State-of-the-Art Analysis of Intrapreneurship: A Review of the Theoretical Construct and Its Bibliometrics

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Abstract: Business complexity demands that companies look for alternative ways to ensure their survival. Thus, one means to generate a competitive position, growth and development is intrapreneurship, which refers to entrepreneurship that arises within established organizations. However, current studies of the phenomenon are sometimes limited to contributions that lack substantive theory. Given this problem, the objective of this study was to determine the current state of the art of intrapreneurship based on a documentary analysis. Similarly, a bibliometric analysis was carried out that evaluated the existing publications. A total of 133 documents related to the term were found. After analyzing these documents, we concluded that new studies on the matter need to be developed. Therefore, a future agenda is proposed and the implications of this phenomenon on the performance of current companies are discussed.

Keywords: intrapreneurship; corporate entrepreneurship; models; bibliometric analysis; bibliometrics

1. Introduction

The complexity of today’s business dynamics in terms of competition, high consumer standards and shorter product life cycles demand that companies look for alternative ways to ensure their survival and growth (Baruah and Ward 2014; Deprez et al. 2018; Galván et al. 2018a; Kuratko et al. 2017; Rubio 2015), so organizations have had to transform themselves to secure a favorable position in their respective industries (Galván et al. 2019).

Against this backdrop, some authors recognize that a genuine means to ensure economic development and, specifically, organizational development, is corporate entrepreneurship (e.g., Galván and Sánchez 2018; Turró et al. 2014), also known as intrapreneurship, which can be broadly defined as entrepreneurship that arises within an established organization (Ahmed and Ajjad 2013).

Intrapreneurship has been attributed to performance outcomes’ (Kearney et al. 2013), revitalization (Baruah and Ward 2014; Deprez et al. 2018), improved competitive capabilities, satisfaction, improved affective commitment of those involved (Rutherford and Holt 2007), increased innovative capacity of the firm (Bierwerth et al. 2015) and other issues, such as increased productivity and a business stance of constant anticipation of environmental changes (Zahra 1991).

However, some critical aspects that condition its study have been recognized. One of these relates to the limited exploration of the domains of this phenomenon, which is manifested in a scarce set of theoretical contributions that help the creation of knowledge in a field in which only extracts and pieces of theory are found (Galván et al. 2019).

In addition to the above, one of the main reasons that guide the study of intrapreneurship is the awareness of the adoption of practices that allow companies to develop. By
studying the phenomenon of intrapreneurship, knowledge is provided that allows its understanding as a critical factor in the survival, success and improvement of competitive capabilities in companies (Audretsch et al. 2020), and also gives rise to discussion of the need for the valorization of the employee in the company and managerial, strategic and normative activities that support the innovative ideas of the workforce.

This article aims to determine the current state of the art of the term “intrapreneurship” based on the analysis of its main exponents from the associated scientific publications that allow the development of a future research agenda. It addresses the research question: what is the current state of the art of the phenomenon of intrapreneurship and where should future research on the subject be directed? This research objective and question goes beyond the bibliometric analysis of the term and its variants, because it invites reflection on the need to contribute to the development and evolution of a general or substantive theory.

The following sections encourage discussion on the role of intrapreneurship in the firm, and present a series of reflections on the evolution of intrapreneurship and the vision of intrapreneurship from the perspective of dynamic capabilities, in addition to the background of intrapreneurship, its most accepted concepts and the most representative models. Methodological aspects are addressed and later, a bibliometric analysis is undertaken to describe the evolution of the study of intrapreneurship in terms of number of publications, most representative journals, associated keywords, main authors and countries in which the research has been carried out. Finally, the importance of intrapreneurship is discussed, its implications for business performance, and the need for further research in this field of management sciences for which future lines of research are proposed.

2. Literature Review

2.1. Intrapreneurship in the Framework of Dynamic Capabilities

From its origins, classical microeconomic theory evaluated the firm according to market conditions. The organization was analogically viewed as a “black box” whose inner workings and transformations were virtually unknown (Donaldson and Preston 1995; Foss 1996; Ghemawat 2000, 2003; Grant 1996; Hoskisson et al. 1999; Jensen and Meckling 1976; Rumelt et al. 1991; Seth and Thomas 1994). The model of the firm, as outlined in the contributions of the classics, “. . . was a smooth-running machine in a world without secrets, without friction or uncertainty and without a time dimension” (Rumelt et al. 1991, p. 13).

