



Cocreating transformative value propositions with customers experiencing vulnerability during humanitarian crises

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Abstract

To understand the cocreation and impact of transformative value propositions (TVPs), which are designed to address vulnerabilities that customers experience because of humanitarian crises, this study applies a typology of service innovation archetypes as a domain theory to examine different ways to cocreate TVPs. The authors identify different types of customers who experience vulnerability, using a social determinants of health (SDOH) framework. Exemplary TVPs reveal how service organizations can alleviate customer vulnerabilities, in the short and long terms, and highlight a distinction between TVPs that require incremental changes to existing resource deployment versus those that require novel capabilities. This article contributes to transformative service research by establishing a value-centric model that relates the cocreation of TVPs to customers experiencing vulnerability. In turn, researchers and managers can identify the output-based, process-based, experiential, and systemic changes needed to cocreate TVPs.

Keywords Transformative service research · Transformative value propositions · Customer vulnerability · Service dominant logic · Service innovation archetypes · Service ecosystems · Social determinants of health · Humanitarian crises

Recent academic work has focused on the role and purpose of value propositions (Payne et al., 2020; Vargo, 2020). Initially conceived of as promises made to potential customers (Payne et al., 2008), a service-dominant logic (S-D logic) view of value propositions conceptualizes them as “multi-actor, intersubjective, institutional co-creations, as phenomenologically interpreted by an actor in a given context” (Vargo, 2020, p. 310). To understand value propositions contextually, it is critical to consider cocreating value propositions among actors in an ecosystem (Chandler & Lusch, 2015; Day, 2020), including customers experiencing vulnerability. Specifically, we investigate how value propositions might be cocreated to address conditions that initiate,

exacerbate, or perpetuate vulnerability in the context of a humanitarian crisis such as the COVID-19 global pandemic.

Humanitarian crises, including pandemics, severe droughts, floods, and fires, impose vulnerabilities that emerge suddenly, and increase vulnerabilities of people already living in disadvantaged conditions. Yet transformative service research (TSR) has not examined the potential benefits of cocreating value propositions for customers experiencing vulnerability closely. Nor do we find much research into how service designs and processes can influence vulnerable consumers (Rosenbaum et al., 2017). Anderson et al. (2018, p. 110) argue that “it is time to move services from being ‘transformative by nature’ to ‘transformative by design.’” We address this call, as well as the need for service research to focus on critical managerial issues, societal service concerns (Huang et al., 2021, p. 460), and service ecosystem designs (Vink et al., 2020). The purpose of this paper is to understand the cocreation and impact of transformative value propositions (TVPs) designed to address vulnerabilities that customers experience because of humanitarian crises. We propose that cocreated TVPs can address vulnerabilities that customers experience due to humanitarian crises. We define TVPs as *invitations extended by an organization offering*

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to cocreate value with those experiencing vulnerability through resource integration (operand and operant), with the potential to enhance customer well-being markedly.

For this effort, the domain theories, or sets of knowledge about a particular subject (Jaakkola, 2020; Lukka & Vinnari, 2014), that we use are the typology of service innovation archetypes (Helkkula et al., 2018) and customer vulnerability, structured by a social determinants of health (SDOH) framework, which exists under the TSR umbrella. By applying service innovation archetypes (output-based, process-based, experience, and systemic approaches), we attempt to illuminate how service organizations reconfigure their resources to cocreate TVPs and thereby answer relevant research questions: How can the typology of service innovation archetypes help us understand TVP cocreation involving vulnerable customers? How can a SDOH framework explain differences in customers' experiences of vulnerability during humanitarian crises? How can TVPs cocreate value with customers experiencing vulnerability? In line with problematization research (Alvesson & Sandberg, 2011), the research questions for this conceptual article likely would not have emerged solely from gap-spotting. Instead, our awareness of emerging TVPs intensified due to the COVID-19 pandemic, which led to different thinking about the vulnerabilities people experience during humanitarian crises. Only then did we identify relevant concepts from service research and marketing literature (e.g., value propositions, customer vulnerability, archetypes of service innovation, SDOH).

With this approach, we contribute first by characterizing TVPs as cocreations with positive implications for customers' experiences of vulnerability, categorized according to the SDOH framework. We thus extend value proposition research to humanitarian crises and connect value propositions with TSR objectives. As a second contribution, we apply an archetypes of service innovation typology (Helkkula et al., 2018) to understand TVP cocreation, which facilitates a clear analysis of the characteristics and impact of TVPs. Using some exemplary TVPs, we identify the need for TVPs that integrate different archetypes to address long-term problems stemming from a humanitarian crisis. With a conceptual model of TVPs, mapped onto the typology of service innovation archetypes, we depict how TVPs can challenge organizations and benefit customers experiencing vulnerability. Integrating different archetypes leads to mutually beneficial outputs in service to customers in crisis: well-functioning processes, an ecosystem perspective, and inclusive human commitment to cocreating innovative value experiences. Still, finding ways to collaborate across archetypes of human service systems remains a fundamental challenge that demands further research and managerial attention.

The structure of the paper is as follows. We first review value propositions from a S-D logic perspective, then introduce theories of vulnerability and SDOH as perspectives on the lived experience of customers experiencing vulnerability. We also present a typology of service innovation archetypes (Helkkula et al., 2018) that can be used to analyze cocreated TVPs for customers experiencing vulnerability. In reviewing how some service organizations reacted to a humanitarian crisis (the COVID-19 pandemic) to serve customers experiencing vulnerability, we draw insights related to how TVPs determine customer well-being; we also assess the extent to which TVPs challenge service organizations to alter their methods for offering and integrating resources with customers. As we show, TVPs can be best understood according to a continuum, from simple reconfigurations to radical changes of existing organizational resources. After discussing our contributions, we note implications for theory, practice, and continued research into TVP cocreation.

