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Tackling exigent grand challenges through corporate social innovation: Evidence from the COVID-19 pandemic

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Abstract

While the body of research on grand challenges (GCs) has grown, our understanding of the role of corporate social innovation (CSI) in tackling exigent GCs, such as the COVID-19 pandemic, is limited. Based on in-depth analyses of four cases of CSI in the services sector during the COVID-19 pandemic, this paper contributes to the GC literature by developing a 3Es framework of the CSI process (i.e., embeddedness, engagement, and enhancement) to illustrate the mechanisms through which exigent GCs can be effectively addressed by firms in the services sector. First, CSI embeddedness in intersectoral partnerships with international organizations based on deep-rooted trust and collective commitment is found to be a fundamental mechanism for efficiently addressing the COVID-19 crisis. Second, CSI engagement through the transformation of existing technology and/or the adaption of existing products/services is found to be an important mechanism for meeting pandemic-induced social needs. Specifically, it is found that leading-edge technologies such as digital platforms can be rapidly repurposed to enable loosely coupled systems that evolve as a new channel to bring together various stakeholders and thus address this urgent GC. Finally, CSI enhancement supported by managerial agility and participatory governance structure plays a crucial role in enabling CSI to function effectively in the context of exigent GCs.

KEYWORDS

corporate social innovation, COVID-19 pandemic, grand challenges, intersectoral partnerships

1 | INTRODUCTION

The outbreak of the COVID-19 pandemic is “the most challenging crisis we have faced since the Second World War” (United Nations, 2020). It represents not only a health emergency but also an economic, social, and human crisis at the global level. Countries around the world are being forced to take “urgent and aggressive actions” to

combat this pandemic (World Health Organization, 2020). According to recent literature (Bertello et al., 2021; Kokshagina, 2021), effectively responding to the COVID-19 pandemic is clearly a grand challenge (GC). However, compared to most GCs, which are typically longstanding and require multiyear collaborative efforts, the GC associated with the COVID-19 pandemic is more pressing and urgent (Howard-Grenville, 2020). It caught the entire world off

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guard and “led to a global crisis that uniquely embodied both the momentary and devastating nature of a natural disaster and the scope and prolonged magnitude of a grand challenge” (Bacq et al., 2020, p. 706). This challenge is a type of exigent GC; such GCs arise suddenly and develop rapidly and widely, presenting a pressing challenge to the entirety of human society.

Although many GCs have existed at different times, systematic research on GCs is a recent phenomenon. The literature finds that firms in the private sector (hereafter referred to as “firms”) can play critical roles in solving the greatest problems faced by the world and in promoting sustainable, inclusive development (Fu et al., 2021; Stibbe & Prescott, 2020; Topple et al., 2017; United Nations, 2020). In particular, the framework of corporate social innovation (CSI), which is a new paradigm for innovation involving intersectoral partnerships between private firms and public organizations that produce profitable and sustainable change for both parties (Kanter, 1999), has been adopted to address various GCs. However, most of the existing relevant research focuses on solutions to longstanding and persistent GCs such as poverty alleviation, inequality reduction, and climate change mitigation (Gutiérrez & Vernis, 2016; Lashitew et al., 2020; Tarnovskaya et al., 2022; Wehn et al., 2021), and our understanding of the role of CSI in tackling exigent GCs, such as combating the COVID-19 pandemic, is limited. There are only a handful of studies examining the role of CSI in addressing this unprecedented GC. For example, Battaglia et al. (2021) present a case study of an Italian academic spinoff and find that academic spinoffs are ideal candidates to respond to urgent GCs through active CSI engagement. Employing data collected from seven companies in China, Crupi et al. (2022) find that firms adopt social bricolage and agile reaction strategies to facilitate CSI activities intended to address the pandemic. Peerally et al. (2022) observe that multinational enterprises (MNEs) adopt CSI approaches to meet the needs of vulnerable and at-risk populations.

These studies provide useful insights and focus on the important role of CSI in tackling GCs. However, the ways in which CSI can be initiated, introduced and executed effectively to address pressing exigent GCs are still under-explored. Intersectoral partnership-based CSI entails its own challenges, as partners from different sectors may be tempted to pursue their own interests at the expense of joint value creation (Bridoux & Stoelhorst, 2020; Ostrom, 2000). Hence, solving collective action problems and effectively introducing and implementing CSI have become vital issues in the context of enabling CSI to successfully address GCs. Such problems are aggravated in the case of exigent GCs due to considerable limitations imposed on the time and resources that are available for

Practitioner points

- CSI plays an important role in tackling exigent GCs.
- A 3Es framework of the CSI process consisting of Embeddedness, Engagement, and Enhancement is developed to illustrate the mechanisms through which exigent GCs can be effectively addressed through CSI in the services sector.
- The 3Es CSI model offers important policy and managerial implications for developing countries related to encouraging for-profit firms to effectively mobilize heterogeneous actors, overcome resource and institutional constraints, and develop novel solutions to tackle exigent GCs.

CSI. All of this highlights the importance of investigating the introduction and implementation process of CSI, which is critical in ensuring that it plays an effective role in tackling exigent GCs such as fighting the COVID-19 pandemic.

Finally, although service innovations are increasingly becoming social innovations (Gallouj et al., 2018), most studies on this topic focus on the manufacturing sector. There are a few pioneering studies on CSI in the services sector only. Co-creation by multiple agents is clearly identified as an important characteristic of social innovation in the services sector, and the co-creation of novel services is shown to be often led by citizens, social entrepreneurs or third-sector organizations such as NGOs or charities, who represent the interests of individual users and citizens (Windrum et al., 2016). Gallouj et al. (2018) argue that the co-creation of innovation is the result of interactions between the competences and preferences of multiple players. Babu et al. (2020) find that CSI plays an important role in value co-creation and that strategic alliances drive value co-creation by building a service ecosystem that facilitates sustained social innovation. These studies provide valuable insights, but our understanding of how CSI can be initiated and executed in the services sector in times of crisis to address exigent GCs (Ghauri et al., 2021) is limited.

Therefore, this paper seeks to contribute to the GC literature by investigating process issues concerning pandemic-induced CSI in the services sector in developing economies using primary sources of information. On the one hand, COVID-19 has been found to spread more rapidly in developing economies where inequality and poverty are more prevalent; in turn, this may further promulgate inequality and poverty (OECD, 2020; UNESCO, 2020).

Moreover, the World Bank (2020) highlights the necessity of addressing vulnerabilities that can exacerbate the global effects of the pandemic and of creating cross-border resilience against this exigent GC. On the other hand, in 2019, services accounted for 55% of the GDP of developing countries (Nayyar et al., 2021), and many innovation processes take place in the services sector (Gallouj et al., 2018). Based on first-hand data collected from fieldwork interviews, we apply a grounded theory methodology inspired by the work of Gioia et al. (2013) to analyze four examples of CSI taking place in three developing economies. In particular, we examine the following:

What are the mechanisms through which CSI can be initiated and implemented despite the challenges that arise during crises and the collective action problems inherent to intersectoral partnership-based CSI to promptly address exigent GCs?

Thus, this paper contributes to the literature in several ways. First, it contributes to the GC literature by advancing our understanding of the role of CSI in coping with exigent GCs in the specific context of for-profit firms. There is a large body of literature on the use of technological or social innovation to address longstanding GCs. However, the ways in which CSI can be initiated, introduced and executed effectively to address pressing, exigent GCs are underexplored, especially in the context of for-profit firms. On the other hand, although there is some literature on the roles of technology and knowledge management in disaster management (Beydoun et al., 2018; Callaghan, 2016; Oktari et al., 2020), the scale of the disasters that have been studied, such as floods, earthquakes, bushfires and landslides, is often local rather than global in nature. Unlike disasters, exigent GCs are associated with relatively large systematic impacts on the global economy and society. Moreover, many such studies have focused on the role of technology or knowledge management in the context of the public sector or civil society organizations, and the role of CSI in the context of for-profit firms has received insufficient attention. This study fills a gap in the GC literature, which mostly focuses on the role of CSI in addressing longstanding GCs.

