

# Accounting as a useful tool for developing competitiveness in Companies

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## Abstract

A documentary review was carried out on the production and publication of research papers on the study of the accounting variable as a useful tool for developing competitiveness in companies. The purpose of the bibliometric analysis proposed in this document is to know the main characteristics of the volume of publications registered in the Scopus database during the period 2016-2021, achieving the identification of 129 publications. The information provided by the said platform was organized using tables and figures for categorizing the information by Year of Publication, Country of Origin, Area of Knowledge, and Type of Publication. Once these characteristics were described, a qualitative analysis was used to refer to the position of different authors on the proposed topic. Among the main findings of this research, the Russian Federation, with 27 publications, is the country with the highest production. The area of knowledge that made the greatest contribution to the construction of bibliographic material referring to the study of accounting as a useful tool to develop competitiveness in companies was business with 43 published documents, and the type of publication that was most used during the period mentioned above was the journal article, which represents 64% of the total scientific production.

**Keywords:** accounting, business competitiveness.

## I. Introduction

Accounting is the area in charge of systematizing the relevant financial information for the correct operation of the companies, allowing past data to determine the future of the company using different variables. The importance of accounting in administrative

processes lies in the fact that by containing and analyzing a large amount of data, it helps to make decisions and solve problems by providing trends and probabilities, thus reducing the risk in investments and determining the success of certain products and services, as well as helping to determine the distribution of resources that

allow for an efficient business function. Accounting is one of the determining factors in business competitiveness as it facilitates the understanding of financial information helping to reduce costs and optimize operational functions allowing to determine the best time to invest without centralizing resources giving a diversification to the company and allowing it to be one step ahead of organizations that perform the same economic activity.

Accounting is an indispensable tool in the administrative management of a company since it facilitates all the processes and helps to determine the best option that a company has, optimizing its management and allowing it to comply with what the clients and the economy are requesting at that moment. Financial systems have undergone major changes in recent years as we are in the era of digitization, so to be in line with what the industry 4.0 demands, has innovated in the tools used to process information; using tools such as big data, blockchain, and information stored in the cloud allowing companies to tabulate and analyze a greater amount of information more accurately as these reports are of great importance for decision making, you must have useful and accurate information about the current situation of the company.

Therefore, it is important to know, in terms of bibliographic resources, the current state of research related to Accounting as a useful tool to

develop competitiveness in companies, so a bibliometric analysis of the scientific production registered in the Scopus database during the period 2016-2021 is proposed to answer the question: How has been the production and publication of research papers related to the study of the variable Accounting as a useful tool to develop competitiveness in companies during the period 2016-2021?

## 2. General Objective

To analyze from a bibliometric and bibliographic perspective, the production of high-impact research papers on the variable Accounting as a useful tool to develop competitiveness in companies during the period 2016-2021.

## 3. Methodology

Quantitative analysis of the information provided by Scopus is performed under a bibliometric approach to the scientific production regarding accounting as a useful tool to develop competitiveness in companies. Also, from a qualitative perspective, examples of some research papers published in the area of the study mentioned above are analyzed from a bibliographic approach to describe the position of different authors on the proposed topic.

The search is performed through the tool provided by Scopus and the parameters referenced in Table 1 are established.

### 3.1 Methodological design

	PHASE	DESCRIPTION	CLASSIFICATION
PHASE 1	DATA COLLECTION	Data was collected using the Scopus web page search tool, through which a total of 129 publications were identified.	Published documents whose study variables are related to Accounting as a useful tool to develop competitiveness in companies.

