

GSJ: Volume 9, Issue 3, March 2021, Online: ISSN 2320-9186

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# **Innovative Entrepreneur and Creativity: A Bibliometric Analysis**

Adriano Carlos Moraes Rosa (PhD in Production Engineering, Higher Education Teacher - Guaratinguetá Faculty of Technology -Centro Paula Souza, Brazil)

Any Moraes Rosa

(Postgraduate in Strategic Management of Innovation and Entrepreneurship - Faculty of Technology of Guaratinguetá-SP, Brazil)

José Manoel Souza das Neves (PhD in Mechanical Engineering, Higher Education Teacher - Guaratinguetá Faculty of Technology -Centro Paula Souza, Brazil

Ramon Oliveira Borges Dos Santos

(Graduando em Engenharia Mecânica, Centro Universitário Salesiano de São Paulo UNISAL Lorena-SP)

**Abstract:** Given the current, competitive, and demanding market scenario, it is necessary to understand and create unusual strategies to achieve greater gains in relation to the competition. One of these strategies is already widely studied, practiced, and characterized by its ability to renew business, by the commitment of all stakeholders and by covering clear objectives. This is innovative entrepreneurship, which in recent years brings excellent results to those who adopt it. However, this entrepreneurship is based on many actions and conditions favorable to innovation, considered fundamental to boost a company towards its objectives and, therefore, also favor the career of the professionals responsible for them. Therefore, this article proposes to analyze through exploratory bibliographic, documentary research and a bibliometric study the evolution of publications on the themes of entrepreneurship, innovation, and creativity in the last years. The main research platforms were used to access bibliographic databases, citation counting, subject significance and the opportunity for further research in the area. The theoretical framework contextualized the history of the application of the terms innovative entrepreneurship and

Adriano Carlos Moraes Rosa, Ph.D. in Production Engineering from Federal University of Itajubá - MG UNIFEI (2019), Professor of Higher Education, member in the INTECFATEC - Laboratory of Innovation and Entrepreneurship at the Faculty of Technology of Guaratinguetá-SP at the Paula Souza Center, Brazil. Research areas: creativity, open innovation, and entrepreneurship. E-mail: adriano@fatecguaratingueta.edu.br

Any Moraes Rosa, Postgraduate in Strategic Management of Innovation and Entrepreneurship - Faculty of Technology of Guaratinguetá-SP, Brazil. E-mail: adriano@fatecguaratingueta.edu.br

José Manoel Souza das Neves, PhD in Mechanical Engineering at the Faculty of Engineering of Guaratinguetá SP - UNESP (2011), Professor of Higher Education at the Faculty of Technology of Guaratinguetá-SP, Brazil - FATEC, at the Paula Souza Center, Brazil. Research in the areas of production engineering and administration, with an emphasis on quality, organizational factors, competitive dimensions of manufacturing, innovation, and entrepreneurship. E-mail: adriano@fatecguaratingueta.edu.br

Ramon Oliveira Borges Dos Santo, Graduando em Engenharia Mecânica, Centro Universitário Salesiano de São Paulo - UNISAL Lorena-SP, graduando em Matemática pelo Centro Universitário Internacional – UNINTER (Licenciatura), Técnico em Mecânica pela Escola Técnica Professor Alfredo de Barros Santos – ETEC 2016. E-mail: adriano@fatecguaratingueta.edu.br

creativity. After the treatment of the data, it was already possible to perceive with the results obtained the great relevance of the subject addressed and, because it is a frequently updated topic, there is a great interest of researchers for the development of new studies.

Keywords: Analysis, Bibliometrics, Entrepreneurship, Innovation, Creativity.

**JEL Codes:** O3, L2, L26.

## 1. Introduction

The word *entrepreneur* originates from the French term "*entrepreneur*" meaning "*one who is between*" or "*intermediate*" (Hisrich, Peters and Shepherd, 2014). It was used by the French economist Jean-Baptiste Say with the objective of naming the individual who transfers economic resources from a low productivity sector to a higher productivity sector. Currently, the entrepreneur is seen by many as the one who opens a new and own business; however, Drucker (2016) points out that not all people who open small businesses are entrepreneurs or are undertaking.

The entrepreneurial being is the one with the ability to apply change actions in a creative way, reformulating and recreating products and environments, seeking differentiated opportunities and taking risks, he remains attentive, prepared, and informed and, according to Chiavenato (2007), the entrepreneur is the one who holds energy, material, ideas, and attitude, acting in his favor and in favor of the community. The entrepreneur for the author is a person with sensitivity and financial abilities for business; is to be dynamic and director of proposals; is someone who starts and operates a business to carry out an idea or a personal project, taking risks, responsibilities and, finally, innovating in their area of expertise.

