



# Study of success and failure cases of entrepreneurs as a result of COVID-19 in Bucaramanga and its metropolitan area

## Estudio de casos de éxito y fracaso de emprendedores a raíz del COVID-19 en Bucaramanga y su área metropolitana

Martha Liliana Torres Barreto<sup>1</sup>  

### ABSTRACT

The different impacts generated by the COVID-19 pandemic have left significant challenges in global ventures. Both emerging and existing companies need to adapt and reinvent themselves to overcome this environment's challenges and opportunities. This exploratory qualitative research had as its target audience enterprises between 0 and 5 years old registered with the Bucaramanga Chamber of Commerce, which were affected by the COVID-19 pandemic. The research development was carried out using the Case Study methodology based on the experience reported by the entrepreneurs. Initially, a literature review and Web analysis of the exposed theme were carried out. The existing entrepreneurial environment in the Bucaramanga metropolitan area was approached, through the characterization of the entrepreneurial scenario, before and during the COVID-19 pandemic. The main challenges faced by entrepreneurs and the strategies they used to adapt their businesses and survive during the crisis were identified. Likewise, the adaptation potential of entrepreneurs in the face of the COVID-19 pandemic was identified.

**Keywords:** Organizational change, COVID-19, company, entrepreneurship, economic recession

**JEL classification:** L26; M21

**Received:** 26-07-2022

**Revised:** 10-10-2022

**Accepted:** 15-12-2022

**Published:** 15-01-2025

**Editor:** Carlos Alberto Gómez Cano 

<sup>1</sup>Universidad Industrial de Santander. Bucaramanga, Colombia.

**Cite as:** Torres, M. (2025). Estudio de casos de éxito y fracaso de emprendedores a raíz del COVID-19 en Bucaramanga y su área metropolitana. *Región Científica*, 2(1), 202532. <https://doi.org/10.58765/rc202532>

### RESUMEN

Los diferentes impactos generados por la pandemia del COVID-19, han dejado grandes retos en los emprendimientos a nivel global. Tanto las empresas emergentes, como las ya existentes, necesitan adaptarse y reinventarse para poder superar los retos y oportunidades que este entorno presenta. Esta investigación cualitativa de tipo exploratorio tuvo como público objetivo emprendimientos entre 0 y 5 años de vida, registrados en la Cámara de Comercio de Bucaramanga, que se vieron afectados por la pandemia por COVID-19. El desarrollo de la investigación se realizó mediante la metodología Estudio de caso, basada en la experiencia contada por los emprendedores. Inicialmente, se realizó una revisión de literatura y análisis Web de la temática expuesta, y se acercó al entorno emprendedor existente en el área metropolitana de Bucaramanga, mediante la caracterización del escenario de los emprendedores, antes y durante la pandemia por COVID-19. Se identificaron los principales retos a los que se enfrentaron los emprendedores y las estrategias que utilizaron para adaptar su emprendimiento y lograr sobrevivir durante la crisis. Así mismo, se identificó el potencial de adaptación de los emprendedores frente a la pandemia por COVID-19.

**Palabras claves:** Cambio organizacional, COVID-19, empresa, emprendimiento, recesión económica.

**Clasificación JEL:** L26; M21

## INTRODUCTION

COVID-19 began in late 2019, with 27 cases of pneumonia of unknown etiology in China's most populous city (Wuhan). The virus spread rapidly until on March 11, 2020, it was declared a "pandemic" by the World Health Organization (WHO), reaching 118,000 cases in more than 110 countries; as the days passed, the contagion had an exponential increase and June 25 of that year there had already been 485,707 deaths and 9,566,268 confirmed cases (WHO, 2020), becoming an unprecedented health crisis.

The COVID-19 pandemic, in most of the small and medium-sized enterprises (SMEs), has generated a variety of disruptive challenges (Mora & Johnston, 2020). The crisis drives the need for new products and services, opening a scenario of opportunity for entrepreneurs but negatively impacting existing ventures (Neumeyer et al., 2020); its effect



ranges from how they serve their customers to supply chain sourcing. Entrepreneurs constantly struggle for survival, and this crisis implies leaving behind the ideas originally conceived in the business model to achieve more sustainable and efficient growth; this adaptation is known as the "entrepreneurial pivot" (Korsgaard et al., 2020).

In this context, this research seeks to evaluate the adaptation potential of entrepreneurs in the city of Bucaramanga and its metropolitan area through case studies that allow the identification of the strategies that allowed them to survive or that led them to fail. In addition, to identify the negative and positive impact unleashed by the pandemic generated by COVID-19 on entrepreneurship, as was done in a recent research that sought to evaluate the impact of COVID-19 on SMEs and employment (Al-Fadly, 2020).

This document initially contains a literature review developed from a search equation with which the most representative information of studies on the impact of COVID-19 on entrepreneurship and the most relevant strategies by entrepreneurs to address the crisis was obtained, also allowing the elaboration of a theoretical framework in which the important concepts to understand the development of the research are defined.

## METHODS

This research is of a qualitative-descriptive type, and was developed in four phases:

### *Entrepreneur scenario*

In this phase, with the help of Web analysis and the Scopus and Web of Science databases, a search for articles related to the project's objective was carried out to obtain information that would allow defining the scenario of entrepreneurs due to the COVID-19 pandemic. For this purpose, keywords related to the research topic were defined to generate a wide range of possibilities; the keywords were translated into English, and synonyms were found with the help of the thesaurus tool (see table 1).

**Table 1.** Synonyms of key words using thesaurus

PALABRA CLAVE	TRADUCCIÓN	SINONIMOS THESAURUS	TRADUCCIÓN
<b>COVID-19</b>	Covid-19	Covid-19 Pandemia Coronavirus SARS	Covid-19 Pandemic Coronavirus SARS
<b>EMPREDEDOR</b>	ENTREPRENEUR	Administrador Persona de negocios	Administrator Businessperson
<b>IMPACTO</b>	IMPACT	Esfuerzo Efecto Conmoción	Effort Effect Shock
<b>EMPRENDIMIENTO</b>	ENTREPRENEURS HIP	Empresa Negocio nuevo	Enterprise New business

Source: Own elaboration.

