

# STRATEGIC ORGANIZATIONAL RESILIENCE DURING AND AFTER THE COVID-19: CASE STUDY OF WESTERN BALKANS

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## ABSTRACT

*The COVID-19 pandemic has affected businesses globally. It swept the world like a wave, changing and adapting economies around the world. However, many businesses have shown remarkable resilience in the face of this crisis, adapting to changing circumstances and finding new ways to serve their customers. To build resilience, people need to understand organizational change. In this study, the authors only explained the organizational aspects of resilience in the Western Balkans. They emphasized that there is a lack of research investigating resilience in the context of venture failure due to the inability to respond to the demands of crisis conditions. Therefore, they study the association between corporate responses that we consider particularly important during this crisis, in relation to labor practices, to determine whether companies experienced less-negative responses to the crisis during the market collapse. The aim of these studies is to highlight the importance of the need to improve resilience after the COVID-19 crisis and to determine strategies for achieving it. For this purpose, extensive literature was used, which represents the theoretical framework of the research. Based on their research, the winners in the changing business environment will be unbridled firms that respond to challenges and create new opportunities.*

**Keywords:** organization, resilience, business continuity, Western Balkans

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## INTRODUCTION

Organizational resilience refers to the organization's ability to quickly adapt to changes in the environment in order to continue operating. Resilience can be viewed not only from the aspect of the individual, organization, and society. In this study, only the organizational aspects of resilience are considered [1]. Building a resilient company should be a strategic initiative that affects the company's functioning and increases its competitiveness [2]. These authors suggest that firm resilience can be achieved by reducing sensitivity to change and increasing flexibility, which indicates the firm's ability to get back on track in the event of disruption.

Speaking about the organizational resilience of small and medium-sized enterprises, some authors make a distinction between large and small enterprises [3]. They believe that small and medium-sized enterprises are more vulnerable than large enterprises, given that risk management is not included in their business strategy. Namely, larger organizations are better organized than small and medium-sized ones, because they have more resources and greater technical knowledge. Moreover, there are no strategic programs for the operationalization of action plans for small and medium enterprises. Statistics also show that SMEs are less resilient than large enterprises. However, SMEs tend to be quicker to respond, even if their responses are not coordinated. The reason for this is a very simplified decision-making structure. In addition to responding quickly to shocks, entrepreneurs should take into account the high failure rate of small businesses in view of this and pay more attention to liquidity, cash flows and seasonal fluctuations [4].

One of the key factors driving venture resilience during the COVID-19 pandemic has been the ability to leverage technology [29]. Companies that were already using digital tools to streamline their operations and connect with customers were better positioned to weather the storm than those that relied heavily on traditional, in-person interactions. This has been particularly true in sectors like e-commerce, where online shopping has surged during the pandemic, and remote work, where companies with strong digital infrastructure were able to quickly shift to a fully remote workforce.

Another key factor has been agility and adaptability. Ventures that were able to pivot quickly in response to changing circumstances were more likely to survive and thrive during the pandemic. This has involved everything from developing new products and services to adjusting pricing and distribution strategies to accommodate changing consumer preferences.

Finally, many ventures have benefited from government stimulus measures and other forms of financial support. This has helped to cushion the impact of the pandemic and allowed businesses to keep their doors open even during times of significant economic uncertainty.

The goal of this research is to point out the impossibility of responding to the demands of crisis conditions and the importance of the need to improve resilience after the COVID 19 crisis, determining strategies for its achievement and defining winners in a changing business environment.

## HYPOTHESES

Long before the onset of the pandemic, researchers began to explore the importance of education for risk management. Based on the results, disaster education is a functional, operational and cost-effective risk management tool [24]. In accordance with this research, we tried to test this hypothesis on the example of the countries of the Western Balkans and to determine how education determines the awareness of the importance of resilience for organizational functioning and business stability (H0).

Hypothesis H0: The level of education affects good preparedness in the event of disasters occurring outside of working hours.

Hypothesis H0: The level of education affects the opinion of good measures to prepare for a disaster outside of working hours.

IT resilience is defined in the literature as an important component of business stability and disaster recovery [25], [28]. However, despite the fact that scholars understand the importance of IT resilience, there is no evidence whether employees and employers are aware of it and whether IT resilience is incorporated into the plans and business strategies of organizations. With this in mind, we wanted to explore how the importance of IT resilience for sustainability and business continuity is understood (H1).

Hypothesis H1: Respondents understand the importance of IT resilience in business continuity planning.

