

# Decoding Resilience: A Research Framework for Building Thriving Organizations in Turbulent Markets

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*Abstract: Companies operate in ever faster and more abruptly changing environments. Due to the global interconnectedness of markets and actors, changes in framework conditions often have impacts across industries and geographical borders and constantly present companies worldwide with new challenges; however, they also offer opportunities. Adaptability to abruptly changing conditions and the ability to shape market environments have gained enormous importance as strategic factors for company organizations. How exactly can adaptability be shaped? This paper assumes that today's companies need concepts that help them to successfully adapt to these turbulent business environments and ideally to shape the changes to their own advantage. In addition, this work assumes that companies rely on already established models from science and business, but also (especially currently) develop new ideas themselves to adapt even faster and more effectively to changing conditions. To explore these phenomena, this paper develops a research funnel that can be used to identify companies that are most likely to provide answers to this question. In addition, this paper presents a research design with which the secrets of the adaptability of these companies can be explored in the field.*

*Keywords: Company Organization; Market Turbulence; Rapidly Changing Business Environments; Adaptability; Organizational Capabilities; Field Research; Research Funnel; Research Design*

## Introduction

Over the last three decades, company environments have changed ever more rapidly and abruptly and with ever greater consequences due to the influence of external factors.

Companies have been facing environmental influences, such as climate change, and the COVID-19 pandemic that gripped the world between 2020 and 2023 interrupted interconnected value chains and whole economies. Companies have had to manage political influences, such as The European Green Deal (2019), as a political answer to climate change, and Russia's attack on Ukraine, which accelerated further changes in the political and economic landscape, for example, through a dramatic increase in electricity prices. With a baseline of 100 points in 2015, the index increased within 6 years by just 11 points, while within just one year from 2021 to 2022, it increased by another 22 points (Statista n.d.). Digital economies have faced a confluence of societal and technological change that has resulted in a digital disruption, the "Sixth wave of Advertising Technology: Privacy" (Picard 2021), which started to accelerate from 2021, when Apple decided to enter this movement. Most recently, practitioners witnessed technological change with the breakthrough of artificial intelligence (Hu 2023) and are situated in the midst of the rollover from Industry 4.0 to Industry 5.0 (Schwab 2017, p. 120; Xu et al. 2021, p. 532).

Additionally, companies have been experiencing a substantial increase in the interdependence of markets ". . . and not just capital markets, obviously, but labor markets, commodity markets, technology markets. We've had a third of the world's population reenter the market economy" (McKinsey Company 2009, p. 2). Access to the global world has become very easy, not least because it is supported by digitalization, which allows, for instance, real-time communication and virtual co-development of whole new businesses. These strong interconnections across different markets and borders support the broad impact of disruptions and accelerate the speed of changes in business environments.

Thus, in the last 30 years, companies have been facing increasing change dynamics, driven by exogenous influencing factors in a wide variety of markets. Some label these rapidly changing business environments "turbulence" (McKinsey Company 2009); others characterize this new world with acronyms, such as "VUCA" (Johansen and Euchner 2013). While descriptions of these changing business environments take views from different scientific lenses, scholars such as Munteanu et al.

agree that these business environments are changing at faster rates than ever (Munteanu et al. 2020, p. 1).

This turbulence has also changed the modes of competition and brought up the question of whether achieving competitive advantage is still sufficient to survive in the long term. D'Aveni stated that the increasing speed and aggressiveness of interaction in the competitive arena means companies can keep their competitive advantage only for a short time (D'Aveni and Gunther 1994, pp. 2–7). Additionally, Santalainen pointed out that competition does not just arise within a certain sector; rather, disruptions can impact markets across industry sectors and regions at any given time, which requires companies to think beyond the industry they operate in (Santalainen 2019, p. 92). Thus, one can observe the demise of the doctrine that companies survive in the long term just due to their age and size (Viguerie et al. 2021, p. 3).

