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A Multiple Case Study of Open Innovation Programs with Large Corporations and Startups

Um Estudo de Casos Múltiplos de Programas de Inovação Aberta com Grandes Empresas e Startups

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ABSTRACT

How large corporations relate to startups can vary considerably, from one-off events to mergers and acquisitions. Still, a model that has been gaining prominence in the Brazilian scenario is that of corporate acceleration programs, in which a relationship is established with one or more startups through a structured work model with a predetermined duration. The two parts complement each other: the large corporation has resources, size, power, and routines that enable it to operate a business model efficiently, and the startup, in turn, has organizational agility, promising ideas, propensity to take risks, and aspiration to rapid growth. This article aims to detail how one large corporation has done business with different startups in Brazil through a corporate acceleration program. With this study, it was possible to identify that even though there may be standards in the operation of a corporate acceleration program where different startups participate in a single initiative, the results are different. These findings encourage new research to better understand, for example, which aspects of a corporation or a startup enable it to achieve better results in such programs.

Keywords: Open Innovation. Corporate Acceleration Program. Startups.

RESUMO

A forma como as grandes corporações se relacionam com as tartups pode variar consideravelmente, desde eventos pontuais até fusões e aquisições. Ainda assim, um modelo que vem ganhando destaque no cenário brasileiro é o dos programas de aceleração corporativa, nos quais se estabelece um relacionamento com uma ou mais startups por meio de um modelo de trabalho estruturado e com duração pré-determinada. As duas partes se complementam: a grande corporação possui recursos, tamanho, poder e rotinas que lhe permitem operar um modelo de negócios de forma eficiente, e a startup, por sua vez, possui agilidade organizacional, ideias promissoras, propensão a assumir riscos e aspiração ao rápido crescimento. Este artigo tem como objetivo detalhar como uma grande corporação tem feito negócios com diferentes startups no Brasil por meio de um programa de aceleração corporativa. Com este estudo foi possível identificar que mesmo que possam existir padrões na operação de um programa de aceleração corporativa onde diferentes startups participam de uma única iniciativa, os resultados são diferentes. Essas descobertas incentivam novas pesquisas para compreender melhor, por exemplo, quais aspectos de uma corporação ou startup lhe permitem obter melhores resultados em tais programas.

Palavras-chave: Inovação Aberta. Programa de Aceleração Corporativa. Startups.

1 INTRODUCTION

Innovation is a driving force that allows organizations and nations to achieve or sustain a competitive advantage (JONASH, 2001). The need to innovate to remain in the market is increasingly present in the reality of large corporations. However, the traditional model, in which companies generate, develop, and commercialize their ideas, needs to be more in a market in constant transformation.

Given this scenario, it is increasingly common for large companies to choose to work with open innovation models (OPENAXEL, 2016; BRUNSWICKER and CHESBROUGH, 2018); such models allow large corporations to use to their advantage the thousands of early-stage solutions that appear every day, instead of competing with them, either to improve their value proposition, to make some internal process more efficient or to add them to the portfolio as a new offer for their client base (CHESBROUGH, 2003). In this context, a segment of companies has stood out in recent years: startups. A literature review by Spender *et al*. (2017) points out a growing interest in the theme "startups and open innovation" and that this subject is strongly multidisciplinary. However, there is a lack of research on the relationship between startups and large corporations in an open innovation context. Diverse modalities of engagement with startups open new possibilities and forms of business models, which concomitantly change the perception of what inter-institutional cooperation entails in generating innovations for efficiency in acting within the market (URBANIEC and ZUR, 2021). The corporation chooses to act in a way that can integrate emerging innovations through interaction with startups, aligning them with businesses already developed by prominent firms (HUTTER *et al.*, 2021).

The scarcity of references is even more significant when analyzing the Brazilian market. While past research highlights advantages related to open innovation mechanisms (BOGERS et al., 2019), it is also vital to note that open innovation initiatives frequently imply the emergency of contradictory divergences among counterparties (ÖBERG *et al*., 2020; STEFAN *et al.*, 2022). Such tensions often encompass value creation and capture processes (STEFAN *et al*., 2022). According to Bonzom and Netessine (2016), of the 500 companies listed on the Forbes Global 500, 262 already have some engagement initiatives with startups. This number is even more significant considering the 100 companies at the top of the ranking; 68% have relationship initiatives with startups. According to a preliminary survey by the author on digital sources in Brazil, approximately 30 large corporations related

to startups, specifically in corporate acceleration programs, in 2018. 2019, this number increased by 86.7%, reaching 56 large companies.