<b>PHASE 2</b>			<p>Research papers were published during the 2016-2021 period.</p> <p>Without distinction of the country of origin.</p> <p>Without distinction of the area of knowledge.</p> <p>Without distinction of the type of publication.</p>
	<b>CONSTRUCTION OF ANALYSIS MATERIAL</b>	<p>The information identified in the previous phase is organized. The classification will be made through graphs, figures, and tables based on data provided by Scopus.</p>	<p>Word Co-occurrence.</p> <p>Year of publication</p> <p>Country of origin of the publication.</p> <p>Area of knowledge.</p> <p>Type of publication</p>
<b>PHASE 3</b>	<b>DRAFTING OF CONCLUSIONS AND FINAL DOCUMENT</b>	<p>After the analysis carried out in the previous phase, the study proceeds to the drafting of the conclusions and the preparation of the final document.</p>	

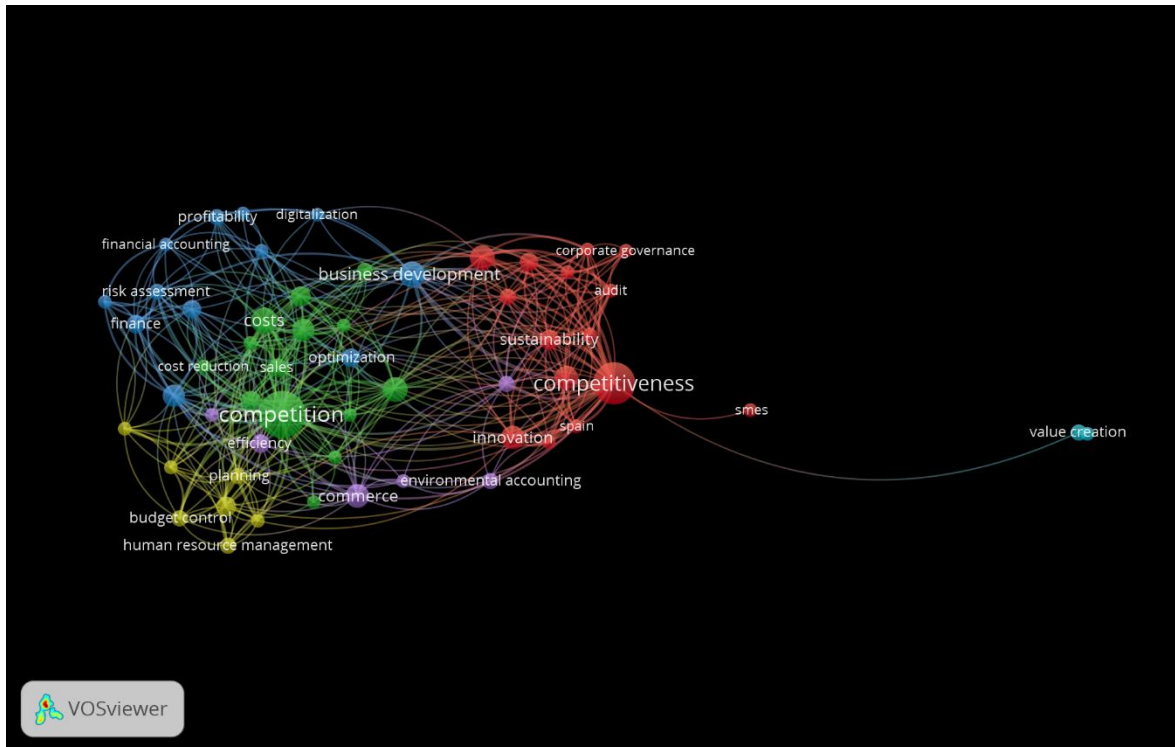
**Table 1.** Methodological design.

**Source:** Own elaboration (2022)

**4. Results**

**4.1 Co-occurrence of words**

Figure 1 shows the co-occurrence of keywords within the publications identified in the Scopus database.



