

Guest editorial

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Crisis management across cultures in the COVID-19 pandemic: towards a knowledge-based systems view

Introduction

Since early 2020, the COVID-19 crisis, classified as a global public health emergency (GPHE), has resulted in a series of devastating impacts, such as the breakdown of industries, massive job losses, natural hazards and social precarity on many national economies, as well as the firms operating and the people dwelling within these nations (Chin *et al.*, 2020). Compounding on these issues are the strategic responses of governments and firms, as well as people's reactions to this GPHE, that have unveiled significant cultural differences in cognition, which may further trigger egregious civilisational tensions. As shown in the deteriorating Sino–U.S. frictions and the Russia–Ukraine war, the GPHE-evoked economic and social risks coupled with cultural collisions have elicited – and may continue to elicit – longer and more profound turbulence in global markets. It is obvious that the COVID-19 crisis has posed a variety of “novel” risks (Hardy and Maguire, 2020), which cannot be understood using traditional technocratic, decisionistic and economic models of risk management in the international business (IB) landscape. They also require more effective leadership (Rowley and Ulrich, 2012a, 2012b).

Given that the novel risks incurred from the COVID-19 pandemic contain high levels of unfamiliarity and uncertainty, they cannot be fully translated by the existing stock of knowledge; thus, new knowledge must be created. As indicated by Wang and Chin (2020), heterogeneous cultural values that carry a vast amount of tacit knowledge obscure the establishment of higher-order organising principles of a specific group of people, such as social norms, working values and practical reasoning, resulting in the emergence of a knowledge iceberg phenomenon that hinders knowledge exchange. Evidently, the shortage of knowledge on tackling novel risks becomes more severe and complex in the IB context, where such risks intertwine with cross-cultural variances in human cognition and sense-making (Papa *et al.*, 2018; Buckley *et al.*, 2017; Del Giudice, 2017a, 2017b; Scuotto *et al.*, 2017). As such, the critical role of knowledge management (KM) in multicultural environments with manifold institutional logics, such as multinational enterprises, international strategic alliances and cross-border business models, remains a nascent research field that requires deeper, more comprehensive investigation.

Given the above-mentioned research gaps, it is imperative for scholars, practitioners and policymakers to conduct a fundamental rethinking and thereby reassess the multi-stratified intertwining links between the practices of KM and risk management across cultures amid and after the pandemic. However, such extraordinary crises often lead to intricate systematic failures involving the entire business ecosystem. Thus, we propose a special issue (SI) to advance current studies towards a knowledge-based systems view of crisis management to identify, interpret and rationalise the foregoing novel risks whose essence, probability of occurrence, sphere of influence and magnitude of adverse consequences may subvert extant knowledge and cognition.

It should be noted that, in the field of management, too often do both risk and crisis refer to the probability of harm, loss and other adverse consequences caused by unpredictable events

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to organisations (Wut *et al.*, 2021), while quite a few scholars use the two terms interchangeably (Maguire and Hardy, 2013). Following this line of thought, we also deem risk and crisis as swappable concepts herein.

Objectives of the special issue

As noted in the Introduction, this SI aims to cast light on a synthesising view of KM and risk management and calls for the employment of more systems-based, knowledge-oriented perspectives to address crisis management-related issues, including identifying crises and risk assessment to recovery, in the IB context where developing the meta knowledge of one's own and others' cultures is a prerequisite. To bridge theory with practice, this SI welcomed viewpoints/real impact articles that focused on delineating miscellaneous GPHE-evoked challenges and new phenomena that individuals, firms and governments face in reality.

To allow for more innovative submissions, we encouraged authors to conduct broader interdisciplinary theoretical underpinnings with a greater number of mixed varieties of methodologies and to combine multiple levels of analysis through an integrative lens of KM, risk management and IB. Fortunately, we are very pleased and excited to claim that our SI has received quite a few fascinating articles that encompass a wide spectrum of themes. After a rigorous review process, 12 articles were carefully chosen for publication, which can be classified into four categories based on the research focus discussed, the background setting selected and the methodology used. The main findings and perspectives are summarised below.

Overview of the selected articles

Cultural understanding to manage knowledge and risks in the pandemic. The first section contains three articles. Referring to the logic of unintended consequences of innovation, Oh *et al.* (2022) draw on a representative case of Netflix to illuminate the double-edged moderating effects of KM on the relationships between cultural values (i.e. individualism, power distance and indulgence) and firm performance (collective resilience) in GPHEs. Their results indicate that, apart from calamitous outcomes, the COVID-19 pandemic has also propelled firms to learn new knowledge and thereby achieve miraculous success. Overall, their work manifests two unique strengths; first, they used a diverse sample of 45 countries to test the hypotheses, thus enriching our cultural understanding of relevant issues; second, based on the KM practices of Netflix, they proposed a new KM index that may be applied in other streaming media services providers.