In particular, this paper contributes to the literature by developing a 3Es framework of the CSI process that explains the mechanisms through which CSI can be rapidly introduced and effectively executed to promptly respond to exigent GCs. This 3Es framework features three dimensions, i.e., embeddedness in previous intersectoral partnerships with international organizations, engagement through transforming existing technology

and/or adapting existing products/services, and enhancement enabled by managerial agility and a participatory governance structure, which drive and facilitate rapid CSI formation and effective operation to tackle exigent GCs. This framework also provides a useful tool for the global community enabling us to accelerate our actions to tackle other GCs through social innovation in the context of for-profit firms.

Second, with regard to our understanding of how to tackle GCs through innovation, although there is a substantial body of literature that addresses responding to GCs using technological innovation and partnerships at the individual level (Bacq et al., 2020; Bertello et al., 2021; Kokshagina, 2021; Yokoi et al., 2021), little is known about the circumstances under which intersectoral partnerships can initiate CSI in firms to tackle complex new realities (Ghauri et al., 2021). In particular, the different goals, incentives and management practices of partners are constraints to the functioning of such hybrid organizational forms (Caldwell et al., 2017). Although misalignment can be addressed contractually, these management processes remain and affect task execution. This paper contributes to the GC management literature by identifying several key management changes that are needed for firms to make such partnerships successful under the conditions of emergency and complexity.

Third, while valuable research has been conducted on GCs in the manufacturing sector and developed countries, this paper contributes to the GC literature by providing valuable insights into how the services sector and developing economies can promote CSI to battle exigent GCs. The three-dimensional CSI model offers important policy and managerial implications for developing countries related to encouraging for-profit firms to effectively mobilize heterogeneous actors, overcome resource and institutional constraints, and develop novel solutions to tackle exigent GCs.

2 | CONCEPTUAL BACKGROUND

2.1 | Corporate social innovation and grand challenges

According to Mirvis and Googins (2017), CSI is a strategic intersectoral and/or firm collaboration in which a unique set of available tangible and/or intangible assets are combined to pursue value co-creation via breakthrough solutions. The underlying principle is that of applying synergies to solve emergent problems in society. Such intersectoral partnership-based CSI can provide new sources of value creation and establish a more socially relevant innovation system and corporate culture to

facilitate competitive advantage (Herrera, 2015; Kanter, 1999; Mirvis et al., 2016). In particular, CSI can substantially enhance private firms' own business development in difficult times. As CSI is a strategic business investment rather than a philanthropic activity, private firms use their best people and their core skills to facilitate it.

Dionisio and de Vargas (2020) provide a systematic literature review of the CSI research and find that Kanter (1999) proposes that CSI is an evolutionary notion that effectively encompasses other similar concepts related to corporate social value creation, including innovation for the base of the pyramid (BoP) (Hart & Christensen, 2002), social entrepreneurship (Ghauri et al., 2014; Seelos & Mair, 2005), and shared value (Porter & Kramer, 2006). CSI is a broad, inclusive process that involves deep collaboration with other sectors with the aim of co-creating something new that can generate both financial and social value and that has the potential to simultaneously increase participating firms' competitive advantage and offer needed solutions to societal problems (Dionisio & de Vargas, 2020). Moreover, CSI can include groundbreaking innovations; however, in many cases, it involves the application of existing technologies to situations in which they have not yet been used or in countries or communities that have not previously had access to these technologies or solutions.

In light of this, some studies examine the nexus between CSI and GCs, which are defined as "specific critical barriers that, if removed, would help solve an important societal problem with a high likelihood of global impact through widespread implementation" (George et al., 2016, p. 1881). Specifically, GCs are global problems (e.g., climate change mitigation, poverty alleviation, and inequality reduction) that can be effectively addressed through the coordination and collaboration of stakeholders from both the public and private sectors, as participants from different sectors and regions can bring essential, unique assets to work for social change. This multisectoral and multiregional participation usually pushes private firms toward a more radical social innovation stance (Mirvis & Googins, 2017). For example, by applying the BoP framework, Gutiérrez and Vernis (2016) investigate why some firms succeed in serving low-income citizens while others do not. By undertaking a comparative study of the internal and external conditions surrounding two MNEs, they highlight results showing a need for adequate government interventions and the important role of nongovernment organizations (NGOs) in stimulating CSI to better serve poor people at the BoP. Moreover, again employing the BoP framework, Lashitew et al. (2020) study a telecom firm in Kenya and find strong roles of local embeddedness and

organizational adaptation in facilitating CSI, highlighting the importance of developing a mission-driven identity in bridging goal multiplicities and rationalizing organizational change. Based on a qualitative study of H&M fair living wage programs in Bangladesh, Tarnovskaya et al. (2022) find that H&M uses CSI to combat GCs in collaboration with local stakeholders, suggesting that MNEs can use CSI to drive change in emerging markets if they have a long-term commitment and willingness to shape the surrounding business environment and a prominent standing among key stakeholders.

2.2 | Grand challenges and COVID-19

Ferraro et al. (2015) identify three main facets of GCs. They are (1) complex—the problems feature multiple interactions and nonlinear dynamics; (2) uncertain—the problems are difficult to forecast; and (3) evaluative—the problems cross jurisdictional boundaries, implicating multiple criteria of worth. By this definition, effectively combating the COVID-19 pandemic is certainly an exigent GC because the pandemic has boundless global reach and has swiftly caused overwhelming disruptions to health, the economy and society in general (Howard-Grenville, 2020). Moreover, Bacq et al. (2020) argue that unlike most GCs, which are longstanding and call for multiyear coordinated efforts among various stakeholders, fighting the COVID-19 pandemic is an exigent GC because the pandemic embodies "both the momentary and devastating nature of a natural disaster and the wide scope and prolonged magnitude of a grand challenge" (p. 706). For example, several studies indicate that the temporal landscape of climate change is quite different, as it needs solutions that are more methodical and long-term than those required by the pandemic. Ruiui et al. (2020) argue that the risks of the pandemic have great personal-level impacts, in contrast to the different prolonged implications of climate change. Moreover, the risks of the pandemic are more immediate due to how swiftly it spreads. Based on a recent survey of US citizens, Geiger et al. (2021) observe that people see differences in that the time frame of the pandemic is shorter and that it is natural and medical in nature rather than human-caused. Furthermore, Manzanedo and Manning (2020) highlight the difference in the complexity and scale of the change needed from societies to address climate change; indeed, although it is measurable quantitatively, there are no easy solutions because, for example, there is no vaccine to inoculate against the risks of climate change. These fundamental differences between the coronavirus pandemic and climate change imply that experience gained from tackling climate change cannot be

directly translated to fighting the pandemic. Thus, such an exigent GC is likely to require different policy responses and framing.

There are several studies relating the COVID-19 pandemic to GCs in general. For example, Howard-Grenville (2020) reflects on GC discourse and how it should be taken up in the field of organizational research in view of the COVID-19 pandemic. The author suggests that future work should theorize the arrows within the framework provided by George et al. (2016) explicitly to inform the processes that drive and connect articulation, actions, and outcomes to generate trajectories that can mitigate exigent grand challenges such as the pandemic. Brammer et al. (2020) investigate how the COVID-19 pandemic is affecting businesses and society and whether the role of businesses will return to normal after the pandemic. Based on an analysis of the societal impact of the COVID-19 pandemic in the U.S., this study discusses three scenarios concerning the long-term impact of the pandemic on the role of business in society, highlighting the utility of the societalization model for understanding the conditions necessary for a GC to become societalized. de Ruyter et al. (2022) argue that the COVID-19 crisis has exposed the vulnerability of international supply chains and cash and information flows. Hence, firms should reimagine their marketing capabilities with the aim of increasing their resilience to tackle such an exigent GC effectively.

