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Strategic renewal during crises - A pragmatist proposition for multinational enterprises in a globalized world

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ABSTRACT

Unforeseen environmental shocks, such as the Covid-19 pandemic, often throw organizations into disarray and chaos. Although some organizations can successfully navigate these crises by implementing effective coping strategies, others need more knowledge on crisis management. This paper proposes strategic renewal for multinational enterprises (MNEs) facing such challenges and emphasizes the importance of developing knowledge acquisition, exploitation capabilities, and ambidextrous leadership. Based on an integrative literature review and adopting a pragmatist paradigm approach, we present a multivariate process map for strategic renewal during crises. This can be a valuable tool for MNE practitioners to prepare for future crises preemptively.

1. Introduction

With the advent of advanced technologies such as generative AI (artificial intelligence), a recent report from Goldman Sachs suggests that close to 300 million jobs will be lost in the United States and Western Europe alone (Kelly, 2023). With this conundrum, organizations are beginning to reassess their current approaches and concentrate on leveraging disruptive technologies like generative AI to their advantage (WeForum, 2023). The Covid-19 pandemic was another instance in which global organizations were forced to deal with an unforeseen event (Pedersen and Ritter, 2020). The pandemic caused pervasive disruption in organizations' reorienting their work processes. While these are recent examples of global disruptions, a look back over the past two decades indicates that there have been various factors that have necessitated organizations to rethink the way they work—including the advances in cloud-based technologies, the 2008 financial crisis, the supply chain crisis following the Covid-19 pandemic to name a few (Barnes and Oloruntoba, 2005; Coombs and Laufer, 2018; Dhanesh and Sriramesh, 2018; Wang and Laufer, 2020). Recent events, such as the war in Ukraine and rising inflation, add to today's challenging environment (Birshan et al., 2022). All these events have one thing in common:

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organizations need to rethink how they do business to cope with these unforeseen events.

Businesses usually have a three-stage life cycle: (a) creation, (b) growth and expansion, and (c) failure or closure (Zambrano Farias et al., 2021). Failure or closure can be unexpected (Zambrano Farias et al., 2021) and caused by many factors like globalization, technological and dynamic changes due to the competitive environment (Shaw, 2017), or unforeseen environmental shocks.¹ These exogenous shocks can plunge organizations into a state of chaos and crisis, with many struggling to adapt to the new reality (Bell et al., 2001; Edmondson & Matthews, 2022; Fana et al., 2020; Mani and Mishra, 2020), eventually leading to business failures and closures. From the perspective of an organization, a crisis is any situation that has its roots in the unique characteristics of that business, such as poor management, a poorly designed structure, or an inability to adapt to new circumstances (Wobodo and Oparanma, 2019).

When dealing with unforeseen circumstances, understanding change processes and a willingness to confront the difficulties associated with unplanned change are critical for firms (Shaw, 2017). To date, scholars have been primarily interested in studying and defining the factors that contribute to business failure, based on the simple assumption that a business can only survive and thrive if the reasons for a possible loss of a particular company are known in advance (Buhagiar and Anand, 2023). Different literature streams have addressed how organizations deal with crises in the academic space. For instance, in the industrial marketing literature, Pedersen and Ritter (2020) suggest that organizations must rethink and redesign their operating models to prepare for a post-COVID world. Similarly, Sharma et al. (2020) asserted that organizations need to adapt to succeed. Dugan et al. (2022) conducted an extensive literature review on the crisis management literature and provided suggestions for how the sales function in organizations needs to rethink their processes and organization for navigating crises.

Similarly, in a recent study on supply chain resilience, Wang et al. (2023) suggest that firms need to be ambidextrous to be able to exploit and explore new opportunities when working in complex and turbulent environments. Similar findings have been unearthed in information technology (IT) research (Mithas and Rust, 2016). Nonetheless, we contend that it is equally essential to comprehend how organizations cope, deal with crises, and overcome the risk of business failure.

While different research disciplines (see previous paragraph) have attempted to address the issue of how organizations need to deal with crises and other exogenous shocks, the current literature is predominantly adopting a siloed approach, with each research stream focusing on specific aspects of how organizations handle crises within their theoretical frameworks. This approach does not fully capture the overall complexity of the problems organizations face in a crisis. However, we propose a more holistic and pragmatic view that draws from various disciplines – that is needed to navigate crises effectively. Therefore, the primary objective of this research is to conceptually explore critical factors and develop a process map to assist organizations in navigating crises, focusing specifically on strategic renewal during crises. Additionally, the extant literature on crises and crisis management is fragmented, with ongoing debates among researchers regarding the causes, processes, and outcomes associated with crises (Bundy et al., 2017). This underscores the need for a unified comprehension of the body of literature. Moreover, there remains a gap in the literature for a cross-functional, integrated framework that outlines strategies for organizations to overcome crises (Amankwah-Amoah et al., 2020; Bundy et al., 2017).

Our research focuses on these limitations of extant research. Specifically, we concentrate on strategic renewal and identify actionable and practical processes that may help Multinational Enterprises² (MNEs) avoid business failure during a crisis. Basing ourselves on an extensive literature review across different research streams, we identify various constructs that have been studied in a strategic renewal context and apply conceptual methodology—a technique that focuses on integrating and proposing new relationships among previously researched constructs (e.g., Gilson and Goldberg, 2015)—to understand how organizations can overcome a crisis.

In doing so, we contribute several ways to the literature on strategic renewal among MNEs. First, this paper addresses crises (specifically corporate closures/failures) from an integrated perspective that considers the context of the MNEs and combines theories from three different areas: 1) *knowledge management (KM) capabilities* that refer to the fundamental functions of an organization that support the establishment of systems and procedures for effectively utilizing internal knowledge and acquiring, transforming, and applying external knowledge sources (Gold et al., 2001) and are critical during times of uncertainty and crises; 2) *ambidexterity*, the ability of a firm to swiftly adapt and enhance their current products and services, prioritize existing business demands while simultaneously demonstrating adaptability to anticipated environmental changes (Schmitt et al., 2010); 3) *strategic renewal*, defined as proactive measures taken prior to the onset of a crisis, including the deliberate selection of potential crisis management and resolution strategies for businesses (Schmitt et al., 2018).