Li *et al.* (2022a, 2022b) undertake an unconventional, culturally sensitive linguistic approach to make sense of the formation of risk knowledge; more specifically, taking risk discussions in online knowledge communities as a basis, they explored the negative effect of text complex level and the positive effect of text analytic level on user engagement, as well as the positive intervening role of riskification on the above-mentioned mechanisms. Their findings suggest that, given that language as cultural heritage causes intricacies in risk communication and translation discourses, the use of clear and simple expressions seems to be an effective risk-coping strategy for governments and regulators to inform the public about the existence of an unfamiliar risk, such as COVID-19.

From a Chinese cultural cognition of crisis management, Li *et al.* (2022a, 2022b) offer a holistic depiction of how Chinese firms leverage the development of KM capabilities to make timely strategic emergency responses to the pandemic in different stages of development (i.e. before, during and after the crisis). Importantly, their article enables foreigners to obtain a better understanding of COVID-19 infection prevention and control priorities in China's health-care setting.

Digitalisation reshaping the mechanisms between KM and crisis management. The second section contains three papers. Using Pakistan's educational sector as a background setting,

[Asghar et al. \(2022\)](#) investigate the impacts of social media-based knowledge-sharing intentions and behaviours on the development of authentic leadership to more effectively tackle COVID-19-elicited problems. They also examined the intervening effects of facilitating conditions on the foregoing mechanisms. Given their focus on social media-based KM, their research implies the increasingly vital and prevailing role of digitalisation in shaping the teaching and learning modes in the context of Pakistan amid the pandemic.

Drawing on data from small- and medium-sized firms (SMEs) in China's manufacturing sector, [Guo et al. \(2022\)](#) illustrate the importance of establishing digital platforms to enable knowledge integration among firms' stakeholders across borders for resilience from local and global adversities incurred by the COVID-19 pandemic. Their unique merit lies in the introduction of the affordance theory to rationalise two types of knowledge integration processes (i.e. horizontal and vertical knowledge integration processes) in global digital platforms.

Likewise, [Li et al. \(2022a, 2022b\)](#) also address how the industrial internet platform affords the digital transformation of manufacturing SMEs by enabling knowledge integration and sharing among stakeholders to mitigate systematic risks, particularly those that are derived from the supply side. However, despite similar emphasis on digitalisation-driven KM, the two above-mentioned articles differ in their main focuses (i.e. the outcomes and the antecedents of knowledge integration, respectively) and in the employment of methodologies; the former adopts a quantitative design, while the latter uses a qualitative analysis.

Innovation-related risks and KM across borders. The third section includes three papers. [Duan et al. \(2022\)](#) demonstrate distinct inverted U-shaped associations between different cross-cultural knowledge searches (i.e. breadth, depth and balance) and the innovation quality of high-tech firms, as well as the moderating effects of managerial discretion (i.e. pay, position and operation rights) on the foregoing relationships. Their results usefully provide fresh evidence regarding three types of managerial discretion and how they affect the knowledge search–innovation mechanisms of high-tech firms in a GPHE.

Through a case study on two large Chinese manufacturing firms, [Zhang and Sun \(2022\)](#) investigate the trade-off mechanisms of incentive synergy and organisational structure in the dynamic balancing activities between explorative and exploitative innovation. Their findings imply the potential occurrence of innovation-related risks when resolving the frequently occurring paradoxes embedded in the ever-changing process of innovation.

Based on the secondary data of alliance innovation networks of China's new energy industries, [Zhao et al. \(2022\)](#) first explore the relationships of firms' internal knowledge diversity and external ego-network structures (ego-network density and honest brokers) with their sustainable innovation and then examine the negative moderating effects of external ego-network structures on the knowledge diversity–sustainable innovation associations. The main merit of this article lies in the employment of a social network analysis method to address the possibility of innovation-related risks, which advances KM studies through an unconventional ego-network lens.

KM and specific types of risks amid the COVID-19 pandemic. This section contains three articles. Given that the COVID-19 pandemic has accelerated the growth speed of the knowledge economy, [Jiang et al. \(2022\)](#) focus on addressing the importance of preventing intellectual property (IP) risks, which represent a typical, complex challenge caused by the low transferability and appropriability of tacit knowledge in the post-pandemic era. Their article identifies three critical IP risks (i.e. infringement, leakage and ownership risks) in international cooperation and technology transfer that Chinese enterprises face.

Based on first-hand data from 290 small and micro firms in China, [Lu et al. \(2022\)](#) illuminate the surge of credit constraints and associated financial risks facing small and micro enterprises amid the COVID-19 pandemic. Their findings underscore the big challenges for the government to help such organisations with limited resources to acquire specialised

financial knowledge and thereby better communicate with formal financial institutions for survival.

