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## PROPOSAL OF PRACTICES FOR OBTAINING AND MAINTAINING QUALIFICATION OF COMPANIES INCUBATED ACCORDING TO THE CERNE MODEL

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### ABSTRACT

The business incubation movement has shown great development in recent decades, both nationally and internationally. In this direction, its main focus has been the promotion of entrepreneurship, especially when it is technological and innovative. On the other hand, given the many options of management and organization methods, business incubators tend to present very different results, leading to questions about their value for generating new business. In this context, the CERNE model was created, presenting a set of principles, processes and practices to systematize the management of incubators. The objective of this research was to present a proposal with a set of qualification actions for these companies, aligned with the CERNE model. The research methodology was exploratory and descriptive, using a multi-case study with incubators of companies in the state of Rio de Janeiro. As a result, there was a large preponderance of personalized services as a form of qualification. As for the actions, there was a highlight for those focused on third generation incubators, such as networking generation and business acceleration. Finally, regarding the critical success factors (CSF), it was highlighted the commitment of entrepreneurs with qualification actions and the prospecting by incubators of their demands.

**Keywords:** Business incubators; Qualification; Management model

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## 1. INTRODUCTION

In recent decades, business incubators have gained worldwide relevance as a mechanism for fostering innovative companies. Its primary function is to support the development of new businesses, utilizing a value creation strategy through the provision of services and company monitoring, as well as the availability of a shared physical structure (Alon; Godinho, 2017). For Fernandes *et al.* (2017), the governmental action to create and support business incubators is fundamental for the development of entrepreneurship, as well as new business. The business innovation resulting from this process mainly induces technological progress and productivity gains, as well as job and income generation.

On the other hand, it depends on other factors such as sources of knowledge and technology, human capital and financial resources. According to Theodorakopoulos *et al.* (2014), business incubators have been used as a mechanism for fostering entrepreneurship, bringing together experience, physical structure and support services in a controlled new business environment.

Companies that have gone through the incubation process have significantly reduced their mortality rates from around 80% to 20% in the first year of operation (Oliveira *et al.*, 2010) principalmente, por falta de uma estrutura padronizada para orientar o desenvolvimento de novas incubadoras. Buscando reduzir problemas neste contexto, no ano de 2009 foi criado pela ANPROTEC (Associação Nacional das Entidades Promotoras de Empreendimentos Inovadores). Nevertheless, according to Barbosa (2014), the incubation process must go beyond providing infrastructure, skills and advice to entrepreneurs. It should also focus on managing business incubator processes and services, with a view to increasing the success rate of incubated companies, as well as spreading the entrepreneurial culture. For the National Association of Innovative Enterprises Promoting Entities (ANPROTEC, 2015a), incubators need to expand their results quantitatively and qualitatively by incorporating processes. This way, they can handle the complexity of the demands of today's economy, tuning their structures and services to the needs of regional development and business competitiveness.

In this sense, ANPROTEC and the Brazilian Micro and Small Business Support Service (SEBRAE - *Serviço Brasileiro de Apoio às Micro e Pequenas Empresas*) developed the Reference Center for Supporting New Enterprises (CERNE - *Centro de Referência para Apoio a Novos Empreendimentos*) model, aiming to qualify the performance of incubators of Brazilian companies. Designed to meet the needs of local innovation ecosystems, the model proposes processes and practices to expand incubators' capacity to gener-

ate successful innovative ventures. It is noteworthy that, in 2016, Brazilian incubators totaled about 370 institutions, with their incubated companies generating more than 15 billion reais of annual revenues and approximately 53,000 jobs (ANPROTEC, 2018).

For Perez (2017), noted that in the Brazilian incubation system, incubators were not supported to manage their own operation, as well as clear processes demonstrating how to turn ideas into successful businesses. As a result, the CERNE model presents itself as a way to facilitate and guide incubator managers to make changes in incubated enterprises. In addition, reality is changed and the limits of the incubators themselves are widened, without creating bureaucracy in this way. According to Tietz *et al.* (2015), there is a gap in the studies of the incubation process, that is, referring to the process of selection, development and graduation of incubator projects, emphasizing the need for research in these areas.

It is noteworthy that the CERNE model does not explicitly propose the actions or practices that must be performed by incubators, but the processes and axes that must be followed to reach a minimum performance standard at each maturity level presented. In this context, each incubator is free to develop its own set of qualification actions and initiatives, as long as they adhere to the key process groups and practices of the methodology.

Given the importance of CERNE for the advancement of the Brazilian innovation ecosystem and in view of the numerous qualification actions available, it is necessary to know the best practices for the development of incubated enterprises, carried out by incubators of companies already certified or in the process of implementation of CERNE. Thus, the objective of this research was to relate the practices and forms of qualification most used by incubators in the state of Rio de Janeiro in process or certified in CERNE methodology, maturity level 1, linked to the Network of Innovative Enterprises Promoting Agents (ReINC), as well as the critical success factors (CSFs) in their deployment.

## 2. THEORETICAL FOUNDATION

### Business Incubators

At present, there is an uncertainty of the concept of business incubation given the variety of approaches and methods, such as the virtual incubator model. In this context, Theodora kopoulos *et al.* (2014) present a general picture of the evolution of these institutions (Figure 1), marking the changes in the characteristics of these institutions over the years.