Prior to the industrial revolution, the size and conditions of the market and the firms that interacted in it showed a lack of planning and internal knowledge of organizations and industrial sectors. At that time, the “invisible hand” described by Adam Smith explained the regulation of the behavior of market forces under the assumption of perfect competition (Crook et al. 2013; Ghemawat 2000). Firms were therefore “undifferentiated”, “passive” and “static information processing” entities, which sought to adapt in an environment that they did not seek to shape (Nonaka and Toyama 2005).

However, coping with the dynamics of the competitive business environment imminently led to the need to deepen the understanding of the functioning of economic units, i.e., to unravel their inner characteristics and phenomena. In this sense, their differences, nature, structure, components, decisions, and forms of environmental interaction, and the way they acquire and maintain their positions in the marketplace, were issues addressed in the research agendas of the time (Freeman 1984; Porter 1991).

This led to the development of a number of theories that subsequently evolved over time. The valuation of the firm in terms of factors of production was explained in terms of resource endowments (Ghemawat 2000; Seth and Thomas 1994; Wernerfelt 1984). This valuation was a consequence of the evolution of management thinking in a vision based on resources and capabilities (RBV) (Grant 1996) and the subsequent break with the merely orthodox vision of the firm following the rise of the study of dynamic capabilities, which were understood as the “. . . set of knowledge, skills, competencies, resources, values and processes that allow the organization to adapt constantly to changes in the environment
and to the uncertainty that prevails at a given time or situation” (Hernández-Albuquerque 2016, p. 254).

This last concept is interesting in the sense that, given the above conditions regarding dynamic capabilities, one of the current debates is associated with the possibility of approaching the phenomenon of intrapreneurship from this managerial perspective. Salvato et al. (2009), for example, refer to intrapreneurship as a special type of organizational capability and emphasize the need for an in-depth understanding of this phenomenon. Additionally, the lack of literature highlighted in Sakhdari’s (2016) review of articles published between 1990 and 2015 raises the need for a future research agenda that relates models of intrapreneurship as an organizational capability, thus establishing a coherent link between the two literatures.

2.2. Intrapreneurship Background

There are theoretical antecedents of intrapreneurship dating back to the 1970s (Galván and Sánchez 2017, 2018, 2019; Galván et al. 2018b; Galván et al. 2019; Sakhdari 2016; Turró et al. 2014). One of the main contributions was the study by Peterson and Berger (1971), who contributed to its analysis and scientific documentation by conceiving it as a strategic attitude of large companies in response to fluctuations in their respective markets.

Later, in the 1980s, intrapreneurship took on greater relevance in the research agendas of the economic-administrative sciences (Galván and Sánchez 2017) due to the rise of Schumpeter’s hitherto neglected theories on innovation. In the same decade, Pinchot (1985) introduced the term “intrapreneurship”, recognizing the role of individuals capable of transforming the companies in which they work by generating innovations.

In the 1990s, intrapreneurship became associated with the exploitation of innovative ideas within established firms and was strongly linked to the set of entrepreneurial strategies for new business development or the creation of a proactive vision. During the 1990s, empirical studies of corporate entrepreneurship as a discipline of entrepreneurship increased dramatically. Thus, two important management journals, Strategic Management Journal (1990) and Entrepreneurship Theory and Practice (1995), devoted a special issue to corporate entrepreneurship, from which some of the representative models in the field emerged (e.g., Guth and Ginsberg 1990; Covin and Slevin 1991; Zahra 1991, 1993; and Dess et al. 1997).

The study of intrapreneurship currently has several aspects. One of these concentrates on proposals, descriptions or evaluations of the conditioning factors of the external environment in the phenomenon, among which the contributions of authors such as Miller (1983) and Khandwalla (1987) stand out chronologically, in addition to Guth and Ginsberg (1990); Zahra (1991); Covin and Slevin (1991); Lumpkin and Dess (1996); Antoncic and Antoncic (2011); Antoncic and Hisrich (2001, 2003); Antoncic (2007); Ireland et al. (2009); Kearney et al. (2010); Kearney et al. (2013); and Sakhdari (2016), who in addition to expressing the importance of organizational conditions, point to the external environment as the most representative scenario in the development of the aforementioned behavior.

