

Quantitative Analysis of Key Factors for Entrepreneurial Success: An Empirical Approach

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Abstract

A documentary review was carried out on the production and publication of research papers related to the study of the variables Entrepreneurship, Key Factors and Success. 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, achieving the identification of 207 publications in total. 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 on the proposed topic is referenced through a qualitative analysis. Among the main findings made through this research, it is found that the United States was the country with the highest number of registrations in Scopus with a total of 21 publications referring to the analysis of entrepreneurship and its focus on the analysis of what are the key factors in the success of entrepreneurship. The Area of Knowledge that made the greatest contribution to the study variables was Business, Administration and Accounting with 148 published documents, and the Type of Publication that was most used during the period indicated above were Journal Articles, which represent 71% of the total scientific production.

Keywords: *Entrepreneurship, Key Factors, Success.*

1. Introduction

The key factors of business success, where the art of innovation is the success of new companies, is not an easy task to execute since this environment is plagued by uncertainty and challenges that are present in success. In order to achieve success in companies, they must exercise effectively and promote a combination of vision, projection, passion and excellent decision-making, since these take the course of a vast economic growth that manages to measure the success of future companies. Quantitative analysis is a tool that would allow entrepreneurs to find out, optimize, mediate and ultimately directly influence the success of a company.

The implementation of statistical analysis in the context of business success, refers to the use of statistics and mathematics in order to be able to solve business, financial and risk management problems in a comprehensive way, taking into account those factors to be

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able to determine and understand in a clearer, data-driven way, of the current state of a company and its growth potential.

One of the fundamental aspects that quantitative analysis provides in business success lies in the performance of market research, which allows segmenting, analyzing, understanding, preferences and behavior of a certain target audience, by being able to identify and analyze data and market niches such as customer demographics, shopping algorithms and volatile trends that arise in the various markets. Adapting products and services in an effective way is essential for success. In quantitative analysis, it projects, plans financial analyses, which allows future financial projections to be designed in a more accurate way, this with the function of being able to execute budgets and monitor financial performance.

Entrepreneurs, in turn, must establish and continuously track performance metrics and key job performance indicators in order to evaluate their progress. These quantifiable statistical measures generate information about the different aspects of the company, such as the cost of acquiring the customer factor, return on investment and others, the integration of this new business model helps in the evaluation and management of risk, this in turn allows to identify potential threats, measure their impact and with this be able to execute strategies to minimize risks.

Understanding the competitive landscape is crucial to business success. Quantitative analysis helps compare a company to its competitors in terms of market share, pricing, product features, and customer satisfaction. It allows decision-making based on a series of data provided by the company, with the purpose of mitigating risks and being able to evaluate business performance. While we know, entrepreneurs who manage to implement these quantitative analyses and make business decisions through a series of data, manage to improve their success since it allows them to face the challenges and speculations of business ownership with this to increase their chances of being able to execute and manufacture sustainable companies over time and in a more successful way. 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 Entrepreneurship, Key Factors and Success, as well. Such as the description of the position of certain authors affiliated with institutions, during the period between 2017 and 2022.

2. General Objective

To analyze, from a bibliometric and bibliographic perspective, the production of research papers on the variables Entrepreneurship, Key Factors and Success, published in high-impact journals indexed in the Scopus database during the period 2017-2022.

3. Methodology

A quantitative analysis of the information provided by Scopus is carried out under a bibliometric approach on the scientific production related to the study of the variables Entrepreneurship, Key Factors and Success. Likewise, from a qualitative perspective, examples of some research works published in the area of study mentioned above are analyzed, from a bibliographic approach to describe the position of different authors regarding the proposed topic.

The search is carried out through the tool provided by Scopus and parameters referenced in Figure 1 are established.

3.1 Methodological design

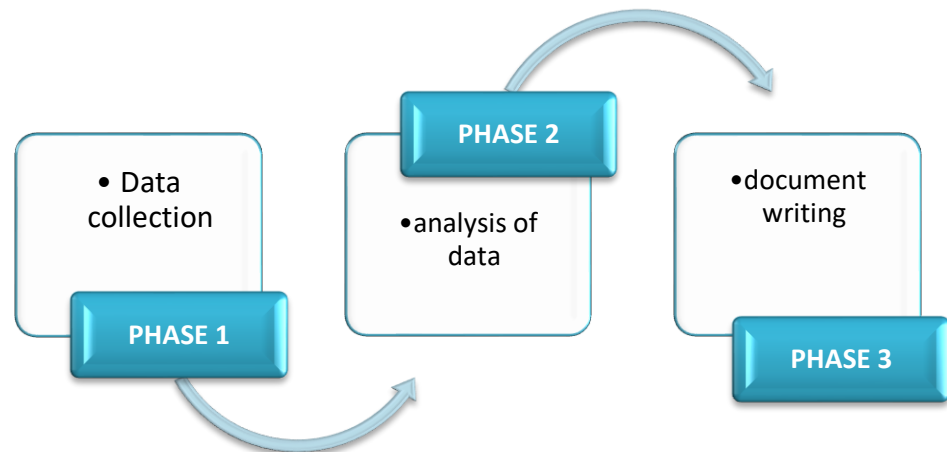


Figure 1. Methodological design

Source: Authors' own creation

3.1.1 Phase 1: Data collection

Data collection was carried out through the Search tool on the Scopus website, through which a total of 207 publications were identified. To this end, search filters were established consisting of:

TITLE-ABS-KEY (entrepreneurship, AND key AND factors, AND success) AND PUBYEAR > 2016 AND PUBYEAR < 2023

- ✓ Published documents whose study variables are related to the study of Entrepreneurship, Key Factors and Success.
- ✓ Without distinction of country of origin.
- ✓ Without distinction of area of knowledge.
- ✓ No distinction of type of publication.

