Journal of Business Research 158 (2023) 113662

Contents lists available at ScienceDirect

Journal of Business Research

journal homepage: www.elsevier.com/locate/jbusres

Investigating the revised international marketing strategies during COVID-19 based on resources and capabilities of the firms: A mixed method approach

Abhishek Behl [a,*], Nirma Jayawardena [b], Achint Nigam [c], Vijay Pereira [d], Amit Shankar [e], Charles Jebarajakirthy [f]

[a] Management Development Institute, Gurgaon, India
[b] O P Jindal Global University, Sonepat, India
[c] Birla Institute of Technology and Science, Pilani, India
[d] NEOMA Business School, France
[e] Indian Institute of Management, Vishakhapatnam, India
[f] Griffith University, Australia

ARTICLE INFO

Keywords:
COVID-19
Resource orchestration theory
Qualitative analysis
Conceptual model
Mixed method
International marketing strategies

ABSTRACT

This paper aims to identify the revised international marketing strategies in communication during the COVID-19 pandemic by utilizing the firm's resources and capabilities. We conducted in-depth interviews and a questionnaire survey with key stakeholders of retail organizations which changed their digital marketing strategies during COVID-19. The data is collected from 587 respondents from different parts of the world through resource orchestration theory. The qualitative findings support a high degree of association among the firm's resources and capabilities, leveraging processes based on the revised international marketing strategies during the COVID-19 pandemic. We have developed a conceptual model based on these findings with six variables: leveraging process of the firm's capabilities information technology-related resources; information technology-related capabilities, dynamic capabilities, environmental uncertainty, and leveraging process of the firm's resources. However, environmental uncertainty and leveraging of the firm's resources were not influential in forming digital marketing strategies during COVID-19. This study proposes a new process for international marketing managers in business organizations to restructure the resources within their organizations by creating new capabilities and leveraging them.

1. Introduction

COVID-19 disrupted the international marketing strategies of firms around the globe (He & Harris, 2020; Jiang & Wen, 2020). Global supply chains have been disrupted due to slowing the global economy and production interruptions. This alAs a result of this situation; business firms must re-evaluate their existing business models to remain competitive (Filimonau, Derqui, & Matute, 2020; He & Harris, 2020; Ratten, 2020). Moreover, social distancing measures affected firms by creating the need to adopt digital platforms to maintain customer contact (Alber & Dabour, 2020).

Some of the revised international marketing strategies during COVID-19 which became important are the need for businesses to close their doors to the public and workers and to let them work from home with home delivery and company failure rates increasing significantly (Crick & Crick, 2020; Elsafty & Ragheb, 2020). Morris, Schindehutte, and LaForge (2002) identified seven aspects of EM behavior: constructive orientation, opportunity-driven behavior, consumer strength, innovation-focused behavior, risk management, resource leveraging behavior, and value development. Although much of the EM literature focuses on small businesses, Nguyen, Sharma, and Crick (2021) point out that behavior can also occur in larger, developed businesses, which aligns with the current study. Many attempts have previously been made to meta-analyze either the marketing strategy-export success relationship or the antecedents or outcomes of international marketing strategy standardization (İpek, 2020).

* Corresponding author.
E-mail addresses: abhishekbehl27@gmail.com (A. Behl), nirmas.jayawardena@jgu.edu.in (N. Jayawardena), achint.nigam@pilani.bits-pilani.ac.in (A. Nigam), vijay.pereira@neoma-bs.fr (V. Pereira), ashankar@iimv.ac.in (A. Shankar), c.jebarajakirthy@griffith.edu.au (C. Jebarajakirthy).

https://doi.org/10.1016/j.jbusres.2023.113662
Received 9 July 2022; Received in revised form 31 December 2022; Accepted 4 January 2023
Available online 9 January 2023

The principal concept of resource orchestration was recently proposed to counter the previously neglected mechanisms using which international managers can collect, integrate, and leverage resources for supporting current opportunities and also creating potential opportunities for gaining a competitive advantage (Baert, Meuleman, Debruyne, & Wright, 2016; Wright, Tartari, Huang, Di Lorenzo, & Bercovitz, 2018). Applying this theory in the context of workplace resource utilization during the COVID-19 pandemic applies the useability of this theory to the next level. Therefore, this leads to the formation of the research question of this study as follows.

RQ: "What strategies were used to change the existing international marketing communication methods during the COVID-19 pandemic?"

Therefore, this study examined how 'resource orchestration theory' (ROT) can be used to explain restructuring the resources in a firm by building new capabilities and eventually leveraging these capabilities during the COVID-19 pandemic (Crick & Crick, 2020; Elsafty & Ragheb, 2020). This research is positioned within entrepreneurial marketing (EM), a subset of the international marketing literature (Ahmadi, 2016; Nguyen et al., 2021). Positioning is more directly concerned with international marketing strategies and actions focusing on the resource depletion caused by COVID-19. Hence, we propose a new international marketing strategy that includes a communication process for the managers in business firms to restructure the resources in a firm by building new capabilities and eventually leveraging these capabilities based on the ROT by Sirmon, Hitt, Ireland, and Gilbert (2011).