Another major perspective in the field of the study of corporate entrepreneurship focuses on the identification of the set of resources and capabilities of the company, conceived as the organizational factors that inhibit or encourage intrapreneurial activity. Among the most representative contributions in the field are the proposals of authors such as Kuratko et al. (1990); Kuratko et al. (1993); Kuratko et al. (2005); Rutherford and Holt (2007); Alpkan et al. (2010); Kuratko and Audretsch (2013); Kuratko et al. (2014) and Kuratko and Morris (2018).

Finally, other fields of the study of intrapreneurship include the conception of the term and its characterization through grounded theory (Galván and Sánchez 2018; Galván et al. 2019), the discussion on the possibility of studying the phenomenon within the framework of dynamic capabilities (Sakhdari 2016) and the effect of intrapreneurship on business development outcomes (Bierwerth et al. 2015).
2.3. Intrapreneurship Concepts

Intrapreneurship, also referred to as “corporate entrepreneurship” (e.g., Collins and Moore 1970; Covin and Slevin 1991; Dess et al. 1997; Guth and Ginsberg 1990; Kuratko and Audretsch 2013; Zahra 1991, 1993); “internal corporate entrepreneurship” (e.g. Jones and Butler 1992; Schollhammer 1982); “strategic entrepreneurship” (Ketchen et al. 2007); “organizational entrepreneurship” (Kearney et al. 2013); and “entrepreneurial intensity” (De Villiers-Scheepers 2012), has multiple meanings, which are set out in Table 1.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collins and Moore (1970)</td>
<td>Two types of entrepreneurship are distinguished: (1) corporate entrepreneurship; (2) independent entrepreneurship.</td>
</tr>
<tr>
<td>Burgelman (1983)</td>
<td>Entrepreneurship refers to the process by which firms engage in diversification through informal development. Such diversification requires new combinations of resources to extend the firm’s activities into areas unrelated or marginally related to its current domain of competence and the corresponding set of opportunities (p. 1349).</td>
</tr>
<tr>
<td>Burgelman (1984)</td>
<td>... is to extend the domain of competence and corresponding set of opportunities through the internal generation of new combinations of resources (p. 154).</td>
</tr>
<tr>
<td>Nielsen et al. (1985)</td>
<td>Intrapreneurship is the development within a large organization of internal markets and relatively small, independent units designed to create, internally market test and expand improved or innovative services, personnel, technologies or methods within the organization. This differs from large business units whose purpose is to develop profitable positions in external markets (p. 181).</td>
</tr>
<tr>
<td>Pinchot (1985)</td>
<td>It is the development of markets within an organization and relatively independent units designed to create, internally, test and expand innovative markets and/or services, technologies or methods.</td>
</tr>
<tr>
<td>Jennings and Lumpkin (1989)</td>
<td>It is a multidimensional concept that incorporates a company’s activities aimed at product and technological innovation, risk-taking and proactively (p. 486).</td>
</tr>
<tr>
<td>Guth and Ginsberg (1990)</td>
<td>Entrepreneurship encompasses two types of phenomena and the processes surrounding them: (1) the birth of new businesses within existing organizations, i.e., internal innovation or risk; and (2) the transformation of organizations through the renewal of the key ideas on which they are built, i.e., strategic renewal (p. 5).</td>
</tr>
<tr>
<td>Zahra (1991)</td>
<td>Refers to the process of creating new businesses within established companies to improve the profitability of the organization and enhance the competitive position of a company or the strategic renewal of existing business (pp. 260–61).</td>
</tr>
<tr>
<td>Covin and Slevin (1991)</td>
<td>Corporate entrepreneurship is described as a dimension of strategic posture represented by the firm’s propensity for risk-taking, the tendency to act aggressively against competition, the establishment of proactive methods and product innovation (p. 7).</td>
</tr>
<tr>
<td>Zahra (1993)</td>
<td>... A process of organizational renewal that has two distinct but related dimensions: innovation and risk [venturing], and strategic renewal (p. 321).</td>