As competitive advantages “are becoming temporary and transient”, organizations must find new ways to develop and keep their longer-term viability (Santalainen 2019, p. 91). This does not mean they should give up aiming for competitive advantage. Instead, Santalainen understands viability as “the ability to live and capacity to be sustained” (Santalainen 2019, p. 92), which in the ideal state complements the aim for competitive advantage. Eventually, “it becomes essential to build strategic capabilities and harness innovation to develop higher value strategies that will create a platform for greater future value and sustainability” (Santalainen 2019, p. 92).

In this context, the ability to adapt to turbulent business environments and new situations has taken on a whole new significance for companies, and so scholars such as Munteanu confirm the need for business organizations “to constantly adapt to new conditions” (Munteanu et al. 2020, p. 1). Mladenova assumes that “the search for organizational change success factors is ongoing and will continue to grow in relevance in turbulent and dynamic environments” (Mladenova 2022, p. 9). Schulze and Pinkow go even further and state that “adaptation to changing environmental conditions is a focal subject of organizational studies and deemed a necessity for organizations in every industry” (Schulze and Pinkow 2020, p. 2). Therefore, this work assumes that today’s business organizations need approaches that help them to successfully adapt to these turbulent environments, and ideally, to successfully shape the changes to their own advantage. In this regard, this work understands company success as building up and defending competitive and viability advantages.

To uncover how organizations can successfully navigate these turbulent environments, organizations should be identified to operate in the heart of these storms, recognizing the need to adapt (rather than, for example, simply ride out the storms relying on financial strength), and have the flexibility to successfully adapt to the twists and turns of such storms.

This paper provides an insight into fundamental theoretical models that can help to overcome the challenges of dealing with turbulent environments. In a second step, this paper presents a model that can be used to identify companies as research objects. It discusses a scientific approach that could be used to study these research objects in the field in order to identify approaches that help company organizations to survive and thrive in turbulent environments.

## Foundational Concepts

Through the years, various scientific discoveries have explored these changes and provided foundational concepts to explain why adaptation and transformation are necessary to succeed, how organizations can shape adaptability, and what are the actions to operationalize adaptability. In the following, this paper describes core elements of foundational concepts that have served as important foundations for research on adaptability in turbulent environments since their scientific emergence in recent decades. These are enhanced by concepts drawn from latest developments and open up further important insights into the implementation of adaptability. See Table 1.

Table 1. Foundational concepts to support adaptability (Johansen and Euchner 2013; D'Aveni and Gunther 1994; D'Aveni 1995; Volberda 1996; Mladenova 2022; Teece 2007; Kodama 2018; Wenzel et al. 2021; Leemann and Kanbach 2022; Carvalho 2023).

Perspective	Theory	Author	Year of Publication	Contribution
WHY (purpose driving transformation)	Navigating the VUCA World	Johansen	2013	Describes the changing environment with the acronym VUCA (volatile, uncertain, complex, ambiguous). Explains that volatility yields vision and uncertainty yields understanding
HOW (organizational requirements)	Hypercompetition: Managing the dynamics of strategic maneuvering // 7Ss framework	D'Aveni	1994	Discovers that competitive advantages are no longer sustainable. Identifies two capabilities needed: speed and surprise
	Toward the Flexible Form: How to Remain Vital in Hypercompetitive Environments	Volberda	1996	Discusses flexibility and added flexible forms as necessary organizational capabilities to support firms to move and respond to a variety of changes more rapidly. Of special interest are his ideas of operational, structural, and strategic flexibility
	Relation between Organizational Capacity for Change and Readiness for Change	Mladenova	2022	Examines two factors for successful organizational change in turbulent and dynamic environments. First, readiness for change, which is seen as an attitude associated with supportive behaviors. Second, organizational capacity for change that focuses on organizational capabilities and could support organizations in navigating continuous and adaptive changes
WHAT (operationalization of adaptability)	The Dynamic Capability Concept	Teece	2007	Develops higher-level competences to determine the firm's ability to integrate, build, and reconfigure internal and external resources/competences to address, and possibly shape, rapidly changing business environments
	Collaborative Dynamic Capabilities: The Dynamic Capabilities View	Kodama	2018	Expands the concept of dynamic capabilities with the idea of strategic collaboration with ecosystem partners to create hard-to-replicate corporate capabilities
	Dynamic Capabilities? Unleashing Their Dynamics through a Practice Perspective on Organizational Routines	Wenzel, Danner-Schröder, Spee	2021	Proposes a practice-based understanding of organizational routines to unravel the "dynamics" of dynamic capabilities
	Toward a taxonomy of dynamic capabilities—a systematic literature review	Leeman and Kanbach	2022	Layers dynamic capabilities into three levels: DC-1 (sensing, seizing, transforming), DC-2 (19 dynamic sub-skills), and DC-3 (240 idiosyncratic dynamic skills).
	A Duality Model of Dynamic Capabilities: Combining Routines and Improvisation	Carvalho	2023	Discusses the contradiction between dynamic capabilities as based on routine, stable patterns of behavior, and intentional changes in the resource base to survive in highly dynamic environments. The author therefore sees dynamic capabilities as both routine and improvisation. Organizations should aim for a balance of both to ensure adaptability in dynamic environments.

