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#### **Research Article**

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## Adaptation of Companies to the Reality of COVID: Criteria Impact and Measures

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#### Abstract

The COVID-19 pandemic has led to a global economic crisis, prompting unprecedented measures to support economies, entrepreneurship, and businesses. This article explores entrepreneurs' perceptions and actions in the face of this challenging situation. A field survey was conducted among 49 businessmen in the Rabat-Salé-Kénitra region of Morocco, impacted by the pandemic. Data were collected using questionnaires and analyzed with the "Nvivo" qualitative analysis tool. Results reveal that entrepreneurs are primarily concerned about the crisis's economic impact on their businesses. The study emphasizes the crucial role of government actions and the necessary measures for entrepreneurs to overcome this situation. The article's purpose is to support analysts in comprehending how companies have responded to the challenges posed by the COVID-19 pandemic, marked by operational hurdles and substantial shifts in consumer behavior. Subsequent research should delve into the effects of these trends and their connection to potential disruptions.

Keywords: Adaptation, Companies, Reality of COVID, Criteria Impact and Measures

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Crises act as accelerants for emerging trends (Bond et al., 2020) since they invariably trigger experimentation and the introduction of new management strategies. Companies found themselves compelled to make a variety of decisions in response to the sudden onset of the pandemic.

Numerous immediate marketing actions in reaction to the COVID-19 crisis were identified, including adapting products to meet changing demand, reorganizing supply chains to meet heightened demand, transitioning to digital distribution channels, demonstrating solidarity with all stakeholders in the supply chain, allocating resources towards advertising and promotion, and providing support to existing customers.

Following the initial shock, companies across all sectors reevaluated their sustainability efforts. Research conducted by Su et al. (2022) highlights their primary concerns, which encompass business continuity in terms of financial stability, economic uncertainties, and the elevated risk of job losses. The Three C's (Competence, Capability, and Competitiveness) serve as an internal framework capable of guiding companies toward a secure future (Hamilton, 2020). The "new normal" must be founded on a harmonious approach that ensures affordable access to products and services, responsible management of society's consumption of natural resources, and a commitment to technological excellence (Herstatt & Tiwari, 2020).

The objective of this study is to explore how entrepreneurs have reacted to the challenges posed by the COVID-19 pandemic, characterized by significant operational hurdles and substantial shifts in business practices. It seeks to address the following question: What is the perception of entrepreneurs regarding the impact of the COVID-19 crisis and how have they adapted to overcome it? To accomplish this, a field survey was conducted with 49 business owners in the Rabat-Salé-Kénitra region, utilizing the qualitative analysis tool "Nvivo" (word clouds, nodes, and sub-nodes).

This article consists of three main sections: the identification of the research problem derived from the literature review, a comprehensive explanation of the methodology employed, and the analysis and discussion of the study's findings.

#### 2. Review of the Literature

Amidst an atmosphere of unpredictability, can we pinpoint certainties that enable us to come together, to connect, and to collectively make sense of our circumstances? (Frimousse and Peretti, 2021). During periods of uncertainty, a systematic review offers a comprehensive insight into the measures adopted by companies to adjust to the intricate challenges stemming from the pandemic, focusing on three primary facets: innovation, technology, and collaboration.

#### 2.1 Adaptation and Innovation in Response to the COVID-19 Crisis

Value proposition innovation, primarily manifesting as consumer experimentation, has most frequently taken the form of introducing new products and services. In the immediate aftermath of the COVID-19 crisis, organizations were compelled to explore digital alternatives and devise means of delivering products and services with minimal and secure physical contact. They also sought strategic positioning and forged new partnerships within ecosystems to facilitate these adaptations. In response to the evolving landscape, companies must exhibit a high degree of agility, harnessing their dynamic capabilities (Seetharaman, 2020). They have engaged in exploiting marketing opportunities such as product bundling, rebranding initiatives, and even venturing into entirely new product categories (Angelidou, Lisboa, and Saridakis, 2022). Furthermore, they have leveraged their social capital to create and cultivate knowledge about customers, raw materials, and competitors. This approach has enabled them to obtain cost-effective, swift, and valuable information to drive innovation (Chesbrough, 2020).

In severely affected sectors, such as hospitality, business model innovation has taken the form of incremental, rapid changes that were swiftly implemented (Breier et al., 2021). Within the service sector, the pandemic compelled firms to transcend their existing business strategies. Innovations in this sector have been characterized by spatial adaptability, community engagement, a focus on health, and the effective use of technology. These changes have also involved a redefinition of the role of customers, with external constraints and institutional dynamics serving as catalysts for change (Amankwah-Amoah et al., 2021).