</tr>
<tr>
<td>Lumpkin and Dess (1996)</td>
<td>The essential act of entrepreneurship is new entry. New entry can be achieved by entering new or established markets with new or existing goods or services. New entry is the act of launching a new venture, whether by a start-up company, through an existing company or through an internal corporate venture . . . . EO [entrepreneurial orientation] refers to the decision-making processes, practices and activities that lead to new entry (pp. 136–37).</td>
</tr>
<tr>
<td>Knight (1997)</td>
<td>Entrepreneurship is a fundamental stance, instrumentally important for strategic innovation, particularly under changing conditions in the firm’s external environment. The notion of entrepreneurial orientation is applicable to any company, regardless of its size and type (p. 215).</td>
</tr>
<tr>
<td>Sharma and Chrisman (1999)</td>
<td>... The process by which an individual or a group of individuals, in association with an existing organization, creates a new organization or instigates renewal or innovation within that organization (p. 18).</td>
</tr>
<tr>
<td>Antonic and Hisrich (2001)</td>
<td>It refers to the process that occurs within a firm regardless of its size and leads not only to new business, but also to other innovative activities such as the development of products, services, technologies, management techniques, strategies or competitive positions (p. 498).</td>
</tr>
</tbody>
</table>
### Table 1. Cont.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antoncic and Hisrich (2003)</td>
<td>It is defined as entrepreneurship within an existing organization, referring to emerging behavioral intentions and organizational behaviors related to deviations from the usual. Intra-entrepreneurial processes continue within an existing company, regardless of its size (p. 9).</td>
</tr>
<tr>
<td>Kuratko et al. (2005)</td>
<td>Behavior that requires organizational sanctions and resource commitments for the purpose of developing different types of value-creating innovations (p. 700).</td>
</tr>
<tr>
<td>Rutherford and Holt (2007)</td>
<td>CE is the process of improving the firm’s ability to acquire and utilize the innovative skills and abilities of the firm’s members (p. 430).</td>
</tr>
<tr>
<td>Ireland et al. (2009)</td>
<td>A corporate entrepreneurship strategy is a direct vision or vision-driven approach to entrepreneurial behavior that purposefully and continuously rejuvenates the organization and shapes the scope of its operations through the recognition and exploitation of entrepreneurial opportunities (p. 21).</td>
</tr>
<tr>
<td>Parker (2011)</td>
<td>It is a practice for developing new businesses within an existing organization, to exploit a new opportunity and create economic value.</td>
</tr>
<tr>
<td>De Villiers-Scheepers (2012)</td>
<td>Corporate entrepreneurship is a multidimensional phenomenon. It describes the process by which established firms can act innovatively, risk-taking and proactively. Venture ventures, intrapreneurship and strategic renewal are different components of corporate entrepreneurship.</td>
</tr>
<tr>
<td>Kearney et al. (2013)</td>
<td>A set of organizational-level activities that focus on discovering and pursuing new opportunities through acts of risk-taking, renewal, innovation, risk-taking and proactively (pp. 328–29).</td>
</tr>
<tr>
<td>Ahmed and Amjad (2013)</td>
<td>Intrapreneurship is the act of behaving as an entrepreneur within corporate environments (p. 88).</td>
</tr>
<tr>
<td>Kuratko and Morris (2018)</td>
<td>A term used to describe the entrepreneurial behavior that can develop within medium and large established organizations, including terms such as entrepreneurial organizations, intrapreneurship and venture capital.</td>
</tr>
<tr>
<td>Galván and Sánchez (2018)</td>
<td>... represents the entrepreneurial practice or behavior in enterprises ... characterized by a philosophy of openness to change, as well as a general vision aimed at exploring and/or exploiting the opportunities of the environment by means of an appropriate combination of resources and the development of proactive and innovative activities, such as the creation and/or substantial improvement of products, services, internal organizational methods, processes, technologies and markets (p. 173).</td>
</tr>
</tbody>
</table>