Johansen recognized the speed and intensity of change in the business environment and created ideas on how to address this new world of VUCA. He pointed out that “in a VUCA world, you need to be very clear about where you’re going, but very flexible about how you get there” (Johansen and Euchner 2013, p. 11). He explained that vision and understanding support the organization to adapt sustainably and to not become lost in a world of noisy turbulence (Johansen and Euchner 2013, p. 10). D'Aveni recognized the increasing dynamics of competition and identified two crucial capabilities organizations need to foster: speed and surprise (D'Aveni 1995, p. 51). He stated that “success depends on the creation of a series of temporary advantages, a company’s ability to move quickly from one advantage to the next is crucial” (D'Aveni 1995, p. 51), and additionally that “surprise allows companies to act to undermine competitor advantages before the competitors can take defensive actions” (D'Aveni 1995, p. 51). Volberda further discussed the developments of hypercompetition and indicated that “hypercompetition forces firms to move more quickly and boldly” (Volberda 1996, p. 359). Companies should be organized in “flexible forms. . . that can respond to a wide variety of changes. . . in an appropriate and timely way” (Volberda 1996, p. 359). He described four types of flexibility that are the results of a combination of a variety of capabilities and the speed of response. For field research, this work focuses less on steady-state flexibility, which consists of “static procedures to optimize the firm’s performance” (Volberda 1996, p. 362), rather exploring the other three states described in the context of adaptability in turbulent environments. First, Volberda analyzes operational flexibility (low variety, high speed) which “consists of routine capabilities that are based on present structures or goals of the organization” (Volberda 1996, p. 362) and provides “rapid response to changes that are familiar” (Volberda 1996, p. 362). Structural flexibility (high variety, low speed) “consists of managerial capabilities to adapt the organization structure, and its decision

and communication processes, to suit changing conditions in an evolutionary way” (Volberda 1996, p. 362). Next, he points out that “when faced with revolutionary changes, management needs great internal structural flexibility or intraorganizational leeway to facilitate the renewal or transformation of current structures and processes” (Volberda 1996, p. 362). Finally, he marks strategic flexibility (high variety, high speed) as the most radical type of flexibility (Volberda 1996, p. 363). It “consists of managerial capabilities related to the goals of the organization or the environment” and “is necessary when the organization faces unfamiliar changes that have far-reaching consequences and needs to respond quickly” (Volberda 1996, p. 363).

On the question of how organizations can address the increasing unpredictability and turbulence in the market environment, Mladenova notes that “linear causal models to plan and implement changes become harder to follow” (Mladenova 2022, p. 1). In her work, she refers to the study by Supriharyanti and Sukoco, who explored antecedents and consequences of organizational change (Supriharyanti and Sukoco 2022, p. 58) and further discussed the contradictory context in which organizational change takes place; while some studies see change in the context of discontinuous events, for others, change takes place in the context of continuous change (Supriharyanti and Sukoco 2022, p. 50). Mladenova explores the different dimensions of change, which can be planned or unplanned, adaptive or transformative, continuous or intermittent, incremental or revolutionary (Mladenova 2022, pp. 6–8). In this context, she presents two important success factors for the successful adaptation and further development of companies. The first is readiness for change, which “is seen as an important prerequisite increasing chances for change success” (Mladenova 2022, p. 1) and is “defined as an attitude” (Mladenova 2022, p. 10). The second is organizational capacity for change, defined as the “capability to implement a change” (Mladenova 2022, p. 10), which can be seen “as an antecedent to readiness for change” (Mladenova 2022, p. 10); the author also sees a dynamism between these two factors (Mladenova 2022, p. 9). However, she points out the limited empirical evidence on organizational capacity for change (Mladenova 2022, p. 10), e.g., she raises the question of to what extent are organizational change capabilities part of the dynamic capabilities.