Conceptual foundations

Transformative value propositions cocreated with customers experiencing vulnerability

In its most basic form, a value proposition “invites actors to serve one another in order to attain value, whether it is economic, financial, or social value or some combination of these” (Chandler & Lusch, 2015, p. 6). From a S-D logic perspective, value propositions draw on “operand (e.g., physical) and operant (e.g., knowledge) resources that are mobilized through organizational capabilities and reflect the value that providers intend to offer” (Blocker & Barrios, 2015, p. 267). As we noted previously, Vargo (2020) also cites the importance of their intersubjectivity and institutionality, their phenomenological interpretations, and their context-specific meaning. A foundational purpose of a value proposition is to communicate value cocreation potential for targeted customers, as well as signal the strategic purposes behind them (Eggert et al., 2020). When enacted, TVPs beget activities and coproduced services between service providers and customers. These transformative service initiatives are “activities by organizations or volunteers to serve people experiencing vulnerabilities, including long-term challenges [that] try to improve their well-being” (Boenigk et al., 2021, p. 1). Their strategic promise in turn reflects the recognition that service organizations cannot deliver value to customers experiencing vulnerability; they can only offer value propositions and cocreate value *with* customers (Helkkula et al., 2012; Vargo & Lusch, 2008, 2016). If the goal is to cocreate innovative TVPs, service organizations

also must reconsider their service ecosystems, processes, and outputs (deliverables) to enable customers experiencing vulnerability to cocreate experiences that enhance their well-being. Such revisions require a service system (Koskela-Huotari et al., 2021) or ecosystem (Akaka et al., 2012) view.

In making these claims, we distinguish carefully among habitual, holistic, and transformative value propositions. The habitual value propositions that organizations normally offer are designed to satisfy ordinary, recurrent needs. But customers experiencing vulnerability often suffer from multiple resource constraints simultaneously (Givens, 2020) and thus require transformative value, which is a “social dimension of value creation that generates uplifting change for greater well-being among individuals and collectives” (Blocker & Barrios, 2015, p. 265). When humanitarian crises such as the COVID-19 pandemic foreground factors that create vulnerability, organizations can articulate TVPs to appeal to customers. Holistic value propositions (e.g., Blocker & Barrios, 2015; Skålén et al., 2015) work to address a wide range of needs, such as physical (e.g., shoes), relational (e.g., sports leagues), emotional (e.g., art, dance), and community service (e.g., volunteering with a local charity) demands (Blocker & Barrios, 2015, p. 271). In so doing, they “contest the compartmentalization of life and instead invite members to create transformative value through therapeutic meanings about one’s body, mind, spirit, and relationships” (Blocker & Barrios, 2015, p. 271). We acknowledge the transformative potential of this type of value proposition and therefore integrate it into our previously proposed definition of TVP.

Although value propositions can take many forms, vary in intensity, and have different relevance for various target markets (Chandler & Lusch, 2015), they generally should appeal to multiple stakeholders (Frow & Payne, 2011), such that they can be evaluated in a service ecosystem. Ideally, they also convey the resources that a customer needs in order to engage in a service (Payne & Frow, 2005). Value propositions are particularly important for addressing the vulnerabilities of potential customers, due to their ability to combine and integrate different systems of actors, who might include customers and firms, but also refer to value constellations or society as a whole (Chandler & Lusch, 2015, p. 7). Similarly, TVPs may vary in intensity, represent potential solutions to one or more sources of vulnerability, and require more or less resource integration to cocreate value; as complex, extended service offerings that involve multiple actors, they often are embedded within an ecosystem. Noting Payne et al.’s (2020) argument that value propositions should address dynamic competitive environments and changing customer needs, we evaluate the impact of TVPs in

a dynamic competitive environment and the rapidly changing customer needs that emerge from a humanitarian crisis.

Vulnerability and social determinants of health

Vulnerability can be defined as “the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard” (Wisner et al., 2003, p. 11). Growing marketing and service research devoted to vulnerability (e.g., Boenigk et al., 2021; Cheung & McColl-Kennedy, 2019) recognizes that *customer* vulnerability arises because the individual experiences powerlessness due to some imbalance or inequality in a market interaction (Baker et al., 2005). This institutionally-created state of relative powerlessness may be long-lasting or conditional (Baker et al., 2005). In discussing *consumer* vulnerability, Hill and Sharma (2020) emphasize a lack of access and control over resources, which restricts consumers’ ability to function in the marketplace. Regardless of the precise term used, vulnerability is an individual-level concept that is important to understand and resolve, particularly for the benefit of people experiencing vulnerability, such as those who are physically disabled, detained immigrants, those living in rural areas, prisoners, people suffering from mental/behavioral health issues, the homeless or housing insecure, children, and indigenous people (Turkewitz, 2020).

Vulnerability theory also recognizes people as socially embedded in and affected by societal institutions (Fineman, 2008, 2019). Poverty and income inequality drive many conditions of vulnerability (Morduch, 1994), which in turn expose people to risks they could avoid were they endowed with more resources or capabilities. In this sense, “risk is socially constructed, the result of societal forces marginalizing certain segments of the population, and shaping exposure, vulnerability, and capacity” (Clark-Ginsberg et al., 2020). But risk and vulnerability also can stem from earthquakes, floods, extremely cold weather, biological disasters (e.g., pandemics), and storms (tornadoes, hurricanes, and tsunamis), often referred to as *natural disasters*. But this terminology focuses on the disaster, rather than its effects, and thereby “suggests an uncritical acceptance of a deeply engrained ideological and cultural myth ... extreme natural events are not social disasters until a vulnerable group of people is exposed” (Wisner et al., 2003, p. i). If natural events restrict access to facilities and services or increase social isolation, they can create the conditions that produce humanitarian crises.

Another perspective on vulnerability outlines factors that can increase it, according to a framework that contains social determinants of health (SDOH), which reflects people’s living conditions, across their homes, workplaces, schools, and

social sites (Centers for Disease Control, 2020c). They are difficult to address because they reflect deeply engrained social structures and issues. As upstream social factors, SDOH such as income poverty, material deprivation, insufficient education, neighborhood conditions, violence risk, and limited access to health care (Marmot, 2005) can create parallel crises, implying amplified risks and vulnerabilities (Clapp et al., 2020). To escape the conditions that increase vulnerability, people must deal with the underlying causes, which constitute complex social problems (Carey et al., 2015). For example, a forced choice of buying food, healthcare, paying for rent or other necessities may result in eviction and worse conditions before official systems get involved (Benfer & Wiley, 2020; Castrucci & Auerbach, 2019). As this example implies, imposed policies and institutions that define “taxation and tax credits, old-age pensions, sickness or rehabilitation benefits, maternity or child benefits, unemployment benefits, housing policies, labour markets, communities, and care facilities” are some of the foundational causes of the immediate causes of SDOH (Marmot, 2005, p. 1102).