Internationally, technology-based businesses account for an average of 50% of all incubated companies, although there is wide variation in participation among countries. Key features of these business incubators include: assignment of physical space; lack of profit for the most part; provision of basic services; training; and management consulting. In addition, the main sources of income for maintaining these institutions are public funding (ANPROTEC, 2012).

According to Perez (2017), an incubator must demonstrate results for society, generating differentiated enterprises, qualifying human resources, and generating employment and income for its region. As stated in Carvalho and Galina (2015), there has been a lack of commitment to the research and evaluation of the value of the incubation process, such as the real impact on the development and success of incubated and graduated companies, despite the increasing number of business incubators.

To achieve the objectives of the work, the main tool used was benchmarking, that is, the evaluation of the best and usual qualification practices performed by incubators that have already implemented or are implementing CERNE. In consonance with Wann *et al.* (2017), benchmarking is a method designed to monitor and evaluate best practices, whether technological, strategic or internal and external to the company. It is thus considered a continuous process of improving the performance of the organization within a specific business and geographic context. For Islam *et al.* (2013), in turn, benchmarking is a recognized mechanism for evaluating companies' efficiency and improving their competitiveness through regular comparison with the most outstanding competitors. This process of understanding the internal and external aspects of the company aims to observe and

implement best practices that guarantee the organizations' competitive advantage.

### The CERNE model

The CERNE management model aims to promote significant improvement in the results presented by business incubators, as well as reducing variability in the generation of successful innovative ventures. For Passoni *et al.* (2017), the systematic of this model aims to implement basic procedures to reduce the variation in the results of incubated companies. In this context, Maciel *et al.* (2014) utilizando indicadores de desempenho e adotando como base os elementos adotados pelo Centro de Referência para Apoio a Novos Empreendimentos (CERNE emphasize that in order to fulfill its role more effectively, the business incubator must have a management process to track and measure its evolution, as well as incubated ventures, proper planning, financial support, and a network of partnerships.

The origin of CERNE dates back to the year 2006 and its construction had the leadership of ANPROTEC and the collaboration of various entities and agents. Its inspiration was international programs to foster new business, such as the European Business Innovation Centers (BICs) and the American Small Business Development Centers (SBDCs). As a foundation, CERNE is not a finished methodology. It is modernized as the business environment changes. In addition, it offers certification for each of its maturity levels (CERNE 1 to 4), granted by ANPROTEC and the Brazilian national SEBRAE (Pinheiro, 2017). The model is divided into processes and practices that are based on eight principles: focus on enterprises, focus on processes, ethics, sustainability, accountabi-

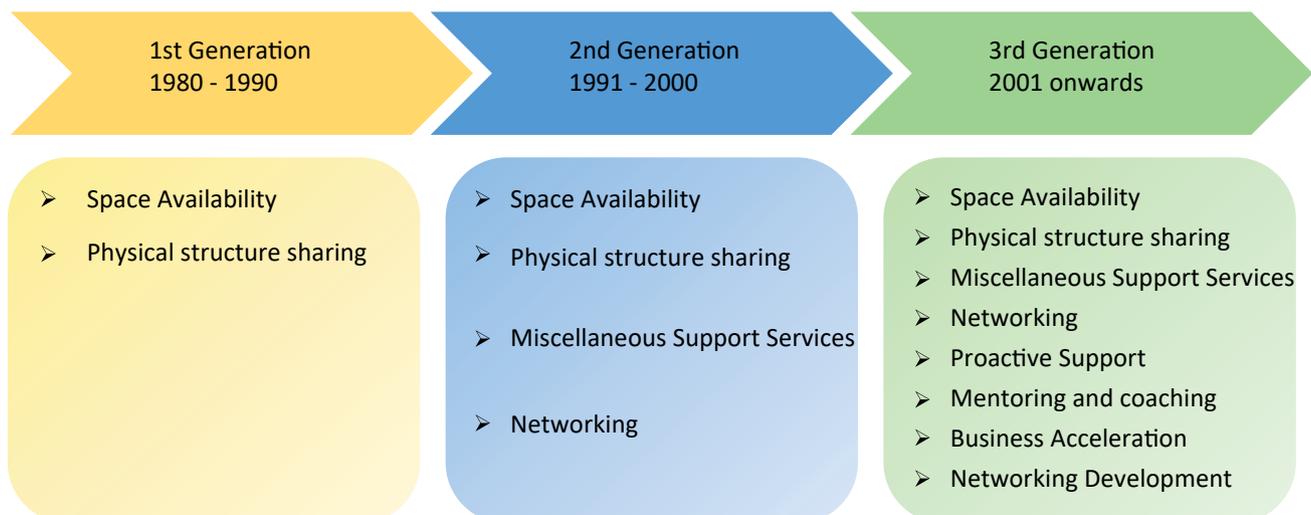


Figure 1. Evolution of the business incubation process

Source: Prepared from Theodorakopoulos *et al.* (2014)



lity, continuous improvement, human development, and, finally, transparent and participatory management (Figure 2).