The theme of this research was chosen, therefore, due to its relevance in the current context, which seems to grow every year. It aims to seek a deeper understanding of how large corporations have faced open innovation regarding their relationship with startups through corporate acceleration programs in the country.

2 LITERATURE REVIEW

2.1 Open Innovation

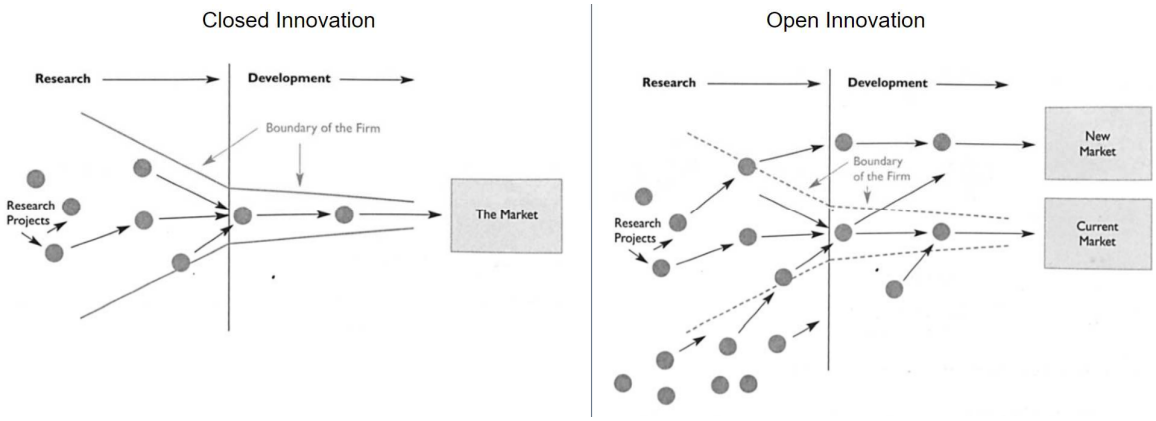
In business, innovation can be understood as a social phenomenon generated by human needs that results in something new, practical, sustainable, and profitable. Drucker (1986) defines innovation as a tool for entrepreneurs exploring changes as opportunities to generate new business.

Open innovation, in turn, has emerged as an essential concept in academic research and industrial practice and is now also becoming increasingly important in public policy (BOGERS *et al*., 2018). Henry Chesbrough is considered by many to be the father of open innovation, responsible for coining the term in the early 2000s, proposing that such an approach would be essential for companies looking to create and profit from technology. According to the author:

> "Open Innovation is a paradigm that assumes that firms can and should use external ideas and internal ideas, as well as internal and external paths to market, as the firms look to advance their technology. Open Innovation combines internal and external ideas into architectures and systems whose requirements are defined by a business model." (CHESBROUGH, 2003)

In another definition, Chesbrough *et al*. (2006) characterize open innovation as the purposeful use by companies of internal and external knowledge flows to accelerate internal innovation and expand markets for external use of innovation. The following scheme compares the traditional innovation model, here called closed innovation, with the open innovation model.

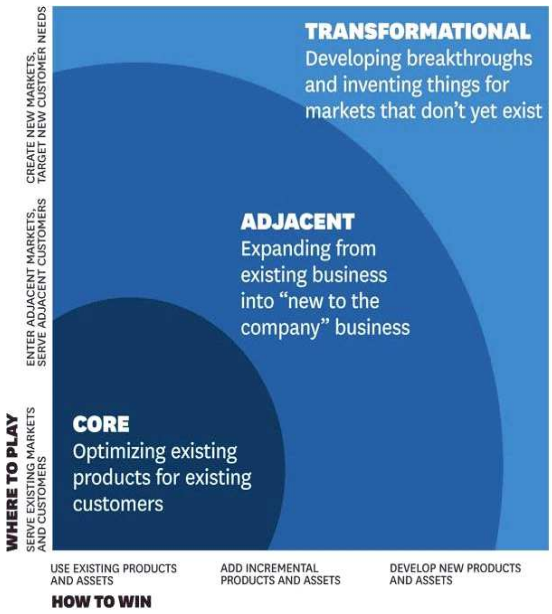
Figure 1 – Difference between Closed Innovation and Open Innovation



Source: The author, adapted from CHESBROUGH, 2012

Another point to be considered in the company's decision on which model to use in its innovation initiatives is its objective in each project. The following figure classifies the objectives pursued by corporations in their innovation initiatives into three categories.