Focusing on determinants of health is relevant because of the importance of health as a goal for most people, which becomes even more salient during humanitarian crises. To survive, people need to be healthy, which entails “complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 1948). This broad definition includes subjective well-being, which reflects people’s personal evaluations and experiences, in a eudaimonic domain (e.g., living a fulfilling life) (Lee et al., 2013). Thus, evaluating SDOH as an important customer outcome—which might be measured in terms of homelessness, food insecurity, older adults, and issues with access to education as conditions of vulnerability (Clapp et al., 2020)—aligns well with TSR, because responses to humanitarian crises that address threats to health can be truly transformative for people experiencing vulnerabilities. Even if socioeconomic conditions often relate to health inequalities and social policies that affect health (Adler et al., 2016), some responsibility to address SDOH lies with organizations that contribute to socioeconomic ecosystems. That is, if some health determinants are social in nature, then participants in the social realm, including service organizations, must address them, such as by meeting the social needs of people experiencing vulnerability (Castrucci & Auerbach, 2019). To alleviate vulnerability though, various entities in service ecosystems likely need to coordinate their efforts and articulate TVPs that can achieve well-being. This would be founded on resource integration, which shapes individual subjective well-being (Chen et al., 2020). Previous research reveals that consumption adequacy, such that basic life necessities are met, is key to people’s perceived

life satisfaction (Martin & Hill, 2012). People experiencing vulnerability seek and work hard to escape their situation, with a variety of coping strategies, such that they are open to value propositions that would enable them to apply their own resources and capabilities in efforts to overcome their vulnerability (Martin & Hill, 2012).

Furthermore, to understand complex social problems a syndemics lens is helpful. That is, “syndemics are adversely interacting diseases and other health conditions that increase the illness burden of a population, commonly as a consequence of harmful social conditions that produce multiple disease clusters and vulnerable physical bodies” (Singer, 2018, p. 1), so a syndemic approach evaluates how social environments interact with inequality and injustice to manifest in vulnerability (Singer et al., 2017). In turn, it reveals the demand for broad interventions, designed to deal with the social origins of a problem (Singer et al., 2012). Syndemic vulnerability arises in living environments in which two or more health conditions co-occur, so people risk concurrent health problems (Willen et al., 2017). Its solutions thus must involve multiple constituents. The current study is part of a broader discussion that attempts to take an ecosystem view of value cocreation and its capacity to mitigate vulnerabilities stemming from syndemics.

Archetypes of service innovation to analyze transformative value propositions

A crisis such as the COVID-19 pandemic can create or exacerbate customer vulnerabilities but also stimulate innovative value propositions to alleviate those vulnerabilities. Archetypes of service innovation reveal the strengths and limitations of TVPs in relation to value cocreation (Helkkula et al., 2018). As suggested by Jaakkola (2020), we use archetypes of service innovation as a domain theory, to establish new theoretical insights into customer vulnerability. Specifically, we propose that output-based archetypes prioritize deliverables, process-based archetypes identify service processes, experiential archetypes examine customers’ phenomenological value experiences, and systemic service archetypes examine interactions among actors and resources. The former two have dominated service innovation research (Helkkula et al., 2018), but the latter two archetypes also are important for organizations seeking to alleviate customers’ insecurity in a service ecosystem. With a theoretical synthesis of approaches to service, we seek a more structured, deeper understanding of TVPs. For example, firms cannot create customer experiences directly but instead must design a service ecosystem and processes to facilitate that customer experience. Each concept has broad support and applications, but they have not been applied in research into customers’ vulnerability during humanitarian crises. Using

relevant examples, we evaluate this new *assumptive ground* (Alvesson & Sandberg, 2011) to advance understanding of important service research concepts. Then we gauge customer vulnerability in these exemplars (Siggelkow, 2007) to illustrate how TVPs might be applied during humanitarian crises.

Exemplars of TVPs in a humanitarian crisis by service innovation archetypes

We searched for various organizational responses to the COVID-19 pandemic between March 2020 and March 2021 that indicated efforts to serve people with food and/or housing insecurities, older adults, and people with limited access to education. The (combinations of) search terms included “value proposition,” “COVID-19,” “vulnerable customers,” “pandemic response,” and “business model.” When we identified exemplars, we adopted a snowball technique to find additional insights in the references and citations. Rather than an exhaustive review, we seek to outline how TVPs can help alleviate customers’ vulnerabilities during humanitarian crises, which resources and capabilities are required to deliver these TVPs, and how they affect customer well-being. This theory-based approach, rather than a case-based approach to theory development, can effectively reveal key outputs, processes, customer experiences, and ecosystems (Black & Gallan, 2015; Wieland et al., 2012), which in turn affect TVPs and well-being.

Output-based transformative value propositions

When a firm makes an output-based TVP, it is attempting to create offerings with valuable attributes. In the simplest form, output-based TVPs provide essentials, such as food. The output might not change, but some aspect of it shifts, such as an increase in quantity or change in price (Helkkula et al., 2018). Financial insecurity during humanitarian crises often makes access to food, as a basic resource, difficult, and the resulting food insecurity implies an inability to access food of sufficient quantity or quality (Myers, 2020). For example, the COVID-19 pandemic worsened the conditions of and increased the number of people experiencing food insecurity (Hake, 2020), such that in the first few months of the pandemic, calls to a U.S. social needs helpline frequently focused on food insecurity (Kreuter et al., 2020). To address such food insecurity, Burger King offered an output-based TVP that provided two free kid’s meals with any purchase. The change refers to the deliverable output, even though the service ecosystem and service process remained unchanged. This rather simple reconfiguration entails only a change in the price. Although it arguably represents a promotion, because it likely cost the organization more than it generated in

incremental revenue we include it as a representation of a simple reconfiguration of resources.

Output-based TVPs also might provide resources that people experiencing vulnerability have lost, such as the digital devices that vulnerable students required to be able to access online learning offerings during the pandemic (Strunsky, 2020). Locked-down students could not physically attend their schools or universities, and learning mostly transitioned to online formats, a shift that exposed disparities between students with ready home Internet access and those who lacked it (Adely & Balcerzak, 2020). This “digital divide” in turn precipitated additional problems, because schools needed to find a way to provide the resources they previously offered in person, whether through online instruction, e-libraries, streaming, or online tutorials and thereby overcome the “homework gap” (Turner Lee, 2020). Pandemic restrictions that closed public libraries also eliminated the primary channel for Internet access for many university students (Moynihan, 2020). Without stable access to the Internet, vulnerable students and pupils had to take risks to find Wi-Fi (Mansfield & Conlon, 2020), including working from parking lots and potentially exposing personal data to open networks. As output-based TVPs, some universities, not-for-profit organizations, and school districts allocated funds or applied for grants to obtain tablets and computers they could lend to the students they serve.