**Figure 1.** Co-occurrence of words.

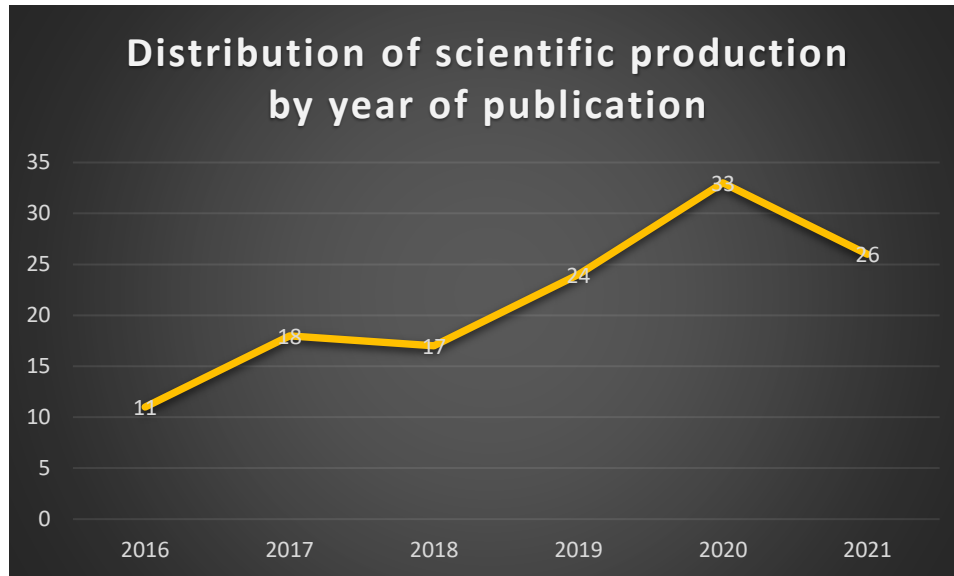
**Source:** Own elaboration (2022); based on data provided by Scopus.

As shown in Figure 1, the key word most used in the research related to the variables under study is competitiveness, which is the ability of companies to stand out from others that perform the same economic activities, giving them an advantage in the market depending on different factors such as quality, price, manufacturing, awareness, and recycling of products, among others. There are also keywords such as business development, sustainability, and innovation which are factors that determine the level of competitiveness that a company has when using new systems and tools for its organizational management allowing them to stand out in the marketing of their product or service. Keywords such as cost reduction, information management, environmental accounting, and corporate management are keywords that determine the financial system of a company that is responsible for computing and analyzing large

amounts of information seeking that these are understood and studied allowing you to determine trends and probabilities in the processes that companies perform. Finally, there are keywords such as digitalization, finance, and risk reduction which are keywords that determine the innovations that are made in financial systems, which in recent years used big data as a tool that allows them to digitize large volumes of accounting information and convert them into reports that help in making business decisions to reduce the risk of losses thus helping to improve business competitiveness and the fulfillment of organizational objectives.

#### **4.2 Distribution of scientific production by year of publication.**

Figure 2 shows how the scientific production is distributed according to the year of publication, taking into account that the period from 2016 to 2021 is taken.



**Figure 2.** Distribution of scientific production by year of publication.

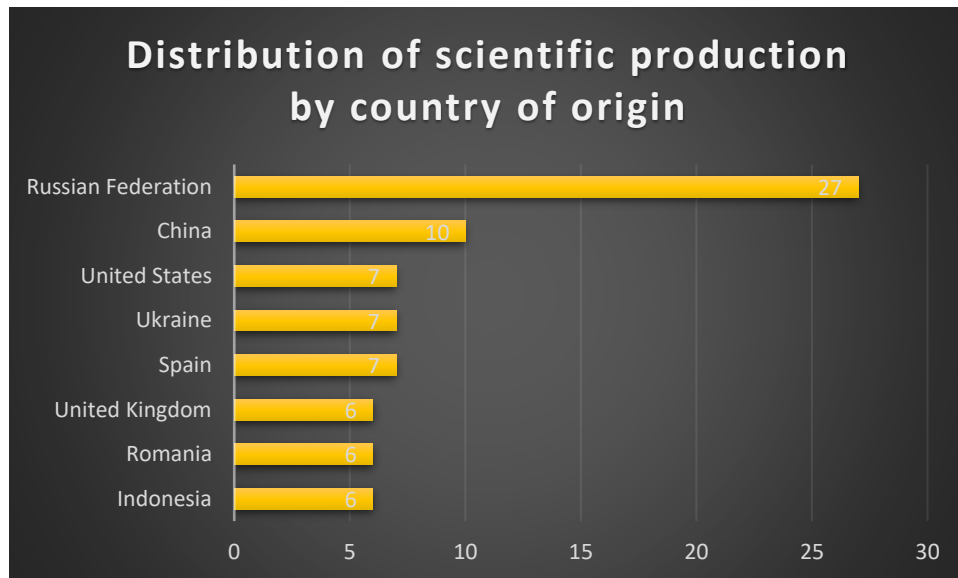
**Source:** Own elaboration (2022); based on data provided by Scopus.

