

# LOCAL DEVELOPMENT AND SOCIO-ECONOMIC ENTREPRENEURSHIP THROUGH THE USE OF NEW INFORMATION AND COMMUNICATION TECHNOLOGIES AS A RELEVANT DIMENSION OF COMPETITIVENESS IN GUAYAQUIL'S COMPANIES

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## Abstract

To develop this article, a documentary review of the elaboration and production of research works related to the study of Local Development, Socio-economic Entrepreneurship and the use of New Information and Communication Technologies at the Latin American level was carried out in order to know, through a bibliometric study, the main characteristics of 13 publications registered in the Scopus database during the period 2017-2021. The results obtained from this database were organized in tables and figures, categorizing the information by variables such as Year of Publication, Country of Origin and Area of Knowledge, which allowed to identify, through qualitative analysis, the position of different authors regarding the proposed topic. The main findings of this research were that Mexico stood out for having the highest scientific production, leading the list with 4 publications. Likewise, the area of knowledge that contributed the most to the construction of bibliographic material related to the study of variables was the social sciences with 7 published documents.

**Keywords:** Local Development, Socioeconomic Entrepreneurship, New Information and Communication Technologies (NICT), Competitiveness.

## 1. Introduction

With the passage of time, the need for the entire world to remain in continuous interconnection with other peers to remain alert to the constant social, economic and environmental changes it faces and thus make the best decisions for its environment has become more noticeable. Governments, individuals and companies as sources of employment and development are no strangers to this need, so their interest has been observed in implementing New Information and Communication Technologies (NICT) that allow the development of more efficient processes that positively influence their levels of competitiveness.

On the one hand, New Information and Communication Technologies (NICT) can be defined as follows:

These technologies are considered centered on computer programs or software, digital devices (smartphones, tablets, smartwatches, among others) and communication techniques (social networks and email), which further facilitate organizational processes and are easy to implement and use (Acosta Véliz et al., 2020). On the other hand, competitiveness refers to the ability of a

company to be better than other companies, i.e., to offer better quality through using better raw materials and resources. Although there is a close relationship between NICT and competitiveness, it should be noted that nowadays, it is not possible to refer only to the economic aspect; on the contrary, the social aspect has become the most relevant factor to be taken into account within an organization. For this reason, this research article seeks to describe the main characteristics of the set of publications attached to the Scopus database that are directly related to the variables mentioned above, as well as the description of the position of certain authors affiliated to institutions around the world, during the period between 2017 and 2021 at the Latin American level.

## 2. General Objective

To analyze from a bibliometric and bibliographic perspective, the elaboration of works on the variables Local Development, Socioeconomic Entrepreneurship and the use of New Information and Communication Technologies in Scopus during 2017-2021.

## 3. Methodology

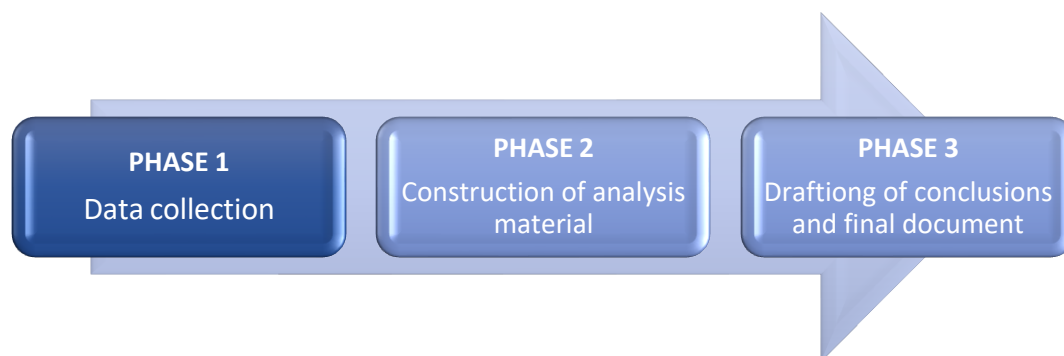
This article is conducted through a mixed research approach combining quantitative and qualitative methods.

