

# AN EXPLORATION OF START-UPS' RESILIENCE TO CRISES USING THE PROJECTIVE RESEARCH TECHNIQUE - SENTENCE COMPLETION

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**Abstract:** *The study explores the impact of economic, health, climate, energy and political crises on startups, highlighting the different ways entrepreneurs perceive and manage these complex challenges. The research, conducted through semi-structured online interviews using the projective technique of sentence completion, is based on a sample of 25 managers of startups founded between 2021 and 2022 in various fields. The results highlight that managers perceive crises as situations that accentuate vulnerability and risk, but also as opportunities for innovation and creativity.*

**Key words:** *start-up, crises, risk, resilience, projective techniques*

## 1. Introduction and literature review

In recent years, startups are facing a number of complex challenges, driven by threats from economic, health, climate, energy and political crises. The survival and prosperity of startups have been exposed to multiple and complex risks. Crises, such as those mentioned, have brought immediate and significant damage to companies (Štefko et al., 2020; Evans, 2020), and startups, representing one of the most vulnerable actors in any economy (Walsh and Cunningham, 2016), have been severely affected. Startups, being in their infancy, are much more fragile in the face of events they have not experienced before compared to larger companies. For example, in terms of the consequences of the COVID-19 pandemic, they were not prepared to deal with complex uncertainties that were complicated to control (Kuckertz, 2020; Sharma et al., 2020).

Faced with external adversities that are difficult to control, startups have had to adapt quickly to the new reality. Their entrepreneurial agility, flexibility and creativity have been extensively leveraged to identify opportunities to overcome challenges (Hongwei and Lloyd, 2020).

Literature argues, the business environment in which a startup thrives is permanently full of challenges and risks, and entrepreneurs often face unpredictable situations that can jeopardize the survival of the business leading to a high failure rate. Elements such as ownership, business strategies, management approaches, and technological advances are

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critical factors that can contribute to business failure, but at the same time, they are essential aspects of the recovery and growth process (Karabag, 2019).

However, in recent years the challenges of several overlapping and interlocking crises have put unprecedented pressure on them. This reality imposes constant pressure and high levels of stress on entrepreneurs, which can lead to psychological disorders such as entrepreneurial burnout. These recent events, including the pandemic, political and energy issues, have highlighted more than ever the imperative of building resilience in business (Su and Junge, 2023).

Recent research (Duchek, 2018) shows that there are situational factors (e.g., home through parental behavior and parental experience) and process-related factors (behaviors such as entrepreneurial learning and experience and entrepreneurial attitudes and behaviors at work) relevant to the development of entrepreneurial resilience. To these are added individual resilience factors such as skills and abilities. The importance of process-related resilience factors is emphasized as they can be influenced by entrepreneurs themselves contributing to increased resilience and entrepreneurial success. Organizational resilience is considered a process that is formed from the capabilities that a firm possesses to conduct operations and perform effectively under dynamic environmental conditions (Ismail et al., 2011). In this context, the organization's preparedness, response and effective recovery from crisis, for example from the crisis generated by Covid-19, are facilitated by dynamic competencies, resources and capabilities that the firm possesses (Koranteng, 2022).

The business crisis communications that entrepreneurs made on social media during the pandemic crisis had two objectives, to communicate the crisis within the business due to the pandemic and to communicate the elements of solving the crisis by highlighting skills, knowledge, means and critical issues to overcome (Carvache-Franco et al., 2023).

Recent research (Ivanov, 2020) suggests that the chances of recovery and sustainable construction are higher for innovative companies that learn from the complicated experiences of crisis periods. Crisis periods force startups to become more resilient, embrace change, exhibit greater creativity and seek continuous improvement. At the same time, they need support from authorities, and authorities need to be guided to make the support they provide as effective as possible.

## **2. The aims and objectives of the work**

The aim of this research was to investigate how start-up managers perceive the risks associated with launching a business in the context of a market affected by several crises.

The objective of the research was to determine the magnitude of risks experienced by startup managers for each type of crisis faced by startups during the period under investigation, i.e. health, financial, political, climate crisis.

## **3. Material and Methods**

Achieving the goal requires a deep understanding of the feelings felt by start-up managers in a period marked by uncertainty and insecurity. In this context, the projective

technique of sentence completion in semi-structured interviews was considered most appropriate.

The interviews were applied online between 20-30 April 2023 on a sample of 25 subjects, managers of startups established between 2021-2022 in different fields of activity (manufacturing, tourism, trade, services, education, etc.). They were chosen by the research team after a check of characteristics and compatibilities so as to be suitable for the purpose and objective of the research.

The interviews started with presenting the topic, informing about the purpose of the research, confidentiality of the data and obtaining consent to participate in the research. Managers were then asked to describe in a few words the business they run. In order to achieve the research objective, participants were asked to talk about how the crises that mankind has experienced in the period since starting their business until now have affected their business, to give details about the topic and to talk about their feelings, feelings and concerns about how existing or possible crises may affect their business in the future. The projective sentence completion technique was then used. Respondents were given sentence starters in which participants were given suggested desired context and then asked to complete them in ways they found meaningful (Soley and Smith, 2008; Kujala et al., 2014).