### 2.2 Technological Resilience and Innovation in the COVID-19 Era

In the era of COVID-19, technology plays a pivotal role in establishing a competitive edge and ensuring the survival of businesses. In today's fiercely competitive corporate landscape, small enterprises equipped with advanced technology can formulate and sustain a competitive strategy, laying the groundwork for long-term growth and market dominance. This sets them apart from those who resist technological adoption and are confined to the utilization of commonplace IT infrastructure (Akpan, Soopramanien, and Kwak, 2021).

The pandemic has presented an opportunity for a new generation of entrepreneurs poised to lead the next industrial revolution and pioneer innovative business approaches empowered by cutting-edge technologies. Industries severely impacted by the pandemic, such as restaurants and hotels, can enhance sanitation, facilitate social distancing, and deliver engaging, personalized experiences to their clientele through the adoption of new technologies (O'Connor, Hopkins, and Johnston, 2021).

COVID-19 has accelerated the digital transformation process, not only within businesses but also among individuals and public entities. Business digitization will

heighten the focus on digital marketing and sales channels, promote remote work, and fuel the consumption of technological products, including Internet of Things-enabled systems, artificial intelligence, big data, and robotics. More and more people will engage through hybrid communication mechanisms accessible from any location, transcending the physical confines of businesses and homes. The realms of cybersecurity and privacy are emerging as pivotal considerations in the embrace of these innovative technological solutions (Almeida, Duarte Santos, and Augusto Monteiro, 2020).

Industrial enterprises operating software-based and/or digital services are poised to weather such crises more resiliently in the future (García-Madurga, Grilló-Méndez, and Morte-Nadal, 2021). The pandemic has compelled governments and policymakers to reevaluate their information utilization and expand their technology adoption to mitigate the various social impacts of the virus's propagation (Dwivedi et al., 2020).

#### 2.3 Fostering Collaboration and Resilience in Times of Crisis

In times of crisis, entrepreneurs harness the power of their networks to engage in collaborative endeavors, launching new products and services through cooperative sales channels, exchanging vital information, and concurrently offering assistance to fellow community members. These endeavors are frequently characterized by gradual, incremental progress and contribute to the development of internal competencies as well as capabilities within related ecosystems, thereby fortifying their resilience and their potential to collectively shape future value.

Business-to-business coordination has emerged as a highly effective marketing strategy during the pandemic, benefiting not only organizations but also their customers and various stakeholders. Collaborative initiatives embody a blend of cooperation and competition. Consequently, decision-makers exercise great caution when selecting which competitors to partner with, aiming to avert unfavorable outcomes. Questions persist regarding the continuity or cessation of these competitive strategies once the COVID-19 pandemic subsides (Crick and Crick, 2020).

#### 3. Methodology

It is a survey based on a content analysis assisted by the NVIVO qualitative analysis software.

According to Crang (2002), this technique consists of extracting the desired information from a body of material by systematically and objectively identifying the specific characteristics of the material. This involves categorizing the data so that it can be summarized, classified, tabulated and inferred.

Our empirical analysis relies on a survey conducted with 100 established entrepreneurs in the Rabat-Salé-Kénitra region. To begin, we selected all firms launched in this region since 2016, encompassing a six-year period prior to the survey.

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Subsequently, we identified the primary founders of these new businesses. Given previous research indicating that the effects of stressors on entrepreneurial well-being can be influenced by prior entrepreneurial experience (Kollmann et al., 2019), we deliberately focused on novice entrepreneurs to mitigate potential confounding factors associated with prior entrepreneurial experience. A breakdown of these novice entrepreneurs by typology is presented in Table 1.

All members of this population were administered a self-completed questionnaire designed to solicit their perspectives on how the COVID-19 health crisis has affected their businesses and the coping strategies they have devised or employed to address the situation. Responses were collected during the period spanning June to July 2022, resulting in a total of 49 valid questionnaires.

Activitysector	Workforce	Validpercentage	Cumulative percentage
Tourism	8	16,3	16,3
Service	13	26,5	42,8
Industry	5	10,2	53,0
Construction	19	38,8	91,8
Other	4	8,2	100,0
Total	49		

**Table 1.** Distribution of entrepreneurs in the sample by sector of activity

**Source:** Authors via SPSS.

Once the questionnaire was closed, we proceeded to the analysis that allowed us to organize, classify and synthesize the information collected by creating a structure of nodes and sub-nodes, in which the frequency of appearance of themes in the text is used.

