

THE USE OF INTRAPRENEURSHIP AND INTERNAL STARTUPS AS CORPORATE INNOVATION ACCELERATORS

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ABSTRACT

This study conducts bibliographical research on studies focusing on intrapreneurship and internal startups and the fundamental strategic resources required for organisational transformation movement aimed at building a culture of continuous innovation. Additionally, it aims to understand the practical application of the theoretical framework by examining (i) a case study of Bosch; and (ii) the regulatory guidelines that are being developed to encourage the creation of innovative companies, such as the practice of regulatory sandboxes, also referred to as the experimental regulatory environment.

Keywords: Intrapreneurship; Internal startup; Corporate innovation.

INTRODUCTION

How can new business models that are more collaborative, efficient, and sustainable be developed? The underlying theme that drives this research centres on investigating intrapreneurship and internal startups as instruments aimed at promoting innovation, flexibility, and adaptability.

Large corporations have already adopted open innovation, intrapreneurship (or corporate entrepreneurship), and internal startup development to generate new businesses and improve their internal processes. Such actions seek to link innovation to all activities performed within an organisation to foster an environment of continuous learning and corporate transformation.

It is necessary to establish simplified special conditions to stimulate the development of innovative business models and to allow testing of experimental techniques and technologies. Thus, this study seeks to verify the regulatory framework and legal initiatives aimed at removing barriers that hinder the experimentation phase of new products and/or services. The regulatory sandbox practice has been used as an innovation-inducing tool and a relevant indicator for assessing a country's regulatory capacity for innovation.

This study's objective is to analyse studies that examine theories on intrapreneurship and internal startups as accelerators for continuous innovation and corporate sustainability through bibliographical research. Further, it aims to identify normative facilitators that provide an ecosystem of innovation to enhance the creation and viability of startups.

RESEARCH METHODOLOGY

To achieve this study's objectives, we conducted bibliographical research on studies related to the research topic; institutional documents, laws, and normative acts were consulted. This research focused on articles discussing the theme available in the Google Scholar and Portal Periódicos Capes knowledge bases.

We conducted our search by using the following keyword combinations within the search fields of the selected databases: 1. 'intrapreneurship' or 'intrapreneur' and 'corporate innovation or internal startups'; 2. 'intrapreneurship' and 'corporate innovation'; 3. 'intrapreneur' or 'internal startups'; 4. 'intrapreneur' and 'corporate innovation'; 5. 'intrapreneurship' and 'internal startups.'

A total of 688 documents were retrieved. We included articles that: (a) contained the research terms, in the title, abstract, keywords, or body of the text; (b) contained full texts, were free of charge, and available through CAPES access and Download via Google Scholar; (c) were in English, Spanish, and Portuguese; (d) were published from 2010 onwards. Quality criteria were also applied when selecting articles and institutional documents by carefully reviewing the titles, abstracts, and keywords of all publications identified by the search strategy. New filtering was performed and studies that adhered to the research theme were selected; 36 articles remained after this process. A synthesis matrix was developed to organise the information and knowledge extracted from the selected studies. Subsequently, the information gathered from the texts analysed was compared and interpreted.

THEORETICAL FRAMEWORK

This section discusses concepts related to intrapreneurship and internal startups as fundamental strategic resources for the movement of transformation and corporate innovation.

Intrapreneurship

Intrapreneurship is a fundamental strategic resource for sustaining the organisational transformation movement aimed at fostering a culture of continuous innovation. This model aims to develop an entrepreneurial attitude and encourage proactive behaviour among employees in the search for corporate solutions to improve internal processes or new business opportunities, using an organisation's talents.

The term intrapreneurship was coined by businessman Gifford Pinchot in 1978, emerging from the term 'intra-corporate entrepreneuring' (intracorporate entrepreneurship). (Pinchot, 1989) emphasises that the role of intrapreneurship is not solely to enhance efficiency and innovation within organisations, but also to organise companies to restore their activities as a contribution to society." This suggests that companies are organised in a manner such that their activities contribute to society. Furthermore, the author refers to intrapreneurship to describe employees of large corporations who are recruited to think and act like entrepreneurs (Pinchot, 1989).