On the one hand, a quantitative analysis of the information selected in Scopus is carried out under a bibliometric approach of the scientific production corresponding to the study of Local Development, Socioeconomic Entrepreneurship and the use of New Information and Communication Technologies.

On the other hand, from a qualitative perspective, examples of some research papers published in the area of the study mentioned above are analyzed from a bibliographic approach that allows describing the position of different authors on the proposed topic.

It is important to note that the entire search was carried out through Scopus, establishing the parameters referenced in *Figure 1*.

### 3.1 Methodological design



**Figure 1. Methodological design**  
Source: Own elaboration

#### 3.1.1 Phase 1: Data Collection

The data collection was executed from the Search tool on the Scopus web page, where 13 publications were obtained from the choice of the following filters:

local AND development AND socio-economic AND entrepreneurs, AND information AND communication AND technologies AND ( LIMIT-TO ( PUBYEAR , 2021 ) OR LIMIT-TO ( PUBYEAR , 2020 ) OR LIMIT-TO ( PUBYEAR , 2019 ) OR LIMIT-TO ( PUBYEAR , 2018 ) OR LIMIT-TO ( PUBYEAR , 2017 ) AND ( LIMIT-TO ( AFFILCOUNTRY , "Mexico" ) OR LIMIT-TO ( AFFILCOUNTRY , "Colombia" ) ) OR

LIMIT-TO ( AFFILCOUNTRY , “Brazil” ) OR LIMIT-TO ( AFFILCOUNTRY , “Chile” ) OR LIMIT-TO ( AFFILCOUNTRY , “Ecuador” ) OR LIMIT-TO ( AFFILCOUNTRY , “Peru” ) OR LIMIT-TO ( AFFILCOUNTRY , “Argentina” ) OR LIMIT-TO ( AFFILCOUNTRY , “Guatemala” ) )

- ❖ Published documents whose study variables are related to the study of local development, socio-economic entrepreneurship and the use of new information and communication technologies.
- ❖ Limited to the years 2017-2021.
- ❖ Limited to Latin American countries.
- ❖ Without distinction of area of knowledge.
- ❖ Without distinction of type of publication.

### 3.1.2 Phase 2: Construction of analysis material

The information collected in Scopus during the previous phase is organized and subsequently classified through graphs, figures and tables as follows:

- ❖ Word Co-occurrence.
- ❖ Year of publication.
- ❖ Country of origin of the publication.
- ❖ Knowledge area.
- ❖ Type of Publication.

### 3.1.3 Phase 3: Drafting conclusions and final document

In this phase, the study proceed analyzing the results previously obtained, resulting in the determination of conclusions and, consequently, the final document.

## 4. Results

### 4.1 Co-occurrence of words

Figure 2 shows the Co-occurrence of keywords found in the publications identified in the Scopus database.



**Figure 2.** Co-occurrence of words

**Source:** Own elaboration (2022); based on data exported from Scopus.

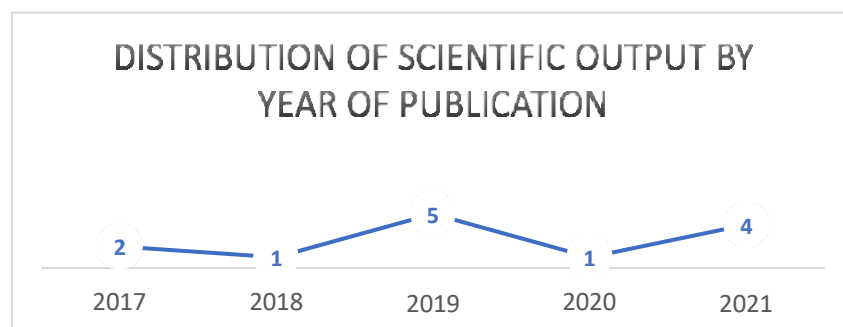
As mentioned above, the data in Figure 2 were exported from Scopus, which shows us some of our variables and their relationship with other terms, which we will explain below.