2020 is the year with the highest number of publications registered in Scopus related to the variables under study, presenting 33 documents, among which is the title “Management accounting: Effect on the key factors of competitive success in the cooperative sector” (Castillo, Pacheco, & Manotas, 2020). This document highlights the role of accounting in improving business competitiveness as it helps to compress a large amount of information, more specifically, in companies belonging to the cooperative sector which are exposed to a large amount of information so they need tools that make understandable the relevant information for business management, so through this study the significant and positive influence of the dimensions of management accounting, comprehensiveness, timeliness, and integration on the key factors of competitive success and make easier the decision making process in administrative actions was proven.

In second place is 2021 which presents 26 documents within which is the title “Methodical approach for the evaluation of the level of competitiveness of the industrial enterprise based on the mathematical apparatus of the theory of indistinct sets” (M.S, 2021). This document aims to present a mathematical system for measuring the level of competitiveness of enterprises, which is defined as the set of phenomena and production processes of the enterprise's business activities and the social and economic life of society that cause changes in production costs and, as a result, the level of its competitiveness. Thus, a quantitative assessment of the tools used by companies can determine the level of competitiveness of an organization within a business sector.

#### **4.3 Distribution of scientific production by country of origin.**

Figure 3 shows the distribution of scientific production according to the nationality of the authors.



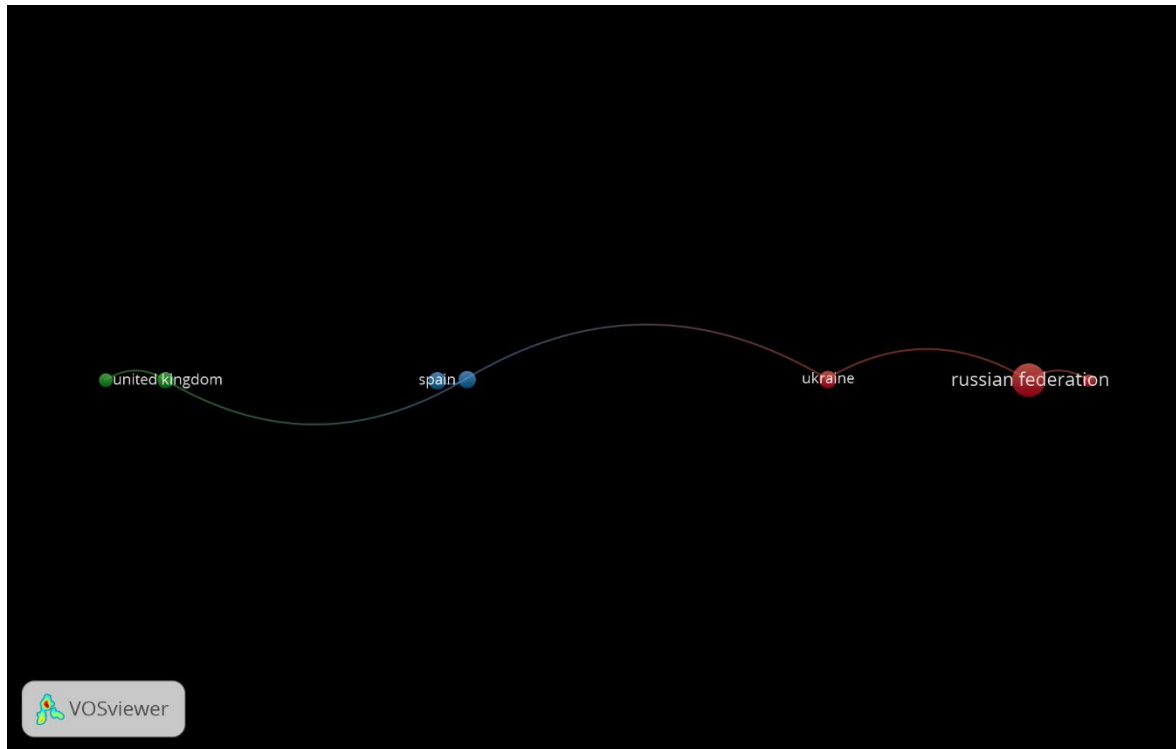
**Figure 3.** Distribution of scientific production by country of origin.