Sebrae (2018) conceptualises intrapreneurship as a process that occurs within an existing company, regardless of its size. It not only generates new businesses, but also fosters

innovative activities and guidelines, such as the development of new products, services, technologies, administrative techniques, strategies, and competitive postures. According to (Antoncic & Hisrich, 2003), intrapreneurship comprises eight distinct and interrelated elements: (i) product or service innovation; (ii) risk-taking; (iii) proactivity; (iv) competitive aggressiveness; (v) self-renewal; (vi) new ventures; (vii) new businesses; and (viii) new processes. (Antoncic & Hirsch, 2001) define corporate entrepreneurship as an organisation's internal entrepreneurship process, focusing on innovation to identify and exploit opportunities that facilitate value creation, regardless of available resources. On the other hand, (Govindarajan & Trimble, 2005) consider corporate entrepreneurship as a process that aims to favour the continuous innovation of companies, enabling them to adapt to the challenges inherent in the competitive global market.

Intrapreneurs are members of organisations who innovate, identify, and create business opportunities. They structure and coordinate new combinations or arrangements of resources to generate or increase value by exploiting unmet needs or improving the efficiency of something that is already done (Wunderer, 2001). To establish a culture of intrapreneurship in companies, it is necessary to provide a clear vision of its objectives and goals, communicate challenges faced, and invite intrapreneurs to identify solutions and test their ideas. Top management must engage and support cross-functional teams, tolerate failures, and celebrate successes. Nevertheless, organisations must cultivate leadership skills among intrapreneurs and establish intrapreneurial career plans. To accelerate this process, it is essential to internalise practices that foster creativity and innovation (Antoncic & Antoncic, 2011), institute reward systems (Pessoa & Oliveira, 2006), enhance the flexibility of organisational boundaries, practice effective communication, and ensure the autonomy of intrapreneurs (Lapolli & Gomes, 2017; Pinchot, 1989).

It is worth mentioning that the difficulties in incorporating the highlighted practices are mitigated when organisations use knowledge as a strategic resource that generates value and enables competitive advantages, thus directing efforts in the search for innovative solutions through an interdisciplinary approach. This facilitates the exchange of knowledge and experiences among employees and orients them towards the pursuit of corporate objectives. Intersectoral actions contribute to the development of new corporate models, initiating a learning process by building knowledge through collaboration, enabling effective responses to organisational challenges. Interdisciplinarity requires the identification of a shared problem on a joint work platform. It involves the establishment of fundamental principles and concepts, and generating mutual learning, which is not achieved by merely combining concepts, but by the recombination of internal elements (Almeida, 1997). The greatest challenge for corporations in the knowledge era involves the critical factors for developing employees' skills and cultivating an environment that strengthens internal and external relationships.

Internal Startups

Technological advances and market complexity have forced large corporations to direct investments towards the adoption of agile methods. These processes allow them to capture value from their customers through short product development cycles, services, and

new business models, by engaging and motivating creative professionals in the innovation process (Ries, 2012).

The COVID-19 pandemic has accelerated the digital transformation (TD) process, resulting in large companies prioritising investments in startups to incorporate new technologies and increase competitiveness. (Sebrae, 2018) defines startups as incipient organisations in uncertain scenarios, with business models aimed at developing and offering innovative solutions to latent market demands. Startups are human institutions designed to create new products and services under conditions of extreme uncertainty (Ries, 2012), such as environmental uncertainties (Perin, 2015). In this context, companies are betting on the startup ecosystem to innovate quickly and encouraging autonomous internal structures referred to as 'internal startups' as a corporate sustainability strategy.

Although initiatives to encourage intrapreneurship are a trivial topic in the field of administration, internal startups as a tool for developing corporate solutions are still a recent topic in the business context. Internal startups are institutionalised through a semi-dependent structure, comprising a multidisciplinary group, with the aim of implementing innovation within organisations (Märijärvi et al., 2016). This multidisciplinary group of intrapreneurs defines the business vision and creates hypotheses and validates or rejects them; the positive results are used by the company to improve internal processes or develop products and services that better meet customer needs. Additionally, internal startups are characterised as an agile method of corporate innovation that incorporates certain principles from the 'Lean Startup' approach.