To this end, the most frequent "word search" tool is used, which allows us to know the frequency of appearance in the text of similar words, derivatives and synonyms, and to eliminate the others that do not add value to the analysis. From this, the word cloud is constructed, after different tests that allow establishing the optimal number of words that will be included to reach a sufficient frequency of repetition and an acceptable visibility in the graphic representation. Based on the results, an initial structure of nodes is proposed and all the information, contained in each of them, is classified and codified. Finally, it is analyzed if the initial proposed structure offers an acceptable coverage of the available information and, if so, this process is iterative and is repeated in each of the created nodes and sub-nodes until the number of coded references in each of the existing nodes and sub-nodes is acceptable. Next, a hierarchical diagram is created that graphically collects the structure of the created subnodes based on the references coded in each of them.

#### 4. Results and Discussion

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As can be seen in the figure below, the word impact occupies a central place in the cloud and, together with aid, business, sector and measures; it is positioned as one of the most used expressions by entrepreneurs to express their opinion on the current situation.



Figure 1: Word cloud of the questionnaire node Source: Authors via NVIVO software

Thus, it can be deduced that much of the content will be based on the description and evaluation, from the perception of the entrepreneurs themselves, of the impact of the health crisis on their businesses. For this reason, it has been decided that this will be one of the topics for which the information collected will be classified. In parallel, and based on the most used words, it was decided that the second thematic axis would be related to the measures and aids requested by the employers. In the same way, the term government is included as a topic in which all the opinions that the entrepreneurs express about their actions in relation to the health crisis are codified.

An initial exploration of the information provided allows us to verify that there is an optimal degree of coverage with this first classification of nodes. Therefore, it was decided to continue the analysis of the perception that entrepreneurs have around the three main thematic axes identified: Impact, Measures and Government.

#### 4.1 Analysis of the Impact node

This node collects information that entrepreneurs have expressed to describe the impact that the health crisis has had on the evolution of their businesses.



# Figure 2: Word cloud of the "Impact" node Source: Authors via NVIVO software

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As we can see, the central axis of the topic is the impact they have suffered on different aspects, hence the frequent use of this word to define how they live the consequences of the current health crisis in their companies. Next to it, we can see that disappointment, closure, income, inconvenience are positioned as the most frequently used words in the contents collected on this topic. And for this reason, for the analysis of the Impact node, it was decided to create a structure of sub-nodes that includes the following aspects: "perspective", "economic", "inconvenience", "disappointment" and "closure". The detailed analysis of each of these sub-nodes allowed us to know the perception of entrepreneurs in the Rabat-Sale-Kenitra region regarding the impact of the COVID-19 crisis.

The main manifestation that entrepreneurs make when describing the impact of this crisis is the "economic" impact on their businesses. In turn, different sub-nodes are highlighted to help structure the content collected in this sub-node. On the one hand, in terms of employment, employers say that the current situation has had a huge economic and therefore employment impact, affecting both "new hires and old hires." With regard to the "expenses" sub-node, it is indicated that entrepreneurs perceive that the adjustment to the "new normal" has resulted in an increase in expenses associated with their business, which in turn has been accompanied by a decrease in income, making it even more difficult for entrepreneurs to be able to support the fixed expenses generated by their activities. For example, some business people say, "the unit is currently only producing expenses" or that the situation has resulted in "higher expenses and lower revenues."

Furthermore, in the economic field, the decrease in income is mentioned, which is mostly qualified as a total loss of income, but in other cases, it is qualified as a decrease in them. Hence, it is understood that the impact has not affected all companies equally. It has been possible to identify factors such as the total or partial suppression/shutdown

of the company, the extension of the limitations imposed to the mobility, the duration of the obligatory confinement, etc., that affect this different evolution.

To conclude the analysis of the sub-node that includes the impact at the economic level, the entrepreneurs focus their attention on the description of the evolution of the reserves. It is therefore clear that the cancellation of stocks, during and after the months of the imposed preventive measure, had a strong economic impact, accentuated especially by the fact that it took place in the summer months (activities depending on specific periods of the year, school vacations, etc., ) "I lost the income of the periods that generate the most income per year...").