3.1.2 Phase 2: Construction of analytical material

The information identified in the previous phase is organized. The classification will be made by means of graphs, figures and tables based on data provided by Scopus.

- ✓ Co-occurrence of Words.
- ✓ Year of publication
- ✓ Country of origin of the publication.
- ✓ Area of knowledge.
- ✓ Publication Type

3.1.3 Phase 3: Drafting of conclusions and outcome document

After the analysis carried out in the previous phase, we proceed to the drafting of the conclusions and preparation of the final document.

4. Results

4.1 Co-occurrence of words

Figure 2 shows the co-occurrence of keywords within the publications identified in the Scopus database.

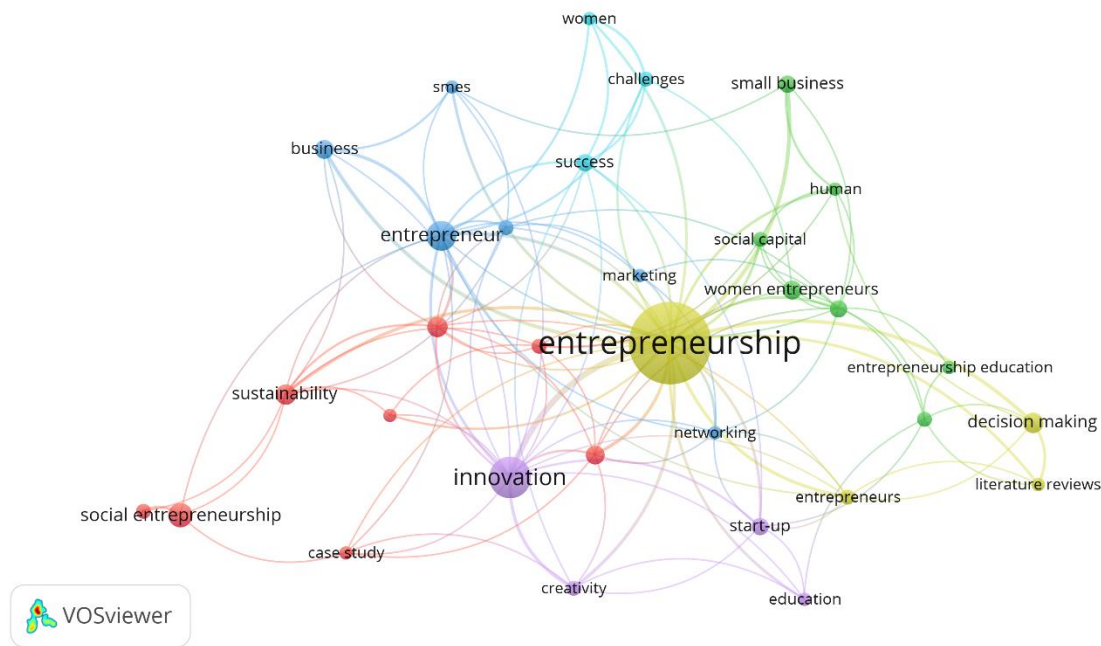


Figure 2. Co-occurrence of words

Source: Authors' own elaboration (2023); based on data provided by Scopus.

Entrepreneurship was the most frequently used keyword within the studies identified through the execution of Phase 1 of the Methodological Design proposed for the development of this article. Innovation is among the most frequently used variables, associated with variables such as Sustainability, Companies, Creativity, Social Capital, Business, Marketing, Decision Mark. From the above, it is striking, business success is an ongoing journey and quantitative analysis supports the measurement and continuous improvement of performance to adapt to changing circumstances and remain competitive. Quantitative analysis is invaluable for making forecasts. Businesses can make accurate predictions related to sales, demand, and financial performance, making it easier to strategically plan and adapt to changing market conditions. This ability to foresee potential challenges and opportunities allows companies to make proactive decisions and stay ahead of the competition by incorporating these key factors within their quantitative analysis framework, companies can equip themselves with the tools and knowledge needed to make informed decisions, optimize operations, and work towards sustainable success. In an increasingly data-centric business landscape, integrating quantitative analytics into decision-making processes is paramount for organizations looking to thrive, innovate, and meet the changing demands of their markets.

4.2 Distribution of scientific production by year of publication.

Figure 3 shows how scientific production is distributed according to the year of publication, taking into account that the period between 2017 and 2022 is taken.