Thus, the entrepreneur seeks change and the exploration of opportunity and can add value to products and services, being continuously attentive to capital management. Drucker (2016) identifies entrepreneurs as those who explore opportunities and changes according to consumer preference, since for the author, they have the characteristic of innovation, being able not only to identify opportunities that allow transformations of products or services, but to perceive changes in the market flow to be prepared for future occurrences, that is, innovation is the specific tool of these entrepreneurs.

This article aims, then, to analyze the main concepts of entrepreneurship, innovation and creativity, using exploratory bibliographic and documentary research, making a connection between the subjects and, later, present the results of a bibliometric research considering the *Web of Science and Scopus* bases for the most relevant, most recent and most cited works (articles), thus collaborating with the dissemination of these important and current subjects to the academic community, entrepreneurs and other stakeholders. Making it clear that entrepreneurship and innovation added to creativity can be translated into "success".

# 2. Literature Review

In this section are presented some of the important and recent concepts on the main themes of this article such as entrepreneurship, its fragment for and entrepreneurship in Brazil, innovation and, finally, creativity.

#### 2.1 Entrepreneurship

According to Dornelas (2008), the concept of intensified in Brazil in the late 1990s and several factors try to explain the interest in the subject, especially in the United States, a country where the *term entrepreneurship was coined*, known and referenced many years ago, and is not, then, something new or unknown. Also according to Dornelas (2008), the period of formation of capitalism occurs concomitantly with the phenomenon of the Industrial Revolution initiated in Great Britain in the second half of the eighteenth century; in France and the United States, from the early years of the 19th century; in Germany, only in the last decades of the same century, historical moment characterized by the great expansion of commercial, business and manufacturing activities, assuming the most representative countries of this process the position of "model to be followed".

Thus, the power of nations was associated with economic progress where all continental governments with any claim to a rational policy were consequently fostering economic growth and especially industrial development and, in this context, Cantillon (1950), in the second half of the eighteenth century, tried to identify the entrepreneurial individual, linking their existence not only in relation to their function in society, but mainly to their position in relation to the risk of fluctuations in supply and demand. This individual could be both the trader, the manufacturing producer, or the farmer settler.

As explained in Filion (2000), in the context of industrial revolution, Cantillon's interest in entrepreneurs was not an isolated phenomenon, but was harmonious with the ideas of the liberal thinkers of

the time, who demanded full freedom so that each one could make the best of the fruits of his work. Thus, the entrepreneur is the individual who is positioned at the central point of the economic process to balance it, assuming the role of intermediary between the classes of producers and consumers. This individual would manage the work of production, presenting himself as the axis of various relationships and, for Lodi (2003), in group, these people can be considered as "powerful captains", that is, men who alone and with great energy and intelligence that could control all organizational processes.

Given positions in relation to the entrepreneur and his function, it is found that the most used definition of entrepreneurship is that applied by Schumpeter (1997), where, according to the author, the entrepreneur is understood, above all, as an innovative subject that drives economic and social development through reform or revolution in production patterns, then, the development process that is applied, cannot be understood as a simple growth of the economy, but as a phenomenon that presents a circular flow that tends to balance promoting effective and exponential changes in the previously existing structure.

Finally, it is possible to realize that there is not a single definition for "entrepreneurship", however, there is a consensus in many languages that the term is widely used when it is treated innovation, risk, creativity, organization, and wealth. Knowing entrepreneurship enables the notion of how-to better structure companies and how it is possible for a professional to improve as a manager.

# 2.1.1 Entrepreneurship in Brazil

According to Beni (2006) entrepreneurship in Brazil gained strength in the 1920s, with the implementation and development of more than 4,000 industries that were subsidized and protected with government authorization. With the opening of the Brazilian economy in the 1990s, entrepreneurship is once again highlighted with the implementation of SEBRA (before CEBRAE), becoming increasingly effective in leveraging business development. From this, several renowned companies were founded, such as The Sadia Group and the Pão de Açúcar Group. According to Dornelas (2003), the entrepreneurship movement in Brazil began to take more shape only in the 1990s, when entities such as SEBRAE (Brazilian Service for Support to Micro and Small Enterprises) and SOFTEX (Brazilian Society for Software Export) were created. The same author (Dornelas, 2003) highlights some actions that also contributed to the growth of entrepreneurship practice in Brazil: the Softex and GENESIS (Generation of New Software, Information and Services) programs that supported software entrepreneurship activities, the Brazilian Entrepreneur program, from the Federal Government, aimed at training more than 6 million entrepreneurs throughout the country, the EMPRETEC and Young Entrepreneur programs of SEBRAE.