Again, this suggests that the impact cannot be attributed equally to the sector as a whole, but that there are going to be differences that will require further analysis to better understand what impact this crisis has caused in a specific sector.

Another issue that emerges from the content analysis of the impact that entrepreneurs manifest as a result of the current situation is the list of inconveniences that the measures implemented by the government cause for the management of their companies. These inconveniences are caused by the need for companies to adapt to the new regulations, referring both to the level of extraordinary expenses and time "... the measures we have to adopt to minimize the contagion mean more working hours and the loss of business days".

To finalize the impact study, the future perspective that entrepreneurs have based on the current situation is analyzed.

This information is collected under the sub-node "perspective". A first approximation allows the evaluation companies' negative or positive outlook. The former are in the majority in the region's business community, with 32 out of a total of 49 references expressing their opinion on this issue. The entrepreneurs who have a positive view of the future evolution of the sector express that "the region will not be one of the most affected areas", they also indicate that "a very good season is coming, since the reopening of borders and the return of travel between regions is possible without authorization. Most of those who hold a negative view of future developments believe that the impact could be significant enough to force them to close. "in my case, it could be decisive to continue the opening", "we will all end up closing". Others consider that a long period of recovery awaits them before returning to pre-crisis levels, which will be characterized by great uncertainty.

#### 4.2 Analysis of the Measures node

It is worth noting that the purpose of the thematic axis "measures", is to collect the proposals that would be necessary to be implemented by the government in order to overcome the situation in the most effective way. As can be seen in Figure 3, the words aid, enterprises and measures attract a large part of the attention of businessmen to express their perception. For the analysis, a sub-node structure is proposed that divides

the measures identified by entrepreneurs according to their nature, such as "facility", "regulation", "training", "economic", "resources" and "help". Each of the sub-nodes created, in turn, requires the construction of a sub-node structure that classifies and structures the information contained in each aspect to be discussed.



Figure 3: Word cloud of the "Measures" node Source: Authors via NVIVO software.

Thus, the sub-node "Facility", which contains a total of 29 references, is in turn structured into four sub-nodes. Therefore, it can be seen that the demand for facility to entrepreneurs refers primarily to the demand for greater elasticity, "to have the different possibilities of facility explored", "...as a quality action" and to expose the information both "...on national and local television, as well as on social networks." On the other hand, they also state that it would be appropriate to take advantage of the current situation in which the need to rebound from the crisis favors the development of alternative modalities.

Regarding the proposed measures in terms of "regulation", the entrepreneurs have expressed the needs they perceive to face the current health crisis. This sub-node is in turn divided into three sub-nodes that manage to capture the information contained on their proposals in this area. Thus, on the one hand, the entrepreneurs ask that the previous restrictions on travel to avoid contagion not be reinstated, both in the operation of the institutions themselves and to allow visits to monuments and natural resources. On the other hand, they emphasize the need for the regulations developed to regulate the new situation to be flexible, both in the particularities of the companies and in what has to do with the infections. They also ask for this flexibility in the rest of the bureaucracy and the necessary time to comply with the imposed measures. Finally, they demand "clarity" in the measures that will be implemented, that the regulations be "clear and credible" and that they be informed in advance to allow them to adapt with sufficient time, so that they can know "what they can do and what not...", in order to develop the necessary investments to be able to comply.

Regarding the "training" needs that employers consider an obligation to be developed by the supervisory ministry, two sub-nodes can be distinguished: the demand for training in "hygiene and disinfection protocols", as well as in new technologies that are being developed to overcome this period of crisis. On the other hand, it is considered opportune to receive expert advice "so that they make the necessary investments", in order to adapt to the current situation while being competitive.

The entrepreneurs primarily emphasize the importance of implementing economic measures to assist them, as evident from the majority of their opinions. This is reflected in the "economic" sub-node, which comprises 48 references and is the most extensive sub-node in this thematic axis. Additionally, the "aid" sub-node contains 11 references, which imply that the demand for financial aid, specifically for small businesses, is an underlying context. Consequently, entrepreneurs' plea for economic support is one of the most significant measures that garner their attention.

Within the "financial" sub-node, a hierarchical structure is established that allows the information to be grouped according to the nature of the economic aid requested. Thus, we obtain that the majority demand is concentrated on direct aid to companies, such as aid for the cessation of activity, which they ask to be maintained until the activity can be carried out normally again. This aid is considered essential to avoid the closing of companies.

