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Different response paths to organizational resilience

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Abstract An essential yet understudied aspect of organizational responses to an environmental shock is how managers interpret and respond to their new environments and address post-shock environmental challenges. The post-shock managerial response process can be intense *and* highly consequential as actors often must challenge the status quo in a compressed period. Decisions are frequently "life or death" in terms of organizational survival. This study analyzed data on resilient organizations' responses to the COVID-19 crisis and offered a model of organizational response paths to resilience. Our grounded theorizing offers three primary contributions: (1) we add richness to the distinction between organizations that are resilient or not by highlighting different response paths within the organizational-resilience category; (2) we complement the notion of *post*-adversity growth by explaining how organizations grow *during* adversity; (3) we move beyond explanations of resilience based on differences in organizations' resource endowments and instead provide new insights into different paths to resilience based on differences in how organizations interpret and respond to the same adverse event.

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Plain English Summary There are different ways organizations make the most out of a surprising challenge to enhance performance, adjust, and pivot for new opportunities. The COVID-19 pandemic has challenged organizations in different ways—some experienced near-exponential increases in demand, whereas others saw their entire business evaporate overnight. Despite a continuum in the severity of these challenges, they require resilience. But how does resilience happen in organizations? Our study examines different responses to a challenge that, while originating from the same adverse event (COVID-19 pandemic), impacted organizations and their decision making differently. We find three patterns of responses that provide options for how organizations might approach challenges based on the impact they experience. First, some organizations fell into sudden, exponential demand—requiring simple decision-making rules to make incremental changes to support rapid scaling. Second, other organizations faced operational challenges and found ways to repurpose existing structures to maintain business operations. Finally, some organizations appraised their situation as an imminent threat to organizational survival, requiring rapid, wholesale changes to the business model in the form of pivots. Thus, the principal implication of this study is that organizations have different experiences from the same precipitating event, and they should ensure they align firm decision making, strategic initiatives, and operational activities to best promote resilience.

Keywords Organizational resilience · Adversity · Entrepreneurship · Adaptation · Decision-making

JEL Classification S01 · D21 · D62 · D80 · D91

"We cannot change the cards we are dealt. Just how we play the hand." – Randy Pausch's Last Lecture (Carnegie Mellon University)

1 Introduction

In recent years, there has been increased interest in understanding how organizations and people are resilient to adverse events (Battisti et al., 2019; Darkow, 2019; Herbane, 2019; Kahn et al., 2018; Williams & Shepherd, 2016a). Indeed, while globalization has spurred unprecedented increases in the scale and efficiency of organizations, it has also produced increased vulnerability as the widespread interdependence of systems can damage organizational performance when global supply chains are disrupted (Interos, 2021). Therefore, there is a critical need to understand how organizations maintain functioning—and potentially thrive (Battisti et al., 2019; Vera et al., 2021)—*in the face of adversity* that occurs in a variety of forms: environmental shifts, disruptive events, technological change, economic pressure, and so forth (Bruyaka, Philippe & Castañer, 2018; Eggers & Park, 2018; Park & Rogan, 2019; Shepherd & Williams, 2020). Resilience is a process that builds the capacity "to interact with the environment in a way that positively adjusts and maintains functioning prior to, during, and following adversity" (Williams et al., 2017: 742). While maintaining functioning in the face of adverse events is important, a critical but overlooked issue in the study of organizational resilience concerns how some actors may prosper, enhancing (rather than merely maintaining) functioning in the face of even the most extreme adversity (e.g., leaders thriving in adverse contexts (Vera et al., 2021)) or experiencing personal growth after recovering from a traumatic event (Maitlis, 2009, 2012, 2020).

Studying the differing degrees to which resilient organizations respond to the onset of adversity is essential as such responses are highly consequential to organizational performance and require adaptive activities to manage effectively. The literature on resilience suggests that adverse events are "low-probability, high-impact negative shocks or jolts to a focal individual's or organization's environment that is *potentially* highly disruptive to well-being" (Shepherd & Williams, 2020: 2, emphasis added). However, impressions of adverse events may be unnecessarily negative and unlikely to represent everyone's experience—hence why adverse events are *potentially disruptive* to organizations. From the current perspective, the *resilience* outcome in the face of an adverse event is *maintaining* positive functioning—as opposed to a loss of functioning that endures (*chronic dysfunction*) or takes time to return to normal (*recovery trajectory*) (Bonanno, 2004; Williams et al., 2017). However, there is evidence that facing adversity can *increase* positive functioning (Williams & Shepherd, 2016b, 2018). For example, Williams and Shepherd (2016a, 2021) show that an adverse event can present potential opportunities to alleviate suffering above and beyond the scope of the adversity and can help address chronic issues, such as poverty, homelessness, and joblessness. Similarly, Maitlis (2009) shows how some people who suffer from a traumatic injury recover and eventually benefit—also known as post-traumatic growth (Calhoun & Tedeschi, 2014). However, even this post-adversity growth involves a drop in functioning before recovery and, ultimately, increased functioning (vis-à-vis the pre-adversity functioning).

Despite the advances in research on organizational resilience in the face of adversity (Ahmed et al., 2021; Williams et al., 2017), certain unchallenged assumptions have limited research advancements. Indeed, the resilience literature and its reliance on the dichotomous categorization of organizations in response to adversity (i.e., resilient or not resilient) lead to gaps in our understanding of adversity and organizational resilience. Specifically, there is a gap in our understanding of differences in organizations' experiences and interpretations of the same adverse event and, subsequently, their different response paths to *different forms* and/or degrees of organizational resilience. There is also a gap in our understanding of the upside potential of adverse events more immediately than post-adversity growth. If there is an upside, then we need to understand how this upside is achieved. In seeking to address these gaps in our current knowledge, we ask the following questions: *how and why do resilient organizations differ in their responses to an* *adverse event, and how do these different responses shape degrees of enhanced functioning?* To address this question, we conducted a qualitative study of organizations that *all* appeared to be resilient to varying degrees in the face of the ongoing COVID-10 pandemic. We chose to explore resilience in the face of the COVID-19 pandemic because it had a broad impact on business across a wide range of industries and thus allowed us to explore different challenges and responses to the same adverse event (i.e., because events can vary in adversity (Shepherd & Williams, 2020) investigating one event allows us to focus on the differences in organizational responses). We identified and analyzed data on 34 responses by resilient organizations that could be theoretically revealing to our inquiry, drawing on both qualitative interviews and secondary data. Specifically, we identified organizations that demonstrated various degrees of resilience in response to the same adverse event, which outside media sources observed.

The primary insight of our qualitative analysis of these resilient organizations and their responses is the identification of three different response paths of organizational resilience that unfolded after the onset of the COVID-19 pandemic and public health responses to it starting in March 2020. We use the term "response path" consistent with the psychology literature on resilience (Bonanno, 2004), which, in an organizational context, refers to the sequence of decisions and actions an organization implements to interpret its new context and then adapt to the perceived features of the adverse external environment. Indeed, we found that despite facing a common adverse event, the resilient organizations we studied experienced and interpreted the adversity differently, which then initiated different response paths to organizational resilience. Our grounded theorizing and model make three primary contributions to the literature, which we briefly preview before detailing qualitative analysis and findings.

First, one research stream explores why some organizations recover well from the negative impact of environmental jolts (Benner & Zenger, 2016; Meyer, 1982; Stieglitz et al., 2016; Wenzel et al., 2020). A largely separate research stream explores why some organizations can maintain positive functioning in such adversity (for a review, see Williams et al., 2017; e.g., Battisti et al., 2019; Caza et al., 2020). The organizations we studied experienced and interpreted the focal adverse event differently, triggering different response paths to organizational resilience. Therefore, we move beyond the dichotomous distinction between resilient and non-resilient organizations to add richness to the notion of organizational resilience.

Second, a small but important stream of research on recovery from an adverse event explores how, in the long run, experiencing adversity (by organizational members) can lead to positive outcomes, including for organizations, post-adversity growth (at the individual level see Maitlis, 2009, 2012, 2020). Our findings contribute to this individual-level research on post-adversity growth. Some organizations we studied experienced growth amid adversity without having first experienced the disruption that characterizes post-adversity growth.

Finally, organizations are more resilient to adverse events when they have substantial resource endowments (Carmeli & Markman, 2011; Lengnick-Hall et al., 2011; Stephens et al., 2013), flexible decision making (Rahmandad & Repenning, 2016; Shepherd et al., 2017), learning capabilities (Battisti et al., 2019), and innovative and improvisational behavior (Baker & Nelson, 2005; Dewald & Bowen, 2010). Although adverse events differ in their geographical scope, duration, and severity (Williams et al., 2017), the same adverse event is assumed to similarly affect firms with comparable resources and capabilities. From this perspective, differences in adversity response effectiveness are associated with heterogeneity in pre-adversity stocks and/or the adaptive responding capacity of an organization. However, we found that the same adverse event impacted organizations differently (regardless of similar resource endowments). This finding is more consistent with the psychology literature on resilience (Bonanno, 2004), which finds that adversity presents only a *potential* for disruption, as people interpret, respond to, and act upon common adversity differently. Therefore, we provide insights into different forms of resilience (which we label capitalizing, repurposing, and realigning) based on their use of their resources rather than differences in the size of the resource endowment or the nature of the adverse event. In doing so, we integrate well-established insights at the individual level of resilience into organizational-level theory. Having briefly previewed our findings and contributions, we now turn to the theoretical background and analysis.

2 Theoretical background

Adversity is a ubiquitous part of life and has thus featured prominently in organizational studies (see Bundy et al., 2017; Williams et al., 2017). For example, most people are exposed to at least one and often several potentially traumatizing experiences in their lifetimes (Ogle et al., 2013). Organizations are similarly exposed to a wide range of events that can be highly disruptive (Taleb, 2007). Adversity comes from many sources, including natural disasters, industry dynamics, organizational error, accidents, and so forth (Boin, 2005; Laufer & Coombs, 2006; Perrow, 1994; Quarantelli & Perry, 2005; Pfeffer & Salancik, 2003; Quarantelli, 1998; Roux-Dufort & Lalonde, 2013). In many cases, large-scale adversity is described as a disruptive event, or a sudden onset environmental shock or jolt that is surprising, unstructured, unexpected, and negative in nature (Meyer, 1982; Rosenthal, 2003; Topper & Lagadec, 2013) that threatens the very survival of the focal actor (i.e., individual, organization, community, etc.) (Lagadec, 2007; Pearson & Clair, 1998; Sayegh, Anthony, & Perrewe, 2004). From this perspective, the sudden onset of adversity implies time pressure and the need for coordination among multiple stakeholders to address challenges (Sommer & Pearson, 2007). For example, adverse events such as emergent disasters (Bundy et al., 2017), political upheaval (Carroll & Delacroix, 1982), and economic downturns (Bradley et al., 2011) may be disruptive and devastating. Indeed, some organizations that face an adverse event suffer a drop in positive functioning and may then bounce back over an extended period (i.e., recover (Beunza & Stark, 2003) or turn around (Zimmerman, 1989)), whereas others experience chronic low performance and/or termination (Seckler, Fischer, & Rosing, 2021; Williams et al., 2020). In contrast, some organizations are resilient to adverse events, experiencing minimal disruption to functioning (Mittermaier et al., 2022a; Powley, 2009), while others may even grow from an adverse event, using it as a "crucible" to come to a "new or altered sense of identity" (Bennis & Thomas, 2002: 63; Roberts et al., 2005).

While adversity can vary from discrete *events* such as natural disasters (e.g., bushfires (Shepherd & Williams, 2014; Williams & Shepherd, 2016b, 2018) and earthquakes (Williams & Shepherd, 2016a, 2021)) and man-made disasters (e.g., refugees fleeing war in their home countries (Mittermaier et al., 2022a, 2022b)), it also manifests in longer-term processes of *chronic* adversity such as poverty (Chatterjee et al., 2022; Shepherd, Parida & Wincent, 2021), the intersectionality of dirty work, slums, and caste (Shepherd et al., 2022), and "permanent" refugees (Shepherd et al., 2020). Indeed, it has been argued by some (e.g., Roux-Dufort, 2007, 2016; Shrivastava, 1992; Turner, 1976) that the actual "event" of a crisis is a discrete flashpoint *derived* from a longer, incubated process. This notion of an incubated crisis suggests that adversity may grow, ebb, and flow, interacting with organizational responses over time (see Williams et al., 2017 for review).

In sum, recent research has revealed that organizations are influenced by the contextual features of adversity, especially its duration and degree of impact. However, as has been established by foundational scholarship (e.g., Christensen & Bower, 1996; Finkelstein, 1997; Pfeffer & Salancik, 2003), organizations are not simply acted upon by environmental forces but produce different interpretations and then responses that allow them to manage and capitalize on environmental conditions (i.e., constraints and opportunities, etc.) that shape the relationship between adversity and organizational outcomes (i.e., performance, failure, etc.). Therefore, while acknowledging the diverse forms of adversity that shape organizations, we are interested in isolating and understanding different *organizational* responses. To do so, we sought to understand how responses vary across organizations facing *the same* adverse event (i.e., adversity is held constant).