The 'Lean Startup' methodology draws inspiration from the lean production model that was employed at Toyota by Taiichi Ohno and Shigeo Shingo. It aims to facilitate the creation of a repeatable and scalable business model through short product development cycles and projects, aligning with real customer needs. It is structured around customer development, agile development, and technological platforms (Blank, 2013; Ries, 2012).

It is worth mentioning that there is a tendency to apply the Lean Startup principles proposed by (Ries, 2012 & Blank, 2013) as a foundation for the functioning of internal startups, considering that there are few studies focused on this topic (Moreira, 2019). The Lean Startup principles proposed by (Ries, 2012) are: (i) Entrepreneurs are everywhere (internal and external); (ii) Entrepreneurship is management: requires a level of management; (iii) Validated learning: to generate value, startups must maintain a constant cycle with their customers to test hypotheses; (iv) 'Build-Measure-Learn' cycle: constant cycle of product development, measuring customer reaction, and learning to 'preserve' or 'pivot'; (v) Innovation accounting: startup costs must be separated from the rest of the company.

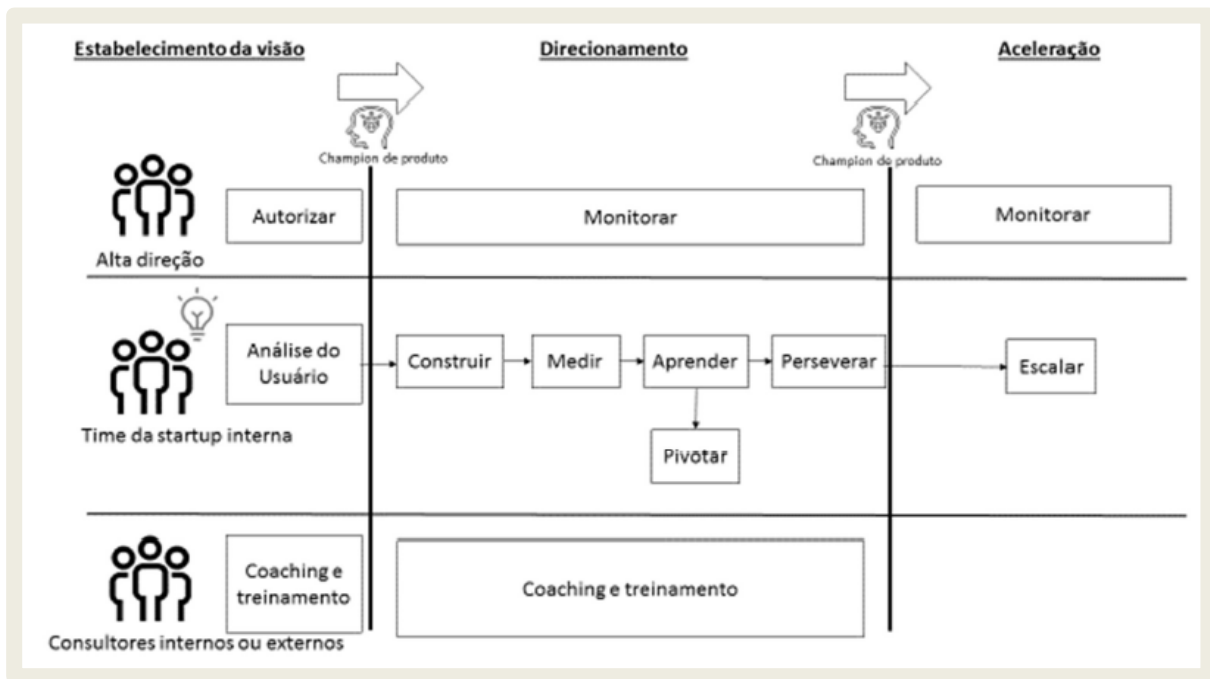


Figure 1
OPERATING MODEL OF AN INTERNAL STARTUP

Source: Moreira (2019)

Bosch Case Study: From Intrapreneurship to Open Innovation

Bosch Curitiba, in pursuit of a sustainable future and facing new challenges—mainly those related to electrification and other forms of mobility—in addition to the economic crisis, have decided to adopt open innovation actions, an intrapreneurship program, and develop internal startups to generate new businesses and improve internal processes. Initially, agribusiness, health, logistics, and mobility were prioritised in the development of solutions. The budget allocated to this type of project is considered to have a high risk of failure.