Figure 2 – Matrix of Innovation Ambitions



Source: NAGJI and TUFF, 2012

When analyzing the three categories of innovation ambition, after understanding the advantages presented by the open innovation model, it seems consistent to infer that the initiatives that are closer to the aspirations at the ends of the axes, that is, those of a Transformational character, are those in which open innovation has the most significant potential to deliver value. According to Nagji and Tuff (2012), a high-tech company can

move towards the upper right corner, taking greater risks with more audacious innovations for more significant gains. Although this may seem obvious, only some organizations think of the best level of innovation to be achieved, and even fewer can achieve it.

2.2 Innovation initiatives between Startups and Large Corporations

Ries (2011) states that a startup can be defined as an entity formed by people to design innovative products and services under a generally uncertain scenario. Blank (2012) reinforces this definition, indicating that a startup is an organization at an early stage whose objective is to find a replicable and scalable business, developing new products or services in an environment of extreme uncertainty. Thus, startups must be able to combine creativity, research, and innovation to efficiently satisfy the needs of a rapidly evolving market (THIEL, 2014). To maintain their competitive advantage, large companies constantly look for new value-creating business models that allow them to boost innovation through interaction with various market players throughout this process (URBANIEC and ŻUR, 2021).

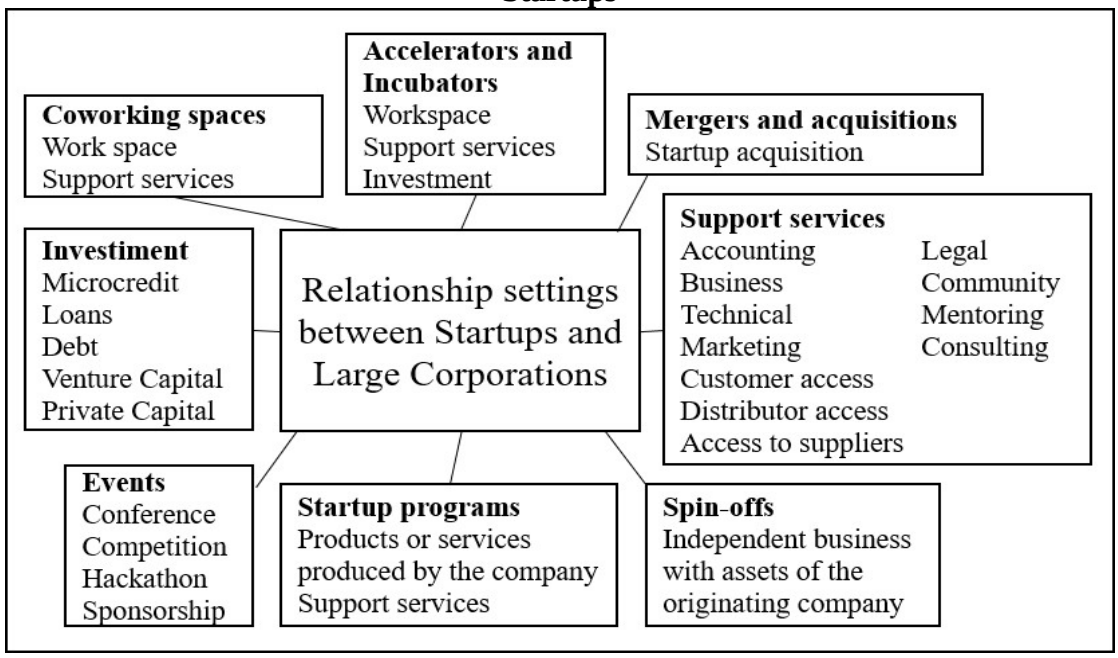
The frequent recent success stories of startups have drawn the attention not only of new entrepreneurs willing to build a business but also of large corporations interested in better understanding the models and strategies used by these companies. Such corporations seek to innovate more assertively, and the Venture Capital model stood out when this type of relationship began to spread.

The term Venture Capital is used to characterize risky investments that focus on the purchase of equity interest in private companies with high growth potential. In general, these investments are made with a high degree of uncertainty since the invested companies tend to have a short life span, few tangible assets, and operate in markets that change quickly (GOMPERS and LERNER, 2001).

One reason Venture Capital has shown itself to be a rising force in large corporations is that for every dollar invested through this model, the result in terms of published patents can be three times greater than a dollar invested in traditional corporate research and development (KORTUM and LERNER, 2000).