Furthermore, while entrepreneurs may request loans in certain cases, they also stress that this may not be a viable solution. Instead, they argue that the assistance provided should be in the form of non-repayable aid to offset the income shortfall of companies, rather than increasing their debt burden. Similarly, entrepreneurs propose that a reduction in the taxes they are obligated to pay would be a favorable measure in the economic sector. Therefore, on some occasions, they even ask for a waiver of certain fees and taxes. With regard to employment, they express the wish to extend the Temporary Employment Regulation Files (ERTE), in order to be able to maintain the levels of employment, even if it is "with the obligation to maintain the contract for the foreseen duration". They also ask for direct assistance to be able to face the additional expenses generated by the health situation "masks, frost...". Therefore, on some occasions, they even ask for a waiver of certain fees and taxes. With regard to employment, they express the wish to extend the Temporary Employment programs ( AWRACH ), in order to maintain employment levels, even if it is "with the obligation to maintain the contract for the expected duration".

To conclude the analysis of the thematic axis Measures, the sub-node "opening of the borders" was created, which gathers the references expressed by the entrepreneurs through which the opening of the borders is requested, because they consider that "the exchanges with the world allow a movement of the raw materials and also the respect

of the contracts with the customers abroad".

#### 4.3 Analysis of the Government node

To summarize the analysis of the primary thematic categories derived from the information provided by entrepreneurs in the Rabat Sale Kénitra region, a new node named "Government" is established to gather their views on the effectiveness of the government's response to the COVID-19 health crisis.

To summarize the analysis of the main thematic axes derived from the information provided by entrepreneurs in the Rabat Sale Kénitra region, a new node named "government" is established to gather their views on the effectiveness of the government's response to the COVID-19 health crisis. Given the nature of the subject, it was decided, initially, to divide the information according to the qualification given to this action as positive, negative or neutral. Once this first classification was made, we obtained that, out of a total of 47 references coded in the Government node, a total of 27 references gave a negative qualification, five references positively valued the measures developed by the government and fifteen references were classified as neutral, as they did not have a strictly positive or negative appreciation of it. Figure 4 represents the word cloud of the government evaluations sub-node.



**Figure 4:** Word cloud of the positive evaluation sub-node **Source:** Authors via NVIVO software

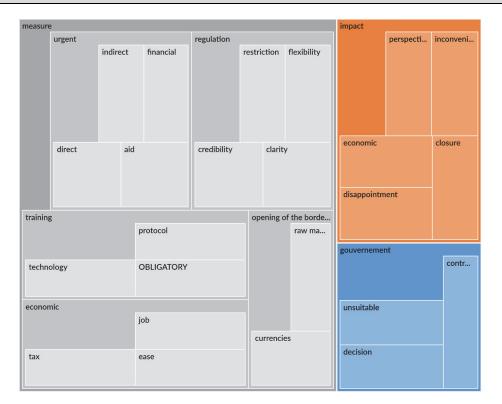
As can be seen, we get that the highest frequency of words falls on the terms dissatisfied and insufficient. Thus, in the first place, it can be seen that the entrepreneurs clearly do not evaluate the government's performance as positive or negative. On the one hand, they evaluate the measures adopted by the government positively, but at the same time they stress that they are insufficient for the duration of

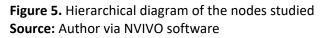
the health crisis. On the other hand, they criticize the impossibility of carrying out certain actions in the administration, despite the implementation of the remote access for certain requests (investment file in the regional investment centers), but at the same time they praise the freezing of the administrative deadlines for the realization of other steps.

Finally, we obtain that the negative opinion is based on the complaints that underlie the measures developed by most of the ministerial departments in relation to the management of this pandemic and that are qualified as insufficient, late, inadequate or contradictory.

