Strategic Adaption (Capabilities) and the Responsiveness to COVID-19's Business Environmental Threats

Christoffer Hansson and Bruno F. Abrantes

1 Introduction

Unexpected changes happen out of a sudden and pivot the playing field for organizations. This is self-explanatory since it is "unexpected." One may however wonder if it is possible to prepare for these unexpected changes. This chapter delves into the organization's strategy realm, and herein into Strategic Flexibility to cope with critical market dynamics, as uncertainty or unpredictability:

> *How much (or little) does an organization commit strategically to build (a rational) response to adapt to the EBE?*

We argue that COVID-19 holds, both, a corporative warning to senior managers and a lesson to be learnt in relation to sudden external environmental changes (as COVID-19). The disruption caused by multiple and accelerating (in number and effect of) changing events has drastically changed the environment for today's companies (Abrantes, 2020). In addition, it does not even show any tendency to slow down (Weber & Tarba, 2014). Much of this can be alluded to globalization and technological advantages, which have led to more transfer of knowledge and new customer patterns (Vecchiato, 2015). Due to globalization, we have seen an increasing amount of foreign competition, which is now a severe threat to an organization's home turf (Hitt et al., 1998). Even internally organizations experience changes as

C. Hansson
Niels Brock Copenhagen Business College (NBCBC), Copenhagen, Denmark
e-mail: christoffer.Hansson@inriver.com

B. F. Abrantes (✉)
Niels Brock Copenhagen Business College (NBCBC), Copenhagen, Denmark

ISCTE University Institute of Lisbon, Lisbon, Portugal
e-mail: bruno_Abrantes@iscte-iul.pt; btfa@niels.brock.dk

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pressure from their employees is forcing the organizations to be adaptive as a response to the market (Nejatian et al., 2019).

Today's leaders are, therefore, witnessing new rules to play by to put their organization ahead of competition. The combination of technological advances and globalization has resulted in a blurring line between where industries fit in. Furthermore, this shows it has become increasingly difficult for companies to analyze their surrounding environment (Hitt et al., 1998). However, COVID-19 became certainly the utmost familiar term in the manager's lexicon, as an external business environment (EBE) concern, unthinkable until the outbreak (Jacobides & Reeves, 2020).

This research explores the precautionary routes organizations may follow to be more sensitive to EBE kinesis, more aware of emerging changes, and more prepared for outer phenomena highly impactful on the organizational routines. A myriad of strategic concepts surrounding the adaptation to EBE changes (as presented in Sect. 2) is accompanied by an empirical testing based on the collection and manipulation of qual data from industry practitioners from the business-to-business software industry to provide insightful perspectives into the current reality.

Nonetheless, previous studies assert that organizations are building a gradual awareness of the importance of developing new (or renewed) knowledge, skills, and abilities (KSA) to comply with the natural and social dynamics of the outside world, which is an endeavor understood as something to be embraced beyond the technological and (global) synergistic awareness (Nejatian et al., 2019).

Such corporate openness, regarding the up-/reskilling of KSAs and so the upgrading of human capital to respond to a world in constant mutation society, perceives inertia (or institutional isomorphism) as the major negative cause of the organization's unpreparedness in such context. This requires a transposition (and materialization) of such openness of the corporate thinking into an effective renewal of the strategic design/s for the future. This becomes even more apparent when companies either thrive (by adapting) or perish (by drifting). In the latter case, getting relegated to the periphery or condemned to exclusion (Nejatian et al., 2019). It has, therefore, never been as important as now (as COVID-19 had the virtue to bring it to the spotlight) the fashioning of flexible business models associated with (corporate/business/functional/operational) strategies that assertively cope with volatility, uncertainty, complexity, and ambiguity (VUCA) in the EBE. This is an urge for today, and so can the firms navigate in this new playfield, both in the short and long term (Hitt et al., 1998).

Isolating here a single event (COVID-19) and abstracting ourselves from the rest of the remaining threats in the world (as a hypothetical exercise), this event offers per se a rich scenario for testing flexibility and the ex ante preparedness of the firms. On March 11, 2020, the World Health Organization (WHO) announced COVID-19 as a world pandemic. This event shook the Western world that experienced unpredictable spillover effects on multiple societal quadrants, namely a new economic crisis (WHO, online). As an external environmental event with unpredictable contours to the general public (thus, one could not possibly anticipate) contrasts highly to the apparently more predictable ones, as the globalization and technological trends discussed above, raising other uncertainty-related challenges to the incumbent side, forcing organizations to reflect upon strategies and practices or revise current business models.

With COVID-19, the uniqueness of its context making an ideal setting for a study of such kind is the scale of challenges (broader in *scope* and with immediate *impact* than others), and thus adding an "urgency trap,"[1] requiring a swift response from each and every organization, as never seen before (Jacobides & Reeves, 2020). The solution drills downs to a baseline of fundamental capabilities firms need to own within the category of strategic adaptation (alias, *environmental awareness* and *patching*). However, both are time-sensitive (capabilities) and connected to a psychological quirk as if an inverse urgency-importance reward system was set in place (the "*mere-urgency effect*"). This uncovers the fact that urgent-solving tasks are the low rewarding ones, but the importance of these dynamic capabilities is high since their possession is preparatory for building a further absorptive capacity to adapt to other scenarios alike.

Over the last years, four different strategic concepts have reaped a fair amount of attention from scholars. *Strategic Adaptability* is the oldest concept and has mainly been researched by Miles and colleagues back in 1978, while *Strategic Agility* is argued to be the most contemporary one (Miles et al., 1978; Weber & Tarba, 2014). In between, *Strategic Flexibility* emerged mostly in the 1990s through the effort of researchers such as *Donald Gerwin*, *Ron Sanchez, Michael A. Hitt*, *Barbara W. Keats,* and *Samuel M. DeMarie* (Gerwin, 1993; Sanchez, 1997; Hitt et al., 1998). Approximately, at the same time, *Constantinos Markides* opened a broad new research avenue toward *Strategic Innovation* (Markides & Anderson, 2006, Markides, 1998).

Often, one hears in the organizations this terminology (Strategic Innovation, Strategic Agility, and so forth) being interchangeably applied with an unwarranted purpose to explain the corporate state of mind and postulations of being "agile," "innovative," or "flexible." Despite their commonalities (which terminological similarity seems to confuse business practitioners), most of the previous research has focused on one or a maximum of two of those subjects. Therefore, there is a recurrent research gap as to the boundaries, thresholds, complementarities, and commonalities of these conceptions, as to the way they connect at a more holistic level given.

This chapter aims to understand the association of the four strategic concepts (Adaptability, Agility, Flexibility, and Innovation) and their relevance for coping with or solving EBE threats. The knowledge derived from it can serve as a foundation for how organizations can adapt to a sudden external environmental change in the form of a pandemic, more specifically COVID-19.