With the rise of startups and their significant impact on the market, several corporations have been related to them differently, not only via a Venture Capital model. The following scheme presents some possible forms of relationship found in the literature and corroborated by the author's experience in this sector.

Figure 3 – Relationship settings between Corporations and Startups



Source: Author, adapted from BONZOM and NETESSINE, 2016

Given an open innovation model and the various forms of relationship between large corporations and startups, this study chose to delve into the interaction model known in the national market as the Corporate Acceleration Program. This modality is part of two new models of engagement with startups, inspired by enhancing the technology testing process and access to the market for high-value innovations. A significant part of the studies on corporate accelerators has focused on analyzing the success factors and contributions that have fed to this corporate accelerator as an agent that, for both startups and large firms, offers promising returns (URBANIEC and ZUR, 2021; WOJCIK et al., 2020).

This recent interaction model between large corporations and startups allows companies to market their ideas and those of other companies. They are a nascent alternative in the market -and in rapid expansion- to facilitate or engage with more efficient ways to identify and exploit new and innovative business opportunities (SHANKAR and SHEPHERD, 2019). In this model, companies can invest, finance, and commercialize innovation in addition to generating products and services.

Corporate acceleration programs allow large corporations to use in their favor the various early-stage solutions that emerge daily through startups rather than competing with them, whether to improve their value proposition, make some processes more efficient, or add them to the portfolio (RICHTER *et al*., 2028). According to Ubaniex and Zur (2021, p. 6), this type of intermediary is defined as “business models that offer support to groups of

companies in initial stages of development, for a limited period, employing access to desks, orientation, training and other specific resources of the host company."

Weiblen and Chesbrough (2015) point out that the two parts complement each other: the corporation has resources, size, power, and routines that enable it to operate a business model efficiently. The startup, in turn, has organizational agility, promising ideas, a propensity to take risks, and an aspiration for rapid growth.

It is important to note that there is a difference between traditional accelerators and corporate accelerators. The table below clarifies the main differences between them:

Table 1 – Comparing Traditional Accelerators and Corporate Acceleration Programs

	Traditional Accelerator	Corporate Accelerator
Objectives	Financial and strategic analysis, knowledge and acquisition	"Competitive advantage" not very well defined
Source of objectives	Determined by the company	Determined by the company
Startup stage	Initial stage	Any stage
Support types	Resources and network	Resources, network, and experience
Support duration	Eight weeks	Maximum 12 months

Source: Author, adapted from HEINEMANN, 2015

According to Kohler (2016), unlike traditional accelerators, corporate acceleration initiatives enable more collaboration models between large corporations and startups; they are:

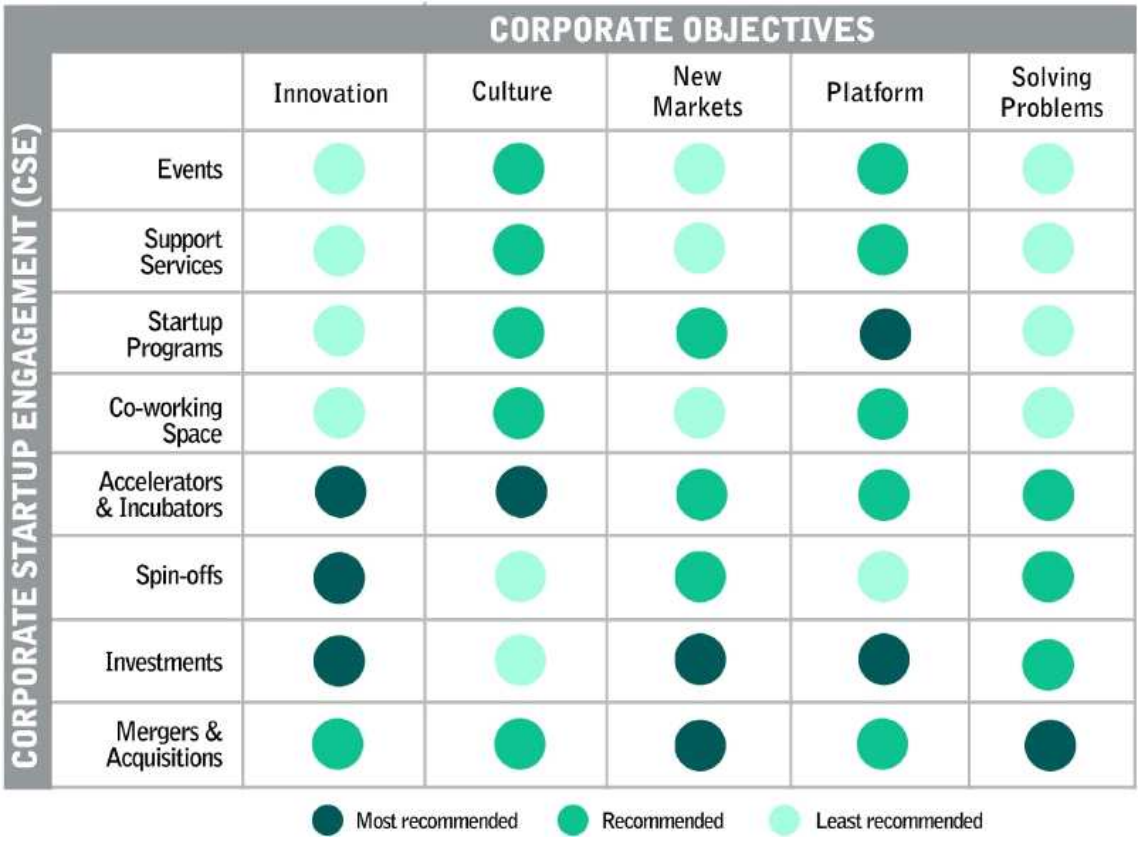
- The corporation supports a pilot project: The company finances the startup's development of innovative solutions and products instead of trying to do it internally. This model allows companies to explore innovation perspectives at a lower cost, in a shorter period, and with less risk. Corporations can develop new products in conjunction with startups, analyze market opportunities through startups, or solve business challenges through technology or the talent of startups.
- Corporation becomes a customer: mutual benefits result if the startup conquers the company as a customer and the corporation finds a solution to its problem points. Working with a large corporation can be essential for startups to test their solution on the market and scale their operations.
- Corporation becomes a distribution channel: channel partnerships can be mutually beneficial, as they provide a joint solution for the corporation and the startup. Instead

of building their distribution networks, startups can offer their products through companies.

- Corporations invest in startups: Supporting startups benefits corporations, providing them with less capital needed and more incredible speed than traditional research and development models and access to new markets and capabilities. At the same time, startups benefit from favorable terms over conventional venture capital sources.
- Corporation acquires startup: acquiring startups is a fast and impactful way to solve specific business problems and enter new markets. For startups, the acquisition is an attractive exit strategy.

To understand why the corporation chose the collaboration model, it is important to analyze its objectives in its relationship with startups. The table below presents a comparative analysis of the corporation's objectives and the relationship models recommended for each one.

Figure 4 – Type of interaction recommended according to the objective of the Corporation



Source: BONZOM and NETESSINE, 2016

Analyzing Figure 4, we can see that the initiatives of traditional accelerators and incubators or mergers and acquisitions are the ones that receive the most recommendations regardless of the corporation's objective. However, these initiatives also require the most significant commitment of corporations' time and resources. According to Weiblen and Chesbrough (2015), companies are developing lighter models to engage with startups, accelerate decision-making, and have the ability to attract, support, and retain prominent startups.

Corporate acceleration initiatives, being guided by large corporations, tend to seek the maximization of benefits for these companies in their relationship with startups; however, for such a relationship to be successful, it is essential that the initiatives also offer benefits to startups. (BONZOM and NETESSINE, 2016; KOHLER, 2016). Shankar and Shepherd (2019) established that five dimensions constitute the phenomenon of corporate accelerators: identification of potential companies for acceleration, corporate acceleration, corporate development through accelerators, strategic posture, and investment time horizon. This study evaluated the corporate acceleration program not only from the perspective of its operation but also from the perspective of the results obtained.

3 METHODOLOGY

This article aims to detail how one large corporation has done business with different startups in Brazil through a corporate acceleration program. This research addresses a topic that is still recent and little explored, so it is classified as exploratory, whose purpose is “to develop, clarify and modify concepts and ideas, formulate problems more precise or searchable hypotheses for further studies” (GIL, 2009). In general, research of this nature is used when one wants to know more about a subject that is not profoundly studied (HAIR et al., 2005). Finally, we also identify relevant elements about corporate accelerators and the challenges they must face to achieve their objectives within the open innovation actions adopted by large corporations.

The procedure is characterized as research based on secondary sources since it is based on materials and company records. It is a multiple-case study for studying interactions with more than one startup without seeking comparative objectives (GIL, 2009; TRIVIÑOS, 2001).

