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EUGENIO NUNZIATA

Beyond the Agile Model: Overcoming Instability with Resilience

In a context defined as permacrisis, a company's ability to consciously manage instability and discontinuity becomes central and strategic to its survival. Organizations that invest exclusively in "agile" value-added processes may prove to be "fragile," forced to frequently interrupt operations and reorganize resources in the face of a succession of unforeseen events. In contrast, companies that not only focus on agility but also develop broad resilience capabilities perform better, demonstrating dexterity in adapting and recovering in the face of catastrophic events, and creating a "new normal" that ensures business continuity and long-term health.

AGILE//RESILIENCE//SUPPLY CHAIN//ORGANIZATION//CHANGE MANAGEMENT

EUGENIO NUNZIATA
Adjunct Professor of Organization, Department of Business and Management, at Luiss Guido Carli University (Rome). He is a Senior Advisor in Organizational Change Management.

Shifting to an agile operating model, optimizing sources of supply in distant, lower-cost economies, relocating production systems, decreasing unit costs, and maintaining or bolstering a competitive position in the marketplace: these are some of the strategies implemented by companies to meet the challenges posed by globalization. Statistical evidence shows that the globalization of trade and productive investment has soared from 39% of global GDP in 1990 to 59% in 2019 (European Central Bank, 2021). However, managing the global interdependencies that have developed over the past three decades in production processes and supply chains has proven more problematic recently, especially for companies that have built global value chains over time (*Centro Studi Confindustria*, 2023).

In recent years, a state of permacrisis,[1] characterized by a succession of unexpected geopolitical, economic, social, and climatic events, has transformed the habitat in which we live. This constant co-occurrence of emergencies has transformed the concept of crisis from a temporary rupture into a permanent state of contextual instability.

How many companies have equipped themselves with the necessary flexibility to reduce their dependence on imported strategic resources? Which production systems have had the foresight to assemble an organizational and strategic structure capable of ensuring a timely response to emergencies and a rapid reallocation of resources (skills, technology, infrastructure, and production capacity)?

An organization's ability to cope with such discontinuities plays an increasingly central and strategic role in its survival. In light of the recent advances, studies on organizational resilience could provide a valuable framework for reinterpreting agility as an operating model capable of equipping a company with the levels of adaptation and responsiveness needed to reduce system vulnerability. Confirmation of this hypothesis, described by Holbeche (2018) as the resiliently agile model, could be the key to finally achieving the profound paradigm shift that has been discussed for more than fifty years: the transition from a mechanical to an organic model. This article therefore aims to help managers to deepen their understanding of the organizational attributes of agility and resilience, highlighting their distinctive features.

> The resiliently agile model could be the key to achieving the transition from a mechanical to an organic model.

THE AGILE ORGANIZATION

Agile organizations have an operating model that balances the need for stability and for dynamism. This allows them to quickly and efficiently reconfigure strategy, structure, processes, human resources, and technology, so they can continuously optimize and protect the value chain over time, overcoming certain rigidities of previous lean approaches (Cegarra-Navarro et al., 2015). Organizational agility, then, refers to a company's ability to make rapid changes in production processes and achieve operational flexibility in response to stresses in the external environment, and to seize immediate opportunities. Agility provides the organization with a constant, enduring capacity for adaptation, flexibility, and responsiveness (Teece et al., 2016).

Several working frameworks, especially in the areas of product development and technological innovations, can be traced back to the 2001 Agile Manifesto.

Subsequent analysis of successful experiences and available research (Salo, 2017) has identified some intrinsic factors that characterize the operating model of an agile organization: a network of self-regulated teams united by an orientation towards co-creating value for stakeholders, supported by effective organizational learning mechanisms, very fast decision-making cycles, and the widespread use of enabling technologies, all in a strongly people-centered cultural context.

