UFSC (Federal University of Santa Catarina). The methodology is characterized as a descriptive and exploratory study, in which data were collected from the NOVUS incubator, and being created in 2017 by UFSC, was analyzed from the theoretical perspective of habitats of innovation, absorptive capacity, and innovation. The data analyzed suggest that the standardization of processes and the wide dissemination of methods of evaluation and selection of resident companies are strategic factors for the incubation of the incubator in CERNE, and the quest to create standards of performance in order to increase the capacity incubators, can help in the creation of innovative and successful ventures.

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# **INTRODUCTION**

O Livro Azul (2010), the result of the 4th National Conference on Science and Technology and Innovation for Sustainable Development, considers that efforts can be developed to stimulate municipalities to create local conditions propitious to innovation - so-called innovation environments. In Brazil, for example, we highlight the strategies that can enhance the success of organizations and, consequently, encourage knowledge-based ventures. With regard to incubators, strategic environments for the development of innovation, they represent birth sites, growth and development of small, usually technology-based businesses that are aware of their main production input, assisted by a common infrastructure and, sometimes with the presence of a University that promotes the transformation of ideas into products, services and processes (Wolffenbüttel, 2001, Grimaldi and Grandi, 2003 apud Mantovani et al, 2006, Moré, 2016).

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Another highlight is the fact that incubators are organizations that can be related to public or private educational institutions, townhouses and even independent business initiatives. The basis for sustaining an incubation program is based on the diffusion of entrepreneurial culture, knowledge, and innovation. (Costa et al., 2008). Thus, the different incubation models studied in Brazil have their peculiarities that need to be recognized in order to know which are the best paths that can be traced by companies until their graduation. At some point in the incubation process, companies need to be formalized and become a legal entity, acting in the market under the supervision of incubators in the marketing of their products and services. It is important to emphasize that companies that have gone through incubation processes may have a competitive differential that is related to their potential of receiving financial contributions even though they operate independently in the market, due to the various training and orientations that were passed to it by the incubator. Considering the context of the incubators, it is necessary to reflect on the habitats of innovation (Moré, 2016). For this study, are considered as environments that aim to boost

productivity and innovation of companies acting as agents promoting the transfer of information and knowledge in the promotion of new business and the generation of new ideas. Examples of these habitats are scientific and technological parks, incubators and districts, or centers of innovation (spolidoro, 1999; lahorgue, 2006). Innovation habitats can also represent environments characterized by the intense exchange of experiences and knowledge, the result of spaces with concentrations of companies, suppliers and several shared services. This differentiated organizational environment becomes, in general, specialized (Stopper, 1995, Mills, Reynolds and Reamer, 2008).

Considering these examples, it is observed that developing countries, such as Brazil, have invested in their innovation habitats in order to create an organizational environment capable of enhancing the level of technological advancement of local industries, promoting research or development industrial. There are also countries that seek to attract foreign investment, especially in activities of high added value; or those who seek to accelerate the transition from a laborintensive economy to an intensive knowledge focus (Koh, Koh and Tschang, 2005), adding value to their products and services and maximizing their potential for innovation and the creation of new ideas. Studies on capacity development and the generation of innovation can also contribute to the growth and structuring of companies. In the case of this research, it is understood the development of capacities as a strategy to enhance the business growth and management of its own resources, people or technologies, resulting in a superior competitive advantage over its competitors (Dosel and Nelson, 2000). Researches in innovation habitats analyze the contribution of the absorptive capacity in the structuring of the industry and the network knowledge, demonstrating that the construction of collaborative environments can contribute effectively in the development of capacities aimed at knowledge sharing between organizations (Vega-Jurado, Gutierrez-Gracia and Fernandez-De-Lucio, 2008, Exposito-Langa, Molina-Morales and Capo-Vicedo, 2011, Hervas-Oliver, 2012).