#### 2.2 Innovation

For Roberts (2001) and López-Ruiz (2007), the need to innovate and do different from the others originates from the human search for survival and is in Olduvai, Tanzania, African continent, where it is believed to be the place where theorists understand to have emerged the most remote ancestors of the race, since there, records of innovation were found with the development of supporting artifacts in the search for food, the main challenge of the time. It is possible to recognize and understand that development and growth depend on the knowledge and willingness of a society to innovate.

The action of innovating is considered a fundamental factor for the growth and increase in the performance of the business areas. The literature presents several concepts of innovation, however, some of the main theoretical concepts of innovation are multiplied by several works and authors, including Utterback (1971), already defining innovation as an invention that reached the stage of insertion in the market in the case of a new product. If the invention refers to a new process, innovation will occur at the stage of its first use. In this case, the invention is an original solution to a need or desire. The author emphasizes that the idea he refers to is not to suppress current processes from new actions in the markets, but to support ideas and take them forward to the point of producing impact.

Ferreira, Pugas and Da Silva (2018), also propose their definition, treating innovation as something comprehensive, being beyond novelty or invention. Innovation is divided into phases, the first phase being that of invention, present since the beginning of civilization, the second of the dissemination, common in globalized markets, being founded by the production and outsourcing of consumer products and, also, a third phase, arising from the strategy for economic sustainability of organizations, instigated by emerging knowledge after globalization of the economy and alternative to keep up with the speed of demand for new products.

Since the spread and multiplication of markets and, with the economy supported by production and outsourcing, several studies have identified, defined, and understood the innovative processes that have long been understood as the foundations of the competitive economy. These studies evidenced the competitive business success dependent on this influential innovation management that proposed several factors that are aligned with these processes (Rossetti and Morales, 2007; Di Benedetto, 2012).

Innovation is also declared as a need capable of inflaming the desire for change, and of reinventing itself, being considered a question of survival, because technological and marketing infrequencies cause

rapid and significant changes in the socioeconomic and cultural compound, which forces organizations to adapt, so those who are not adapted to this new scenario should prepare, then, for a gradual or immediate outcome (Rodriguez y Rodriguez, 2005).

In the age of knowledge, innovating is a way to take advantage of creative moments, often making use of a pre-existing knowledge that together with other small knowledge can assimilate new skills and new solutions, this process involves a cycle that includes taking advantage of development, production, and all possible interactions and feedings between phases (Carvalho and Sugano, 2016).

#### 2.3 Creativity

There are several articles and authors that since the 1950s present definitions for the concept of creativity, a concept that, in the opinion of some of them, is easier to recognize than to define, because it happens in the face of behaviors resulting from personal characteristics, cognitive abilities and social environments. In this perspective, we also highlight the aspects related to originality, adequacy of solutions and possibility of using various paths to achieve excellent results (Cramond, 2008).

And according to Cruz (2005), the creative activity can manifest itself in the human being early, accompanying him throughout life, in smaller or larger proportions depending on several factors that can be personal or contextual, and that some experiences translated into knowledge lead to the argument that the creative act is also constructed through elements of reality that the person knows.

Consensually, several authors have a great complexity and multidimensionality of the concept of creativity and, thus, bet that the relationship between personal characteristics, context, processes, and products of creative acts are some of the main factors of their development (Bahia and Iberico-Nogueira, 2005). Thus, the word creativity has its meaning to elaborate, conceive, create. Creativity, on the other hand, is something that allows the shape of the "new", this "new" can be treated in the most diverse fields of activity allowing distinct coherences that are established for the human mind as related phenomena (Parolin, 2001).

The action of creating therefore encompasses the ability to understand; and this, in turn, that of confronting, organizing, configuring, signifying and, according to Ostrower (1993), creativity is traditionally seen as a divine inspiration, as a form of intuition and, in the biological approach, marked by Darwin's evolutionary theory, creativity is like an inexhaustible and hereditary genetic compound, and it is not possible to educate a person for creativity.