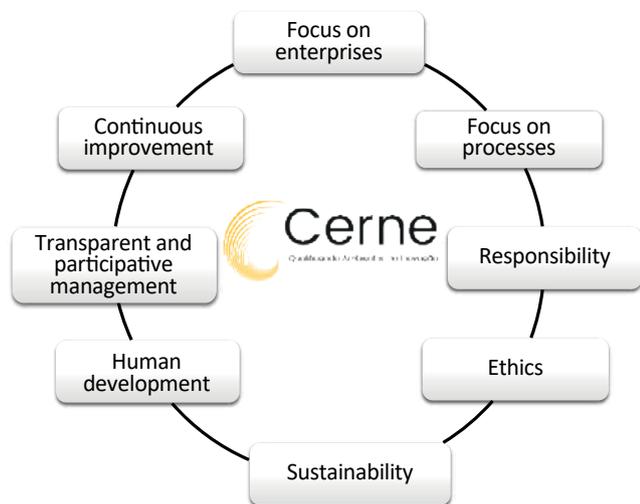


Figure 2. CERNE Principles  
 Source: Prepared from Oliveira *et al.* (2010)s

In addition, it has three levels of coverage. The first refers to the enterprise, in which processes and practices are related to the development and improvement of the products, services, technologies, management and personnel of incubated businesses. The second level focuses on the processes that enable the transformation of ideas into business. The third covers the management of the incubator, including finance, people and relationship with the surroundings (ANPROTEC, 2015a). Thus, the incubator manager should take care of all three levels simultaneously, guiding entrepreneurs, reviewing processes and managing the incubator as a business, an institution that relates to the surroundings (Figure 3).

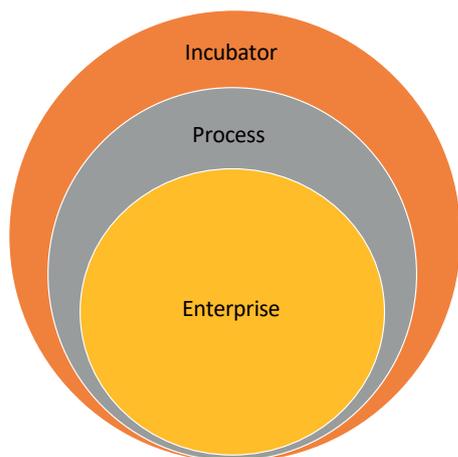


Figure 3. CERNE coverage levels  
 Source: Prepared from Anprotec and Sebrae (2016) and Oliveira *et al.* (2010)

Due to the quantity and complexity of the processes and practices to be addressed, the central structure of the CERNE model is organized into four increasing levels of maturity: CERNE 1 - enterprise, related to processes and practices aimed at incubated companies; CERNE 2 - incubator, related to incubator management; CERNE 3 - partner network, related to the expansion and consolidation of the partner network; and CERNE 4 - continuous improvement, related to the consolidation of the institution's innovation and internationalization management system (Figure 4).

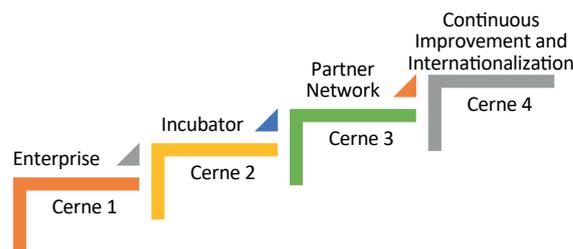


Figure 4. CERNE maturity levels  
 Source: Made from Pinheiro (2017)

Each level comprises a set of the so-called key processes for the incubator to use best practices for each maturity level. In CERNE 1, which covers the key qualification process (research focus), all processes and practices are directly related to the development of incubated enterprises, in addition to the basic management of the business incubator itself (Chart 1). The key processes are branched into five key practices according to CERNE's five axes: entrepreneurial, technological, capital, market, and management.

**Critical Success Factors (CSF)**

According to Luz (2016), CSFs are key attributes or areas that need to be prioritized, as their outcomes are critical to achieving organizational goals. Thus, you need to know them first and foremost to track their performance and control them. According to Reis and Amaral (2016), CSFs are a set of reduced elements that, if executed satisfactorily, lead the organization to success in a specific business or economic context. The authors also report several CSFs, including efficient communication, commitment, ongoing monitoring, stakeholder management, clear objectives and goals, as well as planning and analysis.

**3. METHODOLOGY**

Given the objectives of the work, it is proposed an applied research with a mixed approach. Gray (2012) presents a mixed approach such as one that includes at least one quanti-



**Chart 1.** CERNE's Key Processes and Key Practices 1

Key Processes	Key Practices	
1) Awareness and Prospecting	1.a) Awareness	1.b) Prospecting
	1.c) Qualification of potential entrepreneurs	
2) Selection	2.a) Receipt of proposals	2.b) Evaluation
	2. c) Hiring	
3) Planning	3.a) Entrepreneur's development plan	3.b) Technology plan
	3.c) Capital plan	
	3.e) Management plan	
4) Qualification	4.a) Qualification of the entrepreneur	4.b) Technological qualification
	4.c) Financial qualification	
	4.d) Market qualification	
4.e) Management qualification		
5) Advisory/consultancy	5.a) Advisory / consultancy to entrepreneurs	5.b) Technological advisory / consultancy
	5.c) Financial advisory / consultancy	
	5.d) Market advisory / consultancy	
5.e) Management Advisory / consultancy		
6) Monitoring	6.a) Entrepreneur Monitoring	6.b) Technology Monitoring
	6.c) Financial monitoring	
	6.d) Market monitoring	
6.e) Management monitoring		
7) Graduation and Relationship with Graduates	7.a) Graduation	7.b) Relationship with Graduates
8) Basic management	8.a) Institutional model	8.b) Financial management and sustainability
	8.c) Physical and technological infrastructure	
	8.d) Support and management	
8.e) Communication and marketing		

Source: Made from ANPROTEC (2015b)

tative and one qualitative method. Thus, one can obtain "a richer and contextual view of the researched phenomenon".