The most optimal search equation was obtained through experimentation and the combination of keywords. In the process of identifying the equation, it was found that the word "Impact" and its synonyms deviated from the research results since they were directly related to health, medicine, and environmental issues. For this reason, it was not taken into account for the formulation. In addition, the results were filtered where only research articles in English and Spanish were taken into account; the year was also taken into account since the results published before the year 2020 did not generate any contribution to the research. This is how the search equation was obtained:

TITLE-ABS-KEY (entrepreneur\* OR administrator\* OR businessperson) AND (entrepreneurship\* OR enterprise\* OR "new business") AND (COVID OR pandemic [OR sars\*]) AND (LIMIT-TO [DOCTYPE, "ar"]) AND (LIMIT-TO [PUBYEAR, 2020]) AND (LIMIT-TO (LANGUAGE, "English") OR LIMIT-TO (LANGUAGE, ["Spanish"])).

From the review process, 11 articles were obtained in the Web analysis, 61 results in Web of Science and 85 in Scopus. Of these, articles with languages other than Spanish and English were excluded. The total sum was 157 articles, but when crossing the results of the two databases it was detected that the Scopus database contained all the Web of Science articles, that is, they were duplicates. Finally, only the Scopus database was taken into account for the development of the research, thus obtaining a total of 96 articles to review.



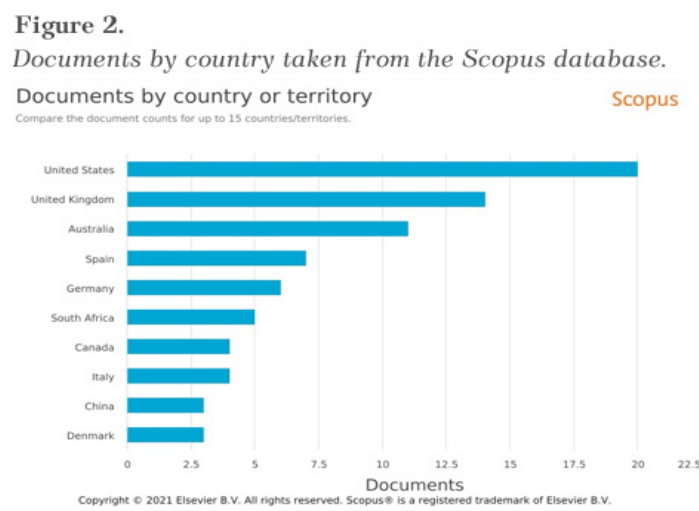
## RESULTS

### Literature review

#### Bibliometric analysis

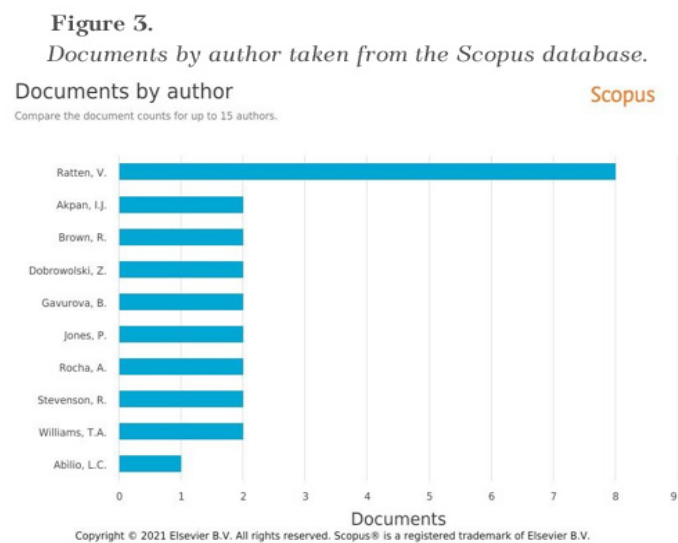
The documents obtained in the literature review were analyzed using the Vosviewer application to evaluate the most outstanding words or words used most frequently by the authors in the articles found. Figure 1 shows a word map highlighting the terms: "COVID-19", "Entrepreneurship," and "Entrepreneur," which cover all the references required for the development of this research, in addition to relating the words "China," "Spain," and "Italy," which represent the countries where the COVID-19 pandemic had the greatest impact, presenting the highest number of deaths from this virus.highest number of deaths from this virus.

Figure 2 shows the main countries that have addressed the subject of this research project; the United States stands out as the country with the most scientific research contributions, with 20 research papers published in journals, followed by the United Kingdom with 14, Australia with 11 and Spain with 7.



Source: Own elaboration based on Scopus.

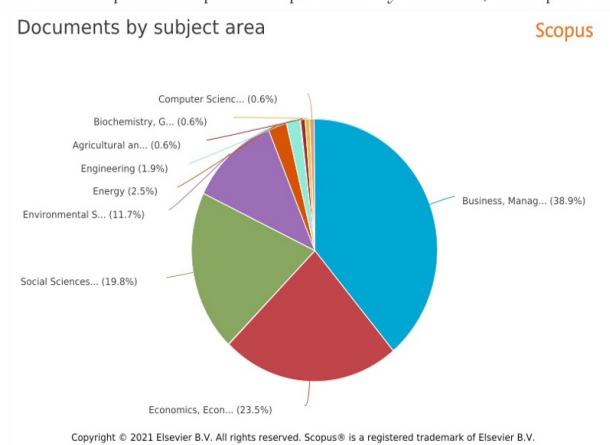
Figure 3 shows the authors with the most publications, aligned with the subject matter. The author Ratten stands out, with 8 scientific researches, among which the following stand out: "Coronavirus disease (COVID-19) and sports entrepreneurship" and "Coronavirus (COVID-19) and entrepreneurship: cultural and lifestyle changes" changes".