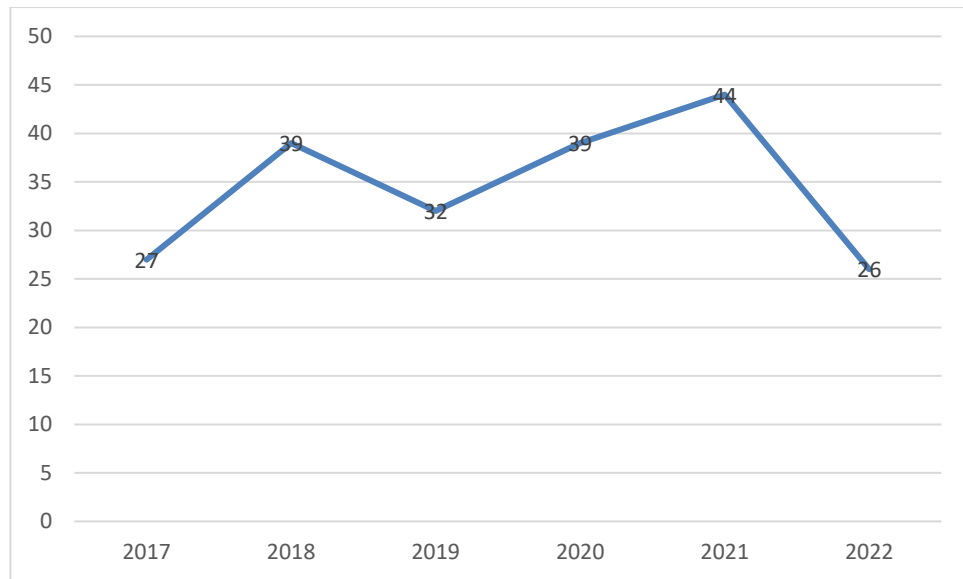


Figure 3. Distribution of scientific production by year of publication.

Source: Authors' own elaboration (2023); based on data provided by Scopus.

Among the main characteristics evidenced through the distribution of scientific production by year of publication, it is notorious a level of number of publications registered in Scopus in the years 2020, reaching a total of 6 documents published in journals indexed on this platform. This can be explained thanks to articles such as the one entitled "Interaction of potential and effective entrepreneurial capabilities in adolescents: modeling the structure of youth entrepreneurship through structural equation models" this article aims to emphasize entrepreneurial skills in adolescents, in order to determine the relationship between entrepreneurial skills (dependent variable) and the key factors for their development: personal, social, and educational (independent variables). It has an empirical-analytical design of an explanatory nature. After the design, validation and application of the evaluation instrument, the estimation was carried out using Structural Equation Modeling (SEM). The results show a great impact of potential entrepreneurial capacity on effective entrepreneurial capacity, determined by the direct effect of personal traits and life skills, the family as a moderating element, as well as the mediating role of entrepreneurial training processes. It highlights the complex nature of entrepreneurship, which is influenced by multiple factors as possible drivers of the success of entrepreneurial initiatives.(Campo-Ternera, 2022)

4.3 Distribution of scientific production by country of origin.

Figure 4 shows how all the publications registered in Scopus are distributed according to the country of origin of the institutions studied.



Figure 4. Distribution of scientific output by country of origin

Source: Authors' own elaboration (2023); based on data provided by Scopus

Within the distribution of scientific production by country of origin, the records from institutions were taken into account, establishing the United States as the country of this community, with the highest number of publications indexed in Scopus during the period 2017-2022, with a total of 21 publications in total. In second place, the United Kingdom with 18 scientific papers, and Germany occupying the third place presenting to the scientific community, with a total of 13 papers among which is the article entitled "Residents' perceptions of tourism: a decisive variable to stimulate entrepreneurial intentions and activities in tourism in the mountainous rural area of the northeastern region of Romania" This study aims to investigate the perceptions of the To assess the development of entrepreneurship in this area is consistent with the positive/negative perceptions identified. . A total of 1277 questionnaires were collected from the inhabitants of 78 sampled municipalities, and their processing using statistical methods shows that the inhabitants of two counties have positive perceptions about the living conditions in their communities, the involvement of the authorities in the development of tourism, and the exploitation of tourist attractions. On the other hand, when comparing the values of the business development indicators, it can be seen that two counties concentrate 91% of all active enterprises and 94% of start-ups in the food and accommodation sector at the level of the study area, and the rate of creation of new businesses and their density have much higher values in these counties than in the region where the aspects analysed are perceived negatively. The information provided by the research is particularly useful for regional and local authorities to make decisions related to a more coherent financing of rural mountain tourism.(Saghin, 2022)

4.4 Distribution of scientific production by area of knowledge

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

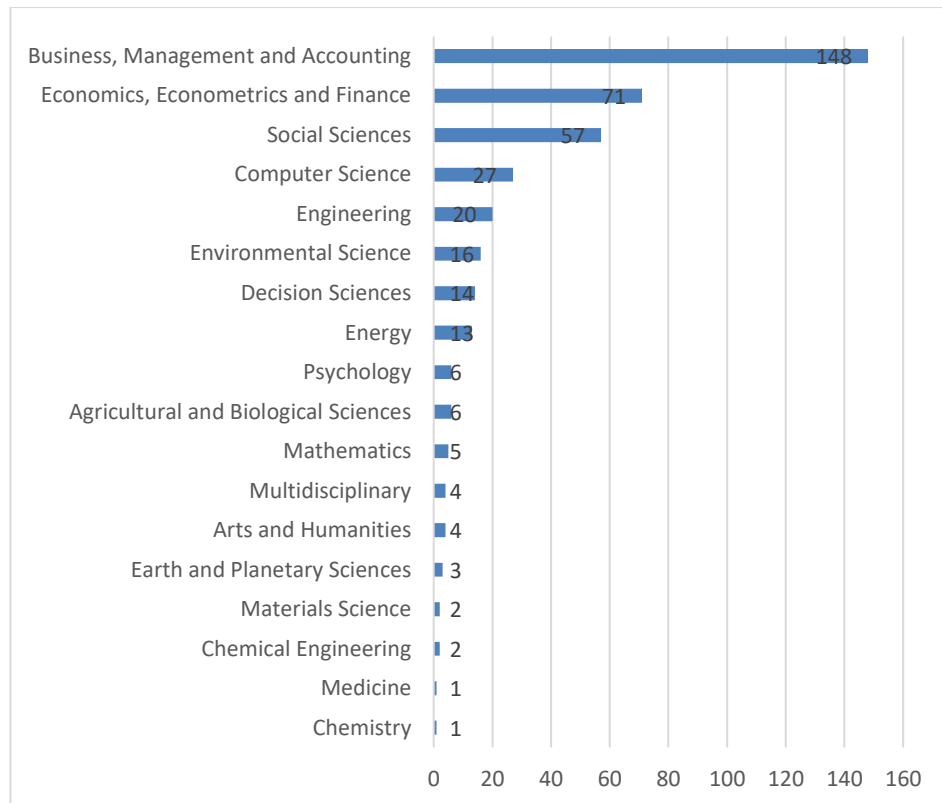


Figure 5. Distribution of scientific production by area of knowledge.