From the point of view of objectives, the research was exploratory and descriptive. As stated by Barbosa (2014), Exploratory research "aims to provide greater familiarity with the problem in order to make it more explicit or to build hypotheses." For Prodanov and Freitas (2013), In descriptive research, the phenomena of the physical and human world are observed, recorded and analyzed without interference or manipulation by the researcher, using techniques such as interview, form, questionnaire, test and observation.

Regarding the technical procedures, the multiple case study was adopted, selecting the incubators of companies in the state of Rio de Janeiro linked to ReINC. based on Yin (2001), the case study allows for an analysis preserving the significant characteristics of real life phenomena and complex social interactions, and is a common strategy in areas such as sociology, political science, management, and planning. In this context, multiple case designs are considered more robust compared to single case designs, presenting more consistent results, although they may require more time and resources from the researcher.

As a collection instrument, a questionnaire with closed questions based on the CERNE methodology axes was used for the key qualification process, as described in items 4.a to 4.e of Table 1. These questions were based on the relation of practices and qualification forms of companies incubated in the research of Chaves (2018) and collected from incubators of CERNE 1 certified companies throughout Brazil. This same relationship includes the CSFs in the use of these actions by the institutions. The "Google Forms" technology was used to fill in and compile the responses collected after sending the survey instrument to the managers of 16 Rio de Janeiro-based incubators linked to ReINC in 2018.

Also based on the study by Chaves (2018), closed questionnaires applied to the Rio de Janeiro incubators were used, in descending order, listing the most used options in the whole grouping of information, whether practices, qualifications or CSF, with a response rate from managers above 50%.

Finally, the analysis of the results was performed using descriptive statistics. Thus, the most used qualification actions were highlighted, analyzing them from the scientific literature point of view and relating them in decreasing order



of frequency. With this relationship, a proposal was presented with the practices and forms of qualification with 50% or more choices by the incubator managers of the companies surveyed. The same logic was used in the selection of the cited CSFs.

#### 4. RESULTS AND DISCUSSION

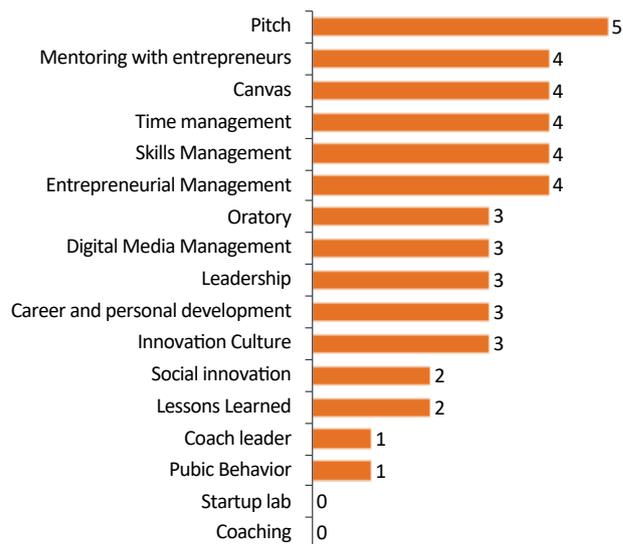
As a result of the survey conducted in November 2018, a response rate of 56% (9 out of 16 respondents) was achieved, thus obtaining the frequencies of practices and forms of qualification, as well as the suggested CFSs. It should be noted that managers could suggest new options in each issue, increasing the number of related items.

##### Entrepreneurial axis

Regarding the qualification actions related to the entrepreneurial axis, three types of practices stand out among the most mentioned (Graph 1). First, the qualification in skills related to the relationship with stakeholders, namely: pitch (the most indicated with five choices in nine respondents or 55%) and oratory. Secondly, an action linked to the exchange of experiences with market entrepreneurs already graduated by the incubator through mentoring. Then, qualification practices related to business management were pointed out, such as the Canvas method, time management, skills management, and entrepreneurial management.

For Clark (2008), there has been a trend in the last two decades of giving quick presentations known as pitches to make a first contact with investors. These presentations require an ability to persuade an audience of small investors generally in their decision making and have a major impact on the viability and growth of new businesses. For Daly and Davy (2014), business-oriented pitch is an essential skill for engaging investors and business partners, providing a quick picture of the company's value proposition.

According to Somsuk and Laosirihongthong (2014), The success of incubators is related to the quality of internal human resources and the provision of training to qualify entrepreneurs in long-term management skills. Bose et al. (2017) describe the evolution of the incubation process from the simple provision of spaces, shared structure for services and processes that add value to the entrepreneur. Silva et al. (2017) highlight the importance of technology incubators' ability to adapt and respond to the needs of entrepreneurs in a changing environment, with an emphasis on developing internal and external organizational skills.