The theoretical and practical contribution of the study is multifold. In the existing literature, different theoretical models attempt to explain slow and incremental processes of internationalization of firms in the literature on international business. Several stage models have been developed, such as the Swedish "Uppsala Internationalization Model" and the American "Innovation-related Internationalization Model" (Andersen, 1993). Researchers began questioning the universality of these stage models in the late 1980s. Johanson and Mattsson (1989) argued that firms entering an already internationalized market (so-called late starters) behave differently.

An effective foreign marketing strategy has synergistic benefits that benefit the entire company (Baert et al., 2016; Wright, Huang, & Bercovitz, 2018). By establishing sales activities in another nation, the corporation may save money by having some product manufacture or assembly done elsewhere, where labor prices are lower (Terpstra, Foley, & Sarathy, 2012). The company's global position may provide possibilities to source low-cost raw materials for its domestic and foreign manufacturing operations (Paliwoda & Thomas, 2013). The economic crisis brought on by the coronavirus lockdown and social distancing laws has served as a good wake-up call for enterprises in general and industrial businesses in particular (Allison, Davis, Webb, & Short, 2017; Willis, Woodward, Brown, Popmihajlov, Saddier, Annunziato, & Gershon, 2017). The greatest way to survive is to learn from the past when factory towns in the United States and other industrialized nations were more than just factories (Te'eni-Harari, Lampert, & Lehman-Wilzig, 2007; Terpstra, Foley, & Sarathy, 2012). The firm was frequently saved by its intergenerational relationships with the community, suppliers, and employees (Paliwoda & Thomas, 2013). This paper highlights the importance of identifying the revised international marketing strategies in communication during the COVID-19 pandemic by utilizing the firm's resources and capabilities (Baert et al., 2016; Hair, Risher, Sarstedt, & Ringle, 2019). The study also suggests that international marketing managers restructure the organization's internal resources to develop new capabilities. The study also helps managers leverage developed capabilities to gain competitive advantages during COVID-19.

2. Theoretical underpinning and review of literature

When considering the structuring, utilizing, and leveraging process using resources and capabilities of the firm, the current literature suggests the dynamic managerial capabilities of the organizational resources without considering the dynamic nature of the business environment (Asiaei, Rezaee, Bontis, Barani, & Sapiei, 2021; Collins, 2021). The research done in the domain of strategic agility and human resource management has explicitly focused on the dynamic nature of the business environments (Ahammad, Glaister, & Gomes, 2020; Baert et al., 2016); leadership differences (Rimita, Hoon, & Levasseur, 2020); and human resource management during the pandemic of COVID-19 (Am, Affandi, Udobong, & Sarwani, 2020; Elsafty & Ragheb, 2020). Therefore, it is clear that up to date, none of the studies focused on applying the resource orchestration theory by Sirmon et al. (2011) to propose a new process for the managers in business firms to restructure the resources in a firm by building new capabilities and eventually leveraging these capabilities during COVID-19 pandemic. Although cooperation and competition simultaneously can improve company efficiency, existing research lacks how business-to-business marketing strategies will be implemented in the event of a large-scale disaster.

Most businesses, especially for-profit businesses, aspire to expand regardless of age or market. According to Whalen et al. (2016), EM comes from the behavior of businesses operating in unpredictably changing contexts, providing an alternative to the traditional marketing perspective. According to research, companies that develop organically rather than via acquisitions have superior long-term profits (Carnes, Chirico, Hitt, Huh, & Pisano, 2017; Marshall, 2007). A worker's physical strength and emotional energy contribute significantly to their ability to perform tasks and significantly influence their performance and decision-making in an organization (Xia, Song, & Qian, 2019). Research has mostly focused on the number of resources required to develop innovative processes or on how those resources influence innovation. However, effectively managing those resources is also vital to innovation (Carnes et al., 2017; Przychodzen & Przychodzen, 2018; Symeonidou & Nicolaou, 2018). However, a set of constraints influences how businesses handle capital (Barrick, Thurgood, Smith, & Courtright, 2015; Massa, Tucci, & Afuah, 2017; Sirmon, 2007). To take advantage of opportunities and remain ahead of the competition, companies must develop new capabilities and seek out less crowded niche markets, which necessitates acquiring new resources (Barrick et al., 2015; King, Covin, & Hegarty, 2003).

Uncertainty is a persistent concern for international marketing literature. Still, no complete system recognizes the numerous forms and causes of uncertainty, the various coping mechanisms employed by employers, and the outcomes they produce (Crick & Crick, 2020; Liebowitz, 2020). As a result, worldwide company executives find it challenging to appreciate the wide range of risks within their organizations and devise efficient methods to address them, particularly in times like the present Covid-19 epidemic (Sharma, Leung, Kingshott, Davcik, & Cardinali, 2020).