2.3 | Corporate social innovation and COVID-19

There are two streams of literature investigating how this exigent GC can be tackled through innovation: one stream focuses on the involvement of individuals/crowds, including virtual hackathons (Bacq et al., 2020; Bertello et al., 2021; Yokoi et al., 2021) and extreme crowdsourcing campaigns (Kokshagina, 2021), and the other stream focuses on the role of CSI (Battaglia et al., 2021; Crupi et al., 2022; Peerally et al., 2022). Technically speaking, the former approach can be applied anywhere with an internet connection. As these studies reveal, however, it is more popular in developed economies such as the U.S. (Bacq et al., 2020) and EU countries (Bertello et al., 2021; Kokshagina, 2021; Yokoi et al., 2021). The latter can be found in both developed (Battaglia et al., 2021) and developing economies (Crupi et al., 2022; Peerally et al., 2022). These differences might be attributed to the weak institutional environments prevalent in developing economies (Peerally et al., 2022; Saka-Helmhout et al., 2021).

According to the macro sociological theory of socialization (Alexander, 2018, 2019), the COVID-19 pandemic has swiftly and significantly increased the societal

pressure on businesses and the role of firms in society (Brammer et al., 2020). Ekins et al. (1992) argue that social value creation requires private and public cooperation and collaboration with other stakeholders. Park and Ghauri (2015) indicate that to operate and succeed in meeting the challenges of GCs and new realities, companies need to consider the perspectives of several stakeholders who provide complementary contributions and expect varied returns. These arguments are consistent with stakeholder capitalism theory, which indicates that firms not only optimize shareholders' value in the short term but also consider the needs of all their stakeholders and society at large with the aim of pursuing long-term value creation (Shwab & Vanham, 2021). There is growing evidence that firms that adopt a long-term view perform better and are more competitive than other firms (Barton et al., 2017; Fauver & Fuerst, 2006; Hillman & Keim, 2001). Therefore, from the perspective of private firms, undertaking CSI is an important approach to tackling exigent GCs. However, as highlighted in Section 1, only the three studies mentioned above explore the relationship between CSI and exigent GCs such as the COVID-19 pandemic; thus, there is a need for more research on the dynamics under which firms engage in combating urgent GCs through CSI.

On the other hand, as indicated by Bridoux and Stoelhorst (2020), collective action problems refer to situations in which partners/stakeholders may be tempted to pursue their own interests rather than maximize joint value creation. Considering that intersectoral partnership is a fundamental element of CSI, addressing collective action problems could be a serious issue related to facilitating effective intersectoral partnership-based CSI to tackle exigent GCs such as the COVID-19 pandemic. There is a large body of literature on solving collective action problems at the local level (Bridoux & Stoelhorst, 2020; Ostrom, 2000, among others). Trust, reciprocity and reputation have been found to be the key determinants of successful collective actions (Ostrom, 2005). However, few studies address this critical issue in the context of emergency situations at the global level such as the situation that we are facing in the case of the COVID-19 pandemic. Thus, our study aims to shed light on how the collective action problems inherent to intersectoral partnership-based CSI can be solved during this unprecedented urgent crisis and the mechanisms through which CSI can be achieved to promptly tackle exigent GCs.

3 | RESEARCH SETTING

Tackling the COVID-19 virus demands resources and investments, and many governments have committed

enormous amounts of resources with a “whatever-it-takes” mentality (Mazzucato, 2021). Thus, 2020 witnessed a growing number and scope of intersectoral partnerships aiming to address the various challenges brought by the pandemic, delivering urgent health and socioeconomic responses to the pandemic, supporting communities in living with the pandemic or working toward postpandemic recovery and ensuring that things would be built back better. Almost immediately and simultaneously, governments, international agencies, global companies, academia and civil society organizations all rose to the challenge by continuously forming partnerships to enhance social capital, mobilize resources and develop the required infrastructure. Intersectoral partnerships such as public–private–civil society partnerships emerged in response to the COVID-19 pandemic; for example, in the area of public health services provision, contact tracing, isolation hotels, education and food supply support, and social protection provision for disadvantaged communities materialized.

4 | RESEARCH METHODS

4.1 | Research approach and case selection

To obtain comprehensive insights, we conducted inductive research that was multidisciplinary in nature and employed a case study approach (Ghauri & Grønhaug, 2010). Our empirical study was conducted by applying a grounded theory methodology that was inspired by the approach of Gioia et al. (2013). One of Gioia et al.'s (2013) most important contributions is their establishment of an inductive method for idea generation and associative data analysis that goes beyond first-order participant viewpoints. In the context of rigorous theorizing about salient human experiences, this method may help encapsulate essential concepts using terminology appropriate for the level of meaning of those who have had the experiences (Gioia et al., 2013). Thus, this scientifically sound method can aid in-depth analyses and critical interpretation and facilitate meaningful theorization regarding investigated phenomena. In this study, we intended to provide in-depth theoretical and practical insights from selected cases of complex phenomena in their natural contexts (Eisenhardt & Graebner, 2007; Yin, 2017). This approach helped us identify and explore the different dimensions that characterize phenomena (Leonard-Barton, 1990). Qualitative data also contributed to explaining and contextualizing partnership formation and management processes.

We developed the case study by building on different sources of information (Ghauri, 2004). First, we obtained first-hand information by conducting interviews with four

private sample firms involved in four intersectoral partnerships. Then, we collected additional material about the intersectoral partnerships from the corresponding websites and publicly available news articles. Specifically, the interviewed cases were purposefully and theoretically sampled (Ghauri et al., 2020; Shah & Corley, 2006) in two steps. In the first step, we searched for partnerships that were created during the COVID-19 pandemic period in 2020 via an internet keyword search using Google Search, which has broad coverage. Recognizing that we might miss some new partnerships without internet exposure, we incorporated expert recommendations from the partnership community of the United Nations (UN). Second, as we performed the search in only English, we may have missed cases that might have appeared in searches conducted using languages other than English. For this reason, to make the sample as representative as possible, we asked a Spanish-speaking expert to conduct and translate a search covering the Spanish-speaking countries of Latin America. Through these two steps, a total of 36 new partnerships that were formed in response to the COVID-19 pandemic were identified.

We applied the maximum variance sampling strategy to explore theoretical replication on partnerships for social innovation, hoping to maximize our chances of understanding the experiences resulting from a diversified range of practices implemented to fight COVID-19. We endeavored to select cases that differed from each other but that were sufficiently similar to facilitate comparative analysis (Ghauri, 2004). Moreover, our cases were selected using criteria pertaining to representativeness tied to the leading organization type, geographical location and comparability. First, the leading partner could be a private sector organization, a public organization or a civil society organization. Second, regarding geographical location, we tried to include partnerships serving all continents. Third, we included both immediate responses to the pandemic and mid- and long-term responses to the pandemic, which involved helping communities live with the pandemic and post pandemic recovery.

Based on the abovementioned three criteria, nine partnerships were selected for in-depth interviews; these partnerships were led by different types of organizations (5 were led by public organizations and 4 were led by private firms), situated in different geographical locations (Asia, the Middle East, Latin America and Africa), and varied in their focus on short- or long-term responses to the pandemic. For the purpose of this research, we focused on four partnerships in which the private sector has played a significant role, i.e., the Hayel Saeed Anam Group (Yemen) (hereafter referred to as “HSA”), the Tencent Foundation (China) (hereafter referred to as “Tencent”), Grupo Posadas (Mexico) (hereafter referred

to as “POSADAS”), and Hotel Flamingo (Mexico) (hereafter referred to as “FLAMINGO”). Of these, POSADAS and FLAMINGO protected women and migrants during the pandemic. The models of these cases are unique, as the partnerships accommodate vulnerable groups who are usually excluded from shelters.