Process-based transformative value propositions

When a firm cocreates a process-based TVP, the focus is on applying new process ideas or using processual thinking in fundamentally new ways, by modifying how the service provider or customer applies and integrates resources. In its simplest form, a process-based TVP does not change the customers or the place where the service is offered but rather alters how human capabilities get applied to enable the service. Older adults tend to be particularly vulnerable during humanitarian crises; they were at a higher risk of contracting COVID-19 (Centers for Disease Control, 2020a), as well as greater social isolation. Therefore, some grocery stores opened earlier or hosted exclusive shopping hours for seniors to help them maintain social distance (Lakritz, 2020). This new value proposition helped make shopping safer and reduced older customers’ risk of contracting COVID-19. It also represented a revised service process, even though the service ecosystem remained unchanged. This change demanded a somewhat complex set of capabilities from service organizations, which had to redesign their processes and engage in communication, commitment, and enforcement efforts.

Another changed process and place emerged in many delivery processes, such as when schools and universities changed from face-to-face lecturing to online teaching.

This transition was necessary but had uneven effects: students already endowed with sufficient resources and support adapted relatively readily, but others suffered from the reduced individual attention, social support, and learning time (García & Weiss, 2020). They also might have lost access to supportive whole-child development offerings, such as after-school activities, socializing with other students, and practice with time management skills (García & Weiss, 2020). As educational services continue to transition, various service providers, including teachers, coaches, tutors, and counselors, will need to develop new process-based TVPs to engage students in new experiences.

Experiential transformative value propositions

With experiential TVPs, the cocreation effort aims to increase positive and diminish negative experiences for customers; the essence of experiential TVPs is how customers or other important actors experience value. Despite the integral role of experiences in value cocreation, service design and innovation research traditionally have not embraced an experiential archetype (Helkkula et al., 2018). S-D logic emphasizes that value propositions are phenomenologically (experientially) cocreated by an actor in specific contexts (Vargo, 2020), such that firms cannot deliver value experiences and instead only participate in the cocreation and offering of value propositions (Vargo & Lusch, 2016). According to Lanning (1998, p. 55), a “value proposition is the entire set of resulting specified experiences.” Experiential TVPs reflect phenomenology concepts (Husserl, 1970), and a phenomenological approach to value and value cocreation is evident in research informed by S-D logic (Vargo & Lusch, 2008). In any context, including humanitarian crises, customers’ and other relevant actors’ positive value experiences provide the foundations of service (Lusch & Vargo, 2006) and are the reason for being for any service firm.

As responses to a humanitarian crisis, TVPs can alleviate customers’ experience of vulnerability. For example, on Seesaw’s novel learning platform, teachers and students engage in dialogues about assignments in ways that were not previously possible in virtual settings (Lagorio-Chafkin, 2020). Another technology, introduced by Megilla, encourages older adults to share their life’s stories to alleviate their sense of loneliness and separation (Orlov, 2020). In both these exemplars, customers experiencing vulnerability were enabled to participate in new activities that might increase their overall well-being, by increasing social interactions or feelings of belonging. In addition, Internet service providers created price points for various customer segments, including free services provided to qualified consumers (Adely & Balcerzak, 2020), to alleviate the negative experience of a lack of access to the web. School busses provided Wi-Fi service for rural populations (Hannon, 2020). By helping

customers overcome the digital divide and lack of access to educational materials, these initiatives reduced experiences of vulnerability. Lanning (2020) argues that many firms do not fully commit to delivering what they promise. Thus, the relevant question is not, “What’s our value proposition?” but rather “What customer experiences should we cocreate?” and “How can we best ensure that customers obtain these experiences?” (Eggert et al., 2020).

Experiential TVPs also can emerge from other archetypes or be embedded into other TVP archetypes. To facilitate distance learning, the Tata Group provided its e-learning software free of charge to educational institutions in India (Clift & Court, 2020)—a minor change in the service process but a significant change in how new (previously underserved) actors experienced education during the pandemic. The output was a novel improvement in access to educational materials. This simple change to pricing made the offering available to new market segments, many of whom were experiencing vulnerability, necessitating a broader understanding of target market needs, wants, and experiences. This required an expanded ecosystem in which to cocreate value. As another result, the organization expanded its customer knowledge, capabilities, and future revenue possibilities.

Systemic transformative value propositions

During the COVID-19 pandemic, some innovative service organizations developed new service ecosystems around their customers. Systemic TVPs focus on actor allocations, such as the links among the customer roles of user, buyer, and payer (Michel et al., 2008), or resource integrations. A simple form of systemic TVPs adopts one of the roles, such as when school districts offered free lunches not just to students but to anyone who came and indicated a need for food (Blume, 2020; Green & Fadulu, 2020), which represented a new customer segment. S-D logic and its embrace of a general, actor-to-actor, systemic perspective anticipates that value cocreation takes place in service ecosystems that comprise many actors (Vargo & Lusch, 2011, 2016).

For instance, housing insecurity due to the COVID-19 pandemic emphasized systemic failures and social injustice in the United States (Pollack et al., 2020). Calls to 2-1-1 (a social needs helpline in the U.S.) skyrocketed at the start of the COVID-19 pandemic, first mostly directed toward food insecurity; later, there was a trend toward requests related to housing insecurity (Kreuter et al., 2020). Solutions to the problem needed to come from a systemic level, because it is difficult to shelter in place, as required by public health authorities, without shelter. In turn, people without homes experienced greater risk of COVID-19 exposure (Centers for Disease Control, 2020b), along with multiple linked issues, such as lack of access to health care (Clark-Ginsberg et al.,

2020; Kushel et al., 2007). People experiencing homelessness also lack material and social resources to alleviate risks of a natural hazard, such as COVID-19 (Clark-Ginsberg et al., 2020). A systemic TVP designed to address housing insecurity in the hospitality sector involved hotels that offered drastically reduced rates (\$50 or less). Noting these offers, housing advocates and not-for-profit organizations worked to cover these costs (Fakuade, 2020), a partnership that had not existed prior to the crisis. Thus, the incrementally altered price of a room begot drastic changes among service ecosystem actors and added complex new resources (hotels working with housing not-for-profits). It also required the development and enforcement of new rules and processes for long-term occupancy.