## 3. Method

The research method used was conceptual theoretician, with review of existing literature or bibliographic research, a research that explains a problem through theoretical references published in documents (Gil, 2019). The research approach is quantitative, which makes use of statistical techniques to measure opinions and information for a given study (Richardson, 1999) with the use of bibliometric analysis, bibliographic research, documentary research and qualitative analysis of the results.

The bibliometric analysis, a technique that applies methods of statisticians and mathematicians to analyze and construct indicators on the dynamics and evolution of scientific and technological information of disciplines, areas, organizations, or countries (Oliveira *et al.*, 2018) and, in this article, it was chosen to better understand the focal areas, having as databases used, the consolidated Web of Science *and Scopus*. Finally, the article sought to consolidate the state of academic research on "innovation". Based on a systematic review of the literature published in the last 27 years, synthesizing various research perspectives in a multidimensional comprehensive structure of organizational innovation linking leadership, innovation as a process and innovation as a result. The keywords of this production were initially (and "isolated") innovation, systematic innovation, and creativity, then this same research was done with the words together (combined).

## 4. Results and Discussion

The Web of Science or WOS (2020) and Scopus platforms are two of the most important databases in their class. They reference scientific citations and were designed to support scientific and academic research by topics covered in the areas of sciences, social sciences, arts, economics, finance, humanities, engineering, etc. Using these bases, this article has adopted the following parameters:

- Search Type: By topics in the main collections of WOS and Scopus bases.
- Date/Period: 2009-2020.
- Categories: Business Finance, Business, Economics, Engineering Multidisciplinary, Humanities Multidisciplinary, Management, Multidisciplinary Sciences, Social Sciences Interdisciplinary.
- Language(s): English and Portuguese.
- Document(s) searched(s): articles only.

# 4.1. Wos Base: Entrepreneurship, Innovation And Creativity.

As Shown in Figure 1, 8,835 articles on entrepreneurship were found in WOS's main collection. Due to the quantity, the most relevant, and most cited studies were catalogued for analysis. Figure 1 also shows the growing production/interest in the subject from 2015, and between 216 and 2017 there is no effective growth.

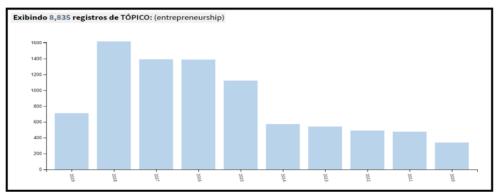


Figure 1: Entrepreneurship Research - Publications/Citations. Source: Adapted from Web of Science (2020)

- Managing the Rivalry of Competing Institutional Logics was considered the most relevant production by the base/collection. The authorship is by Trish Reay and Robert Hinings, published by Organization Studies in 2009. This article investigates an organizational field where competing institutional logics have existed for a long time. Four mechanisms were identified to manage the rivalry of competing logics that facilitate and strengthen the separate identities of key actors, thus providing a way for competing logics to coexist and, separately, guide the behavior of different actors. Contributing to institutional literature showing that competing logics can coexist and the rivalry between logics can be managed through the development of collaborative relationships. The keywords used were institutional logic, institutional change and collaboration.
- Female Entrepreneurship: Types of Economic Activity by authors Iuliia S. Pinkovetskaia, Liudmila I. Kryukova, Diego Felipe Arbeláez Campillo, and Magda Julissa Rojas-Bahamon was classified as newer and was published by Tarih Kultur Ve Sanat Arastirmalari Dergisi-Journal of History Culture and Art Research in 2019. The authors analyze the standards that define the level of women's business activities, as well as the sectoral structure of these groups. The aim of the study is a comprehensive assessment of women's early business activity and their sectoral preferences in setting up their own business. The keywords used were women's business, women's entrepreneurship, sectoral structure, economic activity.
- The most cited article (965 notes) was *The Business Model: Recent Developments and Future Research* by Christoph Zott, Raphael Amit and Lorenzo Massa and published by the *Journal of Management* in 2011. It provides a broad and multifaceted view of the literature received on business models in which the authors examine the concept of business model through various subject lenses. The review reveals that scholars do not agree on what a business model is, and that literature is developing largely in silos, according to the phenomena of interest to the respective researchers. The keywords used were innovation, business model, value creation, value capture and strategy.

As Figure 2 shows, they were found in the main collection of WoS 25,085 articles on innovation. Due to the quantity, the most relevant, and most cited studies were catalogued for analysis. Figure 2 also demosntra also shows production/interest in the subject from 2015.