Source: Own elaboration based on Scopus

Figure 4 identifies the most important areas of knowledge to which the articles found are aligned. It is established that the areas with the highest participation are Business Administration with 38.9 %; Economic Sciences, with 23.5 % and Social Sciences, with 19.8 %. These results reflect the direct relationship of entrepreneurship with the development of the economy and the affinity with the present study.

**Figure 4.**  
Publications by area on Entrepreneurship and the pandemic by COVID19, taken from the Scopus database.



Source: Own elaboration based on Scopus

Finally, through the analysis, the equation constructed is aligned with the topic of interest for the development of this research. The 96 articles identified were subjected to a review to select those with greater affinity with this research's development. The selection criteria were filtered from title, abstract, and keywords, criteria to which a score was assigned according to their priority (see Table 2); in this process, the title and abstract were the most important, since from their content, it was possible to deduce what the research of each article consisted of and, although the keywords are of great importance, they were assigned a lower score, since from these it is not possible to demonstrate, at first sight, how much affinity each filtered document has about the study we are carrying out here.

**Table 2.**  
Item Selection Criteria

CRITERIOS DE SELECCIÓN	VALORACIÓN/CRITERIO
TÍTULO DE ARTÍCULO	35
RESUMEN	35
PALABRAS CLAVES	30
	100

Source: Own elaboration.

Note: the table appears in its original language.

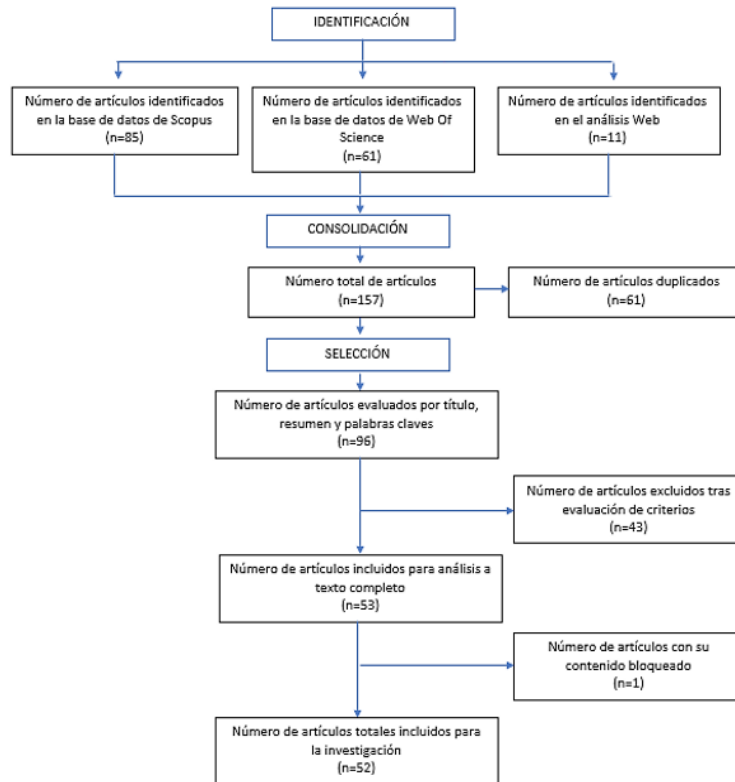
**1. Scoring.** Each of the selection criteria has an assigned value that, when added together, gives a value of 100 points; the score was established according to the importance of each criterion.

**2. Evaluation method.** Each of the articles was evaluated in relation to the affinity between the selection criteria and the objectives of the present research project.

**3. Selection.** To select an article, the minimum score should be greater than or equal to 75 points.

The process by which the total number of articles was obtained is shown in Figure 5.

**Figure 5.**  
*Article selection flowchart*



Source: Own elaboration.

Note: the figure appears in its original language.

### Literature analysis

Numerous studies focus on assessing the impact of the COVID-19 pandemic on the business sector and the economy; undoubtedly, the effects cannot be quantified at this time as the crisis is still ongoing. Globally, the COVID-19 pandemic brought myriad changes, forcing companies to reinvent their products, production processes, supply chains, and marketing to survive or return to their regimes. On the other hand, it also brought business opportunities, driving innovation in new products and services (Neumeyer et al., 2020).

Drastic measures to prevent the spread of COVID-19 require some that, in many cases, impede the normal functioning of society. These include using face masks, social distancing, quarantine, and the definitive blocking of all movement of goods (WHO, 2020). Consequently, many companies have had to close or suspend their economic activity. In their research, Chanto and Loáiciga (2021) examined the impact of these measures to understand entrepreneurs' expectations during the crisis. They point out that up to 70% of small companies stated that if the blockade continued, they would only have the resources to operate for the next three months. A qualitative analysis was also carried out in China, where it was identified that SMEs, particularly the youngest ones, experienced the greatest negative impact. The research conducted identified four phases through which companies have had to go through companies see a collapsed demand with a cash drop received; companies see a decrease in products and services needed as supply chains are increasingly broken; companies were forced to stay open during the partial blockade through new working conditions never experienced before, and there was a significant reduction in the workforce.

The problem faced by SMEs due to the COVID-19 pandemic went from being a health crisis to an economic crisis, generating a multidirectional effect in all sectors. Although some suffer more than others, the level of affectation depended on whether the main sales channel was face-to-face. The literature mentions lodging, tourism, and food service as the most affected. There are also significant decreases in culture, recreation, sports, and education; apparently, the only one that has been able to take advantage of this is the health sector.