Astra Zeneca sought to develop a novel distribution system, in the form of a service ecosystem that included previously unlinked partners. In partnerships with governments and other companies, it increased supply chain efficiency for the distribution of critical health care equipment and supplies (Clift & Court, 2020). This organization and its partners pushed to create a new service ecosystem that would last even if the COVID-19 pandemic were to end, as a means to address future humanitarian crises. Each entity within the new service ecosystem needs to develop novel capabilities, including those that allow for the integration of the capabilities of the various other members of the service ecosystem.

In Table 1, we sort exemplary service organizations according to the types of customers' vulnerabilities they sought to alleviate during the COVID-19 pandemic: homelessness/housing insecurity, food insecurity, older adults, access to education, and health insecurity. That is, we show how service organizations can use the service innovation archetypes typology to structure their thinking about how to construct TVPs. This table lists the service innovation archetypes altered by the firms' TVP: output, process, customers' value experiences, or service ecosystem. In many cases, each exemplar represents a variety of archetypes. Thus, while we use specific exemplars to illustrate the individual archetypes, we acknowledge that most exemplars do not represent only one archetype. How various archetypes interact to create TVPs that can address long-term vulnerabilities is discussed next.

Assuming a value-centric approach to address long-term vulnerabilities

Because services can transform social action and dominant social structures (Blocker & Barrios, 2015), if service organizations react to humanitarian crises, customers' long-term vulnerabilities can be alleviated and well-being can be increased (Anderson et al., 2013). In review of each exemplar, we determine the extent to which the TVP requires

a simple or disruptive reconfiguration of firm resources (Chandler & Lusch, 2015). Long-term vulnerabilities result from the intersection of various factors, prompting our reliance on a syndemic lens.

Crises other than the COVID-19 pandemic can provide illustrations of long-term vulnerabilities. For example, when Hurricane Katrina hit New Orleans in 2005, it caused major damage and created sustained crisis and vulnerability conditions. Food, water, and other basic supplies were scarce. Long-term food insecurity following this crisis was acute for local residents with weak social support, poor physical or mental health, and women (Clay et al., 2018). Mental health detriments also have persisted for survivors of Hurricane Katrina (King et al., 2016), and its traumatic effects also have led to low birth weights among their children, such that "women who are most vulnerable to disaster may be also vulnerable to poor pregnancy outcome" (Harville et al., 2015, p. 2512). Another exemplar of a persistent problem relates to the disruption of educational facilities, which creates long-lasting effects too: "Research conducted six months after Hurricane Katrina found that about twenty per cent of students in New Orleans were either not enrolled in school or had missed more than ten days a month. One study reportedly found that, five years after the storm, roughly a third of the city's children had been held back, nearly double the average in the South; another study reportedly found that the average seven-year-old in New Orleans at the time of the hurricane was, a decade later, more likely than his or her counterparts in all but two cities in the country to be neither employed nor attending school" (MacGillis, 2020).

In the short term, following a humanitarian crisis, rapid action is needed, in the form of output-based TVPs, such as to deal with immediate food insecurity. However, such short-term TVPs cannot alleviate long-term vulnerability, which instead demands more complex TVPs. Economic resources might fund some key initiatives but do not constitute a comprehensive strategy. Monetary support for COVID-19 initiatives and stimulus payments made directly to taxpayers has helped but does not solve the problems of people experiencing vulnerability; such forms of capital are resources, not strategies. Systemic TVPs offer greater promise; in Table 1, we present Bank of America's commitment to spend \$1 billion to address SDOH that existed previously but also have been intensified by COVID-19. Beyond the strictly financial contribution, the pledge also cites the need for a long-term solution to ameliorate sources of vulnerability, a goal that led Bank of America to revise its distribution network, spur the development of a vast ecosystem of partners, and generate novel success metrics. One-time donations tend to reify existing networks and enterprises, but this TVP encompasses a novel approach to engage a wider variety of actors. Sharing Excess, which was founded in 2016, also uncovered a new purpose and significant demand for its service during the COVID-19 pandemic. It facilitates transfers of student

Table 1 Output-based, process-based, experience, and systemic innovative transformative value propositions (TVPs) cocreated to serve customers experiencing vulnerability during the COVID-19 pandemic

Categories of Customers Experiencing Vulnerability	Service Innovation Archetypes				
	TVP Exemplars	Output	Process	Experiences	Systemic
Homelessness/housing insecurity	Some hotels offer drastically reduced rates (\$50 or less); housing advocates work with not-for-profit organizations to cover costs for people with housing insecurities (Fakuade, 2020) “Bank of America Corp. is committing \$1 billion to address economic and social disparities heightened during the COVID-19 pandemic. It will address four areas: job training, health, small businesses, and housing...Potential support opportunities include aid for minority-owned small businesses, skills training with high schools and colleges, investment in affordable housing, and recruiting in underserved areas, among others” (Hudson, 2020)	Housing and health security	New process	Able to shelter off the streets to reduce risk of contracting COVID-19	New ecosystem
Food insecurity	Burger King, a fast food restaurant chain, is giving away two free kid’s meals with any purchase, with the aim of fighting hunger among low-income, food insecure Americans (Lakritz, 2020) Sharing Excess, a not-for-profit organization, facilitates sharing of excess meal swipes (vouchers) to be used at local restaurants for community members in need and provides “income for a team of 10 drivers and a source of pride for hundreds of unpaid volunteers” (Downey, 2020)	More affordable housing Food-insecure customers have another option	New process Same	Address causes of inequality to alleviate suffering due to housing insecurity Alleviate children’s food insecurity	Expands existing ecosystems Same
Older adults	Some grocery stores open earlier and host exclusive times for seniors to shop to help maintain physical distance (Lakritz, 2020)	Food insecurity is mitigated through coordinated resources	New process	Job creation, alleviation of food insecurity for vulnerable community members	New process
		Exclusive shopping hours	Revised process	Alleviate health insecurity	Revised process

Table 1 (continued)