The first aim is, therefore, to investigate how organizations work with different strategic concepts. Further breaking down into objectives it will first analyze how organizations work with their strategy in relation to the strategic concepts and then

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[1] Idea withdrawn from the *Eisenhower framework* (or Urgency-Importance Matrix) written in 1961 by *Dwight D. Eisenhower.*

examine how organizations stay aware of their external environment and how they choose to adapt to it. The second aim is to gain an understanding of how COVID-19 as an unpredictable external environment affects the organizations. This is related to the objectives to examine the possibilities for an organization to be better prepared for an unpredictable happening and determine whether organizations can benefit from being prepared for external changes ahead of time.

2 Business Environmental Change: Four Key Dynamic Capabilities (DC)

2.1 Strategic Adaptability

The majority of today's organizations engage in processes of evaluating their external environment. At the same time, they have to manage their internal interdependencies. This two-sided pull results in a big challenge for the organization as it needs to find a way to handle the complexity and find a balance between the internal and external environment (Miles et al., 1978).

The balance in handling these factors leads to Strategic Management, explained by Chakravarthy(1982, p. 35) that "Strategic management is the process through which a manager ensures the long-term survival and grow." Ultimately this points out the big struggle for today's leaders. The big external changes in the environment are happening at an increased pace, resulting in a more difficult task to adapt. Therefore, effective organizations manage to cut out a piece of the market for them and establish procedures to complement their market strategy (Miles et al., 1978). Additionally, one of the important areas of Strategic Management is to optimally manage the company's own resources in the form of material and organization to find a balance between both and avoid misfits (Chakravarthy, 1982). This leads to that organizations primarily have two choices for their focus to address the environment. On one hand, they can have an external focus and benefit from the ability to adapt to the changes that appear in their market. On the other, they can have an internal focus, instead of setting their sight on a more niche market, but this will be at the expense of their ability to adapt (McKee et al., 1989).

Miles et al. (1978) showcase that there are four different strategy types that every organization can be attached to—Defenders, Analyzers, Prospectors, and Reactors. Overall, the greatest number of companies adopt a Defender strategy, while Reactor is the least favorable one.

Although in reality companies do tend to have a mixed approach across their different organizations (Abrantes & Venkataraman, 2022, Abrantes, 2020; Pleshko & Nickerson, 2008).

- Defenders: Focuses on a specific area of the market where they can create a stable presence, mainly by focusing on producing a limited number of products for a more specific segment. Through this, they show tendencies of ignoring trends and developments outside their own business area. This may cause some risks in the form of ineffectiveness since their niched focus makes them vulnerable to strong market shifts.

- Prospectors: Reacts in a different way than Defenders as Prospectors' success comes in finding and developing new products and markets. They strongly value and emphasize their role as an innovator, sometimes even sacrificing their profit to maintain their innovative status. Since they are scanning through different environments and trends, they also need to stay flexible. This potentially causes some issues during a stable world with no major external changes as the investment made to stay adaptable will not bear any fruit.
- Analyzers: Positioned in between Defenders and Prospectors, they wish to find a balance and utilize the best of both worlds—low risk and high reward. Rarely operates with the first move and instead enter a market when it has proved viable. Through this, they imitate the successful penetrators, Prospectors, while also holding on to their stable set of products.
- Reactors: Where the other three all work in a proactive way to find their winning strategic and stable move, the Reactor instead functions in an unstable way. Usually, this is a result of drastic shifts between previously mentioned strategies or trying to go for both of them. Over time, however, this strategy is not feasible, and organizations need to decide and settle for one of the previous three strategies.

These companies can also be seen operating in different clusters and states—*unstable, stable,* and *neutral*.

- Unstable state: Is where Defenders operate and shy away from the environment. Usually, they can in the short term show good results, but during the long term they are a lot more vulnerable.
- Stable state: In contrast to shying away, these companies are instead open to the changes created in their environment. Analyzers operate in this cluster, and although they do not create changes, they react swiftly.
- Neutral state: These companies have either anticipated the environmental changes or are highly prepared through investments made to be ready. This is where the Prospectors operate (Chakravarthy, 1982).

Moreover, McKee et al. (1989) have tested these strategy types in relation to the application to market–strategy formulation. They suggest that the analyzer strategy would be favored whenever the market is mildly unstable but may not be when it is characterized by highly unstable markets. When operating in a volatile market, a flexible approach proved to be more successful, with the exception of when a market was highly influenced by negative forces. These differences force organizations to find an appropriate and suitable position in order to find a strategic fit toward its environment (Johnson et al., 2008).

Oktemgil and Greenley (1997) further prove that highly adaptable companies grow more when they operate in stormy environments. These companies also impact the market and customer behavior through their effectiveness to a further extent.

Furthermore, Analyzers appear as the most successful group in both terms of adaptability and performance. The second best in performance, Prospectors, only slightly beat out to others (Pleshko & Nickerson, 2008).

Prospectors and Analyzers also appear to compete for the same customer group, while Defenders and Reactors show similar traits in how they limitedly operate the markets. At the same time, a higher market orientation is often connected to above or on-average growth markets, which are the usual case for Analyzers and Prospectors (Lukas, 1999).

In order to keep up with the external focus, there is a large amount of activities needed to stay adaptable, for example, monitoring rivals, markets, pricing, and product development. This will come at a higher cost for companies, possibly limiting the amounts of actions the organization may take (McKee et al., 1989). However, further research shows that adaptive capability does not always have to be overly expensive. Organizations need to keep in mind that the result of higher performance can create business advantages that prove more valuable than heightened costs (Oktemgil & Greenley, 1997). These organizations can easily thrive and survive if they can handle the higher complexity of the environment since it shows a higher level of adaptiveness (Johnson et al., 2008).

2.2 *Strategic Agility*

One of the most difficult tasks today is to create a strategy for the future. The paradox is that companies become unsuccessful because they are doing what is right for too long time. Their once-successful business model has instead become a heavy burden that overstays its benefit, making it even a bigger challenge for previous successful companies (Doz & Kosonen, 2010; Vecchiato, 2015). This further shows the importance of transforming a company faster to meet global competition and face the disrupting tendencies (Doz & Kosonen, 2010). Strategic Agility is, therefore, more about inventing new models of business and less about regrouping old products or categories (Weber & Tarba, 2014).

Weber and Tarba (2014) explain Strategic Ability as “the ability of management to constantly and rapidly sense and respond to a changing environment by intentionally making strategic moves and consequently adapting the necessary organizational configuration for successful implementation,” showing it is a combination of leadership knowing the direction for change and planning resources accordingly AND having an organization with the layout to implement the imposed actions.