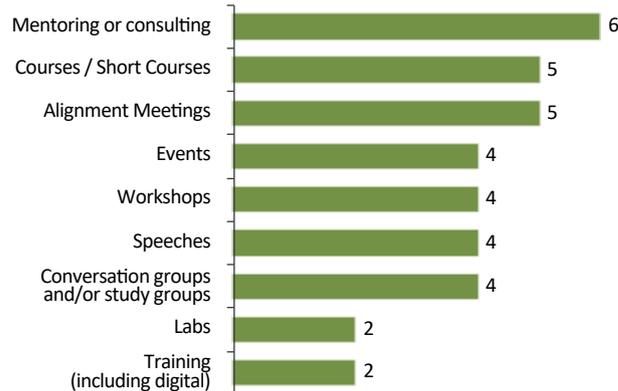


**Graph 1.** Qualification practices for the entrepreneurial axis

Source: The author

Some less cited actions are also highlighted, such as leadership, career, personal development, lessons learned, and public behavior. According to Schiopu *et al.* (2015), Recent research has identified the weight of emotions in business behavior, that is, in decision making, creativity, perception, and other forms of cognition. For Ammetller-Montes *et al.* (2014), The key factors in offering assistance actions are related to the business decision process, based on the behavioral elements and attitudes of new entrepreneurs.

Regarding the qualification forms, for the entrepreneurial axis (Graph 2) the use of mentoring or consultancy with six marks in nine respondents or 66% stands out. Schiopu *et al.* (2015) emphasize that, depending on the needs of entrepreneurs, one may have a model focused on providing network services, training and intense generation of synergy with the surroundings. Zhao *et al.* (2017) emphasize the importance of knowledge-based services and the ability of the incubator to provide them, whether from outside or within, leading to faster business development.



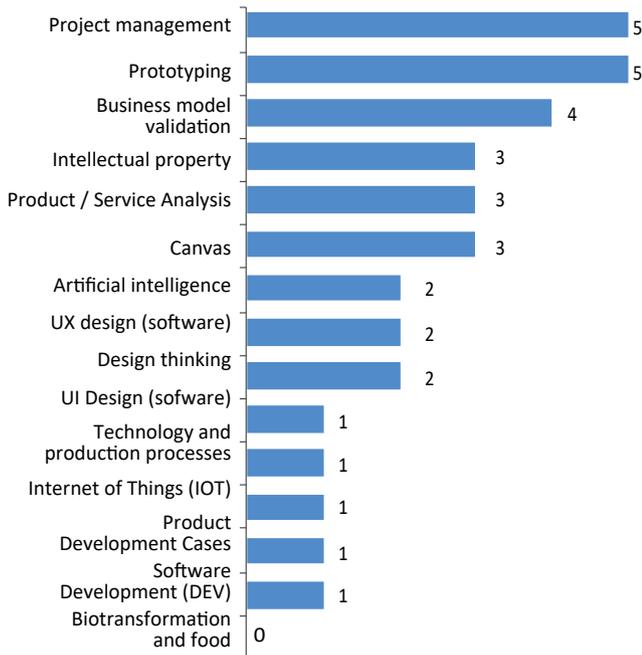
**Graph 2.** Qualification forms for the entrepreneurial axis

Source: The author



**Technological axis**

Regarding the technological axis (Graph 3), two practices stand out first: project management and prototyping, with 55% of the answers each. Following, there are three other actions: (i) business model validation; (ii) intellectual property; and (iii) analysis of products and services. As stated by Khalid *et al.* (2014), the management of the services offered by incubators has become a critical factor for the most modern institutions. In this context, intellectual property, prototyping, product development, licensing agreements, and royalties should be highlighted. For Somsuk and Laosirihongthong (2014), incubators generally provide the development of key skills for the insertion of their services and products, with emphasis on prototyping, validation, product, and service design.

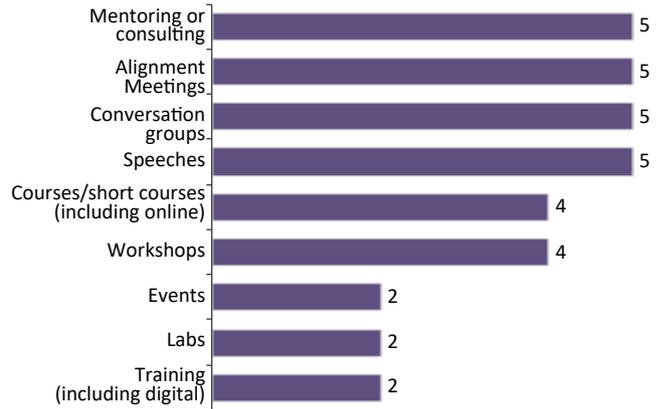


**Graph 3.** Technological qualification practices  
 Source: The author

As for the Qualification forms for the technological axis (Graph 4), a very balanced distribution is seen among the chosen options. In addition to the traditional tools, courses, lectures, workshops, the use of experiences sharing actions, information exchange, alignment meetings, conversation circles and customized practices for each entrepreneur and mentoring or consulting are highlighted.