Maximum variance sampling typically overrepresents members of some groups while underrepresenting others to take into account the widest possible range of experiences. The fundamental tenet of maximum variation sampling is to acquire a better understanding of a phenomenon by examining it from all angles (Ghauri et al., 2020). This approach enables the selection of cases or individuals who represent the whole spectrum of attitudes and perspectives on a subject under investigation, including both extreme and typical cases as well as any alternative positions that may be discovered (Given, 2008; Schreier, 2018). It enables researchers to pinpoint certain demographic groups to collect specific data for study. As the data sources used are very closely aligned with the research context, the margin of error in the results is also reduced (Ghauri, 2004; Schreier, 2018). This research was conducted between October 2020 and March 2021. A summary of the four cases selected for in-depth interviews is given in Table 1.

4.2 | Data collection

The data collected were part of a large UN Partnership Accelerator-commissioned research project on effective partnership practices implemented in response to the COVID-19 pandemic. The interviews were each 1 h long and were conducted via video-conference meetings based on a semi-structured questionnaire shared beforehand with the participants. Consent was obtained before the interviews, as they were digitally recorded. To prevent validity and reliability problems, we tried to build the narrative from the accounts of diverse interviewees in the partnerships. We interviewed at least two partners from each partnership. Please refer to Table 2 for details about the data sources.

4.3 | Data analysis

The interview transcripts were coded, and the set of codes was agreed upon by all the authors. The open codes were analyzed with a focus on commonalities and dissimilarities to extract abstract second-order themes from the specific first-level concepts. Following Gioia et al. (2013),

TABLE 1 Brief descriptions of the studied partnerships.

Private sector organization	Description	Other major partners
Hayel Saeed Anam Group (Food processing, MNE, Yemen)	<i>The International Initiative on COVID-19 in Yemen (IICY)</i> . This is a collaborative partnership of businesses and international organizations united by a desire to support Yemen's response to COVID-19. IICY partners work collaboratively with the Yemeni authorities and help tackle challenges through a wide range of activities.	Tetra Pak, Unilever, the United Nations, the WHO, the Yemen Private Sector Cluster and the Federation of Yemen Chambers of Commerce and Industry
Tencent Foundation (Digital Technology, China)	<i>Tencent Foundation Online Donation Platform</i> . The Tencent Foundation has launched many partnerships involving the private sector, NGOs and local governments and facilitated donations and crowdfunding to support various responses to the COVID-19 crisis.	Local governments, other firms, universities, NGOs, and international organizations such as WFP
Grupo Posadas (Hotel, Mexico)	<i>COVID-19 Women and Children Safe at Hotels, Mexico</i> . In response to the increase in domestic violence, this organization implemented a strategy to provide safe, temporary and free hotel accommodations for women and their children who are victims of domestic violence.	Spotlight Initiative, UNICEF and UNFPA, and national and local governments
Hotel Flamingo (Hotel, Mexico)	<i>IOM partnership on filter hotels for migrants</i> . The IOM, in partnership with the government, civil society, academia and the private sector of Ciudad Juarez (northern Mexico near the United States border), implemented a program to give temporary accommodation to migrants.	The International Organization for Migration

TABLE 2 Data sources.

Interviews	# of interviews CASE 1	# of interviews CASE 2	# of interviews CASE 3	# of interviews CASE 4
International organizations	1	0	3	2
Partners	4	2	3	1
<i>Total</i>	5	2	6	3
<i>Roles of interviewees</i>	Company spokesperson and managing directors of partners	Company Vice President and staff	Partnership coordinator, UN country office official, and professionals	Partnership coordinators and IOM and UN country office officials
Archival materials	Approx. # CASE 1	Approx. # CASE 2	Approx. # CASE 3	Approx. # CASE 4
Partnership reports	2	1	2	2
News	6	2	3	2
Webpages	9	8	11	5
<i>Total</i>	17	11	16	9

Abbreviations: CASE 1: The International Initiative on COVID-19 in Yemen (IICY); CASE 2: Tencent Foundation Online Donation Platform; CASE 3: COVID-19 Women and Children Safe at Hotels, Mexico; CASE 4: IOM partnership on filter hotels for migrants.

second-order themes were generated based on a rigorous analysis of emerging patterns, interconnections, and existing theory. Following a cyclical process in which we bounced back and forth between emerging patterns in the case data and existing theory, we were able to derive concepts from the quotations, which served as the foundation for the development of second-order themes (Corley & Gioia, 2011; Dubois & Gadde, 2002, 2014; Ghauri, 2004). Finally, we condensed these second-order themes into key aggregate dimensions to arrive at a result (Hagen et al., 2018). The emergent model (Figure 1), with its first-order concepts, second-order themes, aggregate dimensions, and, most crucially, their interactions, is presented here along with the analytical procedure and empirical results.

5 | THE CSI MECHANISMS USED TO TACKLE EXIGENT GCS

Based on evidence from studies of these four cases, this section analyses the process of CSI in the battle against the COVID-19 pandemic with a special focus on the factors and mechanisms that triggered the formation of the effective implementation and operation of partnership-based CSI and enabled this process. This allows us to proceed with a more in-depth discussion of the empirical results. We demonstrate how and why these aggregate dimensions and their underlying themes were developed. Following Figure 1, we begin with a presentation of the themes and the fundamental concepts (mechanisms) that underpin them. Table A1 contains the representative

quotes from which we extracted the concepts and subsequently condensed the seven themes.

5.1 | Embeddedness

5.1.1 | Intersectoral partnerships

The findings indicate that in all four firms, CSI is based on intersectoral partnerships, particularly public–private partnerships embedded in existing networks involving international organizations. For example, in the case of the International Initiative on COVID-19 in Yemen (IICY), a series of critically complementary skills, such as financial planning, time management, financial competences, technical skills, and local know-how, were contributed by private sector firms, including HSA, Tetra Pak, and Unilever. UN agencies and public authorities used their capabilities related to international coordination to reduce delays and prevent inefficiencies in hospitalizations and supply delivery. In the words of the corresponding interviewees (spokesperson of HSA and assistant to the Chair of the IICY, hereafter referred to as HSA spokesperson, and the Managing Director of Tetra Pak) from the IICY,

It is very important that the private sector helps public health authorities in their work on the ground. Local actors have led in upholding local systems and ways of living and contributed local resources to relax the constraints introduced by the lack of knowledge regarding regional aspects of Yemen.