In support of the operationalization of adaptability, Teece developed the concept of dynamic capabilities, which describes “higher-level competences that determine the firm’s ability to integrate, build, and reconfigure internal and external resources/competences to address, and possibly shape, rapidly changing business environments” (Teece 2007, p. 1395). This was expanded by Kodama, who combined this idea with the idea of strategic collaboration with ecosystem partners to create hard-to-replicate corporate capabilities (Kodama 2018, p. 4).

Wenzelet al. highlight the dynamics within dynamic capabilities and thus draw attention to the internal mechanisms and actors of organizational change. In doing so, they also expand the dimensions of organizational change to include the change efforts that occur beyond the intention of management (Wenzelet al. 2021, p. 400). Leemann and Kanbach enrich the concept of dynamic capabilities with further subcategories. In their literature review, they examined 34 technical papers (between 2007–2020) and uncovered two additional layers (Leemann and Kanbach 2022, p. 486). The groupings are structured in a practical language (Leemann and Kanbach 2022, p. 497), which in turn can be helpful in the field research. Lastly, Carvalho considers the contradiction of change routines on which dynamic capabilities are conceptualized and the highly dynamic environments that require more than just routines. She resolves this paradox with her duality model, which considers dynamic capabilities in the context of both routines and improvisation (Carvalho 2023, p. 1) and thus results in a “more realistic and comprehensive view of dynamic capabilities” (Carvalho 2023, p. 15).

Company organizations and research have used the ideas of the discussed models over the last 30 years to manage the changing environmental conditions. At the same time, the speed of change and the acceleration and intensification of the impact on companies of the increasing interconnectedness of the global economy, and thus also the cross-industry turbulence, have increased enormously. This has pressured practitioners to develop their ideas based on the organizational requirements and operationalization of adaptability. Thus, understanding change and adaptation only as organizational routines is no longer sufficient. Rather, turbulent environments require adaptation, which can happen ad hoc and in a revolutionary manner as well as continuously. New ideas and models are already taking up these ideas. However, one can also observe that these new models require further empirical validation. At the same time, it can be assumed that, especially in these times of turbulence, practitioners operating in the heart of such change will also develop new approaches to enable their companies to survive. A research design that aims to explore strategies for thriving amid market turbulence must take these circumstances into account.

## Requests for Research

To find appropriate objects for field research, selection criteria can help to precisely identify those companies that are most likely to recognize the need for change and are also most likely to be the ones that further develop or reinvent ideas for successful adaptation. In addition, appropriate research methods have to consider foundational research that has been acknowledged by theory and field, and, at the same time, ensure the necessary openness of research to be able to perceive and analyze completely new ideas and approaches. The following section presents a research funnel that can be used to identify suitable objects for field research and further discusses a research approach to provide answers to the research question.

### Research Funnel

Screening for field research objects for which adaptability to rapid changing environments is an essential science may follow a four-step research funnel as shown in Figure 1.

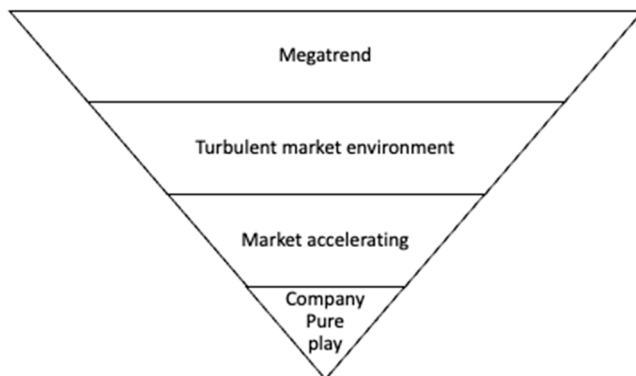


Figure 1. Research funnel, own illustration.