Source: Authors' own elaboration (2023); based on data provided by Scopus.

Business, Administration and Accounting was the area of knowledge with the highest number of publications registered in Scopus with a total of 148 documents that have based its methodologies Entrepreneurship, Key Factors and Success. In second place, Economics, Econometrics and Finance with 71 articles and Social Sciences in third place with 57. The above can be explained thanks to the contribution and study of different branches, the article with the greatest impact was registered by Business, Administration and Accounting titled "Social Entrepreneurship Global Success Story Perspectives and Social Entrepreneurship Transformation Review" The main objective of the article is to review the existing definitions and frameworks of Social Entrepreneurship (SE) for clarity. The paper also attempts to learn from the SE's global benchmark success stories and assess the factors of the SE ecosystem, thus capturing the main themes of the SE and its transformation. The paper is qualitative and explores the various models and definitions of social entrepreneurship of reference, the ecosystem of support, and the success stories of various literary sources, including books, journals, research databases, journals, websites, original reports published by the government, corporate reports, and related disseminated information. The article uses an inductive approach to understand social entrepreneurship models from global cases, identifies the main themes and presents the facts without any changes. Research work is vital to understand and clarify the concept of social entrepreneurship by industry, researchers, academia and government and, from now on, the review of SE definitions and models identifies the thematic areas of SE, its intention and the current scenario of SE. The key characteristics of SE are to generate social value, innovation, seek opportunities, create social change, generate social well-being and obtain social results. From the evaluation of several global SE success stories, it is found that developed countries in Europe and the Nordic countries are at a very advanced level of SE transformation, focusing on environmental concerns, networking, recycling, profit orientation, and government policymaking.(Jawahar P., 2022)

4.5 Type of publication

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

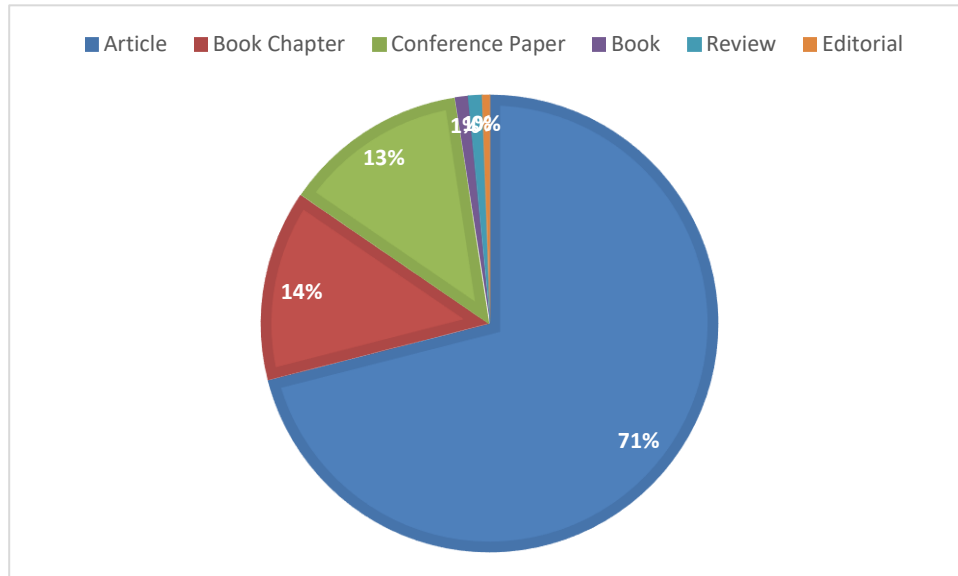


Figure 6. Publication Type

Source: Authors' 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 the one entitled Journal Articles with 71% of the total production identified for analysis, followed by Book Chapter with 14%. Session Paper are part of this classification, representing 13% of the research papers published during the period 2017-2022, in journals indexed in Scopus. In the latter category, the one titled "International Collaborative Training in the Business Food Industry: Evidence from an Emerging Economy" stands out. This article aims to identify, analyze the influential network relationship, and prioritize the key success factors (KSF) of international collaboration training in the business food industry with a case study on Iran's emerging economy. Design/methodology/approach: To identify a list of KSFs, a qualitative method, the literature review, is initially used. A quantitative method, fuzzy Delphi, is then employed to finalize the main KSFs based on the opinion of business experts in the food industry. To analyze the causal relationship and prioritize KSFs, a Fuzzy Decision Making Test and Evaluation Laboratory (DEMATEL) Analytical Network Process (ANP) methodology, i.e., FDANP, is applied. In the first stage, the cause-effect diagram of the KSFs is extracted using diffuse DEMATEL and then, the weights and priorities of the KSFs are evaluated using a fuzzy ANP. Findings: The results illustrate that the characteristics of effective development workers are the main dimension of successful international collaboration that directly affects other dimensions. On the other hand, the increase in marketing and merchandising is the most important KSF that is directly related to the capabilities and professionalism of the international business collaboration team. The leading and informal role of team members also plays a vital role in strategic and communication issues that affect the success of the collaboration, e.g. market research and new product development. The availability of financial resources and the ability of partners to obtain ongoing funding is also a crucial and necessary factor for a successful collaboration. Originality/value: Using an extensive literature review to extract KSFs from international business collaboration and finalize them using a fuzzy Delphi method and examine the cause-and-effect relationships between them, as well as prioritizing KSFs are the main contributions (Razavi Hajiagha, 2022)