Categories of Customers Experiencing Vulnerability	Service Innovation Archetypes				
	TVP Exemplars	Output	Process	Experiences	Systemic
Access to education	Megilla, a video-storytelling platform designed to bridge generations and record treasured stories, offers a free basic platform to help alleviate seniors' loneliness and separation during the COVID-19 quarantine (Orlov, 2020)	Free service for older adults	Same	Alleviate loneliness and isolation	Same
	Sanvis Health's CareHero is "a cloud-based virtual care offering tailored for the exceptional challenges that senior living communities are facing during the COVID-19 pandemic" (Orlov, 2020). It helps operators of skilled nursing facilities coordinate residents' care	Better care and well-being	New process	Alleviate issues of care coordination and scheduling for older adults	
	Tata Group (India) provides e-learning software free of charge to educational institutions to facilitate distance learning (Clift & Court, 2020)	Access online educational materials	Minor changes	Address lack of access to educational materials	New actors
	School busses create Wi-Fi hotspots in rural and underserved communities in the U.S. during COVID-19 (Turner Lee, 2020). This proven solution serves those without home Internet access (Evans, 2016) and helps students access content and complete assignments on time (Koenig, 2020)	Revised offering	Minor changes	Address lack of access to education	New actors and resources
Many colleges lend laptops to students. Online service platforms like One Simple Wish (Strunsky, 2020) match students who need laptop computers with donations	Improved ability to learn online	Changes to policies and procedures	Address lack of access to education	Minor changes	
Comcast provides free Wi-Fi hotspots (even to non-customers), unlimited data, and will not disconnect delinquent customers during the COVID-19 pandemic (Heyl, 2020)	Impact on learning capabilities	Changes definition of "customer"	Alleviate lack of broadband access	New actors	
Seesaw provides a learning platform that enables educators to use voice-image technology to overlay audio over images (Lagorio-Chafkin, 2020)	Facilitates virtual learning in previously not possible ways	Minor changes	Seamless learning, submissions, and evaluations	New actors creating new educational content	

Table 1 (continued)

		Service Innovation Archetypes			
Categories of Customers Experiencing Vulnerability	TVP Exemplars	Output	Process	Experiences	Systemic
Health insecurity	<p>Apple and Google are collaborating to design software to “alert users if they came in contact with someone infected with the virus” (Ip, 2020), helping people better assess their risk of exposure</p> <p>Michaels stores and sellers on Etsy developed do-it-yourself face mask kits, complete with all the supplies and instructions required to make protective equipment</p> <p>Astra-Zeneca created novel partnerships with governments and other companies to increase the efficiency and skill in supply chains and distribution of critical equipment and supplies (Clift & Court, 2020)</p> <p>The Dallas Connected Community of Care brought together local government, safety net providers (food banks, homeless shelters), community organizations, and health care providers to identify, trace, and educate people living in hot-spot, underserved communities (Kosel & Nash, 2020)</p>	<p>New offering</p> <p>Enable do-it-yourself PPE</p> <p>Novel value constellation</p> <p>Novel value constellation</p>	<p>New process</p> <p>Minor changes</p> <p>Revised processes</p> <p>Revised processes and resource integration</p>	<p>Alleviate health insecurity</p> <p>Alleviate health insecurity</p> <p>Alleviate SDOH and health risks</p> <p>Alleviate of SDOH and health risks</p>	<p>New actors and resources</p> <p>Minor changes</p> <p>New actors and new type of resource integration</p> <p>New actors and new type of resource integration</p>

meal vouchers that can be used at local restaurants among community members, and in support of its operations, it commits to hiring local residents, while attracting the effort of hundreds of volunteers (Downey, 2020). To make the business model work, Sharing Excess had to develop a new service ecosystem, with the potential to address food insecurity for college students and others.

A value-centric TVP also might combine output-based, process-based, experiential, and systemic innovations, to leverage strengths and overcome limitations. Although the different archetypes in cocreating TVPs are not really isolated, identifying these distinct types is useful to understand how they contribute to the overall value-centric approach, which then can alleviate long-term customer vulnerabilities (c.f., Helkkula et al., 2018). That is, a combined value-centric approach is required to address complex, long-term needs that by definition require multidisciplinary efforts (Singer et al., 2012). For example, a new product from Sanvis Health, called CareHero, provides “a cloud-based virtual care offering tailored for the exceptional challenges that senior living communities are facing during the COVID-19 pandemic” (Orlov, 2020). Practitioners in skilled nursing facilities can use it to coordinate residents’ care and appointments, which vastly increases the coordination of the efforts of various actors who enter the patient’s ecosystem. Such coordination has profound effects for the health and well-being of older adults, their families, and other caregivers. It also encourages greater communication, which tends to be a critical tension for patient-centered care (Vogus et al., 2020). This value-centric approach combines output- and process-based TVPs to change how patients schedule health appointments. CareHero also establishes a new service ecosystem to connect patients, families, caregivers, clinicians, health care professionals, and insurance and payment sources, which improves the experiences of all these parties and reduces people’s anxiety, uncertainty, and time spent scheduling.

During the COVID-19 pandemic, many health care organizations also sought to alter their strategies to meet patients’ needs. When emergency rooms were swamped with COVID-19 patients, hospitals had to postpone routine and elective health care, which in turn created an unexpected opportunity to re-evaluate the services offered to customers (Sorenson et al., 2020). Some notable outcomes include adjustments to imbalanced revenue streams, redeployments of (human) resources, and more investments in technologies such as telemedicine. A quote from a health care executive illustrates this shift:

I believe the time has come to revisit the way health-care is being delivered, and if we’re right, we’re going to be having to rely more and more on technology. It’s

a sensitive issue because dollars are tight, but we have to stay ahead of the market. (Squazzo, 2020, p. 14)

In seizing this opportunity, brought about by a humanitarian crisis, to revise their health systems (Sorenson et al., 2020), health care providers and systems revealed themselves as nimble, in contrast with long-standing assumptions that the industry was resistant to change. For true systemic change to occur though, organizations and providers will need to maintain their commitment to telehealth, mental health, and primary care service, as well as provide more home-based care and eliminate some low-value care services (Harrison, 2020; Sorenson et al., 2020). When one health care system adopted two new services, drive-thru care sites and a virtual health care platform (Choi et al., 2020), it embraced changes in all four service innovation archetypes: the process (customers no longer come to a clinic), outcome (greater access to care and less time to obtain it), customer experiences (safer to get healthcare service via the drive-thru or online), and ecosystems (patients, health care professionals, and other actors must work together to deliver service).

To reinforce the utility of such an approach, we also consider a value-centric solution that could engage all four archetypes to cocreate a TVP to address a long-standing challenge, namely, climate change. Addressing this threat to humanity and its potential to impose vulnerability on everyone requires concerted effort among policy makers, multinational corporations, local governments, community groups, and individuals (Sun & Yang, 2016). Service outputs must be significantly altered to reduce their impact on the environment; innovative processes are needed to meet basic human needs through more effective resource usage; customers’ experiences are likely to change, such as those related to food choices, transportation, and travel opportunities; and addressing this humanitarian crisis necessitates a systemic approach, because it is a syndemic that cannot be solved simply. Climate change is important for business management, human civilization, and further research (Nyberg & Wright, 2020).