Turbulence may arise due to technological, political, or societal change or due to changing environmental influences. These factors can both trigger the change and be affected by the change. What the influences have in common is change itself. Thus, in the first step, one could begin with a model that explains the change in the world and identifies clusters that are subject to strong change dynamics or turbulence. The model of megatrends can serve as a starting point here. Megatrends name and describe complex change dynamics and affect all levels of society, thus influencing companies, institutions, and individuals (Zukunftsinstitut 2022).

Megatrends are defined “as complex main global change dynamics. . .the biggest drivers of change in business and society and are shaping our future. . . , . .multilayered and full of opposing streams. . .Global phenomena” (Zukunftsinstitut 2022) that range across societies, nationalities, and industries. Megatrends thus represent market environments characterized by turbulence, complexity, and rapid change. This means that companies operating within these megatrends are situated precisely in the market environments that require adaptability. Second, the shaping parameters of the market in which the research object operates should not yet be fixed. The market should be characterized by rapid changes and uncertainty. Thus, for example, companies operating in the neo-ecology megatrend (Zukunftsinstitut 2022)<sup>2</sup> must deal with (sometimes turbulent) environmental conditions where public sectors change legal frameworks; for example, framework conditions for subsidies. New challenges that are based on outdated infrastructure arise. New market players enter the arena, such as companies that no longer view cars solely as mechanical constructs but as executing organs of intelligent software, or business models that, for example, enable the sharing of objects such as cars. New technologies completely change the way materials are handled and thus have a direct and lasting impact on value chains.

The 12 megatrends and their intersections form subrends which, on the one hand, provide trend knowledges insights into subrends<sup>3</sup> (Zukunftsinstitut 2022). On the other hand, the intersections of the megatrends capture whole (new) markets, such as in the area of electromobility, where the transformation from combustion engines to electrified drives has reached a momentum. In Germany alone, for example, the passenger car population of electric vehicles more than doubled between 2020 and 2021, and it is expected that this population will increase tenfold within the 7 years after 2021 (Bratzel and Tellermaun 2022, p. 3). Additionally, Kalb and Metha from the Statista report state that “as electric drive vehicles are gradually gaining momentum around the world, the next phase of growth is expected to mainly be driven by vans and trucks” (eMobility—In-depth Market Insights & Analysis 2022, p. 4).

Thus, the research object should operate in a market that is part of such a subtrend. This paper assumes that, within a defined subtrend, the growth of the related market should at least show a momentum of acceleration. This assumption should be validated by available market data in individual cases.

Market acceleration will lead companies operating in that market to constantly sense their environment, which means “identification and assessment of an opportunity” (Teece 2012, p. 1396) and includes “scanning, creation, learning, and interpretive” (Teece 2007, p. 1322) activities. Such an accelerating market and the companies’ intention to survive and thrive in that market eventually lead such companies to transform their sensing activities into actions that build up new or reconfigure existing (Teece 2012, p. 1395) “internal and external resources/competences” (Teece 2012, p. 1395) to rapidly adapt to changing factors. This could even require them to rapidly adapt their entire business model to secure their future in the accelerating market.

Fourth, the company should be a pure play company, focusing exclusively on a particular activity or product. A pure play company that focuses on a specific activity, a specific product, or exclusively on a specific industry, is highly dependent on the development of the market and trends. Disruptive innovations can mean immediate threats or opportunities for their own business. As a result, the company’s activities, such as the adaptation of their activities to changing environmental factors, either lead to successful survival and further development or to a rapid death. Thus, in this context, this paper assumes a relationship between a company’s ability to adapt and its success or failure. Therefore, the idea is that this will allow for clearer conclusions to be drawn about the approaches of the business organization under study in relation to adaptability.

