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Resources for business resilience in a COVID-19 world: A community-centric approach

Stefanie Beninger*, **June N.P. Francis**

IE Business School, IE University, 28006 Madrid, Spain
Beedie School of Business, Simon Fraser University, Vancouver, BC V6C 1W6, Canada

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Abstract COVID-19 has drawn renewed focus on the importance of resilience, both among practitioners and in academia, as companies struggle to cope with the rapid swings, changing patterns, and disruptions in supply and demand. This article identifies and delineates a way forward for companies to support resilience, particularly recognizing the wider communities they are nested in and the resources that exist there. To identify such productive resources, known as capitals, we provide a novel and actionable integrated capitals framework (ICF). ICF integrates 10 existing frameworks drawn from both practice and academia and is comprised of nine different forms of capital that businesses can leverage and contribute toward supporting resilience. We provide insights into how businesses can use this framework to achieve resilience through this useful, yet underutilized, path.

1. Resilience: Resources and the community

The novel coronavirus pandemic has revealed how unprepared many companies are to handle major crises. The virus has wrought immense problems, with employees limited in their ability to work, customers curbed in their ability to patronize businesses, and supply chains compromised to the point that some shipping routes ground to a halt as borders closed. Even access to public infrastructure was limited in certain cases, among other complexities. These problems have proven to be challenging for many organizations, causing serious contractions or collapse. Bankruptcy in the U.S. and elsewhere is skyrocketing, with the oldest department store in the U.S., Lord and Taylor, joining a long list of firms declaring bankruptcy.

These existential challenges require firms to find ways to become more resilient in the face of

* Corresponding author
E-mail addresses: stefanie.beninger@ie.edu (S. Beninger), francis@sfu.ca (J.N.P. Francis)

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such complexities. *Resilience* is the ability of systems to maintain both their functions and structures in the face of change (Allenby & Fink, 2005). Resilience can help companies manage adversity (Linnenluecke, 2017), and the pandemic is creating urgency for firms to develop such resilience (Zhu et al., 2020). Given this, resilience is a topic of growing importance (van der Vegt et al., 2015) with an exponential rise in both academic publications (Linnenluecke, 2017) and business attention. Many managers are seeking to bolster their resilience in the current unpredictable business environment (Reeves & Whitaker, 2020). Companies are focusing on resilience in their communications and activities. For example, McKinsey featured resilience in its online knowledge-sharing repository, while Unilever's CEO Alan Jope noted the importance of resilience in its businesses (Unilever, 2020).

To support resilience, the literature points to the need for resources (e.g., Linnenluecke, 2017; Vogus & Sutcliffe, 2007). Resilience can be supported by resources that are flexible, diverse, and held in slack. Flexible resources are needed (Pereira & Da Silva, 2015) where, for example, agile manufacturing would allow businesses to pivot in times of crisis. Such flexible models, including Instacart and Amazon Flex Delivery, proved to be critical during the pandemic (Esper, 2020). A diversity of resources can also be useful (Westley, 2013); for example, multiple suppliers can help organizations solve shortages in the face of a crisis. *Slack resources* (i.e., resources held in excess) can also be crucial in areas in which inventory, surplus labor, and cash-on-hand can help weather disturbances (Sharfman et al., 1988).

COVID-19 has revealed that resources from businesses and supply chains may lack the flexibility, diversity, and slack to support resilience in the current crisis (Zhu et al., 2020). Companies tend to focus on a relatively narrow range of resources, namely those that are under their direct control or directly applicable to their focal business. Elements such as cash flow and insurance coverage are all within a manager's purview, and rightly so. However, in times of crisis, organizations need to be ready to draw upon a wider range of resources than they have previously. Such resources need not be limited to those owned by the firm but can be found in the wider community.

A *community* is a complex set of relationships with a shared sense of mutual interest (Solomon, 1994) linked by shared locale, social interaction, and common ties (Bernard, 1973). Businesses can be viewed as communities themselves (Frederick, 1998; Melé, 2012; Solomon, 1992, 1994) and also residing within wider communities. Wider communities influence organizations and are influenced by them (see Marquis et al., 2011). Wider communities also provide resources to businesses and vice versa. The pandemic has shown that resources from the wider community are critical to businesses. For example, tax-funded resources are helping businesses weather the crisis, while community medical systems are keeping employees and customers healthy. In turn, companies like the U.S.-based H-E-B Grocery Company, driven by community consultations, increased wages and invested in their local context in the current crisis (Berry & Stuart, 2020), while Uber provided rides to workers battling the pandemic.