2.1 Responding to environmental changes

Recovering from adversity While resilience implies the maintenance of functioning in the face of adversity, a recovery response results from (1) a significant loss in functioning that then (2) is restored over time. Adverse events often disrupt organizational functioning. For example, recent global crises, such as the 2008 financial crisis and the COVID-19 pandemic, resulted in significant organizational disruptions: lost jobs, customers, and sources of revenue and even the failure of organizations (Crayne, 2020; Crosina & Pratt, 2019; Giones et al., 2020; Martinez et al., 2019). Indeed, Meyer (1982: 515) described that an environmental jolt has a disruptive impact on organizations and has resulted in research seeking to explain how organizations can overcome their disrupted functioning to recover and return to the pre-jolt status quo (Lalonde & Roux-Dufort, 2010). Crisis management can facilitate the recovery from a loss of positive functioning (Ballesteros et al., 2017; Bundy & Pfarrer, 2015; Christianson et al., 2009; Stam et al., 2018). In particular, Wenzel and colleagues (2020) highlight four strategies for a crisis response: (1) retrenchment to stabilize performance and simplify decision making and activities (Benner & Zenger, 2016; Gartenberg, 2014; Pearce & Robbins, 1994; Robbins & Pearce, 1992), (2) perseverance to maintain current business activities because frequent changes can be distracting and ineffective (Pacheco-de-Almeida, 2010; Stieglitz et al., 2016; Wenzel et al., 2020), (3) innovation to facilitate strategic renewal (Baker & Nelson, 2005; Helfat, 1997), and (4) exit (i.e., failure) as a way of cutting losses and allowing remaining resources to be redeployed elsewhere (Argyres et al., 2015; Burgelman, 1996).

While crisis management can help reduce losses and ease the path to recovery, other research explores improvisational tactics that facilitate recovery. Indeed, organizations that are more effective at recovering from a crisis event are those that can improvise (Drabek, 1985; Stallings & Quarantelli, 1985), rapidly mobilize resources and capabilities (Kreps & Bosworth, 1993; Neal & Phillips, 1995; Shepherd & Williams, 2014), and coordinate organizational members (Dynes, 2003; Wenger et al., 1987). Furthermore, efforts to rapidly respond to challenges can facilitate a decreased recovery period, allowing organizations to "bounce back" quickly to their pre-crisis functioning levels (Grattan et al., 2017; Gunderson, 2000). However, bouncing back[1] to pre-adverse event functioning may be less than ideal, as returning to the status quo may "have [negative] ramifications and implications beyond those initially imagined or planned" (Tsoukas & Chia, 2002: 568). Indeed, organizations seeking to bounce back by replicating former processes and business activities may experience conflicting results (D'Adderio, 2014) due to a potentially damaging misfit between their new business environments and the previous status quo. Therefore, bouncing back could result in "a crisis [that] would never end because organizations would always fail to reestablish the prior status quo," which should perhaps not even be a goal in the first place (Darkow, 2019: 151).

Resilience to adversity Although the assumption is that adverse events cause organizational disruption (Comfort et al., 2010; e.g., Meyer, 1982), some organizations are resilient to these adverse events (Alexander, 2013; Linnenluecke & Griffiths, 2015; Sutcliffe & Vogus, 2003; Wildavsky, 1988). A resilient response to adversity is not uncommon. Indeed, despite assumptions to the contrary, resilience is the *most common* individual response to adversity compared to other outcomes (e.g., chronic dysfunction, recovery, etc.) (see Galatzer-Levy et al., 2018 for a meta-analysis and review). Organizations can enhance resilience before an adverse event by developing resources (e.g., through financial (Bradley et al., 2011; Carmeli & Markman, 2011), cognitive (Lengnick-Hall et al., 2011; Thomas et al., 1993), behavioral (Boin et al., 2010; Weick & Sutcliffe, 2011), and emotional (Stephens et al., 2013) endowments (Williams et al., 2017)).

Therefore, there have been efforts to explore how organizations can establish processes, routines, and business models to withstand potentially disruptive external forces. Furthermore, the literature on preventing adversity has emphasized developing risk-assessment systems that help anticipate and avoid crises, which involves collecting and analyzing extensive data from organizations and their environments (Gephart et al., 2009). While risk reduction is an understandable strategy, even the most elaborate risk-assessment models have "severe shortcomings... [as] risk assessment is tied to potential threats that *need to be known in advance*," which is difficult due to human fallibility and highly interrelated systems that make the number of variables required to accurately determine risks unmanageable (Darkow, 2019: 147, emphasis added).

In much of the extant research, the distinction between resilient and non-resilient organizations and organizations that are quicker or slower to recover from setbacks depends (at least in part) on pre-adversity resources and capabilities (see Bonanno et al., 2011; Galatzer-Levy et al., 2018 for reviews). For example, resilient organizations are those that (1) have more substantial resource endowments (Carmeli

[1] We acknowledge that some scholarship refers to "bouncing back" as resilience itself. However, we align our definition with the psychology literature that describes bouncing back as a recovery process. That is, individuals lose functioning and then bounce back (i.e., recover) (see Bonanno, 2012; Bonanno & Diminich, 2013; Bonanno, Romero, & Klein, 2015; Bonanno, Westphal, & Mancini, 2011 for reviews).

& Markman, 2011; Stephens et al., 2013) and pre-established capabilities, such as flexible decision making (Rahmandad & Repenning, 2016), innovation (Dewald & Bowen, 2010), and resourcing capabilities (Williams & Shepherd, 2016b); (2) can bring new resources to bear (Shepherd & Williams, 2014); and (3) deploy existing resources for new purposes (Bechky & Okhuysen, 2011). However, an adverse event can impact organizations over and above differences in resource and capability endowments. Indeed, in some cases, possessing larger resource endowments may inhibit an organization's ability to rapidly respond to a challenge (Grimes, Williams, & Zhao, 2019) and discontinuous changes in its environment (Tripsas, 2009; Tripsas & Gavetti, 2000).

Furthermore, while an adverse event can disrupt resource structures and institutional norms, it can also enhance the value of objects and resources previously undervalued and underutilized (e.g., community relationships, social capital, and human capital (Williams & Shepherd, 2018, 2021)). Thus, novel opportunities may emerge from an adverse event for those who can recognize and deploy new resource combinations to pursue opportunities. Indeed, research outside the work on resilience shows that organizations and their managers can have very different appraisals of the same event despite similar positions. For example, some may perceive an environmental signal as an opportunity and others as a threat (Dutton & Jackson, 1987; Jackson & Dutton, 1988) based on their regulatory focus (McMullen et al., 2009), entrepreneurial mindset (Kuratko et al., 2020), and firms' strategic orientation (Wiklund & Shepherd, 2005). Therefore, an event recognized by all as adverse—for example, a global pandemic—may lead some to perceive opportunities and other threats.

Beyond pre-crisis endowments, organizations can also achieve resilience through adaptive responses to an adverse event (Sutcliffe & Vogus, 2003; Williams et al., 2017). Organizations can be more resilient to an adverse event based on their cognitive and behavioral responses (Weick & Sutcliffe, 2011). Resilient cognitive responses include discerning an environmental change beyond simply surviving (Dewald & Bowen, 2010; Lengnick-Hall & Beck, 2005), adjusting through innovation (Dewald & Bowen, 2010), and implementing flexible (Rahmandad & Repenning, 2016) and shared (Weick, 1993) decision making. Resilient organizations respond to adversity behaviorally through enacting solutions (Lengnick-Hall & Beck, 2005; Rahmandad & Repenning, 2016), mobilizing and combining resources (Bechky & Okhuysen, 2011; Shepherd & Williams, 2014), and repurposing their identities (Powell & Baker, 2014). Overall, prior scholarship explores how organizations can prepare for a crisis and adapt in the moment to *maintain functioning*. However, this research does not address (as it was not its purpose) how actors might *enhance* functioning in response to a crisis. Furthermore, scholarship does not address differences in degrees of resilience as it usually treats organizational responses as either resilient to an adverse event or not (Ahmed et al., 2021; Sutcliffe & Vogus, 2003; Williams & Shepherd, 2016a).

Post-adversity growth An alternative *recovery* outcome to bouncing back to the status quo is the notion of *post-adversity growth*, which is consistent with "aiming for 'better' rather than for 'replacement'" when recovering from adversity (Shepherd & Williams, 2014: 976). This idea of "build[ing] back better" (Shepherd & Williams, 2014: 978) implies that in recovering from a disruptive crisis event, actors can grow from the experience and can "be changed, sometimes in radically good ways" (Calhoun & Tedeschi, 2014: IX). Consistent with the saying, "What doesn't kill you makes you stronger," there is substantial evidence that some individuals who experience a highly adverse event not only recover but grow from the experience (e.g., bereavement research (Tedeschi & Calhoun, 1995)). From this perspective, an adverse event serves as a "crucible" in which individuals "develop and deepen character" such that adversity serves as a training ground for their growth which may not have been possible in other contexts (Byrne et al., 2018: 255).

Post-adversity growth research has been extended to employees experiencing adversity; employees can benefit from "transformative positive change that can occur as a result of a struggle with greater adversity" (Maitlis, 2020: 395). The notion of this form of growth is that in facing and recovering from an adverse event, an individual can begin to see him- or herself as stronger and more capable of coping with future adversity, see others with greater intimacy and belonging, and have a greater sense of purpose with different priorities (Maitlis, 2020).

Beyond post-adversity growth, a related body of scholarship examines organizations thriving in the face of adversity (Alexander et al., 2021; Seville, 2016). For example, researchers have highlighted a trial-by-fire model (Bradley et al., 2011; Swaminathan, 1996), recognizing that organizations born under adverse conditions may benefit from adversity exposure if they survive. Similarly, other research recognizes that difficult circumstances can spur creative destruction in the form of technological changes (Eggers & Park, 2018; Giones et al., 2020), demonstrating that some organizations do not merely endure crises, but achieve new heights (Battisti et al., 2019; Morgan et al., 2020). For example, Alexander and colleagues (2021: 31) find that "some firms respond to traumatic events in ways that leave them fundamentally better across various dimensions, including financial and non-financial measures." Despite these contributions, the literature on organizational post-adversity growth is still emerging. Similarly, advances in research on positive organizational scholarship (Spreitzer & Sutcliffe, 2007; Vera et al., 2021) speak to thriving in the face of adversity yet are not directly linked to resilience. We anticipate that significant insights can be achieved by challenging a dichotomized notion of resilience (i.e., resilient or not), allowing us to integrate resilience with the notion of in-adversity and post-adversity growth.

3 Methods

3.1 Research context

To explore our research questions, we sought data that could be unusually revelatory (Eisenhardt & Graebner, 2007) to provide insights into how resilient organizations experience, interpret and respond to the same adverse event as opposed to other more traditionally explored phenomena (i.e., why some are resilient and others are not, or how organizations recover from a substantial disruption to their functioning, or whether one adverse event is more devastating than another). The focal adverse event is the onset of the COVID-19 pandemic. The adversity of the onset of the COVID-19 pandemic was devastating in its direct physical, social, and economic impact. At the societal level, this adverse event led to social distancing and sheltering to stop the spread of the virus. As a result, many mental-health problems arose from social disconnection (e.g., isolation and stress combined with drug availability led to a 30% increase in US drug overdoses in 2020 (McKay, 2021)), and as of this writing, more than 5.5 million people have died worldwide, and more than 900,000 have died in the USA (as of February 2022; Center for Disease Control and Prevention, 2022). From an economic perspective, the COVID-19 pandemic led to millions losing their jobs, a reduction of 2.2 million business owners in the United States from February 2020 to April 2020, and the devastation of many industries (e.g., hospitality and entertainment industries) (Craven et al., 2020; Fairlie, 2020).

Within the context of the adversity generated by the COVID-19 pandemic, we sought data on resilient organizational responses that were transparently observable (see Eisenhardt, 1989). Identifying revelatory data on resilient organizations was possible for four reasons. First, the onset of the COVID-19 pandemic has a relatively definitive date of February/March 2020 (outside of China). At this time, it was widely recognized and broadcast as an adverse event that caused substantial suffering. Second, there has been extensive national coverage of the pandemic, efforts to constrain it, and the resulting suffering both have caused (Haroon & Rizvi, 2020). Third, organizations' responses to the adverse event were largely observable as managers repeatedly communicated their assessments, planned responses, and the impact of the adversity on their organizations' performance. Managers were aware of the adverse event and felt compelled to respond. Finally, the media recognized some organizations as functioning positively under adversity (i.e., as resilient organizations).