Tying to the introduction, companies experience extreme difficulties to anticipate the unexpected, which often results in too late responses (Doz & Kosonen, 2010). These challenges are often alluded to the vast number of indicators that could be enabling and how they connect to each other. Therefore, it is crucial to find out where to find necessary indicators and prioritize them to not invest in improper areas since this might even block organizations from obtaining Strategic Agility (Nejatian et al., 2019).

Complementing the need and action surrounding business models, the information technology (IT) landscape also is proven to be an important part of Strategic Agility. Connections in the intranet and ERP systems are important pieces that enable organizations to succeed as it is crucial to support employees with the right tools. Employees, therefore, need to be viewed with importance by managers and be provided with relevant resources to obtain new and improved knowledge (Nejatian et al., 2019).

The reason why Strategic Agility is important today according to Doz and Kosonen (2010) is that "Strategic Agility is most obviously a keystone to having the ability to transform and renew business models." It will give organizations a more precise and correct view that fits external and internal systems since they are becoming aware of their environments in time to take necessary action. Through this, organizations can prevent an eventual strategic drift. Strategic drift is the phase when organizations focus too much on internal and earlier historical strategic successes while not being aligned with the environmental changes, which ultimately makes organizations much more vulnerable to outside threats (Johnson et al., 2008, pp. 179–182).

2.3 Strategic Flexibility

The increased powers coming from the new competitive landscape force organizations to be more flexible than ever. In response to this, Strategic Flexibility explains how an organization can act in a proactive way as well as rapidly respond to the changes in the market and thereby succeed (Hitt et al., 1998; Herhausen et al., 2021).

According to Sanchez (1997, pp. 71–72), Strategic Flexibility is "the condition of having strategic options that are created through the combined effects of an organization's coordination flexibility in acquiring and using flexible resources."

Especially important in the organization is the strategic leadership. Strategic leadership shows the necessity that the top management leaders need to both have knowledge of transformation and vision while providing inspiration to gain commitment through the whole organization (Hitt et al., 1998).

Without this, history has shown that previous successful leaders tend to focus on remaking their previous strategies that proved to be successful earlier, only to result in failure due to the changes in their work (Shimizu & Hitt, 2004; Herhausen et al., 2021). Other examples of failures are that companies have become too big and underestimate digital technology, the advantages it brings, and change the industry. The importance of rightful strategic leaders becomes more apparent as otherwise leaders often show to be unable to swallow their pride and admit something went wrong. Instead, they are determined to put more money to make it work, which often only results in lost time and investments (Shimizu & Hitt, 2004). In worst cases, even following an old way of optimizing might over time make it increasingly difficult for organizations to respond to the external environmental factors (Sanchez, 1997).

Hence, leaders need today to gain awareness of the changes and know more about the differences between the stable environment and unstable environment. An unstable state is often caused by a random event, which in turn is an occurrence that is impossible to predict. This leaves the leaders to use their foresight to meet the changes and help guide the organization through this uncertain time. For the leaders to be successful with this, they need to be accompanied with an organization proving it is flexible enough to make effective changes in a quick manner (Hitt et al., 1998). If organizations prove to be flexible enough, they can obtain advantages since they can quickly shift between strategies, creating business advantages against competitors (Cingöz & Akdoğan, 2013). Additionally, Strategic Flexibility does not always have to be viewed as a defensive approach toward adapting to uncertainties. It could also successfully work as a strategy to enforce uncertainties toward the competition (Gerwin, 1993).

Meanwhile, it is also important to not be overly flexible, and this balance is needed to be dealt with grace (Gerwin, 1993). To sum up, organizations need to find the balance between creating new competencies while also making the most use of the existing knowledge and resources and using these resources within the flexibility of the organization (Sanchez, 1997). One way to help solve this balance is that "shared decision-making across an organization appears to be crucial to promote Strategic Flexibility" (Herhausen et al., 2021).

IT helps companies both with product development and gaining insight about the outside market in order to be more responsive in a quick manner toward the market. This further proves its potential to be helpful and beneficial to companies by restructuring the IT resources in order to minimize the disadvantageous (Chen et al., 2017). Further, Chen et al. (2017) show that research on IT alone does not provide for Strategic Flexibility, but it enables companies to adapt and change over time. For organizations that are working in an ever-changing and unsecure environment, it is therefore crucial to have correct support from IT since it will help gather and analyze information while providing dynamic capabilities.

In short, two types of company strategies can be identified in accordance with its Strategic Flexibility. Either they hold a high or low focus on Strategic Flexibility. Simultaneously, these can be put into either high or low macroenvironmental activity, creating four typical scenarios.

– Organizational scenario 1: high flexibility in a high-turbulence environment (HF → HT)
– Organizational scenario 2: low flexibility in a high-turbulence environment (LF → HT)
– Organizational scenario 3: high flexibility in a low-turbulence environment (HF → LT)
– Organizational scenario 4: low flexibility in a low-turbulence environment (LF → LT)

From a short-term view, investments made into resources might affect the performance of organizations' strategic choices. In other words, if a company follows a high-flexibility approach during a low-turbulence environment, its performance will decrease (scenario 2). In the same way, the reverse—a low-flexible organization in a high environment will also see decreased performance (scenario 3). This also shows that scenarios 1 and 4 will see an increased performance due to being better in synchronizing between strategy and environment, with a small advantage for scenario 4.

However, this changes slightly over the long term. Companies in scenario 2 will suffer even more by being low on flexibility during a highly turbulent environment. Absolutely best will instead be scenario 1 as it has been prepared to handle these types of changes. Scenarios 3 and 4 will in turn see no real influence on its performance. This shows that organizations adopting a high Strategic Flexibility will over time be better prepared for future external changes. At the same time, it may be dangerous for organizations to be cradled into a false security as a low approach to Strategic Flexibility in the short term might work, but in the long term it might hit them hard if the macroenvironmental changes are high (Johnson et al., 2003).

2.4 Strategic Innovation

Innovation works today as a competitive advantage for companies, no matter if it is from a managerial or technological point of view (Ion & Cristina, 2014). However, history is fertile in examples of business success and failure with similar ideas on how to be innovative about their strategy, but one became successful and one failed miserably. The key difference is for companies to deliver value to the customer while also being aware by keeping down costs (Markides & Anderson, 2006). Usually, you find innovation strategies in industries that are more dynamic, where either technological change or newer products emerge (Miller, 1987).

Successful organizations succeed when innovation is focused primarily on value and not efficiency, putting the customer at the forefront. This, however, does not mean that they are slow when it comes to IT. Successful organizations have shown to be early adopters of technology within their industry either by looking outside their industry for inspiration or even creating it themselves (Markides & Anderson, 2006). In order to create new strategies, top management needs to step aside and let new voices from previously unheard groups be heard. Finally, this will lead to new experiments of a smaller stature where risks are low to maximize learning (Markides & Anderson, 2006).