Businesses and these wider communities interact, co-evolve, and are "surely tied inseparably together" (Frederick, 1998, p. 377) where business resilience is intertwined with wider community resilience (Adekola & Clelland, 2020; McKnight & Linnenluecke, 2016). Despite these connections, businesses tend to largely neglect the wider community (Calvano, 2008; Marquis et al., 2011; Weaver et al., 2019). Nonetheless, companies are increasingly realizing that they are connected to their wider communities (Freeman et al., 2020) and community-centric approaches are being called for (Venugopal, 2021). Such a community view can provide different perspectives (Solomon, 1994) when companies facing disasters need to be creative in identifying resources (Williams & Shepherd, 2016a).

We introduce an inclusive yet parsimonious community-centric framework to support managers in identifying and leveraging a more inclusive set of resources for resilience, which we identify as *capitals*. We identified 10 distinct frameworks of multiple forms of capital from both academia and practice and synthesized the capitals into one single integrated framework called the integrated capitals framework (ICF). Our goal was to create a comprehensive framework of important types of capital but without duplication. The resulting ICF includes nine different capitals present in communities: financial, physical, social, natural, human, cultural, public, political, and health. Firms can use this framework to support resilience.

2. Understanding resilience: A community-centric approach

As problems become more complex, managers need to move outside the norm and work the problem from a multilevel perspective, one that includes the wider community. Resilience requires an understanding that businesses are integrated within a broader society (Reeves & Whitaker, 2020). However, companies often overlook and underestimate their reliance on these wider communities (Beninger & Francis, 2016). This tendency might be due to an often-implicit moral separation of economic institutions from other aspects of life (Shepard et al., 1995), including from these communities (VanSandt & Sud, 2012).

When the wider community is explicitly considered, it is often conceptualized as a stakeholder. *Stakeholders* are those who can affect and are affected by the focal company, including consumers and the community (Freeman, 1984). However, stakeholder relationships are often approached dyadically—between firms and customers or firms and society—with strict boundaries between them (Hill, 2010). In this way, companies are viewed as self-contained (Porter & Kramer, 2011) rather than being part of the wider community.

Such siloed framing has limited our thinking. Managers often fail to see the varying communities surrounding businesses. Ecology literature coined the term *metacommunities*, which is a set of local communities linked by multiple potentially interacting elements. In ecology, these elements are flora and fauna. Borrowing the idea for business, these elements would be resources and actors. Indeed, a company can be viewed as a community itself (Frederick, 1998) with shared assets, responsibilities, and purpose (Melé, 2012; Solomon, 1992, 1994). This framing harkens back to a foundational management thinker, Peter Drucker, and his proposed *plant community*, where companies are viewed as communities in and of themselves.

Ecology argues that various communities connect to other communities within these metacommunities (Leibold et al., 2004). Businesses similarly interact with other communities (e.g., other organizations) and are nested into wider communities. Indeed, "the corporation is one's community, which is not to deny, of course, that there is always a larger community—as diverse as it may be—that counts even more" (Solomon, 1992, p. 327). For example, think of a business surrounded by a suburb of family homes: A community (business), along with other businesses and organizations (also viewed as communities), is nested within a wider community (the suburb), which is nested within even a wider community (a city), nested within even a wider community (a country). Actors and resources interact within and between these different communities across multiple levels in which the boundaries are permeable.

Where the stakeholder framing could—and arguably did—shift our focus (Freeman, 1984), a similar shift could occur if we view businesses as surrounded by and nested within broader communities and appreciate the resources available there, thus taking a community-centric perspective. Such a focus is likely only going to become more important. For example, the pandemic is leading to more localized supply chains (Davies, 2020) and highlighting "the many processes and people required to move goods through supply chains, the safety and welfare of these workers, and the role of local, state, and federal governments in overseeing the work required to get products to store shelves" (Esper, 2020, p. 1).