Second, drawing on these literature streams, we develop a process map that provides a process to attain strategic renewal using a pragmatist methodology. By applying a pragmatist methodology, this paper presents an outline or ‘menu’ of realistic and comprehensible activities that practitioners in MNEs can use before or during crises to prevent failure or closure and achieve strategic renewal during unforeseen events. Accordingly, this work aims to close the divide between theory and practice prevalent in management research and inspire and inform international scholars. Based on an extensive literature review, we propose that *knowledge acquisition and exploitation capabilities* contribute significantly to effective decision-making and adaptation during a crisis and can help avoid corporate failures (see, for example, Amankwah-Amoah et al., 2020). In addition, we find *ambidexterity and ambidextrous leadership* as

¹ This study considers that corporate crises resulting from the Covid-19 pandemic have led to numerous corporate closures or failures. For example, half a million firms are at risk of failing in the United Kingdom alone (Cook and Barrett, 2020). Therefore, this study uses “crisis” to refer to business closures due to unforeseen events or environmental shocks (such as the Covid-19 pandemic) (see Bartik et al., 2020; Fairlie, 2020; Bongaerts et al., 2021).

² Several multinational firms filed for bankruptcy during the covid crisis. NPC International Inc. largest franchise of Pizza Hut, Hertz, JC Penny, Virgin Atlantic etc. <https://finance.yahoo.com/news/10-big-companies-went-bankrupt-132709714.html?guccounter=1>.

essential enablers of strategic alignment and adaptation (see, for example, [Brix, 2019](#)). Finally, based on the findings of the conceptual review, a pragmatist approach is applied to develop the Multivariate Process Map³ for strategic renewal during crises.

This paper is structured as follows: We first review recent research on business-to-business (B2B) MNE's responses to exogenous shocks. After presenting our methodology, we provide a cohesive overview of the literature on strategic renewal, knowledge acquisition, exploitation capabilities, ambidexterity, and ambidextrous leadership. Next, we discuss their relevance in exogenous shocks organizations face. Building on the integrative review (see [Snyder, 2019](#)) of the selected constructs, we develop the Multivariate Process Map for strategic renewal during crises. Finally, we discuss implications for management research and practice, research limitations, and areas for future research.

2. Recent research on organizational responses to unforeseen exogenous shocks

Organizations are often caught off guard and unprepared during times of crisis, such as the 2008 financial crisis or the more recent Covid-19 crisis. This has led to an increased focus in academic research investigating how businesses can survive and thrive in the face of major environmental setbacks (Anand & Buhagiar, 2021). However, literature on how MNEs navigate crises despite facing extreme economic and societal danger is still limited. Differentiating the COVID-19 crisis from previous unforeseen environmental shocks and crises, [Cortez and Johnston \(2020\)](#) use social exchange theory to identify 22 practices managers in B2B MNEs must handle to deal with the crisis. These practices fall under four interlinked themes, namely, (a) digital transformation, (b) decision-making process, (3) leadership, and (4) emotions and stress.

On the other hand, [Ritter and Pedersen \(2020\)](#) suggest that different organizations must respond differently to various situations. Thus, each organization's business model needs to be reassessed to recover from a crisis. [Pedersen and Ritter \(2022\)](#) draw on risk management and strategic management literature to identify four market-shaping opportunities for B2B organizations to emerge successfully from the Covid-19 pandemic. Focusing on the uncertainty in business markets created by the pandemic, [Matthews et al. \(2022\)](#) identified six areas that firms should focus on when dealing with crises emerging from unforeseen events (such as the Covid-19 pandemic).

Focusing on the critical role played by leadership when dealing with the Covid-19 pandemic, [Tuan \(2022\)](#) identifies the importance of effective communication by leaders to help the employees of MNEs deal with the crisis. In addition, [Hartmann and Lussier \(2020\)](#), [Sharma et al. \(2020\)](#), and [Epler and Leach \(2021\)](#) focus on the critical role of the MNEs sales force in coping with the pandemic. Similarly, the impact of digital transformation on dealing with the Covid-19 pandemic and an organization's assessment of its digital marketing capabilities gap have been identified as factors critical for ensuring the success of a B2B organization's response to the pandemic ([Herhausen et al., 2020](#); [Alalwan et al., 2021](#)). Furthermore, co-opetition between firms ([Crick and Crick, 2020](#)), use of design thinking ([Cankurtaran and Beverland, 2020](#)), open innovation ([Chesbrough, 2020](#)), and focus on service lead growth ([Rapaccini et al., 2020](#)) compared to product-led change ([Angelidou et al., 2022](#)) have been identified as strategies employed by B2B MNEs to cope with the Covid-19 crisis.

The literature mentioned above highlights that researchers have examined various factors to understand how firms have coped (and, at the time of writing, are still coping) with the Covid-19 pandemic. What extant literature has in common is that the factors studied have been examined in isolation. As such, up until now, existing research has neglected the interrelationships and mutual support between different constructs. While the Covid-19 pandemic is a significant crisis, organizations can face many challenges and crises that require several different capabilities and skills. We argue, therefore, that it is critical to provide a complete picture of the skills and abilities needed and, thus, a coherent understanding of the essential factors that MNEs need in combination to effectively address and navigate crises. The goal of this research is, therefore, to provide a framework that aids in better understanding relevant constructs that support strategic renewal.

3. Methodology

To accomplish the aims of this article, an integrative literature review was conducted following the guidelines of extant literature ([Snyder, 2019](#)). As the aim of the integrative review is to overview the knowledge base and combine different perspectives into a new framework ([Snyder, 2019](#)), our approach links articles across disciplines to provide multi-level insights and broadens the scope of our understanding (see [Gilson and Goldberg, 2015](#)). As a result, we present a summary of the identified literature and a synthesized conceptual framework (i.e., the Multivariate Process Map) that enables scholars and practitioners to better understand the interconnectivity between strategic renewal and constructs that research (see, for example, [Agarwal and Helfat, 2009](#)) considers as highly important for strategic renewal (i.e., knowledge management capabilities and ambidextrous leadership). Such review methods have been applied in other research (see [Buhagiar and Anand, 2023](#)). As a first step into the conceptual development, following recommendations of extant literature (e.g., [MacInnis, 2011](#); [Yadav, 2010](#)), we selected constructs that extant research considers as highly important for strategic renewal (see, for example, [Agarwal and Helfat, 2009](#)). Since the conceptual approach often adopts a problem-focused approach and thoroughly answers the what's new question or problem that is being investigated ([Gilson and Goldberg, 2015](#)), our approach links articles across disciplines to provide multi-level insights. It broadens the scope of our understanding (see [Gilson and](#)

³ A Multivariate process map is a thematic map that simultaneously captures several parameters (variables) into one mechanism. The primary objective of this multivariate process map is to elucidate and effectively convey the connections between different variables that may give a meaningful outcome.