According to a number of international surveys, the majority of a large panel of leading companies claim to have very ambitious programs in this direction. Specifically, three-quarters of the companies surveyed ranked the adoption of agile-oriented organizational models among their top three corporate priorities (Aghina et al., 2018).

1 In 2016, former European Commission President Jean-Claude Juncker and former International Monetary Fund Operations Director Christine Lagarde spoke of a permanent state of crisis, which they referred to as a "permacrisis," borrowing a term from complexity theorist Edgar Morin (1993).

THE RESILIENT ORGANIZATION

Resilience refers to the ability of individuals, and consequently social-organizational systems, to anticipate, cope with, and recover from unforeseen and unexpected events, disasters, and emergencies that disrupt normal routines. At the same time, resilience in a company is driven by the intent to protect the interests of stakeholders, ensure the well-being of the community, and boost organizational productivity during vulnerable situations due to crises or emergencies. In a resilient context, external threats are not just a source of anxiety and fear but serve as a stimulus to consider new options, i.e., to create conditions of renewed normalcy that can ensure the continued growth of the organization.

A number of studies in the field of *organizational resilience* (Giustiniano et al., 2018) identify an interpretive model that reveals two components underlying people's behavior: an adaptive component that resists shocks, and a reactive component that, conversely, focuses on learning from shocks. The adaptive part is characterized by the sense of intentionality and determination, accompanied by planning and protective initiatives for the company and all its stakeholders, and efforts aimed at improving the existing organization. The reactive component, on the other hand, is oriented towards rethinking the organization, valuing lessons learned and connecting the various internal components. This dimension promotes integration and encourages the search for solutions, creating fertile ground for the development of new hypotheses, even in areas that are not perfectly known.

Among the components observed in the dialectical relationship between adaptability and responsiveness, scholars include improvisation; understood as the ability to interpret one's role with ingenuity and craftsmanship (Sparti, 2019); strategic and creative problem solving; and the activation of virtuous mechanisms of collective learning. The need for resilience in organizations has become so important that the International Organization for Standardization (ISO) has issued ISO 22316, which is dedicated to this topic.

FRAGILITY ARISES FROM CONTRADICTIONS

In the current context, it is essential to define "timeliness of response" and "change" more precisely. How fast should the response be to sudden, unexpected, and frequent events that characterize the external environment? Is the goal of change to restore pre-existing circumstances, or to adapt time and time again and create new conditions of normality? How much of this change can be planned and predicted, and how much instead takes the form of progressive shaping?

The absence of a conscious answer to these questions in an agile organizational setup can lead to fragility and undermine resilience (Holbeche, 2018). In fact, focusing solely on agile operating models can create an exposure that cannot withstand unexpected and sudden shocks (*frAgility*), leading to changes that could have negative repercussions in the long run. On the other hand, the need to express resilience capabilities could be detrimental to efficiency, costs, and margins in the short term. The necessity of responding proactively and in a timely manner can even lead to "anti-lean" decisions, with the risk of creating organizational redundancies that damage the value chain. In economic and production systems, this often translates into economic costs associated with process disruptions and the consequent reorganization of resources. Unexpected and unforeseen is by definition the opposite of predictable, and it is not enough to respond with the suspension of normality typical of a state of emergency. Reducing the vulnerability of the system requires repositioning it whenever the need arises, with appropriate strategies, by moving towards conditions of different normality (Nunziata, 2024).

In recent years, geopolitical imbalances, global pandemics, extreme weather events, cyber-attacks, and other disasters have exposed the fragility of global production and supply chains, This issue is being debated not only by academics and institutions, but also by businesses and the public. Managing the global production (and thus supply) interdependencies that have developed over the past three decades has proven more problematic in the past three years. This is especially true for the types of companies that "have developed a 'tight' global value chain over time, with minimal supplier redundancy, aimed at the efficient use of different competitive advantages, and have adopted production systems characterized by predominantly financial inventory management (such as just-in-time practices). The international organization of production, encompassing supply chains, conceals a potential cost to be taken into account, related to its possible blockage" (*Centro Studi Confindustria*, 2023). These considerations bring to mind subjects such as transaction cost analysis, make-or-buy, and the lean economy.