Just as having an innovation orientation can support resilience (de Oliveira Teixeira & Werther, 2013), so can it be with a community-centric approach. After all, how "we frame the role of business in society matters a great deal" (Freeman et al., 2020, p. 91).

As business and wider community resilience are intertwined (Adekola & Clelland, 2020), businesses can support their wider communities if they recover quickly and continue services (McKnight & Linnenluecke, 2016). Businesses can also shore up community resilience by providing resources (Williams et al., 2017) such as donations, jobs, and physical spaces (Adekola & Clelland, 2020). If community members recover, they can, in turn, continue to support businesses as employees, customers, and suppliers. Members of communities can also draw upon collective social and cultural resources (Marquis et al., 2011). For example, the U.S.-based New Economy Initiative brings together community-based nonprofits to provide resources—including money and coaching—to support businesses during the crisis. Such resources are important for resilience (Linnenluecke, 2017). Companies can bolster their resilience by drawing upon and contributing to wider community resources that have not historically been the focus of their attention.

3. Introducing the integrated capitals framework

What are these resources then? Certainly, financial resources are important for resilience (see Williams et al., 2017), as are social ones (Williams

& Shepherd, 2016a). The pandemic has underscored the importance of other resources, such as health and human resources. COVID-19 positive healthcare workers, for example, were sent to work due to shortages in the Netherlands. Managers thus need to consider a wider set of resources in communities.

A useful way to frame such community resources, and one that has already been used when discussing community resilience, is to identify them as capital (see McKnight & Linnenluecke, 2016). Capital is a word employed as a proxy for productive resources (Roscher, 1843) in which invested resources become capital (Flora et al., 2016). The concept of capital has evolved over the years, originally referring to cattle headcounts millennia ago before referring to money invested in business (Hodgson, 2014). However, resources include more than just money. Today, capital is often viewed more broadly by many, to the point where (regrettably to some) "economists ha[ve] made it respectable to describe any unconsumed productive resource as capital" (Hodgson, 2014, p. 1075). Thinking about multiple forms of capital can be useful in understanding community resources (Flora et al., 2016), where businesses that take a community-centric view are thought to strengthen capital and support resilience (McKnight & Linnenluecke, 2016).

What are these forms of capital? Multiple types of capital have been named and used, with over 25 forms identified by Hodgson (2014) alone. Frameworks of multiple forms of capital have also been created and adopted by academics, companies, nonprofits, governments, supranational entities, and coalitions. For example, Elkington's famous triple-bottom-line approach of economic, social, and environmental dimensions of sustainability spawned frameworks comprised of multiple capitals (Elkington, 2018), where Elkington (1994) himself described how companies can either burn through or sustainably produce multiple forms of capital. However, these frameworks include many different and, at times, overlapping types of capital. Even Elkington (2018) himself recently cautioned (with dismay) against the "bewildering range of options" that emerged from his original approach, including the numerous multicapital models.

Looking to address this concern and provide an inclusive framework, we first identified an exhaustive number of these capital frameworks by searching for academic- and practitioner-based frameworks, using terms such as capitals, capital frameworks, multicapital, and multiple capitals. Our search spanned both academia and practice to acknowledge the value of practice-based approaches and to seek comprehensiveness. This resulted in the identification of 10 existing frameworks that include multiple types of capital (see Table 1). Despite their differences in origin, the previous frameworks were all designed to be used by wider communities or organizations and revealed a high degree of overlap.

We synthesized these previous 10 frameworks into an integrated framework, ultimately creating the parsimonious ICF (see Table 2 and Figure 1) containing nine capitals: financial, natural, social, cultural, human, political, public, physical, and health (see definitions in Table 3). In doing so, we developed an integrated framework, one that provides an inclusive view of capitals that is more complete than any one of the 10 previously individual frameworks.