Based on the above and to evaluate how entrepreneurs have tried to adapt to the COVID-19 pandemic, the

literature analysis has been divided into two parts: first, research articles were selected whose main source of information came from interviews and experiences told by the entrepreneurs themselves. The information was documented based on the strategies, tools, and behaviors they identified to face the crisis. The second part includes the other research found in the literature, excluding those mentioned in the first part.

### ***Entrepreneurs' experience in the face of the crisis***

The scenario that entrepreneurs faced after the crisis tested their abilities to create strategies to adapt and not disappear. Undoubtedly, no one was prepared to face an unprecedented crisis such as the COVID-19 pandemic. To do so, entrepreneurs had to leave their comfort zone and evolve.

Torres et al. (2022) studied the reaction of companies in China to this crisis; their research evidences the first strategies used, among them flexible human resources, product diversification, market research, and improvement of education; in addition, it indicates that small companies with more than five years in the market had more experience in handling crises since they had a contingency plan.

In turn, Marks (2020), through a case study, shows the scenario during the COVID-19 pandemic faced by entrepreneurs Meltz and Duxbury, who initially had a successful swimsuit company and, due to the chaos unleashed by the pandemic, were forced to redesign their business model; thus, they began to deliver fruit and vegetables in boxes. What the author highlights about this pair of entrepreneurs is that even with the low probability of survival, they have identified opportunities amid the crisis; they were based on detecting needs that were not being met and how, from their existing resources, to create a new business model through the pivot. This consists of leaving behind the ideas originally conceived in the business model to have more sustainable and efficient growth to meet that need.

This same concept is joined by young Iranian entrepreneurs who are startup creators, who mention, "We have to consider a pivot at this stage as our market is becoming different," referring to serving different markets that manage to capture new customers since, if we keep insisting on the same ones, we will reach failure: "who knows how long it would take, and if we insist on this market, we will be a loser [sic] ." These entrepreneurs affirm that the way to evolve is through new market research and gaining access to international markets. Pivoting can only be achieved if the entrepreneur possesses resilience, defined as the ability to continue functioning, not only during a disruptive event but also during the aftermath of the crisis.

In Finland, Björklund et al. (2020) interviewed 66 food and beverage industry entrepreneurs. They showed the options SMEs have experienced after the crisis and examined their response to the consumer. From this exercise, 100% chose to experiment during the crisis with new products, 45% experimented with services, 48% with sales channels, and 25% with prosocial actions. In order to reach their customers and continue operating, entrepreneurs used digital and technological tools. Social networks, websites, and applications such as Zoom and Teams facilitated internal and external communication within the companies.

These cases reveal that many entrepreneurs had to change their operating methods to generate new products and services to meet new needs. In addition, another strategy that allowed them to survive was to generate social impact. Fontrodona and Muller (2020) analyzed the impact of the COVID-19 pandemic on SMEs from the social context. They identified that companies have been concerned about generating and providing value to their customers since the crisis. In sub-Saharan Africa, Uber redesigned its business model after the crisis to generate a social impact on the community. Through strategic alliances with the Bill and Melinda Gates Foundation, it delivered medicines for chronic patients to their homes in the western Cape; the medicines were aimed at patients who needed help to pick them up at hospitals and pharmacies. In its new model, the safety and health of its customers were paramount.

The crisis has concerned consumers about caring for their health and the environment. Promoting social entrepreneurship projects to provide innovative solutions to social and environmental problems gives companies a competitive advantage.

From another source, Thorgren and Williams (2020) show in their research how, from an event held through the Zoom platform, it was possible to quickly identify and develop solutions to create social value based on the needs generated by the crisis. The event lasted one week and was held at the Kelley School, Indiana University, in the United States. Its participants were entrepreneurs, coders, doctors, venture capitalists, professionals, students, and professors worldwide. The event was well received and brought together more than 200 people from 10 countries and five continents. Brainstorming was used to capture the issues and solutions raised by the participants; by

the end of the week, they could develop 21 ideas in five thematic areas: health needs, education, small business, community, and procurement. Each of these ideas was aligned with seeking to improve people's quality of life and mitigate the impact of COVID-19 in the communities.

Table 3.

*Strategies used by entrepreneurs to face the crisis. Attitudes and aptitudes needed to face the crisis*

STRATEGIES	ATTITUDES AND SKILLS
Identifying opportunity in the midst of crisis	Negotiating and commercial attitude
Redesigning the supply chain	Ambition
Flexible human resources	Positive mental attitude
Seek new communication channels	Creativity
Develop new market strategies	Decisiveness
Redesign the business model	Social skills
Pivot	Initiative
Education	Planning
Business diversification	Tenacity
Generate social value	Visionary
Generate customer confidence and trust	Innovative
Design sprint methodologies	
Idea bombing	
Digital innovation	
Building a virtual community	
Social media marketing	
Organizational resilience	
Novel value proposition	
Product bundling or rebranding	
Online services such as virtual tasting sessions	
Expansion based on internal capacity	
Niche market expansion	
Identify new business opportunities	
Resource management	
Lower transaction costs and advertise your products and services faster and cheaper	
Access international markets	
Finding suitable distribution channels	
Conflict management	

Source: Own elaboration.

Amid the crisis, it was not only important to look for new markets or generate social value; the different health measures that the crisis brought with it affected various areas of the companies. The supply chain was the main one affected by the closures proposed by the government, causing a shortage of resources necessary for the operation



of companies; the dependence that exists between one company and another to supply its supply chain reduces the chances of survival since it generates a domino effect where, if a company closes, the dependent company is directly affected; for this reason, entrepreneurs have proposed co-creation strategies and local economies. López et al. (2021) found, in their research work, how entrepreneurs are changing their competitive mentality to a collective one in search of the common good; they increased their portfolio of suppliers, going from foreign to local in order to reduce the domino effect caused by the closing of borders and the bankruptcy of one of their suppliers.

The content of *Table 3* reflects the most used strategies that the entrepreneurs relied on to face the COVID-19 pandemic crisis, as well as the attitudes and aptitudes that an entrepreneur should have to be able to face such a crisis, according to the literature review.