Whereas COVID-19 has heightened the contradictions between the supply and demand in rural finance, [Yang et al. \(2022\)](#) synthesise the perspectives of KM and ecosystem to establish a systematic model that takes into consideration the ecological subject, environment and regulations to frame how four types of KM dilemmas provoke the supply–demand conflicts in China’s rural finance. Their unique contribution is to delineate a more holistic picture of how KM can be instrumental in alleviating systematic risks in rural finances.

Conclusion and future research

In summary, the 12 articles selected for this SI built upon interdisciplinary theoretical frameworks that encompass a variety of themes, as well as the application of multifaceted methodologies at the intersection of KM and risk management. The diversity in authorship and affiliation embodies a high level of international research collaboration. Such cultural heterogeneity is conducive to stimulating the formation of innovative ideas. As indicated earlier, we categorised these papers into four sections and outlined the main implications below.

The first section entitled “Cultural understanding to manage knowledge and risks in the pandemic” manifests how cultural differences perplex the codification and integration of GPHE-related knowledge among stakeholders, thus leading to the emergence of novel, unorthodox forms of connectivity between knowledge and risk/crisis management. The second section entitled “Digitalization shaping the mechanisms between KM and crisis management” contains three papers that shed light on how to leverage the orchestration and acquisition of a wider range of open knowledge resources to evade manifold structural risks. The third section entitled “Innovation-related risks and KM across borders” contains three papers that elucidate why undertaking innovation is an especially difficult yet critically important task during a crisis, such as the COVID-19 pandemic, whereby a more comprehensive profile of innovation-related risks can be developed. The fourth section entitled “KM and specific types of risks amid the COVID-19 pandemic” has three articles that characterise how and why the implementation of KM can serve as a strategic means to resolve specific types of systematic risks – particularly financial ones – amidst a GPHE.

Overall, considering the high complexity, variability and lingering potency involved in the COVID-19-elicited challenges, the selected 12 studies may only provide us with a snapshot to understand relevant issues. However, some valuable theoretical and practical implications can be drawn from them. For instance, in the post-pandemic context, whereas the COVID-19 pandemic expedited the expanding velocity of digitalisation and platformisation, organisations in various sectors must build modern, digital-oriented systems to more effectively cooperate and network with stakeholders to co-create value, whereby the possibility of systematic risks can be decreased. Moreover, competitive advantages may be largely contingent on the establishment of sophisticated digital infrastructures that enable greater availability of diversified knowledge across borders, thus minimising structural barriers and associated risks.

We also acknowledge that while new knowledge is constantly created and old knowledge is rendered obsolete, existing theories may not be able to translate or rationalise unfamiliar COVID-evoked risks and thus should be enriched and renewed. Simply stated, the studies at the intersection of KM and risk management are still in their infancy stage, which necessitates the application of broader, more pluralistic perspectives from the KM domain to decipher the dynamics behind complex, equivocal phenomena of novel risks. Echoing this line of thought, [Chin et al. \(2020\)](#) have reconceptualised the notion of knowledge as a dialectical tacit-explicit

system of knowing that transcends cultures, navigating the adoption of an orthodox dialectical systems view of KM in the current New Normal IB environment.

Taken together, the afore-mentioned arguments make it apparent that despite COVID-19 worsening economic, political, ethical and other types of major crises internationally, a tremendous amount of new knowledge has and will be formed across organisational, national and cultural boundaries. This trend signifies bountiful research opportunities. For example, given that many organisations continuously struggle to cope with various frequently updated crises posed by the prolonged pandemic, future research can investigate how organisations develop the dynamic capabilities to recombine and reconfigure varying sets of knowledge with diversified cultural idiosyncrasies and institutional logics to frame GPHE-elicited novel risks more precisely.

Furthermore, the COVID-19 pandemic accelerated the advancement of online educational and commercial platforms and intensified the utilisation of sophisticated digital technologies, such as Fintech, 5G and metaverse technology. However, although these disruptive technologies indeed enhanced well-being amid the pandemic, they also entailed the construction of energy-intensive infrastructure, which, paradoxically, denotes a highly energy-consuming game that poses risks to nature and human well-being. Future research should further investigate whether the underlying principles of KM can help identify, prevent and mitigate such risks to benefit human well-being, particularly in the post-pandemic era riddled with political tensions and increasing scepticism.

Finally, as noted at the outset, the COVID-19 pandemic has led to the collision between Western and Eastern cultures in many aspects and at ever-increasing velocity, which has partly impeded humanitarian aid between countries. However, one of the most paramount consequences of the COVID-19 global pandemic is the provocation of non-routine, complex and system-wide risks to economically and institutionally fragile countries that often scramble for valuable – yet scarce – knowledge and resources in times of adversity and particularly need humanitarian assistance and protection. Future research is thus encouraged to move towards a knowledge-based systems view of risk management that spans borders, whereby individuals, organisations and nations may embrace cross-cultural metacognition that is believed to promote care, compassion and empathy across different cultures and social hierarchies.

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Further reading

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