Goldberg, 2015). As a result, we present a summary of the identified literature from different streams of management and international business and a synthesized conceptual framework (i.e., Multivariate Process Map) that enables scholars and practitioners to understand better the interconnectivity between knowledge management capabilities, ambidextrous leadership, and strategic renewal and, thus, better respond to crisis.

Subsequently, we systematically searched various databases to extract literature (cf. Greenhalgh et al., 2018) from diverse fields and articles that focus on strategic renewal, knowledge acquisition and exploitation capabilities, ambidexterity, and leadership, in the context of crisis management and combination with MNEs and multinational organizations. Furthermore, by employing the pragmatist paradigm (see Simpson, 2018), we emphasize the practicality and relevance of the knowledge generated and develop a process map that MNEs can use to tackle the challenges they encounter during times of crisis. The following section discusses the methodical processes we adopted to develop the integrative literature review presented in this paper.

First, multiple databases, including Scopus, Web of Sciences, ScienceDirect, DOJA, and JSTOR, were used to search for peer-reviewed articles, books, and book chapters associated with literature concerning 1) strategic renewal during times of crisis and 2) crisis management.

Second, once we identified relevant published articles, we read them and critically analyzed and contrasted them, enabling us to form associations between different fields of literature. Through this initial search, we identified that strategic renewal during times of crisis is an emergent field of investigation, and attaining strategic renewal in organizations is closely linked to the dynamic capabilities approach and ambidexterity. The literature on crisis and crisis management displayed that effective crisis management is generally contingent on knowledge acquisition, exploitation capabilities, and effective leadership. This initial methodical process provided us with additional search parameters.

Third, with new search parameters, we returned to Scopus, Web of Sciences, ScienceDirect, DOJA, and JSTOR to search for peer-reviewed articles, books, and book chapters. To source relevant material, we used various keywords and combinations of keywords such as 1) “knowledge acquisition and exploitation capabilities” and “crisis management”, 2) “ambidexterity” and “crisis management”, 3) “leadership” and “crisis management” and kept the focus on MNEs and large organizations. Fourth, once relevant articles were identified, they were read and critically scrutinized to understand the basis of the systematic literature review. Fifth, given the novelty of the COVID-19 crisis and to explore how MNEs may have adapted and are adapting to this crisis, we relied on search engines, such as Google, to source examples of adaptive mechanisms used by organizations to counteract the potential negative implications.

In conducting a literature review within the pragmatist paradigm, as outlined by Simpson (2018), the primary focus of this paper has been directed toward the creation of a practical tool tailored for practitioners, with a strong emphasis on its problem-solving capabilities (Coghlan and Brydon-Miller, 2014). Researchers who adopt a pragmatic perspective evaluate various explanations of world events based on how well they provide the desired or expected results (Kaushik and Walsh, 2019). Therefore, the proposed Multivariate Process Map for strategic renewal during crises intends to refute formalism in exchange for a practical methodology that displays how organizations may overcome crises by applying knowledge acquisition and exploitation capabilities and ambidextrous leadership through a series of implementable actions. The following section critically discusses extant literature on strategic renewal, knowledge acquisition and exploitation capabilities, and ambidextrous leadership. Following this discussion, this paper presents and discusses the Multivariate Process Map for strategic renewal during crises.

4. Synthesis of reviewed literature

4.1. Strategic renewal

Strategic renewal is one type of strategic change that occurs when organizations attempt to restructure their motive and capabilities (Agarwal and Helfat, 2009; Al Humaidan & Sabatier, 2017). While strategic change encompasses both the advancement and renewal of MNEs strategies (see also Verbeke et al., 2007; Volberda & Baden-Fuller, 2017), strategic renewal is a more common and precise term for a specific type of strategic change. Agarwal and Helfat (2009) define strategic renewal as “the process, content, and outcome of refreshing or replacing an organization’s attributes that have the potential to have a significant impact on its long-term prospects” (p. 282). Specifically, strategic renewal refers to organizational processes that aim to alter path dependencies through transformations in strategic intent and capabilities (Albert et al., 2015; Schmitt et al., 2018), which may influence organizational competitiveness (McGee and Sammut-Bonnici, 2015). Researchers, such as Nary (2021), see strategic renewal as an intricate and diverse subject, encompassing several organizational characteristics and their possible influence on the organization’s future. It commonly involves effectuating modifications to an organization’s infrastructure ahead of crises, requiring efforts that may be difficult to initiate, fund, and lead due to uncertainty and lack of preparation (Binns et al., 2014). Organizations can derive numerous advantages from strategic renewal. For example, it can enhance organizational performance through the cultivation of learning orientations, ambidexterity competences, long-term innovation capabilities, and transformational leaders (Kusuma and Sudhartio, 2020).

According to Schmitt et al.’s (2018) systematic literature review on strategic renewal, it generally 1) involves changes to the capabilities which provide an organization with a competitive advantage, 2) exerts organization-wide implications, and 3) is necessary to terminate path dependencies and secure the long-term viability of organizations. Strategic renewal may be effectuated within organizations through repetitive changes or discontinuous alterations in organizational dimensions, including changes to capabilities, processes, resources, structures, routines, decision-making processes, and cognition (Agarwal and Helfat, 2009). Strategic renewal may be acquired through various avenues, including hiring a new employee (Whitney, 1996) or new interfirm relationships through alliances, joint ventures, partnerships, licensing agreements, or intra- and inter-sectorial networks (Agarwal and Helfat, 2009). It occurs when a business seeks and attempts novel ways to leverage its capabilities to adapt to a changing environment and increase its

competitive advantages (Agarwal and Helfat, 2009). Thus, prior literature explores and examines the essence of the strategic renewal concept as a change at the organizational level of a firm of the critical competencies required for long-term survival.