3.2 Data collection

Sample We targeted organizations for this study that explicitly and publicly sought to respond to the focal adverse event. Our primary sample comprises 34 interviews with founder-entrepreneurs of resilient organizations who were asked questions regarding their organizations' actions amid the COVID-19 pandemic. Specifically, in the "How I Built Resilience" National Public Radio podcast series, Guy Roz identified 42 resilient organizations and interviewed their leaders. The podcast series selected founders (and their organizations) based on having built "resilience into their businesses during this very challenging year" (Roz). This mini-series of interviews is a variation of Roz's regular programming ("How I Built

This"), and data from that podcast series has proved fruitful in revealing important insights into entrepreneurs' actions and decision making (Fisher et al., 2020). In considering data for our study, we eliminated interviews that fell outside the scope of our primary questions of interest—namely, outside how resilient organizations responded to the COVID-19 pandemic. Specifically, we eliminated interviews that focused mainly on the pre-pandemic creation and management of an organization (two interviews), interviews with domain experts providing advice to organizations facing adversity rather than representing themselves as entrepreneurs or managers of an organization (two interviews), and interviews with founders of social ventures (six interviews) (because these ventures typically have multiple logics, making direct comparisons with commercially orientated organizations more difficult (see Battilana & Lee, 2014)). After removing these eight interviews from the entire series, we had a sample of 34 interviews with founders of resilient organizations focused on responding to the adverse event associated with the COVID-19 pandemic.

Having identified 34 resilient organizations as our primary sample, we also extensively searched for media and company reports on the 34 organizations from March to December 2020 to triangulate the findings from the interview data. We report the founders' and organizations' names because the interviews and secondary data are public. Using data generated and collected by others provided access to informants on the focal phenomenon, enabled us to avoid imposing researchers' expectations on the respondents, and provided greater transparency for replicating our methods and findings. Indeed, collecting data in this way helped avoid common challenges with collecting interview data—it can sometimes be obtrusive, lack appropriate timing/context, and so forth (David & Sutton, 2004). Of course, the interviewer and the founders may still insert biases into the data collection. However, we sought to mitigate potential interview-specific biases by triangulating responses with the substantial secondary data we collected. Table 1 offers descriptive data about the interviewees, their organizations, and the form of organizational resilience.

Interviews Our primary source of data was 34 interviews with founders. The interviews ranged from 14.26 to 85.73 min (mean = 24.17 min). We transcribed the audio of the interviews, which ranged from five single-spaced pages to 31 single-spaced pages (mean = 25.74 single-spaced pages per interview) for a total of 926 single-spaced pages of text. The purpose of the interviews was to talk with founders about two specific topics: "how they're thinking creatively during such a disruptive time" and "how they've been building resilience into their businesses." Near the end of the interviews, outside callers asked questions consistent with the two broad topics described above. The host asked similar questions to the founders. The audience questions represented a short period of the interview and were similar to the questions asked by the host and across organizations.

Secondary data We searched Lexus Nexus for references for each organization in the *New York Times* from March 2020 to December 2020. We collected articles on the organizations' experiences and responses to the adverse event. We chose the *New York Times* because it has designated business reporters and business articles. The scope is national (rather than regional). It provided ample articles to triangulate the interview data. Specifically, this search identified and included 57 articles and 248 single-spaced pages of text. We used these data to triangulate the findings from the interview data. Specifically, we reviewed the secondary data to verify claims by the interviewees provide additional context beyond statements made in the interviews, supplement gaps in the interviews, and (generally) triangulate the findings from our primary data source (Hampel et al., 2020).

3.3 Data analysis

We analyzed our data consistent with the principles of grounded theory (Locke, 2001). First, we relied on the insider/outsider approach when collecting and analyzing our data (Bartunek & Louis, 1996). The research team member that assembled, transcribed, and coded the interviews performed the insider role. The other member of the research team played the outsider role, pushing for clarification and elaboration (Crosina & Pratt, 2019; Strike & Rerup, 2016). For example, the insider presented the primary data source, and the outsider suggested other sources to triangulate the findings; the insider presented an emerging model, and the outsider

Table 1 Sample descriptive data

Organization	Nature of business	Founded	Est. sales 2019	Est. sales 2020	Interviewee (name/position)	Resilience
Airbnb	Online marketplace for lodging	2008	$4.7B	$3.4B	Brian Chesky, co-founder	Repurposing
Bandcamp*	Online means for artists to share and sell music	2008	Up 122% in 2020 vs. 2019		Ethan Diamond, co-founder	Capitalizing
Barre3	Online fitness teaching balance and empowerment	2008	$256 k		Sadie Lincoln, co-founder	Repurposing
Bossy Cosmetics*	Beauty company for women's empowerment	2019	Unavailable; avoided shutdown		Aishetu Dozie, founder	Repurposing
Bumble	Online dating where women make first contact	2014	$240 M	$337 M	Whitney Wolfe, founder	Realigning
Canva	Free-to-use online design platform	2013	$290 M	$500 M	Melanie Perkins, founder	Capitalizing
DreamBox	Online software for mathematics education	2006		$21 M	Jessie Woolley-Wilson, CEO	Capitalizing
EO Products	Beauty and personal care based on natural inputs	1995		$2.6 M	Susan Griffin Black, founder	Repurposing
Eventbrite	Management of local events and ticketing	2006	$.32B	$.10B	Julia Hartz	Repurposing
Fluenz	Online language-learning software	2007	Unavailable; avoided shutdown		Sonia Gil, co-founder	Repurposing
Jeni's Splendid Ice Creams	Artisan ice cream and stores	2002	$42 M		Jeni Britton Bauer, founder	Repurposing
Hello Sunshine*	Media productions focused on celebrating women	2016	Repurposed, sold in 2021 for $900 million		Sarah Harden, CEO	Repurposing
KiwiCo*	Fun hands-on science projects for children	2011	New subscribers increased by 250%, sales up 650% from 2019–2020		Sandra Oh Lin, founder	Capitalizing
M.M. LaFleur*	Women's professional luxury apparel	2013	Avoided shutdown, entered relationship with Zappos in late 2020		Sarah LaFleur, founder	Repurposing
Life is Good	Positive lifestyle clothing brand	1994		$52 M	Bert and John Jacobs, co-founders	Realigning
Luke's Lobster*	Fresh and sustainable seafood	2009	Shifted online, now has locations in 10 US States, Japan, and Singapore		Luke Holden and Ben Conniff, co-founders	Realigning
Lyft	Online hiring of vehicles and food delivery	2012	$3.6B	$2.4B	John Zimmer, co-founder	Repurposing
Milk Bar*	Chain of bakery restaurants	2008	Pivoted to increase sales by 113%		Christina Tosi, founder	Realigning
Minibar and barmini*	Michelin star restaurants	2014	Avoided permanent closure		Jose Andres, founder	Repurposing

Table 1 (continued)

Organization	Nature of business	Founded	Est. sales 2019	Est. sales 2020	Interviewee (name/position)	Resilience
Peloton	Exercise equipment, instruction, and workouts	2012	$714 M	$1.8B	John Foley, co-founder	Capitalizing
Q&A*	Music distribution to empower artists	2019	Realigned, launched Innovation Labs (2020) for new products		Troy Carter, co-founder	Repurposing
Rent the Runway	Designer clothing rentals	2009	$257 M	$158 M	Jen Hyman, co-founder	Repurposing
Rinse*	Laundry delivery service	2013	80% increase in sales from 2019–2020		Ajay Prakash and James Joun, co-founders	Realigning
Robinhood	Online commission-free stock trading	2013	$278 M	$959 M	Vlad Tenev and Baiju Bhatt, co-founders	Capitalizing
Shopify	Ecommerce software for starting or growing a business	2006	$1.6B	$2.9B	Toby Lutke, founder	Capitalizing
Single Thread Farms*	Inn and restaurant	2016	Ongoing operations with 6 months booked out in advance		Kyle Connaughton, owner	Repurposing
Slack	Platform for chat rooms and messaging	2009	$401 M	$630	Stewart Butterfield, co-founder	Capitalizing
Squire*	Online platform for barbers to organize business	2016	Tripled its valuation from 2019–2020 (up to $250 million); Sales from 0—$10million (2019–2020)		Songe LaRon, co-founder	Repurposing
Strava	Platform for social fitness	2009	$60 M	$72 M	Mark Gainey and Michael Hovarth, co-founders	Capitalizing
Stemple Creek Ranch*	Ranch for organic products and event venue	4th generation	Avoided permanent closure		Loren and Lisa Poncia, owners	Realigning
United Talent	Agency representing entertainment professionals	1991	Grew, acquired Media Link for $125 million		Jeremy Zimmer, co-founder	Repurposing
Wayfair	Online platform for home products	2002	$9.1B	$14.1B	Naraj Shay and Steve Conine, co-founders	Capitalizing
Yelp	Online business reviews and recommendations	2004	$1.0B	$87 M	Jeremy Stoppelman, founder	Repurposing
Zumba	Exercise fitness program	1998	After pivot, experienced rapid growth		Alberto Perlman, co-founder	Realigning

*Private company, sales increases and/or other data are from secondary data sources

made suggestions on its form and structuring, and the insider wrote up the findings, and the outsider pushed and probed the model, offered insights, and requested additional evidence. The insider and outsider then worked together to involve the literature and determine the model's contributions to the literature. While our data analysis was iterative—moving from our data to emerging theoretical models and back again—our analysis followed three general steps. Specifically, we followed the three-stage process of (1) open coding, (2) axial coding, and (3) theoretical coding developed by Strauss and

Corbin (1997), which has been used extensively in management scholarship (e.g., Crosina & Pratt, 2019; Grodal et al., 2021; Pratt et al., 2006).

Open coding This initial data-analysis stage aimed to understand how the resilient organizations experienced, interpreted, and responded to the adverse event—the COVID-19 pandemic. Specifically, we identified and bracketed quotes to retain the informants' perspectives in their own words (Williams & Murphy, 2021). In this early coding stage, we tried to keep the founders' voices by coding nodes with labels consistent with how the interviewees described their experiences in the COVID-19 pandemic (consistent with Locke, 2001). In particular, we sought to identify common phrases and/or patterns (1) within each interview and then (2) between interviews. For example, open codes of statements included the following: "We have to adapt"; "[It] was a huge pivot for us"; "When you grow fast, you will get stretch marks"; "We were dealt a specific hand"; "Diversification helped keep us afloat"; "[This year] we're making these tough decisions"; and "There is a need for human connection." We went through this open coding stage multiple times, adjusting the labels to capture better the content chunks, group highly similar comments (e.g., "We grew from this experience" and "Perhaps surprisingly, this experience provided an opportunity to expand"), and ensure the open codes accurately adhered to the important information contained in the text. In reviewing common codes within and between interviews, we began noticing differences in how the informants responded to the adversity despite the interviews' focus on resilience. This initial insight led us to revisit the data and explore nuance in how the informants experienced the adversity across a spectrum of responses.

Axial coding Axial coding involves abstracting from open codes to move closer to grounded theoretical insights (Strauss & Corbin, 1997). In this analysis stage, we engaged axial coding to group similar open codes into clusters, adjust labels, and return to the data to verify and/or alter the labels until we ultimately settled on theoretically abstracted categories (see Crosina & Pratt, 2019). This abstraction from the open codes required labels that reflected movement toward more theory-based terms. Specific to our inquiry and building on the insight of different responses to the adversity identified in open coding, we began grouping our data based on the founders' different perspectives. For example, we evaluated the specific codes capturing differences in founders' decisions following the market impact, and we grouped those decisions as following "simple rules," "values-based decisions," and "focused on worst case" scenarios. This process drew us into theoretical conversations relevant to these types of entrepreneurial decision making, which helped us better position our emergent findings in theory. We repeated these processes with other concepts that emerged from the data and began arranging our findings into trajectories. We found three separate groups of resilient organizations distinguished by differences in how they experienced the adversity, which led to differences in their response paths. Some organizations were resilient to a big drop in market demand, some were resilient to a slight dip in market demand, and others to a positive jump in market demand.

We compared and contrasted differences in various codes (as described above) across the three groups of resilient organizations to inductively explore if these patterns were represented throughout our sample. Consistent with Crosina and Pratt (2019), we then examined patterns across the groups to explore our axial coding. For example, we used "shifting emphasis" to capture how the founders emphasized different aspects of their current business, accelerated transitions, and exercised pre-existing options; we used "pivoting" to capture how the organizations made substantial changes in strategic direction; we used "incremental adjustments" to capture how the organizations made incremental adjustments to capitalize on opportunities; and so on. As with the decision-making related axial codes described previously, we inductively developed these concepts by (1) evaluating first order codes, (2) abstracting those codes into broader categories, and then (3) considering relevant literature that could potentially frame and/or inform our findings (e.g., literature on strategic change, entrepreneurial resourcefulness, and so forth) (Davis et al., 2009; Fisher et al., 2020; Williams et al., 2021).

