THE RELATIONSHIP BETWEEN ENTREPRENEURIAL ORIENTATION AND ORGANIZATIONAL RESILIENCE IN THE DIGITAL CONTEXT

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Purpose: Based on the theory of strategic entrepreneurship, the aim of this article is to identify the relationship between the dimensions of entrepreneurial orientation (innovativeness, proactiveness and risk-taking) and organizational resilience in the context of digital transformation of enterprises.

Design/methodology/approach: Due to the gap and considerable fragmentation of research in the existing literature on organizational resilience, particularly that on the whole combination of factors influencing it, in this study a set-theoretic analysis was performed using the fuzzy-set qualitative comparative analysis (fs/QCA). The fs/QCA was used to identify previously unknown combinations of entrepreneurial orientation dimensions and digital business capability dimensions that lead to high organizational resilience.

Findings: As indicated by the results of the conducted research, three different configurations are leading to high organizational resilience (digital-driven, digital and entrepreneurial orientation-driven, entrepreneurial orientation-driven). Moreover, it is impossible to create high organizational resilience driven by only one condition.

Research limitations/implications: The study was narrowed down to one selected strategic orientation hence future research can be extended to different levels and theoretical perspectives. To generalize the results and increase the level of universality, a larger research sample from multiple industries and regions can also be analyzed.

Practical implications: The study provides an important reference for companies to strengthen organizational resilience in the context of digital transformation. It pointed out that an entrepreneurial orientation can promote organizational resilience but requires managers to break the routine and focus on spreading the entrepreneurial spirit in the organization, creating a shared vision among individuals and improving employee creativity.

Originality/value: The paper explains the mechanism of the relationship between entrepreneurial orientation and organizational resilience from the perspective of digitization. The findings are relevant to the development of strategic entrepreneurship theory and provide implications for building the resilience of SMEs.

Keywords: entrepreneurial orientation, digital business capability, organizational resilience, digital transformation, fs/QCA.

Category of the paper: research paper.
1. Introduction

The COVID-19 pandemic has caused both supply and demand side shortages in many areas (Belhadi et al., 2021; Soluk et al., 2021), and numerous supply chain disruptions have significantly increased the risk of chain breakage capital for companies. This in turn presents companies with significant survival challenges (Hadjijelias et al., 2022). Moreover, this situation is exacerbated by the emergence of a new generation of digital technologies, such as big data, artificial intelligence or mobile Internet, which on the one hand promote business innovation and improve efficiency (Ferreira et al., 2019; Martinez-Caro et al., 2020), and on the other hand, they have a destructive impact on the structure and operation of companies (Bresciani et al., 2021; Lee, Trimi, 2021). In this situation, organizational resilience was recognized as a key element in adapting and coping in such an uncertain, difficult and turbulent environment.

Strategic entrepreneurship and crisis management scholars have studied resilience for a long time and defined it from various perspectives. Due to the multidimensional and multilevel character of organizational resilience (Kantur 2012; Chewning et. al., 2013), its definition is controversial (Williams et al., 2017). However, an important aspect of resilience is that organizations adapt to strategic processes to find alternative solutions in the new reality (Khan et al., 2021). It is worth emphasizing that research on organizational resilience is fragmented and there is still widespread agreement that its development, especially with regard to empirical research, lags behind (Malik, Garg, 2020; Williams et al., 2017). Thus, the black box of shaping organizational resilience still needs to be explored.

Entrepreneurial orientation is a well-established construct in management science with a rich body of research. Some scholars point to its impact on high performance by providing access to lucrative new opportunities or gaining first-mover advantage (e.g. Covin et al., 2006), while others point to its negative impact on performance due to, for example, misuse of resources and execution of projects with excessive risk (Hult et al., 2003). According to strategic entrepreneurship theory, entrepreneurial orientation can create competitive advantage by locking in resources and building dynamic capabilities. Organizational resilience, on the other hand, as an inherent part of an organization, depends on the resources and capabilities of the firm. Moreover, within the functioning of companies, there are differences in the intensity of competition due to, for example, technology and the business model, which results in different difficulties in acquiring resources. All of this raises the following question: is organizational resilience related to entrepreneurial orientation, especially in relation to the current complex market situation?