### **Common factors discussed by the authors**

The content addressed in this section was that which was not clearly identified through the experiences of the entrepreneurs but which are important factors to take into account in the crisis, within the context of the literature. The aspects most mentioned by the different authors are the following:

**Entrepreneurial resilience.** In the face of any crisis, one of the capabilities that an entrepreneur must have is entrepreneurial resilience, an essential concept in the management of business crises. Different studies on resilience in the context of entrepreneurship and crises focus mainly on the period before the crisis and the skills or resources entrepreneurs and organizations accumulate to resist or adapt.

One of the causes affecting business resilience is the dependence among companies to stock their supply chain. It is well known that the effect caused by a global crisis generates resource shortages, and interdependent companies are playing among themselves to stay afloat. Consequently, when a company collapses, it triggers a domino effect in the supply chain, generating, in turn, collateral damage among those who are part of its ecosystem, such as suppliers and customers.

To mitigate this effect, it is necessary to work on co-creation strategies that allow entrepreneurs to opt for a variety of alternatives to supply their supply chain, where dependence on a single supplier is not generated, but rather an emphasis from which the companies that survive from globalization are not affected by the closing of borders and other measures adopted in the face of the crisis, thus generating resilience in the supply chain. This makes it possible to build local economies that work for the common good to generate a more resilient ecosystem. The challenge for these economies is to change the competitive mentality to transform it into a collective one to strengthen each other to resist the threat of catastrophic impacts better.

In addition to collective strategies, individual strategies should be implemented to guide the entrepreneur toward resilience to face crisis episodes. One of the proposals in the literature to respond to exogenous shocks generated by the COVID-19 pandemic is to adopt a policy of frugality, which requires keeping a long-term objective in mind. In very practical terms, a frugal entrepreneur should behave as follows: sell or divest all goods, services, or resources that do not contribute to primary income. Take stock, organize, and prioritize goods, services, or resources that contribute directly to income. Reduce short-term liabilities and renegotiate financial expenses.

**Opportunity in crisis.** The crisis in the business environment acts as a coin that shows two sides; one of them is the negative impact of entrepreneurship, stagnant growth, and even the definitive closure of businesses; as for the other side - we must start from the Chinese meaning for "crisis" (危机, wēijī) which is formed by two words Wei (危 = crisis) and Ji (机 = opportunity) (Liu et al., 2020)-there are the entrepreneurs who detected an opportunity from the crisis, which served them to reevaluate their business model or to create a new one. Liu et al. (2020) found that entrepreneurs in countries such as China, Korea, and Singapore while fighting the virus, took the time to rethink their supply chains and make them more sustainable; they detected opportunities in non-contact industries, including telecommunications solutions, online education and remote support. They were thinking not only of the good of the company but also of the community and its employees.

Surviving and adapting depend, in large part, on how willing you are to innovate and not resist change. Organizations need to adopt innovative and proactive behaviors to create value, obtain competitive advantages and maintain pre-crisis performance levels. Einstein has a maxim that says "In the midst of every crisis, there is a great opportunity", thus, literature shows the chaos and disappearance of many companies, but it also shows how entrepreneurs cling to their dreams and passions to get ahead. Crises or adverse situations can offer opportunities to grow and gain a competitive advantage over competitors (Schumpeter, 1942). "A time of crisis can create market

opportunities that can be best addressed with innovative and proactive stances” (Eggers, 2020, p. 25). Only those entrepreneurs who are capable of interpreting their ecosystem and generating creative solutions can overcome the crisis.

Innovation increases in times of crisis because it intensifies experimentation, not only in expanding market niches but also in adapting business models due to limitations and prohibitions. Thus, innovation becomes the key that opens the door to opportunity; for example, in the economic recession 2008, innovative companies were much more likely to resist. It is important to emphasize that innovation refers not only to introducing new products, services, and processes but also to exploring and exploiting existing resources to obtain their maximum benefit (Escamilla-Fajardo et al., 2020).

Being at the forefront and not against change allows the entrepreneur to understand the ecosystem he/she is facing more quickly. The authors mention that entrepreneurs who understood the market trends opted for tools to help them continue developing their economic activities, seeking new alternatives to reach the customer. Digitalization, startups, technology, and social networks are tools that have become the best allies when creating strategies aimed at surviving or, at least, not disappearing.

**Financing.** The crisis brings risks and uncertainty that drive the entrepreneur to easily explore the unknown, such as borrowing money and committing their resources to companies in uncertain environments (Escamilla-Fajardo et al., 2020). Globally, there is talk that 60% of SMEs are at risk of running out of cash reserves.

In 2020, we had at hand various forms of financing, such as banks, angel investors, venture capitalists, and incubators. Additionally, there is a high trend for crowdfunding, a way to compensate for the lack of physical interaction or "mating" opportunities. Thus, with some investors, equity crowdfunding platforms are created, and using online videos makes it possible to attract investors' interest.

Although entrepreneurs expect little help from the government, the authors note that government policies should encourage entrepreneurship, strengthening entrepreneurship and resilience worldwide. To that end, public officials have rushed to introduce various economic stabilization measures to prevent millions of small business failures and closures and boost recovery and rapid growth. Some of the strategies that had a positive impact were designing a budget to serve as financial leverage amid the crisis and facilitating online engagement between entrepreneurs and investors through crowdfunding platforms and venues promoting entrepreneurial ecosystems, such as Silicon Valley.