Therefore, one can understand the absorptive capacity as a strategic company in the use of organizational management mechanisms that makes it possible to identify new strategic attributes; create mechanisms to capture external knowledge; create methods aimed at the absorption, transformation and readaptation of intra-organizational knowledge; and to apply new knowledge for commercial purposes, making the systematization of all these actions stimulates innovation in the environment and also encourages entrepreneurship in companies (Zahra and George, 2002, Malhotra, Gossain and El Sawy, 2005, Lane, Koka and Pathak, 2006; Todorova and Durisin, 2007). In this context of intense search for innovation, one can see the significance of understanding what actions to organize innovation habitats, in particular incubators, can effectively contribute to the dynamic performance of companies, being actions related to physical structure, relationship actions or yet the development of organizational strategies for innovation (Lane, Koka and Pathak, 2006, Zahra and George, 2002, Chao Et al., 2011). And it is in this aspect that the guidelines contained in the CERNE manuals (Centro de Referência para Apoio a Novos Empreendimentos) are presented, in which the set of orientations included in its four levels of organization (CERNE 1 - Empreendimento, CERNE 2 - Incubadora, CERNE 3 - Rede de Parceiros, CERNE 4 -

Melhoria Contínua) can help in the development of companies (Cerne, 2015). Regarding the context of innovation culture, it is understandable that it is often fed by actions resulting from knowledge management, which for Junges, Gonçalo, Garrido, and Fiates (2015) knowledge management could be understood from two perspectives: external business relationships and internal structure, where organizational performance is the result of both, that is, both internal and external dimensions of the organization. In other words, for these authors, the generation of competence for organizational innovation positively influences both performance and knowledge management. On the other hand, Luz et al. (2014) portrays the habitats of innovation as spaces of information sharing and knowledge favorable to innovation. According to these authors, these spaces are disseminating and information amplifying environments among innovation agents. Innovation habitats also represent environments where there is synergy between the so-called triple helix. That is, the union and interaction between teaching and research institutions, the business community and public power, allied to a set of local factors such as: qualified urban infrastructure, agile media, or population with a high level of education (Zen, 2005), can help to form a system of innovation that contributes to the development of society and the market. Damião, Zouain, and Plonski (2013) report that innovation environments are support structures for the development of innovative, technology-based activities. They argue that these spaces are differentiated environments, which can be organized by public or private institutions, and are characterized by guaranteeing auspicious conditions for the development of technology-based products and processes. It is also important to highlight that innovation environments can minimize the various risks associated with innovative initiatives and maximize the results of new processes created, thus becoming promoters of innovation systems (Zouain, 2003). It is important to emphasize also that these environments can be conducive to the continuous development of technological innovations and promote other types of results, such as relationship strategies; promotion of fundraising; and support to the management, since they constitute spaces of collective learning with the exchange of knowledge, of productive practices and of interactions between different agents (Bellavista and Sanz, 2009). Therefore, it can be understood that innovation habitats represent spaces for stimulating innovation for new enterprises and are important facilitators of the performance of the different stakeholders in the national innovation system. Lastly, the innovation process of companies in innovation habitats needs to have a minimum set of capacities to carry out their main activities, where innovation is focused on the process and not isolated events, including the implementation of the changes necessary for the improvement of products/services, process improvement, and organizational and managerial systems. (Schreyer and Kliesch-Eberl, 2007, Miranda and Figueiredo, 2010). And in this minimum set of capacities, the development of actions suggested by CERNE can help incubators and companies in their sustainable development and achieve long-term strategies. Contextualizing the research topic, a research question is presented: How can CERNE help in the construction and development of incubators? In this way, the general objective of the article is to present the process of creating an incubator of companies from CERNE, and for this, the key processes of the creation of the incubator NOVUS (Center of Reference for Support to New Enterprises), of the Secretariat of Innovation of the Federal University of Santa Catarina.