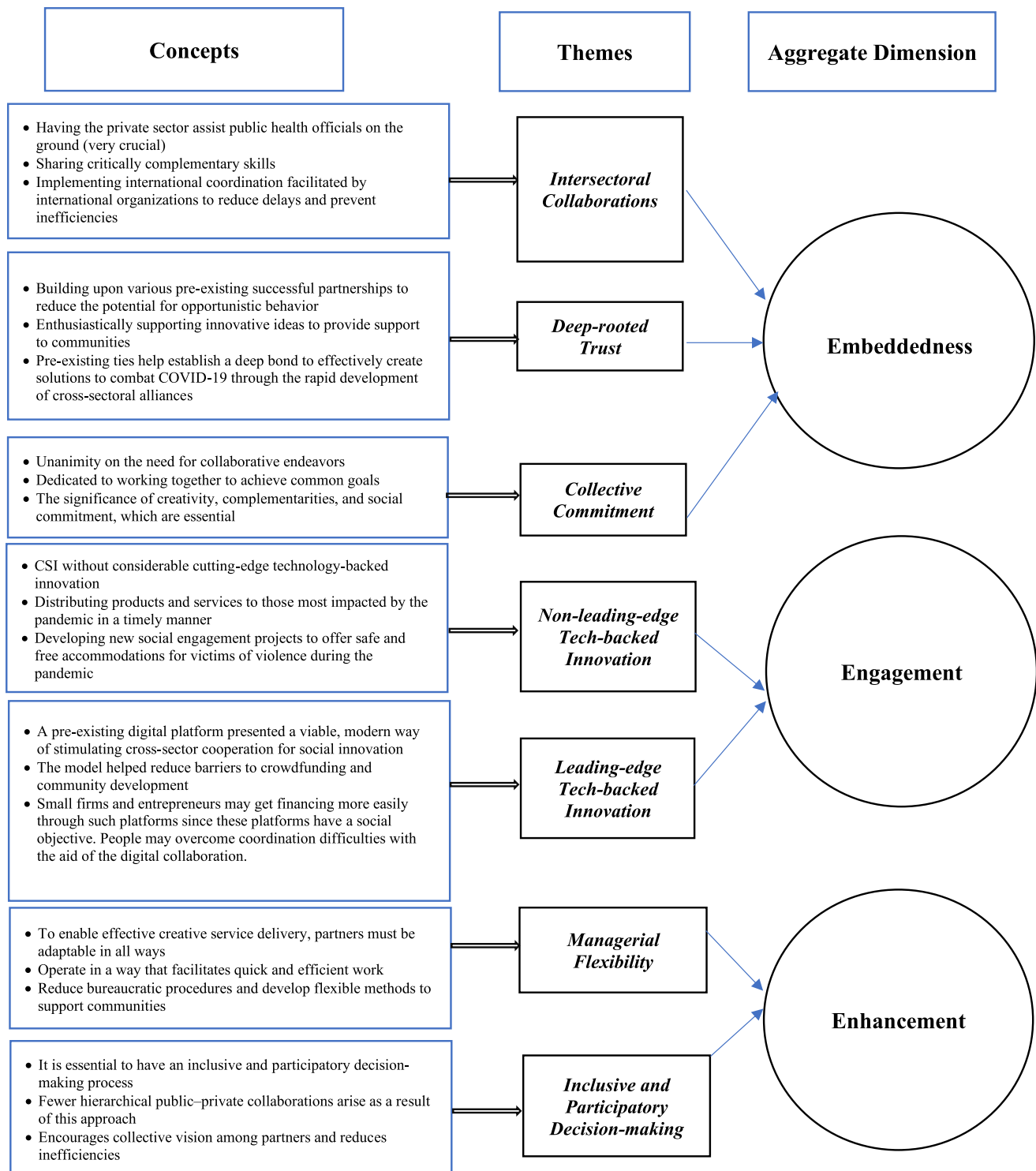


FIGURE 1 Data structure (based on Gioia et al., 2013). Source: Author's own development.

The UN and public partners stepped up their emergency response via international arrangements to deliver medical supplies and expertise to Yemen. The partnership had a significant and immediate impact on the reduction of gaps between Yemen's hospitals across the country.

The spokesperson for HSA further explained the following:

With limited resources, the situation was too serious for only one actor to make a quick and immediate impact when dealing with the COVID-19 crisis in Yemen. We felt that

there was a need to include other actors to create a quick and immediate impact. We worked with the private sector, but we also reached out to the World Health Organization (WHO) and really worked around their expertise. We are not health experts, but the WHO had that expertise.

5.1.2 | Deep-rooted trust

A common theme of the selected interviews was that in the midst of tragedy, CSI involves a high level of trust, and it builds upon various preexisting successful partnerships. For example, in the words of the HSA spokesperson,

We reached out and leveraged the established network to start a dialogue on the need to support the country's response by taking a very proactive approach before the report of the first confirmed case in Yemen, which enabled the quick establishment of a platform bringing together both public and private organizations with a shared objective.

The IICY partner (the Managing Director of Tetra Pak) added the following:

In the case of the IICY, we had previous experience working with a majority of the partners prior to the pandemic, both for wider business operations and for corporate social responsibility (CSR) purposes. We warmly welcomed the initiative of the HSA to establish a coalition of local and international organizations that could work together to provide support to communities in desperate need of assistance.

This finding highlights that preexisting relationships with international organizations are a key element of developing deep-rooted trust, which is a crucial factor in providing swift solutions to combat COVID-19 because it enables firms to form intersectoral partnerships very quickly.

5.1.3 | Collective commitment

The findings suggest that a high level of collective commitment is vital for combining the efforts of partners to combat the pandemic. In our cases, the private firms were very proactive; indeed, they

delivered much more than they had committed to achieve joint goals without increasing the possibility of opportunistic behavior. In the words of a Tencent manager (Vice President),

In response to the pandemic, massive global collaboration calls have been launched. While the globe is standing tightly on the front line, Tencent is also committed to joining the fight by providing support for international emergency response. We recognize that the key message delivered by information analyses of China and other parts of the world is that the world raised a huge level of demand for personal protective equipment (PPE) and other medical equipment and resources, particularly for those situated at the front line against the pandemic when traditional supply channels could not meet the sudden surge in demand.

As highlighted by a UNICEF Coordination Specialist for COVID-19 Women and Children Safe at Hotels, Mexico (hereafter referred to as "W&C"),

In this work, the hotel sector has been integrated, which has provided human capital and spaces that have become a haven for victims. This tripartite strategy continues to operate and will surely leave us with many lessons, but the first one, without a doubt, is the value of innovation, complementarities and social commitment to do something different in favor of the human rights of women and children in Mexico.

Unsurprisingly, the public sector also committed to making joint efforts. According to a representative (UNICEF, Coordination Specialist) of the UN International Children's Emergency Fund (UNICEF) in Mexico,

We know that due to the confinement imposed to prevent the contagion of COVID-19, violence against women, children and adolescents has increased, so all social sectors have the responsibility to implement solutions in the short term to protect their integrity and rights. The collaboration between the public and private sectors to offer safe accommodation to women and their children is proof of this commitment.

5.2 | Engagement

5.2.1 | Non-leading-edge tech-backed innovation

The findings showed that three out of four sample firms engaged in CSI without involving significant leading-edge tech-backed innovation. Rather, they adapted their existing goods and services to meet the needs of vulnerable populations who were severely affected by the pandemic in a timely manner and to demonstrate social innovation in service delivery. For example, POSADAS joined the W&C effort, teaming up with UNICEF, the UN Population Fund (UNFPA), the Spotlight Initiative, national and local governments and other hotels in Mexico to offer safe and free hotel accommodations for women who were victims of violence during the pandemic and their children. The POSADAS manager reported the following:

Grupo Posadas hotels provides women survivors and their children with accommodation and food for up to seven nights and seeks to help them out of dangerous situations. The POSADAS partnership creates significant value in terms of financial support, which enables the saving of lives.

5.2.2 | Leading-edge tech-backed innovation

In the case of Tencent, we found that transforming existing digital platforms offered a promising contemporary means of encouraging social innovation through cross-sector partnerships. Notably, an existing digital platform was transformed for the purpose of crowdfunding; this approach may be a model that can be implemented to mitigate barriers to crowdfunding and community development with the promise of expanded economic collaboration between a broader cluster of stakeholders in a contactless world. An interviewed Tencent communication staff member reported the following:

The platform digitalised charity by leveraging technologies such as digital transactions, social networks, cloud computing, blockchain and others. Also, it makes donations much easier than they are in the traditional channel and thus attracts more people to contribute.

The platform provided technological architectures and governance standards that guided loosely coupled

temporary partnerships of network users toward the GC and the creation of shared value. The resources of organizations and individuals, when combined either directly or indirectly, exert their impacts more effectively, efficiently, and innovatively and on a larger scale than they do individually. Compared to traditional lending models, such social mission platforms impose fewer barriers to funding access on small businesses and entrepreneurs. Moreover, compared to traditional donation models, these platforms reduce the barriers to donating small sums to charitable causes faced by individual internet users. Reducing such barriers is particularly important when an urgent GC is present. A Tencent manager (this interviewee asked to remain anonymous) added the following:

As the pandemic lasts and continues to affect people's lives and social welfare, in every single moment, it is more important than ever to hold together and support each other. This requires an internet campaign that targets public participation, inclusion, and transparency.