We continued to notice differences across codes for the organizations based on their resilient responses to the adverse event. At this point, we began to theorize on different responses through the lens of the literature on responses to adversity—which we began to call different response paths to organizational resilience. We found two response paths consistent with the notion of resilience maintaining positive functioning in the face of adversity (after a short, unsettling period (see Bonanno, 2004; Bonanno et al., 2011))—*repurposing resilience* ($n=17$) and *realigning resilience* ($n=7$). We also found organizations that experienced increased positive functioning, which we labeled *capitalizing resilience* ($n=10$). The differences we noted across these three trajectories served as the impetus for splitting our sample into three sub-samples. We then compared and contrasted these sub-samples (outlined in our theoretical coding section and defined/elaborated on in our findings section). For our coding, for example, the capitalizing versus realigning versus repurposing resilient organizations differed on axial codes in, respectively, (1) "needs generated by the adverse event" versus "needs for pre-adversity products" versus "demand substantially reduced" (2) "simple rules" versus "value-based decisions" versus focused "worst-case scenario," (3) "incrementally adjusting" versus "measured adjusting" versus "pivoting—wholesale adjusting," (4) "rapidly scaling" versus "reimagining and renewing" versus "hustling."

Theoretical coding In this last stage of coding the data, we began configuring the axial codes into aggregate dimensions as a basis for inducting a larger theoretical story (Charmaz, 2014; Crosina & Pratt, 2019). As alluded to above, it became clear that the adverse event impacted the sample of resilient organizations differently, which led to the three pathways reflecting different resilient responses and outcomes (from the same adverse event). As illustrated in Fig. 1, we aggregated the axial codes to reflect theoretical dimensions. We further abstracted our axial codes into theoretical concepts that we incorporated into a dynamic, grounded theoretical model. Specifically, the theoretical dimension of "organizational functioning" captured the capitalizing, realigning, and repurposing of resilient organizations; "market reaction to adverse events" captured the increase in demand generated by the adverse event, demand for pre-adversity products, and demand substantially reduced; "decision making" captured simple rules, values-based decisions, and worst-case scenario; "strategic actions" captured adjusting incrementally, shifting emphasis, and pivoting; "organizational capabilities" captured capabilities for communication and coordination, varied capabilities, and building new capabilities; and "operational activities" captured scaling, repurposing, and hustling.

Having identified an initial set of theoretical concepts, we systematically explored similarities and differences across the three pathways. As we proceeded, we also iterated between our aggregated findings and extant theory to consider if/how our data was theoretically revelatory. In systematically comparing these three pathways, we noted that in decision making, the difference between the capitalizing resilient organizations' simple rules did not vary greatly from the realigning resilient organizations' value-based decisions. However, the inputs and outputs of their decision making varied considerably, as detailed below. We then refined the model by exploring potential mismatches between the emerging model and the data and vice versa. We also analyzed the newspaper articles (by coding chunks of text consistent with the codes generated from the interview data) to triangulate the emerging findings. After many iterations, we eventually settled on a grounded theoretical model that best represents the data. We report and display this model at the end of the findings section.

4 Findings

Our findings begin with the adverse event that all the organizations in our sample experienced. However, after the onset of the adversity, we began seeing differences across our sample that emerged and persisted based on four primary factors: (1) market reaction, (2) problem framing and decision making, (3) strategic change, and (4) operational activities. These factors constitute the primary comparative means by which we communicate our findings. We compare and contrast the three resilience response paths (capitalizing, realigning, and repurposing) that emerged from our findings across these four factors. By *capitalizing resilience* we refer to the trajectory of the organizations that took advantage of potential opportunities for growth due to the market conditions. *Realigning resilience* refers to the trajectory of the organizations that redeployed existing resources to better align with the changed market conditions. *Redeveloping resilience* refers to the trajectory of the organizations that completely restructured their resources, capabilities,

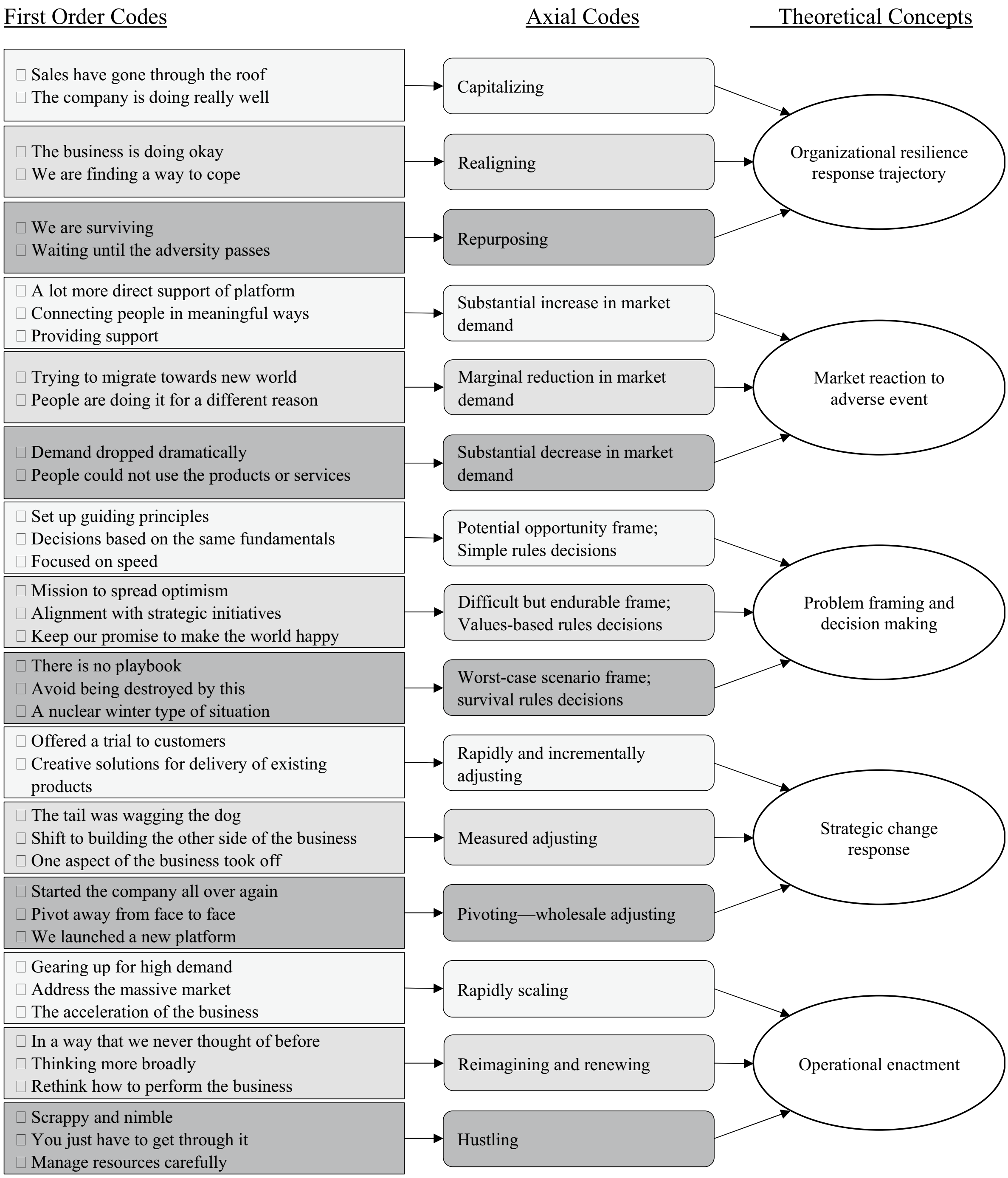

Fig. 1 Data structure

and activities to create market opportunities that would allow for ongoing functioning. Our findings reveal that patterned differences across these factors influenced the organizations' paths to resilience. We discuss our findings by beginning with the common exposure to the adverse event.

4.1 Adverse event

All interviewees acknowledged the adversity that resulted from the COVID-19 pandemic—for their organizations, society at large, and the economy. Indeed, specific to our sample, the COVID-19 pandemic substantially impacted the US economy. The following New York Times excerpt well captures the COVID-19 pandemic's impact:

> Not since the attacks of Sept. 11, 2001, has a crisis enveloped so much of the economy so quickly. Broadway is dark. The college basketball tournaments are canceled, and professional sports are on indefinite hold. Conferences, concerts, and St. Patrick's Day parades have been called off or postponed. Even Disneyland—which stayed open through a recession a decade ago that wiped out millions of American jobs and trillions of dollars in wealth—is shuttered. This hits the heart of the economy, and it hits the economy on all sides," said Diane Swonk, chief economist at Grant Thornton (Casselman et al., 2020).

Regardless of the ultimate trajectory, all sample organizations experienced the event as adverse and changing market demand for their primary products/services. For example, Vlad Tenev and Baiju Bhatt (co-founders, Robinhood; capitalizing organization) explained, "[In February 2020] the US had just gone into lockdown and the stock market cratered." Loren and Lisa Poncia (co-owners, Stemple Creek Ranch; realigning organization) recalled the arrival of the crisis in this way:

> Everything starts to shut down. . . . It was a very scary time for all of us; it was definitely very tumultuous. . . . our most immediate concern was that our team, our staff, was not going to be able to work. We were going to get sick, or we weren't going to be able to physically leave our homes to go to the workplace.

Alberto Perlman (co-founder, Zumba; realigning organization) noted that "many gyms and fitness studios are closed, leaving Zumba instructors without a place to teach," which was a direct threat to his organization's survival.

While the organizations we studied all experienced adversity associated with the COVID-19 pandemic and faced some disruption to functioning, they all quickly returned to positive functioning—consistent with a resilience response (Bonanno, 2004; Williams et al., 2017)—and continued to generate revenue throughout the crisis (albeit through different paths). These resilient responses stood in contrast to other firms, such as Hertz rental cars, that lost operational functioning (i.e., sought to reorganize under Chapter 11 bankruptcy) and then entered a period of recovery that is ongoing as of this writing (Paukert, 2020). Notably, while we observed that all of the organizations we studied maintained functioning, there were apparent differences in the *specific* impact of the adverse event on each organization and the organizations' *pathways* to achieving resilience. Indeed, after the initial shock of the adverse event subsided, the organizations in our sample faced different market reactions to the adverse event based on their industries, which represented the "hands they were dealt" (consistent with the paper's opening quote). We then explain differences in their resilient responses to market conditions—how they played the hands they were dealt.

4.2 Market reactions to the adverse event (1 to 2 months after the onset of the adversity)

Although the pandemic is an adverse event and was recognized as such by the founders of our sample organizations, the pandemic impacted their industries differently. Some industries (e.g., hospitality, travel) experienced sudden losses, whereas others (e.g., online personal fitness, information) experienced sudden *increases* in demand (Klein & Smith, 2021). Unsurprisingly, we found that differences in the impact of the adverse event across industries had a different impact on the organizations' primary markets and, as a result, required different resilience responses to enable ongoing functioning (see Table 1).

Organizations resilient to a substantial reduction in market demand The repurposing resilient organizations experienced a *big drop in market demand for their products and services*. While, at least initially, the drop in demand was so significant that many of these founders were worried about whether their organizations would survive, these organizations maintained organizational functioning. For example, when Sarah Harden (CEO, Hello Sunshine—a media production company focused on celebrating women) was asked, "You're not filming anything right now," she responded, "That's correct," as essentially all business operations ground to a halt. Similarly, Jeremy Stoppelman (founder, Yelp—a company that hosts online business reviews and recommendations) explained how a lot of his company's business is with restaurants, noting that "this industry has just been hammered, unlike any other industry" and "maybe [sales] are not zero, but it is going to zero pretty damn quickly." Taken together, the repurposing resilient organizations largely faced market conditions that resulted in a substantial drop in nearly every facet of their business, thus precipitating the need for significant corrective actions to maintain functioning.

Organizations resilient to a marginal reduction in market demand The realigning resilient organizations initially faced diminished demand for their products and services, although less than the demand drop for the repurposing resilient organizations. These organizations were able to find a way to overcome this dip in demand. Ajay Prakash and James Joun (co-founders, Rinse) explained the impact of the adverse event on demand for their products and services: "So, dry cleaning has certainly taken a hit. You have less people going to the office; less people traveling; weddings and graduations and formal events aren't happening." Similarly, Bert and John Jacobs (co-founders, Life is Good—a positive lifestyle clothing brand) explained,

> By and large, we knew that consumers want things closer to market, want greater choice, etc. And we were trying to migrate in that direction. . . . And I think in particular in these really difficult times, we also learn how much people need optimism, need uplifting messages. . . . Our point of difference is seeing the world through an optimistic lens and sharing those ideas—how an optimist views the world.