In summary, there have been several attempts in the past to meta-analyze either the marketing strategy-export performance relationship or the marketing strategy-export performance relationship (Agag & El-Masry, 2016; Leonidou, Samiee, Aykol, & Talias, 2014). Due to COVID-19, commercial enterprises must re-strategize their current business strategies to remain competitive (Filimonau et al., 2020; He & Harris, 2020; Ratten, 2020). Social distance metrics, for example, impacted companies by requiring digital platforms to stay connected with customers (Alber & Dabour, 2020). As a result of the social distance measures, the use of digital technologies like augmented reality, virtual reality, gamification, and artificial intelligence to connect with consumers has become unavoidable (Alber & Arafa, 2020; Alber & Dabour, 2020). Although businesses have started to invest in digital technology, it is important to understand how these investments have improved productivity during COVID-19 (Pandey & Pal, 2020; Strusani & Houngbonon, 2020).

Although cooperation and competition simultaneously can improve company efficiency, existing research lacks how business-to-business marketing strategies will be implemented in the event of a large-scale

disaster. When considering international marketing literature on structuring, utilizing, and leveraging process using resources and capabilities of the firm, the current literature suggests the dynamic managerial capabilities about the organisational resources without considering the dynamic nature of the business environment (Asiaei et al., 2021; Collins, 2021). The dynamic character of corporate settings (Ahammad et al., 2020; Baert et al., 2016); leadership differences (Rimita et al., 2020); and human resource management during the COVID-19 pandemic have all been studied in the realm of strategic agility and human resource management (Elsafty & Ragheb, 2020; Nurzaman et al., 2020). As a result, none of the studies to date have focused on using Sirmon et al. (2011)'s orchestration theory to propose a new process for managers in business firms to restructure their resources in a firm by building new capabilities and then leveraging these capabilities during the COVID-19 pandemic.

2.1. Resource orchestration theory in international marketing

Considering the COVID-19 situation, commercial enterprises should re-think their current business strategies in order to remain competitive (Filimonau et al., 2020; He & Harris, 2020; Ratten, 2020). This is due to several reasons including to take advantage of opportunities, remain ahead of the competition within the existing industry, companies must develop new capabilities and seek out less crowded niche markets, which necessitates the acquisition of new resources (Barrick et al., 2015; King et al., 2003). Hence, Resource orchestration theory (ROT) has become increasingly common in adjacent and complementary fields such as operations management and marketing, sub-disciplines such as human resource management, and entrepreneurship. It has been attempted to meta-analyze either the marketing strategy-export performance relationship or the marketing strategy-export performance relationship in the international marketing literature (Agag & El-Masry, 2016; Leonidou, Samiee, Aykol, & Talias, 2014). While strategic management scholars have contributed to much of the current ROT analysis, it began with Edith Penrose's work in economics. As a result, strategic management researchers discovered and translated Penrose's original ideas to understand better how companies use their tactics to gain an edge over business rivals in terms of utilizing resources during an unexpected or risky situation (Alexy, West, Klapper, & Reitzig, 2018; Amit & Schoemaker, 1993). The ROT by Sirmon et al. (2011) suggests that superior firm efficiency is the product of a mixture of capital, skills, and managerial intervention.

The applicability of RBV to revise international marketing strategies during the COVID pandemic can be further justified based on two main reasons. Firstly, this framework focuses on how managers efficiently distribute resources to gain competitive advantages. The process of structuring, bundling, and optimizing an enterprise's capital to boost competitive advantages is known as resource orchestration (Asiaei et al., 2021; Gunasekaran et al., 2017). Combining the three processes is crucial in generating market value for stakeholders (Sirmon et al., 2011). Cui and Pan (2015) recently applied resource orchestration theory to clarify how companies handle and package resources in a complex world to achieve efficient e-commerce and e-government processes. Carnes et al. (2017) examined how companies utilize capital portfolios and various resources for developing skills to make development at various stages of the life cycle. Secondly, ROT (resource orchestration theory) is generally recognized as one of the most influential and effective theories for identifying, interpreting, and forecasting organizational relationships even twenty years later (Barney, Ketchen, & Wright, 2011). ROT, like many theories, has evolved in stages that correspond to the formation of several revised marketing strategies, including introducing new products/services or procedures to overcome changes in the existing marketing environment (Barney et al., 2011; Carnes et al., 2017). Table 1 summarises the primary papers from each of these stages in the growth of ROT as follows.

As a result of the transition from RBV to ROT, the emergence of

Table 1
The evolution of ROT in international marketing literature.