Beyond the Infrastructure Dimension, Fernández *et al.* (2015) suggest that incubators can offer skilled services that create economies of varied scale and synergies, such as those linked to technology transfer and international trade. In this direction, one should bet on services that have greater potential to add competitive differential. According

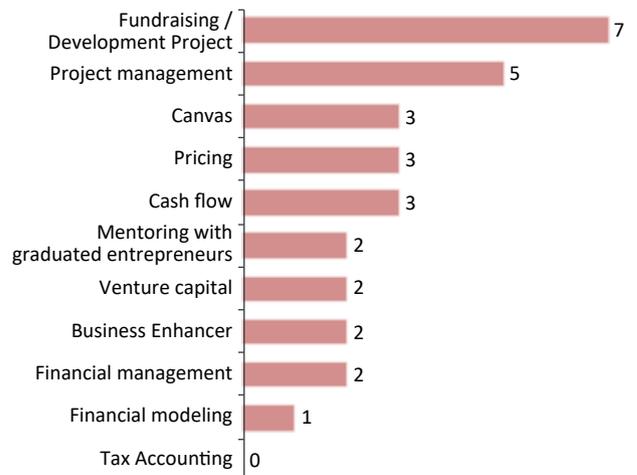
to Vanderstraeten *et al.* (2016), a strategy for personalizing the services offered, in addition to focusing on a business segment, is the key to improving business incubator results and indicators.



**Graph 4.** Qualification forms for the technological axis  
 Source: The author

**Capital axis**

In the practices related to the capital axis (Graph 5), the actions linked to the raising of external resources stand out, especially through funding projects, with 78% (seven out of nine respondents). This response rate was the highest among the five-axis practices, tied with the “strategic planning” practice of the management axis, highlighting the importance of public funding and venture capital for new business. Secondly, in this axis, appears the project management action, with 55% of the answers.

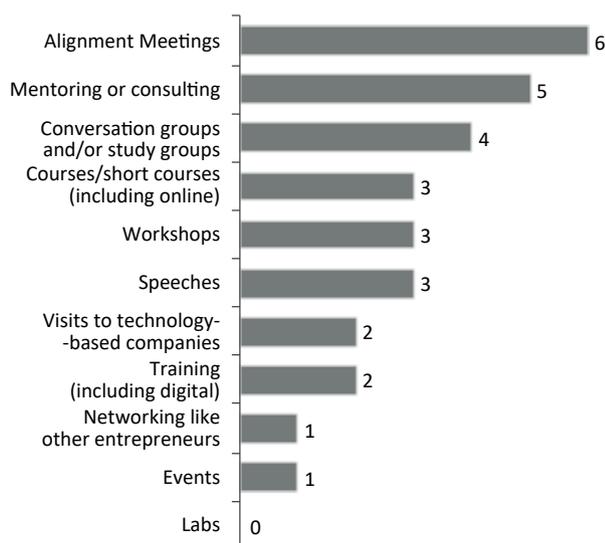


**Graph 5.** Qualification practices for the capital axis  
 Source: The author



As stated in Silva *et al.* (2017), entrepreneurs are looking for more agile environments to help them with accounting, legal, communication, and access to knowledge networks and financial resources. In this sense, incubators provide a greater relationship between startups and various economic agents, such as consumers, business partners, and financial capital. Theodorakopoulos *et al.* (2014) highlight, among the key critical success factors in incubation processes, the quality of entrepreneurial education and incubated companies' access to capitalization and financing.

Regarding the forms of qualification (Graph 6), the participation of the incubator and networking team is emphasized to ensure understanding. There is also success in issues related primarily to fundraising and development projects. In this context, alignment meetings stand out in the first place and the conversation groups and study groups in the third place (67% and 45% of respondents, respectively). It also reports the importance of mentoring and consulting with 55% of respondents, in second place. It is noteworthy that throughout the research was the only occasion where this last form of qualification did not appear among the most adopted.



**Graph 6.** Qualification forms for the capital axis

Source: The author

According to Ammetller-Montes *et al.* (2014), The evaluation process carried out through the exchange of information with stakeholders, whether from the incubator team or from external networks, provides the choice of services that best suit the needs of startups. Thus, the key factors in offering assistance actions are related to the business decision process and the behavioral elements of new entrepreneurs.

## Market axis

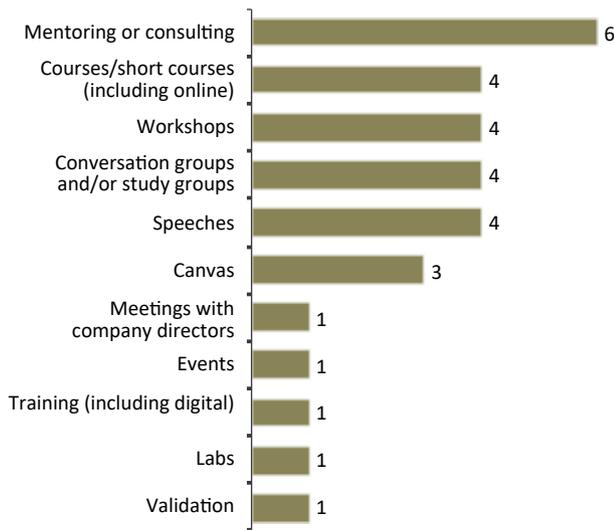
Regarding the market axis, research and market analysis appear with distinction: 67% of respondents; followed by marketing with 55% (Graph 7). Other actions such as market strategy aligned with product internationalization, entrepreneurship and questions related to the price of products or services obtained 45% of the answers. In this direction, there is an emphasis on issues associated with the strategy, positioning of the company and its products in the market.