## Case analysis

### *Main results of the cases studied*

For group 1, corresponding to the companies registered between the years 2015 and 2019, the impact generated by the COVID-19 pandemic was negative in a large part of the companies, since many were dedicated to the Wholesale and Retail Trade. The manufacturing industry and the tourism sector were halted by the measures established by the government for the management of the pandemic, since they were directly related to the flow of people and products. As the survey results show, the vast majority of the companies (67.6%) were negatively affected and, in general, according to the interviews conducted, they all cited the reduction in sales as the main negative effect that forced them to reduce their payrolls. For example, COLOMBIANA DE SERVICIOS COMEDORES & SUMINISTROS S.A.S. said in the interview that, due to the government's cease of activities, its sales were reduced by 20% compared to the previous year, and there were problems with the transportation of goods and the movement of personnel. What happened to this company is described by Dublino (2020) in his research through the definition of the 4 phases that a company goes through in the crisis generated by pandemic; within which are the fall of cash, the decrease of products and services due to the breakage of supply chains, opening under conditions not experienced and the reduction of the workforce. All the phases were, in general, those experienced by the companies registered between 2015 and 2019, in the Chamber of Commerce of Bucaramanga.

Along these lines, for Natha de Leche, Obleas Postres y Dulces, one of the companies interviewed within the first group, the biggest challenge was to function as a company that depended 100% on the face-to-face public, since after the distancing they had no way to serve their customers and, therefore, the first month of quarantine they sold practically nothing, according to their own statements. This is evidenced in the literature reviewed, where the problem of the pandemic crisis in SMEs jumped from the health sector to other economic sectors, where those who suffer the most are those enterprises in which their main sales channel was face-to-face, such as accommodation,

tourism or food service sectors. Within the results of the survey of these group companies, 35.1% belong to the wholesale and retail trade, most of which use face-to-face as a sales channel, hence the visibility of the negative effects of the COVID-19 pandemic crisis.

To face this type of problems, companies developed certain strategies to mitigate the damage to their economy, as is the case of DISTRIBUIDORA NIKOSAN S.A.S., which initially implemented safety measures to ensure the health of workers; each one had a complete kit, also used teleworking to not saturate the offices. To deal with the distributors' fear of going out on the street and getting sick, the company had to provide each of them with psychological help and thus guarantee their overall safety; another strategy was to analyze sales forecasts to make fair purchases from suppliers and not have too much inventory that could affect them. Based on the results of the survey, the main strategies used by the companies registered between 2015 and 2019 are presented, some of which were temporarily closed in compliance with the sanitary measures of the health entities; some reduced staff and others appealed to teleworking. The above was also evident in China where it was observed that the first strategies used were also related to flexible human resources, product diversification, market analysis and improvement in education.

The variations in the market due to the conditions generated by the pandemic brought business needs and/or opportunities; this was an issue consulted in the survey, and it was reflected that the vast majority (62.2%) found a business alternative, however, this alternative, in the cases of companies registered between 2015 and 2019, occurred more as a necessity than as an opportunity. For example, in the interview conducted with the confectionery company Natha de Leche, Obleas Postres y Dulces, a representative said that having no other sales channel than face-to-face they had to resort to advertising experts in social networks to attract customers, which gave them the opportunity to expand their commercial area and, according to the analysis of that market, include birthday cakes in their product portfolio due to their high demand. This phenomenon is presented in the literature as in the case of entrepreneurs Meltz and Duxbury and their company Granadilla Swimwear who, due to the stagnant conditions of the swimwear retail market, decided to enter the food industry and use their brand and sales channels to promote Granadilla Eats, dedicated to the sale of fruits and vegetables through social networks (Marks, 2020).

A visible factor when going through the crisis was digital innovation, reflected not only in teleworking but also in the customer service and sales channels as a search for alternatives in the enterprises' marketing. According to the survey results, many enterprises implemented social networks as the main sales and customer service channel. This inclination was also evident from the interviews. LARKEN SECURITY LTDA, a company dedicated to private security activities, said that within their channels, they enabled means such as social networks and the website to facilitate information access to customers. In the literature, the authors mention that entrepreneurs who understood the market trends opted for tools that would help them continue developing their economic activities, seeking new alternatives to reach the customer, such as using startups, digitization, technology, and social networks.

All the previous results of the companies registered between 2015 and 2019 in the Bucaramanga Chamber of Commerce lead us to affirm that, in Santander, the companies stood out for their organizational resilience when facing the pandemic crisis, since, despite complex conditions, they managed to reinvent themselves and/or adapt to last over time. For example, COLOMBIANA DE SERVICIOS COMEDORES & SUMINISTROS S.A.S. He said in the interview that what led them to survive the crisis was to adapt and reinvent themselves, having to do things that were not done before, entering sectors different to what the company was dedicated to; In this case, they entered the construction sector. According to the survey carried out, 8.1% of the startups of registered companies, between 2015 and 2018, changed their business model (those who stopped doing what they had been doing and opted for a new idea). Although changing your business model is not the only way to deal with the crisis, this depends on the need or opportunity. According to the literature, studies on resilience in the context of entrepreneurship and crises are focused on the period before said crises and on the skills or resources that organizations have to resist or adapt.

As for the companies registered in 2020 in the Chamber of Commerce of Bucaramanga, corresponding to group 2 of the analysis, their main characteristic is that they have already been active in commerce, either in the region or elsewhere. All these enterprises found an opportunity to start a business in the pandemic or, by necessity, established themselves in the Santander market. When the pandemic fell in the country, certain conditions allowed them to develop as entrepreneurs. Some of these advantageous conditions were the ease of procedures, reconsidering initiatives that had been inactive, or the detection of an opportunity in the regional market. For example, Prada Pinzón Jorge Omar, a trading company in the pharmaceutical industry for animals, said in an interview that due to the pandemic crisis, he closed where he was and moved to Bucaramanga. In the literature, Liu et al. (2020) found that companies in China, Korea, and Singapore, while facing the virus, detected opportunities in other non-contact industries.