Source	Key concepts
Penrose (1959)	Capital is a critical factor in determining how a company grows; when resources are scarce, growth is limited
Lippman (1982)	The resource-based perspective (RBV) is based on the concepts of inimitability and causal uncertainty
Wernerfelt (1984)	Introduced the concept of a resource-based view to describe how to look at a company's capital rather than its products.
Barney (1986)	Researched how organizational culture can improve sustained competitive advantage
Barney (1991)	Presented and developed the core principles of RBV; we discussed how resources could be categorized as valuable, rare, inimitable, and non-substitutable sources of competitive advantage, and we described the corresponding characteristics of resources.
Grant (1991)	A discussion of the relationship between strategy and the firm's resources and skills
Harrison, Hitt, Hoskisson, and Ireland (1991)	Resources and resource synergy are highlighted as essential aspects of diversification
Conner (1991)	In contrast to industrial-organization economics, RBV is emerging as a new philosophy of business
Mahoney and Pandian (1992)	It was further described using distinctive characteristics of RBV, organizational economics, and the theory of competencies and industrial structure.
Peteraf (1993)	Outlined the conditions that give rise to competitive advantage
Hart (1995a)	Combined RBV and the RBVI to Create the natural-resource-based view of the firm
Hart (1995b)	A theory of competitive advantage based on the relationship between the firm and its natural environment and a theory of resource-based competitive advantages
Combs and Ketchen (1999)	Examined how to balance conflicting predictions about the choice of organizational type from RBV and organizational economics
Barney and Arikan (2005)	Explored the reasons for certain companies to outperform others consistently
Barney et al. (2001)	Resource-based views are currently the most effective approach to understanding strategic management and have established their effect on relevant subjects.
Ireland et al. (2003)	Identify the tools required to take advantage of growth opportunities to become competitive and gain a competitive advantage by using strategic entrepreneurship
Foss and Foss (2005)	Constructed philosophical bridges between ROT and the theory of property rights
Kraaijenbrink et al. (2010)	In their analysis, the authors determine that there are eight major types of criticisms in the literature and conclude that if the variables, boundaries, and applicability of RBV are appropriately defined, the core message of the RBV will withstand criticism from five of these.
Hart and Dowell (2011)	Researchers revisit Hart's natural resource-based view (NRBV) of the company and summarize progress on testing elements of the theory. They also re-evaluate the NRBV considering several significant developments in the resource-based view literature and sustainable enterprise studies over the past decade.
Miller (2019)	Theories that explain how competitive advantage and economic rents are sustained are part of the RBV
Nagano (2020)	This paper examines the RBV's evolutionary mechanism as it is triggered by "rigidity." It explains both the importance and limitations of the RBV.
Collins (2021)	When pursuing a high-commitment human resource strategy, the CEO's managerial cognition, social capital, and human capital play a key role

conceptual spin-offs, and integration with other perspectives, ROT has developed as a theory (Alexy et al., 2018; Amit & Schoemaker, 1993; Barney, 1986, 1991). As part of resource-based research, retrospective analyses, such as a meta-analysis of empirical evidence based on the ROT's tenets, are necessary (Crook, Ketchen, Combs, & Todd, 2008). Competition dynamics analysis examines competitors' movements and countermoves to gain favorable and profitable market positions (Ketchen, Snow, & Hoover, 2004). Upon considering the evolution of the RBV concept, it becomes clear that its tenets provide a comprehensive picture of resources and the complete set of unique characteristics that identify a resource as a potential source of competitive advantage (valuable, rare, inimitable, and non-substitutable) (Barney, 1991). The RBV was further described by relating it to distinct characteristics such as organizational economics and theory on competencies industrial structure (Mahoney & Pandian, 1992). Combs and Ketchen (1999) examined how conflicting predictions regarding the choice of organizational type can be reconciled between RBV and organizational economics. Furthermore, this concept was widely extended towards strategic entrepreneurship (Ireland, Hitt, & Sirmon, 2003), RBVs variables (Kraaijenbrink, Spender, & Groen, 2010), testing elements and re-evaluation of the theory (Hart & Dowell, 2011), stakeholder relationships (Kull, Mena, & Korschun, 2016), and finally towards managerial social cognition (Collins, 2021). Table 1 shows the ***evolution of ROT in international marketing literature***.

3. Research design using a triangulation approach

To investigate the revised international marketing strategies during COVID-19, we used a mixed-method approach since it allows the researcher to ask both confirmatory and exploratory questions and thus to verify and generate theory in the same study (Tashakkori & Teddlie, 2009, p. 89). As international marketing strategies for COVID-19 in retail sectors will provide a comprehensive knowledge base for retail organizations, these strategies will be particularly beneficial during this unexpected pandemic (Tashakkori, Johnson, & Teddlie, 2009). Before the quantitative analysis, we conducted a qualitative thematic analysis to identify the crucial factors (Aurier, Evrard, & N'Goala, 2004; Babin, Darden, & Griffin, 1994). Since this methodology is widely used and applied, we tested our model with conviction (Aurier et al., 2004; Babin et al., 1994). Further, we used a questionnaire-based survey approach to validate the qualitative study findings. Our model was developed using abductive reasoning and iterative evolution (Babin et al., 1994). One significant benefit of the mixed method is that the qualitative results confirmed the quantitative findings on revised international marketing strategies during COVID-19 for managers in the retail sector (Beal, Stewart, & Fielding, 2013; Harrison & Reilly, 2011).