**Graph 7.** Qualifying practice for the market axis

Source: The author

Zhao *et al.* (2017) divide the knowledge-based services offered by incubators into categories, including market research, finance and management. According to Khalid *et al.* (2014), the most qualified services, linked to the so-called fourth generation incubators, include market assessment and strategy, as well as sales development. As for Calza *et al.* (2014), actions with emphasis on forming strategic partner networks have several motivations, including: validation of new products; access to suppliers; and relationship with research centers and universities. As for the forms of qualification of the market axis (Graph 8), mentoring and consulting were once again highlighted with six out of nine respondents (67%). Secondly, there was a balanced distribution of shares, with 45%. Still on the same axis, the three most traditional are courses, workshops and lectures. In addition, there is one related to the ability of incubators and incubated companies to network and exchange knowledge, such as conversation circles and study groups.



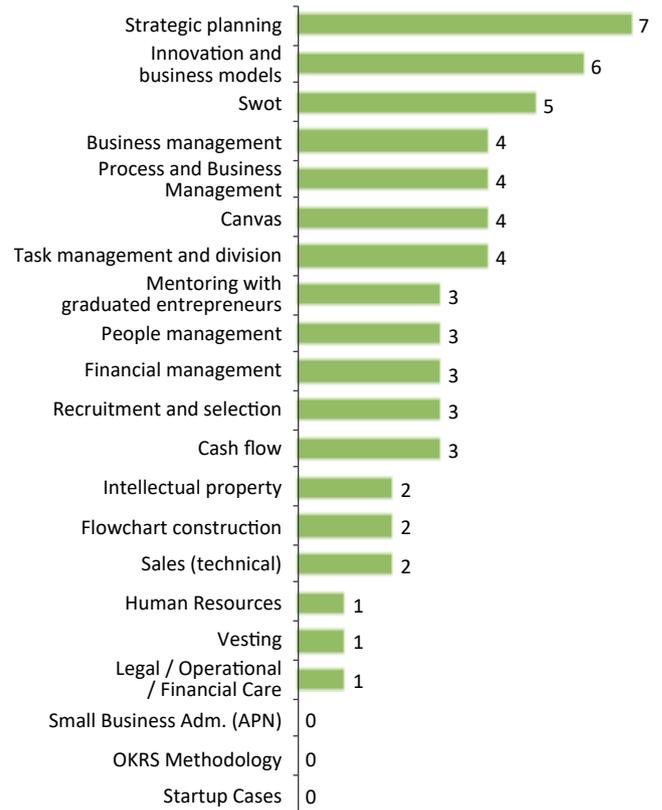
**Graph 8.** Qualification forms for the market axis  
Source: The author

Ammetller-Montes *et al.* (2014) identify four types of services that can be offered to business owners: internal incubator services, consulting services, networking services, and those based on new media resources.

### Management axis

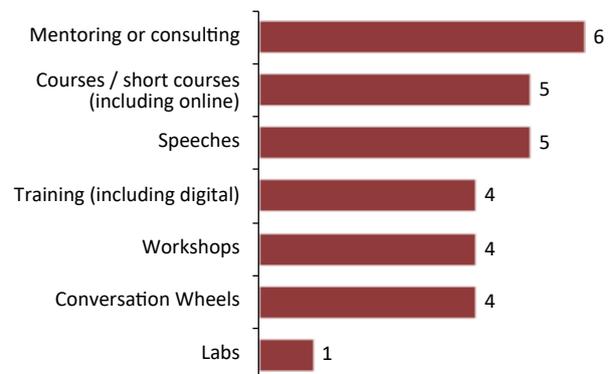
Regarding the management axis (Graph 9), emphasis is given to practices related to business planning and modeling, including: strategic planning, innovation, business model, and SWOT, with 78%, 67% and 55%, respectively. In this direction, the qualification action “strategic planning”, which is the most adopted among the five axes, along with the “fundraising and development projects”, stands out. Other prominent practices are related to the operational management of companies, such as process and business management, with 45% of the answers.

Bose *et al.* (2017) argue that while small businesses play a large role in job creation, they generally lack adequate management skills and sources of capital in their initial activities. Pessoa (2015) states that the lack of resources, the weight of operational issues and the small organizational structure lead start-ups to modestly use strategic planning, despite its importance. According to Ammetller-Montes *et al.* (2014), the adoption of an external cooperation strategy tends to be a stimulus for collaboration with agents that would not normally be available to the organization, such as scientific institutions. For Somsuk e Laosirihongthong (2014), management skills development by incubator staff is critical and can range from business plan training and technology transfer to marketing and financial management. In addition, close liaison with departments and laboratories should be established to complement specific skills.



**Graph 9.** Qualification practices for the management axis  
Source: The author

Regarding the form of qualification in the management axis (Graph 10), mentions and consultancies are again seen as the most used (67%), followed by more usual forms such as courses and lectures (55%).