Therefore, this study attempts to examine the impact of entrepreneurial orientation on organizational resilience in a complex digital transformation environment. In the digital age, traditional models of entrepreneurship face many new challenges. If digital opportunities are not used to achieve digital transformation, the likelihood of failure increases dramatically.
Currently, there is little research in the literature on entrepreneurial orientation in conjunction with the mechanisms of digitalization affecting organizational resilience. This paper describes the dimension variables in detail and identifies configurations leading to high organizational resilience through the use of fuzzy-set qualitative fuzzy comparative analysis (fs/QCA). The study was conducted among thirty-six manufacturing SMEs. The following research question was posed: What are the possible combinations of factors (dimensions of entrepreneurial orientation: innovativeness, proactiveness, and risk-taking, and dimensions of digital business capability including digital strategy, digital integration and digital control) that generate high organizational resilience?

This study offers several contributions to the literature. This study investigated the impact of entrepreneurial orientation on organizational resilience in a digital context, something not found in previous literature. Firstly, a framework was proposed to understand the configuration of the dimensions of entrepreneurial orientation and digital business capability leading to high organizational resilience. It was found that entrepreneurial orientation can promote organizational resilience, the creation of which is a process that requires the integration of resources and capacity building, inducing a spirit of innovation, learning, entrepreneurial alertness and sensitivity to opportunity. Entrepreneurial orientation prompts managers to explore resources and build networks that can improve digital business capability. This research has confirmed that digital business capability plays an important role in maintaining organizational resilience. Digitization is breaking the boundaries of companies and has helped them gain more opportunities to search for resources and may even determine the survival of companies. Secondly, the study reveals many equifinal configurations to high organizational resilience rather than one best solution offered in most of the literature research to date. The study helps to better understand the interdependence of causal conditions in established relationships with the test result.

The study is structured as follows: a theoretical framework that addresses organizational resilience, dimensions of entrepreneurial orientation and dimensions of digital business capability and the interactions of these concepts, the presentation of the method and results, and finally the discussions and conclusions.

2. Literature review

Resilience is a multidimensional and multidisciplinary concept used in psychology, ecology and engineering, which is gaining more and more importance in research conducted around business management (Duchek, 2020), especially in relation to crisis management or unstable changes (Dahles, Susilowati, 2015). As indicated in the literature, organizational resilience enables appropriate adaptation in crisis environments in order to survive, rebuild, develop
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(Dahles, Susilowati, 2015; Torres et al., 2019) and achieve a competitive advantage. There is still a gap in the literature regarding a universally accepted definition of resilience. Some researchers draw attention to the capacity of resilience to renew and return to its original state (Freeman et al., 2003), others to adapt to change (Weick et al., 1999), or even to bounce back and transform challenges into opportunities and improve performance (Lengnick-Hall, Beck, 2003). In a systematic review of the literature on resilience, Linnenluecke (2017) defines organizational resilience as an attribute of responding to external threats through the use of internal resources. On the other hand, Ates and Bititci (2011), point to organizational resilience as the ability to predict key opportunities resulting from emerging trends and to maintain stability in a turbulent environment. This study uses the following definition of organizational resilience as the ability of companies to withstand discontinuous crises and respond to normal risk (Branicki et al., 2018).