There can also be strong differences between newcomers in the industry and existing organizations. The biggest challenge for existing companies coming to Strategic Innovation is often alluded to its organization and the need to challenge the status quo by continuously focusing on developing its culture and mindset (Markides, 1998). Furthermore, there is an additional level to Strategic Innovation by adding disruption. The difference is that Disruptive Strategic Innovation is "both different from and in conflict with the traditional way," for example, low-cost airlines or online news. Eventually, these players grow big enough to make an impact on the whole market, forcing established companies to acknowledge the competition (Charitou & Markides, 2003, pp. 56–57).

However, it is to be remembered that innovation purely from the technical side will not be enough to determine your success as you will need a right, commercializing strategy for it (Teece, 2010). It is not always the right thing to answer to newcomers who disrupt your industry. While you may be in the same industry, you can have completely different markets. This ultimately shows that it is not always the right thing to worry and start fighting the new innovators directly and that it depends on the company on what actions to take (Charitou & Markides, 2003).

Further evidence from Tuominen et al. (2004) shows that there are strong connections between a high level of innovativeness for how companies handle their adaptability. Strategic innovation differs in that way that it is not just a way to be reactive toward the market, but to work proactively to venture and expand into new market territories and opportunities (Charitou & Markides, 2003).

3 Instability and Turbulence of the Global Markets

3.1 Contextualization of COVID-19

It is difficult to comprehend and know the impacts of the pandemic that we currently are in the midst of. However, looking back at the last four downturns, 14% of the companies went the complete opposite and even increased their sales growth rate. Similarly, an earlier pandemic has impacted the market. Most specifically, the SARS outbreak in 2003 is viewed as the tipping point for e-commerce in China, paving the way for companies like Alibaba to become the major player it is today (Jacobides & Reeves, 2020).

Even before the outbreak of COVID-19, business models were highly affected, much as a result of the technological revolution and changes in consumer preferences. However, all these areas have now accelerated, creating a higher urgency for business leaders to take responsive actions. Therefore, organizations and leaders are forced to minimize the weaknesses in the business models in order to be better positioned for upcoming disruptions. As a starting point, organizations need to find out where the crisis has stretched or broken the existing business models, and identify the risks and results to create a minimum viable strategy by using the adaptive strategic tools (Howard, 2021).

On the opposite side, the most successful companies have been shown to be those that are willing to invest more than competitors. These investments are also made in fewer, more specific areas, focused on a higher return. In a time of a pandemic like COVID-19, organizations do not have the luxury to take the easy approach and follow old habits. Instead, they need to adapt as new business models are more valuable, not to mention they make it easier to thrive after the crisis has settled (Jacobides & Reeves, 2020). Thinking about both short-term and long-term effects may seem tough, but it is essential for successful leaders. An agile decision-making in subverted strategy is crucial to create a lead over competition that even spans past the disruption (Howard, 2021). Additionally, companies can put together temporary adhocracies with the singular motivation to be innovative. These groups are a combination of specialists within different areas targeted to find quick digitization for an organization offering or finding digital replacements for its offerings (Seetharaman, 2020).

Given the lengths of lockdowns, the people of today have been forced to adapt and learn new habits. Therefore, companies need to develop a systematic understanding of these changes in order to obtain a strengthened position. This can be done in a matrix based on two questions. Is it long-term or short-term changes and were they existing trends or newly emerged? This results in Boosts (temporary departures from existing trends), Displacements (new trends that are temporary), Catalysts (existing trends being accelerated), or Innovations (new lasting trends). This will be helpful to understand what the changes are and better determine the fit and scope for investments (Jacobides & Reeves, 2020).

3.2 Strategic Adaptation and EBE Fitness: Connecting the Four Dynamic Capabilities (DC)

Organizations are heavily influenced by their external environment. In order to adapt to these changes in circumstances, Strategic Adaptability focuses on the strategy models as a recipe—*Defenders, Analyzers,* or *Prospectors*—to pursue that fits both their internal resources and external impact. It is of high importance to be in line with current environmental state, but over time Analyzers and Prospectors have shown to be most successful, especially since the disruptions occur more frequently.

Both Strategic Agility and Strategic Flexibility share various commonalities. They both advocate (1) the reconfiguration/renewal of business models and (2) the ownership of IT resources and capabilities (R&C) to the levering of change (or response) to changes in the outer environment. The bottom-line difference is, for Strategic Flexibility, the organization is the gear of change, while for others defending Strategic Agility is about the ability to respond to the changes in the environment. Nonetheless, previous literature does not denote incompatibility between both viewpoints. In addition, Strategic Innovation appears in the middle of them with a focus on how companies, through innovativeness, create value for their customers, whether fueled by self-driven forces (flexibilization) or responding to external stimuli (agilization).

COVID-19 is certainly an unpredicted external shift in the environment that highly affects all organizations, being the markets, therefore, is perceived as highly unstable and turbulent. Further, the literature shows support for that organizations with an Analyzer or Prospector strategic type would be better prepared to handle, even thrive and possibly grow during this time. However, previous literature does not provide insights into such a sudden and unexpected occurrence like a pandemic and is addressed in the following sections. The closest experience from past market competition is the notion of big-bangs, yet a socioeconomic event, nurtured by the supply side, with the intention of some upstarters to create fast disruptions (Abrantes, 2020). An essential trait in any successful changing organizational strategy, for accommodating such disruptive changes (from the outside-in or inside-out), is through the type of strategic leadership, together with his/her proximity to the teams,[2] the timely actions taken, and the dimension of R&C allocation (namely IT-related ones to accelerate information needs and streamline the analytical processes).

Out of the four different strategic concepts, Strategic Flexibility and Strategic Agility have been shown to be the closest to each other. Strategic Flexibility emphasizes how strategic leaders often fail because they try to remake previous successful strategies, even pushing for more investments despite failing results, similar to Strategic Agility (Hitt et al., 1998; Doz & Kosonen, 2010). Meanwhile, both mention that the usage of IT can be very helpful, even necessary. In the end, IT itself is not resulting in flexibility, but instead is best viewed as a supporting resource to adapt to the environmental changes (Chen et al., 2017; Nejatian et al., 2019). This is no exception in regard to Strategic Innovation, where it is even of a much higher focus. Similarly, to the areas of Strategic Agility and Strategic Flexibility, the usage of IT itself does not provide a successful strategy. Instead, it is a focus on what value it brings both to organizations and their customers instead of pure efficiency (Markides & Anderson, 2006).

Additionally, in Strategic Flexibility this is further developed in categorizing the environment into stable or unstable, where unstable is the result of a random event that is impossible to predict. This creates uncertainty for all organizations, but flexible leaders can easily help navigate through this unforeseen storm, even resulting in business advantages (Howard, 2021). Therefore, Strategic Flexibility is to be viewed as a driven choice of being proactive in response to the environment while Strategic Agility is the next step and functions as a form of execution of this flexibility. In other words, how quickly the organization can work to adapt to the changes in the environment. In this way, both are tightly connected to the same areas, but have different focuses.