## LITERATURE OVERVIEW

This article presents various viewpoints related to organizational resilience. The literature on organizations uses the term “resilience” as a versatile and multidimensional concept [5]. In the context of strategic management and changes, resilience is the ability of self-renewal over time through innovations [6]. Furthermore, the building of organizational resilience is connected to employees and management [7], [8], [9], who work in the learning organization. In addition, resilience implies the adaptation of organization strategy [10],[11], as well as a solution for organizations having a high level of threat in all aspects of their work environment [1].

One of the most significant challenges facing businesses in the EU is the COVID-19 pandemic, which has had a major impact on the economy and disrupted global supply chains. To adapt to this changing environment, many companies are focusing on building resilience by implementing new business models, enhancing supply chain resilience, and adopting new technologies. A recent report from the European Parliament highlights the importance of digital transformation for business resilience, with a focus on cybersecurity, data protection, and the use of artificial intelligence [13]. The report also emphasizes the need for businesses to adopt a circular economy model, which involves reducing waste and promoting the reuse of resources. Besides this report, there have been numerous studies on the business resilience after Covid-19. Here are some key reputable sources:

A research published by the Kauffman Foundation in 2022 highlighted the importance of financial resilience for entrepreneurs [14]. The brief emphasized the need for entrepreneurs to build up financial reserves and maintain strong relationships with lenders and investors in order to weather economic downturns and other unexpected events. A survey conducted by McKinsey & Company [15] in August 2021 found that 90% of executives believed that their companies had become more resilient due to the pandemic. Also, the survey showed that the future will belong to companies that put technology at the center of their outlook, capabilities, and leadership [15].

According to a report by the World Economic Forum 55% of businesses surveyed had increased their investment in digital transformation in response to the pandemic [16]. Namely, waves of COVID-19 pandemic response have accelerated digital transformation and technology adoption, and transformed many sectors through new workplace planning and talent management. Further, studies by the Harvard Business Review and McKinsey Global Surveys found that companies with higher levels of digital maturity were better equipped to adapt to the pandemic and were more likely to have experienced growth [17], [18].

A report by the US Chamber of Commerce published in March 2021 found that 90% of small businesses reported having made changes to their operations due to the pandemic, with 58% reporting that they had made significant changes [19].

A survey by KPMG published in November 2020 found that 94% of companies had made changes to their business model in response to the pandemic, with 61% reporting that they had accelerated their digital transformation plans [20]. The study defined a growth mindset as the belief that abilities and traits can be developed through hard work and dedication.

One number of authors considered “capabilities” and their importance for a resilient response [11], [23]. They noted that capabilities include skills, knowledge, and access to resources. Overall, these studies suggest that organizations' resilience is influenced by a variety of factors, including mindset, emotional intelligence, skills, social support, access to resources and financial stability [30].

## METHOD OF THE STUDY

The study was conducted in four Western Balkan countries (Figure 1).



*Figure 1. Location of the study area*

The present research was conducted in the Serbia, Bosnia and Herzegovina, Montenegro and Northern Macedonia. At the end of the year 2019, the research was started and has completed in October 2021.

The methodology of our paper is based on qualitative and quantitative research. Namely, we used the methods of analysis and synthesis as well as the method of deduction for the interpretation of the obtained data. The Kolmogorov Smirnov and Pearson's Chi-square test were applied.

### *Data Collecting Procedure and Statistical Technique*

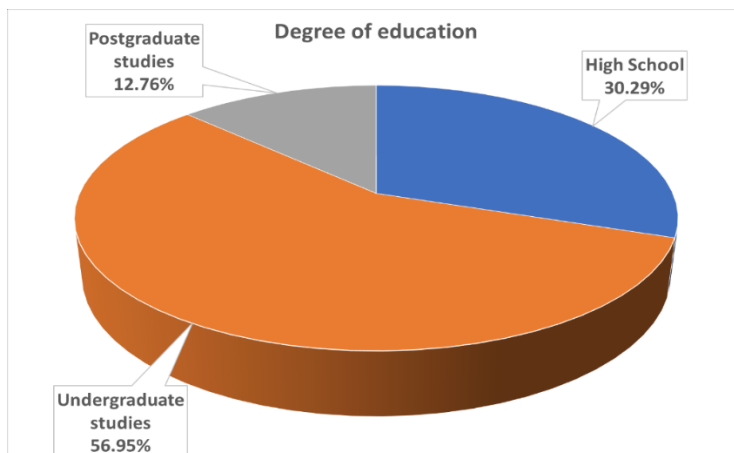
In this study, data were collected using multiple methods, including a literature review. The interviewer selected the respondents based on their availability. Before the interview, the researchers described the meaning of the study and its context to the participant. We used open-ended and closed-ended questions. Further, the research is also based on our previous research. A web survey was used, which contains a structured questionnaire of 22 questions. Before sending the survey, the respondents were explained the importance of the research and its context. In addition, a comparative method was used, which served to compare the results of the research obtained in this way and put them in relation to the collected data for four countries. Another method of analysis and synthesis has found its application in this study. Namely, the quantitative methods, the Kolmogorov-Smirnov test was also used. Descriptive analyses, such as range, number, percentage, mean, standard deviation, and ranking order, were used whenever possible.