In short, we found that repurposing and adapting existing technologies, products, and services are the main ways in which firms engage in CSI to combat the pandemic in the services sectors of developing economies. For example, we found that digital platforms can be rapidly repurposed to enable loosely coupled systems that evolve as new channels that bring together non-profits, social firms, governments, and for-profit firms to address the new reality. Digital partnerships help people overcome coordination challenges, especially in the context of complex and urgent GCs, and they allow and occasionally encourage contributors to uncover new problems and solutions.

5.3 | Enhancement

5.3.1 | Managerial flexibility

The pandemic has been extremely disruptive and has induced much uncertainty. Information that is ascertainable, reproducible, transferable, and predictable tends to be elusive, causing the joint delivery of new ideas to be more difficult than it is in normal situations. Our findings demonstrated that in circumstances such as this, partners need to be very flexible, adapting all of their working practices to facilitate successful innovative service delivery so that disadvantaged individuals and groups such as poor people in Yemen and vulnerable women, children, and migrants in Mexico are able to enjoy the outcomes of

innovation. The HSA spokesperson indicated the following:

We needed to be as flexible as possible to make our organization able to move fast because our organization is huge with a lot of bureaucratic processes in place and the pandemic developed so quickly. We worked in a way that gave us flexibility to move fast and to get things done.

In the words of a UN staff member who is a partner (Coordinator of the Filter Hotel) of the IOM Partnership on Filter Hotels for Migrants (hereafter referred to as “IOM-MIGRANTS”),

I think the capability of being flexible is very important for us to move the structure of the partnership as quickly as possible and adequately respond when we get a new idea or when we face obstacles such as political, bureaucratic or operational limitations, which we deal with every day.

A similar point of view was re-emphasized by other Mexican government staff and UN staff who participated in these CSI efforts. Some commented that “*we made decisions much faster than we normally do.*” There were many differences between the public and private sectors in terms of organizational and financial management procedures. “*Without flexibility, it would take a much longer time to go through the usual procedures, and some partnerships might even become impossible.*”

5.3.2 | Inclusive and participatory decision-making

We observed that the partnerships were indeed empowered by an inclusive and communicative governance model. Under such a model, each partner does its best to contribute its specific skills and capabilities to achieve success. For example, the HSA spokesperson indicated the following:

In the first week of our partnership, we validated the gaps and needs with the public health authorities and found that there were fewer than 200 ventilators for the whole country. We then started purchasing ventilators, which was very difficult, as we relied on only two airports in which only two planes were available. This obviously made things

much more difficult, not only for people to travel but also for goods to come into the country. In the meantime, the UN, as one of our most important partners, mobilized flights to bring those supplies all the way from China to Yemen. Through this partnership, we managed to secure 400 ventilators within 4 weeks. If it was not for this partnership, I do not think the 400 ventilators would have come into the country.

A representative (Coordinator of the Filter Hotel) of IOM-MIGRANTS added the following:

Diseases like COVID-19 create a risk to lots of individuals around the world, whoever they are. We believe that we can mitigate these risks through common and inclusive approaches to every single life, in the case of migrants, by providing them with accessible services and care rather than focusing on their migration standing.

This finding emphasizes that inclusive and participatory decision-making is an instrumental factor in the CSI process, particularly in the context of tackling urgent GCs, because it usually leads to a decrease in the number of hierarchical relationships between the public and private sectors. Specifically, inclusive and participatory decision-making facilitates a clear, collective vision that partners can fully commit to, reduces transaction costs and inefficiencies in the allocation of roles and responsibilities to the lowest level possible, and ensures that partners are appropriately represented and balanced in terms of power (Williamson, 2007).

6 | CONCLUSIONS AND DISCUSSION

6.1 | Conclusions

Firms in the private sector are important and nonnegligible actors in the context of global efforts to tackle GCs. This paper investigates how CSI can be effectively introduced and implemented to tackle exigent GCs during crises. Using multiple case studies of firms engaged in intersectoral partnerships during the COVID-19 pandemic, we find that CSI can be an effective strategy enabling firms to overcome constraints and barriers to tackling exigent GCs. Specifically, a 3Es framework of the CSI process (i.e., embeddedness, engagement, and enhancement) is developed to illustrate the mechanisms

through which CSI can be implemented by private firms in the services sector to promptly tackle urgent GCs in developing economies.

First, embeddedness in existing partnerships featuring the involvement of international organizations, deep-rooted trust, and collective commitment serves as a useful mechanism for triggering CSI and creating solutions to address exigent GCs. Second, CSI engagement in the form of transforming existing technologies and adapting existing products/services is found to be an important way to meet pandemic-induced social needs. Firms not only engage in CSI without involving significant leading-edge tech-backed innovation but also adopt leading-edge technologies such as digital platforms that can be rapidly repurposed to enable loosely coupled systems that evolve as new channels that bring together various stakeholders to fight this exigent GC. Finally, CSI enhancement enabled by managerial flexibility and participatory governance structures plays a crucial role in ensuring that CSI functions effectively in partnerships/alliances that form quickly and provide urgently needed services. Evidence from this study suggests that managerial agility and an inclusive, transparent governance structure ensuring equal participation, clear responsibility, and efficient and transparent communication are crucial. This is particularly the case during crises, when partnerships need to act rapidly to respond to exigent GCs and deliver solutions.

As the relevant prior literature mostly focuses on the role of CSI in addressing longstanding GCs such as climate change mitigation, poverty alleviation and inequality reduction, this paper complements this literature by examining the role of CSI in tackling exigent GCs such as effectively combating the COVID-19 pandemic, which calls for prompt and effective solutions. Moreover, this paper adds to the literature by providing valuable insights into how developing economies can stimulate CSI to fight exigent GCs in the services sector. In particular, this paper makes a theoretical contribution to the extant GC literature by developing a 3Es framework of the CSI process to uncover the mechanisms through which CSI can be rapidly initiated and effectively executed by firms in the services sector to swiftly respond to exigent GCs in developing economies.

In summary, the evidence from the case studies suggests a model for the formation and implementation of partnership-based corporate social innovations that are focused on tackling exigent GCs, as illustrated in Figure 2. As we analyzed the data from our cases, we repeatedly found that CSI is the main strategy adopted by private firms to overcome various constraints and barriers related to combating the pandemic. Specifically, we found that embeddedness in existing intersectoral partnerships involving international organizations, deep-

rooted trust and firm commitment are important factors in triggering partnership-based CSI and developing innovative approaches to tackle GCs. Such joint CSI efforts, in return, deepen the trust between partners. Second, firms actively engage in CSI by transforming existing technologies and/or adapting existing products and services in the services sectors of developing economies. In particular, digital technology can play an important and critical role in enabling and enhancing private firms' capabilities to conduct CSI to address GCs on an international scale or during times of emergency and crisis. Finally, the effective implementation and operation of partnership-based CSI is enhanced by managerial flexibility, inclusive decision-making, deep-rooted trust and firm commitment. This is particularly important for multistakeholder, multisectoral partnership-based CSI and for CSI activities conducted during crises.

While prior literature has provided an in-depth and insightful understanding of the benefits and costs of collaborative innovation, this paper contributes to the literature on the role of intersectoral partnerships in CSI, particularly in the context of addressing very complex and exigent global challenges. In particular, it provides a deeper understanding of the role that the private sector can play in addressing major challenges during a crisis, which has mainly been examined from the perspectives of the state and the public sector. Intersectoral partnerships built upon existing networks involving international organizations can help the private sector build up its network and outreach, offer important resources and the implementation capacity to rapidly create solutions to exigent GCs and ensure the broad delivery of their impacts. Moreover, by transforming and/or adapting existing products, services and technologies, firms in the private sector can play a crucial role by bringing reliable information to actors on the ground when public information mechanisms are affected by a crisis, in addition to offering the financial resources and production capacity needed to meet the basic needs of people. This finding is in line with those of Lee et al. (2019), who suggest that advanced technology, such as digitization, artificial intelligence, and smart technologies, that involves CSI processes plays an important role in influencing the development of CSI, consequently enhancing the associated social value creation and social progress. In addition, our finding is consistent with that of López-Gómez et al. (2020), who argue that it is extremely challenging to repurpose existing production to manufacture a new product line; this explains why it is common for firms in the services sector to engage in CSI to address the pandemic, particularly in developing economies.