#### **Literature Review**

The international literature presents innovative habitats of various shapes and ways, but in general, they can represent an instrument of promotion for several economic and political objectives (Bolton, 1997). In order to support the integration between similar social agents (small and large companies) or different ones (university and industry), the habitats in this sense have the role of being a regional/local development mechanism focused on competitiveness and organizational performance, generating growth and financial returns. Innovation habitats are structures of economic and technological development that aim to foster knowledge-based economies by integrating scientific/technological research, business/companies, and governmental organizations into one physical location, and by supporting the interrelationships between these groups. They are formally linked (and usually physically nearby) to centers of technological excellence, universities and/or research centers. (Unesco, 2015, Iasp, 2015). The success of the first North American experiments contributed decisively to the evolution and construction of the concept of innovation habitats as well as to the development of emulation experiences in Europe, with emphasis on the implementation of the pioneer French parks (Sophia-Antipolis) and British pioneers (Cambridge) in the early 1970s (Schmitz and Humphrey, 2000). Zouain and Plonski (2006) also present classifications considering historical and geographic elements for innovation habitats, more precisely for parks, and accordingly, they portray four general models:

- **Californian model:** correspond to structures created by universities and can be linked to cutting-edge, emerging and high value-added technological sectors. They take advantage of the attractiveness of the region, as well as the commercial value of research developed by universities, in the creation of companies. They focus on the creation of new (technological) companies, through university departments and laboratories, as well as companies located in the park.
- **British Model:** represent parks created by universities and installed on their campuses, characterized by the minimal presence of industrial manufacturing activities, focusing on development research activities, business laboratories, among others. Incubators are important elements in this model.
- North-European Model (Scandinavian): Model developed in regions with high economic potential or high growth, with a well-established business and competition culture. It has a great number of success cases, whereas it has the best characteristics of other existing models. As main characteristics are: areas of small to medium extension; projects promoted with the participation of universities, public and private organizations; reduced offer of areas emphasizing the offering of buildings; and specialized management teams, quite involved in the aspects of promoting the transfer of technology and the commercial insertion in the international market of products and services of its users.
- **Mediterranean model:** the parks are generally promoted by public entities (municipalities and regional governmental organizations); are instruments of regional development; and are related to the occupation of large extension areas.

For Chiochetta (2010), in the habitats of innovation presented above, the characteristics of these are practically the same, standing out for all of them the initiatives promoted by the universities, connected to cutting-edge technological sectors, that take advantage of the capacity of attraction of the region, as well as the commercial value of research carried out by universities. The International Association of Science Parks (Iasp, 2015) portrays that the existence of an innovation habitat can stimulate and generate the flow of knowledge and technology among universities, research institutions. companies, and markets, promoting them. In its turn, the Association of University Related Research Parks (Aurp, 2015) approaches the habitat of innovation as the region's technological development environment by stimulating technology transfer and interaction between universities and business; stimulating new companies and technological institutions, and the attraction of activities and research projects of large companies.

#### The importance of innovation habitats

In summary, innovation habitats can help create connections between different personas, which can transform isolated economies into an interconnected network, bringing benefits to all. It should be emphasized that the formation of networks and partnerships is a key factor for the success of the organizations inserted in the current context of high competitiveness between companies (zen, 2005; chiochetta, 2010). Bolton (1997) also classifies innovation habitats as static or dynamic, where static would be similar to an industrial space, with well-structured and designed buildings and facilities. Dynamics, on the other hand, is designed within a growth concept of the enterprise, allowing the creation of a critical mass of knowledge-based industries that settle in the cluster. In the latter, it seeks to create a link with the local higher education and research centers, in order to stimulate the actions of transfer of knowledge and technology. It is worth noting that in innovation habitats, universities and research institutes represent strategic players; business incubators; technologybased companies; companies or industries; public, in all spheres (Federal, Municipal and State) among other entities to support entrepreneurship and innovation (zouain, 2003). In Brazil, the movement of innovation environments can be considered late (chiochetta, 2010). Some pioneering experiments were only launched in the decades of 1980-90. These experiences, for the most part, have suffered some impacts, among them, the discontinuity of actions; lack of a specific policy to support these initiatives; and especially the resistance of part of the academic-university environments, resulting in the lack of formalization of the structures being planned, culminating in the fact that some ended up becoming just business incubators (Zouain and Plonski, 2006;