#### 2.4. Intrapreneurship Models

To enrich the understanding of the phenomenon of intrapreneurship, this section highlights some of its main models whose classification criterion consisted of the systematic and critical identification of documents with higher citation rates. As a result, some of the most representative models are presented in Table 2.

Guth and Ginsberg’s (1990) proposal is a pioneering model based only on conceptual notions of strategy and management; however, the authors did not determine any empirical relationship between the inputs and outputs of the model. Zahra (1991), by comparison, proposed and demonstrated an empirical relationship based on the results of Fortune 500 industrial companies in the United States and, unlike the predecessor model, Zahra proposed that the environmental factors to be considered are those that are relevant to their behavior. Furthermore, as a differentiating element of his proposal, Zahra (1991) proposed and proved that the main strategy of the company is related to the development of ventures. For the author, the type of strategy dominates the mission, the objectives and the deployment of resources.
Table 2. Intrapreneurship models.

<table>
<thead>
<tr>
<th>Model</th>
<th>Inputs</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuratko et al. (2005)</td>
<td>Organizational background: autonomy, time availability, organizational support, free time, structure.</td>
<td>Entrepreneurial behavior of middle managers—Organizational results and individual results.</td>
</tr>
<tr>
<td>Ireland et al. (2009)</td>
<td>External environmental conditions, individual entrepreneurial cognitions, pro-entrepreneurial organizational architecture.</td>
<td>Entrepreneurial and behavioral processes, strategic entrepreneurial vision—Competitiveness and strategic repositioning.</td>
</tr>
</tbody>
</table>

Covin and Slevin’s model (1991) is considered to be one of the first to consider innovation, proactively and risk-taking as dimensions of intrapreneurship. Their model, like the first, has no empirical validation; however, their proposal has influenced multiple studies on intrapreneurship, according to the results of its citation in Thompson Routers.

Another of the models outlined in Table 2 is that of Antoncic and Hisrich (2001), who sought to develop and validate an empirical cross-cultural model for intrapreneurship applicable to any firm. As a hallmark of their approach, the authors considered internal elements as “organizational characteristics”, within which elements such as quantity and quality of communication, formal controls, and intensity of the internal environment, organizational support, competence-related values and people-related values were considered for the first time, all with a presumption of being positively associated with intrapreneurship.

Later, Kuratko et al. (2005), based on the scientific contributions of the aforementioned authors, proposed a theoretical model oriented towards the evaluation of specific organizational factors that promote intrapreneurship. An interesting element in this model was the integration of knowledge about the phenomenon and the proposition that the behavior of middle managers is related to a successful intrapreneurial stance (Kuratko and Audretsch 2013); in addition, the unique consideration of internal factors such as the level of autonomy, rewards, the availability of time given to employees and the supportive organizational structure.
Rutherford and Holt (2007), to determine the reasons why people develop entrepreneurship in their workplaces, conducted an empirical investigation. Their research alludes to the relationship between three different categories that influence the development of entrepreneurial behavior in the company, which are related to processes, contexts and individual characteristics of employees. The authors also proposed and tested the existence of a mediated relationship between corporate entrepreneurship and some desirable individual outcomes such as job satisfaction, turnover intention and affective commitment of employees.

The results of the work were captured in the authors’ proposed model, in which the process variables refer to the way in which the company’s leaders facilitate internal entrepreneurship through specific strategies; the context variables are those that describe aspects related to the strategic renewal and diffusion of corporate entrepreneurship; and the individual variables refer to the willingness, skills, attitudes and capabilities of the employees. According to the authors: “These three kinds of variables should not only influence people’s perceptions of the organization’s capacity to be entrepreneurial, but also their perceptions of their own capacity to be entrepreneurial” (p. 431).

A few years later, Ireland et al. (2009) presented another model that is considered to be a pioneer of pro-entrepreneurship organizational architecture and depicted the individual elements and outcomes of corporate entrepreneurship strategy monitoring. In this study, the authors proposed the measurement of strategy as an organizational-level driver of corporate entrepreneurship. This represented the distinctive premise of the model, i.e., the argument that corporate entrepreneurship can emerge as part of the entrepreneurial philosophical component of the firm, in addition to the fact of studying entrepreneurship from its different levels, such as the individual level (employees), the middle level (middle managers) and the organizational level.

In a model similar to that proposed by Kuratko et al. (2005), Alpkan et al. (2010), represented the phenomenon through empirical results whose purpose was to measure the direct and interactive effects of organizational support and human capital on innovative performance in manufacturing firms in Turkey. The differentiating element of their proposal lies in the incorporation of elements concerning the firm’s human capital whose effects were found to moderate innovation and the overall development of the firm.

Kearney et al. (2010) argued the need to involve the public sector in the study of intrapreneurship. They empirically demonstrated that organizations were able to manage change through corporate entrepreneurship provided they were able to adapt to fluctuations in the environment, and their corporate decision-making style and control systems were aligned. In this sense, a public sector company would generally develop intrapreneurial behavior only through the renewal of its core processes and ideas.

Although the Kearney et al. (2010) model was developed based on the context of public sector firms, it involved elements considered by the pioneering articles for the private sector. Munificence, for example, has been an element of the environment present since the origins of the study of intrapreneurship, as has complexity, assessed in earlier models as dynamism or hostility. However, the very nature of parastatal enterprises makes it clear that issues pertaining to the political environment need to be incorporated.