Multifunctional internal teams comprised of proactive, creative, and entrepreneurial members were established, providing them the freedom to innovate and experiment. Their objective was to map strategic segments, identify market problems or internal processes, and create and test solutions, products, and services.

Bosch identified the importance of intensifying open innovation and encouraging a more collaborative, communicative, and creative environment to learn and share initiatives and experiences with external agents (universities, startups, research centres, and venture capital funds). In 2019, it inaugurated the first Bosch Hub in South America, the ‘Curitiba Connector’, in partnership with the Spark CWB District, expanding an international innovation ecosystem that has several spaces across various cities including Chicago, Guadalajara, Stuttgart, London, and Shanghai. It is an innovation space that focuses on IoT, Industry 4.0, AI, agribusiness mobility, and TD. Additionally, it seeks to accelerate the construction of innovative solutions, develop new skills, and improve operational excellence (Spina, 2020).

According to the National Institute of Industrial Property, Bosch ranked as the third company with the most applications for invention patents in 2019 in Brazil (Bosch, 2020), with 51 applications. Over the past decade, it has submitted 351 applications in Brazil and internationally, of which 47 were granted. Bosch was recognised as Top 1 in the Automotive industry by the 100 Open Startups, for conducting the most open innovation in startups in 2020 in the Brazilian sector. Thus, it has consolidated itself as a company that has invested the most in innovation in Brazil.

Normative Enablers to Expand Innovation Capacity: Legal Framework for Startups and the Regulatory Sandbox

In 2021, Brazil enacted the Complementary Law 182/21, which establishes the legal framework for startups and innovative entrepreneurship. It aims to stimulate the creation of startups—considered business organisations that are nascent or in the early stages of operations—whose performance is characterised by innovative applications to business models, products, or services offered, provided that all requirements are met. This law establishes: (i) principles and guidelines for public administration activities; (ii) presents measures to encourage the business environment and increase the supply of capital for investment in innovative entrepreneurship; and (iii) regulates the bidding and contracting of innovative solutions by public administration. The sanctioned text originates from PLP 146/2019, whose explanatory memorandum refers to the Italian Startup Act (Italian Ministry of Economic Development, 2019), which established a regulatory framework to meet the needs of new technology companies in the country and stimulated an exponential increase in the startup ecosystem.

The establishment of legal and regulatory frameworks globally was stimulated by the adoption of the Global Competitiveness Index 4.0 in 2014, published by the World Economic Forum, replacing the Global Competitiveness Index, which has existed for 40 years. This change aimed to incorporate elements related to innovation, flexibility, and the ability to adapt to change. In other words, it can be seen that the measurement of long-term productivity and growth factors, linked to the 4th Industrial Revolution, was included in the indicators, classifying countries according to 12 pillars of competitiveness, one of which is innovation capacity. These axes comprise 98 indicators with data from international organisations and from an executive opinion survey conducted by the World Economic Forum. Brazil occupied the 71st position among 141 countries in 2019.

It should be noted that apart from operational challenges associated with implementing new products and services, there are also legal barriers. Thus, the challenges faced by startups are related to the legal framework governing these companies, as the application of rules indistinctly hinder innovation.

Regulatory quality is directly related to the government's ability to formulate and implement robust policies and regulations that allow and promote the development of the private sector. Consequently, legal frameworks are particularly important to startups. The model adopted by countries such as Singapore, the United Kingdom, and others, involves the formation of regulatory sandboxes, which was inserted in LC 182/2021 under the term 'experimental regulatory environment.' Its legal definition was proposed as follows: the set of

simplified special conditions so that participating legal entities can receive temporary authorisation from bodies and entities with sectoral regulatory competence to develop innovative business models and test experimental techniques and technologies, upon compliance with criteria and limits previously established by the body or entity regulation and through a facilitated procedure.