Discussion and implications

With this study, we have sought to determine how a typology of service innovation archetypes clarifies the cocreation of TVPs involving vulnerable customers, as well as how the SDOH framework might explain the differences among customers’ experiences of vulnerability during a humanitarian crisis. To address these questions, we integrate the typology with the SDOH framework, such that the TVP characterization we suggest theoretically links knowledge about customer vulnerability, elements of SDOH, and service

innovation archetypes. Insufficient access to education and health care, aging, and food and housing insecurity (critical SDOH) can create vulnerability, which can be alleviated with TVPs, especially during a humanitarian crisis such as a pandemic, because the extreme condition accentuates the relevance of the vulnerabilities. To mitigate vulnerability, service innovation is promising but not yet fully realized. To encourage such efforts, we propose that actors in service ecosystems must recognize that value cocreation depends on their introduction of innovative, relevant value propositions (Vink et al., 2020).

With this research, we characterize TVPs as cocreations by service providers and people experiencing vulnerability. With SDOH, we apply a relevant framework to the types of vulnerabilities customers experience during a humanitarian crisis, which has strong theoretical utility. Furthermore, we use syndemics to illustrate the complex nature of the causes of vulnerability (Singer et al., 2017). Many factors can intersect to create conditions that seem inescapable; by cocreating TVPs though, service providers can offer these customers a clearer way forward, to help them see light through a crack in a prison wall. Furthermore, we propose a novel conceptualization of customer vulnerability, pertaining to how it is experienced in conditions of homelessness, food insecurity, aging, and limited access to education or health care, due to a humanitarian crisis. With this more nuanced view of customer vulnerability, we reveal how customers experiencing vulnerability can be aided by service organizations in the short- and long-term. When service organizations can identify causes of customer vulnerability, they also can identify opportunities to cocreate innovative new TVPs to address them.

As a second contribution, we apply the archetypes of service innovation to understand both the cocreation and impacts of TVPs. This typology facilitates analyses of TVPs, according to an identification of their characteristics. Such insights are relevant, because resolving the thorny problems (syndemics) that result from humanitarian crises require TVPs that integrate different archetypes, such that they produce mutually beneficial outputs, well-functioning processes, a systemic view, and a fully inclusive human commitment to cocreate valuable experiences for customers in crisis. That is, the output-based archetype highlights the intended aim of TVPs: improved well-being for everyone. The process-based archetype focuses on the importance of managing the process for cocreating TVPs. The experiential archetype addresses vulnerable customers' positive experiences of TVPs. A systemic archetype integrates service providers, customers, and other stakeholders and their resources to cocreate TVPs. Combining all four in a value-based TVP is a significant challenge but also a powerful way to address a syndemic.

To illustrate these combinations, in Fig. 1 we position each archetype around a circle that expands as the intensity of the particular dimension increases. Then we map three exemplars onto Fig. 1. First, Astra-Zeneca cocreated a totally new TVP, through novel partnerships with governments and other companies to increase the efficiency of supply chains to distribute critical equipment and supplies. With its new business strategy and novel capabilities, it strongly reflects the output-based, process-based, and systemic attributes, with a medium level of experiential impact. Second, the bus-provided mobile Wi-Fi hotspot service to increase educational access among rural and underserved communities was less intense in terms of output-based, process-based, or systemic TVP, but it powerfully alleviated children's experiences of vulnerability due to their lack of access to education. Third, Sharing Excess and the meal vouchers it provides ranks high on the output-based and experiential dimensions. Its process-based dimension is at a medium level, and the systemic dimension is low.

Thus, as Fig. 1 shows, TVPs can be evaluated according to service innovation archetypes (output-based, process-based, experiential, and systemic) and according to their intensity, or the extent to which they involve incremental or more radical changes to capabilities and resource integration. When more service innovation archetypes change in developing a TVP, the offering organization must develop more extensive novel capabilities, both internally and externally focused. To do so, firms need to assimilate and cooperate, such that they strengthen their internal and relational abilities. Vulnerability can be short-term and temporary or more permanent, so it is important to include time elements when assessing the length of humanitarian crises and their effects on customers experiencing vulnerability. Some humanitarian crises last longer than others: A hurricane that causes limited damage may take just a few months to recover, an earthquake that produces extensive damage may take years, and a pandemic may lead to permanent changes. As a result, service organizations must develop TVPs that alleviate short-term effects (e.g., immediate food insecurity), moderate-duration impacts (e.g., establishing expanded housing options), and long-term, sustained forms of vulnerability (e.g., healing the digital divide with educational software and training).

Furthermore, when more archetypes of service innovation are involved in developing TVPs, service providers need to become more customer-focused and customer-driven in innovating their business models, to develop and acquire appropriate resources and capabilities (Keiningham et al., 2020). They also likely need to cooperate in service ecosystems to transform their offerings (Kandampully et al., 2021). With a systemic archetype component, researchers can more fully engage with prior literature on service ecosystems to