In the case of innovation habitats, these three formats can be found. However, the participatory model shows that it is the most opportune considering the joint action of the triple propeller (companies, government, and universities), acting as agents of the promotion of innovation in relation to products and services of interest to society and the market. In this model known as the triple propeller, easily identified in the case of innovation habitats, it can be highlighted, for example, that there is an incessant search for the companies to increase their productivity, to develop new technologies and to improve the quality of services and products offered (etzkowitz, leydesdorff, 1997, 2000). Recently, the model was rediscussed by Etzkowitz (2009; 2012), who proposes a structure of cooperative interaction between Government, Enterprise and University. For Etzkowitz and Leydersdorff (2000), this model proposes not only the interaction of the players but their internal transformation through the interaction of the university, transforming from only an educational institution to an educational institution with research (basic and applied) involving service provision; of government action that no longer needs to occur with specific sectors, but can benefit from alliances at the national, regional or international level, replicating models used by global companies; and the company by changing its perception of profit to a broader notion of value and sustainability.

availability, density, and interconnectivity of industries to generate positive effects from knowledge propulsion, transaction efficiency, and cluster-level economies, which are reinforced when geographically concentrated. Each factor not only interacts with others but also affects the context that acts and in the case of innovation habitats, one habitat could exert influence over another. Based on Figure 1, it is understood that governance in such innovation environments can identify advantages and present problems, in which existing policies need to be planned in order to leverage competitive advantages in terms of increasing innovation activities, research, and development in companies. In the understanding of innovation habitats, an important theoretical perspective of analysis



Figure 1. The innovation orientation of national industry cluster. Source Furman, Porter and Stern (2002)

The first factor (entry conditions) concerns the general availability of qualified scientists and engineers to increase the innovation potential of the economy as a whole. The second (demand conditions) is related to the nature of the national and international demands of the clusters focused on specific products and services. That is, demanding clients influence national companies to offer better technologies and increase incentives in the search for global innovations (Furman, Porter and Stern, 2002). The third factor (context for business strategy and rivalry) highlights the intensity of the local competitive context and the reward process for successful local innovations. The effects of this factor depend on general incentives offered for innovation, such as intellectual property protection and regulations affecting certain products, a consistent pressure of local rivalry, and openness to international competitiveness in the cluster. The fourth factor (support and relationship industries) is related to the

focuses on studies of absorptive capacity. In it, it is assumed that the organization needs prior knowledge related to assimilate and use new knowledge. Research on memory development suggests that previously accumulated knowledge increases the capacity to put new knowledge into memory, what it calls knowledge acquisition, being the ability to remember and use the knowledge acquired (Cohen and Levinthal, 1990, Zahra and George, 2002). Absorptive capacity can still be understood as the ability to learn about and solve problems (zahra; george, 2002). The level of prior knowledge present in the company, primarily in the form of human capital, helps the company to absorb new related knowledge. According to Cohen and Levinthal (1990), the ability to evaluate and use external knowledge is largely a function of the level of prior knowledge related to the company. Zahra and George (2002) approach a process perspective on absorptive capacity and argue that sharing effective internal knowledge



Figure 2. Absorptive Capacity Model. Source Zahra and George (2002)