Latin America, composed of developing countries, remains in constant change due to the demands that globalization has brought with it. One of these has been the achievement of social justice where inequalities of all kinds can be diminished; hence, there is a number of emerging enterprises that seek to meet the economic and social needs of people who, in turn, influence the local and socio-economic development of territory to contribute to regional development jointly.

External factors such as covid-19 have affected companies and ventures in maximizing their objectives. However, they have always depended to a greater extent on the characteristics of the environment in which the processes and those in charge of their execution are carried out.

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

Figure 3 shows the distribution of scientific production according to the year of publication.



**Figure 3.** Distribution of scientific production by year of publication.  
Source: Own elaboration (2022); based on data exported from Scopus.

Figure 3 shows that the scientific production concerning the variables Local Development, Socioeconomic Entrepreneurship and the use of New Information and Communication Technologies at the Latin American level in the period between the years 2017 and 2021, left as a result of the publication of 13 documents in the Scopus database containing the keywords. Likewise, throughout the period, several changes were experienced. It started with the year 2017, in which one of the lowest numbers of documents published during the period is observed, a number that decreases the following year. Although the number of publications differed each year, it is important to note that those with the highest scientific contribution were in 2019 and 2021, with 5 and 4 papers, respectively.

Of the latter, the book entitled “Economic Growth in Latin America and the Impact of the Global Financial Crisis” stands out, where the effects of the said financial crisis on economic growth in Latin America are addressed from “a variety of applicable points of view and topics such as telecommunications, subprime lending and public education” (Cerezo Bregni & Garita, 2017).

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

Figure 4 shows the distribution of scientific production according to the nationality of the authors.



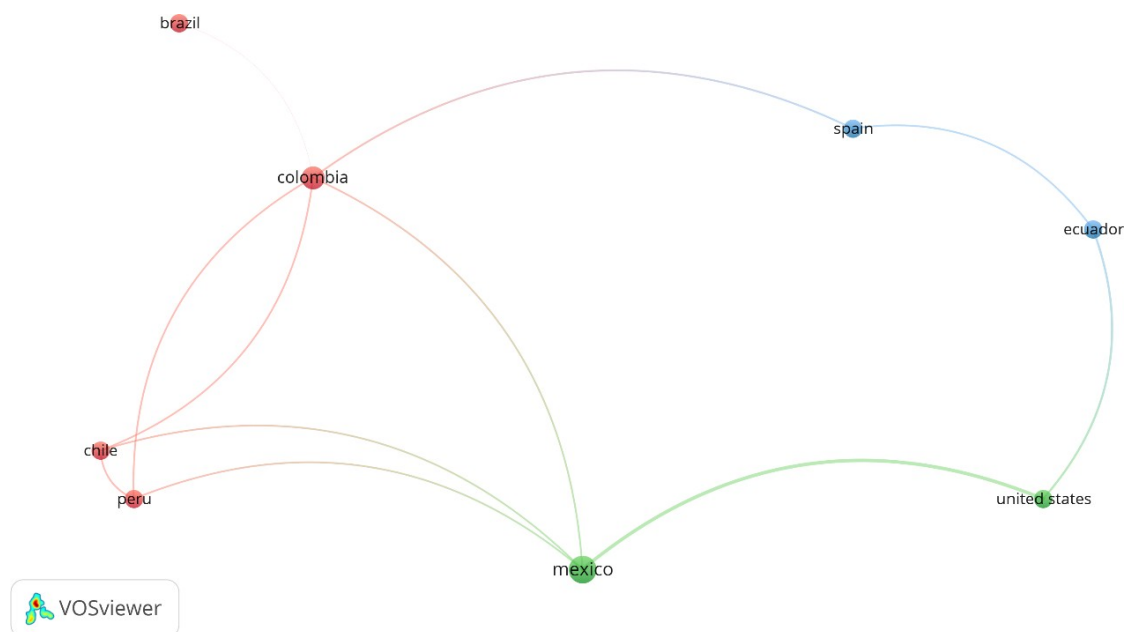
**Figure 4.** Distribution of scientific production by country of origin.