Moreover, the findings of this study shed new light on the governance structure of CSI and complement the GC

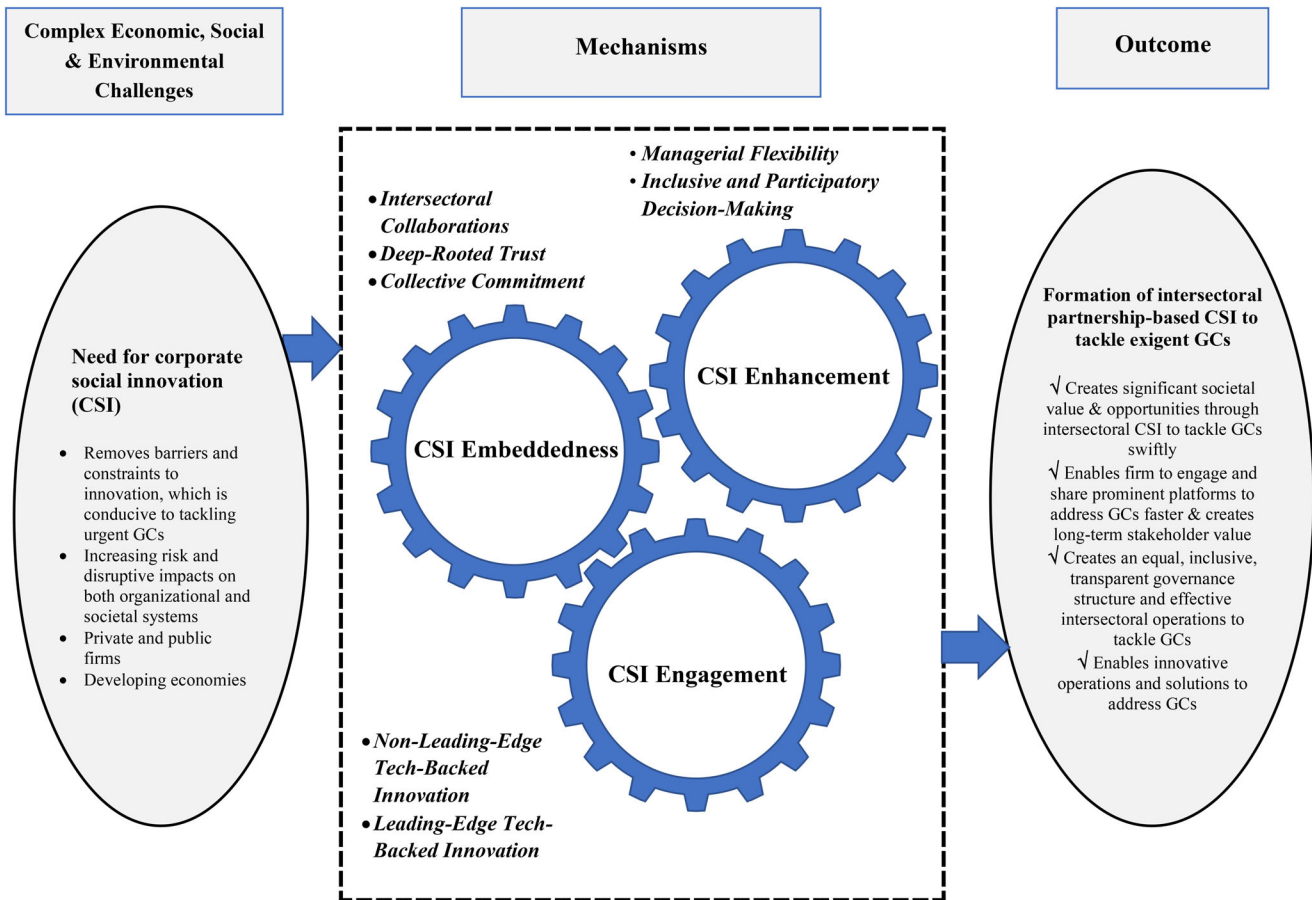


FIGURE 2 The CSI mechanisms used to tackle exigent GCs: The 3Es framework of the CSI process.

literature. CSI promotes ideas and value sourcing among stakeholders (Phills et al., 2008), and it often involves collaboration characterized by new and less-hierarchical relationships between the government, private firms, civil society and citizens (Ayob et al., 2016). As a consequence of this cross-pollination, a host of social innovations have emerged. Our findings suggest that partnerships designed to respond to global challenges may not always be led by the public sector, particularly in the context of exigent GCs such as fighting the COVID-19 pandemic, in which people feel more immediate personal risk and responsibility than they do in relation to long-standing GCs such as climate change mitigation. This result is consistent with the work of Pera et al. (2016), who show that organizations' commitment is instrumental in establishing effective resource integration practices in an alliance, which can subsequently boost the creative potential of different stakeholders. Moreover, when addressing exigent GCs, firms may lead the way, working with governments and non-profits as partners rather than as adversaries or subordinates. Some mature, large and financially stable firms may even act as leading partners partly because they have more resources to focus on their

impact on society, as the IICY case shows. Moreover, governments have moved away from playing the antagonistic roles of regulators and taxers toward the more collaborative roles of partners and supporters. In particular, the findings of this research suggest that international organizations can be active and effective partners in addressing GCs at the international and local levels.

With regard to the importance of goal alignment and trust, our findings suggest that these factors are important for the success of CSI. This is consistent with the literature on alliances and collaborations because collaboration is an important feature of CSI. A reduction in the demand for formal monitoring allows for more investment in knowledge sharing by firms, makes firms act very quickly, enables them to deliver extraordinary results and allows them to fight the pandemic. This finding is in line with the works of Dyer and Chu (2003) and Wu et al. (2007), who argue that the sticky nature of trust-based relationships between partners serves to reduce the potential for opportunistic behavior because the trust between partners reduces transaction costs and facilitates rapid knowledge exchange. An equal and participatory governance structure is important for

less-hierarchical CSI-oriented partnerships among the government, private firms and civil societies, as this allows them to overcome barriers to the functioning of such hybrid organizational forms (Caldwell et al., 2017).

Admittedly, this study has limitations. Much of the empirical evidence presented is from the perspective of private firms. Although we integrated the views of public organizations as much as possible, more diversified views would enrich the analysis. While this study addressed the effectiveness of partnerships in the fight against the crisis and the fact that these businesses survived the crisis, kept their customers, and broadened their networks, further studies are needed to extend our understanding of business outcomes such as expanded market and reputation, enhanced capabilities, and stakeholder value maximization. Future research can revisit these case study firms after a few years to evaluate the impact of CSI on their business performance. Finally, collaboration is not free from failures and downsides. More in-depth studies should be conducted to identify the internal and external conditions that are necessary to facilitate successful multisectoral and multiregional innovation collaboration.

6.2 | Policy and managerial implications

The findings of this research have important managerial implications for practitioners and policy implications for supranational bodies administering such partnership schemes. With regard to the policy implications for supranational organizations such as the UN and the World Bank, greater importance and support should be given to multistakeholder intersectoral partnerships involving the private sector to accelerate global efforts to tackle exigent GCs and implement the 2030 Sustainable Development Goals (SDGs). Indeed, the ability of the private sector to play an active and important role in tackling exigent GCs through a partnership-based CSI strategy has been demonstrated. Both funding and non-funding policies should be designed to support transformation and facilitate the operation of intersectoral partnerships, which are important vehicles for the creation and implementation of important social innovations designed to address exigent GCs. Funding policies are crucial to supporting and establishing partnership-based CSIs. Nonfunding policies such as those related to tax exemptions, knowledge transfer, global and local network sharing, and technological support—especially in terms of digital technology—are also important areas for international policy actions. Finally, best practices from successful CSI partnerships and lessons learned from failures should be widely shared to ensure that partnerships work effectively toward their objectives.