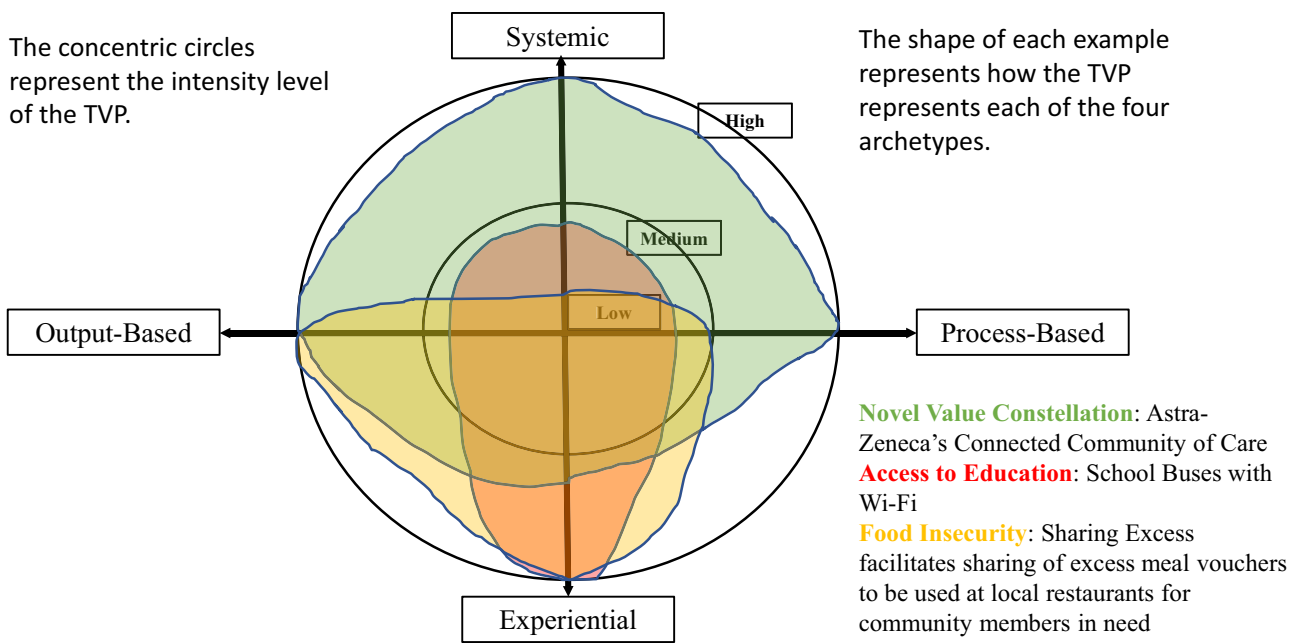


Fig. 1 Model of transformative value propositions (TVPs) by service innovation archetypes. Note: The exemplars in this figure illustrate TVPs described more fully in the text and Table 1

represent the context and phenomenon under examination. Government agencies (such as FEMA in the US) might provide initial aid to people experiencing vulnerability during a humanitarian crisis, but sustained efforts need inputs from wider varieties of ecosystem actors. Firms are not enough, government agencies are not enough, not-for-profits are not enough, and the public at large is not enough: All entities must align their goals and intentions. Mutually beneficial outputs, well-functioning processes, and fully inclusive human commitment to cocreate better value experiences require combined efforts to serve customers in crisis. This research also provides implications for the theory and practice pertaining to TVP cocreation. It is interactions among service innovation archetypes that can resolve syndemics, in line with a service ecosystem perspective. We contribute to services marketing, and TSR particularly, by offering a conceptual framework of the impact of TVPs on organizations and customers experiencing vulnerability.

Further research directions

Coordinating archetypes remains a fundamental challenge, highlighting the need for further research and trial-and-effort practices. In relation to TSR, we introduce the concept of TVPs and identify humanitarian crises as promising contexts for driving service design and innovation, due to the disruption they create in all aspects of customers’ lives and their potential to create new sources of revenue and profitability for companies. Rather than finding reasons to develop new

services, businesses may be subject to *imposed service innovation*, which triggers “a change of mindset and stimulat[es] business opportunities that would not have been considered under normal circumstances” (Heinonen & Strandvik, 2020, p. 102). Heinonen and Strandvik (2020) assess service innovations that emerged in response to the COVID-19 pandemic in terms of their strategic stretch (degree of business model change) and strategic horizon (response timeframe). The resulting four categories represent different organizational strategies for meeting customer needs, which might be meaningfully compared with the archetypes of TVPs that we identify. As the highlighted exemplars we provide herein show, certain TVPs demand radical transformations of organizational resources, consistent with previous predictions that businesses must obtain and mobilize relevant capabilities to deliver disaster recovery offerings (Ozanne & Ozanne, 2021). But if TVPs only require minimal changes to an organization’s business model, they likely involve just the redeployment of a few marketing mix elements (e.g., price, promotion). Therefore, continued research might investigate a continuum of TVPs and conceptualize them according to Heinonen and Strandvik’s (2020) model.

The COVID-19 pandemic made many sources of vulnerability, and their contributions to customer marginalization and disenfranchisement, highly salient. Underemployment and financial poverty are primary determinants of vulnerability, constraining access to health care, education, and other sources of welfare (World Health Organization, 2020). Health care could particularly benefit from innovative TVPs,

which would require organizations to reexamine their internal resources and external relations, then reconfigure their capabilities to engage successfully in novel service ecosystems. One option, reflecting a systemic approach, involves government agencies that invest in “local groups, such as neighborhood associations or local religious organizations, to revitalize the community and to identify and respond to residents’ needs post-disaster” (Raker et al., 2020, p. 2130).

Regarding the concept of TVPs and the service innovation archetypes typology specifically, we also suggest the need for research into the following questions:

- What are the long-term effects of TVPs on customer and frontline employee well-being?
- What role do service ecosystems have in the creation of TVPs?
- How should different entities within service ecosystems function (collaborate, integrate resources) to deliver on innovative TVPs?
- Can the archetypes of service innovations and SDOH be used to cocreate TVPs that alleviate people’s experiences of vulnerability due to climate change?
- Which combinations of archetypes of service innovation are most appropriate to address various forms of customer vulnerability?

Conflicts often emerge in response to cocreated offers of transformative service (Varman et al., 2021), so another topic for consideration is the potential unintended consequences of TVPs. Finally, the exemplars we provide may be subject to selection bias, so we call for empirical studies that specify which service organizations respond to humanitarian crises with which TVPs, including the characteristics of these organizations before and after the crisis and the measurable effects of their efforts on customers’ short- and long-term vulnerability. In so doing, such studies also could address different types of crises, other than a global pandemic, to learn if and how they require various configurations of TVPs to alleviate human suffering.

Conclusion

Transformative value propositions are not only possible, as the exemplars in this article show, but imperative. To address the needs of people experiencing vulnerability, the private sector must work with ecosystem partners to be innovative in service design and delivery. Sources of vulnerability are pervasive, and pressure to respond is intensifying. The dynamics of markets, the environment, and social trends are changing rapidly, and an organization’s future must include responding to these forces. Traditional competitors and

non-traditional technology must be embraced to develop a broad-based response to improve the lives and well-being of employees and customers. The nature of humanitarian crises (such as the COVID-19 pandemic) makes implementing service innovation challenging. Yet, some exemplars have clearly responded to the challenge, strategically and purposefully. What remains is for TVPs to spread more widely and systematically, so that attending to the needs of customers experiencing vulnerability becomes one of the primary aims in how service is delivered.

Declarations

Conflicts of interest None.

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