An overemphasis on the agile and lean paradigm has exposed manufacturing systems to significant vulnerabilities. By prioritizing cutting costs and maximizing margins, companies have lost sight of the need to cultivate resilience capabilities. To be resilient, they must have robust supply networks that can quickly recover from shocks caused by abnormal and/or unexpected events. To this end, the following practices are essential: (1) detecting weak signals from the external environment early to enable response and recovery from disruptive conditions; (2) effectively managing the supply chain end-to-end, supported by data governance that enables full traceability from raw materials to finished product, covering subcontractors, suppliers, and end customers; (3) monitoring demand, also counting contingency stocks, and assessing diversification of supply sources, including local sources; (4) investing in digitization to improve remote control of supply chains, and in automation to lower costs and offset processing in high-cost countries.

The phenomena of reshoring (moving production back to the country of origin), nearshoring (moving production to suppliers in geographically closer countries), and backshoring (moving part of the supply chain back to the country of origin) are receiving growing attention in both the economic literature and the policy debate. In addition, the context of rising geopolitical tensions has encouraged the adoption of a new approach called "friendshoring," in which firms choose to shift production to politically allied countries that are considered friendly (*Fondazione Nord Est*, 2022). Two recent surveys conducted by *Fondazione Nord Est* (2022) and the *Centro Studi Confindustria* (2023), provide interesting data on the relocation of supply chains by Italian manufacturing firms. These studies point to an increased exposure of Italian companies to foreign sourcing: almost 73% of respondents source the materials they need for production abroad. In contrast to this heavy reliance on foreign sourcing, between 2016 and 2020, 21% of companies carried out full or partial backshoring operations.

To cope with sudden events, many companies have turned to redundancy strategies, augmenting the amount of available inventory to avoid disruptions. Over the past two years, nearly two out of three companies (or 65.8%, a percentage that rises to 81.2% for companies with more than 250 employees) have stocked up on their inventories to prevent supply problems. This change in approach can be summarized by the phrase "from *just-in-time* to *just-in-case*," which describes the shift from a model focused on efficiency and minimizing waste to one that prioritizes securing supply lines (*Fondazione Nord Est*, 2022).

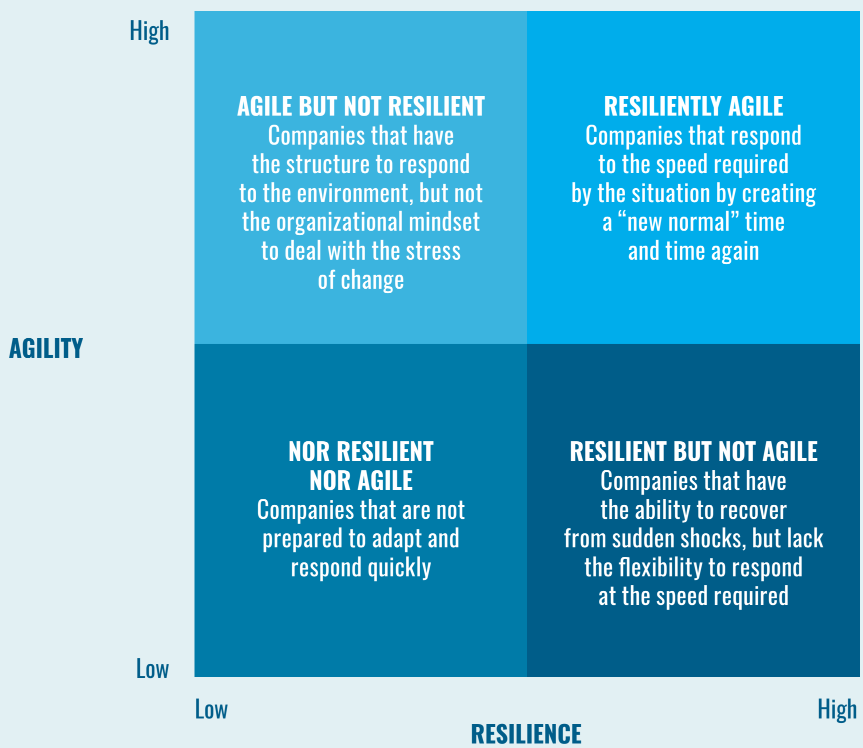
However, the prospect of widespread backshoring is neither practical nor desirable. On the one hand, some materials (especially raw materials) are only found in certain areas of the world; on the other hand, abandoning global value chains would mean giving up the benefits of production specialization and economies of scale. This said, the May 2023 World Economic Forum predicted that supply chains will become shorter over the next three years. Confirming this trend, an *Economist* survey (2023) of a sample of 3,000 senior executives worldwide showed an upsurge in the adoption of nearshoring (from 12% in 2021 to 20% in 2022) and backshoring (from 5% to 15%).