### **Research Methodology**

How can field research identify approaches within company organizations that help them survive in turbulent environments?

First, field research needs to recognize the increasing speed of environmental changes, especially in the last 10 years, driven by, for instance, disruptions such as the financial crisis, increasing political reactions and changes due to the climate crisis, the COVID-19 pandemic, the war between Russia and Ukraine, and, additionally and most recently, another breakthrough in AI with ChatGPT (Hu 2023). Therefore, related field research should assume that the accelerated pace of environmental change forces businesses and science to develop existing models or create new approaches that help business organizations succeed in these turbulent and complex environments. Thus, the underlying research needs to provide a level of openness (Mayring 2023, p. 26)<sup>4</sup> to exploring new ideas and approaches. The study of the research object in the field should use the instrument of interviews, in which actors in the concerned research object are questioned about its concepts, frameworks, and processes. Of particular interest here, especially in the first phase of exploration and orientation, is the actors’ interpretive knowledge as experts, i.e., their views, interpretations, objectives, and assessments, as well as their collective dimension, which means the extent to which this interpretive knowledge is also shared by further experts (Bogner et al. 2014, pp. 18–19). In this context, the applied research methodology should understand experts as “people who—based on specific practical or experiential knowledge that relates to a clearly defined problem area—have created the possibility of structuring the concrete field of action in a meaningful and action-guiding way for others with their interpretations” (Bogner et al. 2014, p. 13). Moreover, in contrast to a specialist, who can be described primarily as possessing special know-how and specific professional competences, experts are characterized above all by the fact that they can expand their expert knowledge and experience across the board with new experiences and insights they have gained (Bogner et al. 2014, pp. 14–15). Thus, ideally, field research can identify experts who have already gained experience in managing

turbulent environments, which they apply to the current situation in which they and their company operate, reflect on, and evolve.

In summary, the research methods should constitute qualitative research (Mayring 2023, p. 19)<sup>5</sup>, which also finds support from Teece, who recommends studying dynamic capabilities through in-depth qualitative research (Teece 2012, p. 1400). With reference to the dynamic aspect of dynamic capabilities, Wenzel et al., in contrast, point out that quantitative methods, such as the survey-based linear regression model, fall short in these cases when solely applied (Wenzel et al. 2021, p. 401). However, they welcome any research design that enables researchers to “engage with the everyday realities of organizational life through which organizational change comes about” (Wenzel et al. 2021, p. 401).

This research design shares this assessment and recommends reconsidering extensions of the research design by quantitative methods and therefore expanding it into, for example, an explanatory sequential design (Creswell and Plano Clark 2017, p. 67), if this is required by the indications and intermediate results of the field research. Furthermore, it can be assumed that this qualitative research approach generates further hypotheses, which can be answered with the help of quantitative methods and possibly beyond one research object. Field research should further assume that such profound changes in market environments and market rules did not start in the last 10 years, but years earlier. Therefore, this qualitative research should also be partly deductive, drawing on models that have emerged in the past. The central theoretical foundations in this regard are summarized in Table 1. For example, for research that especially focuses on capabilities on an organizational level that help operationalizing adaptability, it especially highlights the dynamic capability concept from Teece. This concept describes “higher-level competences that determine the firm’s ability to integrate, build, and reconfigure internal and external resources/competences to address, and possibly shape, rapidly changing business environments” (Teece 2012, p. 1395). Kodama expanded this concept to the idea of collaborative dynamic capabilities, which includes the idea of strategic collaboration with ecosystem partners to create hard-to-replicate corporate capabilities (Kodama 2018, p. 4). Thus, on one hand, research could consider the critical organizational capabilities of sensing (“identification and assessment of an opportunity”), seizing (“mobilization of resources to address an opportunity and to capture value from doing so”), and transforming (“continued renewal”) (Teece 2012, p. 1396). Furthermore, field research should look into required leadership capabilities, since in rapidly changing environments, companies are particularly dependent on the ability of leaders to sense and make the right decisions (Kodama 2018, pp. 22, 26), which requires “sensing instincts from top management” (Kodama 2018, p. 18).