Discontinuous crises are sudden and unexpected events spread over time and space, such as the COVID-19 pandemic, for example, which can be helped by strong resilience to overcome. Entrepreneurial orientation, on the other hand, is a strong motivation in running a business and is a key factor in resilience. It helps companies to better understand changes caused by sudden shocks, analyze their surroundings and develop appropriate countermeasures. Based on extensive literature in this area, it has been assumed that entrepreneurial orientation is the tendency to engage in innovation, and take risky ventures through proactive behavior, thus beating the competition (e.g. Vaznyte, Andries, 2019). Moreover, as shown by numerous studies, entrepreneurial orientation can increase the scope of connections with stakeholders and support the acquisition of diverse knowledge (Santoro et al., 2020). In turn, risk-taking is associated with bold decisions that the company takes to obtain specific benefits while being aware of potential losses. In this regard, risk-taking has a strong relationship with improvisation and bricolage behavior (Moenkemeyer et al., 2012). Entrepreneurial orientation may also stimulate the tendency to accumulate experiences in coping with failures and take more adequate measures in the face of the coming crisis (Williams et al., 2017). It should also be noted that companies are always exposed to normal risks in the course of their functioning in the market. Overcoming their innate rigidity, firms with a high entrepreneurial orientation are more likely to pursue risky ventures, seeking to innovate and build competitive advantage. As Zahra and Covin (1995) point out, a strong will to get ahead encourages firms to gain a first mover advantage, which significantly increases the flexibility of their operations. A manifestation of entrepreneurial orientation is also the implementation of a strategy aimed at catching early warning signs of market changes (Lee et al., 2013), for firms with few resources this is an effective way to explore new opportunities.

In the face of the digital economy, the importance of digital opportunities owned by companies is growing. Digitization, as indicated by Proksch et al., 2021 is the use of technology and digital infrastructure, widely in the economy, business and society. A digital business capability, the conceptual basis of which is provided by a resource-based view, is a dynamic
capability enhanced by a digital application. According to this well-established view, companies have resource configurations that lead to performance differences (Barney, 1991) and translate into capabilities. Dynamic capabilities allow companies to better adapt to the environment and achieve excellent results (Teece et al., 1997). Hence, according to Yeow, Soh, Hansen (2017) or Nasiri, Saunila, Ukko, Rantala, and Rantanen (2020) dynamic capabilities provide a strong means of testing the degree of digitization of companies. A digital business capability is manifested in the driving force of digitization in business processes, digital strategy, integration and digital control. The digital strategy focuses on creating value and business practices in digital transformation. In turn, digital integration leads to growth and value creation thanks to the coordination of organizational tensions arising from the misallocation of resources (Helfat, Raubitschek, 2018). Digital control by analyzing the return, costs and resources related to digitization supports the capture of new value and transformation of the digital strategy by adapting to and capturing the opportunities as well as the elimination of emerging threats (Wielgos et al., 2021).

Companies characterized by a high entrepreneurial orientation can use information from the network to make decisions for the integration of digital resources. Through such a strategy, companies develop their resource management capability, conduct digital learning and complement each other within digital technologies (Ravasi, Turati, 2005). Due to the entrepreneurial orientation, innovation drives companies towards introducing digital management mechanisms that support the linking of the innovation chain with digital technology. On the other hand, risk-taking leads to new challenges and added value, while being proactive allows the use of a variety of digital technologies and actively fits into the digital age. It also contributes to solving problems, especially those relating to resource constraints and market competition through digital transformation. Importantly, the success of innovation depends largely on the acquisition of knowledge (Zhou, Li, 2012). Digital business abilities, on the other hand, make it easier for enterprises to coordinate with partners, suppliers and customers, which greatly facilitate the acquisition of the desired technological knowledge (Helfat, Raubitschek, 2018). Digital integration can have a significant impact not only on the reconfiguration of free resources but also on the management of the learning mechanism and the creation of business value thanks to new knowledge (Easterby-Smith, Prieto, 2008). Digital Audit monitors the use of digitization and assesses the progress of digital business transformation to reduce potential risks. Importantly, digital business capability helps companies adapt to the adequate technology and lack of digital knowledge of stakeholders (Martinez-Conesa et al., 2017).

In summary, previous research indicates the relationship between entrepreneurial orientation and digital business capability. However, there is little research to support how entrepreneurial orientation and digital business capability interact with each other leading to the creation of high organizational resilience. Therefore, this study explores how entrepreneurial orientation and digital business capability work together in terms of
organizational resilience from a holistic perspective based on the configuration theory. The conceptual model is shown in Figure 1.