Among the challenges assumed by the companies recently registered in the Chamber of Commerce of Bucaramanga, one of the most complex was that of companies that would work 100% face-to-face with their clients. Power Up was one of these companies, which would be dedicated to physical conditioning, but did not find a way to reach its clients with the traditional way of working since it was impossible to make a personal and face-to-face follow-up. Another challenge for the companies registered in 2020 was the entrepreneur's mental capacity to open under the economic conditions of the crisis since there was no guarantee to respond with lease obligations and to sell their products or services. This could also be accompanied by an absence of government subsidies for purchasing products or services, as in the case of ISADEL S.A.S., a company dedicated to real estate activities.

It is possible to contrast these drawbacks of the companies registered in 2020 with those assumed by the companies that have already been operating since 2015, as they are similar. In both groups, similar strategies are applied to develop the business exercise. In fact, according to the interview, many entrepreneurs registered in 2020 applied similar tools when opening their companies, such as the use of technology as a sales channel where they have been able to sell and increase their customers, as was the case of the marketing company Prada Pinzón Jorge Omar.

All these challenges for companies that wanted to enter the regional market were addressed with strategies or economic support; one of these strategies is the business co-creation to supply their supply chain, where dependence on a single supplier is not generated and, thus, companies are not affected by closures or measures taken by the crisis. This strategy was imitated by the company Valorización de Residuos Agroindustriales S.A.S. B.I.C., which partnered with Ecopetrol and could obtain business support and thus restart its commercial work.

Among the strategies used by the companies registered in 2020, education was also supported when facing the crisis. Many companies opted to train themselves and their employees in labor management amid the pandemic.

All these ways of starting up and enduring in the market define the companies registered in 2020 in the Bucaramanga Chamber of Commerce as resilient companies since they made use of all possible tools to be part of the market, as in the case of Power Up, which focused on customer acquisition campaigns, showing the benefits of being in shape and the importance of taking care of health by creating new ways of reaching the customer, without making use of the physical spaces of the gym, but synchronously at each customer's home. Implementing all these individual strategies will lead the entrepreneur towards resilience to face crisis episodes.

As for group 3, characterized by the enterprises canceled in 2020, all these companies were not prepared to face the crisis of the COVID-19 pandemic and did not have elements -such as economic support from family, friends, or their own- to survive and never applied strategies to manage to stay in operation.

Since these companies never thought about digital innovation and carried out their processes based on face-to-face activities, when it came to training or errands, they failed because those who had to carry out this procedure could not do it virtually. This led to the inability to pay obligations such as leases and, finally, to liquidate the economic entity, as happened with DCIN Inversiones S.A.S., to cite an example.

In other words, the companies that closed in 2020 did so because of inadequate or no planning. According to the interview, many of these companies had been experiencing organizational problems since before the COVID-19 pandemic. In contrast to the previous groups, these companies needed the business resilience seen from the lack of attitudes and aptitudes to face the crisis.

The above leads us to consider Santander companies as organizationally resilient since, when analyzing the three groups of enterprises, the vast majority faced the crisis and managed to remain active in the business; even though most of them were not prepared to face the crisis, they ended up converging in the same situations of resilient companies presented in the cases in the literature, at a global level.

### *SWOT analysis*

This tool allows a diagnosis to be made to evaluate components of the sector and thus facilitate decision making and strategy planning based on the identification of internal and external factors, given its current situation and context. To identify strengths and weaknesses, the case study of entrepreneurial companies in Bucaramanga and its metropolitan area was taken as the unit of analysis. The results of the research carried out from the questionnaires and interviews, and the literature review developed were taken into account. Internal factors are considered as

components that are within the control of the companies in the region, and external factors are considered as components that are not within their control, such as the political, economic and social environment of the region.

It should be noted that these components are presented in a very general way in an attempt to cover the main characteristics of local enterprises, given their versatility and variety (see Figure 6).

**Figure 6.**  
*SWOT Matrix*

	Positivos	Negativos
Interno	<p><b>FORTALEZAS</b></p> <ul style="list-style-type: none"> <li>-Compromiso de los empleados por conservar su empleo y que subsista su empresa.</li> <li>-Baja/Media resistencia al cambio fruto de poca duración en el mercado y pequeño tamaño (Pymes).</li> <li>-Capacidad para reinventarse y pivotear de negocio.</li> <li>-Empresas abiertas al cambio, con diversificación de producto y adaptabilidad.</li> <li>-Emprendedores con aprendizaje rápido que les permitió abordar mercados digitales con solvencia.</li> <li>-Empresas fuertes en sectores menos afectados (alimentos y salud).</li> </ul>	<p><b>DEBILIDADES</b></p> <ul style="list-style-type: none"> <li>-El manejo de redes sociales y redes de mercadeo eran bajas.</li> <li>-No se contaba con recursos necesarios para la cancelación de nóminas.</li> <li>-Recursos económicos bajos para cubrir costos logísticos debido a las ventas bajas.</li> <li>-Ausencia de previsión económica para eventuales contingencias.</li> <li>-Falta de habilidades en estrategias financieras.</li> <li>-Bajo apalancamiento financiero.</li> </ul>
Externo	<p><b>OPORTUNIDADES</b></p> <ul style="list-style-type: none"> <li>-Incentivos gubernamentales a emprendimientos.</li> <li>-Facilidad de los trámites de constitución de la empresa.</li> <li>-Detección de oportunidades inéditas en diferentes sectores del mercado regional.</li> <li>-Fidelización de los clientes con marcas propias y negocios de la región.</li> <li>-Compradores más conscientes.</li> <li>-Empresas fuertes en sectores con crecimiento durante el confinamiento (Domicilios, alimentos y salud).</li> <li>-Altas oportunidades de crecimiento en negocios digitales.</li> <li>-Nuevas dinámicas comerciales aún inexploradas (un entorno totalmente nuevo al eliminarse las restricciones sanitarias).</li> </ul>	<p><b>AMENAZAS</b></p> <ul style="list-style-type: none"> <li>-Distanciamiento social.</li> <li>-Escasez de materia prima.</li> <li>-Posibles nuevos confinamientos.</li> <li>-Impuestos gubernamentales y/o reformas tributarias venideras.</li> <li>-Deudas, refinanciamientos e intereses monetarios.</li> <li>-Sobrecostos derivados de protocolos de higiene y seguridad.</li> <li>-Dificultad para el desplazamiento personal y de materiales.</li> </ul>

Source: Own elaboration.