However, field research should still maintain an inductive character by incorporating a degree of openness (Mayring 2023, p. 26)<sup>6</sup> to new aspects in its research design, because it can be assumed that it is precisely in times of greatest challenge that people feel the greatest pressure to change and develop new ideas to master these changes and take advantage of opportunities that arise. Thus, field research should follow the idea of theoretical sampling from the grounded theory, which describes the process of data collection, in which the researcher parallel collects, codes, analyzes, and decides what data to collect next and where to find those data (Glaser and Strauss 2005, p. 53).

For the design of the interviews, field research should follow the idea of the theory-generating expert interview, which focuses on the “subjective dimension of expert knowledge” (Bogner et al. 2014, p. 25)<sup>7</sup>. In the view of Bogner, the definition of the theory-generating interview aligns with the grounded theory methodology (Bogner et al. 2014, p. 25).

To analyze the interview outcomes, field research could follow Kuckartz’ idea of the qualitative content analysis, which is about “systematic and methodically controlled scientific analysis of texts, images, films, and other communication content. Not only manifest, but also latent content can be analyzed. At the center of qualitative analysis are categories with which all material relevant to the research question(s) can be coded. Category formation can be deductive, inductive, or deductive-inductive. The analysis can be primarily qualitative but can also integrate quantitative-statistical evaluations; it can be both category-oriented and case-oriented” (Kuckartz and Rädiker 2022, p. 39). Consequently, deductive aspects, such as questioning and applying the dynamic capability model to practice, as well as a level of openness that allows for field research to pick up new aspects of the analysis and add to them for further research, are incorporated into the interview design.



While analyzing the data, in accordance with the idea of theoretical sampling (Glaser and Strauss 2005, p. 53), it may be valuable to survey additional employees in further organizational units to validate initial findings and hypotheses and to gain further insights. However, before moving from the analysis phase to the phase of theoretical sampling, it is worth considering whether an intermediate step should be taken to reflect on the results with the previously interviewed experts. This is especially of interest if, in the analysis of different expert interviews, one discovers collective dimensions within certain expert groups (interpretive knowledge that is shared by several experts Bogner et al. 2014, pp. 18–19) or if the different experts come to opposing interpretations on the same topics. The method of guided group discussions is of particular value for reflection. Through this method, extreme and individual opinions can be put into perspective in the discussion, and latent meaning, which does not surface so easily in an individual interview, can be discovered (Mayring 2023, pp. 68–69). Especially when experts (unconsciously) develop new ideas to shape changes in the business environment, indicators from the individual interviews (“reading between the lines”) can be reflected in the group discussion.

As presented in Figure 2, the suggested field research methodology can be summarized as follows:

- Use qualitative research methods, which may be extended to mixed methods in a later stage;
- Create a partly deductive research character by drawing upon existing models, such as the dynamic capabilities model and the collaborative dynamic capabilities model, when focusing on the operationalization of adaptability;
- Maintain an inductive character by incorporating a degree of openness following the idea of theoretical sampling from the grounded theory;
- Explore and collect data by interviewing actors, conduct qualitative content analysis, and draw conclusions for next samplings;
- Consider group discussions for reflection.

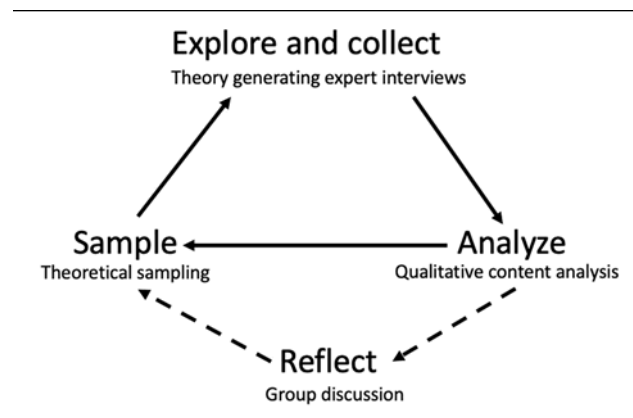


Figure 2. Suggested research design.