Our integrated framework clarifies the discrepancies in the previously identified frameworks related to, for example, built, physical, constructed, manufactured, and produced capital. With the ICF, we also go beyond Bourdieu's (1986) well-known four capitals—economic, social, cultural, and symbolic—to include other important elements related to nature, infrastructure, and health. Health, in particular, is an essential component of communities (McCrea et al., 2014) as the effects of COVID-19 have underscored. Health is also an aspect highlighted by Bebbington's (1999) capitals frameworks. We went beyond sociology's community capitals framework (Flora et al., 2016) for two reasons. First, we wanted to capture a broader view of *public capital*, which can include built aspects such as roadways, but also can include nonbuilt aspects like natural waterways. Communities also have intangible infrastructure (Vachani & Smith, 2007). Flora et al. (2016) referred to these elements as social infrastructure that is separate from social capital, and we denote it as a part of public capital. For example, the public asset of rule of law far surpasses the tangible aspects of courthouses. Certainly, the COVID-19 crisis has shown the critical need for accessible tangible and intangible public capital in all of its forms. In addition, while Flora and colleagues discussed health resources, it was not separately denoted as a capital.

Table 1. The 10 contributing frameworks of ICF

	Framework	Framework description	Capitals	Source description
1.	Bourdieu (1986, 1989)	Seminal work on four kinds of capital	Economic, cultural, social, and symbolic	Academic: sociology
2.	Flora et al. (2016)	The Community Capitals Framework (CCF) identified capitals in rural communities	Built, financial, cultural, human, natural, political, social	Academic: sociology
3.	Bebbington (1999)	Framework focused on sustainability of rural livelihoods	Cultural, human, natural, produced, social	Academic: development studies
4.	Hawken et al. (1999)	The Natural Capitalism approach described capitals underpinning economic systems	Financial, human, manufactured, natural	Profit/nonprofit: authors are sustainable development experts/advocates from profit and nonprofit
5.	Forum for the Future's Five Capitals (n.d.)	A model for organizations looking to improve their sustainability (Porritt, 2007)	Financial, human, manufactured, natural, social	Nonprofit: Forum for the Future is a global nonprofit and think tank
6.	IIRC (International Integrated Reporting Council; 2013)	A framework for integrated accounting reporting reflecting a wider set of resources	Financial, human, intellectual, manufactured, natural, social, and relationship capital	Coalition: IIRC is an international coalition of regulators, investors, and accounting professionals
7	The Sigma Project (2003)	Framework focused on sustainability and encouraging businesses to use these capitals in delivering their products and services	Financial, human, manufactured, natural, social	Coalition: UK Department of Trade and Industry (government), Forum for the Future (nonprofit), The British Standards Institution (MOU with UK government), and AccountAbility, a global consultancy and standards firm
8.	MultiCapital Scorecard from Thomas and McElroy (n.d.)	Scoreboard created as a context-based reporting tool for organizations in relation to stakeholders	Economic (internal and external), constructed, human, natural, social, and relationship	Business: a training and consulting company formed by a former Unilever executive and a former Price Waterhouse, KPMG, and IBM consultant
9.	Indicators of Environmental Sustainable Development (IESD; Berger-Schmitt & Noll, 2000)	Framework aimed at expanding the measure of wealth, particularly related to the environment (World Bank, 1997) and wider society (Berger-Schmitt & Noll, 2000)	Natural, social, human, and produced (the latter mentioned only briefly)	Supranational: Proposed by World Bank (1997), integrated by Berger-Schmitt and Noll (2000), and adopted by the European Commission
10.	Sustainable Livelihoods Framework (DFID, 1999)	Framework where capitals collectively called "livelihood assets," to be used to understand and analyze poverty	Financial, human, natural physical, social	Government: British Department for International Development's livelihood assets

For thoroughness, other capitals not included in these 10 academic and practitioner frameworks, such as those from Hodgson's (2014) expansive list of capitals, were assessed for inclusion but ultimately excluded as we sought to avoid the ICF becoming unwieldy. Overall, the final ICF offers a parsimonious and actionable framework of nine different forms of capital, where these productive

Table 2. The integrated capitals framework (ICF)