With a number of businesses ceasing operations due to Covid-19 (Amankwah-Amoah et al., 2020), investigating how organizations may acquire long-term survival through strategic renewal has become a primary theoretical consideration (Schmitt et al., 2018). However, while this theoretical lens may be applied to explore how an organization acquires long-term survival, this field of research is relatively nascent and saturated with polarized perspectives (Klammer et al., 2017; Schmitt et al., 2018). In addition, the means through which organizations may renew their infrastructure still needs to be explored.

Despite these shortfalls in the literature, attaining environmental fitness in organizations may be perceived as grounded in mechanisms for firm-level change, including the dynamic capabilities approach and ambidexterity (Parente et al., 2011; Tuncdogan et al., 2019). In this respect, “strategic renewal is, in fact, an integral part of the dynamic capabilities framework” (Teece, 2019, p. 32). As a kind of dynamic capability, we argue that ambidexterity involves exploring and exploiting the firm’s existing competencies (Crossan et al., 1999; March, 1991) necessary for system survival and continued renewal.

Although dynamic capabilities and ambidexterity can facilitate strategic renewal, these theoretical frameworks offer only general routines or processes for organizational change. As a result, they do not guide the specific capabilities or tension balances needed to manage crises.

In this respect, previous studies have demonstrated that the capacity of organizations to acquire and exploit knowledge during times of crisis is vital for enhanced decision-making – this, in turn, was noted to lead to effective crisis management (Burnard et al., 2018; Cania and Korsita, 2015; Khvatova et al., 2016; Lauras et al., 2015; Paraskevas et al., 2013). In addition, research has indicated that during crises, leadership plays a core role in establishing an organizational vision and managing the contradictory demands present within unpredictable contexts (Lewis et al., 2014). Therefore, the following sections discuss knowledge acquisition and exploitation capabilities and ambidextrous leadership while building on the research mentioned above.

4.2. Knowledge acquisition and exploitation capabilities

Strategic renewal can be facilitated by knowledge acquisition and exploitation capabilities, which comprise absorptive capacity (Cohen and Levinthal, 1990; Zahra and George, 2002), combinative capabilities (Kogut and Zander, 1992), and knowledge management capabilities (Falihat et al., 2020; Foss and Pedersen, 2002; Nielsen, 2006). Absorptive capacity mirrors the ability of organizations to acknowledge the significance of external information, incorporate it into the organization’s infrastructure, and commercialize it, leading to strategic flexibility, innovation, and augmented performance (Cohen and Levinthal, 1990; Zahra and George, 2002).

According to Kogut and Zander (1992), combinative capabilities, which refer to an organization’s capacity to generate “new applications of knowledge from existing knowledge” (p. 391), are conceptualized to lead to strategic renewal through knowledge creation and innovation. Similarly, knowledge management capabilities refer to the three core capabilities used in managing and transforming knowledge, including knowledge development, knowledge (re)combination, and knowledge use capabilities (Nielsen, 2006) which are conceptualized to contribute toward strategic renewal by way of a new product or service development (Nielsen, 2006).

The importance of the absorptive capacity for organizational adaptation during crises has been made relatively pertinent through the increasing reliance of organizations on partnerships and networks, which provide organizations with access to new knowledge, enhanced organizational learning, mutual gains, and collective innovation (Arikan, 2009). For example, Eli Lilly partnered with AbCellera to explore and identify successful antibodies to treat Covid-19, while GSK and Sanofi collaborated to develop a potential vaccine for Covid-19 (Sanofi, 2020). Further, the European Institute of Innovation and Technology (EIT), which launched a platform for Covid-19 research, continues to promote collaboration in healthcare (EIT Health, n.d.). EIT’s multi-disciplinary platform serves as a connecting point for innovators to request and offer collaborative knowledge exchanges to develop resources to combat Covid-19 (EIT Health, n.d.).

Similarly, to facilitate knowledge sharing between medical practitioners, the technology-based organizations SingularityNET, Ocean Protocol, and Nth Option collaborated to establish www.AskCo19.com, enabling medical frontline personnel to share information about Covid-19 (Srivastava, 2020). In the retail sector, collaborations have surfaced, including cooperative efforts between Belgian distributors Delhaize and Colruyt to deliver groceries to hospital staff. In addition, Amazon partnered with Lyft to offer Lyft staff various employment positions at Amazon until the Covid-19 pandemic was curtailed. At the same time, Carrefour and Uber Eats in Paris have partnered to provide home deliveries (Altavia, 2020). Through absorptive capacity, where organizations jointly open up to their external environment (Holmqvist, 2003), organizations are more likely to benefit from collaborative learning (Moynihan, 2008), enhanced knowledge creation processes, access to new knowledge, and collaborative innovation opportunities (Schönström, 2005).

The ability of organizations to react to crises through combinative capabilities (i.e., developing new products or services through novel configurations of knowledge) has been a widely applied capability during the Covid-19 pandemic. For example, Ford, 3 M, and General Electric partnered to mass-manufacture hospital medical equipment (Bogage, 2020). On the other hand, companies such as Pernod Ricard SA, alcohol manufacturers, and the luxury goods group LVMH started using alcohol distilleries and perfume plants for manufacturing hand sanitizers (Buckley, 2020). Foxconn Technology Group, which manufactures iPhone components, readjusted production lines to manufacture surgical masks in China, while Elon Musk and Medtronic Inc. entered discussions to develop novel ventilators (Buckley, 2020). In addition, Fitbit designed and developed the Fitbit Flow, a low-cost and user-friendly emergency ventilator; PathSpot developed a scanner to check and provide feedback to individuals regarding the efficiency and effectiveness of their handwashing habits (Hakobyan, 2020).