With regard to the representation of the intrapreneurship phenomenon proposed by De Villiers-Scheepers (2012), it should be noted that this was a model built on the notions of entrepreneurship from all of the previously mentioned models (e.g., Antoncic and Hisrich 2001; Covin and Slevin 1991; Guth and Ginsberg 1990; Kearney et al. 2010; Kuratko et al. 2005; Zahra 1991). However, the distinctive element of their model is that, in general, theories of entrepreneurship have a predominant focus on the developed economy. In this sense, the relevance of these previously stated theories in the context pertaining to emerging economies had not been tested until the authors’ development and empirical validation in 146 South African firms.

Finally, to complement the above models, Kearney et al. (2013) proposed the analysis of the constructs and dimensions of corporate entrepreneurship in the private and public
sectors. An interesting element in the latter authors’ proposal is the incorporation of the five dimensions of intra-entrepreneurship, in addition to different output constructs between for-profit and public non-profit entities.

3. Materials and Methods

This research is of a documentary type and its scope is descriptive and reflexive. As described in the previous section, a literature analysis was carried out as a result of the search and classification of the main exponents of intrapreneurship, according to their citation indexes in Web of Science. This allowed discussion of the consideration of intrapreneurship within the framework of dynamic capabilities and the presentation of the most representative antecedents, concepts and models in this behavior. Authors of these studies are contained in Table 2. Furthermore, a bibliometric analysis was carried out in which 133 different academic and scientific documents were identified.

It is important to note that the analysis of the scientific contributions of knowledge-generating agents is an initial approach when the aim is to study a phenomenon in depth, which is why bibliometrics has become a tool for evaluating the quality of the process of generating judgments and the impact of this on its environment (Escorcia 2008). The importance of performing a bibliometric analysis is to visually determine the state of the literature from different perspectives and to identify gaps in the research (Tranfield et al. 2003).

To extract the papers analyzed, it was necessary to search the Web of Science (WOS) database, which contains publications from journals indexed in the Journal Citation Report (JCR). The WOS database was used because it groups high impact literature (JCR), which does not entirely exclude journals in Scopus Index. Thus, the decision was made to use the resource available to researchers to search for related articles based on the accreditation of the WOS database at the international level.

According to the above, this analysis was based on an appropriate keyword search. Thus, first, the words “corporate entrepreneurship” and “intrapreneurship” were entered into the WOS search engine, yielding a total of 161 research papers (articles, book chapters, literature reviews, works in progress, among others) in all of the years from the catalogue to 2020. It was necessary to further process the search by applying filters focused on the categories of administrative sciences: Business, Management, Economics, Industrial Engineering, Business Finance, Social Sciences interdisciplinary and Operations Research Management Sciences; and by the type of documents such as articles, works in progress, book chapters and literature reviews, finally yielding 133 research papers.

Subsequently, the information on the research was extracted using a BibText file (.bib). This format allows the reading of the elements that the WOS offers users about each of the works stored on this site, including the year of publication, authors, research area, language, journal and keywords.

Finally, the information was processed using the statistical software “R”, via programming code and the use of the bibliometrix package, achieving an analysis of the research documents in a more efficient and specific way, this through graphs, indexes, collaborative networks and publication frequency.

4. Results of Bibliometric Analysis

It was noted in Section 2 that the literature related to intrapreneurship has its origin in the 1970s, but it was not until the 1980s that it gained a greater force. However, the results of the bibliometric analysis suggest that papers related to the subject of intrapreneurship and corporate entrepreneurship in high-impact scientific repositories began to appear in the early 1990s. However, the growth of scientific contributions was low, with only one to three papers per year until the period 2010 to 2020, when the average number of titles with reference to the topic grew by an average of 8.1% per year. As shown in Figure 1.
It is important to note that during the 1990s boom in this type of publication, the perspective of dynamic capabilities also emerged, in which it was no longer necessary for the firm to have the sole intention of retaining an advantage in its environment, but rather its capacity to act and anticipate change, the timely response in terms of adapting or reconfiguring its competencies in the face of hostile or unforeseen conditions and the flexible disposition to incorporate aspects of innovation (Teece et al. 1997). In this sense, intrapreneurship emerged as an adaptive response to the needs of firms in rapidly changing environments (Sakhdari 2016).