![Figure 1. The research framework. Source: own study.](image)

### 3. Data and method

This study uses fs/QCA, a configuration approach based on set theory and fuzzy algebra (Ragin, 2008). The fs/QCA approach examines how the interaction between variables affects the outcome under study. This method is suitable for examining the combined effects of multiple preceding variables to obtain the same outcome (Rihoux, Ragin, 2008; Kwiotkowska, 2018). In fs/QCA, both necessary and sufficient conditional relationships can be identified. In this study, the fs/QCA method was used to investigate the complex causal mechanisms between entrepreneurial orientation and digital business capability and organizational resilience. In fs/QCA, configuration theory is used to perform a comparative analysis between cases, in addition, the method provides an exploration of which conditional configuration elements produce the expected outcome (in this study, high organizational resilience). It should be emphasized that the fs/QCA method combines the advantages of qualitative and quantitative research, thanks to which it not only solves the problem of generalization inherent in the qualitative analysis of several cases but to some extent compensates for the lack of qualitative changes and analysis of phenomena inherent in purely quantitative analysis on large research samples.

The data was collected through a survey from a list of 167 manufacturing, small and medium-sized (SMEs) Polish companies, 36 of which completed the survey. Industry sectors included: manufacture of computers, electronic and optical products: 28.1%, furniture...
manufacturing: 20.2%, manufacture of motor vehicles, trailers and semi-trailers: 16.3%, manufacture of electrical equipment: 35.4%. Participants in the study were members of top management, including CEOs (46%) digital executives (28%) and manufacturing directors (26%) in manufacturing SMEs. The survey was conducted from March 2022 to June 2022. In line with previous studies (e.g. Krishnan, Scullion, 2017), SMEs were defined as companies with fewer than 250 employees. The sample was obtained by emailing, and calling business owners and asking them to participate in a survey. After making sure that the respondent is the appropriate representative of the company and indicating the company-level variables (company age, company size, industry), the respondent answered the questions regarding the appropriate variables shown in random order. Finally, certain personal details (e.g. gender, age) were requested after the anonymity of the response.

A five-point Likert scale was used for all scale items ranging from 1 (strongly disagree) to 5 (strongly agree). The individual reliability of each construct was greater than the minimum acceptable Cronbach's $\alpha$ of 0.7, indicating high reliability (Nunally, Bernstein 1994). The research assumes that organizational resilience not only copes with the shock of a discontinuous crisis and enables recovery from it, but also has the capacity to adapt to normal risks. Five elements were used to measure organizational resilience based on Marcucci et al. (2021) i.e.: financial liquidity, project portfolio and brand image, risk management, organizational solutions that enable social relationships (e.g., collaborative teamwork, creative problem solving, and soft skills development), and information sharing by supply chain partners.

The scale developed by Wielgos et al. (2021) was used to explore digital business capability within three complementary dimensions: digital strategy, digital integration and digital control. Each of the three dimensions contains a set of indicators. The digital strategy includes three elements such as “Our digital strategy opens up completely new opportunities to create value for our customers”. The digital integration consists of five elements, for example: “Our company is increasingly digitally connected with customers, suppliers and partners”. The digital control includes three elements, one of which is “Our company has concrete specifications for the implementation of digital business transformation”.

Entrepreneurial orientation was measured using items based on several previous studies in this area (e.g. Hughes, Moragna, 2007: Covin, Wales, 2019; Kwiotkowska, Gębczyńska, 2019; Bauweraerts et al., 2021). Innovativeness, proactiveness and risk-taking, each of these three dimensions were measured by three items, for example innovativeness: “We actively introduce improvements and innovations in our business”, proactiveness: “We always try to take the initiative in every situation (e.g. against competitors, in projects when working with others) and risk-taking: "People in our business are encouraged to take calculated risks with new ideas".
4. Results

In fs/QCA, it is important to check if any single condition is necessary for organizational resilience before carrying out a proper analysis. In a necessity analysis, a causal condition is considered necessary for an outcome if the consistency score exceeds 0.90 (Ragin, 2008). The fs/QCA 3.0 software was used in this study. Table 1 shows the results of this analysis. For high organizational resilience, the consistency coefficients for all conditions were below 0.9, which indicates that no single condition is necessary for organizational resilience (Ragin, 2008; Schneider, Wagemann, 2012).