Capital	Source frameworks	ICF capitals
Financial/ economic	Bourdieu (1986); CCF (Flora et al., 2016); DFID (1999); Forum for the Future (n.d.); Hawken et al. (1999); IIRC (2013); The Sigma Project (2003); Thomas and McElroy (n.d.)	Financial
Natural	Bebbington (1999); CCF (Flora et al., 2016); DFID (1999); Forum for the Future (n.d.); Hawken et al. (1999); IESD (1997); IIRC (2013); The Sigma Project (2003); Thomas and McElroy (n.d.)	Natural
Social	Bourdieu (1986); Bebbington (1999); CCF (Flora et al., 2016); DFID (1999); Forum for the Future (n.d.); IESD (1997); IIRC (2013); The Sigma Project (2003); Thomas and McElroy (n.d.)	Social
Human	Bebbington (1999); CCF (Flora et al., 2016); DFID (1999); Forum for the Future (n.d.); Hawken et al. (1999); IESD (1997); IIRC (2013); The Sigma Project (2003); Thomas and McElroy (n.d.)	Human
Intellectual	IIRC (2013)	
Cultural	Bebbington (1999); Bourdieu (1986); CCF (Flora et al., 2016)	Cultural
Political	CCF (Flora et al., 2016)	Political
Symbolic	Bourdieu (1989)	
Built	CCF (Flora et al., 2016)	Physical
Constructed	Thomas and McElroy (n.d.)	
Produced	Bebbington (1999); IESD (1997)	
Physical	DFID (1999)	Public
Manufactured	Forum for the Future (n.d.); Hawken et al. (1999); IIRC (2013); The Sigma Project (2003)	
Health	Bebbington (1999) discussed human capital; CCF (Flora et al., 2016) discussed health equity	Health

resources could contribute to resilience. The capitals used in the ICF are detailed in Table 3.

4. Understanding the capitals at multiple levels

Companies, viewed as communities themselves, can utilize the ICF to assess their own set of capitals. Capitals that could be present in a company include:

- Financial capital (e.g., wages and incomes);
- Physical capital (e.g., company printers);
- Public capital (e.g., warehouses and company roads);
- Natural capital (e.g., water use);
- Health capital (e.g., product safety and healthcare plans);
- Human capital (e.g., employee training and customer education);
- Social capital (e.g., worker and customer relationships);
- Political capital (e.g., promotions and power dynamics); and
- Cultural capital (e.g., corporate culture).

The COVID-19 crisis has also underscored that companies are part of these wider communities

Figure 1. The integrated capitals framework

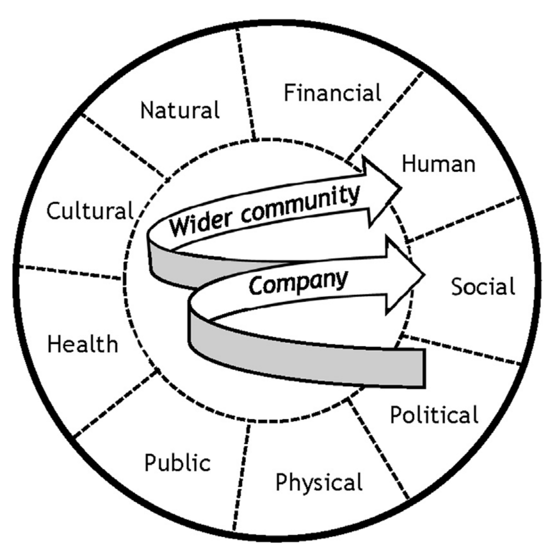

Table 3. Description of the capitals

Integrated capitals	Suggested definitions	Illustrative example(s)
Financial	Financial assets (Coleman, 1988) that can be converted immediately and directly into money (Bourdieu, 1986)	Tax coffers, community savings, investments
Natural	Environmentally provided assets that provide useful (non) renewable goods and services (Serageldin & Steer, 1994)	Soil, air, water, minerals, flora, fauna biodiversity
Social	Resources borne from a durable network (Bourdieu, 1986) of social ties that can provide benefits (Coleman, 1988)	Membership groups (advocacy, politics, etc.)
Cultural	"[T]he set of ideas, practices, beliefs, traditions, and values [that]... identify and bind together a given group of people" (Throsby, 1999, p. 7, p. 7)	Art, traditions, cultural events
Human	Skills and knowledge (Coleman, 1988)	Knowledge to create goods
Political	Power, or the ability to push one's (or a group's) will on another and to control settings and the structure of interactions (Wolf, 1990)	Standards, rules, regulations (Flora et al., 2016)
Physical	Tangible assets (Coleman, 1988) that are human-made	Housing, equipment
Public	Public goods and services (Winters et al., 2002), human-built (Flora et al., 2016) (e.g., roads) or human—utilized (e.g., waterways), tangible or not	Electricity, irrigation, rule of law
Health	Stock of health (Grossman, 1972), including the absence of impairment and ability to cope with demands of life (Sartorius, 2006)	Vaccinations, infant mortality, disease levels

