

The Role Of Technological Disruption In Business Transformation: Keys To Entrepreneurial Success

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Summary

A documentary review was carried out on the production and publication of research papers related to the study of the variables Technology and Business Transformation. The purpose of the bibliometric analysis proposed in this document was to know the main characteristics of the volume of publications registered in the Scopus database during the period 2017-2022 by Latin American institutions, achieving the identification of 240 publications. The information provided by this platform was organized through graphs and figures categorizing the information by Year of Publication, Country of Origin, Area of Knowledge and Type of Publication. Once these characteristics have been described, the position of different authors towards the proposed theme is referenced through a qualitative analysis. Among the main findings made through

this research, it is found that Brazil with 113 publications was the Latin American country with the highest scientific production registered in the name of authors affiliated with institutions of that nation. The Area of Knowledge that made the greatest contribution to the construction of bibliographic material referring to the study of the variables Technology and Business Transformation was Computer Science with 117 published documents, and the Type of Publication most used during the period indicated above were Journal Articles with 71% of the total scientific production.

Keywords: Innovation, Strategy, Entrepreneurship, Latin America.

1. Introduction

Technological disruption in this era has changed the way businesses operate and transform. With the present technological advances, organizations are forced to adapt and adopt new strategies in order to be at the commercial forefront in a constantly changing market. A technological disruption is a fundamental change that occurs when a new technology or innovation completely changes an industry or in a certain sector. These innovations bring with them the development of new products or services or the incorporation of technical solutions that allow optimizing the internal processes of companies. On the other hand, business transformation involves significant changes in the operations of organizations, in themselves and in communications with customers.

However, technological disruption accelerates transformation processes, since companies must quickly adapt to the constant demands of the market and thus take advantage of the opportunities offered by the current technological era. Technological disruption is known to affect all the various sectors of the economy, from processing to services. Likewise, the introduction of artificial intelligence, machine learning and the implementation of robotics are transforming the way companies have been operating and interacting with customers. These new technologies allow various government entities to automate the different repetitive tasks, in order to improve

operational efficiency and provide a personalized experience for each client.

Digital disruption aims to found new companies and new business models. Technology startups are using the digital age to create innovative solutions that challenge old business paradigms and change the global marketplace game. However, it is important to note that digital disruption is not without challenges for businesses. The proper implementation of these technological changes demands a fairly significant investment with which it can generate changes in the institutional structure and the skills of employees. Likewise, companies must be prepared to face and counteract the future commercial challenges of new companies and therefore be able to adapt quickly to changes in the markets.

Finally, it is important to highlight the importance of technological disruption as it is drastically transforming the way companies work and change. To remain competitive, government and institutional actors must be willing to acquire new technologies in order to adapt to market volatility. Companies that can benefit from applied sciences and adapt to new business models will be those that manage to excel in the commercial age and progress in the present digital age. For this reason, this article seeks to describe the main characteristics of the compendium of publications indexed in the Scopus database related to the variables Technology and Business Transformation, as well. As the description of the position of certain authors affiliated with institutions, during the period between 2017 and 2022.

2. General Objective

Analyze from a bibliometric and bibliographic perspective, the elaboration and publication of research works in high-impact journals indexed in the Scopus database on the variables Technology and Business Transformation during the period 2017-2022 by Latin American institutions.

3. Methodology

This article is carried out through a mixed orientation research that combines the quantitative and qualitative method.

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 the variables Technology and Business Transformation. On the other hand, examples of some research works published in the area of study indicated above are analyzed from a qualitative perspective, starting from a bibliographic approach that allows describing the position of different authors against the proposed topic. It is important to note that the entire search was performed through Scopus, managing to establish the parameters referenced in Figure 1.