Table 1. Necessity test of single conditions using the QCA method

<table>
<thead>
<tr>
<th>Condition</th>
<th>High organizational resilience</th>
<th>Consistency</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovativeness</td>
<td></td>
<td>0.6706</td>
<td>0.5871</td>
</tr>
<tr>
<td>~Innovativeness</td>
<td></td>
<td>0.6316</td>
<td>0.6633</td>
</tr>
<tr>
<td>Proactiveness</td>
<td></td>
<td>0.6608</td>
<td>0.5707</td>
</tr>
<tr>
<td>~ Proactiveness</td>
<td></td>
<td>0.6339</td>
<td>0.6841</td>
</tr>
<tr>
<td>Risk-taking</td>
<td></td>
<td>0.6649</td>
<td>0.5566</td>
</tr>
<tr>
<td>~ Risk-taking</td>
<td></td>
<td>0.6035</td>
<td>0.6716</td>
</tr>
<tr>
<td>Digital strategy</td>
<td></td>
<td>0.6757</td>
<td>0.6479</td>
</tr>
<tr>
<td>~Digital strategy</td>
<td></td>
<td>0.6339</td>
<td>0.6401</td>
</tr>
<tr>
<td>Digital integration</td>
<td></td>
<td>0.6324</td>
<td>0.5455</td>
</tr>
<tr>
<td>~Digital integration</td>
<td></td>
<td>0.6211</td>
<td>0.6159</td>
</tr>
<tr>
<td>Digital control</td>
<td></td>
<td>0.6235</td>
<td>0.6713</td>
</tr>
<tr>
<td>~Digital control</td>
<td></td>
<td>0.6801</td>
<td>0.7085</td>
</tr>
</tbody>
</table>

Note. ~ logical negation - the absence of conditions. Source: own study.

In the case of fuzzy set variables, it is necessary to apply theoretical and contextual knowledge to determine the most appropriate thresholds for full membership and non-membership in defined sets (Douglas et al., 2020; Kwiotkowska, 2022). In this study, a direct calibration method was used to calibrate the relevant antecedent conditions and outcomes as fuzzy membership outcomes. The data was calibrated by setting the fully-in and fully-out cut-off points to be ± one standard deviation from the mean value. For all conditions and the outcome, the cut-off point was set to the mean for each variable. The results are shown in Table 2. The reason we used this approach is that the average reflects the average level of firms and the standard deviation reflects the variation between firms.
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Table 2.
Variable calibration

<table>
<thead>
<tr>
<th>Antecedent and outcome</th>
<th>Full membership</th>
<th>Cross-over point</th>
<th>Full non-membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovativeness</td>
<td>4.868</td>
<td>3.852</td>
<td>2.836</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>4.838</td>
<td>3.817</td>
<td>2.789</td>
</tr>
<tr>
<td>Risk-taking</td>
<td>4.845</td>
<td>3.852</td>
<td>2.847</td>
</tr>
<tr>
<td>Digital strategy</td>
<td>4.628</td>
<td>3.789</td>
<td>2.947</td>
</tr>
<tr>
<td>Digital integration</td>
<td>4.764</td>
<td>3.741</td>
<td>2.717</td>
</tr>
<tr>
<td>Digital control</td>
<td>4.736</td>
<td>3.764</td>
<td>2.791</td>
</tr>
<tr>
<td>Organizational resilience</td>
<td>4.766</td>
<td>3.805</td>
<td>2.845</td>
</tr>
</tbody>
</table>

Source: own study.

In the next step, a truth table was created consisting of $2^k$ lines (“$k$” is the number of conditions), where each line represents a possible configuration of conditions. In the qualitative comparative analysis process, it is suggested to set a benchmark for consistency 0.75 and above (e.g. Covin et al. 2016). This study established 0.9 as the consistency threshold and 2 as the number of allowed cases. The results are shown in Table 3.

