

Bibliometrics and business. A challenge for researchers

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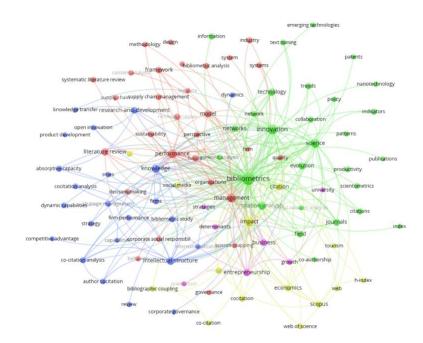
Gaviria-Marín, Magaly

Universidad Católica de la Santísima Concepción. Email: mgaviria@ucsc.cl

1. INTRODUCTION

Bibliometric studies are a technique used to obtain an overview of the state of research in various scientific disciplines. For some time ago until now, bibliometric studies have increased significantly. For example, 6 times more bibliometric studies were published in 2020 than 10 years ago (*see figure 1*). The scientific community of Business and Management has also participated in this increase. In fact, they are among the scientific disciplines with the highest productivity in this type of studies. The evolution of information technologies and the emergence of the Internet are partly responsible for this increase. The development of various specialized tools and software. the availability of data/information online, have increasingly facilitated the systematization of information, which boosted has the development and publication of these studies.

FIGURE 1. CO-OCURRENCE OF KEYWORDS ABOUT BIBLIOMETRIC STUDIES IN BUSINESS AND MANAGEMENT.



Source: Information based on WoS (2021)

Bibliometrics is considered as a subbranch of infometrics, and has the potential objective, reliable, to introduce an transparent and reproducible process of analysis (Aria & Cuccurullo, 2017). This usually involves a series of approaches or procedures, such as the analysis of scientific performance and the graphic mapping of science. The first one, is based on statistical techniques and elaboration of indicators that show the scientific performance, in terms of productivity and influence, of the different scientific actors, i.e., authors, institutions or countries. The second, the graphical mapping of science, allows the analysis and representation of the connections or network structure in a particular scientific field. Given complementary, their scholars of bibliometric techniques recommend the joint use of these procedures (Cobo, López-Herrera, Herrera-Viedma, & Herrera, 2011), although in practice, it is common to find studies that use only one of these approaches/procedures.

The last few years have shown a increase considerable in scientific information and literature in the world. In fact, after the outbreak of the Covid-19 pandemic, the New York Times noted that never before so many researchers had generated in a short period of time, so much knowledge in different disciplines (Apuzzo & Kirkpatrick, 2020). In the face of the explosion of information and publications, the various bibliometric procedures are proving key/useful in organizing and providing a structured analysis of a large body of scientific information (Aria & Cuccurullo, 2017), which also involves the disciplines of Business and Management.

Notwithstanding the increase in number of publications of these studies, and the usefulness they provide to science, their publication process is not free of barriers. For example, and to name a few, the development of these studies involves knowing various calculation techniques, use of computer tools, and use of other software, which are generally used under commercial licenses (Guler, Waaijer, & Palmblad, 2016) which limits the potential development of better quality bibliometric studies. In addition, these studies have a cumbersome nature in their elaboration process, and researchers must have good skills to handle specialized software to interpret data and graphs, which reduces the possibility of involving academics who do not have these computer skills (Gutiérrez-Salcedo, Martínez, Moral-Munoz, Herrera-Viedma, & Cobo, 2018). But just as there are barriers, there are also several challenges in the development and dissemination of this type of studies. First, researchers must strive to go beyond the presentation of data and indicators. The experience and knowledge of the research team on the subject of study, their ability to interpret and relate data and information, is key to nurturing bibliometric studies with useful content to infer future development trends of a particular field of research. Probably, these practices are likely to be more highly valued and lessen the prejudices that the reviewers often have about these studies.

A second challenge that researchers must take up, is to seek greater applicability of these studies in the different areas of academia and the business environment. Bibliometric studies in Business and Management should not only measure the impact of the scientific literature of the discipline, but also visualize the most researched and updated topics and determine the limits of the fields of study. Updated information should be a guideline for academics and/or consultants who work with the business environment. In recent years, several bibliometric studies have been published in Business and Management, for example, in the area of Strategy (Ramos-Rodrígue & Ruíz-Navarro, 2004; Vicente, Rafael, Serra, & Almeida, 2020); in the field of Big data in business (Nobanee, 2020), in Strategic Entrepreneurship (Schröder, Tiberius, Bouncken, & Kraus, 2020), in Innovation (Marchiori, Popadiuk, Mainardes, & Rodrigues, 2021; Randhawa, Wilden, & Hohberger, 2016), in Human Resources (Danvila-del-Valle, Estévez-Mendoza, & Lara, 2019), and lately in Family Business (de las Heras-Rosas & Herrera, 2020). Many more studies can be found. But what is important, is that these studies allow structuring the knowledge base of a given field by delivering updated, objective and reliable data/information. These studies have the potential to generate an impact in the professional/business area, through the applicability that academics/consultants can give it. Certainly, academics/consultants who update themselves and know the scientific trends of their discipline have the opportunity to differentiate themselves by doing their work in a better way, allowing firms to learn from trends, strengthen their capabilities, become more competitive and survive in these uncertain times.

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