A very interesting point that ties into the Strategic Adaptability is how companies with a high or low focus on Strategic Flexibility work in either high or low market turbulences. It shows that the absolute most important thing to acknowledge is to be in check with the current high or low turbulence regarding the environment in short-term aspects (Johnson et al., 2003). This is mainly due to the investments that are needed to make to become both flexible and agile. However, from a long-term perspective it is clearly favored to adopt a higher flexible strategy. This can be seen in the Strategic Adaptability section, where Analyzers and Prospectors are shown to be more successful over time, even if Defenders could have some

[2]Note that the Kaizen philosophy of continuous business improvement would denominate this concern as a "Go to Gemba," as the proximity to the operations is key to success.

short-term victories (Miles et al., 1978; McKee et al., 1989). Again, the "mere-urgency effect." This also shows that Strategic Flexibility actually works as an offensive strategy and not only as a defensive protection (Gerwin, 1993).

Since literature continuously explains that environmental changes are happening more rapidly and intensely, one can begin to envision a pattern (and a connection) through these four strategic concepts, while their reasoning overlaps on the following market tendencies:

1. Organizational quest for *environmental awareness capabilities:* Organizations and their leaders are summoned to develop a sophisticated strategic vision and acquire a larger sense of awareness of the environment risks and opportunities.
2. *Preparedness is key to competitiveness and success*: Market research is a must for gaining new knowledge. In this context, market research is the output that seeds (knowledge) toward the preparation of a brighter (fit) future.
3. *Refrain from superfluous investment or over-investment moves*: Flexibility, agility, and adaptability require moderation and rationality in the acquisition of resources and their allocation to business units and projects. Resources are costly, scarce, and constitute only an asset in the right place and time where they can contribute to further value addition/appropriation. Thus, they are, by principle, temporary, mobile, and transferable.

These three trends are anchored on the necessity of organizational leaders to stop relying on their old business models and not to be afraid to make investments into new areas, while being innovative enough to respond to the external environmental changes to find the right strategic fit (Shimizu & Hitt, 2004; Johnson et al., 2008; Doz & Kosonen, 2010; Weber & Tarba, 2014; Herhausen et al., 2021).

4 Overview of the Cases and Results

Organizations that put emphasis on being flexible and agile to adapt through innovation are more likely prepared to, in a quicker and better manner, navigate through the stormy waters of uncertainty caused by external environments and even gain business advantages. Hence, the recognition of fads, and their transformation into emergent trends, is of great importance to separate the wheat from the chaff and determine which one is temporary or lengthy, impactful or not, harmful or an opportunity, plausible or simply a mirage (Hitt et al., 1998; Markides & Anderson, 2006; Jacobides & Reeves, 2020).

Table 1 Open coding: themes

Dimension		Theme	
Code	Description	Code	Description
OC	Organizational capabilities	OC-IC	Strategic (design) capabilities
		OC-IT	IT-capabilities
		OC-BPR	Business processes (routines)
CA	Competitive advantages	CA-GF	Growth focus[a]
		CA-MF	Market focus[b]
		CA-SM	Strategic (adaptation) models[c]
EBE	External bus. Environment	EBE-C19	Market changes due to COVID-19
		EBE-C19+	Positive impact on the firm
		EBE-C19 -	Negative impact on the firm

Source: Own elaboration
[a]Informants' insights regarding their corporate decisions regarding "portfolio development" as growth, stability, divestment, or turnaround
[b]Endeavors of market research to build environment and competitive intelligence.
[c]Based on the four strategy types of business adaptation to competitive changes (i.e., Defenders, Prospectors, Analyzers, and Reactors) of Miles et al. (1978)

4.1 Methodological Procedure and Open-Coding Outputs

A multiple case study research with a qualitative approach follows an interpretive paradigm (Saunders et al., 2019, p. 142). Semi-structured interviews are applied to senior representatives of three software companies.

The sampling method fits a nonprobabilistic category as the interviewees were purposively chosen due to their seniority and assumed accessibility to relevant content as gatekeepers of information able to convey a faithful portrait of the strategic actions of these firms under the COVID-19 pandemic. Qualitative data was crunched following a thematic analysis method, looking at separate cues or streams of initiatives, as different patterns of data. From the interviews, three themes have been identified under an open-source coding logic, as represented Table 1.

The strategic design seemed to be strongly influenced by culture. Participant 1 (P1) repeatedly attributed to culture the role of the main predictor of the way the company strategizes and stands out from its rivals. Surprisingly, such a feature also emerged in the interviews of P2 and P3. Firstly, P2 pinpointed culture as a "*strategic differentiator.*" However, in firm 1 (P1) the cultural variable seems more accentuated than in the others. For instance, P1 mentioned a long history of charismatic leadership as being part of the driving force of the company forward.

In the interview of P2, the impact of culture is verbalized to be negative, in general, hence not specifically associated with a particular EBE-C19, revealing that sometimes the ones who climb internally in the organization's hierarchy often do not "*put the neck out,*" which creates a more succumbing organization. P3 claimed that multiple projects' proposal and portfolio competition within and across programs are sometimes misunderstood by organizational stakeholders who actively transfer to the cultural sphere their proactiveness becoming activists of intra-department separation and reluctance to collaborate.

The viewpoint about IT seemed a common denominator across the three firms. All participants pointed in the same direction, which is that a solid and secure IT infrastructure is nowadays a commodity for any computer-based business architecture from transactional to reporting and intelligence monitoring and strategic controls. P1 and P3 further developed this by stating that IT shows not just an essential resource but the drive that supports the process enhancement.

As to the business processes, P3 admitted to having no backup plan for unpredictable external threats such as COVID-19, stating that their full focus was until the pandemic scaled up quickly. This is also something mentioned by P1, revealing that the organization did/does not have any strategy in place, but an idea and a vision in what direction to solve their operational debilities and inefficiencies. Moreover, it was also revealed that business processes are administrated in a decentralized manner, being up to the different departments to drive initiatives (also recognizing that it is believed not to be the best practice; decentralization of the business process control). Similarly, P2 reveals a point of view in which the firm seemed to be strongly focused on product/service innovations.

Regarding competitiveness, the answer differed. P1 mentioned his organization follows a rather political posture, with multiple departments being involved in the early stages of the strategy process that in reality were deemed to be unnecessary and lead to a waste of energy debating diversified points, resembling more the gathering toward an "innovation theatre." He exemplified that dispersion by telling the history of a middle manager who once proposed a global roll-out plan for a product specifically sold to one single customer account. P2 instead mentioned they rather focus on the market, following the stream of thoughts of their users and customers' experience, and including their partners in an ample strategic dialogue. P2 revealed that his firm wanted to gain more awareness about and become a stronger part of the ecosystem, leveraged by its own innovations. P3 instead mentioned a big focus on scaling up quickly by pushing out sales and marketing. One similar aspect here was the desire to be an integrated platform. Additionally, P3 pointed out the importance when growing to have a "plan B" in an effective way. Recalling a previous crisis (in 2008), the interviewee brought an anecdote to demonstrate how successfully they managed to transform it into an opportunity by holding a product that worked across industries, which meant they could just diversify vertically (across industries) instead of their peers focused at the time on changing the whole product offer.