GOVERNING ORGANIZATIONAL CHANGE

Resilience and agility are two highly complementary paradigms that are essential for an organization that wants to be able to adapt to sudden shocks. However, these concepts have specific characteristics that clearly differentiate them. Failure to appreciate these dissimilarities can lead to minor organizational inconsistencies in practice. Instead, understanding the differences and complementarities between resilience and agility helps leaders consider all salient factors in order to manage change in their organization and prepare for an uncertain future. If we define resilience as the ability to withstand, absorb, and respond to sudden changes, and agility as the ability to move in a decisive but flexible manner, then an organization can exhibit different combinations of these two characteristics (Figure 1).

The considerations discussed so far would lead to the assertion that the complementarity between agility and resilience lies in their different scopes of application. While the former is related to the way the organization and its operations function in terms of value production processes, the latter is associated with behaviors and cultural settings, which means it concerns people, communities, and the organization understood as a social system. In other words, resilience is a way of being that characterizes the DNA of an organization; it should be a prerequisite for agility. Moreover, resilience works in both the short and long term, allowing companies to balance the need to respond immediately to sudden crises and disasters with the ability to identify and capitalize on long-term opportunities that may arise from critical situations. From an agile perspective, change is

FIGURE 1 DISTINCTIVE CHARACTERISTICS OF AN ORGANIZATION



conceived as a path that must be planned and managed step by step, while from a resilience perspective, change means continuous design, driven by the need to create a "new normal" time and time again in response to contextual challenges.

Organizations can be designed to express agility, but resilience depends fundamentally on the people who run them. In fact, people with appropriate training and organizational mindsets can become accustomed to operating in a constantly changing, agile organizational environment. However, to express resilience and adaptability in an environment that is constantly subject to unforeseen events, it is important to possess strategic sensitivity and individual maturity. These traits enable people to understand the larger context in which they operate, to anticipate the possible consequences of their actions, and to make informed decisions even in situations of uncertainty.

MANAGERIAL IMPACT FACTOR

- **Synergy between agility and resilience:** By integrating agility into production processes and resilience into the organizational culture, companies can respond quickly to crises while maintaining a long-term strategic vision.
- **Strengthening the supply chain**: Resilience requires dynamic supply chain management focusing on diversifying sources, continuous monitoring, and adopting a strategic approach that shifts from a just-in-time model to a just-in-case model.
- **Adaptation and organizational innovation**: Resilient companies integrate an adaptive approach with a reactive one, with the aim of learning from experience and innovating through creative improvisation and strategic problem solving.
- **Improving human resources**: Resilience is based on strategic skills, decision-making maturity and contextual vision, while agility is fostered by autonomous teams that are continuously learning.
- **Moving toward resilient governance**: The adoption of digital technologies and advanced tracking and control systems enhances the ability to anticipate risks, ensure business continuity, and proactively address challenges.

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