and integration are the critical parts of absorptive capacity. The authors propose that the absorptive capacity should be defined as a dynamic capacity, being a set of routines and organizational processes by which companies acquire, assimilate, transform and exploit knowledge. They also suggest that the absorptive capacity has two general states: potential (the external knowledge that the company could acquire and use) and realized (the external knowledge that the company acquired and uses), according to Figure 2. On the other hand, the absorptive capacity may still depend on processes and routines within the organization that allow sharing, communicating and transferring knowledge (Lane, Koka and Pathak, 2006). The company needs to reconfigure and realign its knowledge management capabilities to adapt to changing environmental conditions better and sooner than its competitors. The complementary nature of the internal and external knowledge processes reinforces the coordination requirements, which requires an integrated knowledge management (Lane, Koka and Pathak, 2006, Lichtenthaler and Lichtenthaler, 2010). The results also indicate that this effect of the absorptive capacity on innovation is stronger when the internal information flows are more efficient, as pointed out by the studies of Zahra and George (2002), corroborating in the fact that the potential absorptive capacity is a necessary condition to achieve competitive advantage in innovation, but companies also need to develop the ability to transform and exploit external knowledge in order to fully benefit from it. It is emphasized the importance of understanding the process of creating an innovation-driven environment since it is vital in the development of companies and in the generation of products and services that serve the interests of society and the market. It should also be noted that the variables - time and speed - are strategic elements for companies seeking competitive differentials in the market (differentiated products or services) and considering the pressures and needs of society and the market are also essential elements for its innovation process, as product lifecycles and the time of their development are increasingly shorter, in a scenario where customers expect delivery services and products (Oecd, 2005). In this context, characterized by intense competition and increasing market pressures, the intensity of competition, rapid globalization and constant changes in the area of information technology make innovation inevitable for companies as a way of capturing opportunities through the development of new products and the market itself (Hauknes, 1998, Lobianco and Ramos, 2004, Kubota, 2009).

Thus, in order for companies to have a competitive edge that allows them to position themselves strategically in the market, innovation could not be based only on research and development, but also on initiatives that enable these companies to generate managerial and markets. In other words, their innovation processes may be geared to the generation of knowledge based on strategic models that consider social and economic aspects, stimulating the network, avoiding isolated organizations (Hauknes, 1998, Lobianco and Ramos, 2004, Kubota, 2009). Therefore, innovation can improve company performance by optimizing its capacity to innovate and improve product management processes, considering the application of new organizational practices and the development of an entrepreneurial capacity to acquire and generate new knowledge (Alvarenga Neto, 2004, OECD, 2005). Lastly, the presented theory can lead to the understanding that the innovation needs the promotion of creation and knowledge sharing, generating new possibilities of combining different information (Tidd, Bessant and Pavitt, 2008). That is, knowledge may exists or results from a process of search for technology, market or competition actions, in which strategic actions by the innovation habitats can boost the development of companies.

#### **MATERIALS AND METHODS**

Qualitative research may also represent a situated activity that locates the observer in the world, consisting of a set of material and interpretive practices that offer previously unseen visibilities, using a series of representations, including field notes, interviews, conversations, photographs, recordings and reminders (Denzin and Lincoln, 2006). Thus, in this research, observations were used in the NOVUS incubator from March to May 2017, where primary data of documents and forms and unstructured interviews with the managers involved were analyzed. Qualitative approaches are predominantly adopted when: the evidence replaces statistical information; to capture psychological data, and to understand the complexity and interaction of elements related to the obj ects of study. Its characteristic lies in the richness of the details and descriptions, in order to seek a better understanding of a particular object of study (Martins and Theophilo, 2008). Innovation habitats needed this approach because they were complex environments created to enhance the relationship between all players and provide the generation of innovations. Therefore, in understanding the role of each player regarding their contribution, these activities were categorized to relate them to the premises contained in the CERNE manuals, and in this way, to verify which practices can be validated for the structure to be created, in the specific case of NOVUS. As a general hypothesis of this research, it is considered that the application of CERNE can contribute to the innovation and the absorptive capacity of incubators. It is also understood that the qualitative approach is the best choice for this research, since it allows the deepening and detailing of the investigation of a problem at a stage of conceptual evolution, since it was through the qualitative research that it was possible to deepen the investigation of its empirical field - the habitats of innovation - with greater possibility of collecting evidence that supports the in-depth analysis.