4 FINDINGS

Given an open innovation model and the different forms of relationship between large corporations and startups, both target corporations in this study opted for an interaction model supported by a third-party agent. The author of this study represented the third-party organization and was involved in both programs in question.

For confidentiality reasons, this study will not present the names of the corporations and startups. Still, it is necessary to characterize the organizations so that the reader has enough information to understand their reasons and the characteristics of the type of intervention performed. Some data from the corporations and startups will be mentioned below.

Characterization of corporations

Name: Corporation A
Nature: Private - S.A.
Ownership of capital: mixed, with foreign central controller
Business sector: Retail and Construction
Size and location: The company's main office is in São Paulo's capital, and factories are in the Southeast and Northeast regions. It is one of the leaders in the country's paints segment.

Name: Corporation B
Nature: Private - S.A.
Ownership of capital: mixed, with foreign central controller
Business sector: Retail
Size and location: The main office is in São Paulo, the capital, and with over 1,000 stores spread around Brazil, the company is one of the leaders in the retail segment in the country.

Characterization of startups

Name: Startup A
Nature: Private - Ltd.
Ownership of capital: national
Sector of activity: Logistics
Size and location: headquarters in Belo Horizonte/MG; 5 employees.

Name: Startup B
Nature: Private - Ltd.
Ownership of capital: national
Sector of activity: Technology
Size and location: headquarters in Recife/PE; 11 employees.

Name: Startup C
Nature: Private - Ltd.
Ownership of capital: national
Sector of activity: Consulting
Size and location: headquarters in Belo Horizonte/MG; 6 employees.

Name: Startup D
Nature: Private - S.A.
Ownership of capital: mixed, national, and foreign
Sector of activity: Technology
Size and location: headquarters in Porto Alegre/RS; 16 employees.

Name: Startup E
Nature: Private - Ltd.
Ownership of capital: national
Sector of activity: Logistics
Size and location: headquarters in Curitiba/PR; 5 employees.

Name: Startup F
Nature: Private - Ltd.
Ownership of capital: national
Sector of activity: Retail
Size and location: headquarters in São Paulo/SP; 6 employees.

Name: Startup G
Nature: Private - Ltd.
Ownership of capital: national
Sector of activity: Retail

Size and location: headquarters in São Paulo/PR; 3 employees.

Name: Startup H
Nature: Private - S.A.
Ownership of capital: mixed, national, and foreign
Sector of activity: Financial
Size and location: headquarters in London/UK; 3 employees.

Name: Startup I
Nature: Private - S.A.
Ownership of capital: national
Sector of activity: Technology
Size and location: headquarters in São Paulo/SP; 17 employees.

To achieve the corporation's innovation objectives, a corporate acceleration model was adopted. In this model, a relationship is built between the corporation and one or more startups for a finite period, in this case, through an external partner who has experience with programs through a structured work model. The corporation defined the work model by evaluating its different objectives.

Among the objectives of the organization with the program in question, we can mention the generation of innovations with greater agility since it does not need to follow its internal processes; a reduction in the risk linked to the development of such innovations since a partner, the startups, becomes part of the process and dilutes the risk of the undertaking; and the ability to seek innovative solutions and trained teams in the market in the form of products or services from startups and their lean and specialized teams.

The two programs, one for each corporation, happened in different year periods, but the general process was the same. The selection process for the startups that participated in the program started with a survey of the corporation's problems and innovation needs, in which up to 20 main themes were listed for each corporation. From this list, 16 startups were shortlisted from a pool of up to 300 startups for a presentation day in which each startup had five minutes to introduce themselves and another ten minutes to answer questions asked by the corporations' governing body.

After all the presentations, the corporation's board met for the final deliberations. In the case of Corporation A, four startups (Startups A, B, C, and D) were selected to develop

projects in the program; Corporation B, on the other hand, selected five startups (Startups E, F, G, H, and I). The four-month acceleration cycle was divided into eight fortnights, and each fortnight was called a sprint, so there were eight acceleration sprints in both programs. The first sprint aimed to raise the project ideas that the corporation and the startup had for working together. Based on the list of ideas raised, an effort was made to assess the effort required to execute each idea and a cross-check of that information with the potential benefit generated by each one.