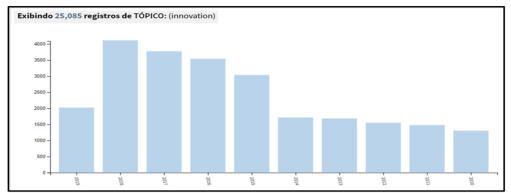


Figure 2: Innovation Research - Publications/Citations. Source: Adapted from Web of Science (2020)

- Understanding Innovation was considered the most relevant production by the base/collection. The authorship is by Kenneth B. Kahn, and it was published by Business Horizons in 2018. This article deals with the importance of the element innovation in individual actions and for organizations aiming at the success of projects. The keywords used were innovation process; innovation mindset; innovation strategy.
- Sharing Goods? Yuck, No. An Investigation of Consumers' Contamination Concerns About Access-Based Services by Hazee Simon, Van Vaerenbergh Yves and Delcourt Cecile was classified as more recent by the term "Innovation". It was published in the Journal of Service Research in 2019. The authors deal with Access-Based Services (ABS), and the challenge of making consumers realize this innovation in the service area. According to the research presented, the groups show concern about contamination, being an important barrier in the adoption by the consumer of ABS; they arise when a person believes that someone touched an object and transferred waste or germs. The key words of this work are services based on access, sharing economy, contamination, contagion, adoption of innovation.
- With 976 notes, the most quoted article was *Global land use change, economic globalization,* and the looming land scarcity by Lambin Eric F. and Meyfroidt Patrick. Was published by *Proceedings of The National Academy of Sciences of The United States of America* in 2011. The article explains global changes in land use, highlighting the challenge of building sustainable structures for the use and preservation of forest ecosystems by providing information on the best use of the services they provide to us. The challenge also involves awareness confronting the economic globalization that occupies agricultural and forestry land, causing the reduction of these important areas. The key words of this production were land change, forest transition.

As Figure 3 shows, 3,440 articles on creativity were foundin the main collection of WOS. Due to the quantity, the most relevant, and most cited studies were catalogued for analysis. Figure 3 also shows the growing production/interest in the subject from 2015 to 2020.

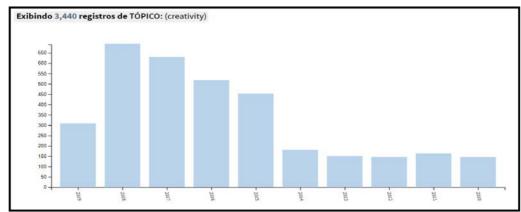


Figure 3: Creativity Research - Publications/Citations. Source: Adapted from Web of Science (2020)

- Playing with Words Day Pilkey's Literary Success in Humorous Language was considered the most relevant production by the base/collection. It was published in the American Journal of Play in 2019. The authorship is by Evangeline Nwokah, Vanessa Hernandez, and Erin Miller. The authors analyze the language game as an important component for the construction of the popular graphic novels of many children. They argue that Pilkey's literary devices fall into two main areas of hyperbole and linguistic creativity and that Pilkey's language transforms the structure of the construction of the reader's thought. The key words of this production were language game, graphic literary devices, novels, Captain Underpants, Dav Pilke.
- The Mirroring Phenomenon in Cultural Consciousness of Russia by author Olga Yu Osmukhina was classified as more recent by the term "Creativity". It was published by Tarih Kultur Ve Sanat Arastirmalari Dergisi-Journal of History Culture and Art Research in 2019. The article deals with the understanding of the phenomenon of mirroring, this being the similar body language expressed when two or more people live or are only close for a short period, was directed particularly in a scientific way to the cities of Russia. It interprets the phenomenon of mirroring based on studies conducted differently with groups of people from the cities. The key words of this production were cultural studies, mirroring phenomenon, identification.
- The most cited article (711 notes) was Linking Empowering Leadership and Employee Creativity: The Influence of Psychological Empowerment, Intrinsic Motivation, And Creative Process Engagement by Xiaomeng Zhang and Kathryn M. Bartol and published by the Academy of Management Journal in 2010. This research developed and applied a theoretical model linking empowering leadership to creativity through several related variables. Using research data from professional employees and their supervisors at a large information technology company in China. It was identified that leadership empowerment positively affected psychological empowerment, which in turn influenced both intrinsic motivation and involvement in the creative process. The key words of this production were empowerment leadership, creativity, empowerment, motivation.