5. Conclusions

Through the bibliometric analysis carried out in this research work, it was established that the United States was the country with the highest number of published records for the variables Entrepreneurship, Key Factors and Success. With a total of 21 publications in the Scopus database. In the same way, it was established that the application of theories framed in the area of Business, Administration and Accounting, were used more frequently in the introduction of a quantitative analysis since this mathematical and financial method serves as a powerful tool to achieve business success by providing a structured and data-driven approach in an analytical way for decision making. Several of the key factors play a fundamental role, as it implements the quality of the data provided by quantitative analysis, which allows and guarantees that this data is accurate and reliable, which allows the company to make business decisions in a correct way. However, the choice of this quantitative method in which there is a large amount of data available, companies that run a quantitative analysis gain a significant advantage that would allow them to be able to identify, track and compare key performance indicators which is a key piece to measure and quantify business performance, draw clear objectives for success.

In quantitative analysis, it allows business organizations to more accurately identify the production areas that require greater intervention and to supply resources accordingly in a more harmonious way, in addition this statistical method plays a fundamental role in risk management, which allows companies to evaluate and reduce risks by quantifying the probability and potential impact of various scenarios. By doing so, entrepreneurs' business organizations can make well-prepared decisions that minimize potential negative outcomes, ensuring financial stability and resilience. Quantitative analysis is invaluable for making forecasts. Businesses can make accurate predictions related to sales, demand, and financial performance, making it easier to strategically plan and adapt to changing market conditions. This ability to foresee potential challenges and opportunities allows businesses to make proactive decisions and stay ahead of the competition. To conclude, quantitative analysis is not simply a tool but a fundamental pillar of business success. It enables organizations to make data-driven decisions, measure and optimize performance, manage risk, allocate resources efficiently, and gain a competitive advantage in the marketplace. Its multifaceted role in shaping strategies and driving informed decision-making is indispensable to maximizing profitability, sustainability and growth. In today's data-centric business landscape, quantitative analytics isn't just an option; It's a necessity for those seeking sustained success and relevance in their respective industries.

References

- Campo-Tenera, L. A.-S.-V. (2022). Interaction of Potential and Effective Entrepreneurial Skills in Adolescents: Modeling the Structure of Youth Entrepreneurship Using Structural Equation Models. BARRANQUILLA, COLOMBIA.
- Jawahar P., P. B. (2022). Perspectives of Global Social Entrepreneurship Success Stories and Review of Social Entrepreneurship Transformation. Malaysia.
- Razavi Hajiagha, S. H. (2022). International Collaborative Training in the Business Food Industry: Evidence of an Emerging Economy. IRAN .
- Saghin, D. L.-M. (2022). Residents' perceptions of tourism: a decisive variable in stimulating entrepreneurial intentions and activities in tourism in the mountainous rural area of northeastern Romania. ROMANIA.
- Aguilar, M. G., Jaramillo, J. F., Ddiba, D., Páez, D. C., Rueda, H., Andersson, K., & Dickin, S. (2022). Governance challenges and opportunities for implementing resource recovery from organic waste streams in urban areas of latin america: Insights from chíá, colombia. *Sustainable Production and Consumption*, 30, 53-63. doi:10.1016/j.spc.2021.11.025