**Source:** Own elaboration (2022); based on data provided by Scopus.

The Russian Federation is the country with the largest contribution to research related to the importance of accounting in business competitiveness, presenting 27 documents registered in Scopus, among which is “Control and analytical aspects of management of financial results of enterprises”. (Klychova et al., 2021). The main objective of this document is to present the development of the theoretical bases and the development of recommendations on the perfection of the methodical maintenance of the internal control of financial results. For this, they highlight the importance of knowing and having an internal control system, so through a conceptual model, they explain the theoretical bases of an effective financial system for the correct management of accounting information that allows for improving business competitiveness. All of the above presents the

necessary knowledge to implement financial systems as an ideal tool to improve business management and achieve organizational objectives.

At this point, it should be noted that the production of scientific publications, when classified by country of origin, presents a special characteristic and that is the collaboration between authors with different affiliations to both public and private institutions, and these institutions can be from the same country or of different nationalities so that the production of an article co-authored by different authors from different countries of origin allows each of the countries to add up as a unit in the overall publications. This is best explained in Figure 4, which shows the flow of collaborative work from different countries.



**Figure 4.** Co-citations between countries.

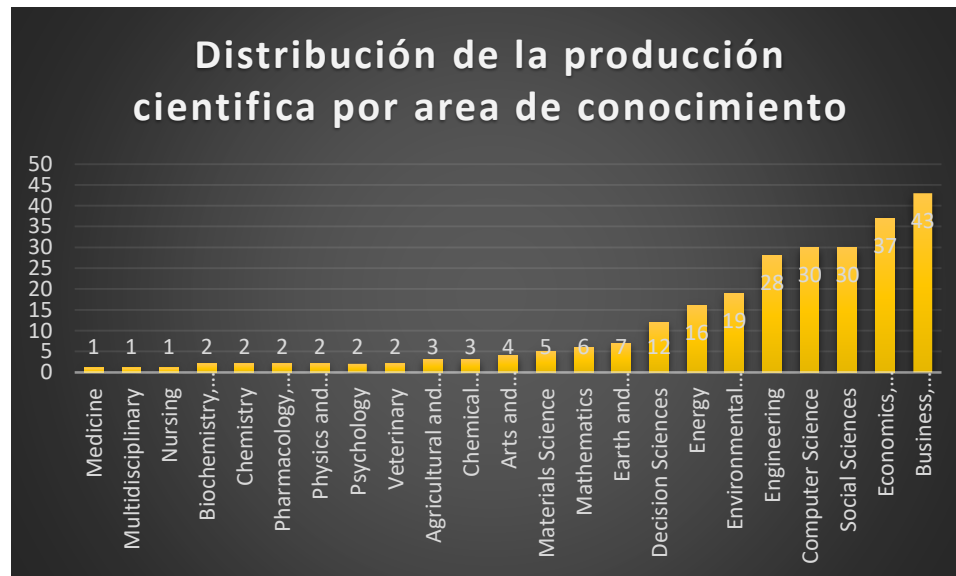
**Source:** Own elaboration (2022); based on data provided by Scopus.