3.1. Methodological design

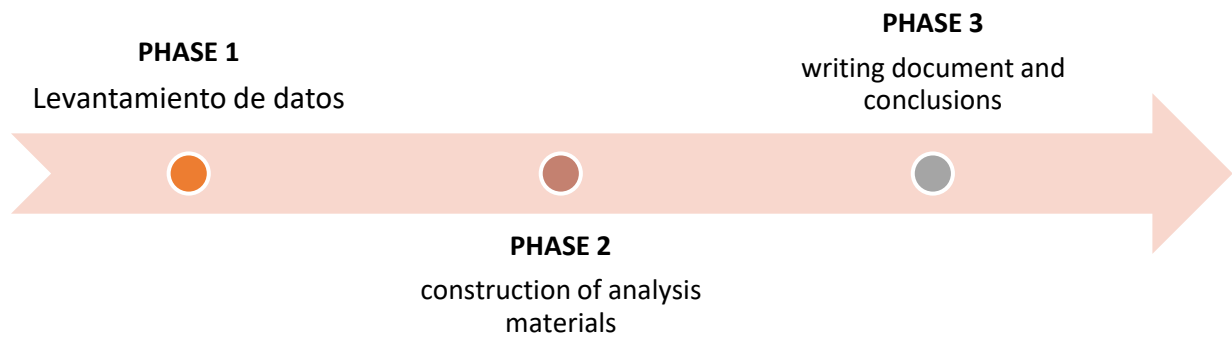


Figure 1. Methodological design

Source: Authors.

3.1.1 Phase 1: Data collection

Data collection was carried out from the Search tool on the Scopus website, where 240 publications were obtained from the choice of the following filters:

TITLE-ABS-KEY (technology, AND business AND transformation) AND PUBYEAR > 2016 AND PUBYEAR < 2023 AND (LIMIT-TO (AFFILCOUNTRY , "Brazil") OR LIMIT-TO (AFFILCOUNTRY , "Colombia") OR LIMIT-TO (AFFILCOUNTRY , "Mexico") OR LIMIT-TO (AFFILCOUNTRY , "Peru") OR LIMIT-TO (AFFILCOUNTRY , "Chile") OR LIMIT-TO (AFFILCOUNTRY , "Ecuador") OR LIMIT-TO (AFFILCOUNTRY , "Argentina") OR LIMIT-TO (AFFILCOUNTRY , "Cuba") OR LIMIT-TO (AFFILCOUNTRY , "Venezuela") OR LIMIT-TO (AFFILCOUNTRY , "Uruguay") OR LIMIT-TO (AFFILCOUNTRY , "Paraguay") OR LIMIT-TO (AFFILCOUNTRY , "Puerto Rico") OR LIMIT-TO (

AFFILCOUNTRY , "Panama") OR LIMIT-TO (AFFILCOUNTRY , "Honduras"))

- Published documents whose study variables are related to the study of the variables, Technology and Business Transformation.
- Limited to the years 2017-2022.
- Limited to Latin American countries.
- Without distinction of area of knowledge.
- Regardless 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 by graphs, figures and tables as follows:

- Co-occurrence of words.
- Year of publication.
- Country of origin of the publication.
- Area of knowledge.
- Type of publication.

3.1.3 Phase 3: Drafting of conclusions and outcome document

In this phase, we proceed with the analysis of the results previously yielded resulting in the determination of conclusions and, consequently, the obtaining of 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.