Organizations resilient to a substantial increase in market demand After the initial shock of the adverse event, the capitalizing resilient organizations found that it *generated greater demand for their products and services or adjacent products or services*. Although these founders acknowledged their organizations' luck in occupying a market position where demand increased, they faced significant obstacles in responding to opportunities generated by the adverse event (as we will explain later). For example, the adverse event led Ethan Diamond (founder, Bandcamp—a company that hosts music-label and artist content and allows those actors to control pricing, etc.) to pause and consider his company's industry impact: "The pandemic hit; the shutdown happened. We realized, okay, many artists are losing a huge part of their income. This is our community. What can we do to help?" Indeed, artists could no longer tour and hold live events, a mainstay for promoting music. However, Bandcamp's decisions to offer artists a platform to hold live online events and sell their music soon led to demand for their services growing beyond their capacity to serve.

Indeed, the theme of a positive jump in demand was common for the capitalizing resilient organizations: Peloton (home-based fitness) saw a "huge surge in demand," Canva (online design tool) grew rapidly, Shopify (online payment processor) experienced a "spike in new customers," and Wayfair (online furniture retailer) experienced "unexpected success during the economic crisis." In explaining the jump in demand, many of the founders of the capitalizing resilient organizations noted that the adverse event generated a greater need for people to remain connected. Their organizations' products and services helped address this newer or expanded need. John Foley (founder, Peloton—a company that provides exercise equipment, instruction, and workouts) explained,

> *We're bringing connection*, we're helping people relate, and we're understanding, and we're supportive, and we're there for them in a wild way. It feels like Peloton was built for this moment of helping people connect virtually. It's a really beautiful thing that we've experienced. We're all learning about new ways to connect and meaningful ways to connect. (Emphasis added)

4.3 Problem framing and decision making

While the market conditions the organizations in our sample faced differed following the onset of the adverse event, these differences alone did not determine the entire trajectory of an organization's resilience response path. Indeed, faced with the initial experiences of the adverse event and its impact on their organizations' primary markets, the founders framed the problems their organizations faced differently, which influenced their decision making on how to respond. This framing and decision making varied across the categories of organizations, which played an essential role in shaping their overarching response paths (see Table 2 for illustrative quotations).

Repurposing resilient organizations The repurposing resilient organizations framed the situation as a *worst-case scenario and existential threat* and employed *survival rules* to guide decision-making processes. A worst-case scenario refers to a situation in which individuals believe the circumstances exceed their ability to control/manage the challenges, and seemingly everything that could go wrong goes wrong (Fischbacher-Smith, 2010). For example, Songe LaRon (co-founder, Squire—an online platform for barbers) described the adversity as likely to ruin his business: "It's always safe to kind of assume the worst case and be prepared for the worst case, which we were prepared to go to zero revenue for over 12 months [to survive]." Similarly, Jerremy Stoppleman (founder, Yelp) described the situation as "a nuclear winter type of situation."

With the framing that their businesses faced the most severe threat to survival, these founders sought to make decisions that "matched the moment." This meant enacting decisions as the businesses entered "unknown territory." Repurposing founders believed there were no decision-making guides for such an existential threat and that they had exceeded their risk models. For example, Brian Chesky (co-founder, Airbnb) noted that "there is no playbook" for operating in the pandemic context—all goals had to be set aside to survive. He explained,

> We're not going to be the kind of company that will be destroyed by this. So we're going to obviously try to take care of each of our stakeholders. And when we got to the employees, we basically had exhausted options. Having raised \$2,000,000,000, we came to the conclusion that we would have to do layoffs when we confronted the hard truth. … we did not know when travel would return. Nobody did. And the second thing we knew is that when travel would return, it would look fundamentally different than the travel before the pandemic. And so our business would have to look different, and we'd have to change the shape of our business and what we focused on.

For these organizations, business survival entailed concerted efforts to conserve cash and treat employees with respect, especially those they felt they had to lay off. The idea was to "get through" this period and begin rebuilding. For example, Christina Tosi (founder, Milk Bar—a chain of bakery restaurants) reflected on this initial stage of responding to adversity as a.

> scary game to play, and that's reality. And so you have to just track it because you can't control it and you can't get stuck in it. And there's no rearview mirroring. You cannot turn, look back. There's only forward. . . . So let's just take one step forward every day.

Realigning resilient organizations The realigning resilient organizations *framed the problem as difficult but endurable* and relied on *values to guide their decision-making*. For example, Alberto Pearlman (co-founder, Zumba—an exercise fitness program) described the pandemic and its consequences this way: "It's tough [on our Zumba gym owners], and we've been trying to help them [through it]." Interestingly, framing the problem in this way led the realigning resilient organizations to emphasize how they would make their decisions for organizational changes based on *core values.* For example, Bert and John Jacobs (co-founders, Life is Good) described their approach this way:

> Our mission is to spread the power of optimism—we're so lucky to have that—and these 10 values we call the Life is Good superpowers. Things like gratitude; that is so huge right now. We're hearing it from our customers. . . .

Table 2 Decision making for responding

Capitalizing resilience *Simple rules*	Realigning resilience *Values based*	Repurposing resilience *Worst-case scenario*
And if one of the incentives here is not just the health, and see if you have our employees, but kind of being good citizens and good stewards …. We should do it as quickly as possible. (Founder, Slack) It was really important that we set up, sort of, our guiding principles. (Founder, Canvas) I think the entire company has incredible clarity of mission right now, again, about what we set out to do. But exactly how we do this [is] really left to all these parts of a company. We love to be loosely coupled, but loosely coupled only really works when we come together and base our decisions on the same fundamentals. (Founder, Shopify) Our focus in the beginning was really we need to make sure that our people are okay. All the other considerations, they have to come after that. And that was where we focused initially. So in some sense, you have a single purpose. You do that, you do that as best you can. (Founder, Strava) "There were seven execs," Butterfield [founder, Slack] recalls, "and everyone spoke between 30 and 90 s.'' Each executive expressed gratitude to staff, then briefly explained his or her most important priorities— "and that was it." The entire thing was over in 21 min. (Griffith and Hirsch, December 1, 2020) It's no secret that for all but a rarefied few musicians, record sales alone can no longer pay the bills. Back in March, when tour cancellations wiped out many performers' livelihoods overnight, Bandcamp took action. This week, the music platform will continue its new custom of waiving its revenue share on purchases made the first Friday of every month, so fans can put more money directly into artists' pockets. (Burke, September 4, 2020)	I think we were good to act quickly in this business. I mean, not just because my name is at stake and my family is part of it [the business]. There is no difference or delineation between my personal [and] business life. So when you're faced with ultimately making that critical decision to save a business, it affects your family and friends in major ways.... We got super small [so] that we got aligned around some strategic initiatives pretty quickly. (Founder, Luke's Lobster) So we said we have to do three things. One, the most important thing, how do we continue to help instructors generate income. Two, how do we deliver education virtually for people? New people want to become instructors or our existing instructors who need further education, especially if they're transitioning to virtual. And three, how do we keep our promise to make the world happy and healthy? (Founder, Zumba)	I think fundamentally it starts with a question of, like, "Are you in a good place to make those decisions?" And what I mean by that is it's incredibly stressful. I'm sure there isn't a single CEO out there who isn't up at 4:00 a.m. thinking, like, "Oh, God, what am I going to do about that?" But the most important thing is kind of keeping your wits about you. (Founder, LeFleur) What would we do? How do we survive? Is there a freeze?... And it's a nuclear winter type of situation. Fortunately, the world did start to restabilize. (Founder, Yelp) We ran the worst-case scenarios, the medium-case scenarios, and the best-case scenarios and then made the decision that raising the debt was kind of a no-regrets move. But then... preserving the cash... on hand, making decisions about expenses... we needed to tighten up. (Founder, Lyft) So this goes to show you can never really know, but it's always safe to kind of assume the worst case and be prepared for the worst case, which we were prepared to go to zero revenue for over 12 months. (Founder, Squire) In May, Airbnb announced that it would go "back to our roots" by focusing on "everyday people who host their homes." (Griffith, February 21, 2021)

> We hear this from our employees. . . . But we're fortunate that the foundation of our company is . . . one thing we believe is timeless and powerful and that is optimism. . . . We had to adjust. But the foundational values are rock solid. . . . But values in a lot of companies, I feel like, is [sic] a dusty couple sheets of paper that's tucked away. Our superpowers are something we talk about daily. Our employees embody these values—gratitude, love, authenticity, creativity. And we live for these things, and we live for spreading them out to the world.

As a foundation for decision making, key principles provided some sense of control and agency in a time of chaos. Ajay Prakash and James Joun (co-founders, Rinse—a laundry delivery service) discussed how values influenced their decision making in the current ambiguous and challenging environment. Ajay explained, "So the importance of having core values—the importance of having guiding principles so that when you get into situations like this where things can get blurry, you can stay rock solid and focus on the goal—I think is a really important takeaway."

Capitalizing resilient organizations The capitalizing organizations framed their problems as *potential opportunities* and used *simple rules* to guide decisions. While crises inevitably pose challenges, they also generate potential opportunities—especially opportunities to help people (Williams & Shepherd, 2016a). The capitalizing resilient organizations framed the crisis as introducing opportunities for incredible growth. For example, Ethan Diamond (founder, Bandcamp) described the potential of opportunities in the current environment, noting that before the pandemic, "We weren't thinking about entering that at all [new independent venues for live music events]. And in retrospect, it was kind of crazy that we weren't. It was conceived, designed, and built in a very, very short period of time. We moved several people off of other projects to get that done."

To capitalize on the emergent opportunities, these organizations employed simple rules for decision making, which enabled them to avoid becoming bogged down and increased the speed of their decisions. Simple rules refer to a strategy that emphasizes pursuing opportunities, jumping into the confusion during market transitions, and orientating businesses toward growth (Davis et al., 2009; Eisenhardt & Sull, 2001). For example, Melanie Perkins (founder, Canva) identified opportunities to achieve high growth. She explained how the pursuit of these opportunities had to be guided by what she described as three decision-making pillars:

> [Pillar 1] The first one was our safety, and well-being is the number one and most important thing at all times. That sort of meant that we, [in] early March, had started working from home prior to the government recommendation. And then, [Pillar 2] making sure we're supporting our community. And then, [Pillar 3] rallying together and growing. And those have sort of been the three pillars that we've made all of the decisions for our company based upon in the months gone.

While our informants explicitly described how they used simple rules to make organizational decisions, sometimes the simple rules and decision making appeared similar to the realigning organizations' reliance on "fundamentals" (Shopify), a "single purpose" (Strava), and a "clarity of mission" (Shopify). Further, some of the capitalizing organizations' initial decision making resembled that of the repurposing organizations before they transitioned to relying on simple rules. For example, some of the resilient organizations' initial decisions were to "pull back and remain conservative" (KiwiCo), "make sure that our people are okay" (Strava), and "raise money... [that] in hindsight, we didn't need" (Wayfair). However, we still labeled these resilient organizations as "capitalizing" because their initial responses of seeing the event as a worst-case scenario or one that simply had to be endured soon faded, and their leaders shifted rapidly to decision making based on simple rules (some of the simple rules were guided by values/mission) to exploit opportunities arising from a positive jump in market demand. For example, Sandra Oh Lin (founder, KiwiCo) explained how initially (the first one to two weeks), "we definitely became more conservative. So very quickly, we decided to basically pull back or remain conservative on marketing spend. We were looking at things like hiring and figuring out what we wanted to do. So we held [paused] on hiring." She continued and noted, however, that after a few weeks of "tracking the business... we actually started to see pretty quickly a pretty decent uptick in the business" and thus changed the company's response.

4.4 Strategic change response

The initial framing and decision-making scope described above ultimately guided the organizations' strategic change initiatives. Strategic change is a deviation in how an organization allocates resource dimensions that are believed critical to performance (adapted from Zhang & Rajagopalan, 2010). In response to their situations, the organizations implemented strategic change initiatives to identify and deploy available resources and capabilities as part of their resilient responses to their changing external environments. The desired strategic change and the capabilities for enacting such change varied across the categories of resilient organizations (see Table 3 for additional representative quotations), to which we now turn.

Repurposing resilient organizations The repurposing organizations sought to address what they saw as a worst-case scenario by *pivoting, or wholesale adjusting* to significantly alter their organizations' strategic direction to survive the sudden collapse in market demand. Given the big dip in market demand, they changed by pivoting to find a new path through adversity. A pivot refers to a "structured course correction designed to test a new fundamental hypothesis about the product, strategy, and engine of growth" (Ries, 2011: 149; e.g., Grimes, 2018; Hampel, Tracey, and Weber, 2019; Morgan et al., 2020). For most, their pivots were so substantial that the founders saw the situation as akin to starting a new organization altogether. For example, Sonia Gil (co-founder, Fluenz) described the company's change in strategy:

> In March, we got to start a company all over again, but we got 30 days. What do we do? Website?. . It was clear that the way to do it was we had to pivot and go online. . . . How do we pivot the face-to-face experiences where people definitely expect much more than just the language learning, right? It's about a cultural experience. It's about feeling taken care of. How do we translate what we have there into this screen? And thankfully, throughout the years that we've done the in-person immersion, we had been doing some online coaching with people that had already been in the immersion to continue. So we already had a little bit of knowledge in terms of the format.