The definition of which project would be worked on arose from assessing which idea has the most significant potential benefit and, in parallel, the least execution effort. From this analysis, priority projects were defined, and the next step was the definition of the validation project, also known in the market as a “pilot” or "proof of concept" project for validation, a theme that was the focus of the second sprint. At the end of the first sprint, all nine startups and corporations presented similar results.

From the second sprint, there was a similar scenario for one startup of each program that did not follow the traditional acceleration process. Corporation A with Startup C and Corporation B with Startup F stopped participating in the standard acceleration process since the prioritized opportunity did not allow the development of a proof of concept due to the complexity of the deliverable. Also, Corporation B and Startup E went on a different path due to a high level of strategic alignment between the two companies. For the other six startups, the pilot that would be developed to validate the solution was defined in this stage.

Given the definition of the pilot for each project, the other meetings were aimed at working on legal and integration issues so that the solutions of startups were put to the test. Success indicators were defined to monitor each proof of concept. After the four months of acceleration, the results were evaluated, and the next steps for the company relationship were defined.

In subsequent research carried out by the author with the corporations, it was shown that both corporations were satisfied with the process, the way it was conducted, and the results presented by the work with startups. The results obtained with each of the startups given six months after the end of each program are explored below.

Startup A

Project framework according to the Innovation Aspiration Matrix: Adjacent
Result: The corporation supports a pilot project

Comments: The corporation showed interest in the startup's business model, and a pilot was set up and started. However, the startup's low maturity—it was operating in this new business model just six months ago—combined with a complex regulatory factor proved to be critical in advancing the project within the expected schedule. Despite the delay in completing the pilot, a long-term relationship was established.

Startup B

Project framework according to the Innovation Aspiration Matrix: Core
Result: The corporation supports a pilot project
Comments: The startup developed a project to offer its technology solution through the corporation's points of sale. The pilot was successful, and the performance evaluations were satisfactory; however, due to a strategic decision by the corporation, the project was discontinued. A long-term relationship has yet to be established.

Startup C

Project framework according to the Innovation Aspiration Matrix: Core
Result: corporation becomes a customer
Comments: the initial ideation process generated a possibility for a project with high added value for both parties. Given the complexity of the solution and the importance of the product delivered at the end of the project, the pilot/proof of concept stage still needs to be carried out in this case. A long-term contract was established in the second month of the acceleration cycle, and the final solution was delivered seven months after the signature, that is, after the scheduled completion of the acceleration cycle. A long-term relationship has been established.

Startup D

Project framework according to the Innovation Aspiration Matrix: Adjacent
Result: The corporation supports a pilot project
Comments: The startup's solution aroused the interest of the corporation's marketing and customer relations area by offering an automated model for a process that the corporation was already conducting manually. The pilot was established to validate the technology's capacity

to meet the need, and after reaching the established indicators, a supply contract and a program to implement the model were defined. A long-term relationship has been established.

Startup E

Project framework according to the Innovation Aspiration Matrix: Transformational

Result: The corporation acquires the startup

Comments: the business synergy between the companies was evident at the beginning of the process, which is why activities with the startup were focused on negotiating its acquisition by the corporation from the start of the cycle. It took around seven meetings in four months of negotiations to reach an agreement. The corporation acquired the startup, and the founders became part of the corporation's governing body after the acquisition. A long-term relationship was established.

Startup F

Project framework according to the Innovation Aspiration Matrix: Adjacent

Result: corporation becomes a customer

Comments: the initial ideation process generated the possibility of a project with high-added value for both parties. Given the complexity of the solution and the importance of the product delivered at the end of the project, the pilot/proof of concept stage still needs to be carried out in this case. A long-term contract was established in the third month of the acceleration cycle. The final solution was delivered ten months after such signature, after the scheduled end of the acceleration cycle. A long-term relationship was established.

Startup G

Project framework according to the Innovation Aspiration Matrix: Adjacent

Result: The corporation supports a pilot project

Comments: The corporation showed interest in the startup's business model, and a pilot was set up and started. However, the startup's low maturity—it had been operating for only six months—proved to be a critical point in the corporation's assessment of continuing the project. A long-term relationship still needed to be established.

Startup H

Project framework according to the Innovation Aspiration Matrix: Transformational

Result: corporation becomes a distribution channel

Comments: The startup developed a project to offer its financial technology solution through the corporation's points of sale. The pilot was successful, and performance evaluations were satisfactory; however, due to a strategic decision by the corporation not to attack a sector outside its specialty, the project was discontinued. A long-term relationship still needed to be established.