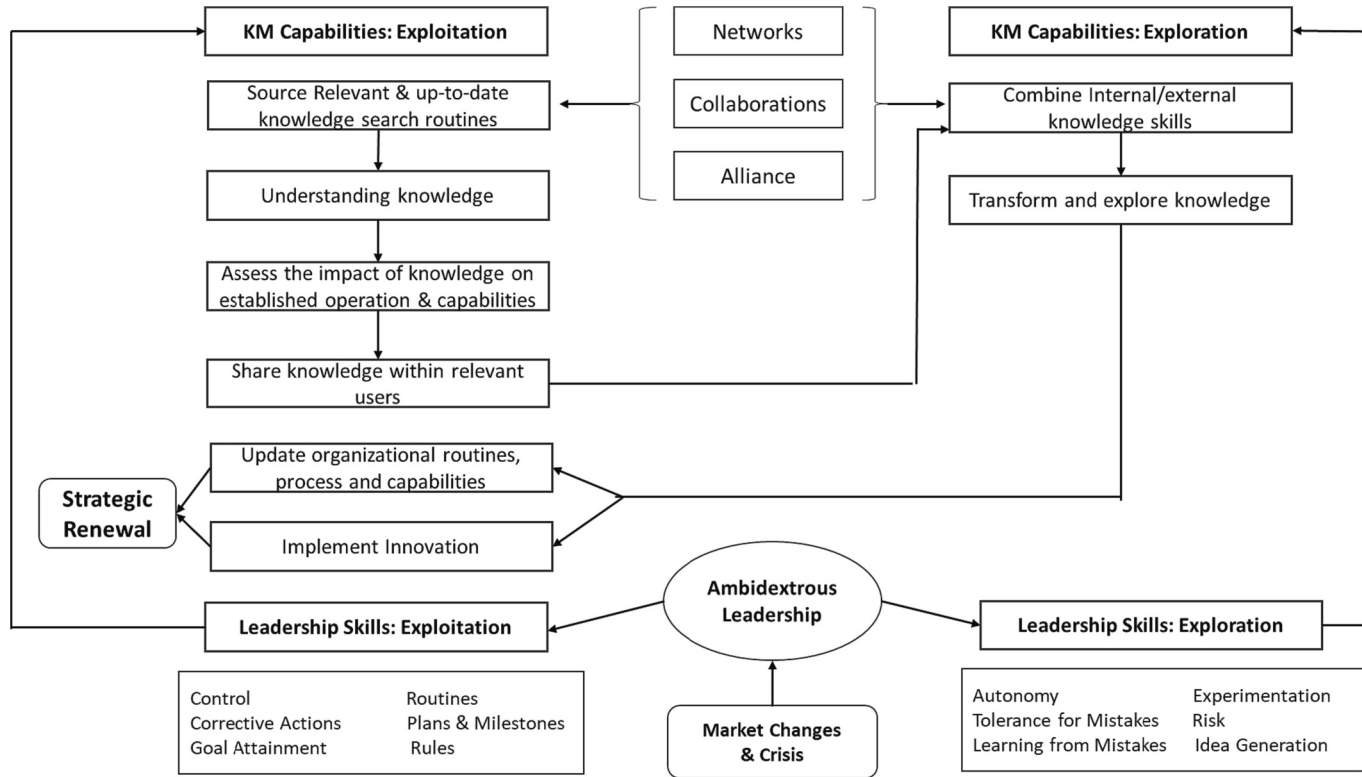


Fig. 1. Multivariate process map for strategic renewal during times of crises.

While absorptive and combinative capabilities may provide organizations access to new knowledge, learning, and innovation opportunities, knowledge management capabilities provide an infrastructure for systematically integrating, leveraging, and exploiting newly acquired knowledge resources (Nielsen, 2006). For example, from an institutional level, Taiwanese and New Zealand Governments effectively employed knowledge management strategies to contain the spread of Covid-19 (Acies Innovations, 2020). In Taiwan's case, the knowledge management strategy adopted by the Taiwanese Government revolved around reusing knowledge acquired from the 2002 SARS outbreak (Acies Innovations, 2020).

Using knowledge acquisition and exploitation capabilities (i.e., absorptive capacity, combinative capabilities, and knowledge management capabilities), organizations systematically identify essential information about contextual changes and establish crisis management plans based on accurate and up-to-date knowledge (Cania and Korsita, 2015). Thus, absorptive capacity, combinative capabilities, and knowledge management capabilities enable MNE organizations to attain strategic renewal through access to new knowledge, innovation opportunities, and enhanced decision-making through routinized knowledge processes. However, organizations during crises simultaneously need to balance exploratory efforts aimed at discovering innovation opportunities and exploitation efforts aimed at selection and refinement (March, 1991).

4.3. Ambidexterity and ambidextrous leadership

Ambidexterity refers to a firm's ability to achieve "alignment in its current operations while adapting effectively to changing environmental demands" (Gibson and Birkinshaw, 2004, p. 210). It focuses on how organizations balance their resource distribution between exploring new possibilities and exploiting existing competencies (Brix, 2019; March, 1991). Through exploitation activities, organizations may benefit from increased efficiency, the extension of competencies, productivity, and variation reduction (Brix, 2019; March, 1991; O'Reilly and Tushman, 2008). On the other hand, exploration is associated with innovation, uncovering new possibilities, making the discovery, achieving autonomy, and considering alternatives (Brix, 2019; March, 1991; O'Reilly and Tushman, 2008).

Research traditionally investigated the relationship between organizational design and ambidexterity (Birkinshaw et al., 2016; Brix, 2019; Simsek et al., 2009). An alternate stream of literature has emphasized that organizational ambidexterity may depend on leadership (Probst et al., 2011; Rosing et al., 2011; Zacher and Rosing, 2015). Thus, successfully implementing ambidexterity in organizations depends on leaders' ability to effectively balance the tensions between exploration and exploitation activities and design and reconstruct organizations according to the market's demands (O'Reilly and Tushman, 2008). Ambidextrous leadership involves maintaining existing tasks while simultaneously promoting the development of innovations. It requires both short-term and long-term thinking, followed by the development of emotionally appealing visions and a concurrent focus on executing existing operational routines (Probst et al., 2011).

In times of crisis (such as during the Covid-19 pandemic), ambidextrous leadership can facilitate the rapid development of solutions and enable fast-paced decision-making by balancing an organization's resources between its future vision and adaptation through flexibility and creativity (Lewis et al., 2014). Moreover, through ambidextrous leadership, organizations may benefit from effectively distributing resources between exploration and exploitation activities, ensuring that organizations execute operational tasks while simultaneously focusing on future opportunities and innovation activities (Zacher and Rosing, 2015).