Upon completion of the survey, the collected data were coded, tabulated and analysed in accordance with the conceptual framework and objectives of the study. Descriptive techniques were used to analyse the collected data using appropriate software, such as SPSS and Microsoft Excel.

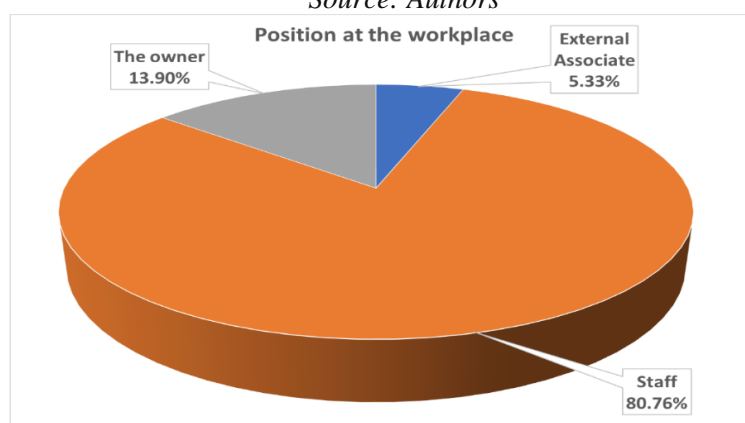
## KEY FINDINGS AND DISCUSSION

The study was conducted during the COVID-19 pandemic. Bearing in mind the obvious indicators of a decrease in economic activity of organizations by declaring a state of emergency and restrictive working time and social distance after its cessation of operation, one of the important questions was "Which of the next good measures for preparing for a disaster outside of working hours?" and "Where does IT resilience fit most into business continuity planning?". The respondents were of different levels of education (Figure 2), in different business positions (Figure 3) as well as different lengths of engagement at work (Figure 4).

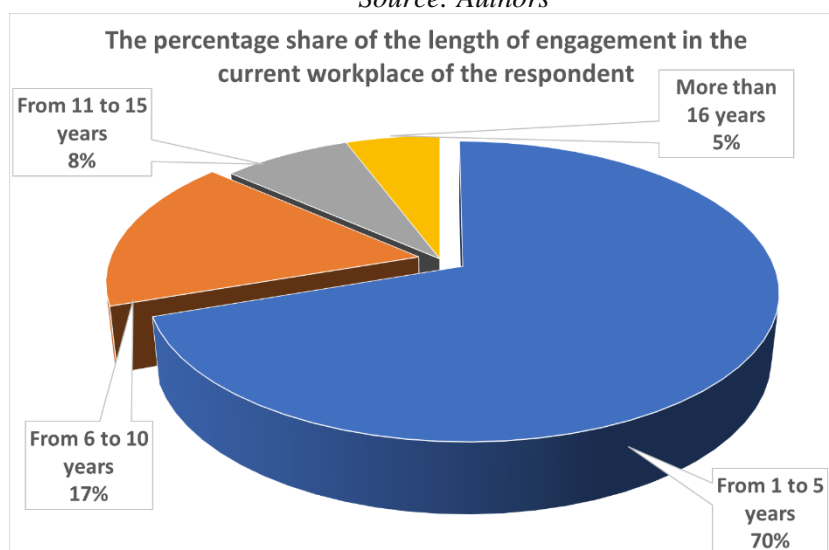
Distribution of frequency answers to the question "Which of the following good measures for preparing for a disaster outside working hours", is shown in Figure 4. It can be noted that the largest number of answers is "Ensuring that all team members have permanent access to the company through networks electronically", which in percentage amounts to 43.05%, while only 19.43% of respondents believe that such situations will not occur, obviously not recognizing the moment they are in, nor the advantages of forming such steps that would enable better resilience of the enterprise.