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

In the study of Local Development, Socioeconomic Entrepreneurship and the use of New Information Technologies, Mexico leads the list of published papers with a total of 7 records in the Scopus database during the period of the years 2017-2021, followed by Colombia and Brazil, with 3 and 2 texts respectively.

The paper entitled “Entrepreneurship research in Latin America: a literature review” (Alvarez & Lopez, 2018) focuses on studying the state of entrepreneurship research in the Latin American context, identifying the research conducted about Entrepreneurship in the region. Managing to identify that there are not much research or documents related to the proposed topic, it is considered necessary to stimulate researchers and organizations to make more scientific contributions in this study area.

At this point, it is important to note that the elaboration of scientific publications, in many cases, is based on collaborations that may involve private and public institutions from one or several countries. Therefore, the same publication may be linked to one or more authors with different nationalities and thus to more than one country simultaneously, making part of each of the total number of articles or publications in the final sum. *Figure 5* below shows in greater detail the flow of collaborative work carried out by several countries.



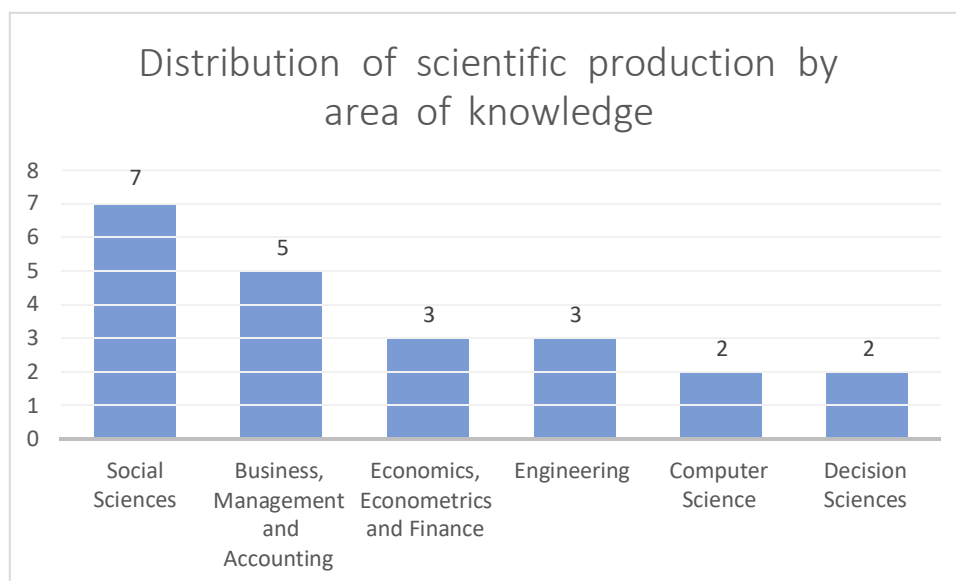
**Figure 5.** Co-citations between countries.

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

*Figure 5* shows the research grouping according to the collaboration between authors from different international institutions. There is outstanding participation between authors affiliated with institutions in Latin American countries such as Mexico, Chile, Peru, Colombia, and Ecuador and countries in other regions such as Spain and the United States.

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

*Figure 6* shows the distribution of the production of scientific publications according to the area of knowledge through which the different research methodologies are implemented.