As mentioned above, the Russian Federation is the country with the greatest contribution to research related to the variables under study, with publications in collaboration with authors from Ukraine, Spain, and the United Kingdom to conduct comparative studies to establish how accounting systems are implemented in different countries and to determine their influence on business competitiveness. In second place is China with 10 publications, including “The impact of artificial intelligence on the accounting industry” (Shi, 2020). This document aims to analyze the challenges faced by the accounting industry when implementing artificial intelligence to optimize their processes, this also generates several problems such as the unemployment of

many accountants and new problems that come with this. Even so, artificial intelligence represents the improvement of business efficiency, the reduction of work errors, the prevention, and control of business risks, the improvement of business competitiveness and the improvement of human resources efficiency. Finally, it concludes with the need to train accountants on accounting systems using artificial intelligence.

#### **4.4 Distribution of scientific production by area of knowledge**

Figure 5 below shows how the production of scientific publications is distributed according to the area of knowledge through which the different research methodologies are executed.



**Figure 5.** Distribution of scientific production by area of knowledge.

**Source:** Own elaboration (2022); based on data provided by Scopus.

Business is the area of knowledge with the largest number of contributions through the theories that are framed in it, in the search for new knowledge about the importance of accounting in improving business competitiveness with 43 publications, within which is the title “The design and implementation of the financial management information system of the company” (Zhou, 2017). This paper aims to study a financial information system that analyzes the appropriate features to help TF group companies to invest in the business model of accounting and fund management, eliminates the information screen, and controls the process of “centralized management mode” thus helping to determine the best domestic and overseas investments, so it was concluded that this financial system is the basic realization of investment through accounting information and data analysis seeking to accelerate the turnover of capital and integration of resources to improve business competitiveness.

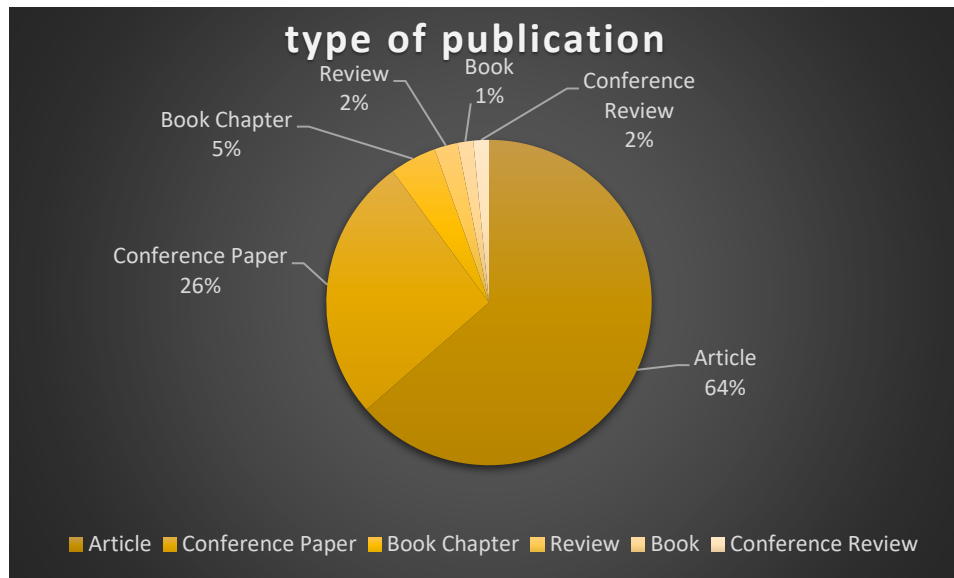
In second place is *economy*, where 37 documents were written following the guidelines