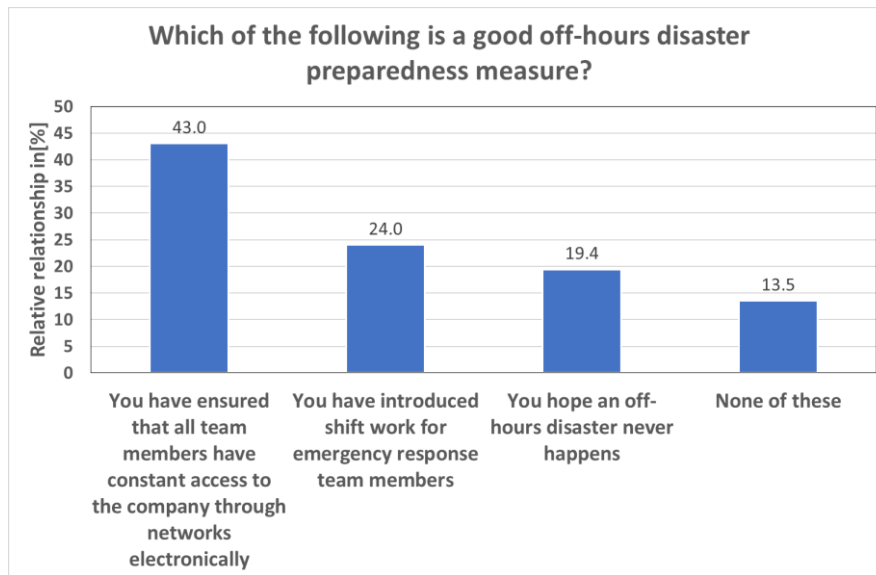
**Figure 2.** Distribution of the sample according to the level of education  
Source: Authors



**Figure 3.** Distribution of the sample in relation to the work position at the workplace  
Source: Authors



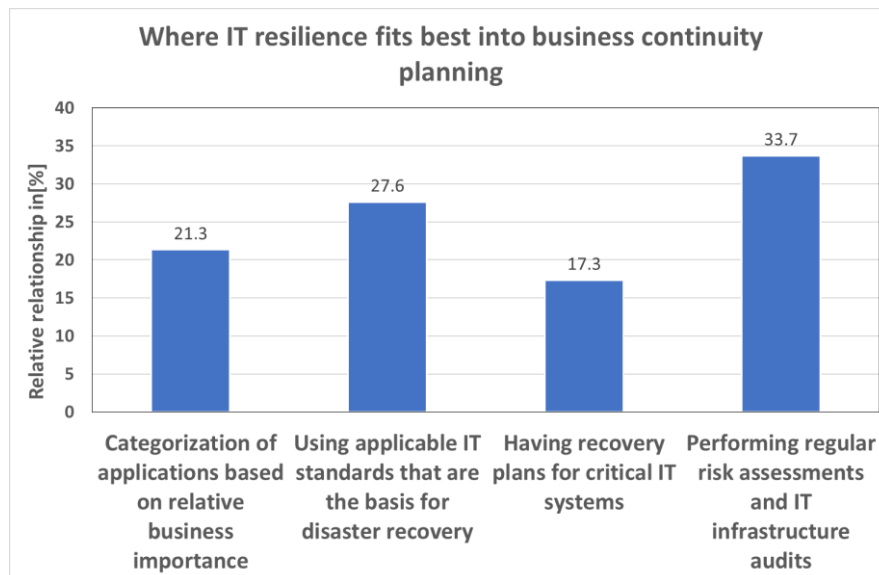
**Figure 4.** Sample distribution in relation to length engagement in the respondent's current workplace  
Source: Authors



**Figure 5.** Distribution of responses to the question "Which of the following is a good off-hours disaster preparedness measure?"

Source: Authors

When asked about the integration of IT resilience into business continuity planning, the majority of respondents answered "Performing regular risk assessments and IT infrastructure audits" (33.71%) (Figure 6), while 27.62% of respondents answered "Using applicable IT standards which are the basis for disaster recovery".



**Figure 6.** Distribution of responses to the question "Where does IT resilience best fit into business continuity planning?"

Source: Authors

Using the Kolmogorov-Smirnov test for all variables, the results were tested for normal distribution (Table 1).