During the 1990s, journals such as Strategic Management Journal (1990) and Entrepreneurship Theory and Practice (1995) positioned themselves as pioneering repositories of empirical contributions on intrapreneurship. Today, the most widely published journals are the International Entrepreneurship and Management Journal, the Journal of Business Venturing, the International Journal of Entrepreneurial Behavior Research, the International Journal of Entrepreneurial Venturing and the journal Dimensión Empresarial.

In addition to the above, it is important to note that the area of knowledge with the highest presence of empirical documents on intrapreneurship is Business Economics, followed by other less relevant areas such as Engineering, Psychology, Social Sciences Other Topics, among others, as illustrated in Table 3. These results highlight the importance of a greater diffusion of the term “intrapreneurship” in order to be involved in other areas of knowledge and not only in the field of economics or business. These areas can be, for example, psychology, from the perspective of behavior and skills or characteristics of the intrapreneur, public administration, or the impact in areas of economic development at macro-environmental levels where studies on the matter are scarce.

With regard to the countries that contribute most to knowledge on intrapreneurship, the results of the bibliometric analysis indicated that Spain, the United States, Turkey, the Netherlands and Portugal are the regions with the highest number of publications. In the case of Mexico, there is a low contribution in high-impact scientific repositories, as shown in Figure 2. This highlights the importance of studying the phenomenon in developing countries or cross-cultural studies, in which the behavior and the reasons that give rise to it between the different sectors and territories can be compared.
Table 3. Areas of knowledge with the most publications on intrapreneurship.

<table>
<thead>
<tr>
<th>Area of Knowledge</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business economics</td>
<td>128</td>
<td>96.241</td>
</tr>
<tr>
<td>Engineering</td>
<td>9</td>
<td>6.767</td>
</tr>
<tr>
<td>Psychology</td>
<td>6</td>
<td>4.511</td>
</tr>
<tr>
<td>Social sciences other topics</td>
<td>6</td>
<td>4.511</td>
</tr>
<tr>
<td>Computer science</td>
<td>3</td>
<td>2.256</td>
</tr>
<tr>
<td>Operations research management science</td>
<td>3</td>
<td>2.256</td>
</tr>
<tr>
<td>Area studies</td>
<td>2</td>
<td>1.504</td>
</tr>
<tr>
<td>Public administration</td>
<td>2</td>
<td>1.504</td>
</tr>
<tr>
<td>Development studies</td>
<td>1</td>
<td>0.752</td>
</tr>
<tr>
<td>Education educational research</td>
<td>1</td>
<td>0.752</td>
</tr>
</tbody>
</table>

Figure 2. Contribution to intrapreneurship knowledge by country.

It was also found that the preferred language for the publication of scientific papers on intrapreneurship and corporate entrepreneurship is English, although there are also few contributions in Spanish and Slovak. However, most quality documents found in WOS journals recognize English as the primary language. Among others, the institutions that publish the most on intrapreneurship are the Autonomous University of Barcelona and the University of Ljubljana, where the research lines in this regard are consolidated.

In addition, the authors who contribute most to the generation of theory on intrapreneurship include: Urbano, Antoncic, Turró, Marques, Calisto, Hisrich, Lages, Alvarez, Aranda-Uson, Baruah, Bulut, Duobiene, Farrukh, Ferreira, Franco, García-Morales, Genedy, Guerrero, Hadad, Hughes, Kraus, Kuratko, Linder and Mansori. The participations of the 10 most representatives are illustrated in Figure 3.
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Figure 3. Most productive authors.

In terms of the most frequently used keywords in the scientific articles, the following were found: intrapreneurship, corporate entrepreneurship, innovation, development, models, orientation, development, construct, management, companies, financial development, development, strategic management, among others. The co-occurrence relationships of the keywords are illustrated in Figure 4.

Figure 4. Most representative keywords.

To conclude the bibliometric analysis, it is important to mention that it is particularly interesting to note the definition of two very marked conceptual structures in the publications. One is related to the external environment of the companies and words such as environment, construct, dimensions, link and suggestions. The other perspective is related to the internal environment of the business, whereby terms such as strategy, business development, absorptive capacity, owners, organizations, innovation, models, growth, management, financial development, entrepreneurial orientation and knowledge can be seen. These two main subgroups can be seen in the Figure 5.
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![Dendrogram of issues related to intrapreneurship.](image)

5. Discussion and Conclusions

Multiple authors have noted the importance of intrapreneurship in the growth and development of the entities that generate it, so this can be considered one of the main assertions of the theoretical models presented in the literature review section (e.g., Alpkan et al. 2010; Antoncic and Hisrich 2001; Kearney et al. 2013; Kuratko et al. 2005; Rutherford and Holt 2007).