Figure 4 below shows the incidence of published articles, where subjects and entrepreneurship, innovation, and creativity "combined" are related, and the WOS research database for data extraction is applied. Articles relating entrepreneurship, innovation and creativity were found in WOS's main collection. The most relevant, the most recent and the most cited studies were catalogued for analysis. Figure 4 also shows the growing production/interest in the relationship between the subjects from 2015.

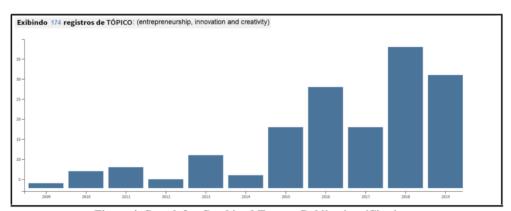


Figure 4: Search for Combined Terms - Publications/Citations. Source: Adapted from Web of Science (2020)

Creativity, innovation, and the historicity of entrepreneurship was considered the most relevant production by the base/collection. It was published in the Journal of Entrepreneurship and Public Policy in 2019. The authorship is by Jordan J. Ballor and Victor V. Claar. The article deals with the concepts of creativity and innovation demonstrating that these concepts are interrelated, and indeed, often conflicting. A distinction between the terms "entrepreneurship" and "entrepreneurs" is also demonstrated. The aim of this article is to explore the distinction between creativity and innovation based on its relationship with history and implications in understanding entrepreneurship. The key words of this production were entrepreneurship, innovation, creativity and history.

- Uncertainty Avoidance and Intrapreneurship: A Four-Level Investigation by the authors Arslanagic-Kalajdzic Maja, Cerne Matej and Kadic-Maglajlic, was classified as the most recent relating the concepts of entrepreneurship, innovation, and creativity. It was published in the Journal of Macromarketing in 2019 and the study demonstrates the application of a conceptual model at four levels of the role of uncertainty prevention in the formation of intra-entrepreneurial intentions of employees, differentiating between the prevention of uncertainty at the level of unity and country. Using the relationship established between behavioral control and intentions, we consider how employee creativity and self-efficacy influence intra-entrepreneurial intentions.
- The most cited article (334 notes) was *Sensemaking in Organizations: Taking Stock and Moving Forward* by Maitlis Sally and Christianson Marlys K. and published by the journal *Academy of Management Annals* in 2014. It deals with the subject Sensemaking, process by which people work to understand new, ambiguous, confusing, or otherwise issues or events that violate expectations. As a central activity of the organization, the creation of meaning has been the object of considerable research that has intensified in the last decade.

# 4.2 Base Scopus: Entrepreneurship, Innovation And Creativity.

Figure 5 shows the graphic evolution of incidences of the term entrepreneurshipthat were found in the main collection of SCOPUS, with 11,599 articles on the subject. The most relevant, the most recent and the most cited studies were catalogued for analysis. It also demonstrates the increasing incidence of documents on entrepreneurship and its potentialisation since 2016.

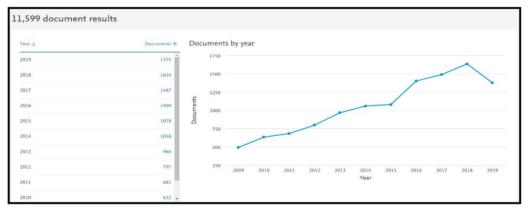


Figure 5: Entrepreneurship Research - Publications/Citations. Source: Adapted from SCOPUS (2020)

- Entrepreneurship, economic growth, and innovation: Are feedback effects at work? was considered the most relevant production by the base/collection. The authorship is by Miguel-Ángel Galind and María Teresa Méndez and published in the Journal of Business Research in 2014. The study analyzes the relationships between entrepreneurship, innovation, and economic growth, showing the effects of feedback on these relationships. The approach considers three equations linking GDP, innovation, and entrepreneurship. The key words of this production were innovation, knowledge, economic growth, entrepreneurship, income distribution.
- The growth of the Japanese black tea market: how technological innovation affects the development of a new market was ranked as more recent by the term entrepreneurship. The authors are Risa Takano and Daisana Kanama. It was published in the Journal of Economic Structures in 2019. The article studies the birth of the Japanese black tea market, its decline, and its renaissance. The key words of this production were Japanese black tea, new market, entrepreneurship, Japanese green tea, technological innovation.
- The most cited article (1,969 notes) was *Business models, business strategy and innovation authored* by *David J. Teece* and published by the journal *Long Range Planning* in 2010, a research that explains how business models are defined and applied during the implementation and that they seek to deliver "value" to their customers by making them pay to live these experiences generating profits for these institutions. The key words of this production were business model, business rule, new business development, business architecture, entrepreneurship, business value, economics, marketing, business transformation, management, business relationship management, business process modeling.