**Table 1. Kolmogorov-Smirnov test results**

Variables	Level of significance	The result
Degree of education	0,000	Hypothesis H is rejected
Way of engaging in the workplace	0,000	Hypothesis H is rejected
Length of engagement in the current workplace	0,000	Hypothesis H is rejected
Which of the following is a good off-hours disaster preparedness measure?	0,000	Hypothesis H is rejected
Where does IT resilience best fit into business continuity planning?	0,000	Hypothesis H is rejected

Source: Authors

The obtained results show that the null hypothesis about the normality of the size distribution is rejected for all variables, so further testing of the initial hypothesis can be carried out using non-parametric testing.

To test the initial hypothesis H about the type of influence of variables on responses in relation to individual dimensions, Pearson's Chi-square test was used (Table 2).

**Table 2. Testing Pearson's Chi-square test**

Hypothesis	Dimension	Variables	Level of significance	The result
H <sub>0</sub> : The level of education affects the opinion of good measures to prepare for a disaster outside of working hours.	Which of the following is a good off-hours disaster preparedness measure?	Degree of education	0,025	Hypothesis H is rejected
		Way of engaging in the workplace	0,317	Hypothesis H is accepted
		Length of engagement in the current workplace	0,341	Hypothesis H is accepted
H <sub>1</sub> : Respondents understand the importance of IT resilience in business continuity planning.	Where does IT resilience best fit into business continuity planning?	Degree of education	0,511	Hypothesis H is accepted
		Way of engaging in the workplace	0,594	Hypothesis H is accepted
		Length of engagement in the current workplace	0,087	Hypothesis H is accepted

Source: Authors

From the table shown above, it is noticed that only the first variable related to the level of education of respondents and the first dimension "Which of the following good measures for preparing for a disaster outside working hours?" have a mutual dependence at a significance level of 0.025. Since their contingent coefficient is 0.323, which is low to mean, the hypothesis H<sub>0</sub> "The level of education influences the opinion of good measures for preparing for disaster outside working hours" is confirmed. The other two variables that are associated with business processes "Method of engagement in the workplace" and "Length of engagement in the workplace" are not related to responses. The second hypothesis H<sub>1</sub> "Respondents understand the importance of IT resilience in business continuity planning" has not been confirmed since all three variables do not affect the values of dimension results. In addition, our research has shown that the poor IT resilience is not an outcome of the COVID-19 pandemic, though the crisis certainly made an impact on it.

## CONCLUSION

In recent years, research is looking in new directions. In that manner, it is important to detect whether an organization has resilience potential. According to our research the hypothesis  $H_0$  "The level of education influences the opinion of good measures for preparing for disaster outside working hours" is confirmed, while other hypothesis  $H_1$  "Respondents understand the importance of IT resilience in business continuity planning" is rejected. Without IT resilience, businesses cannot respond to internal and external stressors. This leads to the collapse of business. Therefore, it is necessary that the strategy of resilience emphasizes on the awareness of organizations about the range and impacts of dangerous events affects their recovery priorities and business continuity. Namely, while the COVID-19 pandemic has certainly presented significant challenges for ventures around the world, many have shown remarkable resilience and adaptability in the face of these challenges. The COVID-19 pandemic has had a profound impact on organizations, highlighting the need for resilience and adaptability. According to our research we can recommend some key steps that organizations can take to develop resilience strategy in the face of future crises:

*Develop a crisis management plan:* A crisis management plan should be in place to help organizations respond quickly and effectively to any unexpected events. This plan should outline the roles and responsibilities of each team member and provide clear guidelines for communication, decision-making, and resource allocation.

*Foster a culture of resilience:* Organizations should cultivate a culture that encourages resilience, adaptability, and innovation. This includes encouraging employees to speak up, take risks, and share ideas.

*Invest in technology:* Organizations should invest in technology that enables remote work, collaboration, and communication. This includes cloud-based software, video conferencing tools, and project management software.

*Diversify supply chains:* The pandemic highlighted the importance of diversifying supply chains to reduce risk. Organizations should consider sourcing materials and products from multiple locations and suppliers to ensure continuity of operations.

*Focus on employee well-being:* The pandemic has taken a toll on employee well-being, which can impact productivity and performance. Organizations should prioritize employee well-being by providing resources and support for mental health, stress management, and work-life balance.

*Maintain financial stability:* Organizations should maintain financial stability by building up cash reserves, managing debt, and diversifying revenue streams.

*Learn from past experiences:* Finally, organizations should learn from past experiences and use them to inform future decision-making. This includes conducting post-crisis reviews and incorporating feedback into future plans and strategies.

By leveraging technology, staying agile, and taking advantage of government support measures, many businesses have been able to weather the storm and emerge stronger on the other side.

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