While their pivots reflected a substantial risk, the repurposing organizations felt they had little to lose in finding a new path when considering the worst-case scenario. For example, Sadie Lincoln (founder, Barre3—an online fitness company that teaches balance and empowerment) reflected,

> We had to let go of that beautiful production. And I remember distinctly the team, we kind of ask ourselves, What are we afraid of, like, go try. Let's do this. And when we gave all of our owners and ourselves that permission to be messy, to fail, and then pick ourselves back up and ultimately triumph. … And now it's done significantly better because so many people are working out at home. They're subscribing to that.

As Sadie Lincoln explained, pivoting was the *only option* for Barre3 to survive, and the company planned to pivot and pivot until hitting on a sustainable idea.

Realigning resilient organizations The realigning organizations responded through strategic change that involved *measured adjusting* or carefully shifting emphases in their diversification strategy to accommodate fluctuations in demand and capture potential opportunities. Rather than pivoting wholesale, the realigning organizations resourcefully evaluated their portfolios of resources and diverse interests to figure out what could be brought to bear (Williams et al., 2021) and redeployed toward new ends in response to their experienced dip in market demand. Therefore, their strategic activities involved a shift in emphasis—a redeployment of resources (financial, human, managerial)—to higher-demand areas that showed promise. For example, Bert and John Jacobs (co-founders, Life is Good) recognized that they could use this disruption to change their emphasis from

Table 3 Responding through strategic actions

Capitalizing resilience *Incremental adjustments*	Realigning resilience *Shifting emphasis*	Repurposing resilience *Pivots*
I think my advice and what has served us really, really well has been aligning the business model with the community that we're here to serve. (Founder, Bandcamp)	The idea from the beginning, not just with COVID, but what we were trying to do is maintain the company's value system but change the business model. Founder, Life is Good)	EO makes a whole line of body, skin, and hair care products, but since the COVID-19 crisis, we've pivoted to pretty much only making hand sanitizer and hand soap. (Interviewer, EO Products)
In 2010, we started to move towards the B2B model, but I didn't shut down the parent channel, the consumer channel. We knew that they were teachers there and administrators there in the parent channel. And we thought that if we could win their confidence, it would help the institutional side of the business. (Founder, DreamBox)	It's about adaptation. We listen closely to our customers. It's a dialogue … You have a business, you know, the world's changing. You can't have the same business. (Founder, Life is Good)	And I'm like, "Look, there's nothing to sell, guys [customers], but can we chat? Can we talk?" And it became this whole community discussion.... And so that just kept me busy. (Founder, Boozy Cosmetics)
Peloton stopped filming live classes in early April after an employee at its New York studio tested positive for the coronavirus. But by the end of the month, it was streaming live classes again. The first one happened on April 22 from the apartment of Robin Arzón, Peloton's head instructor. More than 23,000 customers logged in and rode along with her, issuing virtual high fives and climbing a digital leader board. "When things are uncertain, we adapt," Ms. Arzón wrote on Instagram, alongside a photo of herself surrounded by production equipment and electrical cords in her apartment. (Griffith, May 7, 2020)	All we knew is we need to find a way to keep buying seafood and getting seafood to people who want it. So it was actually an amazing experience. We had one of our teammates... suddenly have to start researching how to build an ecommerce business. (Founder, Luke's Lobster)	I think we've never seen ourselves as a workwear brand [clothes]. We've always seen ourselves as a brand for working women.... We launched a channel.... And then customers are actually uploading and sharing different opportunities that have come their way and using it as a tool to just help other people find jobs. (Founder, LeFleur)
Harley Finkelstein, Shopify's president, said Google and Shopify were developing new ways for merchants to sell through Google services, such as experiments to allow customers to buy items directly on YouTube and to display what products stores are carrying in Google Maps. (Wakabayashi, 2021)	The first thing we did was we allowed our instructors to start teaching online. They started teaching on Zoom, but parallel to that, we started developing our own platform, and it's called Zen Studio. (Founder, Zumba)	You know, when we started closing stores and we started to... make videos.... People are going to be at home and baking and cooking and curious more than ever about food. So let's show up for them. And we filmed all this stuff. (Founder, Milk Bar)
	We had very fortunately been ahead of the curve with an app [for] video chatting that was a feature that historically had moderate to low use.... Remarkably, the usage just went through the roof. (Founder, Bumble)	We've got a farm full of produce. I've got a restaurant full of food. You know, I've got a team that just wants to cook. How about this idea? I'll start reaching out to friends of the restaurant and wineries and investors and great guests that we have and see if they can start funding. So I'm a family man and we'll start preparing food and I'll put everyone to work. We'll start cooking. (Founder, Single Thread Farms)
	A collaboration to encourage their use, between the Maine Coast Fishermen's Association, a trade group; Gulf of Maine Sashimi, a high-end processor; Island Institute, a nonprofit Maine community group; and Luke's Lobster, a restaurant chain; are making the fish [hake] available nationwide, flash-frozen, at Luke's online store. Luke Holden, an owner of Luke's Lobster, is serving the fish at his flagship restaurant in Portland, Maine, but said his other locations were too small to allow for the preparation.... They're selling each fish in two one-pound packages, $60 for hake, $55 for monkfish and $18 shipping. (Fabricant, February 24, 2021)	"In the absence of our ability to bring people together for in-person experiences, we moved fast to help creators take their experiences online," said Julia Hartz, a founder and the chief executive of Eventbrite. (Brown, December 31, 2020)

an archaic set of processes to better align to new growth opportunities. Bert said,

> The tail was wagging the dog where the wholesale business and this long supply chain window was kind of ruling our company. And we already knew that that was an archaic model. … And that in some ways or maybe in every way, the COVID crisis kind of was your opportunity to do that. I fast-forwarded everything. … we're one of those fortunate businesses where COVID did us a favor. It really moved us along.

Although some realigning organizations described their strategic actions as a pivot, we differentiate a "measured adjusting" strategic change response from a pivot in that these organizations did not launch entirely novel activities. Instead, they had some prior engagement in their new activities and were now simply emphasizing those activities while decreasing their emphasis on others. For instance, in describing their strategic action, Luke Holden and Ben Conniff (co-founders, Luke's Lobster) noted the following:

> We've had to pivot from selling to other restaurants and food service and casinos and cruise lines and build that grocery branded business that we had. We had to get from big, unbranded commodity packs and start producing grocery branded freezer and refresh container-type packages. So that was a huge pivot for us.

Similarly, Alberto Perlman (founder, Zumba) noted that during the crisis, "surprisingly, our clothing business is doing very well. People are buying fitness clothing to work out at home, and we were able to manage it." This shift in emphasis relied on the organization's diverse capabilities to accelerate the transition to performing this new strategy.

Capitalizing resilient organizations The capitalizing organizations maintained core business operations and took strategic action by *rapidly and incrementally adjusting* the production and sales of existing products/services to capture value from the sudden surge in demand. These organizations looked to effectively capitalize on the positive surge in market demand for their products/services. For example, John Foley (founder, Peloton) described how changes his company made focused on enhancing the performance of their current products and services, such as changes to the delivery service and product setup:

> We found a lot of creative solutions on how to deliver bikes. … And we've created new tools online to help you do what our delivery folks would have done had they delivered it and spent the half hour setting it up. And now it's more of a self-service model … And it's working. We found some good solutions.

Naraj Shay and Steve Conine (co-founders, Wayfair—an online platform for home products) sought to quickly implement changes to capture the rise in demand for home furnishings during the pandemic. They explained,

> I do think [during] this period of time [facing the crisis], we noticed that even though you're big, you can still change quickly. And so, I think we have a team that can react dynamically, and we have a very entrepreneurial culture still. And I think innovation favors entrepreneurs during a time of change. . . . It's something that we do well as a company. Navigating, regardless of kind of what the future looks like.

4.5 Operational enactment

The adversity created challenges for the resilient organizations in determining how they needed to change and how they could then implement that change. Indeed, as is common in the aftermath of sudden onset challenges, resilient organizations faced significant operational difficulties due to a rapid switch to remote work, supply chain disruptions, and surrounding restrictions and lockdowns. Our data revealed that the resilient organizations differed in their operational enactment processes in response to their market demand situations and strategic change objectives. We now explain these differences (see Table 4 for additional illustrative quotations).

Repurposing resilient organizations In their desperate effort to implement various pivots, the repurposing resilient organizations relied on *hustling* to find and refine a path for survival continuously. Hustling refers to "urgent, unorthodox actions that are intended to be useful in addressing immediate challenges and opportunities" (Fisher et al., 2020: 1002). In terms of operational activities, hustling often involved rapidly discarding the "baggage" of prior ways of doing things to allow experimentation with new activities. For example, Jen Hyman (co-founder, Rent the Runway—a company that provides designer clothing rentals) described her resilient organization as taking a "kind of scrappy and nimble" approach. In some cases, hustling involved repurposing capabilities. For instance, Brian Chesky (co-founder, Airbnb) explained, "We have a recruiting team. Maybe we could dedicate a percentage of the recruiting team to do job outplacement for the people being laid off. Maybe they could basically be an outplacement team to help them find jobs." To repurpose, Jeremy Zimmer (co-founder, United Talent—an agency representing entertainment professionals) went back to opportunities rejected in the past for a second look, especially given the current lack of potential opportunities. Hustling involved engaging in real-time operational adjustments to "play the hand they were dealt" (Sarah Harden, CEO, Hello Sunshine) and being "open minded" to "obtain some small wins despite the really big hits" (Christina Tosi, founder, Milk Bar).

The purpose of hustling was to provide sufficient operating revenue that would allow the organizations to be resilient to the adversity, regain a fit with their changing external environments by redefining themselves, and prepare for an economy that should improve (when the adverse event eventually fades). Hustling was a way of quickly "trying on" different approaches that might serve as both short- and long-term solutions for these organizations that faced a large initial drop in the market demand for their primary products and services. For example, Jeremy Zimmer (co-founder, United Talent) indicated that "we are all trying to manage our resources as carefully as we can so that when things start to come back to normal, we will be healthy and able to take advantage of the return to normal." With a little more vision for the future, Sarah Harden (CEO, Hello Sunshine) believed that her company had "planted some wonderful seeds of development that will hopefully grow in the years to come."

Realigning resilient organizations The realigning organizations broadly altered their operations by *reimagining and renewing* their current routines to overcome new constraints. Routines are "stable patterns of behavior that characterize organizational reactions to variegated, internal or external stimuli" (Zollo & Winter, 2002: 340). To reinvent current routines is to rethink them and use them differently or with different configurations. Consistent with the strategy of redeploying resources from less productive business areas to those that show more promise (consistent with real options reasoning (McGrath, 1999)), the realigning resilient organizations sought to maximize their repurposing efforts to increase resource productivity. For example, Whitney Wolfe (founder, Bumble—an online dating platform on which women make the first contact) explained how the adverse environment (and the dip in market demand) encouraged her to think differently about her organization's operations:

> This is an opportunity to hire in a way that we never thought about before. … we're opening up our talent pool opportunity. . . . And of course, this has posed new demands. We need to lean into social growth more. And so you hire for that, or we need to double down here.

Operations need to be adapted to the shift in strategic emphasis. Loren and Lisa Poncia (co-founders, Stemple Creek Ranch—organic products and event venue) explained the operational changes required to satisfy their organization's online customers:

> [Enacting our strategy] became the logistical issue of how do we take all of this product that was processed and . . . cut and wrapped and ready to sell, like, in large quantities and pieces to restaurants and food service and somehow process that into retail cuts so that we could have them available for the direct-to-consumer sales.