As part of this research, participants were asked to continue the sentence, "A startup during an economic crisis is just like ..... ", "A startup during a health crisis is just like ..... ", "A startup during a climate crisis is just like ..... ", "A startup during an energy crisis is just like ..... ", "A startup during the Russian-Ukrainian armed conflict is just like ..... ". In order to achieve the objective, research participants were asked to report on the steps taken to strengthen their business and the support actions that would be most appropriate for the business they were running.

In the data analysis stage, the specific steps of a qualitative research, i.e. structuring, sorting and classifying data by themes through content analysis (Krippendorff, 2018; Stewart and Shamdasani, 2014), were followed. The results obtained were described in the form of an essay, a format specific to qualitative studies (Nili et al., 2017).

A feature and limitation of qualitative research is that the data are not statistically representative, but we believe they are relevant to the study population.

### **3.1. Results and discussion**

The crises felt in almost every market in the world have also had an impact on the business activities of the managers interviewed. The negative effects have been felt, but most participants say they have had to face major unforeseen challenges that have forced them to make substantial efforts to survive, but they have been forced to adapt, to look for solutions.

Many of the managers interviewed said that they feel the stress associated with uncertainty and are worried about their business, feeling inexperienced in dealing with crisis situations. They most often mentioned the economic crisis characterized by falling demand, income and investment, the effects of which were compounded by the energy

crisis. The crisis generated by the military conflict between Russia and Ukraine is also a source of stress and concern for startup managers and has a significant impact on the businesses they run. Political and economic instability has been associated with the war that is taking place so close to the country's borders.

The analysis of the data obtained by applying the projective sentence completion technique places the research participants on two levels. Most of them made associations leading to the idea of vulnerability, fragility, increased risk. Representative associations for this category include „A startup during an economic crisis is just like .....”, “a leaf in the wind”, “an immobile person”, “walking in the rain without an umbrella”, „a loan with rising interest”, “a tornado”, “gambling”, “a small child trying to walk in the middle of a strong storm”, “an adventure in the desert”, “fish on dry land”. However, the associations made by another part of the managers participating in the research lead to the idea of motivation forcing innovation and creativity, encouraging and rewarding the talent of anticipating change, as the literature (Cepel, 2020) argues, increasing adaptability and resilience. For them, “A startup during an economic crisis is just like .....”, “an opportunity if you can identify and capitalize on problems and turn them into money-making opportunities”, “an opportunity to win if you know how to identify the opportunity”.

The associations made for startups during a health crisis were in a larger number with a pessimistic tinge, the most representative being “a sick and scared person”, “a football player without a leg”, “a block about to collapse”, “a sailor sailing on an ocean with strong winds and silvery waves”, “a soldier without a weapon on a war field”, “healthy patient in a sick hospital”. Even the most optimistic ones retain a note of concern: “a vision beyond the tragedy around”.

A startup during a climate crisis is seen as “a helpless person”, “a mere bystander”, „battling windmills”, „like leaving home without a raincoat in a storm”, “a willow tree on the bank of a dried-up river”, “a polar bear in a desert”, “a gardener trying to grow plants in the midst of a severe drought”.

The energy crisis, felt primarily through rising energy costs, is associated with declining profitability especially by managers whose businesses rely on energy-intensive technologies. The most common sentiment in the participants' presentations is powerlessness. Research participants associated this crisis with expressions such as “a powerless person”, “a doomed person”, “a punished child”, “inflation compared to the price of gold”, “a loan with exponentially increasing interest”, “a driver trying to drive a car without fuel in the middle of a long journey”.

The Russian-Ukrainian war deeply surprised research participants. They expressed their astonishment and helplessness at the disaster caused by this conflict by associating this crisis with expressions such as „an astonished bystander”, “a tree destroyed by fire”, “a ship captain sailing through a minefield, trying to avoid obstacles and reach a safe harbor”, “a lottery in an envelope - you can go bankrupt because there is no longer priority for the services you provide or you can strike if you operate in a key sector that remains fundamental in wartime”, “like working with a gun to your head”.

#### 4. Conclusions

The research highlights the complexity of how entrepreneurs perceive and manage crises in their business environment. The projective technique of sentence completion revealed two distinct perspectives of managers. Some perceived crises as opportunities for innovation and creativity, while others highlighted vulnerability and risk.

The negative effects of crises were felt, but most participants made consistent efforts to survive and adapt to change. Understanding the feelings and experiences of managers in times of uncertainty can help improve their preparedness and resilience in the face of unforeseen events.

This study highlights the complexity of how entrepreneurs perceive and manage crises in their business environment, proving once again the importance of effective stakeholder engagement. Knowing this information, decision-makers can prioritize actions and resources so as to counteract the effects of the crises that cause the greatest trauma. For example, the importance of a framework for financial education of entrepreneurs that considers financial resilience during and after crisis situations in general and pandemics in particular emerges from this study as highlighted by many other researches (Aassouli and Ahmed, 2023). Preparing for crises and anticipating change become key issues for survival and success in business.

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