While ambidextrous leadership provides the climate necessary for adaptation and strategic renewal by balancing exploitation and exploration activities, absorptive capacity, combinative capabilities, and knowledge management capabilities work toward strategic renewal through routines aimed at accessing new knowledge and combining knowledge resources for innovation opportunities and routinizing knowledge processes for effective decision making. By combining ambidextrous leadership with absorptive capacity, combinative capabilities, and knowledge management capabilities, this paper proposes a Multivariate Process Map for strategic renewal during crises, which can support MNEs in overcoming crises.

5. Multivariate process map for strategic renewal during times of crises

5.1. Proposed conceptual framework

Based on the literature review and the theoretical discussion, Fig. 1 illustrates the Multivariate Process Map for strategic renewal during crises. This map shows how MNEs may establish pragmatic processes to attain strategic renewal by deploying ambidextrous leadership and knowledge acquisition and exploitation capabilities, hereafter referred to as KAE capabilities—an all-encompassing term for the following processes: knowledge creation, knowledge acquisition, knowledge capture, knowledge assembly, knowledge sharing, knowledge integration, knowledge leverage, and the exploitation of knowledge.

The proposed process map is relevant for practitioners in MNEs as it may be applied as a tool to pre-empt strategic renewal. During crises, it may be referred to as a guiding infrastructure for discontinuous strategic renewal. In addition, this map concurrently aims to assist practitioners in reducing or overcoming symptoms of organizational paralysis by providing an outline of pragmatic, structured, and implementable KAE processes and leadership skills for effective adaptation. The proposed process map is a crucial tool designed to guide and facilitate practitioners in their endeavor for competent leadership and effective KAE capability utilization during times of ambiguity and crisis. Its purpose is to inspire and encourage practitioners to explore novel and alternative approaches, helping them navigate and overcome challenges confidently and efficiently. While there is no one-size-fits-all solution for adaptation and strategic renewal in crises, the proposed process map aims to assist practitioners in how systematic approaches toward KAE capability utilization and leadership can overcome chaos and disarray by motivating employees and structuring knowledge flows. Using Covid-19 as

an example, the following section presents and discusses the different elements of the Multivariate Process Map for strategic renewal.

The following discussion is subdivided into two sections to address the different components (i.e., leadership skills and KAE capabilities) constituting the Multivariate Process Map for strategic renewal during times of crises. [Section 5.2](#) provides an overview of the leadership skills and KAE capabilities necessary for the exploitation process in contexts of crises. [Section 5.3](#) discusses the leadership skills and KAE capabilities for exploration processes in contexts of crises.

5.2. Ambidextrous leadership and KAE capabilities for exploitation

Ambidextrous organizations focus on existing goals for the company while remaining adaptable to future changes in the environment. This necessitates distinct organizational characteristics, such as well-defined structural configurations, conducive organizational environments, and a proficient leadership team ([Schmitt et al., 2010](#)). Ambidexterity describes the ability of firms to pursue both an exploratory and an exploitative orientation ([Doblinger et al., 2022](#)). We argue that to create a climate conducive to the exploitation of knowledge resources during times of crisis, leaders must focus on “refinement and [the] extension of existing competencies” ([March, 1991](#), p. 85). To create this environment, structure, control, routines, milestones, plans, and rules are necessary to reduce variances, i.e., exploratory behaviors ([Rosling et al., 2011](#)). While exerting control in rapidly changing environments may be an arduous task for one leader, an organization may subdivide each phase of the KAE process between different middle managers who, in turn, will be responsible for other aspects of the KAE process ([Probst et al., 2011](#)). Alternatively, organizations may subsequently choose to appoint employees with the best and most functional abilities to lead each phase of the KAE process, which, according to [Nonaka et al. \(2000\)](#), guarantees “the right man in the right place” (p. 27). This strategy relies on redundancy, where managers recognize employees’ abilities, strengths, and knowledge ([Nonaka et al., 2000](#)), acting as an effective and efficient strategy to delegate task responsibilities to well-suited candidates.

The KAE process for exploitation begins with sourcing information from the external environment ([Cohen and Levinthal, 1990](#); [Zahra and George, 2002](#)). For example, the Covid-19 outbreak started on December 31, 2019, and by January 13, 2020, the first case of Covid-19 was reported outside China’s territorial jurisdiction ([Secon et al., 2020](#)). While the evolution of Covid-19 was relatively fast, continuous research and development (R&D) and up-to-date information paved the way for the early identification of environmental threats and opportunities ([Teece, 2007](#)). Although specific organizations may have been unable to identify the threats posed by the rapid development of Covid-19 in its early stages, R&D and search activities may also be applied amid crises to effectively source information on the strategies adopted by competitors and competing nations to overcome hyper-turbulence. Moreover, while the capability to source external information is generally path dependent on prior knowledge (i.e., placing organizations that have accumulated tacit knowledge of crises in a better position to recognize the value of information, such as China’s early Covid-19 reports) ([Cohen and Levinthal, 1990](#)), a state of chaos, may potentially stimulate organizations without prior knowledge on crisis management to explicitly define the problem and outline plans to overcome that problem ([Nonaka and Takeuchi, 1995](#)).

Once an organization has identified relevant information, it needs to be assimilated through interpretation, which is a deliberate effort to understand the information itself, the implications of such information, and to whom such information needs to be communicated ([Zahra and George, 2002](#)). The rate at which knowledge will be assimilated within an organization is relatively contingent on an organization’s skills, prior knowledge, and novelty of the information ([Cohen and Levinthal, 1990](#)). Therefore, the impact of Covid-19 and the global measures implemented, being relatively novel, may have required substantial reflection by an organization to understand i) how the available information may impact current operations, ii) how the available information may be used to enhance existing processes; iii) how the available information may impact business models; and iv) how the available information may be applied to adjust the business model. Once the information is understood, it should be redirected to relevant departments and personnel. KAE processes shift into the exploratory phase once external information is successfully shared with appropriate personnel and departments.

The following section outlines exploratory KAE processes while simultaneously providing an overview of the leadership skills necessary for the exploratory KAE process.

5.3. Ambidextrous leadership and KAE capabilities for exploration

Research shows that, ambidextrous leaders can thrive when it comes to capitalizing on market shifts. Such leaders are characterized by their cautious yet bold nature, deep understanding, unwavering commitment, and efficient implementation for superior organizational performance. Thus companies must recognize the extent to which they have ambidextrous leaders who can lead the company out of major risks ([Birshan et al., 2022](#)) or develop their ambidexterity.