With regard to managerial implications, adopting a partnership-based CSI strategy can not only enable firms to achieve their CSR objectives but also serve as a way to enhance their long-term shareholder value. As highlighted by Sinkovics and Archie-Acheampong (2020), MNEs' responses to GCs are mainly related to factors such as competitiveness and stakeholder perceptions, which affect these enterprises' economic bottom lines. Similarly, our study revealed that partnership-based CSI activities can enable firms to share resources, skills, and networks and to play a role in addressing complex and exigent GCs. Moreover, partnerships can not only provide a vehicle for the implementation of new ideas regarding tackling GCs but also foster trust among partners.

On the other hand, given that there are major differences between individual actions designed to address exigent GCs, such as combating the COVID-19 pandemic, and those intended to address long-standing GCs, such as mitigating climate change (Poortinga et al., 2022), it is easier for private firms to obtain support from other stakeholders, such as employees, customers, board members, investors, and NGOs, to engage in CSI to tackle exigent GCs. Moreover, engaging in CSI during the pandemic can lay the groundwork for private firms to build back better working conditions and policies by clearly demonstrating their care for their large community of stakeholders. Firms can have both local and international impacts, even during times of crisis, if they are supported by digital technology and leveraged by international organizations. In other words, digital technology can be used to collaborate with foreign partners and leveraged for an international impact. Therefore, firms should actively develop digital infrastructure and digital skills to enable and enhance their capacity to implement CSIs. In tackling the COVID-19 pandemic, digital technology has been applied not only to harness the collective efforts of large numbers of diverse individuals via virtual hackathons and crowdsourcing campaigns (Bacq et al., 2020; Bertello et al., 2021; Kokshagina, 2021) but also to enhance firms' CSI capacity in fighting the exigent GC of COVID-19. For example, by employing artificial intelligence technology, Tencent developed a rapid imaging and diagnosis solution for COVID-19 to replace physician examinations. Moreover, JD.com employed drones to deliver goods to districts that had shut down due to the pandemic (Peerally et al., 2022). Moreover, to enable the effective operation and success of partnership-based CSIs, certain good practices should be adopted. In particular, flexibility at the firm and government levels is needed to ensure that interorganizational or even transnational public-private sector partnerships can swiftly respond to emergencies during a crisis. Finally, an inclusive and participatory decision-making process is also crucial for the

successful implementation of such partnership-based CSIs. This is critical for trust building, effective communication, and well-informed decision-making.

CONFLICT OF INTEREST STATEMENT

We confirm that there is no conflict of interest in conducting or reporting this research. The research was fully approved by the ethical committees at Oxford University and University of Birmingham.

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APPENDIX A

TABLE A1 Representative quotations.

Themes	Quotations
Intersectoral partnerships	<ul style="list-style-type: none"> “It is very important that the private sector helps public health authorities in their work on the ground. Local actors have led in upholding local systems and ways of living and contributed local resources to relax the constraints introduced by the lack of knowledge regarding regional aspects of Yemen. The UN and public partners stepped up their emergency response via international arrangements to deliver medical supplies and expertise to Yemen. The partnership had a significant and immediate impact on the reduction of gaps between Yemen’s hospitals across the country.” “With limited resources, the situation was too serious for only one actor to make a quick and immediate impact when dealing with COVID-19 and the worst humanitarian crisis in Yemen, as it is considered by the UN. We felt that there was a need to include other actors to create a quick and immediate impact. We worked with the private sector, but we also reached out to the World Health Organization (WHO) and really worked around their expertise. We are not health experts, but the WHO had that expertise.”
Deep-rooted trust	<ul style="list-style-type: none"> “In the case of the IICY, we had previous experience working with a majority of the partners prior to the pandemic, both for wider business operations and for corporate social responsibility (CSR) purposes. We warmly welcomed the initiative of the HSA to establish a coalition of local and international organizations that could work together to provide support to communities in desperate need of assistance.” “When enterprises swiftly construct intersectoral alliances, pre-existing successful ties and trust are vital to building collaborations. In addition, corporations responded rapidly and achieved exceptional outcomes. Because of the decrease in the need for formalized supervision, companies were able to devote more resources to information exchange, which enabled them to respond swiftly and effectively.” “Trust was crucial in the fight against COVID-19 because it allowed corporations to immediately build intersectoral collaboration.”
Collective commitment	<ul style="list-style-type: none"> “In this work, the hotel sector has been integrated, which has provided human capital and spaces that have become a haven for victims. This tripartite strategy continues to operate and will surely leave us with many lessons, but the first one, without a doubt, is the value of innovation, complementarities and social commitment to do something different in favor of the human rights of women and children in Mexico.” “We were dedicated to joining the battle by supporting worldwide emergency response appeals. In order to join the fight, we were committed to supporting global emergency response efforts. We were committed to analyzing and sharing information available from countries throughout the world, which provided a clear warning that the pandemic was generating enormous demand for medical equipment and resources. During a time when traditional supply lines were unable to keep up with demand, communities benefited from collaboration.”
Non-leading-edge tech-backed innovation	<ul style="list-style-type: none"> “Grupo Posadas hotels provides women survivors and their children with accommodation and food for up to seven nights and seeks to help them out of the dangerous situations. The POSADAS partnership creates significant value in terms of financial support, which enables the saving of lives.” “To help victims of violence, companies used social innovation to create safe spaces. During the crisis, these measures were critical in safeguarding the most vulnerable.” “It was because of collaborative efforts between the government and the private sector that goods and services were delivered to individuals who were most impacted or displaced by the pandemic in a timely manner.”
Leading-edge tech-backed innovation	<ul style="list-style-type: none"> “As the pandemic lasts and continues to affect people’s lives and social welfare, in every single moment, it is more important than ever to hold together and support each other. This requires an internet campaign that targets public participation, inclusion, and transparency.” “The digital platforms transformed charitable giving into a digital experience by making use of cutting-edge tools, including online transactions and social media. In addition, it is far more convenient than the old method of donating and hence encourages more individuals to take part.” “One particularly noteworthy use of contemporary digital platforms has arisen. For example, since these platforms have a social objective, small firms and entrepreneurs may be able to get financing more quickly than they would be able to via conventional financial intermediaries.”

TABLE A1 (Continued)

Themes	Quotations
Managerial flexibility	<ul style="list-style-type: none"> • “We needed to be as flexible as possible to make our organization able to move fast because our organization is huge with a lot of bureaucratic processes in place and the pandemic developed so quickly. We worked in a way that gave us flexibility to move fast and to get things done.” • “We must be able to quickly modify the partnership's structure in order to react to new concepts or obstacles, such as political, legal, social, administrative, or operational restrictions, which we confront on a regular basis. Adaptability is essential.” • “Partners must be flexible in all aspects in order to facilitate the efficient execution of creative services. Work in a manner that facilitates our ability to do tasks swiftly and effectively. Improve community support by reducing bureaucratic red tape and using more adaptable processes.”
Inclusive and participatory decision-making	<ul style="list-style-type: none"> • “It is critical that the decision-making process be inclusive and participatory. Public-private partnerships will be less hierarchical as a consequence. This method promotes a shared vision across partners and helps eliminate inefficiency.” • “A large number of individuals are at risk all across the world due to the pandemic. In the case of vulnerable people such as immigrants, rather than being singled out because of their immigration status as legal or illegal immigrants, migrants may benefit from services and care that are accessible to them regardless of their immigration status.” • “Making decisions in an open and participatory manner is very fundamental in today's world of information and technology. There will be fewer top-down or red-tape public-private partnerships as a consequence of this strategy. It encourages partners to have the same vision and prevent inefficiencies.”