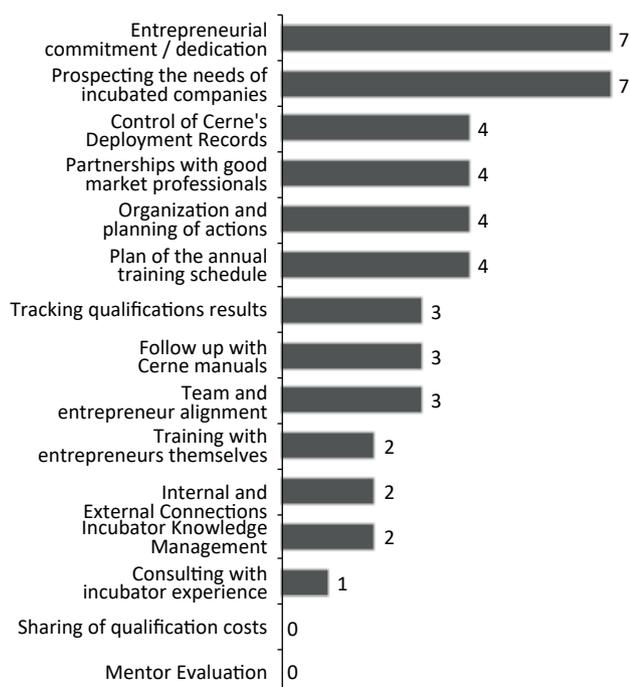
**Graph 10.** Qualification forms for the management axis  
Source: The author

For Calza *et al.* (2014), mentoring and coaching services are used to minimize specific deficiencies in the management or technological aspects of new business. The trainings have a more generalist character and address issues of a common nature.



## Critical Success Factors

Regarding CSF for the implementation of qualification practices (Graph 11), there was a strong emphasis on two factors: (i) commitment and dedication of entrepreneurs; (ii) prospecting the needs of incubated companies. Thus, both had a high response rate with seven out of nine respondents (78%). Second, there were factors related to planning and control, such as organization, planning of training actions and contact with professionals of excellence in the market (45% of the choices).



**Graph 11.** Critical success factors for implementing qualification practices

Source: The author

For Theodorakopoulos *et al.* (2014), Success factors for incubation programs include the ability of managers to adjust their processes to the needs of each company's market reality, in addition to monitoring the results presented and the relationship with entrepreneurs.

## Proposed practices for qualifying incubated companies

As a central objective of the work, Table 02 presents a proposal of actions, forms and CSFs. They are meant to be applied by business incubators, especially those using the CERNE model. The context is also pointed out, confronting each axis of the model with the obtained results and the researched literature.

## 5. CONCLUSION

This work aimed to relate the most used practices and qualification forms, directed to incubated companies and adhering to the CERNE methodology, in a sample of incubators of Fluminense companies linked to ReINC. These institutions are mostly public and are in the process of certification in the methodology. In addition, the establishment of FCSs was considered fundamental in the implementation of the same actions. At the end, a proposal was presented relating the most pointed items, according to the criteria described in the research methodology.

The main motivation of this benchmarking was to establish a list of qualification practices for business incubators that intend or are in the process of certification by the CERNE model, and secondarily for those who wish to use the best qualification actions of business incubators, specifically the Fluminense ones.

As for the results, there was firstly a great deal of evidence in practices related to building and developing innovative businesses, with less emphasis on operational and traditional business management issues. These include strategy, market relationships, innovation processes, business model, fundraising, as well as modern tools for shaping the business, such as Canvas and prototyping. Thus, the practices presented are aligned with the concept of third generation incubators, more concerned with accelerating new business and network development.

Secondly, as regards the forms of qualification, those related to the exchange of knowledge and experiences are evident, as well as those offering customized qualification to new entrepreneurs. In this direction, alignment meetings, study groups and conversation circles are cited, especially mentoring and consulting. On the other hand, it is noted that although there was less evidence, traditional practices such as courses and lectures were also cited. Once again here, one can see adherence to the concepts of modern incubators, in which personalized services and networking are highlighted.

Among the FCS, the importance given to the specific demands of incubated entrepreneurs stands out. This fact is in agreement with the studied literature, for which modern incubators tend to perform interaction processes with their increasingly private and dedicated customers. Moreover, another factor refers to the commitment of entrepreneurs in carrying out qualification actions, which also demands a significant management and communication capacity of the incubator team.

As a result of the work, a proposal was presented for practices to achieve qualification for business incubators,



adhering to the CERNE methodology, with the objective of guiding incubators in the key management process. The results, although obtained in the universe of Rio de Janeiro, may be adapted to the culture of other states.

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Chart 2. Proposed practices for qualifying incubated companies

Axes	Qualifying actions or practices	Qualification forms	Context
Entrepreneur	- Pitch	Mentoring or consulting	Emphasis on developing presentation skills of company and business products and services. Qualification primarily through personalized service and experience Exchange.
		Courses or short courses	
		Alignment Meetings	
Technological	- Prototyping	Speeches	Focus on developing process and product development skills. Qualification in traditional and/or custom format.
		Conversation Wheels	
	- Project management	Alignment Meetings	
		Mentoring or consulting	
Capital	- Fundraising / Development Projects	Alignment Meetings	Improvement of knowledge in the management of financial planning and fundraising. Use of personalized qualification and exchange of experiences.
	- Project management	Mentoring or consulting	
Market	- Market Research / Market Analysis	Mentoring or consulting	Emphasis on skills aimed at analyzing and positioning products and services in the market. Custom qualification service.
	- Marketing		
Management	- Strategic planning	Mentorias ou consultorias	Focus on skills related to business planning and modeling. Balance between traditional and custom qualification format.
	- Innovation and business models	Courses / short courses (including online)	
	- SWOT	Speeches	
			
CSF			
Prospecting the needs of incubated companies			
Entrepreneurs commitment and dedication			

Source: The author



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