3.1. Exploratory qualitative results

The first section of this paper is a qualitative analysis with data collected by conducting face-to-face personal interviews. The qualitative approach was adopted to investigate the viewpoints of key stakeholders of retail organizations which changed their digital marketing strategies during COVID-19 by asking them to describe their views on how their careers evolved and what advice born out of the experience they can share with others—using a nonprobability sample of 25 participants from Sri Lanka, Australia, China, Papua New Guinea, and USA (Beal, Stewart, & Fielding, 2013; Harrison & Reilly, 2011; Shi, Wang, Chen, & Zhang, 2020). These participants include ten sales assistants, ten retail branch managers, and five senior managers. During the interviews, the respondents were given a short description of retail shopping for FMCG products; it read, A total of 25 participants shared their experience: 59 % female, 41 % male, with 30 % between 18 and 24 years old, and 50 % between 25 and 34 years old. Moreover, 20 % were in the older age category. Therefore, our sample lies in the younger age range. A study controlled for the effect of age on the data, and age did not affect the results reported (Creswell, Hanson, Clark Plano, & Morales, 2007). The qualitative analysis is done using the NVivo software. The applicability of the NVivo for the thematic analysis can be further justified, as revising the marketing strategies comes under exploratory research (Feng & Behar-Horenstein, 2019; Rossolatos, 2019). Using an international market research agency, the data was collected from 587 respondents to conduct data in the second section of this paper, which is a quantitative approach (Shi et al., 2020; Yuan, Wang, Liu, & Ma, 2022).

Although quantitative research gathers and analyses data using statistical techniques to test a hypothesis, qualitative research seeks to describe, interpret, or develop a theory or conceptual framework around events (Creswell et al., 2007). As a result, we used the principal concept of resource orchestration, which was recently proposed to address previously overlooked mechanisms by which international managers can collect, integrate, and leverage resources to support available opportunities and explore potential opportunities to boost the firm's competitive advantage (Baert et al., 2016; Wright et al., 2018). Resource orchestration theory contributes to changing the existing international marketing communication method by structuring, utilizing, and leveraging resources and capabilities during COVID-19 (Barney & Arikan, 2005; Barney et al., 2011; Barney, Wright, & Ketchen, 2001; Carnes et al., 2017). The theoretical constructs include information technology resources, capabilities, dynamic capabilities, and environmental uncertainty, which were examined through a series of interview questions.

Theme 1: Information technology-related resources

The demand for people with advanced knowledge and the general rise in the application of advanced knowledge is linked to investments in information technology. The quality of the project team, or, to put it another way, the expertise of the project team, is a critical aspect of the success of an IT project (Huang, 2021). The technical talents of workers are also critical to the success of IT projects; therefore, maintaining and developing highly qualified staff is a big problem (Huang, 2021; Powell & Dent-Micallef, 1997). In their careers, IT personnel frequently confront challenges connected to premature anachronisms. Due to the fast evolution of information technology, IT managers who are oblivious to this issue can swiftly lose experienced staff (Tohidi & Jabbari, 2012). Management, resources, and communication are three important ideas uncovered via this qualitative research, and they are all closely connected to the information technology resources in this study. Table 2 presents the NVivo query findings on the information technology-related resources.

Table 2
NVivo query findings on the information technology-related resources.

Theme	Codes	NVivo QSR query results
Management	Experience	*I do not know why people without ten years of minimum experience do not get promoted (P1)* *I think experience is the key factor in designing the growth of the company" (P3)*
	Workforce	*Our workforce is very less with comparison to the multinational companies (P3)* *Covid made us realized the value of contingency planning. Even the HR department should keep a track on the former applicants who applied for the interviews of our company (P4)*
Resources	Innovation	*The products and specially the design needs to change (P3)*
	Knowledge	*The knowledge is the key to develop a good brand (P5)*
Communication	Patience	*I appreciate the patience of my employees when dealing with rude customers (P6)* *Patience is the key. I think I got succeeded in my life as a senior manager due to my patience. So, I climbed the ladder very quickly because I had the capacity to tolerate many things that ordinary people will not… (P7)*
	Skills	*It is a skill. I must say that dealing with people and communicating properly is a skill. Not every-one has that and not every-one can do that as well. (P8)*

Based on the word cloud NVivo QSR analysis, the concepts of management, experience, workforce, innovation, skills, and resources directly linked to the information technology-related resources in this study can be further justified. Fig. 1 presents the **NVivo software-based word cloud map for IT resources**.

Theme 2: Information technology-related capabilities

IT competence is described as the ability to locate and implement information technology that can cost-effectively satisfy corporate goals while also maintaining and supporting IT-based systems (Jiang & McCabe, 2021; Karimi, Rezaei, Akbari, & Foroudi, 2021). This capability may be assigned to an organization's IT department, and it is usually done so. Since no function inside a company is isolated, it should be allocated to the company. Each benefits from the other, enriching both of them. This value "bleed" from one function to another is difficult to quantify in a meaningful way, but it does exist (Ahmadi, 2016; Budiningsih, Soehari, & Alfulailah, 2021; Jiang & McCabe, 2021; Tohidi, 2011). It might be favorable or unfavorable (Ahmadi, 2016; Budiningsih et al., 2021; Jiang & McCabe, 2021; Tohidi, 2011). A positive value moves between functions when the organization plays as a team, i.e., when the functions collaborate. The organization's capability is greater than the sum of its parts in this scenario. The functions are more effective when they are combined (Budiningsih et al., 2021; Jiang & McCabe, 2021). The significant concepts identified through this qualitative analysis include repair, updating machinery, long-term maintenance, and support for IT-based systems. Table 3 ***presents the NVivo query findings on the information technology-related capabilities***.