and are heavily affected by them. In turn, companies heavily influence their wider communities (Freeman et al., 2020). Capitals from a wider community that can influence and be influenced by companies include the following:

- Financial capital (e.g., tax coffers);
- Physical capital (e.g., accessible housing for employees and consumers);
- Public capital (e.g., roadways and judicial systems);
- Natural capital (e.g., breathable air);
- Health capital (e.g., vaccination rates and health systems);
- Human capital (e.g., functioning schools and training);
- Social capital (e.g., advocacy and social groups);
- Political capital (e.g., equality and representation); and
- Cultural capital (e.g., traditions and art).

Firms have externalized many of these aspects wherein they can fail to anticipate the interrelationships between the company and its community. Further, these capitals do not exist in isolation. Underpinning the term capital is the idea that capital can facilitate value creation by being a catalyst or magnifier (Dean & Kretschmer, 2007). The different forms of capital can "mutually support and enhance each other" (McCrea et al., 2014, p. 277), providing value (Bebbington, 1999) and affecting other types of capital (Abel, 2008). Changes to one capital can impact other capitals, and emphasizing only one capital can either contribute to or detract from communities (Flora et al., 2016) and companies. As such, businesses need to account for such different forms of capital, either constrained or plentiful, and their interconnectedness, to support resilience.

5. The framework at work: Examples from the pandemic

How, then, can companies best use the ICF in practice? Resiliency requires firms to operate in flexible ways, to draw on diverse community capitals, and to deploy resources rapidly in the face of threats. Drawing examples from the COVID-19 pandemic, we see how these forms of capital can support resilience.

5.1. Community contributions

The wider community has provided valuable resources to businesses to help them survive. One of the most valuable resources in communities is human capital, which is skills and knowledge (Coleman, 1988). Businesses have leveraged expertise from outside their organization in response to the current situation. Public health institutions, for example, have provided companies with evolving information on how to open their premises safely (e.g., ventilation and distancing guidelines), intersecting with health capital. Similarly, both public and physical capital have been crucial: Community buildings across the globe transformed into testing centers to test workers, while governments like Spain delivered masks to all citizens, in some cases on their way to work. These actions were only possible because of political capital, which is the power available (Wolf, 1990) to procure the (then) relatively scarce products such as masks relying on communal financial capital (taxes) to do so and accessing the natural capital inputs necessary to create them.

Regarding cultural capital, some communities and companies have benefited greatly from beliefs and traditions supportive of the coronavirus response. Japan benefited from a cultural affinity for masks during the current pandemic; masks have long been part of the Japanese landscape, dating back to even before the long-ago 1918 pandemic, where, even pre-2020, employees with a cold would put a mask on to go to work (Rich, 2020). Thus, companies seamlessly drew on community cultural capital. Regarding financial capital, many companies recently benefited from an influx of financial assets from the wider communities, including tax relief or bailouts, while employees in countries such as Canada received government payments if furloughed. Less tangibly, businesses benefited from social capital when community members came together across the globe to support one another. People have provided care for children of essential workers, allowing them to go to work. Taken together, the recent virus has shown us that a wide range of resources borne from wider communities are helping to keep our businesses functioning.

5.2. Company contributions

This resource flow is not one-way. Companies have, likewise, supported their wider communities towards bolstering resilience. Private organizations are playing an increasingly pivotal role in emergency response, such as natural disasters, and thus impacting wider community resilience (McKnight & Linnenluecke, 2016). In the recent crisis, companies around the globe provided donations (financial capital), following their traditions of charitable donation (cultural capital). Indeed, a firms' philanthropic history influences community donations in the face of major events (Tilcsik & Marquis, 2013). Other companies created physical capital: fashion companies like Old Navy provided masks and alcohol companies such as Heineken provided hand sanitizer, leveraging natural capital to do so and supporting health capital to support the wider community.