**Figure 6.** Distribution of scientific production by area of knowledge.

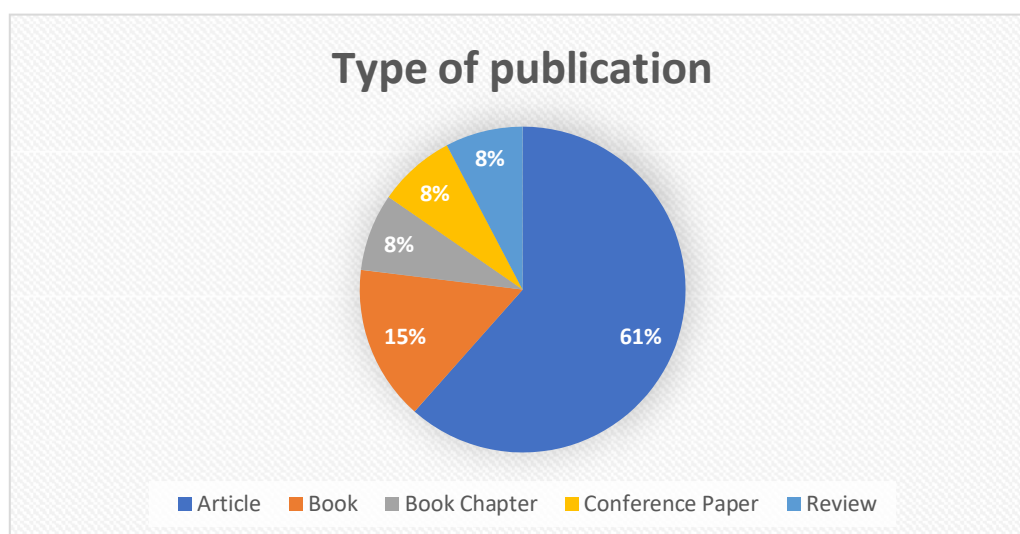
Source: Own elaboration (2022); based on data provided by Scopus.

Due to the significant contribution of Entrepreneurship to the Local and Socio-economic Development of any nation, it is not surprising that most of the publications found in the Scopus database on variables are from the area of social sciences, occupying the leading position in the publication of documents. Other areas, such as business and economics, have contributed to studying these variables, publishing 5 and 3 documents, respectively.

As shown in *Figure 6*, the variables under study are relevant in several areas of knowledge as they depend on various factors to maximize the achievement of benefits or positive results in today's society.

#### 4.5 Type of publication

The following graph shows the distribution of the bibliographic findings according to the type of publication made by each of the authors found in Scopus.



**Figure 7.** Type of publication.

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



Figure 7 clearly shows that the predominant type of publication in the study of Local Development, Socioeconomic Entrepreneurship and the use of New Information Technologies was the journal article, with 8 documents corresponding to 61% of the total. Second place booked with 2, followed by book chapters with only 1 publication, representing 15% and 8% respectively.

One of the articles that stands out the most is the one titled “ Social cryptocurrencies as a model to enhance sustainable development” (Mollá-Sirvent et al., 2021), which arises from the concern for the growing figures of inequality and socio-economic deterioration which Latin American countries are exposed, leading to the consideration of technology as an excellent alternative to try to improve the problem. One of their significant findings points out that actors such as innovation and social entrepreneurship will come together in a new generation of social currencies, extending cryptocurrency technology to the domains of social business” (Mollá-Sirvent et al., 2021).

## 5. Conclusions

Finally, thanks to the bibliometric analysis carried out in the present research work, it was possible to establish that Mexico was the country with the highest number of published records facing the variables of Local Development, Socioeconomic Entrepreneurship and the use of New Information and Communication Technologies with a total of 4 publications in Scopus database during the period 2017-2021 in Latin America.

After analyzing all the information, there is no doubt that the social sphere has been fundamental for the emergence of multiple socio-economic enterprises, which have led to social development in Latin America through ICT. Additionally, it can be determined that “the implementation and use of ICT in companies and the changes in the structure of the same” (Cano Pita, 2018) have served as a means to greater long-term competitiveness and better overall performance.


In the case of Guayaquil, the second most populated city in Ecuador, there is an increase in the number of enterprises due to the need to obtain income; however, it is essential to continue in the process of implementing NICT as a differentiator since they enable companies or entrepreneurs to “promote their products and obtain a competitive advantage that results in benefits for the entire market, and companies that have not yet done so must adapt in order to survive” (Acosta Véliz et al., 2020).

In order to continue generating awareness of the advantages brought about by the implementation of NICT in companies as well as in Local Development and Socioeconomic Enterprises, it is hoped that this research article will encourage an increase in the participation of scientific communities in the study of these variables, from any scientific profile and area of knowledge, which will allow Latin American society and the whole world to know accurately the strategies that can be carried out to ensure access to new technologies.

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