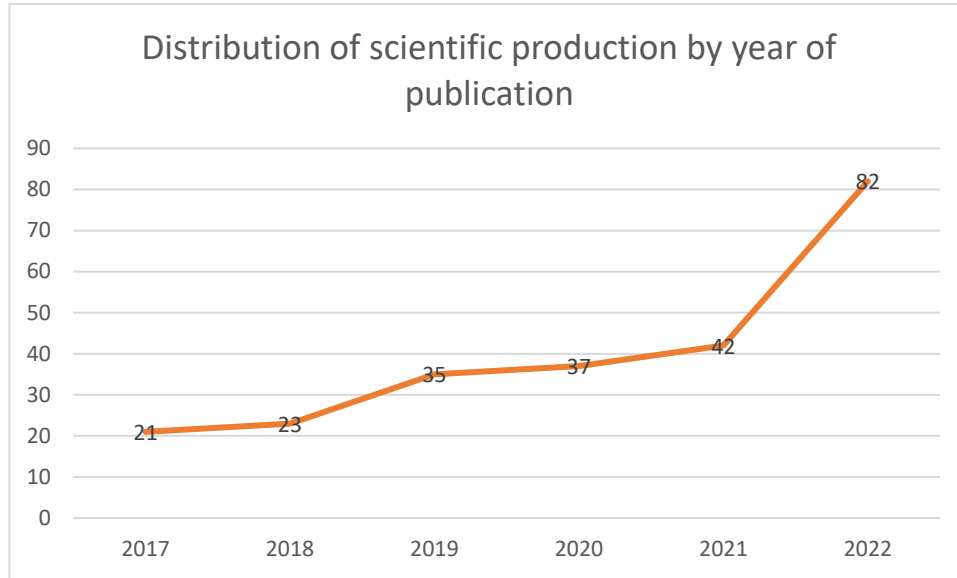


Figure 3. Distribution of scientific production by year of publication.

Source: Own elaboration (2023); based on data exported from Scopus

Among the main characteristics evidenced by the distribution of scientific production by year of publication, a level of number of publications registered in Scopus was the years 2022, reaching a total of 82 documents published in journals indexed in said platform. This study aims to investigate how organizations that invest in social innovation, such as social and for-profit enterprises, organize and shape the dynamics between social innovation and transformation. Design/methodology/approach: This is a qualitative interpretive study through the theoretical lens of social innovation. The organizational phenomenon studied was the business strategy for sustainable regional development of a Brazilian financial institution. Secondary data was collected from the financial institution's documents. Data analysis followed a categorization technique. Findings: This research presents five intersectional elements that act as binders between the structural elements common to these organizations: processes (interorganizational and intraorganizational), forms of materialization of social innovation (products, experiences and replicable forms) and impacts (on society and organization). Practical implications: The article contributes to the debate on social innovation in

terms of its definition, showing that it is both a phenomenon and a theory, still little explored.(Gonçalves, 2022)

4.3 Distribution of scientific production by country of origin

Figure 4 shows how scientific production is distributed according to the country of origin of the institutions to which the authors are affiliated.



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

Source: Own elaboration (2023); based on data provided by Scopus.

Within the distribution of scientific production by country of origin, records from institutions were taken into account, establishing Brazil, as the country of that community, with the highest number of publications indexed in Scopus during the period 2017-2022, with a total of 113 publications in total. In second place, Colombia with 47 scientific papers, and Mexico ranking third presenting to the scientific community, with a total of 25 papers among which is the article entitled "Industry 5.0 beyond technology: an analysis through the lens of the commercial and operations management literature" This study aims to analyze the state of the art and understand the approaches that constitute the study of I5.0, through the lens of business and operations management. Method: A systematic

literature review was conducted through the lens of business and operations management literature. Results: Four major themes were identified: (i) technological application, (ii) Human Resources and workers, (iii) education, and (iv) business and operations management. For each topic, implications, future pathways and practical considerations are presented. Conclusions: Most 15.0 studies have focused on Human Resources and workers discussing the role of technological applications in operator safety. Although 15.0 calls for a step forward in sustainable development, studies on this are scarce. In addition, the literature still lacks practical contributions and frameworks on how 15.0 might impact business management.(Borchardt, 2022)

4.4 Distribution of scientific production by area of knowledge

Figure 5 shows the distribution of the elaboration of scientific publications from the area of knowledge through which the different research methodologies are implemented.