Based on the word cloud NVivo QSR analysis, the concepts that include repair, updating machinery, long-term maintenance, and support for IT-based systems can be further justified. Fig. 2 presents the *NVivo software-based word cloud map for IT capabilities*.

Theme 3: Dynamic capabilities

The dynamic capabilities are deeply embedded in the organization's and its management skills' day-to-day operations. These skills are characterized by a company's capacity to integrate, create, and reconfigure internal competencies to meet or bring about changes in its external business environment (Mikalef et al., 2021). Businesses have typically adopted environmental initiatives, such as eco-efficiency practices if they are economically helpful to their bottom line (Lin et al., 2021). Because of this, corporations have developed a myopic view of their product's environmental performance, focusing exclusively on what happens within businesses, i.e., the production phase. While focusing on greening internal operations is initially helpful in the product supply chain, it results in the responsibilities being moved from one phase to the next or from one business to the next (Balkau & Leroy-Parmentier, 2021). The major concepts identified through this qualitative analysis include expertise, IT knowledge, work experience, and language skills. Table 4 presents the NVivo query findings on the information technology-related capabilities.

Fig. 1. NVivo software-based word cloud map for IT resources.

Table 3
NVivo query findings on the information technology-related capabilities.

Theme	Codes	NVivo QSR query results
Long-term maintenance	Working	*We are working long hours (P20)*
		I think the working culture is important (P25)
	Systems	*We had to update our systems (P19)*
		The adoption of new systems is necessary
	Machinery	*We had to use good machinery (P17)*
	Support	*For example, the support to change, specially when there is a system change within the organization (P18)*
Knowledge	Experience	*The most experienced people can help quickly, so that is something I noticed throughout my career (P10)*
		I think, as everywhere, it is the work experience that matters in the end (P25)

Fig. 2. NVivo software-based word cloud map for IT capabilities.

Based on the NVivo QSR analysis of the word cloud, the concepts of expertise, IT knowledge, work experience, and language skills can be further justified. Fig. 3 presents the NVivo software-based word cloud map for dynamic capabilities.

Theme 4: Environmental uncertainty

Due to the rising complexity of the environment, businesses today work in a complicated, volatile, and unpredictable environment. According to the authors, environmental uncertainty should not be used as a mediator or moderator for the relationship between organisational

Table 4
NVivo query findings on the information technology-related capabilities.

Theme	Codes	NVivo QSR query results
Knowledge Management	Expertise	*I believe that the employees need to have expertise on multiple roles (P13)*
	IT knowledge	*Most of the former generation people find it difficult to even sort out a basic computer work (P14)*
	Language skills	*The language skills are important. I know some person who knew more 10 languages and it helped us specially when serving foreign customers (P16)*
	Work experience	*Work experience should not be a constraint in working with people. (P25)*

Fig. 3. NVivo software-based word cloud map for dynamic capabilities.

Fig. 4. NVivo software-based word cloud map for environmental uncertainty.

agility and performance. Instead, environmental risk variables should be considered as mediators between organizational environmental uncertainty and supply chain performance by academics (Honig & Samuelsson, 2021; Inman & Green, 2021). Ganotakis, D'Angelo, and Konara (2021) describe innovation as the commercial application of new information, which poses a challenge to entrepreneurship, economic growth, competitiveness, and strategy. Firms and start-ups are under strain due to constantly changing dynamic circumstances and rising worldwide rivalry (Zahra, 2021). Tactic expertise can act as a competitive advantage for a company, which is backed up by practices and organizational cultures that facilitate the discovery of meaningful and novel commercial discoveries (Miller, 2019; Nagano, 2020; Sharma et al., 2020; Zahra, 2021). Table 5 shows NVivo query findings on environmental uncertainty.

The notions of risks and uncertainty in the corporate environment may be further justified using the NVivo QSR word cloud analysis.

Our findings provide viewpoints regarding various aspects of leveraging a company's resources and capabilities based on the revised international marketing strategies for COVID-19. The qualitative findings support a higher degree of association for leveraging the process of the firm's resources and the strong capabilities based on the revised international marketing strategies during COVID-19 among consumers and suppliers. The findings of this study led us to develop the conceptual model depicted in Fig. 5, the hypotheses that followed, and the quantitative survey questionnaire that enabled us to identify further and quantify the relationship and impact between these variables. Fig. 4 presents the NVivo software-based word cloud map for environmental uncertainty.

Table 5
NVivo query findings on the environmental uncertainty.