## RESULTS

The Innovative Enterprise Development Environment (NOVUS), according to its internal regulations, represents an articulated action of UFSC with the academic community to, through partnerships, attract enterprises to be incubated and generate public-private partnerships. NOVUS, in its institutional environment, will develop its activities in Sapiens Park, and institutionally it will be linked to the Secretariat of Innovation. Its mission is to foster and support actions to create innovative enterprises with a view to promoting sustainable national and regional development.

Among the activities planned for NOVUS in its internal regiment are: (Novus Regiment, 2017)

- identify innovative base entrepreneurs and encourage the emergence of innovative enterprises;
- to bring UFSC closer to the productive sector and to provide new work/business opportunities for the implementation of innovative companies;
- contribute to the development of Research & Development (R & D) in the country and promote, alone or along with other institutions, courses, and training, in order to prepare them for the constitution and management of a company;
- implement physical structures and create working conditions for the inclusion of nascent companies in the UFSC's operating sectors;
- to promote events, courses and seminars that contribute to the strengthening of the incubated enterprises and act as a facilitator in the incubated enterprises aiming at the use of laboratories, auditoriums, and equipment of the UFSC;
- foment exchanges with teaching and research institutions as well as UFSC centers/units for the development of cooperative projects, optimizing human, material and financial resources for the transfer and absorption of technologies for incubated enterprises;
- to act as one of the promoters of innovation, helping the contact of incubated enterprises with financing institutions to comply with the purpose of making feasible resources of investments in equipment and inputs; and
- to support the nascent entrepreneur, providing adequate space and effective conditions to provide an environment of innovation and transformation of the enterprise venture.

Strategically to fulfill its objectives, NOVUS seeks to support entrepreneurs interested in creating and consolidating innovative companies, offering them administrative and operational support, which will include: permission to use and share physical area; use and allocation of existing laboratories in the various academic departments; sharing of services; legal, accounting, business and marketing orientation; advice and provision of technological services; and enabling technological cooperation with other institutions. Therefore, to achieve its purpose, NOVUS will count on the support of UFSC human, technological and infrastructural resources, in order to establish contracts of adhesion of collaborators and students with the Environment.

#### First steps of incubation

In its development, NOVUS sought to establish, through key practices described by CERNE (2015), structured actions that could help in this process. These initiatives were documented and focused on "Sensitization and Prospecting" stages, which were first promoted by the Innovation Secretariat (SINOVA) of UFSC, which sought to prepare future entrepreneurs for NOVUS in advance by maximizing the efficiency of the incubator before even from its launch. It should be noted that the incubation process of a company consists of the following steps: pre-incubation; incubation; University graduate; and post-incubation, and throughout this process, companies need to be able to have a product, process or service or at least a prototype with potential market insertion; hav e a promising business model; and present innovative and / or technological character. It should be noted that the understanding of the effort to innovate can range from absolute measurements (R&D expenditures, the number of R&D staff, the number of hours delivered to R&D) and relative R&D expenditures/sales volume, R&D expenditures/number of employees) (Nieto and Quevedo, 2005). That is, all these factors have in common the fact that they indicate the contribution to the process of innovation within the company in the form of P&D activities, also considering its absorptive capacity aimed at the exploration and exploitation of knowledge (Nieto and Quevedo, 2005).



Figure 3. The model on the effects of efforts for innovation. Source Nieto and Quevedo (2005)

In Figure 3, hypotheses 1 and 2 can portray, according to the authors, the existence of conditions related to the structure of the industry that generates technological and directed opportunities of knowledge, and with them influence the level of effort pla ced for a company to innovate. However, according to the proposed model, internal characteristics of the company, represented by its absorptive capacity (hypothesis 3, 4 and 5), may also affect the intensity of this innovative effort.