Beyond meeting the new environment's emerging operational needs, the realigning organizations also sought to address challenging operational constraints by adjusting and/or redeploying resources. Interestingly, our data showed that these organizations' exploration of new ways to address operational challenges caused by the adversity-induced dip in market demand may have generated new opportunities. For example, Alberto Perlman (co-founder,

Table 4 Responding through operational activities

Capitalizing resilience *Stretching and scaling*	Realigning resilience *Rethinking and reinventing*	Repurposing resilience *Experimenting and repurposing*
I think it's spiked at 10 or 11 weeks [delayed product delivery] in some markets. And I think we're down to six or seven weeks in most markets at this point. And as we continue to build capacity in our manufacturing, pipeline, and supply chain, we're able to meet the demand a little bit faster. So it's coming down. (Founder, Peloton)	Hey, now I'm teaching online and can take my class virtually. And every week, we launch improvements to the platform. So we added that to the platform so students can chat while they're taking the class. We added emojis. We added things to the paywall so that instructors could take payment... every week. We're launching a new tech at a pace that our technology team had never done so before. And I'm so proud of them because they really took it to the next level.... It felt like we were starting again. (Founder, Zumba)	Then suddenly we noticed that there were nurses, EMTs, and doctors, and they were going into hot zones and needed places to stay. Hosts are telling us, "Hey, we can host these people?" And we created this program called Frontline Stays to provide housing for frontline workers. And we had more than a 100,000 hosts list their homes for a discount. We waive fees. (Founder, Airbnb)
And you can imagine, kind of, the acceleration of the business. (Founder, KiwiCo)	For other farmers and ranchers, the onslaught of interest from home cooks has outstripped their ability to meet demand. Loren and Lisa Poncia run Stemple Creek Ranch in Marin County, Calif., where about 900 cattle and 500 sheep feed on organic-certified pasture. Sales to restaurants made up 11 percent of their revenue. They lost most of it. They are still shipping to a handful of butchers and grocers in California, but online orders from home cooks have risen so fast it's been a scramble to keep up. They spend their days and nights packing meat with dry ice and trying to navigate the strain on their system, which includes overwhelmed processors who cut and wrap their beef. "It's one thing to send out a whole 20-pound rib roast to a restaurant, but now it needs to get cut into pound-and-a-half rib-eyes, and they just don't have the capacity," Ms. Poncia said. (Severson, April 10, 2020)	All the way down the chain, the fishermen, the farmer, everyone who's involved with this is being deeply impacted. So we're really trying to support our local farms and our local producers, but things that you take for granted, it's difficult to get. We have to be flexible. We have to be sort of like nimble with that planning. (Founder, Single Thread Farms)
So we've definitely had different challenges associated with meeting the demand. I think the great thing is that our team has been incredibly responsive and making sure that we were shoring up our supply chain, putting in the appropriate orders to make sure that we had the inventory available.... And so we had to actually scale that up pretty significantly. (Founder, KiwiCo)		I always try and be thoughtful about being super open minded, and so I'm grateful for some of the small wins despite the really big hits. (Founder, Milk Bar)
And I think there was a lot going on. We were trying to keep our systems up amidst being number one on the app store.... We were raising the capital to make sure we could relax the requirements. (Founder, Robinhood)		In late March, Mr. Chesky [Airbnb] apologized to hosts for how the decision had been communicated. "We have heard from you, and we know we could have been better partners," he said in a video. The company set up a $250 million fund to cover some of the cancellation costs and a $10 million relief fund. (Griffith, February 21, 2021)
But the volume has grown dramatically. And as you can imagine, the delays and the carrier networks just create even more calls. So there's a lot of challenges.... So there's a lot of supply chain challenges. And so we started working on that right away.... You do see out-of-stock rates recovering [and] transportation getting better, but it doesn't happen overnight. (Founder, Wayfair)		[Some] may have a hard time feeding their people, but if we are involved, we will not have a problem feeding a village. Because we know where the food is,... water is,... the generators are,... the refrigeration is.... This theory of mine is proving itself time over time. (Saltstein, June 29, 2020)
Peloton is now transporting some of its bikes by plane to avoid congested ports, a move that is significantly more expensive. In late December it paid $420 million to acquire Precor, a fitness manufacturer based in the United States, which will allow Peloton to begin producing bikes stateside in the second half of the year. (Maheshwari and Griffith, January 17, 2021)		

Zumba) explained how his organization tried to help its instructors address new operating conditions (i.e., no access to gyms, which were the primary medium for delivering the product) and realize new opportunities. He said,

> One of the ways we've helped is we really push our instructors and motivate our instructors *to teach outdoors and tell our gym partners*. Our instructors can teach in parking lots, in the parking lot at your gym, and you can partner with them and host these classes there. … *And so I can generate revenue twice*. I can generate revenue for my people who are live, in-person with me, and I can do it at the same time with people all over the world. (Emphasis added)

Capitalizing resilient organizations The capitalizing resilient organizations faced a somewhat contradictory challenge. While they were strategically well-positioned to capture value during the pandemic (via a positive jump in market demand), the possibility of rapid growth resulted in significant operational issues. For this reason, these organizations altered their operations by *rapidly scaling* them to capture value from the surge in demand. Therefore, the increased demand for their products and services (or a subset of them) and their incremental adjustments to grasp proximal opportunities provided the capitalizing resilient organizations with significant growth potential. However, with growth, they experienced challenges in expanding operations (far) beyond what they were initially designed to handle. Therefore, to continue to grow (in the face of the current adversity), they needed to resolve often ambiguous and complex operational limitations related to scaling. Scaling refers to "spreading excellence within an organization as it grows" (Shepherd & Patzelt, 2022: 1). For example, Jessie Woolley-Wilson (CEO, DreamBox—online software for mathematics education) explained the scaling challenges her company faced in this way:

> Most people say, "Oh, it's so great—an exponential growth." And what I say in response to that is when you grow really fast, you get stretch marks. And we got stretch marks—our stretch marks where our support system was overwhelmed. And this was at a time when . . . usually it was a low period, typically. So gearing up for the fall, busy back to school season. And so we looked at our team and we said, "You're going to have to sprint out." And it was very, very difficult because it meant that we had to stretch ourselves.

Similarly, other capitalizing resilient organizations faced operational challenges in delivering products/services, given the seemingly exponential increase in their market demand. For example, John Foley (co-founder, Peloton) explained, "There's been a wind in our sail.... [but] there's a waiting list for people to get their Peloton just because of the surge," which was exacerbated by a substantial disruption to the production of key materials for Peloton's products. Similarly, Sandra Oh Lin (co-founder, KiwiCo) noted there was a need to "make sure we had enough inventory available," and Vlad Teneve (co-founder, Robinhood) reported that there was so much frenzied trading that the company could not handle it. Indeed, Mark Gainey and Michael Hovarth highlighted Strava's operational challenges:

> It took a lot of work to even be able to handle the increased load. We went from adding about a million new athletes [customers] to the platform every month, two [million] at some point, three million a month, and it settles down to about two million a month now. *So we, overnight, kind of had to go to a different mode of operating*. Though it's software, you still have a lot of hardware somewhere that's running all of this, and scaling all that up and making sure that it wouldn't all fall down and crumble . . . under the increased load. . . . But let's do it in the way we believe is scalable long term. And so, in the midst of the pandemic, we shifted the paywall. (Emphasis added)

The organizations' reliance on their communication and coordination capabilities was critical to scaling operations to continue organizational growth. For example, Stewart Butterfield (co-founder, Slack—a platform for chat rooms and messaging) emphasized the importance of communication for effective operations:

> Also, we just invested so much over the last five years in a disciplined culture around communication, partly because of the use of our own product and partly just because we realized how important it was. This transition, I think, was relatively easy because we had already invested so much in a style of working in ways of reporting progress and keeping people updated and coordinated.

5 Discussion

5.1 Review of key findings

In our findings above, we detailed different pathways in responding to an adverse event that each led to a form of organizational resilience. Specifically, we focused on variance in firm responses when the adverse event was held constant (i.e., all firms responded to the same event) in hopes of isolating and learning about different pathways to resilience. We detailed how the resilient organizations experienced, interpreted, and responded to the adverse event differently. Our findings revealed how the capitalizing resilient organizations, realigning resilient organizations, and repurposing resilient organizations differed across (1) the impact of the adverse event on the demand of their primary markets and responses through their (2) interpretation of the adversity and decision making, (3) strategic change initiatives, and (4) operational activities. Therefore, we explain the organizations' different paths to organizational resilience and how their decision making and strategic and operational responses differed. Figure 2 summarizes our findings in a model of organizational resilience responses to an adverse event. Before discussing the implications of our study, we elaborate on the model as a theory on resilience responses.

First, differences in organizational situations at the onset of the pandemic shaped resilience trajectories. Organizations will differ in their positioning related to environmental happenings in any situation. At the onset of the pandemic, rapid product/service demand surges or declines impacted organizations differently. This was due to luck rather than advanced planning in many ways—the pandemic was certainly not a scenario many organizations and governments planned for. This finding differs from the bulk of prior scholarship that focuses on *preparing* an organizational resilience response by engaging in activities for adjusting and responding (Ahmed et al., 2021; Williams et al., 2017). In contrast, the organizations in our data interpreted their specific situation differently, spurring different trajectories for how they achieved resilience. For example, capitalizing resilience organizations noted a sudden and high demand for certain products and services, which had to be managed using diminished supply lines and flexibility. By implementing *simple rules* decision-making, capitalizing organizations could cope with the surge in demand and harvest the benefits that faced them. This finding introduces a new perspective on resilience *and* adversity—adversity can come from organizations experiencing 'too much of a good thing' (i.e., a massive surge in demand). Simple rules can help them navigate that surge.

In contrast, realigning resilience organizations faced a different challenge from the common source of adversity—the marginal reduction in the need for pre-adversity products/services that were now more difficult to take to market. Like capitalizing organizations, realigning organizations needed to develop and deliver products despite environmental constraints. They did so by employing values-based decision-making to help guide their thinking and manage competing tensions—demand for products and limitations of the workforce. Again, this finding differs from extant research, emphasizing *increased* demand *coupled with* decreased ability to deliver. While the scale of demand was not as significant as capitalizing organizations, it still presented an imminent economic and moral challenge.

Repurposing organizations faced perhaps the most 'traditional' situation typically associated with resilience—they experienced a direct and imminent threat to operations due to a sudden and dramatic decrease in demand. Faced with this threat, we found that these organizations did something somewhat unusual—they identified and communicated a 'worst case' scenario to the workforce to guide decision-making. In doing so, they laid the groundwork for mobilizing their employees to enact drastic organizational changes in the form of wholesale pivots. This approach differs from extant research emphasizing *maintenance of functioning* among resilient organizations, which often assumes that maintenance involves

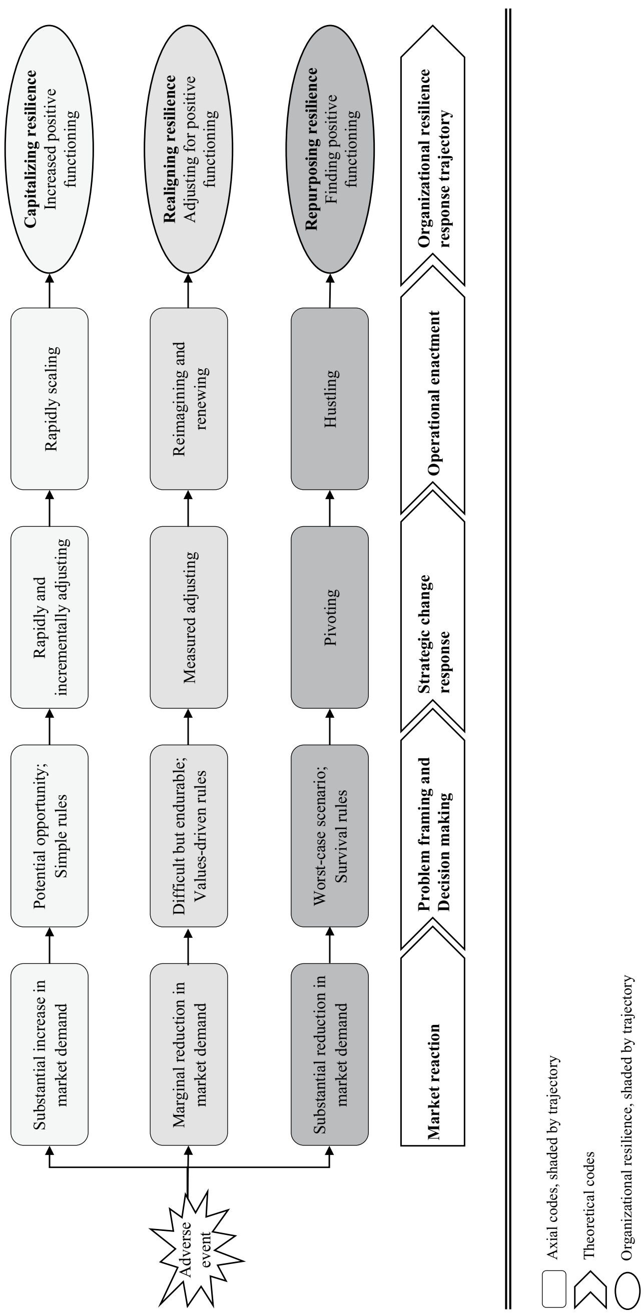

Fig. 2 Model of organizational resilience responses to an adverse event

persisting in the same activities. In contrast, we found that repurposing organizations emphatically and dramatically identified challenges to their business, galvanizing employees around a common decision-making framework for what to do next.