As regards the strategy modeling, all participants touched briefly on some of the aforementioned strategic concepts. Only P2 categorized strategic innovation in a business model as being a driving force of the firm. As innovation was already a big part of the organization's DNA, given the focus on AI and Machine Learning, the notion of agile hit them hard, shaking their cultural foundations, and crawling up the leader of the hierarchy, from processes to strategic design and controls, shaping the (re)thinking process toward a looping introspection and reflection upon corporate utility and reconceptualization. In P1 and P3, it was instead often a type of buzzword being thrown around. P3 touched a bit more upon this, explaining his view that organizations need to be flexible in order to adapt to their surrounding.

Regarding the *market focus,* the viewpoints diverged. P3's view of the market was revealed to be closer to the notion of "place" where you push the products into. P1 mentioned the markets are changing very much due to digitalization, where niches start becoming more and more interesting and successful to focus on. This is also due to the world and individuals becoming more dynamic. As a result, his organization was working with a just-in-time concept to be more effective. P3 instead had much focus on developing their product in relation to what the market wanted. Both analyses and customer participation were useful to verify what to develop. Secondly, this also helped them plan out what countries to penetrate next.

It is interesting to observe, furthermore, that the differences when it comes to a firm's responses triggered are by the effects of COVID-19. Firstly, all participants admitted their firms were directly affected by this phenomenon and were forced to react and act upon it. In P2's organization, the physical presence in the field was something that had to be ruled out, hence changing the interactions and so the competition in their "game" (e.g., temporary abandonment of professional exhibitions and customer visits). This led to an immediate shift in the way they communicated and shared content. It was a fast-paced, operational-driven, tactical response pushing the organization's structure and strategic reconfigurations, but had to let go of some of its human resources. P1 mentioned something similar. The whole sales process changed. However, the interviewee argued that as the amount of changes occurred in such a short period of time, it is nearly impossible to compare their pre-pandemic with the on-pandemic and the post-pandemic realities and determine with any slight accuracy the extent of deviation or approximation to the past reality. In addition, P1 mentioned also the impact on human relations and individual's moral that were argued to have worsened considerably.

P3 disclosed an almost dramatic situation, revealing that this firm was the most negatively impacted one. Firstly, 85% of the service pipeline was stopped due to the lockdown and temporary closure of their retail customers. The company was subjected to an immense commercial and financial strain with cash-flows being abruptly slimmed down. The changes were introduced in a rather drastic way, coming as a sort of inner "revolution" to all stakeholders. The interviewee admitted that not only they were badly hit but also in the post-pandemic period their projects and deal sizes were considerably smaller than before.

However, the interviewees acknowledged also some positive changes (due to COVID-19). P2 mentioned the efficiency gains in the aftermath of processes' alteration. P1 emphasized an almost null impact of some of their coders who already worked from home, meaning that this was already their natural environment. For P3, there simply did not come anything really positive out of such environmental changes.

4.2 Sense-Making

Three fundamental ideas were extrapolated from the *Gestalt* analysis of the qual data:

1. Insufficient exercise of strategic thinking and strategy/ies formalization (or simply "*Organizations strategize too little")*
2. COVID had a noticeable impact on organizations (mostly negatively)
3. The most resilient organizations (regarding EBE changes) were also the ones who developed more sophisticated strategic envelopes

The next subsection describes these three major findings.

4.2.1 Responsiveness Scan: "Organizations Strategize Too Little"

Altogether, at the review of the interviews (already in a written format – transcripts), the manipulation of data per thematic codes, and their sense-making process (while matching the informants' explicit content into strategy-related conceptions), it became clear that organizations do not fully embrace strategy as a whole system of seminal importance for the success of their business and the sustainability of the firm.

It is clear to say that organizations actually strategize and organize themselves too little. Instead, they behave in accordance with a vision and results and make it up along the way. Organizations rather show a tendency to focus on results than the process, hence disregarding strategy-making that shows little meaning. However, those who do spend more time on strategic aspects are more aware and better prepared for the external environment, reaping those benefits. Furthermore, organizations adopt a terminology that visibly integrates strategy concepts, which we argue to be intended to give a professional appearance instead of an actual deep involvement in strategy design, execution, and control. We designate this as a "*strategy-washing*" phenomenon.

Formalization seemed limited and disconnected and involuntarily set in a top-down manner. We assume a low ability to involve organizational stakeholders in the fashioning of strategic goals (including middle managers). A second note also on an inferred sparse attentiveness to the *Communication* of strategy as the departments and projects seemed to be narrowly involved (only) in the operational goal-setting concerning their operational activities related to their own functional areas. Hence, line and middle managers and the operational line were left without an overall vision of the organization. We argue, based on previous literature, that strategic communication is a key mechanism for creating a large collation of interests and individual motivations to engage and further contribute. Hamel (1998), Shimizu and Hitt (2004), and Herhausen et al. (2021) refer to this as an overstaying of ideas in the head of the executives, instead of letting new voices be heard. However, the adherence to strategic visions, destinies, and goals is though primarily dependent on the employee's general understanding of the strategic direction and the commonly shared goals. Conversely, weaknesses in formalization and communication were especially noticed in the informants' speech (in P1 and P3) and markedly absent in P3's speech.

Further to the fragilities in the two mechanisms above, another interesting aspect we have retained was the mediating effect of culture. In general, since the work on corporate culture of *Rosabeth Moss Kanter* and others, we acknowledged the effect of integrative cultures on better accommodation of change waves. However, this empirical test unraveled a negative effect of culture manifested in the stereotyping and compartmentalizing of professions and islands of practice, which was articulated with an unfocused strategic formulation. The culture just accentuated the latter problem in the context of COVID-19. A paradigmatic case explanatory of this problem was found in the professional group of "coders," seemingly left at their own fate, working individually and many working on a blended format (office and home) already for a long period of time. COVID-19 functioned as a kaleidoscope, accelerating and augmenting the problem, because it exacerbated the cultural features with the full transference of workplaces to a "work-from-home" routine. This brought even more focalization on the task/s and more individualization of the employee on their own interests, in turn, damaging the (somehow arguably low) sense of belonging and participation in the company's life. In sum, it is clear that culture plays a much larger role in strategy than the one recognized by the senior managers in these organizations, especially in firm 3, and if used in the right way could prove a valuable strategic asset.