To exploit current competencies and explore future opportunities, the unit of receiving information needs to assimilate incoming information and critically assess the impact of such information on the organization’s current operations and future viability. This process generally occurs through reflective practices. In the context of the Covid-19 pandemic this could have been done by, for example, asking i) how Covid-19 may impact the organization’s market offering, ii) whether there will be a demand for the organization’s products or services amidst a global pandemic, iii) how Covid-19 may impact the organization’s supply chain; and iv) what the implications of Covid-19 on the organization’s revenue streams are. Moreover, to efficiently examine the impact of Covid-19, business units may turn to the organization’s business model and scrutinize each element of the business model against incoming information. Finally, once the implications of Covid-19 have been mapped out, managers must utilize their combinative capabilities to generate novel applications of knowledge from existing knowledge bases ([Kogut and Zander, 1992](#)).

To effectively develop new knowledge, managers need to create a shared space to externalize unique tacit knowledge. Employees

should come together to share experiences and engage in creative dialogue and hypotheses (Nonaka, 1994). Therefore, unlike the initial KAE phases, this phase of the KAE process requires leadership that promotes autonomy, experimentation, tolerance for mistakes, risk-taking, learning from mistakes, and idea generation (Rosing et al., 2011). In this phase of the KAE process, managers must create an atmosphere that promotes sharing tacit knowledge, support, safety, and commitment among employees (Nonaka et al., 2000). Simultaneously, managers must be inspiring, committed to their goals, positive, and selfless (Nonaka et al., 2000).

While managers need to provide the autonomy and leeway required to explore ideas, managers concurrently need to be time-sensitive toward external developments and progressions. For example, during the Covid-19 pandemic, managers should have addressed two core issues in this phase of the KAE process: a) how will/does Covid-19 impact current operations; b) how may the organization's business model be innovated to adapt to future crises. Therefore, this step involves both short-term and long-term thinking. While short-term thinking should have focused on the impact of Covid-19 on current organizational operations, long-term thinking is applied to future-proof the organization's business model.

Short-term thinking and being time-sensitive requires a quick cycle of convergent and divergent thinking, which, in turn, is likely to be monitored by managers. In contrast, long-term thinking maybe a longer, more iterative idea-generation process. In both long-term and short-term thinking, managers and employees explore future possibilities through divergent thinking, where multiple ideas based on existing information are developed (Cropley, 2006). Divergent thinking "requires making unexpected combinations, recognizing links among remote associates, transforming information into unexpected forms, and the like" (Cropley, 2006, p. 391). Through divergent thinking, organizations may identify future opportunities and areas of innovation, which, in turn, may lead the organization to expand its revenue streams and better adapt to changing circumstances. After combining employee knowledge, skills, and ideas, the organization needs to transform these ideas into pragmatic, implementable, long-term or short-term competitive advantages. Once solutions are identified, ideas are fed back into the exploration phase of the KAE process. Finally, managers assemble the resources necessary to update operating procedures, processes, and capabilities and implement innovations.

For strategic renewal to be continuous, the activities detailed in the Multivariate Process Map must be firmly established and embedded in an organization's infrastructure, as the implementation of renewal is continuous and crisis preparedness is ongoing. Discontinuous strategic renewal would involve implementing the Multivariate Process Map to react to crises.

The preceding discussions shed light on the mechanisms (including KAE capabilities and leadership skills) through which organizations may acquire strategic renewal before or during contexts of crises. The proposed Multivariate Process Map for strategic renewal during crises aims to provide practitioners with a 'reference' point or 'menu' of routines and leadership structures to promote exploiting current capabilities and exploring future capability possibilities through innovation activities – leading to strategic renewal.

6. Discussion and implications

In summary, MNEs must adapt their business practices to survive crises, emerge from them, and be prepared for the challenges ahead. Academia has kept pace with these considerations, proposed new theoretical frameworks, and used a theories-in-use methodology to highlight emerging research areas. However, we argue that a more structured approach to how MNEs can deal with crises, in general, is needed. With this in mind, we propose the Multivariate Process Map of strategic renewal during crises that organizations can adhere to if they are interested in strategically renewing themselves.

This paper contributes to the theory two-fold. First, this study reviews the current literature on strategic renewal, knowledge acquisition and exploitation, and ambidextrous leadership. As such, this research offers a cohesive overview aiding researchers in quickly understanding the research landscape on strategic renewal and processes that influence knowledge acquisition and exploitation, and ambidextrous leadership. For example, our process map indicates that ambidextrous leadership should be combined with an organization's focus on developing and building knowledge capabilities while also being able to exploit possible opportunities that arise due to the crisis. Furthermore, the temporal decision-making process must include a strategic renewal plan to anticipate future crises. This indication is derived from extant research findings. For example, Edmondson and Matthews (2022) found that MNEs global salespeople who received higher support from their leaders during the middle of the pandemic tended to cope well with work-related attitudes, managed work-family conflict, and reduced emotional exhaustion and turnover intentions much better than when the support was provided during the early stages of the pandemic. These results demonstrate how leadership aligned with organizational support can positively impact employee work-related outcomes for MNE organizations.

Similarly, research suggests that charismatic leadership is positively and significantly related to service-sales ambidexterity (Ahmad et al., 2021). Service-sales ambidexterity, in turn, is critical for salespeople to build effective relationships with their customers through adaptive selling, highlighting the crucial role of leadership in MNE settings. In addition, Cortez and Johnston (2020) identify eight crisis-comparative dimensions that MNEs must consider, to prevail during the Covid-19 crisis and avoid failures successfully. Building on these eight dimensions, Cortez and Johnston (2020) propose four intertwined areas that MNEs need to focus on (see Section 2). These areas are in line with our process map, where ambidextrous leadership should be combined with an organization's focus on developing and building knowledge capabilities while also being able to exploit possible opportunities that arise due to the crisis. Furthermore, the decision-making process must involve a strategic renewal plan to anticipate future crises for MNEs.