Second, we found differences in the strategic change initiatives and operational activities across the three pathways demonstrating critical differences in operationalizing resilience. Much prior research on resilience describes *what* resilience is (maintenance of functioning) without fully capturing *how* functioning is achieved and then maintained (Ahmed et al., 2021; Williams et al., 2017). Our findings and theorizing begin to address this by showing at least three ways organizations maintained an (in some cases, enhanced) functioning. Capitalizing organizations made rapid, incremental adjustments to adapt to the sudden surge in demand. After these initial adjustments, they could systematize the revised system by scaling operations. This combination of rapid incremental then wholesale changes allowed them to avoid changing processes too quickly, test iterations of adjustments, and then scale the most appropriate models. In contrast, realigning resilience organizations gradually shifted their focus—making less dramatic changes. This gradual approach allowed them to re-think and re-invent processes to continue fulfilling ongoing demand. Indeed, had these organizations taken the approach of capitalizing organizations, the adjustments likely would have been too severe, "over-correcting" instead of taking more appropriate adjustments.

Repurposing organizations took different approaches to enact strategic changes and align their operations with them. These organizations made dramatic pivots in their product portfolio and business practices to fight for survival. This involved imagining alternative strategic scenarios and then hustling to address resource gaps and find opportunities to make those alternatives a reality. These hustling practices demonstrated resourcefulness and creativity (Williams et al., 2021) in overcoming barriers that were suddenly present. Our findings in this area provide new insights into *how* organizational resilience is achieved. Indeed, while resilience is sometimes framed as a capability or stock that pre-dates a "crisis," we found that resilience involves resourceful practices and actions to rapidly realign and redeploy existing resource stocks to new ends.

Finally, the three paths we theorize different conceptualizations of resilience *in kind* and the general approaches to achieving resilience. These differences in kind are significant theoretically and have many implications for how resilience is achieved, developed, and/or cultivated. Specifically, we found that some organizations *increased* positive functioning (capitalizing), while others *adjusted* (realigning) for or *found* (repurposing) positive functioning. These different verbs demonstrate important insights into how organizations can prepare for and enact resilience when facing various challenging scenarios. Furthermore, our model naturally captures a moment in time in what is (as of this writing) an ongoing adverse event. This contextual feature is crucial as it demonstrates how organizations are resilient *for now* and provides insight into the long-term viability of these responses, given different trajectories. For example, while we did not observe cross-trajectory movement in our data, we could theorize that a capitalizing organization will likely eventually experience a drop in demand. This drop could result in them behaving in ways similar to the realigning or repurposing trajectory. It could be that having grown so rapidly, the organization cannot be resilient to the dramatic drop in demand. Similarly, repurposing organizations may succeed and then experience rapid growth—requiring another pivot to adjust to the demand for scale. In brief, while our data do not speak directly to these situations, our theorizing provides a framework for examining these questions.

5.2 Theoretical contributions

Organizational resilience Our findings and model of organizational resilience responses provide new insights into the entrepreneurship literature. First, previous organizational research on adverse events focuses on disruptive effects arising from diverse types of adverse events and, in turn, how an entrepreneurial response can ensure survival and accelerate recovery or face considerable and sustained disruption to operations and performance (Ahmed et al., 2021; Benner & Zenger, 2016; Meyer, 1982; Stieglitz et al., 2016; Wenzel et al., 2020). This study provides insights into entrepreneurship literature beyond the broad categorization of organizations as "resilient or not." Specifically, we found variation in the phenomena of organizational resilience to the same adverse event, paving the way for an understanding of different resilience paths for established organizations. Indeed, our findings shed new light on three categories of resilient organizations—repurposing, realigning, and capitalizing—and their different response paths. Therefore, we move beyond the "all or none" and "one size fits all" approaches to explain multiple resilience paths. Furthermore, we highlight how differences in the impact of the adverse event on the demand of the focal organization's primary markets influence how organizations respond—and thus the form and process of their resilience.

Second, previous research on post-adversity growth has increased our understanding of adversity outcomes (at the individual level (Maitlis, 2009, 2012, 2020) and new ventures' trial by fire (Bradley et al., 2011; Swaminathan, 1996)). Considering the potential upside to adverse events for individuals and organizations is essential. Indeed, while an adverse event can disrupt societal building blocks (Williams & Shepherd, 2021), this disruption also provides a context for trying new things that might have previously been impossible. The current study contributes new insights to the recovery stream of research on individuals' post-adversity growth by highlighting how not all organizations that face an adverse event experience disruption (i.e., they do not need to recover from a substantial disruption), yet they can still benefit from post-adversity growth. That is, distinct from the growth generated by recovering from an adverse event, the actors we studied did not first need to suffer dysfunction to grow; they were resilient to the adversity, including growing their organizations under the new environmental conditions.

Although sample organizations were in the right place at the right time (perhaps through luck (Liu & De Rond, 2016)), they still recognized the event as adverse. They responded to numerous challenges to achieve different forms of organizational resilience. Therefore, we provided new insights into post-adversity growth by pushing its boundary conditions beyond individuals recovering from adversity to organizations resilient to adversity. Specifically, we offer new insights by highlighting how some organizations are resilient to an adverse event (do not experience dysfunction) but can still grow due to the experience. The adversity is sufficient to capture the entrepreneur's attention and motivate change to capitalize on growth opportunities without a substantial and sustained drop in the organization's functioning.

Finally, previous research has revealed the importance of resource endowments for determining whether an organization is resilient or not to an adverse event (Carmeli & Markman, 2011; Lengnick-Hall et al., 2011; Stephens et al., 2013). We contribute to this stream of research by indicating why, over and above resources, organizations differ in their form of organizational resilience based on how they experience the same adverse event and respond to it. We are not saying that resources are not necessary. They are. However, an adverse event can strike groups of organizations in different ways (despite resource endowments). Moreover, how organizations interpret, make decisions, undertake strategic action, and perform operational activities impacts their post-adversity outcomes over and above their pre-adversity resource endowments. Therefore, we provide new insights into the importance of how resilient organizations frame their circumstances, make decisions, and then deploy their resources under adversity over and above the initial stock of those resources when adversity strikes (i.e., the organization's resource endowment).

Entrepreneurial pivots Our findings also have implications for the growing literature on pivots (Grimes, 2018; Hampel et al., 2020; Manolova et al., 2020; Morgan et al., 2020) and business model change and innovation (Bock et al., 2021; Chesbrough, 2010; Martins et al., 2015; Saebi et al., 2017; Zott & Amit, 2010). Pivots occur when entrepreneurs decide to redefine their businesses radically. Such a radical change in the business model can risk disrupting relationships with stakeholders (e.g., Hampel et al., 2020). However, the risk from pivoting seems less salient in an adverse event where relationships with stakeholders are already substantially disrupted—the business would be pivoting in disrupted relationships rather than causing the disruption in stakeholder relationships. A pivot can increase a business model's coherence—"the extent to which the entrepreneurial manager's (or entrepreneurial managers' shared) cognitive structures, that organize managerial understanding, parsimoniously represent the value creation and value capture factors and mechanisms that account for evidence of an opportunity (such as evidence of markets, technologies, stakeholders' beliefs, and so on)" (Shepherd, Seyb & George, 2022). Business-model changes to achieve coherence, especially environmental changes, are critical to firm survival and performance (Bock et al., 2021; Chesbrough, 2010; Martins et al., 2015; Saebi et al., 2017; Zott & Amit, 2010). Therefore, the current study provides new insights into the business model change and pivoting literature.

First, an adverse event can lead to a substantial change in demand that requires a pivot to a new business model to survive. This study indicates how those organizations that face a substantial drop in demand change their business model through their decision-making, strategic initiatives, and operational activities. Therefore, we provide new insights into some of the micro-activities of business model change (i.e., founders' business-model-change behaviors) beyond work on the role of founders' cognition in business-model change (Baden-Fuller & Morgan, 2010; Doz & Kosonen, 2010; Martins et al., 2015; Shepherd et al., 2022; Snihur & Zott, 2020).

Second, even organizations that faced the adverse event with a slight drop in demand (or even an increase) engaged in some form of business model innovation. Therefore, the three resilience pathways provide new insights into the different combinations of decision making, strategic initiatives, and operational tactics that founders use to change their business model depending on their perception of an adverse event.

Finally, in exploring business model innovation, especially for those responding to an adverse event, it is important to relax a core assumption of the resource-based view—unlimited cognitive abilities (Massa et al., 2017), to highlight how the founder's interpretation of the event and the subsequent decision making drive business model innovation through strategic initiative activities and operational changes (regardless of the organization's resource endowment or status or leadership in its industry). We provide new insights into how resources are used for business model change and reflect resilience to an adverse event providing more detail to the emerging research stream of the micro-dynamics of strategic management (e.g., Bendig et al., 2018; Helfat & Peteraf, 2009) and business model innovation (for a review see Massa et al., 2017).

5.3 Limitations and future research

Although this study has several strengths, it has some weaknesses, like all papers. Given the relatively short time frame and sample selection, we did not capture organizations in a fourth path that we know exists—failure or exit. The interviews were conducted for a podcast independent of the research team. While this provided some advantages, it also introduced some possible limitations. Perhaps the founders were motivated to offer socially desirable answers, given the public nature of the broadcast. However, given the responses, details of the founders' hardships, and differences across the resilient organizations on different paths, social desirability is unlikely a concern. Of course, we were unable to ask follow-up questions. Still, the professional interviewer had a similar purpose for the broadcast (as we did for our research) and asked essential follow-up questions. We recognize that there are always questions about the generalizability or transferability of findings from inductive studies. The outcome of our theorizing is a proposed model that we hope future empirical research tests (in part or whole). It is an understatement that the COVID-19 pandemic is an extreme event. We expect that much of the model will apply to other substantial adverse events, but such an expectation will need to be tested by future empirical research. For example, the COVID-19 pandemic, as implied by definition, has impacted people worldwide, whereas most other adverse events impact specific regions; in addressing the spread of COVID-19, many economies have been locked down for extended periods exacerbating the adversity of the virus over an extended period whereas most events have a more temporary impact on businesses and people. Of course, the point of the inductive study is not to provide empirically generalizable findings but to use extreme events to push our thinking to generate new theories or elaborate on previous theories by pushing and stretching previous boundary conditions. The current model provides a theoretical basis for future theorizing and empirical research on different resilience paths to an adverse event.

Indeed, we hope future research extends this line of research. There is an opportunity for scholars to offer a finer-grained treatment of organizational resilience than this study. For example, there may be categories of organizational resilience not represented or captured in the current study.

Similarly, it could be fruitful to explore questions within each path of resilience—are there other differences within each path that future research could tease apart? Indeed, future research can focus on one of the aspects of a response path for a richer and more nuanced understanding of that aspect of organizational resilience than offered in the current model. For example, future research could build on this study's findings to explore more details about decision-making processes (across organizations with different forms of resilience), including who is involved in decision making, where their attention (and their organizations' attention) is focused, how the decision makers analyze and use the information and the speed with which decisions are made and enacted.

Our findings on resilient organizations and their response paths provide opportunities for future research. Although these capitalizing resilient organizations needed to respond to numerous challenges, they all faced a positive jump in market demand for their primary products. We hope that future empirical research increases our understanding of these resilient organizations by investigating their counterfactuals—those organizations that experienced a positive jump in market demand but were unable to overcome the associated challenges and experienced diminished functioning (consistent with the notion of growth-induced organizational failure (e.g., Carroll, 1984)). Why are some organizations resilient to an adverse event that increases demand for their products/services while others are not? How do their response paths differ? Such research may indicate that an adverse event–induced jump in market demand may not be an unambiguous blessing for all organizations and how some can make the most of the new situation.

Finally, we hope that future research considers the amount, type, and deployment of resources in the activities associated with the different organizational resilience paths. For example, how are resources acquired, combined, and deployed by resilient organizations (repurposing, realigning, and capitalizing) in their decision making, strategic change initiatives, and operational activities? There is much to learn about the nuances within and across the organizational resilience paths.

5.4 Conclusion

Adverse events can be highly disruptive to organizations. However, some organizations maintain positive functioning after a temporary period of unsettlement; these organizations are resilient to the adverse event. This study explored how organizations achieved resilience and fell into different categories of organizational resilience—repurposing, realigning, and capitalizing—each with a different response path. This study sheds new light on how resilient organizations vary in their adversity experiences; how some resilient organizations do better than simply maintain positive functioning in the face of an adverse event (i.e., increase functioning); and how resilient response paths are characterized by experiences with market demand changes, decision-making processes, strategic change initiatives, and operational activities. We hope this study's findings provide a basis for future research on the variance and nuance in organizational resilience.

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