- Aguilar-Murguía, D. M., Martínez-Guido, S. I., García-Trejo, J. F., Hernández, S., & Gutiérrez-Antonio, C. (2022). Optimal configuration of a biodiesel production network using oil from black soldier fly larvae doi:10.1016/B978-0-323-95879-0.50151-X Retrieved from www.scopus.com
- Aguilar-Rivera, N. (2022). Bioindicators for the sustainability of sugar agro-industry. *Sugar Tech*, 24(3), 651-661. doi:10.1007/s12355-021-01105-z
- Aguiñaga, E., Henriques, I., Scheel, C., & Scheel, A. (2018). Building resilience: A self-sustainable community approach to the triple bottom line. *Journal of Cleaner Production*, 173, 186-196. doi:10.1016/j.jclepro.2017.01.094
- Akram, S. V., Malik, P. K., Singh, R., Gehlot, A., Juyal, A., Ghafoor, K. Z., & Shrestha, S. (2022). Implementation of digitalized technologies for fashion industry 4.0: Opportunities and challenges. *Scientific Programming*, 2022 doi:10.1155/2022/7523246
- Alanya-Beltran, J., Hassan, A. M. M., Bag, A., Debnath, M., & Bora, A. (2022). Critical analysis of intelligent IoT in creating better smart waste management and recycling for sustainable development doi:10.1007/978-3-031-07012-9_19 Retrieved from www.scopus.com
- Albuquerque, A. R. L., Merino, A., Angélica, R. S., Omil, B., & Paz, S. P. A. (2022). Performance of ash from amazonian biomasses as an alternative source of essential plant nutrients: An integrated and eco-friendly strategy for industrial waste management in the lack of raw fertilizer materials. *Journal of Cleaner Production*, 360 doi:10.1016/j.jclepro.2022.132222
- Alejandrino, C., Mercante, I., & Bovea, M. D. (2021). Life cycle sustainability assessment: Lessons learned from case studies. *Environmental Impact Assessment Review*, 87 doi:10.1016/j.eiar.2020.106517
- Alejandrino, C., Mercante, I. T., & Bovea, M. D. (2022). Combining O-LCA and O-LCC to support circular economy strategies in organizations: Methodology and case study. *Journal of Cleaner Production*, 336 doi:10.1016/j.jclepro.2022.130365
- Ali, S. H., & Puppim de Oliveira, J. A. (2018). Pollution and economic development: An empirical research review. *Environmental Research Letters*, 13(12) doi:10.1088/1748-9326/a8aea7
- Ali, S. S., Al-Tohamy, R., Mohamed, T. M., Mahmoud, Y. A. -, Ruiz, H. A., Sun, L., & Sun, J. (2022). Could termites be hiding a goldmine of obscure yet promising yeasts for energy crisis solutions based on aromatic wastes? A critical state-of-the-art review. *Biotechnology for Biofuels and Bioproducts*, 15(1) doi:10.1186/s13068-022-02131-z
- Ali, S. S., Elsamahy, T., Abdelkarim, E. A., Al-Tohamy, R., Kornaros, M., Ruiz, H. A., . . . Sun, J. (2022). Biowastes for biodegradable bioplastics production and end-of-life scenarios in circular bioeconomy and biorefinery concept. *Bioresource Technology*, 363 doi:10.1016/j.biortech.2022.127869
- Alvarez-Risco, A., Del-Aguila-Arcentales, S., Villalobos-Alvarez, D., & Diaz-Risco, S. (2022). Leadership for sustainability in crisis time doi:10.1007/978-981-19-0549-0_3 Retrieved from www.scopus.com
- Amorim Junior, S. S., Hwa Mazucato, V. S., Machado, B. D. S., de Oliveira Guilherme, D., Brito da Costa, R., & Correa Magalhães Filho, F. J. (2021). Agronomic potential of biosolids for a sustainable sanitation management in brazil: Nutrient recycling, pathogens and micropollutants. *Journal of Cleaner Production*, 289 doi:10.1016/j.jclepro.2020.125708
- Amorim Júnior, S. S. D., Pereira, M. A. D. S., Lima, P. D. M., Marishigue, M., Guilherme, D. D. O., & Magalhães Filho, F. J. C. (2021). Evidences on the application of biosolids and the effects on chemical characteristics in infertile tropical sandy soils. *Cleaner Engineering and Technology*, 4 doi:10.1016/j.clet.2021.100245
- Ampese, L. C., Sganzerla, W. G., Di Domenico Ziero, H., Mudhoo, A., Martins, G., & Forster-Carneiro, T. (2022). Research progress, trends, and updates on anaerobic digestion technology: A bibliometric analysis. *Journal of Cleaner Production*, 331 doi:10.1016/j.jclepro.2021.130004
- Anacleto, T. M., Oliveira, H. R., da Silva, C. F. C., Calegari, R. P., Rocha, M. E., Figueira, T. A., . . . Enrich-Prast, A. (2022). ANAEROBIC DIGESTION AS A TOOL TO REDUCE