Theme	Codes	NVivo QSR query results
Risks/ Uncertainty	Investment risks	*Investors who buy individual stocks face various risks, the most common of which is a company-specific risk. (P23)*
	Time management difficulties	*Finding the drive to finish critical chores can be a challenge at times. (P20)*
		I also believe that sometimes, finding the motivation to complete important tasks can be the first obstacle (P15)
	Business agility	Adapt quickly to market changes *is good and COVID is a real time example which showed us it. (P18)*
	Market risks	*The possibility that investments may lose value because of economic changes is something that I worried a lot. (P7)*

uncertainty.

Based on the qualitative analysis, the study proposes a conceptual model and hypothesizes the following:

H1a. There is a positive relationship between information technology-related resources and leveraging process of the firm's resources
H1b. There is a positive relationship between information technology-related resources and leveraging process of the firm's capabilities
H2a. There is a positive relationship between information technology-related capabilities and leveraging process of the firm's resources
H2b. There is a positive relationship between information technology-related capabilities and leveraging process of the firm's capabilities
H3a. There is a positive relationship between dynamic capabilities and leveraging process of the firm's resources
H3b. There is a positive relationship between dynamic capabilities and leveraging process of the firm's capabilities
H4a. There is a positive relationship between environmental uncertainty and leveraging process of the firm's resources
H4b. There is a positive relationship between environmental uncertainty and leveraging the process of the firm's capabilities

Therefore, we developed the below conceptual framework based on the above analysis. Fig. 5 presents the ***Conceptual model developed on resource orchestration theory.***

In the first section of this paper, the hypothesis has been developed using the qualitative interview themes. This approach was justified using the recent literature (Shi et al., 2020; Westhues, Ochocka, Jacobson, Simich, Maiter, Janzen, & Fleras, 2008; Yin, 2017). It was identified that the concepts of management, experience, workforce, innovation, skills, and resources directly link to information technology-related resources. The concepts of repair, updating machinery, long-term maintenance, and support for IT-based systems can be identified under information technology-related capabilities. The concepts of expertise, IT knowledge, work experience, and language skills are prominent among dynamic capabilities. The concepts of risks and uncertainty in a business environment are identified under the environmental uncertainty category.

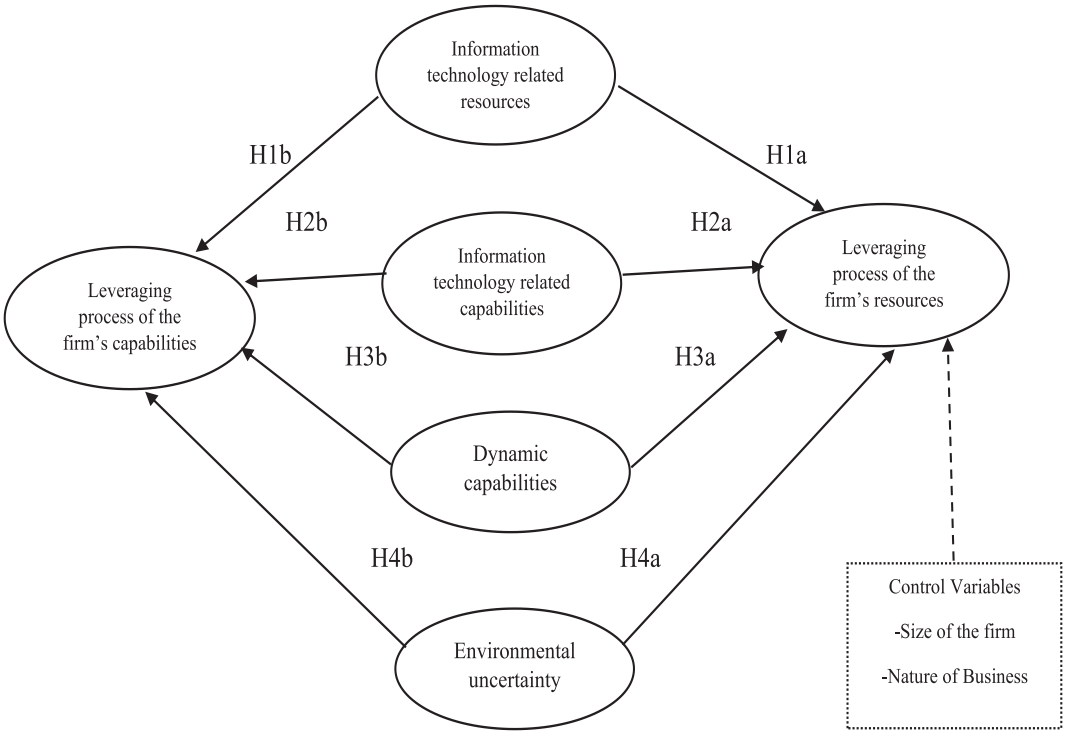

Fig. 5. *Conceptual model developed on resource orchestration theory.* Source: Developed by authors.