The use of the regulatory sandbox practice is gradually emerging in Brazilian legislation; however, its application is limited. For example, in May 2020, Conselho de Valores Mobiliários (CVM) Instruction n. 626, provided the guidelines for establishing and operating an experimental regulatory environment (regulatory sandbox). According to the current normative diploma of the CVM, the initiative aims to encourage entrepreneurship and the development of the Brazilian capital market by creating an experimental regulatory environment where participating entities can test innovative business models within activities regulated by the CVM. In essence, an international practice that is initiated at the national level is a fundamental component for the implementation of new technologies—or even the innovative use of existing ones—to contribute to the real implementation of new products and services.

Another example, in addition to the CVM instruction, is provided through the General Data Protection Law (LGPD). Recently, a device was inserted in the LGPD that attributes competence to the National Data Protection Authority (ANPD) to ‘edit simplified and differentiated rules, guidelines and procedures, including regarding deadlines, so that micro and small companies, as well as business initiatives of an incremental or disruptive self-declared startups or innovation companies.’ That is, the ANPD can create a regulatory sandbox in the field of data protection to reduce the high cost of data processing imposed by the LGPD for startups.

FINAL CONSIDERATIONS

This article focused on the investigation of intrapreneurship and internal startups as strategic mechanisms for innovation, flexibility, and adaptability. The methodology consisted of bibliographical research on studies related to the theme, and the consultation of institutional documents, laws, and normative acts.

Intrapreneurship can be understood as a fundamental strategic resource to support organisational transformation movement aimed at fostering a culture of continuous innovation. As such, its application goes beyond mere practice to reach the very manner of organising companies and encouraging employees of large corporations to think and act like entrepreneurs. Thus, intrapreneurship correlates with the internalisation of practices that stimulate creativity and innovation, enabling flexibility of organisational boundaries and guaranteeing autonomy in the development of products and services. Internal startups are part of the open innovation ecosystem, with the aim of quickly testing and validating new business models as a corporate sustainability strategy.

Based on the theoretical framework, this study identified elements related to practical application. It addresses implementation specificities such as the example of Bosch, which, through an intrapreneurship program, stimulated the integration of internal startups using

cross-functional teams involving proactive and creative members, with the freedom to innovate and experiment.

Barriers to innovation include bureaucratic difficulties related to the creation and implementation of innovative companies. Thus, LC 182/21 was highlighted as an attempt to encourage innovation; it defines the legal framework for startups and innovative entrepreneurship, providing guidelines aimed at fostering startups. The formation of an innovative ecosystem requires state legislators to adopt norms facilitating investment in organisations with an extremely flexible performance and capability to adapt to changes.

The international guidelines of the World Economic Forum already consider a country's regulatory quality, that is, the government's ability to formulate and implement sound policies and regulations that encourage the development of innovative companies. To this end, the regulatory sandbox model also known as the experimental regulatory environment, establishes a set of simplified special conditions. These conditions allow participating legal entities to receive temporary authorisation from bodies and entities with sectoral regulatory competence to develop innovative business models and test experimental techniques and technologies upon compliance with the criteria and limits previously established by the regulatory body or entity and through a facilitated procedure.

Initially used by the Securities Council, as in CVM Instruction n. 626, the practice of the regulatory sandbox is also employed by the LGPD with regard to startups and innovation-driven companies, and by LC 182/2021.

ENDNOTES

According to the rule, participating legal entities may receive temporary authorisation to test innovative business models in activities in the securities market regulated by the Securities Commission. Among the objectives listed by the normative guideline, the purpose of authorising the regulatory sandbox is to: i) foster innovation in the capital market; ii) guide participants on regulatory issues during the development of activities to increase legal certainty; iii) decrease costs and maturation time to develop innovative products, services, and business models; iv) increase the visibility and traction of innovative business models, with possible positive impacts on its attractiveness for venture capital; v) increase competition between service providers and suppliers of financial products in the securities market; vi) promote financial inclusion resulting from the launch of less expensive and more accessible financial products and services; and vii) improve the regulatory framework applicable to regulated activities.

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