Figure 6 shows the graphic evolution of innovation of the term innovation that was found in the main collection of SCOPUS, with 23,081 articles on the subject. The most relevant, the most recent and the most cited studies were catalogued for analysis. A balance of content publication was identified between 2011 and 2014 and from 2015 the references related to the theme grew.

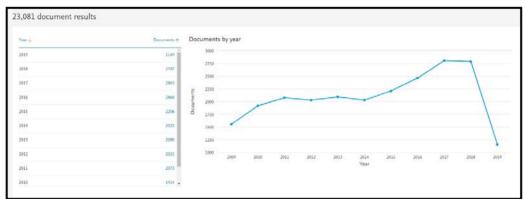
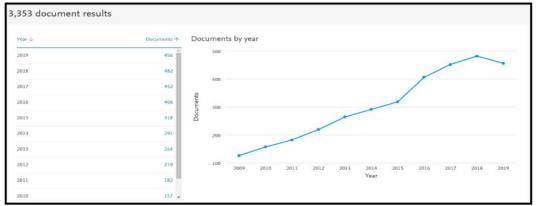


Figure 6: Innovation Research - Publications/Citations.

Source: Adapted from SCOPUS (2020).

- Exploring the dynamics of water innovation: Foundations for water innovation studies was considered the most relevant production by the base/collection. The authorship is by Uta When and Carlos Montalvo and published by the Journal of Cleaner Production in 2018. Research the groundwork for the field of water innovation studies. The contributions capture the current understanding of the dynamics of water innovation and provide proposals on how this innovation process can be fostered. The key words of this production were water, innovation, innovation measurement, innovation financing, organizational innovation, technological innovation, social innovation, service innovation, product innovation and open innovation.
- Investigating the preferences of individuals on public transport innovations using the Maximum Difference Scaling method was classified as more recent by the term "Innovation". Written by the authors Stelios Tsafarakis, Panagiotis Gkorezis, Dimitrios Nalmpantis, Evangelos Genitsaris, Andreas Andronikidis and Efthymios Altsitsiadis. It was published by the European Transport Research Review in 2019. The study presents a survey with public transport users, their diverse mobility needs and preferences and how to meet these needs. The key words of this production were public transport, innovation, latent classes, variance analysis and maximum sizing method of differences.
- The most cited article in the SCOPUS research database referencing the word entrepreneurship also stands out on this same basis, by citations referencing the word innovation (1,969 notes) was (again) *Business models*, business strategy and innovation authored by David J. Teece and published by the Journal Long Range Planning in 2010.

Figure 7 shows the graphic evolution of the term creativity that were found in the main collection of SCOPUS, with 3,353 articles on the theme. The most relevant, the most recent and the most cited studies were catalogued for analysis. An effective growth of publications was identified since 2009 (with expressiveness in 2015).



**Figure 7:** Creativity Research - Publications/Citations. **Source:** Adapted from SCOPUS (2020)

- Creativity, innovation, and sustainability: Insights of entrepinays in the handicrafts industry was considered the most relevant production by the base/collection. The authorship is by Divina M. Edralin, Maria Victoria P. Tibon, Paz Esperanza T. Poblador and Junius W. Yu and published by Journal of Cleaner Production in 2019. The study looked at the ideas of Filipino entrepreneurs in the craft industry about creativity and sustainability and how they relate to innovation. The key words of this production were creativity, innovation, sustainability, entrepreneurship, craft industry, female entrepreneur.
- Identifying the results of smart city development: Findings from systematic literature review was classified as more recent by the term "Innovation". Written by authors Yirang Lim, Jurian Edelenbos and Alberto Gianoli. It was published by Cities in 2019. The study identifies the results of the development of intelligent cities using the method of systematic review of the literature. The key words of this production were intelligent city, ICT, urban planning, result, systematic literature review.
- The most cited article in the SCOPUS research base referencing the word creativity with (770 notes) was A multi-dimensional framework of organizational innovation: A systematic review of the literature by Mary M. Crossan and Marina Apaydin and published in the Journal of Management Studies in 2010.

Figure 8 shows the incidence of 243 (two hundred and forty-three) published articles, where the combined subjects are related to entrepreneurship, innovation and creativity, and the SCOPUS research database for data extraction is applied. As shown in Figure 8 according to the basis, the publication of articles relating the concepts entrepreneurship, innovation and creativity are increasing from 2015.