The "contradictory" sub-node refers to the lack of information and the existence of contradictory information on the basis of the legislation consulted, which led the contractors to situations of great uncertainty, in which they themselves had to decide on the measures to be taken in order to guarantee the safety of their clients. For its part, the sub-node "inadequate" includes references in which contractors express their disagreement with the measures adopted by the various ministerial departments. Thus, they criticize the change of criteria in the measures adopted regarding the initial ban on housing workers, which has made "break the economic structure and it costs much more to put everything back on track. On the other hand, some of the measures developed are also questioned, such as the tasks of disinfection of housing, because they consider that this money could have been used in other areas, such as "reducing the tax burden" or "adapting the resources so that entrepreneurs can take advantage of it". For the workers, it has not been easy". In addition, this reference also includes the mention of other aids, such as the COVID-19 loans, which are still pending and consider that they will arrive when they are no longer needed". To finish with the knot of the negative evaluation of the Government's response, most of the businessmen describe the response to the health crisis as insufficient. Some employers describe the response as "no response", or "worrying response". Most of the references collected in this subnode indicate an insufficiency of the economic measures implemented. They consider that these measures only cover "a small part" of fixed expenses and that, while tax deferral is a relief, it is not a solution to the problem, "sooner rather than later, we have had the expenses or we are going to have to take them on", to which it must be added that some of the measures adopted have contributed to an increase in expenses. However, some small businesses are feeling abandoned by the government.

To finalize the analysis of the three main thematic axes into which the opinion expressed by entrepreneurs in the Rabat-Sale-Kenitra region was divided; a hierarchical diagram is created in which the different nodes are represented in relation to the number of references collected in each case (Figure 5). This graphical representation thus makes it possible to know the relative importance that the entrepreneurs give to each of the subjects considered.





As can be seen, most of the contractors' attention is focused on the issue of impact. Entrepreneurs have been primarily focused on describing the economic impact of the health crisis on their operations, as well as predicting their future development prospects. On the other hand, the proposal of Measures to mitigate the effects of the health crisis on their companies is ranked second in terms of the number of references included in this node. Once again, the demand is focused on the economic level; although the demands for facilities, training or regulation are also important.

#### 5. Exploring Limitations and Charting Future Research Trajectories

This study presents several constraints, which offer fertile avenues for future research exploration. To begin, the prevailing pandemic situation has been characterized as a systemic crisis (Coste, 2021), representing an adverse shock to businesses. It necessitated ingenuity, flexibility, adaptability, creativity, and individual as well as collective resilience, serving as original modes of individual learning and collective action by entrepreneurs.

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Secondly, this study has not delved into the enduring impacts of the variables under investigation. To mitigate this limitation, forthcoming research endeavors could encompass national-level investigations, potentially involving entrepreneurs from diverse geographic regions. This would allow for the measurement of discernible disparities arising from entrepreneurial adaptation during crisis periods.

Third, our study has not accounted for the diversity in entrepreneurs' experiences concerning adaptability, personality traits, or even their fields of study. For instance, a recent study by Capucine Besse, a clinical psychologist by training, has unveiled some key factors in cultivating adaptability. Similarly, The apprehension of failure, whether at an individual or national level (Bosma, N. and D. Kelley, 2019), could impact how entrepreneurs derive lessons from experiences of failure and, consequently, mold their forthcoming entrepreneurial undertakings. Thus, future research endeavors might adopt a more comparative strategy, with the objective of evaluating the effectiveness of the methodology delineated in this study across diverse entrepreneur profiles.

#### 6. Conclusion

Understanding how companies adapt their business models requires a comprehensive consideration of the economic and social structures within which they operate. To succeed in times of crisis, businesses must adeptly navigate a landscape where risk mitigation and opportunity exploitation must occur simultaneously (Obrenovic et al., 2020). Companies have grappled with the intricate challenge of concurrently managing immediate financial and operational disruptions stemming from supply and demand shocks, as well as the uncertainty that looms on the horizon.

The analysis of data, facilitated by the technologies employed, sheds light on the factors propelling the evolution of business models in response to the COVID-19 crisis. Firstly, companies have undergone transformations in their product and service portfolios, adapting them to the demands of a new reality characterized by constraints, most notably physical proximity. Secondly, technology has transitioned from a futuristic concept to a tangible reality, serving as the backbone for more efficient manufacturing processes, the surge of e-commerce, remote work arrangements, and the digitalization of organizational functions. Lastly, a commitment to a collaborative approach, already well-established in certain sectors and in alignment with principles of social responsibility, has channeled a spirit of solidarity across the business ecosystem, recognizing the imperative to support each other during times of crisis.

In terms of future research perspectives, it would be intriguing to incorporate additional dimensions of entrepreneurship, particularly those tied to activity-based approaches, especially in sectors that facilitate access to foreign currency, such as tourism and exports. Additionally, complementing this study with an examination of "government action" could provide valuable insights into the factors contributing to the success or failure of governmental decision-making processes regarding entrepreneurial

projects. This approach could also evaluate the pivotal activities that have played a role in rebounding from the Covid-19 pandemic, particularly within the health sector.

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