Firm 2 (represented by P2) relied heavily on exploring their innovation potential, being also more agile than the others and more open to change and better culturally equipped to accommodate change of all sorts, hence demonstrating itself as a more flexible organization. Firm 1 (represented by P1) ranked second in our sample's flexibility assessment. They revealed some numbness (perhaps, with senior managers getting shocked and caught by surprise) and passivity as to the timely reaction to the environment happening, which demanded an immediate response. Firm 1 had a stronger internal focus. Firm 2 more actively embraced adaptation, denoting also, beforehand, an internal routine to dissect environmental events and flexibly to work with market information in their favor. This company revealed a higher sense of environmental awareness. In P3, we clearly see what happens when you have no attention to either environment or internal strategies. They utilized no real approach and tried to act first to gain first mover advantage without knowing much about the competitive dynamics in the industry. Therefore, they had a low focus and preparation that supports the literature by Johnson et al. (2003) that low flexibility in a highly turbulent environment proves to be highly troubling for the organization.

4.2.2 COVID-19 Impact: (Mostly) Negatively

The impact of COVID-19 is also shown to be big on all organizations (though not a surprise—as seen across several other publications). All three firms were hit and needed to take action. Firm 3 was fully hit, resulting in major setbacks for the business. Additionally, it followed a financial savings approach to tackle the problem. Previous literature flags this approach as the wrong way to deal with it. According to Jacobides and Reeves (2020), this is the exact opposite of what an organization is recommended to do in a context of crisis. Instead, they are summoned to invest in the crisis.

In addition, these types of environmental rare events (so-called Black Swans—as COVID-19) also demonstrate the exposure of business models and susceptibility to collapse. An investment entailed a minimization of failure and a minimization of weaknesses. However, investing in strategic innovations (and new business model development) requires the right corporate mindset on an organization willing to be or maintaining a flexible condition, capable of constant adaptation and renewal. Hence, these four strategic concepts (Strategic Innovation, Agility, Flexibility, and Adaption) are interdependent and inseparable.

Firm 2 set a better example of a positive reaction. They quickly immersed in the problem and created new materials to adapt to the "new normal." Noticeably also they prepared themselves in advance to withstand external changes. Arguably, their product/s was already better equipped than the one in firm 3. In other words, all organizations were impacted by COVID-19 in some way and such a phenomenon truly changed the rule of the game in the industry. The big difference lies in the extent of the impact. Strategic preparedness (in the form of the four concepts above) seemed to be a direct predictor of the outcomes. Nevertheless, further studies on impact may account for organizational specificities (e.g., size or industry).

4.2.3 Resilience (Strategizing Is Beneficial and an Advantage)

The analysis of data from interviews supported previous literature. It revealed that business plans and strategies change nowadays more drastically and at a higher frequency than before. As we can see in P2 compared to P1 and P3, the best outcome happened to the ones who took an Analyzer standpoint and were more flexible and innovative in a turbulent environment. Just by looking at P3, there could be belief that a Prospector approach is the least suitable for a disruptive event such as a Black Swan; for example, COVID-19. But looking at the whole picture of the organizations, the panorama shown is a lack of strategic definitions, almost on the verge of inexistence. They were instead focusing on just selling and growing, without any real plan or any thought about the external environment. This is further evidence that collective resilience (including corporative one) is not randomly achieved, requires a hard focus, and work on strategic adaption to be able to survive and thrive.

Moreover, data made something else clear that organizations need strong management (including the adoption of clearly set Strategic Management processes) willing to take care of the overall responsibility and take the initiative of walking down the road of the necessary measures/steps to ensure a strategy running on track. Without the knowledge, support, and guidance of the executive boards and all top management teams' staff to a full commitment to the organization/ business management, the firm is deemed to fail. This was shown in P3 as the worst example and P2 as the best example. P1 shows the in-between route, where management is knowledgeable, but takes a more passive approach, turning out to lose the ability to patch in the short term the imponderables of COVID-19 and build agility in the medium and long term.

So, a real manager is an essential part of success. They play a big role in pushing the organization forward. Those real managers are summoned to an ambidexterian focus on strategy/operations on one side, and the markets on the other side, acting furthermore as engines of collaborative networking, healthy working environments, positive cultures, intrapreneurial initiatives, and so being primary agents responsible for these essential components of business success in response to external challenges: innovation, agility, flexibility, and culture. This is how to build on incrementally one's resilience. Finally, organizations must provide a clear direction to all employees on how they should act.

5 Conclusion

This chapter aimed to look at, and explain, how EBE events, here instrumentalizing COVID-19, might affect a firm and comprehend, to what extent, Strategic Innovation, Strategic Agility, Strategic Flexibility, and Strategic Adaptation ought to, separately or combined, be a solution to a better fit into the EBE.

The takeaway is clear: *Organizations do not strategize enough*! Strategy is something that one cannot simply articulate in a responsive manner, through the development of Strategic Agility. Agility is not Holy Grail that saves any company from all hazards. This is maybe what some agility IT software solutions would try to sell you! The "agile cliché" that one-model-fits-all the environment's concerns is a rather naïve perspective of business competition and growth and an oversimplification of the environmental constraints. Market–firm interactions are dyadic. They are both an interaction *outside-in* pulled by market stimuli (e.g., by the impactful events—risks or opportunities, and by the key success factors of competitions) but also inside-out by the R&Cs that can better push a better positioning, hence requiring Strategic Flexibility to determine the direction of up-/reskilling, human/social/intellectual capitalization needs, challenges, and opportunities. Yet, strategic innovation occupies a mediating role in such a dyad since the openness to new business models and strategic designs requires both an attentiveness to the mutations in the market realm and also ex ante KSAs to induce (or disseminate) in the market innovative attributions to a more favorable competitive positioning or to promote adaptation to ongoing outer changes.

By combining the literature and participant interviews, a link between theory and practice has been established to provide key takeaways for you as a reader. Firstly, it answers that organizations strategize themselves too little. Instead, organizations have an idea or a vision combined with focusing on results. Strategic concepts are more used to give a light that they have a strategy in place. However, those who do spend more time working with strategic aspects show to be more aware and better prepared for the external environment. Secondly, this chapter has explained that COVID-19 has impacted all organizations in some way. The difference instead is how the changes hit the organizations and there are still difficulties to see to what extent. All three organizations were forced to change processes both internally and externally. However, the extent of the changes was shown to be different between them. The organizations that worked more with strategy and adopted an Analyzer approach made better decisions and needed to change the smallest amount. The organization that had worked the least with strategy instead experienced the biggest impact and experienced massive difficulties.

This shows that organizations can be better prepared by setting up themselves to have a clear strategy that supports the process. This will work as a clear guidance for how the organization should act and tackle difficulties. It is also of high importance to be aware of the external environment and plan accordingly with internal capabilities. This proves to be extra true if the environment is highly turbulent. Additionally, this chapter shows evidence that organizations obtaining an *Analyzer* approach will be better prepared and more successful in volatile markets.