Table 3.
Configurations of high organizational resilience

<table>
<thead>
<tr>
<th>Causal condition</th>
<th>High organizational resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C1</td>
</tr>
<tr>
<td>Innovativeness (IN)</td>
<td>⬤</td>
</tr>
<tr>
<td>Proactiveness (PR)</td>
<td></td>
</tr>
<tr>
<td>Risk-taking (RT)</td>
<td>⬤</td>
</tr>
<tr>
<td>Digital strategy (DS)</td>
<td>⬤</td>
</tr>
<tr>
<td>Digital integration (DI)</td>
<td></td>
</tr>
<tr>
<td>Digital control (DC)</td>
<td>⬤</td>
</tr>
<tr>
<td>Raw coverage</td>
<td>0.19</td>
</tr>
<tr>
<td>Unique coverage</td>
<td>0.06</td>
</tr>
<tr>
<td>Consistency</td>
<td>0.92</td>
</tr>
<tr>
<td>Overall solution coverage</td>
<td></td>
</tr>
<tr>
<td>Overall solution consistency</td>
<td></td>
</tr>
</tbody>
</table>

Note: ⬤ - core causal conditions (present); ⬤ - peripheral casual condition (present); ⬤ - core causal condition (absent); ⬤ - peripheral causal condition (absent); blank spaces indicate “do not care”.

Source: own study.

In this study, three configurations achieved high organizational resilience. In line with the group naming process (Furnari et al., 2020), the first configuration (C1) was named as a digital-driven group, the second configuration (C2) as being driven by digital and entrepreneurial orientation, the third (C3) as entrepreneurial orientation-driven. A detailed explanation of these three configurations follows.

In Table 3, a total of three, first-order configurations are shown, which are adequate for achieving high organizational resilience because they had high consistency and coverage (0.91, 0.57). From the above table, it is clear that there were three configurations to achieving high organizational resilience.
The first configuration (C1) is digital-driven: DC * DI * DS * ~RT * P. The core conditions in this configuration, the presence of digital control together with digital integration emphasize the strong links with digital and indicate that digital transformation is an important factor of high organizational resilience. In turn, in the case of the third configuration (C3), dominated by entrepreneurial orientation: IN * PR * ~RT * DI * DC, empirical research has shown that entrepreneurial orientation can promote organizational resilience, while the combination of innovativeness and proactiveness leads to high organizational resilience, especially when risk-taking is absent. The coverage is 0.1, which is much higher than the other two types, indicating good versatility of this solution. The last configuration, configuration two (C2) driven by digital and entrepreneurial orientation: PR * RT * DS * DI, indicates that different combinations of the dimensions of entrepreneurial orientation and the dimensions of digital business capability can also lead to high organizational resilience. This configuration shows that the combination of proactiveness and digital strategy as core conditions with risk-taking and digital integration as peripheral conditions can result in high organizational resilience.

After the study, to ensure the robustness of the findings, the case frequency thresholds were adjusted from two to three and four and we re-examined the grouping of entrepreneurial orientation and digital business capability with high organizational resilience. The results showed no significant changes in the obtained results. Successively, the consistency threshold was lowered to 0.8, which, however, did not affect the still three supported configurations. Overall, the change in parameters did not result in significant differences in the number, composition, consistency and coverage of the configurations, and the results can be considered robust.

5. Discussion and contributions

This study looked at the impact of entrepreneurial orientation on organizational resilience in a digital context, which has not been found in the previous literature and is an attempt to fill the empirical research gap in this area (Duchek, 2020; Linnenluecke, 2017). A research framework was constructed based on the strategic entrepreneurship theory and it was shown that an entrepreneurial orientation, as well as digital business capability, leads to high organizational resilience. The research used fs/QCA to show how equifinal configurations of entrepreneurial orientation dimensions and digital business capability dimensions are related to high organizational resilience. As research shows, neither the dimensions of entrepreneurial orientation: innovativeness, proactiveness and risk-taking nor the dimensions of digital business capability: digital strategy, digital integration and digital control alone create the necessary conditions for high organizational resilience. The results show that high organizational resilience can be achieved with different combinations of entrepreneurial orientation
dimensions and digital business capability dimensions. Three configurations with high organizational resilience have been identified: digital-driven (C1), digital and entrepreneurial orientation-driven (C2) and entrepreneurial orientation-driven (C3).