## Discussion

The research design discussed can be used to identify company organizations for which adaptability is essential to succeed in their turbulent environments, and to elicit their experiences and insights, building new knowledge based on the findings. It can be assumed that these companies have extensive experience in addressing turbulent market environments and the pressure to change, and the proactive search for and evaluation of opportunities that arise should be part of their strategic and operational management. The research funnel is a helpful tool to identify these companies for field studies.

However, the research funnel has potential for further optimization. For example, the question may be raised as to how much experience of market dynamics and market growth or downturn a company organization needs to understand adaptability as an important characteristic. Another question is whether strong downturns instead require crisis management that goes beyond flexibility



and adaptation. In addition, the research funnel does not consider company size or age. Both criteria certainly have an impact on both the willingness and the ability to adapt. Thus, this research funnel could be extended to include these two criteria. It would then be necessary to discuss how these criteria could be meaningfully shaped.

In conducting the study, a degree of openness is useful to identify new approaches. At the same time, many companies already use methods and models to increase their adaptability. Depending on the level at which the research is conducted (Why, How, or What: see Table 1), the use of additional methods can be considered and evaluated, e.g., new ideas on how companies can build or work their organizations to support adaptability.

The result of such research in the field will be a case study that can deliver insights on how a research object adapts to rapidly changing environments. Although a case study can “draw on several empirical methods” which can also include quantitative data and statistical analysis (Hunziker and Blankenagel 2021, p. 144), case studies are also limited and their significance must be assessed. In this regard, the selection of the research objects should be mentioned as a critical point. To develop a meaningful case study on the research question raised, conclusive selection methods are needed. The discussed research funnel has been developed as an instrument for this purpose and could be further refined to select appropriate research objects with even higher precision. However, even with precisely grounded selection of research objects, the question of connectivity remains. If such a study confirms existing concepts or generates new ones, for example, there is a question regarding to what extent it can be related to companies in different sectors and subrends or to companies in the same sector but of different sizes.

It also needs to be considered that there is always a degree of inherent subjectivity associated with a case study, because the interpretation of data in a case study is carried out by humans who may, for example, bring their own assumptions and value judgements into the analysis, or may be influenced to a certain degree by their relationship to the actors they are in contact with during the research on the object. This can lead to bias, for example.

Nevertheless, such a case study has its value, especially when it comes to gaining deep insights into current, complex phenomena or generating hypotheses that can be tested in further research, since it can be assumed that the results of the study will lead to new research questions.

### Notes:

1 “Corporate longevity remains in long-term decline, according to Innosight’s biennial corporate longevity reports. Our latest analysis shows the 30 to 35-year average tenure of S&P 500 companies in the late 1970s is forecast to shrink to 15–20 years this decade. Every year, a number of companies drop off the S&P 500 list due to a decrease in market value or acquisition by larger companies. They are replaced by other firms that enter the index due to growth in market value, or arrive via an IPO or spinoff.” (Viguerie et al. 2021, p. 3).

2 The neo-ecology megatrend is establishing a new set of values that extends into every area of our daily lives. The sustainability paradigm is reprogramming the codes of global society, culture, and politics—and fundamentally realigning entrepreneurial action and the entire economic system (Zukunftsinstitut 2023).

3 For example, neo-tribes (the intersection of individualization and globalization): The subtrend is characterized by people who freely choose to belong to social groups in relation to their life phases.

4 Theoretical structuring, hypotheses, and methodological procedures should not obstruct the view of essential aspects of the subject matter in the research process. It must be possible to expand, modify, and even revise them if it seems necessary (Mayring 2023, p. 26).

5 Mayring emphasizes five principles of qualitative research (Mayring 2023, p. 19): strong subject-centeredness, an emphasis on descriptive and interpretive research subjects, a requirement to also study subjects in their natural, everyday environments (rather than in the laboratory), and finally, a view of the generalization of findings as a process of generalization.

6 See note 4 above.

7 In this regard, the subjective dimension of expert knowledge includes action orientations, implicit decision maxims, actionguiding patterns of perception, world views, routines. . . In other words, the interpretive knowledge of the interviewees (Bogner et al. 2014, p. 25).

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