References

Abrantes, B. F. (2020). Tech-innovation and spillovers on corporate-defensiveness: Evidence from the Lisbon startup ecosystem. *International Journal of Business Competition and Growth, 7*(1), 68–100.

Abrantes, B. F., & Venkataraman, A. (2022). Environment kinesis and organisational adaptability: Effects of EU's general data protection regulation on the Danish software industry. *International Journal of Learning and Change, 14*(1), 14–45.

Chakravarthy, B. S. (1982). Adaptation: A promising metaphor for strategic management. *Academy of Management Review, 7*(1), 35–44. https://doi.org/10.5465/amr.1982.4285438

Charitou, C. D. & Markides, C. C. (2003). Responses to Disruptive Strategic Innovation. *MIT Sloan Management Review* [Preprint]. Retrieved June 26, 2022, from https://sloanreview.mit.edu/article/responses-to-disruptive-strategic-innovation/

Chen, Y., et al. (2017). Improving strategic flexibility with information technologies: Insights for firm performance in an emerging economy. *Journal of Information Technology, 32*(1), 10–25. https://doi.org/10.1057/jit.2015.26

Cingöz, A., & Akdoğan, A. A. (2013). Strategic flexibility, environmental dynamism, and innovation performance: An empirical study. *Procedia - Social and Behavioral Sciences, 99*, 582–589. https://doi.org/10.1016/j.sbspro.2013.10.528

Doz, Y. & Kosonen, M. (2010). Embedding strategic agility a leadership agenda for accelerating business model renewal. https://doi.org/10.1016/J.LRP.2009.07.006.

Gerwin, D. (1993). Manufacturing flexibility: A strategic perspective. *Management Science, 39*(4), 395–410.

Hamel, G. (1998). Strategy Innovation and the Quest for Value. *MIT Sloan Management Review* [Preprint]. Retrieved June 26, 2022, from https://sloanreview.mit.edu/article/strategy-innovation-and-the-quest-for-value/

Herhausen, D., et al. (2021). Re-examining strategic flexibility: A meta-analysis of its antecedents, consequences and contingencies. *British Journal of Management, 32*(2), 435–455. https://doi.org/10.1111/1467-8551.12413

Hitt, M. A., Keats, B. W., & DeMarie, S. M. (1998). Navigating in the new competitive landscape: building strategic flexibility and competitive advantage in the 21st century. *The Academy of Management Executive (1993–2005), 12*(4), 22–42.

Howard, C. (2021). *Reset your business strategy in covid-19 recovery*, *Gartner.* Retrieved June 26, 2022, from https://www.gartner.com/smarterwithgartner/reset-your-business-strategy-in-covid-19-recovery

Ion, P., & Cristina, V. (2014). Innovation: A strategic option for future economic growth. *Annals of Faculty of Economics, 1*(1), 1220–1225.

Jacobides, M. G. & Reeves, M. (2020). Adapt your business to the new reality. Harvard Business Review. 1 September. Retrieved June 26, 2022, from https://hbr.org/2020/09/adapt-your-business-to-the-new-reality

Johnson, G., Scholes, K. & Whittington, R. (2008). Exploring corporate strategy: Text & cases; [new for 2010! The strategy experience simulation put your business decision-making skills into practice!]. 8th ed, [Nachdr.]. : Prentice Hall Financial Times.

Johnson, J. L., et al. (2003). Market-focused strategic flexibility: Conceptual advances and an integrative model. *Journal of the Academy of Marketing Science, 31*(1), 74–89. https://doi.org/10.1177/0092070302238603

Lukas, B. A. (1999). Strategic type, market orientation, and the balance between adaptability and adaptation. *Journal of Business Research, 45*(2), 147–156.

Markides, C. (1998). Strategic Innovation in Established Companies. *MIT Sloan Management Review* [Preprint]. Retrieved June 26, 2022, from https://sloanreview.mit.edu/article/strategic-innovation-in-established-companies/

Markides, C. C., & Anderson, J. (2006). Creativity is not enough: ICT-enabled strategic innovation. *European Journal of Innovation Management, 9*(2), 129–148. https://doi.org/10.1108/14601060610663532

McKee, D. O., Varadarajan, P. R., & Pride, W. M. (1989). Strategic adaptability and firm performance: A market-contingent perspective. *Journal of Marketing, 53*(3), 21–35. https://doi.org/10.1177/002224298905300305

Miles, R. E., et al. (1978). Organizational strategy, structure, and process. *Academy of Management Review, 3*(3), 546–562. https://doi.org/10.5465/amr.1978.4305755

Miller, D. (1987). The structural and environmental correlates of business strategy. *Strategic Management Journal, 8*(1), 55–76.

Nejatian, M., et al. (2019). Paving the path toward strategic agility: A methodological perspective and an empirical investigation. *Journal of Enterprise Information Management, 32*(4), 538–562. https://doi.org/10.1108/JEIM-10-2018-0233

Oktemgil, M., & Greenley, G. (1997). Consequences of high and low adaptive capability in UK companies. *European Journal of Marketing, 31*(7–8), 445–447.

Pleshko, L., & Nickerson, I. (2008). Strategic orientation, organizational structure, and the associated effects on performance in industrial firms. *Acad Strategic Management Journal, 7*, 95.

Sanchez, R. (1997). Preparing for an uncertain future: Managing organizations for strategic flexibility. *International Studies of Management & Organization, 27*(2), 71–94.

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2019). Research methods for business students.

Seetharaman, P. (2020). Business models shifts: Impact of Covid-19. *International Journal of Information Management, 54*, 102173. https://doi.org/10.1016/j.ijinfomgt.2020.102173

Shimizu, K., & Hitt, M. (2004). Strategic flexibility: Organizational preparedness to reverse ineffective strategic decisions. *Academy of Management Executive, 18*, 44. https://doi.org/10.5465/AME.2004.15268683

Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning, 43*(2), 172–194. https://doi.org/10.1016/j.lrp.2009.07.003

Tuominen, M., Rajala, A., & Moller, K. (2004). How does adaptability drive firm innovativeness? *Journal of Business Research, 57*(5), 495–506.

Vecchiato, R. (2015). Creating value through foresight: First mover advantages and strategic agility. doi:https://doi.org/10.1016/J.TECHFORE.2014.08.016.

Weber, Y., & Tarba, S. Y. (2014). Strategic agility: A state of the art introduction to the special section on strategic agility. *California Management Review, 56*(3), 5–12. https://doi.org/10.1525/cmr.2014.56.3.5

WHO (online) Listings of WHO's response to COVID-19 (no date). Retrieved June 26, 2022, from https://www.who.int/news/item/29-06-2020-covidtimeline