As observed in the study, there is some substitution between entrepreneurial orientation and digital business capability in two configurations leading to a high level of organizational resilience (configurations C1 and C3). These alternative solutions indicate that under certain conditions a high level of resistance can be achieved by different pathways which, however, lead simultaneously to the same outcome. These results also confirm previous reports that entrepreneurial orientation is manifested in the development of a strategy focused on early warning signals about environmental changes (Lee et al., 2013). On the other hand, in the context of digitization, the best way is to combine digitization with the knowledge, behavior and business of companies (Ye et al., 2022), which requires shaping the capability to apply, integrate and control digital technology and combine digitization with business (Wielgos et al., 2021). Moreover, as indicated by the results of the conducted research, there is also a concurrent solution driven by both proactiveness and digital strategy (C2 configuration), which also leading to high organizational resilience. This, in turn, confirms previous reports that companies with a high entrepreneurial orientation are more conducive to promoting the development of digital business capability (Ritala et al., 2021).

These results significantly expand the scope of research conducted so far, confirming the agreement that it is necessary to extend research around organizational resilience (e.g. Williams et al., 2017; Malik, Garg, 2020). The conducted analyzes show that organizational resilience is determined by the interaction between both entrepreneurial orientation and digital business capability, rather than by any single condition. In this regard, this study overcomes some of the limitations of previous research on entrepreneurial orientation and digitalization and their impact on organizational resilience (e.g. Zhang et al., 2021).

The study used fs/QCA, thanks to which it was possible to overcome the difficulties of classical research methods, as well as to show the conditional relationship within configurations leading to a high level of organizational resilience. This method widens the choice of test methods and provides a new approach to testing small and medium-sized samples for organizational resilience.

This study provides an important reference for enterprises to improve their organizational resilience in the context of digital transformation. Both entrepreneurial orientation and digital business capability have been found to promote organizational resilience. With the increase in the complexity of the environment, the tougher competition, acceleration of technological changes, organizational resilience becomes more and more important, in deciding about the survival of the enterprise. Developing resilience requires an appropriate resource base, building strong networks and actively engaging in learning from experience. Enterprises should encourage employees to cultivate an entrepreneurial orientation. Managers should break the routine, focus on a culture that is appropriate for the organization, and spread the spirit of
entrepreneurship so that it is possible to quickly adapt to changes in the environment and face any difficulties. They should make every effort to create a shared vision between individuals and improve the creativity of employees. Moreover, companies should actively introduce digital technologies. For example, Big Data can be used to make more accurate decisions and improve supply chain integration (Wielgos et al., 2021). A variety of digital supply chain technologies enable the realization of intelligent deliveries, full visualization and efficient flows. Cloud computing powers online and offline integration, mobile payments and digital marketing. Managers need to adapt their skills and remain positive about emerging technologies. They should also use digital technology in their organizational processes and value chain, and develop digital business capability in a continuous learning process. Entrepreneurs must be aware that a complex environment is an objective phenomenon that requires continuous improvement of skills, resource finding, knowledge and improvisation to cope with any difficulties and survive.

As with other studies, this one has some limitations that may form the basis of future analysis. The research focused only on the impact of selected orientations and abilities on organizational resilience. Meanwhile, it is possible to study the impact of decision-making logic, and other strategic orientations, such as market orientation or other variables, leading to a wider understanding of organizational resilience in the future. Likewise, the digital business capability is only one aspect of the dynamic capability of firms in the digital context. In the future, therefore, other digital options such as the degree of digital transformation and big data analytics can be explored. The analysis was carried out on a small research sample of Polish manufacturing SMEs. To deepen the research and generalize the results, it is possible to enlarge the research sample with a larger number of entities from various industries and regions.

References


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