- ANTHROPOGENIC IMPACTS ON AQUATIC ECOSYSTEMS. *Oecologia Australis*, 26(2), 169-186. doi:10.4257/oeco.2022.2602.07
- Anacleto, T. M., Oliveira, H. R., Diniz, V. L., de Oliveira, V. P., Abreu, F., & Enrich-Prast, A. (2022). Boosting manure biogas production with the application of pretreatments: A meta-analysis. *Journal of Cleaner Production*, 362 doi:10.1016/j.jclepro.2022.132292
- Andrade, R. O., & Yoo, S. G. (2019). A comprehensive study of the use of LoRa in the development of smart cities. *Applied Sciences (Switzerland)*, 9(22) doi:10.3390/app9224753
- Araoz, M. E., Marcial, A. F., Trejo González, J. A., & Ávila, A. M. (2021). Renewable and electroactive biomass-derived tubes for CO₂Capture in agroindustrial processes. *ACS Sustainable Chemistry and Engineering*, 9(23), 7759-7768. doi:10.1021/acssuschemeng.1c00547
- Araújo, M. F. R. S., Lima, P. C., Cardoso, C. C., & Pasa, V. M. D. (2020). Biocrude production from sugarcane bagasse and ethanol over green catalysts based on shellfish waste. *Journal of Cleaner Production*, 277 doi:10.1016/j.jclepro.2020.123709
- Arekrans, J., Sopjani, L., Laurenti, R., & Ritzén, S. (2022). Barriers to access-based consumption in the circular transition: A systematic review. *Resources, Conservation and Recycling*, 184 doi:10.1016/j.resconrec.2022.106364
- Arruda, E. H., Melatto, R. A. P. B., Levy, W., & Conti, D. D. M. (2021). Circular economy: A brief literature review (2015–2020). *Sustainable Operations and Computers*, 2, 79-86. doi:10.1016/j.susoc.2021.05.001
- Aschemann-Witzel, J., & Stangherlin, I. D. C. (2021). Upcycled by-product use in agri-food systems from a consumer perspective: A review of what we know, and what is missing. *Technological Forecasting and Social Change*, 168 doi:10.1016/j.techfore.2021.120749
- Ashby, A., Callegaro, A. M., Adeyeye, K., & Granados, M. (2019). The spiral economy: A socially progressive circular economy model? doi:10.1007/978-3-030-15066-2_5 Retrieved from www.scopus.com
- Aznar-Sánchez, J. A., Piquer-Rodríguez, M., Velasco-Muñoz, J. F., & Manzano-Agugliaro, F. (2019). Worldwide research trends on sustainable land use in agriculture. *Land use Policy*, 87 doi:10.1016/j.landusepol.2019.104069
- Bacovis, M. M. C., Nascimento-e-Silva, D., Borchardt, M., & Antônio de Melo, P. (2020). Framework proposal to organize sustainability strategies towards a transition to the circular economy. Paper presented at the Springer Proceedings in Mathematics and Statistics, , 337 257-272. doi:10.1007/978-3-030-56920-4_21 Retrieved from www.scopus.com
- Banguera, L., Lucio, E., Duran, C., Fuentealba, D., Hidalgo, J., & Carrasco, R. (2021). Academic perspective on the sustainable supply chain. Paper presented at the 2021 IEEE CHILEAN Conference on Electrical, Electronics Engineering, Information and Communication Technologies, CHILECON 2021, doi:10.1109/CHILECON54041.2021.9703080 Retrieved from www.scopus.com
- Barcelos, S. M. B. D., Salvador, R., Barros, M. V., de Francisco, A. C., & Guedes, G. (2021). Circularity of brazilian silk: Promoting a circular bioeconomy in the production of silk cocoons. *Journal of Environmental Management*, 296 doi:10.1016/j.jenvman.2021.113373
- Barone, A. S., Matheus, J. R. V., de Souza, T. S. P., Moreira, R. F. A., & Fai, A. E. C. (2021). Green-based active packaging: Opportunities beyond COVID-19, food applications, and perspectives in circular economy—A brief review. *Comprehensive Reviews in Food Science and Food Safety*, 20(5), 4881-4905. doi:10.1111/1541-4337.12812
- Barragán-Ocaña, A., Silva-Borjas, P., & Olmos-Peña, S. (2021). Scientific and technological trajectory in the recovery of value-added products from wastewater: A general approach. *Journal of Water Process Engineering*, 39 doi:10.1016/j.jwpe.2020.101692
- Barraza, R., Sepúlveda, J. M., & Derpich, I. (2022). Location of the intermediate echelon to add purchase value and sustainability criteria in a mining supply network. *Sustainability (Switzerland)*, 14(19) doi:10.3390/su141912920

- Barrios-Rodríguez, Y. F., Salas-Calderón, K. T., Orozco-Blanco, D. A., Gentile, P., & Girón-Hernández, J. (2022). Cocoa pod husk: A high-pectin source with applications in the food and biomedical fields. *ChemBioEng Reviews*, 9(5), 462-474. doi:10.1002/cben.202100061
- Barros, M. V., Salvador, R., de Francisco, A. C., & Piekarski, C. M. (2020). Mapping of research lines on circular economy practices in agriculture: From waste to energy. *Renewable and Sustainable Energy Reviews*, 131 doi:10.1016/j.rser.2020.109958
- Barros, M. V., Salvador, R., do Prado, G. F., de Francisco, A. C., & Piekarski, C. M. (2021). Circular economy as a driver to sustainable businesses. *Cleaner Environmental Systems*, 2 doi:10.1016/j.cesys.2020.100006
- Batista-Barwinski, M. J., Venturieri, G. A., Miller, P. R. M., Testolin, R. C., Niero, G., Somensi, C. A., . . . Cotelle, S. (2022). Swine slaughterhouse biowaste: An environmental sustainability assessment of composting, amended soil quality, and phytotoxicity. *Environmental Technology (United Kingdom)*, doi:10.1080/09593330.2022.2143291
- Batlles-delaFuente, A., Abad-Segura, E., González-Zamar, M. -, & Cortés-García, F. J. (2022). An evolutionary approach on the framework of circular economy applied to agriculture. *Agronomy*, 12(3)doi:10.3390/agronomy12030620
- Becerra, L., Carenzo, S., & Juarez, P. (2020). When circular economy meets inclusive development. *Insights from Urban Recycling and Rural Water Access in Argentina. Sustainability (Switzerland)*, 12(23), 1-21. doi:10.3390/SU12239809
- Beermann, K., & Austin, M. C. (2021). An inspection of the life cycle of sustainable construction projects: Towards a biomimicry-based road map integrating circular economy. *Biomimetics*, 6(4) doi:10.3390/biomimetics6040067
- Bejarano, P. -. C., Rodríguez-Miranda, J. -, Maldonado-Astudillo, R. I., Maldonado-Astudillo, Y. I., & Salazar, R. (2022). Circular economy indicators for the assessment of waste and by-products from the palm oil sector. *Processes*, 10(5) doi:10.3390/pr10050903
- Belmonte-Ureña, L. J., Plaza-Úbeda, J. A., Vazquez-Brust, D., & Yakovleva, N. (2021). Circular economy, degrowth and green growth as pathways for research on sustainable development goals: A global analysis and future agenda. *Ecological Economics*, 185 doi:10.1016/j.ecolecon.2021.107050
- Benachio, G. L. F., Freitas, M. D. C. D., & Tavares, S. F. (2021). Interactions between lean construction principles and circular economy practices for the construction industry. *Journal of Construction Engineering and Management*, 147(7) doi:10.1061/(ASCE)CO.1943-7862.0002082
- Berardi, P. C., Betiol, L. S., & Dias, J. M. (2020). Food waste and circular economy through public policies: Portugal & Brazil. Paper presented at the *Wastes: Solutions, Treatments and Opportunities III - Selected Papers from the 5th International Conference Wastes: Solutions, Treatments and Opportunities, 2019*, 99-105. doi:10.1201/9780429289798-16 Retrieved from www.scopus.com
- Bertassini, A. C., Calache, L. D. D. R., Carpinetti, L. C. R., Ometto, A. R., & Gerolamo, M. C. (2022). CE-oriented culture readiness: An assessment approach based on maturity models and fuzzy set theories. *Sustainable Production and Consumption*, 31, 615-629. doi:10.1016/j.spc.2022.03.018
- Bertassini, A. C., Ometto, A. R., Severengiz, S., & Gerolamo, M. C. (2021). Circular economy and sustainability: The role of organizational behaviour in the transition journey. *Business Strategy and the Environment*, 30(7), 3160-3193. doi:10.1002/BSE.2796
- Bertolini, T. C. R., Fungaro, D. A., & Mahmoud, A. E. D. (2022). The influence of separately and combined bentonite and kaolinite as binders for pelletization of NaA zeolite from coal fly ash. *Ceramics*, 68(387), 375-384. doi:10.1590/0366-69132022683873322
- Betancourt Morales, C. M., & Zарtha Sossa, J. W. (2020). Circular economy in Latin America: A systematic literature review. *Business Strategy and the Environment*, 29(6), 2479-2497. doi:10.1002/BSE.2515