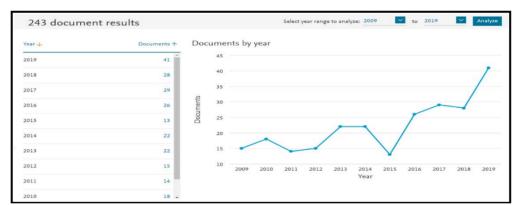


Figure 8: Search For Combined Terms - Publications/Citations.

Source: Adapted from SCOPUS (2020)

- Seeing around corners: How creativity skills in entrepreneurship education influence innovation in business was considered the most relevant production by the base/collection. The authorship is Gundry L. K., Ofstein, L. F. and Kickul J. R. and published by the International Journal of Management Education in 2014. The article discusses entrepreneurship programs and courses that provide context and content to help students learn and apply skills and behaviors designed to create value in entrepreneurial companies. The key words of this production were creativity, innovation, entrepreneurship and curriculum.
- Again featured, the article *Creativity, innovation, and the historicity of entrepreneurship* has been rated as more recent. Written by the authors Jordan J. Ballor and Victor V. Claar It was published in the *Journal of Entrepreneurship and Public Policy* in 2019.
- The most cited article in the SCOPUS research base referencing the concepts with 744 notes, was *The real-time city? Big data and smart urbanism* by Kitchin R. and published by the *Journal of Business Venturing* in 2014. This article focuses, based on several examples, how cities are being instrumented with digital devices and infrastructure that produce 'big data'. These data, advocates argue of smart cities, enable real-time analysis of urban life, new modes of urban governance, and provide the raw material for predicting and promulgating more efficient, sustainable, competitive, productive, open, and transparent cities. The key words of this production were big data, smart cities, urbanism, real-time analysis, data analysis, ubiquitous computing and governance.

## 5. Conclusions.

This article aimed to analyze the main and new concepts of entrepreneurship, innovation and creativity, as well as, using exploratory bibliographic and documentary research to make a connection between the subjects and, later, present results of a bibliometric research on the three terms considering the Web of Science and *Scopus* bases for the cataloguing and analysis of the most relevant works, more recent and more cited in these bases, collaborating with the dissemination of these important and current subjects to the academic community, entrepreneurs and other stakeholders. In relation to the analysis the main and new concepts of entrepreneurship, innovation, and creativity:

- o *Entrepreneurship:* it is the ability to foresee the facts and create business opportunities, develop new products and services, propose innovative solutions; foster economic growth; evaluate alternatives and calculate risks deliberately, act to reduce risks or control outcomes, and put yourself in situations that involve moderate challenges or risks; find ways to do things efficiently and effectively, seeking to achieve standards of excellence; act in the face of obstacles without giving up on purpose; innovation; and successfully generate new ideas generating increased revenue, access to new markets, increased profit margins, among other benefits.
- Creativity: it happens in the face of a behavior resulting from personal characteristics, cognitive
  abilities, and social environments, traditionally it is seen as a divine inspiration, as a form of intuition,
  it is like an inexhaustible and hereditary genetic compound, not being possible to educate a person for
  creativity.

Already with the use of exploratory bibliographic and documentary research to make a connection between the subjects, it is that the terms are interconnected, because the creative man can perceive the market opportunities, to plan actions and to apply them in an entrepreneurial way. This creative man, when realizing himself in a "mutant" market environment then returns to plan new actions that instill his product or service, which will increase his relationship with the customer, increasing his revenue and profit margins.

When we present the results of the bibliometric research on the three terms considering the *Web of Science and Scopus* databases for the cataloguing and analysis of the most relevant papers (articles), the most recent and most cited in these databases we noticed that the term Innovation has been the most used in the production of scientific articles, reaching in the period 25.085 publications on the Web of Science platform and 23.081 on the *Scopus platform*, followed by the term Entrepreneurship with 8.835 publications on the Web of Science platform and 11.599 *on the Scopus* platform and the term Creativity, 3.340 publications on the Web of Science *platform* and 3.353 on the *Scopus platform*.

Finally, with the concepts absorbed in this work and, with the bibliometric results presented, this article concludes with the intention of fulfilling one of the proposed objectives, which is to collaborate in the dissemination of these important and current issues to all stakeholders, whether for the academic community, or for entrepreneurs, future entrepreneurs, and other stakeholders. Entrepreneurship and innovation added to creativity can be translated into "success".

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