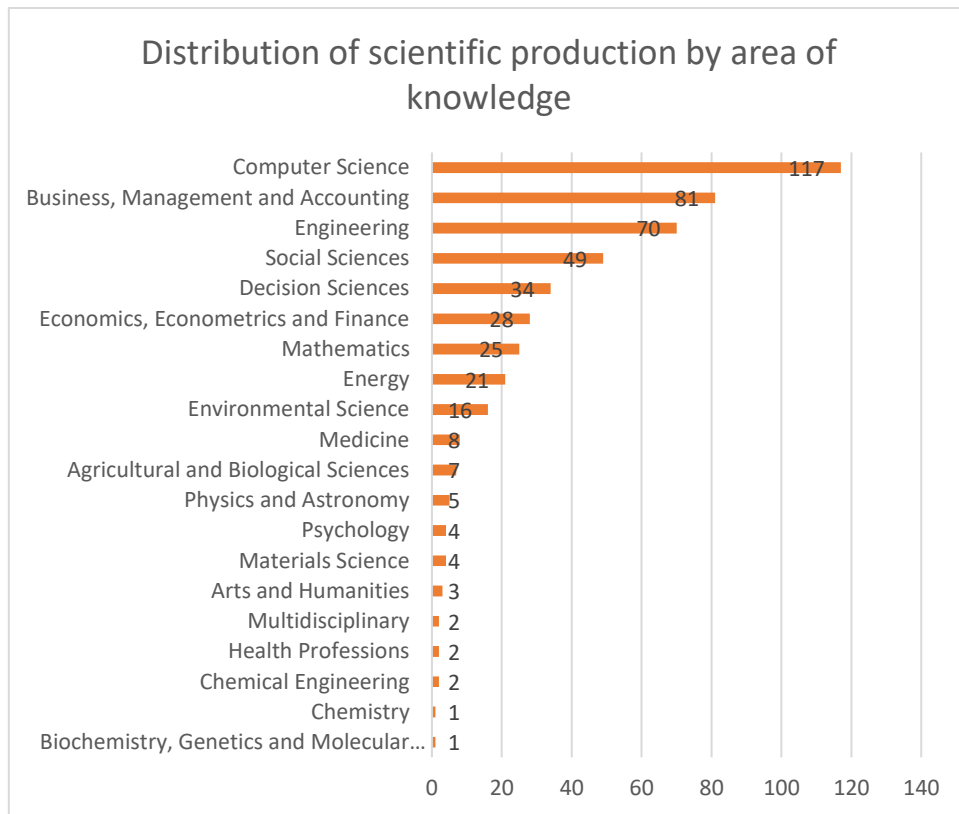


Figure 5. Distribution of scientific production by area of knowledge.

Source: Own elaboration (2023); based on data provided by Scopus

Computer Science was the area of knowledge with the highest number of publications registered in Scopus with a total of 117 documents that have based their variable methodologies Technology and Business Transformation. In second place, Business, Management and Accounting with 81 articles and Engineering in third place with 70. The above can be explained thanks to the contribution and study of different branches, the article with the greatest impact was registered by the Computer Science area entitled "Delivery of multichannel digital services and service ecosystems: the role of data integration within intelligent systems of products and services" whose scope of study is to understand how multichannel digital services can be supported by the integration of data in time real service ecosystems to provide Smart PSS business models. Using the theory of organizational information processing, we consider the integration of data from three ecosystem actors (other business units, suppliers and customers) and analyze how such data sources can support the use of these digital technologies in three types of Smart PSS business models. . We examined these relationships through regression analysis based on a survey of 92 manufacturers, providing a typology of different Smart PSS business models in the ecosystem. Our study illustrates how data flows through ecosystem actors to support Smart PSS business models. Practitioners and academics can learn how to treat Smart PSS according to the specific business models to be implemented and how to combine digital technologies with data integration channels in the service ecosystem. In addition, we show how this combination of digital transformation and Smart PSS helps to expand the theory of organizational information processing in the domain of innovation ecosystems, also providing a new line of research to the digital servitization literature.(Dalenogare, 2022)

4.5 Type of publication

In the following graph, you will observe the distribution of the bibliographic finding according to the type of publication made by each of the authors found in Scopus.