- Bianchini, A., Guarnieri, P., & Rossi, J. (2022). A framework to assess social indicators in a circular economy perspective. *Sustainability (Switzerland)*, 14(13) doi:10.3390/su14137970
- Bigolin, M., De Moura Ferreira Danilevicz, A., & da Silva Filho, L. C. P. (2017). Sustainability requirements for concrete block elements based on recycled CDW: A case study for supporting social production in southern Brazil. Paper presented at the PICMET 2016 - Portland International Conference on Management of Engineering and Technology: Technology Management for Social Innovation, Proceedings, 2413-2419. doi:10.1109/PICMET.2016.7806800 Retrieved from www.scopus.com
- Boloy, R. A. M., da Cunha Reis, A., Rios, E. M., de Araújo Santos Martins, J., Soares, L. O., de Sá Machado, V. A., & de Moraes, D. R. (2021). Waste-to-energy technologies towards circular economy: A systematic literature review and bibliometric analysis. *Water, Air, and Soil Pollution*, 232(7) doi:10.1007/s11270-021-05224-x
- Bonato, S. V., Augusto de Jesús Pacheco, D., Schwengber ten Caten, C., & Caro, D. (2022). The missing link of circularity in small breweries' value chains: Unveiling strategies for waste management and biomass valorization. *Journal of Cleaner Production*, 336 doi:10.1016/j.jclepro.2021.130275
- Bonfante, M. C., Raspini, J. P., Fernandes, I. B., Fernandes, S., Campos, L. M. S., & Alarcón, O. E. (2021). Achieving sustainable development goals in rare earth magnets production: A review on state of the art and SWOT analysis. *Renewable and Sustainable Energy Reviews*, 137 doi:10.1016/j.rser.2020.110616
- Borges de Oliveira, K., & de Oliveira, O. J. (2022). Making hospitals sustainable: Towards greener, fairer and more prosperous services. *Sustainability (Switzerland)*, 14(15) doi:10.3390/su14159730
- Bortoli, M., Hollas, C. E., Cunha, A., Steinmetz, R. L. R., Coldebella, A., de Prá, M. C., . . . Kunz, A. (2022). Water reuse as a strategy for mitigating atmospheric emissions and protecting water resources for the circularity of the swine production chain. *Journal of Cleaner Production*, 345 doi:10.1016/j.jclepro.2022.131127
- Botelho Junior, A. B., Pavoski, G., Silva, M. D. C. R., da Silva, W. L., Bertuol, D. A., & Espinosa, D. C. R. (2022). Promising technologies under development for recycling, remanufacturing, and reusing batteries: An introduction. *Nano technology for battery recycling, remanufacturing, and reusing* (pp. 79-103) doi:10.1016/B978-0-323-91134-4.00006-6 Retrieved from www.scopus.com
- Bravo-García, J., Huerta-Rosas, B., Sánchez-Ramírez, E., & Segovia-Hernández, J. G. (2021). Sustainability evaluation of intensified alternatives applied to the recovery of nylon industry effluents. *Process Safety and Environmental Protection*, 147, 505-517. doi:10.1016/j.psep.2020.11.040
- Braz, A. C., De Mello, A. M., de Vasconcelos Gomes, L. A., & de Souza Nascimento, P. T. (2018). The bullwhip effect in closed-loop supply chains: A systematic literature review. *Journal of Cleaner Production*, 202, 376-389. doi:10.1016/j.jclepro.2018.08.042
- Buller, L. S., Sganzerla, W. G., Berni, M. D., Brignoli, S. C., & Forster-Carneiro, T. (2022). Design and techno-economic analysis of a hybrid system for energy supply in a wastewater treatment plant: A decentralized energy strategy. *Journal of Environmental Management*, 305 doi:10.1016/j.jenvman.2021.114389
- Buller, L. S., Sganzerla, W. G., Lima, M. N., Muenchow, K. E., Timko, M. T., & Forster-Carneiro, T. (2022). Ultrasonic pretreatment of brewers' spent grains for anaerobic digestion: Biogas production for a sustainable industrial development. *Journal of Cleaner Production*, 355 doi:10.1016/j.jclepro.2022.131802