Companies also provided public capital. The National Football League supplied venues to be used as mass vaccination sites, while hotels and mining camps turned themselves into quarantine centers. Companies also dedicated human capital, with Dyson Ltd. deviating from their traditional focus on household appliances to provide innovation on ventilators. Others leveraged their social capital, with Salesforce and Alibaba joining forces to provide equipment to hospitals. Companies also leveraged political capital to support communities, such as when U.S.-based 3M sought to ensure continued export of masks to Canada and Latin America in 2020 despite national political resistance (MercoPress, 2020). These examples highlight how companies have supported resilience in wider communities.

6. Activating the capitals for resilience

These examples highlight the different forms of resources flowing between companies and their wider communities, which helps to support resilience. They also illustrate the need for companies to see their boundaries as permeable, allowing them to draw on diverse capitals for flexibility and slack while also contributing to capitals in the wider community. The ICF can be a yardstick by which to assess an inclusive set of resources for resilience.

6.1. Resilience teams

To best leverage the ICF, wider communities and the businesses within them need to adopt a collaborative and deliberative orientation using the ICF as a springboard. As companies seek to understand a wider set of capitals, they can appoint a dedicated cross-sectional resilience team of internal and external members supported by senior leadership. This team can have several key functions.

First, such a team could start by determining the range of capitals available in their own direct community—their business—as well as in the wider communities. One of this article's authors was previously involved in determining capitals available at the nexus of a company in a wider community—in this case, a village. The priority was to gather information from company members and community members about capitals that were available and constrained. This was accomplished through deliberative and collaborative methods, including interviews and focus groups, that allowed managers to gather and assess information from a diversity of sources (Wegner & Pascual, 2011). Companies need to rely on such input to appropriately assess capitals. In other words, which forms of capital matter most for the various actors? This valuation will differ by community and can change over time. However, like Elkington (2018), we caution against the wholesale adoption of quantitative metrics that would create a de facto accounting tool. Some elements can defy quantification, such as natural (Hawken et al., 1999) and cultural capital. A resilience team needs to be aware of the nonquantitative aspects of capitals.

Second, and relatedly, by working with the wider community to assess resources, the team could identify resources that could be leveraged by businesses themselves and also shared between or used by wider communities. For example, looking at the lessons learned from COVID-19, pharmaceutical companies were advised to tap into relationships at the nexus of firms, insurers, healthcare providers, consumers, and governments (Sarkees et al., 2021) that comprise multiple nested communities. This process can uncover surprises. In the case of the community one of this article's authors was involved with, wider community members disclosed how the company was not appropriately supporting health resources; the company sought to rectify the issue in order to support joint resilience. To implement such a process, it can be useful to involve impartial experts (e.g., consultants) in uncovering the capitals. This approach requires shifting away from the assumption that managers are always the experts. Managers need to value the expertise that lies in the wider community and develop the ability to work with a diverse range of experts, including those in academia, nongovernment organizations, wider community groups, and others such as governance structures (Francis et al., 2020).

Third, a resilience team should keep a view to the horizon on what crises might emerge. For example, H-E-B supermarkets have a full-time executive focused on preparedness (Berry & Stuart, 2020). A resilience team also needs to monitor what happens over time with crises rather than maintaining a short-term focus on select capitals in isolation. Resilience is built over time and can be lost. Everyone can name at least one powerful company that no longer exists where the shuttered company's once strong resilience crumbled. When attending to multiple capitals, the focus is often on preserving and enhancing capitals in the current situation and into the future (Berger-Schmitt & Noll, 2000). However, actions taken during and after crises can impact available resources. Past work has found that those who focus on protecting resources during a crisis, rather than investing in them, can fail to develop resources (Williams & Shepherd, 2016b). As such, rather than taking a protective approach, it can be important to think about how to invest in resources.