From a different viewpoint, Oflaç et al. (2021) suggest that fair treatment of customers and inclusion of customer opinions in the service recovery strategy is key to achieving high recovery satisfaction levels. In this context, strategic renewal may help business customers perceive the monetary compensation provided after a service failure as fair, leading to higher customer satisfaction and retention. Similarly, work by Poblete and Bengtson (2021) focuses on (re)building activities carried out by MNEs to rebuild their relationships with their suppliers after a crisis, and how this contributes to new knowledge on factors that affect this process.

Second, this paper should inspire future research by proposing the Multivariate Process Map for strategic renewal during crises and

offering anchors for future research. For example, while MNEs coped well with the Covid-19 pandemic, the model presented in this paper could be the beginning of research to investigate how managers can build more resilient MNEs operations to ensure and reduce business failures that crises may cause. In addition, research on whether and how MNEs coordinate internal and external activities in crises can be a promising avenue for exploring its relation with KAE and ambidextrous leadership. For instance, there may be less of an issue if required knowledge is available and if leaders work in coordination.

Our findings suggest that MNEs must demonstrate ambidexterity to survive and recover from crises. Ambidexterity involves knowledge management capabilities that include acquiring the knowledge vital for success and being ready to exploit the opportunities when they present themselves. For instance, MNEs should build more meaningful relationships with key customers to ensure they can work closely with them and understand trends in their business that they can exploit when dealing with other customers. Particular attention should also be paid to ensuring established customer relationships are solidified and service failures are promptly addressed to guarantee customer satisfaction and potential learning from service recovery strategies. In addition, MNEs should closely monitor the activities of their competitors and suppliers to ensure they are well-prepared to deal with contingencies. Finally, our study suggests MNEs build strategic partnerships with their suppliers and co-opetition whenever needed.

MNEs need strong coordination of various contextual and institutional-specific crisis preparation efforts, and to do so, the KAE and ambidextrous leadership may help in facing or navigating crises effectively. For example, a key task for MNE managers is to determine whether crises in a specific institutional context or setting (such as developed markets vs. emerging markets) require KAE or any additional support (such as resources other than knowledge, communication channels, etc.).

Our findings also highlight the critical role leaders play in implementing organizational policies. During crises, leaders must communicate with their subordinates and help them manage the challenges that arise due to the crises. Leadership should display ambidexterity to deal with the situation on the ground and empower and reinforce their customer-facing roles with the necessary resources to deal with the business and the stress or emotional challenges that arise among their subordinates. Leadership should also understand what capabilities (including technological and change management) must be developed and deployed to deal with crises.

Our process map developed basically can help MNEs to be agile and adaptable to changing market conditions. This may involve restructuring operations, reallocating resources, or entering new markets. For instance, using strategic renewal as a proactive approach, organizations can reassess and realign strategy, and innovate to adapt to changing market conditions and overcome crises effectively (Filippov and Kalotay, 2011). For instance, by prioritizing innovation and R&D initiatives as part of strategic renewal efforts, MNEs can develop new products, services, and business models that differentiate them from competitors and drive growth even in challenging market conditions. Moreover, Knowledge exploitation involves utilizing existing knowledge and resources to create value. By continuously learning from past experiences and successes, organizations can identify areas for improvement and innovation and thus may lead to strategic renewal (Riviere et al., 2018) to face and manage crises. Furthermore, ambidextrous leaders possess the skill to effectively manage the interplay between exploration, which encompasses innovation, creativity, and adaptability to change, and exploitation, which pertains to efficiency and the optimization of pre-existing resources. This equilibrium empowers institutions to investigate novel prospects while capitalizing on preexisting capacities, thereby facilitating their adjustment to evolving conditions in times of crisis (Gouda and Tiwari, 2024).

While the process map developed is based on the theory and concepts derived from various constructs, we believe that several potential areas can be explored in the future to advance the field. For instance, the impact of ambidextrous leadership styles on the capacity of an organization to manage crises efficiently. An examination of the correlation between ambidextrous leadership behaviors and KAE can be a crucial aspect to investigate empirically. Similarly, how the process map can help in developing resilience in MNEs could be one possible area that could be explored in the future as ambidextrous leaders can assist organizations in recovering from disruptions and adjusting to evolving conditions.

Additionally, though we articulate several aspects of KAE in the process map, it is important to explore how the process of knowledge Transfer and Integration can happen in managing crises. For instance, MNEs are characterized by several levels and units in and across the globe, and hence Investigating how organizations transfer and integrate knowledge across different levels and functions during a crisis to facilitate effective decision-making and response strategies can potentially explain strategic renewal too.

7. Conclusions and limitations

This paper presents a pragmatic approach toward strategic renewal before or during a crisis. In proposing the framework, we suggest that MNEs and their managers adopt the framework and work on creating more resilient firms equipped to deal with any crisis. The proposed process map provides MNE practitioners with an overview of the various capabilities and processes that they can systematically apply to ensure that the organization adapts effectively to changing environmental conditions using KAE capabilities and leadership skills. Despite the contributions of this research, we acknowledge several limitations. First, given the dispersed nature of the literature on MNEs' crises and failure literature, we specifically focused on selected MNE research to focus more on offering a solution-based framework for MNEs rather than engaging the entire range of literature in the MNE domain.

Our study aimed at inspiring and informing scholars on the role of KAE capabilities, ambidextrous leadership, and strategic renewal as the main components to deal with crises or possible failure in the future. However, it also asks scholars to engage more in systematic and bibliometric studies to specifically explore the boundaries of managing crises and addressing failures (see, for example, Cortez and Johnston, 2020; Volberda & Baden-Fuller, 2017). This research is conceptual in nature, thus, future research may use empirical analysis to support, challenge, or extend the findings presented within the conceptual model. In addition, this research mainly focuses on the Covid-19 pandemic as an example of a crisis. Future studies may explore how crises duration and nature impact KAE processes and leadership skills.

CRedit authorship contribution statement

Amitabh Anand: Conceptualization, Methodology, Project administration, Writing – original draft, Writing – review & editing. **Sanjay Kumar Singh:** Methodology, Resources, Writing – original draft, Writing – review & editing. **Melanie Bowen:** Conceptualization, Investigation, Methodology, Writing – original draft, Writing – review & editing. **Deva Rangarajan:** Conceptualization, Methodology, Writing – original draft, Writing – review & editing.

Declaration of competing interest

None.

Data availability

No data was used for the research described in the article.

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