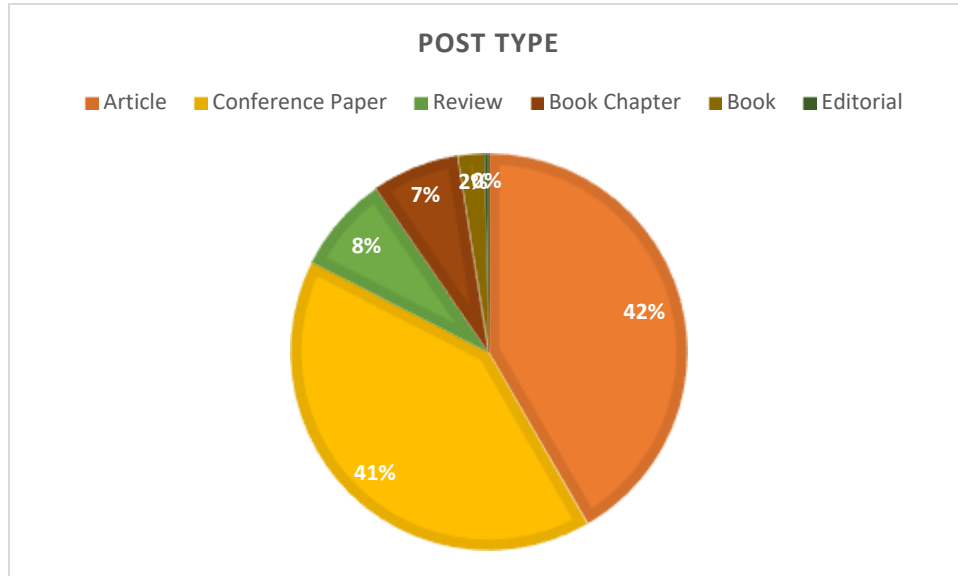


Figure 6. Type of publication.

Source: Own elaboration (2023); based on data provided by Scopus.

The type of publication most frequently used by the researchers referenced in the body of this document was entitled Journal Articles with 42% of the total production identified for analysis, followed by Session Paper with 41%. Journal are part of this classification, representing 8% of the research papers published during the period 2017-2022 in journals indexed in Scopus. In this last category, the one entitled "Life cycle assessment and relationships with the triple bottom line in meat production: a systematic approach to cleaner production" stands out. The objective of this research was to make a scientific map on life cycle assessment (LCA) and triple bottom line (TBL) in slaughterhouse areas, seeking Cleaner Production practices with the aim of recognizing strategic issues to maintain the sustainability of production systems. , in accordance with the development of sustainable practices and the evolution of production in slaughterhouse areas. Design/methodology/approach: The literature review was based on a general approach, with steps adapted from the study phases and activities of the preferred reporting elements for the guide to systematic review and meta-analysis recommendations (PRISMA) to conduct a systematic literature review. The activities were subdivided to discuss the results into two types of analysis: quantitative and qualitative. Findings: The main

findings of our study reinforce the importance of LCA in slaughterhouses to promote Cleaner Production, so the main measures suggested and / or adopted by different authors include the substitution of raw materials for food, with the adoption of grains, protein supplements with less environmental impact on the composition of feed and changes in processes seeking better energy efficiency and optimization of water consumption in meat processing. (Fritsch Denes, 2022)

5. Conclusions

Through the bibliometric analysis carried out in the present research work, it was established that Brazil was the country with the largest number of records published with regard to the variables Technology and Business Transformation. with a total of 113 publications in Scopus database. In the same way, it was established that the application of theories framed in the area of Computer Science, were used more frequently in the impact generated by the implementation of the digital age since this has proven to be a powerful force for the due business transmutation. However, the challenges faced by companies for technological accessibility are evident since this being global, companies are forced to adapt and run the risk of losing ground in the markets. The present digital age has been changing the way companies have been operating, leaving behind the traditional models of communication between customers to the internal operational management of companies. This implementation of new technologies has developed new business models that have changed old paradigms. Companies facing technological disruption have seen significant benefits. They are able to increase efficiency, reduce costs, open new markets and offer innovative products and services. On the other hand, companies that resist technological change suffer and lose market share.

It should be noted that technological disruption is not a single event, but an ongoing process. Technology is constantly evolving and new opportunities and challenges are constantly emerging. Companies must be prepared to continuously adapt and evolve to stay ahead of the ever-changing business environment. In short, technological disruption is changing the way businesses operate, creating new opportunities and

challenges. Companies that embrace and adapt to technological change are more likely to succeed in the future.

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