Faced with this, and considering that most of the events and actions promoted by NOVUS have started recently, many of the key practices are characterized as initials according to CERNE's own guide. However, a critical analysis concerns the fact that it is not clear whether the maximum application of each process could already characterize the level of maturity and quality of CERNE 1, and thus, it was prioritized to present a list of actions that could define necessary prerequisites for its implementation. According to CERNE (2015), "awareness and prospecting" are characterized by awareness-raising. prospecting and qualification practices. Regarding awareness, NOVUS, in partnership with SINOVA, promoted lectures and seminars in the first semester of 2017 to resolve doubts about the importance of innovation and entrepreneurship in business and academia. It should be noted that all these actions are stored in a database that contains the attendance list and the main results of the presentations. In addition, NOVUS has on its own website the dissemination of events and praxis, and in this way, create a database with information and results related to the events and, as such, contribute to future analyzes and proofs of the maturity of the incubator before the practice. Such elements are vital in the initial key process described in the CERNE 1 guide (Cerne, 2015). To better illustrate the actions promoted by NOVUS supported by CERNE 1, Figure 4 is presented.



Figure 4. Key processes of Cerne 1 of NOVUS

Figure 4 summarizes the actions of NOVUS, in partnership with SINOVA, in promoting, for example, lectures on topics such as patents, regional technological bottlenecks, among others related to entrepreneurship and innovation, all of which were carried out in different cities of Santa Catarina. The purpose of the lectures was to qualify the participants in identifying best practices of innovation and generation of ideas in Brazil since an important actor of the lectures was the National Institute of Industrial Property (INPI). Among the topics covered, it is worth mentioning: the practice, process, methodology or technology required for patent generation, and which practices are used in the evaluation of ideas presented for patent registration. Therefore, as described in the CERNE manual, all these practices can be characterized as key actions to improve the development and construction of ideas to be presented to NOVUS.

#### Conclusion

The objective of the article was to present the process of creating an incubator of companies from CERNE (Center of Reference for Support to New Ventures), and for that, key processes of the creation of an incubator were characterized. Therefore, it should be pointed out that the creation of a strategic plan of executions and structured steps for the creation of NOVUS was fundamental for the monitoring of its creation process, in which events and seminars were held as mechanisms for prospecting ideas, as well as a prequalification of future incubators, in which the objective of these actions is to improve the quality and refine future ideas that can be incubated, and all this process built from the partnership between SINOVA and NOVUS in the planning and execution of joint actions. Thus, many of the key practices performed can be characterized as processes that help to sustain the initial maturity of the incubator, even before the entry of new incubates, which may in the future contribute to the capture of qualified incubators. Another highlight is in the preliminary stages of the creation of the incubator, in which NOVUS will establish an "ambition" process, that is, present in the academic community public consultations and identification of suggestions that can meet the real needs of companies incubated; identification of project reception and evaluation practices; and methods of hiring and collecting hatcheries. Understanding UFSC as a public university, it is important that different players can participate in the process of creating the incubator and have adequate space to present their ideas and suggestions.

It is also worth noting that it is essential to make the selection of the companies in advance, presenting all phases and selection criteria, and making all the information available on the incubator's website, as well as presenting a business plan template that can guide the development of the projects. Regarding the evaluation criteria, NOVUS was structured based on an evaluation committee which counts on the participation of qualified teachers and students who are active in the market. Another highlight is that NOVUS employees have master researchers and qualified doctors to establish the necessary partnerships for their creation, in which the university-company relationship can represent the differential of the model that is intended to be applied, creating a team of qualified evaluators to ensure that good ideas to be selected, and internally, create synergy of the NOVUS team with the new demands brought by the entrepreneurs who will be selected. In this sense, it is important to define a contract model that guarantees a smooth contract and aligned with the interests of the university and the incubated, all established with the internal regulations of NOVUS and generating the greatest possible transparency in all activities carried out. Considering the guidelines presented in the CERNE manuals, NOVUS was able to structure and project the beginning of its activities, so that the information contained contributed to the future projection of the incubator and helping in the maturity and quality in the perspectives of CERNE 1. Lastly, a reflection on CERNE is whether a new incubator, such as NOVUS, could have a higher level of maturity using knowledge from other already established incubators, or of its own management models, and thus be able to be evaluated in advance to the higher stages of CERNE.

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