Fourth, the team can nurture crucial relationships. Developing longstanding relationships with critical communities is important to resilience (Beninger & Francis, 2021). Differing disturbances will require different relationships, so managers could start by assessing possible disturbances and the relationships with communities that are most critical. In the case of COVID-19, businesses had to pool and redeploy resources quickly and often locally. To this end, competitors can be sources of resources used to support resilience in the face of crises. This technique was used by small competitors in Myanmar and by competing supermarkets in Britain (Beninger & Francis, 2021). Wider community businesses are nested in such a way that the people who live around a business could also be considered.

6.2. Defining communities

It can be challenging for companies to identify who is part of which communities. Clearly, there is no specific, clear-cut answer to these boundaries, as boundaries are permeable and fluid. Nonetheless, some defining characteristics of communities include "an intermediate size group (one that is neither very large nor small), key institutional settings, relative stability, concreteness, and significant primary and secondary interaction" (Ragin et al., 2008, p. 1380). Political, environmental, social, and cultural aspects shape these boundaries (Flora et al., 2016). Identifying the various communities will need to be uniquely developed by each company and can be informed by deliberative methods. Indeed, the most relevant communities are the communities that are directly relevant to the firms' resiliency.

However, such a collaborative and deliberative approach described above is admittedly difficult for many. Companies often take short-term views (Reeves & Whitaker, 2020), but resilience requires a shift toward longer-term thinking. Further, our world is characterized by a dominant social paradigm primarily focused on competition over collaboration (Mittelstaedt et al., 2014). Companies will also face challenges with appreciating power differentials. Companies with a traditional (dyadic) stakeholder approach might not recognize that some have differing power with some accumulating more of certain resources (Hill, 2010). Power differentials also exist between companies and communities (Calvano, 2008), and conflicts often occur regarding resources within communities (Shultz, 2007) and how to distribute them (Flora et al., 2016). These power differentials (e.g., political capital differences) affect different forms of capital.

For example, as consumers shifted to online purchases related to COVID-19 and during the Black Lives Matter movement protests, the dangers faced by Black workers in the 'last mile' of supply chains as delivery workers became evident through the highly publicized racist encounters they experienced. Given the disproportionate toll that COVID-19 is taking on Black and vulnerable populations, these groups may be less resilient post-COVID-19, with their recovery lagging considerably (Millett et al., 2020). The strain and depletion of the capitals of these groups have severe implications for both business recovery and longer-term resilience. Deliberative approaches, suggested above, can help address such power differentials (Francis et al., 2020; Wegner & Pascual, 2011).

More work needs to be done to understand and use community-centric approaches (Venugopal, 2021). As we struggle with increasing crises, companies can help shed light on which resources best promote resilience and how to optimize them (e.g., Linnenluecke, 2017), including those available in varying (overlapping) communities. The use of ICF can help companies untangle the complex relationships between capitals. One finds few efforts to delineate these complicated interconnected relationships, with some exceptions (e.g., Abel, 2008; Bourdieu, 1986; Flora et al., 2016). Further uncovering the interconnections between these forms of capital remains a challenge, one that will rely on the dedicated work of practitioners and academics in the field to use, learn about, and report on the use of the framework to support resilience.

7. Toward a resilient future

Companies have an opportunity to use the lessons learned during COVID-19 to become more resilient. Our contemporary situation underscores the need to foster links between business and communities, not just as part of corporate social responsibility actions, but to ensure companies and communities continue to function during crises. To this end, we synthesized a framework that includes a myriad of productive resources—conceptualized as capitals—crucial to resilience at the nexus of business and communities. The resulting ICF includes diverse and flexible resources, both constrained and plentiful, for managers to tap into and build upon. Companies have long sought to do more with less in terms of their own held capitals. If companies can embrace community capitals when these capitals already exist in their community, that businesses may learn how to do more with more. Such an approach will ideally motivate managers and academics to embrace a community-centric lens and encourage future practice and research to further understand and improve resilience and the myriad of capital it relies on.

A concluding note to the wider communities themselves that businesses are nested in, such as surrounding villages, cities, or even at wider national levels: Businesses themselves may be sites of untapped resources that can be leveraged in crises. For example, some businesses are experts in optimizing services and could help execute vaccinations. Breaking down the siloed thinking regarding businesses and the communities around them and appreciating the flow of resources there can be a step towards shoring up resilience for all.

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