Note: the figure appears in its original language.

*Offensive strategies (strengths opportunities)*

In the design of offensive strategies, strengths were evaluated to enhance the identified opportunities and obtain the maximum benefit. The following are the offensive strategies proposed:

- Prioritize digital channels as a strategic axis of current and emerging businesses.
- Strengthen the management of social networks. Create and use informative spaces in social networks where people and customers can receive information about the service or product provided, being a way to expand the commercial space and increase customers.
- Open windows and doors to new markets in the environment, constantly checking new and better marketing alternatives.
- Support the other regional sectors seeking the reciprocal benefit of the organizations, leveraging

supplies and supply of raw materials.

- Maintain biosecurity and safety protocols for our customers and employees, seeking loyalty and commitment towards the companies.

#### *Survival Strategies (Weakness + Threat)*

These strategies aimed to create a foundation to withstand the adverse effects of the threats in the best possible way to minimize the damage. At this point, the weaknesses were merged with the threats to evaluate how to work on the weaknesses to minimize the effect of the identified threats and eliminate the negative aspects or barriers encountered.

- Train personnel in financial management to provide solutions in this sector in critical times.
- To have access to money to safeguard internal payroll finances and manage economic lifelines with our banking entities, reducing the economic risk of employees and enterprises.
- To have transportation alternatives that can guarantee the well-being of employees and the condition of raw materials.
- Re-evaluate different alternatives for managing the supply chain, that is, by the adverse realities of the environment.
- Invest in education on different topics associated with the company's environment, which will generate later adaptability in adverse situations.
- Construct alternative work models that do not directly affect productivity and efficiency, respecting the existing measures and norms of the pandemic.

#### *Reorientation Strategies (Weakness + Opportunity)*

This point raises some aspects that made it possible to correct the weaknesses identified by taking advantage of an opportunity and thus reorienting the internal situation of the companies to exploit the opportunities in the best way possible.

- Create a regional support network in which different entrepreneurial companies from different sectors participate to support- socially and economically- any company in the region (including the creation of clusters, conglomerates, and associations).
- Encourage state support for the most affected sectors to reactivate the economy, which in the future will impact the improvement of other economic sectors.
- Pivot from business models with high fixed costs and physical dependencies to more versatile and digital business models.
- It is vital to incorporate technologies that better understand users, putting their experience at the center of business activities.

#### *Defensive Strategies (Strength + Threat)*

Finally, regarding defensive strategies, the strengths and threats identified are merged to evaluate how these strengths were used to minimize or neutralize the threats.

- Consolidate supply channels, ensuring a constant flow of supplies and sufficient storage in times of shortage.
- Migrate or modify key business components to virtual or blended modalities.
- Manage alternation in malleable and flexible operations to non-habitual schedules, seeking to maintain productivity, preserve pandemic measures and standards, and maintain occupancy and number of employees.
- By taking advantage of wholesale clients, a part of this profit could be used to pay immediate debts that put the company's finances at risk.

## **CONCLUSIONS**

The research project developed serves as a starting point for future projects that want to go deeper into this type of research, relying on entities with greater business convening power, such as DANE and the Bucaramanga Chamber of Commerce, ensuring a higher response rate from entrepreneurs.

The supply chain was one of the main affected by the measures imposed by the national government, which caused a shortage of resources necessary for the operation of the companies. The dependence that exists between one company and another to supply its supply chain, reduces the chances of survival, as it generates a domino effect, whereby, if a company closes, the dependent company is directly affected, for this reason, entrepreneurs have proposed co-creation strategies and local economies.

After analyzing the results of the different surveys and interviews in the three classification groups, it was found that the companies in the Santander region stood out for their business resilience during the crisis generated by the covid-19 pandemic. Although the sanitary emergency has not yet been overcome, the economic effects in the country, and specifically in Bucaramanga, continue to be evident; nevertheless, the analyzed enterprises continue adapting to the quarantine conditions and social distancing, transforming themselves according to the needs of the market, and innovating in their processes; which allows them to expand their clients and their portfolio of products or services.

Among the strategies most used by companies, the implementation of technological means for the development of their operations stands out, especially the one in charge of obtaining and retaining customers, making use of communication channels such as social networks, which are in line with the current era of technology, integrating all generations around these technological devices.

Despite the fact that entrepreneurs report a lack of government support, the entrepreneurs who managed to survive did so by reinventing themselves, optimizing their resources, identifying and applying strategies to obtain market opportunities, expanding their clients and their portfolio of products and services. In the midst of the crisis, Santander entrepreneurs believe in their business project, in the importance of their company as a generator of employment and, in this sense, they have made an effort to continue with their company, because of the value it represents for them and for society.

According to the analysis, most of the companies in the region were not prepared for the COVID-19 pandemic crisis, and many survived thanks to the economic support of family, friends or their own, in order not to collapse.

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#### **FINANCING**

No external financing.

#### **DECLARATION OF CONFLICT OF INTEREST**

The author declares that she has no conflict of interest.

#### **ACKNOWLEDGMENTS (ORIGINAL SPANISH VERSION)**

La autora agradece a la Universidad Industrial de Santander por el apoyo recibido.

#### **AUTHORSHIP CONTRIBUTION**

Conceptualization: Martha Liliana Torres Barreto.

Research: Martha Liliana Torres Barreto.

Methodology: Martha Liliana Torres Barreto.

Writing - original draft: Martha Liliana Torres Barreto.

Writing - revision and editing: Martha Liliana Torres Barreto.