The implicit importance of intrapreneurship in improving firm capabilities guides the study of this phenomenon and gives rise to the need to continue contributing to the development of a substantive theory in an area where studies are limited, as seen in the analysis of the number of publications on this topic in the WOS repository.

Therefore, the objective of this research was to determine the current state of the art of the term “intrapreneurship” based on the analysis of its main exponents from the associated scientific publications that allow the development of a future research agenda; similarly, the research question was: what is the current state of the art of the phenomenon of intrapreneurship and where should future research on the subject be directed?

Recapping the information from this analysis, it was found that intrapreneurship does not yet have a theory to support it, although some authors have raised the need for its study within the framework of dynamic capabilities, specifically, as a type of organizational capability (e.g., Salvato et al. 2009; Sakhdari 2016), and recently “intrapreneurship...
“capability” has been discussed as a result of the firm’s absorptive capabilities (Audretsch et al. 2020).

It was found that intrapreneurship has been present in the research agendas of management science since the 1970s, but it was not until the 1990s that the most representative models in the field emerged in which intrapreneurship is posited as the result of exogenous and endogenous conditions of the organization. These two strands of research are still discussed in current models of intrapreneurship. However, studies are currently being developed that aim to characterize the phenomenon from grounded theory (Galván and Sánchez 2018; Galván et al. 2019).

In addition, the analysis of the concepts related to the term intrapreneurship reveals that there is no consensus in the literature, however, it is recognized as the act of entrepreneurship in established companies and, generally, as a practice or behavior that suggests the search for new markets or businesses (corporate venturing), risk-taking, entrepreneurial proactivity, innovation and strategic renewal. Furthermore, the analysis of intrapreneurship models suggests the existence of predictors, such as the external environment, organizational behavior, the strategic vision of the firm and behavioral issues of individuals.

Despite highlighting the implicit importance of intrapreneurship in favorable results for the company, which is another of the major aspects of the study of the phenomenon, the bibliometric analysis showed the existence of few articles on intrapreneurship in the WOS database, suggesting the contribution of new models in specific sectors and territories. It also raises the need to link the term with other areas of knowledge, such as psychology, specifically with regard to the measurement of intrapreneurship at the individual level: what are the conditions that lead employees of a given company or sector to develop intrapreneurial behavior and to propose and carry out new business ideas from the company for which they work? In other words, how or how much does intrapreneurship contribute to the development of the countries or territories that promote it? This includes the areas of public administration, to determine the impact of this behavior in governments, or the educational sector, in which individual student entrepreneurship is encouraged, rather than the development of soft skills that ideas them to grow from an established company. Therefore, it is imperative to broaden the lines of research in the field of intrapreneurship to enrich the contingent nature of the knowledge generated to date. It is also necessary to add new ways of approaching the phenomenon, such as case studies, methodological triangulation, and development of behavioral assessment instruments.

Theoretically, this article contributed to the analysis of the evolution of the study of intrapreneurship, however, its practical usefulness lies in the importance given by the managers of today’s companies in the light of the beneficial results that intrapreneurial behavior can generate in terms of growth, financial development in rapidly changing environments, employee satisfaction, improvement of competitive capabilities, innovation, and anticipation and exploitation of the opportunities generated in the business dynamics.

Finally, it is necessary to mention that, as in all research, our study is subject to a series of limitations. The first is that the set of documents considered for the bibliometric analysis covered only the articles contained in the Web of Science (WOS) repository, so we can affirm the existence of a greater number of articles in repositories such as Scopus or in journals not covered by the quality criteria that form part of the WOS Core Collection. The second is that the search criteria for the documents containing the bibliometric analysis was carried out using the terms “intrapreneurship” and “corporate entrepreneurship”, which are the terms with which this behavior is mainly recognized in the company, although there are other meanings for the term, such as “strategic entrepreneurship” or “organizational entrepreneurship”. Third, the models of intrapreneurship considered as pioneers in the literature review were chosen according to the article’s citation levels and relevance in the field. We believe that for a more in-depth analysis some kind of document classification technique could be used through constant comparison of terms.

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