of the topics related to this area. Among these documents is “Digitization as a vector of development of information systems and modernization of accounting systems” (Chyzhevskaya et al., 2021). The main objective of this document is to support the idea that the digitalization of the economy implies the need to modernize the systems and mechanisms of companies to ensure their competitiveness and improve management systems. All this starts from the analysis of digitization trends in companies using tools such as BigData, cloud storage, and Blockchain that help to make financial systems much more efficient and in line with what the economy requests, giving companies the necessary tools to improve their competitiveness both in business and in the management of digital media.

#### 4.5 Type of publication

Figure 6 shows how the bibliographic production is distributed according to the type of publication chosen by the authors.





**Figure 6.** Type of publication

**Source:** Own elaboration (2022); based on data provided by Scopus.

As shown in Figure 6, within the different types of publications, 64% of the total number of documents identified through Phase 1 of the Methodological Design, correspond to Journal Articles, among which is the one entitled “Accounting control system, accounting information quality, value creation, and entrepreneurial success: An empirical investigation of auto parts businesses in Thailand” (Phornlaphatrachakorn, 2020). The main objective of this paper is to examine the effects of the accounting control system on accounting information quality, value creation, and business success of auto parts firms in Thailand. Therefore, 179 auto parts companies were examined, and thanks to the data collected and analyzed, it was found that the accounting information systems are correlated with the quality of information processed having a significant positive effect on the success of the company and significantly mediates the relationship between the accounting control system and the success of the company helping to improve business competitiveness in the long term.

In second place are the conference proceedings which represent 18% of the total number of documents identified in this study. Within these publications is the title “Investment decision of SMEs based on cloud accounting in the era of big data” (Yu & Tang, 2020) This document determines the role of financial systems in the investment decisions of companies, considering that big data is the new era of accounting information with which you can provide massive data for various economic activities, but also provide valuable information for decision making of large and small companies, helping the crossing of information that raises business competitiveness and reduce risks when making decisions, so it is concluded that financial information systems based on big data seek to effectively promote innovation and development of enterprises and help companies to seize market opportunities.

## 5. Conclusions

Thanks to the bibliometric analysis proposed in the present research, it can be determined that the Russian Federation is the country with the highest number of bibliographic records in the

Scopus database during the period from 2016 to 2022 with a total of 27 documents. The scientific production related to the study of Accounting as a useful tool to develop competitiveness in companies has presented an important growth during the previously mentioned period, going from 14 publications in 2016 to 26 units in 2021 being 2020 the year with the highest number of publication with 33 documents, that is to say, it was possible to double the creation of bibliographic records in 5 years, which indicates the importance that accounting has in the improvement of business competitiveness where through the analysis of financial information it helps in decision making reducing risks and improving the possibilities of success of the organization.

Accounting is a necessary tool in business management because thanks to the tabulation and analysis of accounting information help the decision-making process to be more effective in helping to solve problems. In recent years, financial accounting systems have used big data as the ideal tool for processing large amounts of information allowing them to enter the era of digitization making accounting reports much more detailed and truthful by crossing information and modernizing business systems thus helping their production and management processes are becoming more efficient.

Accounting is important in all types of companies, helping SMEs to improve their accounting processes helping their business growth and fulfillment of organizational objectives. All of the above, allows this article to conclude, highlighting the importance of knowing the theory or bibliographic resources that seek to awaken the interest in organizations, to manage efficient financial accounting systems that allow the company to obtain quality and accurate information that helps in problem-solving and decision making, reducing risks when investing and improving its business competitiveness. That is why the need for

studies such as the one presented in this document is highlighted, which makes a tour of those texts that address the aforementioned topic, to give the reader a broad view of the current situation of the literature on accounting as a useful tool to develop competitiveness in enterprises.

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