Startup I

Project framework according to the Innovation Aspiration Matrix: Adjacent

Result: corporation becomes a customer

Comments: The startup's solution aroused interest in the corporation's marketing and intelligence area because it offered an automated model for a manual process the corporation was already carrying out. The pilot was established in two of the corporation's stores. After reaching the established indicators, a supply contract and a program for implementing the model in other stores were defined. A long-term relationship was established.

As seen in the list above, four of the five interaction models between large corporations and startups proposed by Kohler (2016) were developed because of the cycles of the acceleration programs in question. The only one that needed to be identified was where the corporation invests in a startup. Still, given that a startup was fully acquired by one of the corporations, this scenario was also addressed.

One of the most detailed works on the factors that affect the correct performance of corporate accelerators and prevent the delivery of desired results is that done by Hutter, Gfrerer, and Linder (2021), where challenges are identified within three phases in the development of this type of intermediaries: the preparation phase, the collaboration phase, and the results phase. This contribution contributes substantially to the understanding of the phenomenon, integrating these phases within a holistic approach, as they had previously been studied in a fragmented way in the literature linked to open innovation, focusing exclusively on the design of corporate accelerators or only in the phase implementation of mentoring, monitoring, and networking (HUTTER et al., 2021; URBANIEC and ZUR, 2021).

Through the acceleration program, the corporations were able to solve some of their problems with the help of startups and, mainly, managed to develop innovations that were outside the core of its business, something that was a concern of the company since working in transformational innovations internally had already been proved a challenge for both corporations. The neuralgic point of the intermediary role of corporate accelerators in the

strategic management of the firm's innovation lies in the ability to detect and - in the authors' language - to “nurture” valuable innovations (SHANKAR and SHEPHERD, 2019), along with capturing talents and resources from the startups (RICHTER *et al.,* 2018).

Depending on the acceleration strategy defined, it will allow the corporation to develop capabilities that contribute to optimizing actions regarding innovation management. On the one hand, the corporation may choose to act in a way that integrates emerging innovations through interaction with startups, aligning them with businesses already developed by the large firm (HUTTER *et al*., 2021). From another perspective, collaboration with startups makes it possible to monitor and detect emerging innovations that could be considered disruptive.

5 CONCLUSION

The corporations' initiatives and results validate that an acceleration program can be a significant undertaking to obtain innovation in an agile and diluted risk model. In addition, the corporation's interaction with startups generated lessons that were only possible because it focused on making such innovations internally.

With this work, it was possible to notice that the framing of the project between the large corporation and startup, according to the Innovation Aspiration Matrix, needs to be more decisive for establishing a long-term relationship between companies. Different projects characterized as adjacent and transformational, for example, had different results after the end of the cycle.

The startup's maturity factor also had no more significant weight in defining whether the long-term relationship would occur. Startups with small teams had long-lasting relationships, while others with larger teams needed to build the same relationship—the reasons for that need to be clarified.

The interaction model is not decisive for perpetuating the relationship between large corporations and startups. Indeed, the interactions in which the corporation became a customer of startups were the most successful in the long run, but this is expected in a commercial relationship between two parties. Intersecting with the entrepreneurship ecosystem literature is also the contribution of Banc and Messeghem (2020), where dimensions linked to legitimation, competition, and the formulation of business models are introduced into the strategic attributes (cultural, social, and material) and boosted by corporate accelerators. In the authors' view, they are, therefore, those that shape the business

accelerator as a micro-ecosystem of entrepreneurship: an open system led by one or more actors capable of enhancing the dynamics of innovation and entrepreneurship through effective interaction with the entrepreneurship ecosystem.

It is important to note that due to the limitations established in this report, mainly the fact that only two corporations were being analyzed, additional work on open innovation, including those with a more significant number of startups or with data from more corporations, could give a new view. This work also has a geographical limitation; that is, a study examining practices in other Brazilian regions or different countries would provide additional validity for this work and indicate whether the results can be replicated elsewhere or are peculiar to the local context.

Last but not least, this study was written from the perspective of a large corporation interested in developing one or more open innovation initiatives with startups. However, for such a relationship to be successful, it is essential that the initiatives also offer benefits to startups (BONZOM and NETESSINE, 2016; KOHLER, 2016). Future studies can evaluate this relationship from the perspective of startups. The research scenario on this type of outside-in model looks promising, as in the literature of recent years, areas are still identified to continue exploring the consequences of this phenomenon, whether from a perspective more focused on the processes in program design, from the area organizational, entrepreneurship or innovation management in open innovation contexts.

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