3.2. Quantitative analysis

Divergent perspectives on leveraging process resources and capabilities of the firm based on the revised international marketing strategies during COVID-19 and continuing usage of the revised Covid redundant strategies motivate us to continue our inquiry. In step 2, we look to see whether there are any notable relationship and impact on international marketing strategies during COVID-19 on leveraging process of the firm's resources and capabilities. We also look at whether the length of time spent on each independent variable and the dependent variable moderates the connection. As a result, adjusting for the respondents' geographic origin, the length of usage of the firm's resources and capabilities moderates the link between the independent and dependent variables.

The above-outlined hypothesis was controlled using the "size of the firm" and "nature of the business." The firm size within this study is controlled as it does not include major components that act as an intermediary variable that can immediately affect the dependent variable (Behl, Jayawardena, Ishizaka, Gupta, & Shankar, 2022). Similarly, the nature of the business is also controlled to provide a complete evaluation of the understanding of experimental findings (Behl et al., 2022).

3.3. Research design, data collection, and analysis

Our study utilized a quantitative questionnaire to examine the underlying hypotheses indicated above based on the qualitative findings and literature review. The Likert scale was five points. The first five sections were created to collect information and measure items related to the independent variables (information technology-related resources, information technology-related capabilities, dynamic capabilities, and environmental uncertainty) as well as the dependent variable (the leveraging process of the firm's resources and leveraging process of the firm's capabilities). In the fifth question, respondents were asked to answer questions about their characteristics, such as their age, gender, and country of origin. The data was collected from 587 respondents using an international market research agency. The demographic data of the respondents can be accessed in Table 6. As the constructs were drawn from the qualitative data, we looked at their respective items from the existing scales and modified them in the present study's context. We also performed an exploratory factor analysis (EFA) to finalize the scale before empirically testing the hypotheses. The final questionnaire is attached in the Appendix section.

3.4. Descriptive analyses

We structured our quantitative results to examine the underlying hypotheses indicated above based on the results of the qualitative method and the literature. Our exploratory quantitative results support the conceptual model developed on resource orchestration theory with highest significant level variables of dynamic capabilities and environmental uncertainty. In addition, we present two illustrations of possible

Table 6
Demographic details of the participants of the study.

Demographic Variables	Classification	No. of participants
Age	20–25 years	52 %
	25–30 years	18 %
	30–35 years	7 %
	35–40 years	12 %
	40–45 years	8 %
	45–50 years	1 %
	More than 50 years	2 %
Nature of Business	Product retailing	37 %
	Service retailing	52 %
	Hybrid retailing	11 %
Annual Income	<6000 USD	32 %
	Between 6000 USD and 10,000 USD	46 %
	Between 10,000 USD and 14,000 USD	16 %
	More than 14,000 USD	6 %
Gender	Male	58 %
	Female	41 %
	Others	1 %

ways that this model can be used by retailers (1) as a benchmarking tool, (2) as an index to monitor the existing marketing strategies and practices in the firm, (3) to assess the effectiveness of the existing marketing practices and strategies during COVID-19 pandemic, and (4) as a long-term model to examine the relative importance of the various components of FMCG marketing for specific retailers.

We followed the guidelines of Armstrong and Overton (1977) and applied the non-response bias test to check for the non-response bias. We collected data in two waves between October 2021 and November 2021, with a gap of 3 weeks in between. We compared the mean scores of critical demographic categories using a *t*-test. We found the significance value to be greater than 0.05, confirming no significant difference between the two groups used for data collection. We then compared the average amount donated by the two groups to the average amount donated by the two groups in the subsequent donations made. The *t*-test results confirmed that the data is free from non-response bias. We performed the data analysis as discussed in the next section.

4. Results (quantitative study)

We used primary data acquired from different parts of the world using an international market research agency to acquire the potential responses. We only gathered replies from workers who have experience in the retail sector over the previous two years. We mailed an online questionnaire to collect replies for these workers. The data was then used to analyze and test the proposed hypotheses.

4.1. Measurement validation

Before processing the data and testing hypotheses, one essential step is checking for its reliability and validity. Additionally, we also checked for the goodness of fit of the model. We referred to the guidelines of Kock (2019) to test the nomological validity using PLS-SEM software. We adopted Warp PLS 7.0, which uses a partial least square structural equation modeling. Hair et al. (2011) discussed the rationale for using PLS-SEM over covariance-based SEM and listed multiple criteria. Following those criteria, we confirm that the research is an extension of existing structural models. We propose to use PLS-SEM over CB-SEM. PLS-SEM provides a high degree of statistical power compared to CB-SEM (Hair, Risher, Sarstedt, & Ringle, 2014). Greater statistical power refers to identifying the relationship as significant when they are indeed present in the population (Sarstedt & Mooi, 2019). This characteristic is more suitable for exploratory research investigating less-developed or still-developing literature (Wold, 1985, p. 590). As this study's nature is exploratory, PLS-SEM is the best-suited method. We further referred to the arguments and recommendations for choosing between CB-SEM and PLS-SEM discussed by Hair et al. (2014), Hair et al. (2011), Fornell and Bookstein (1982), and Reinartz et al. (2009) that confirmed the use of PLS-SEM best suited for the current study.

We used Cronbach's alpha as an acceptable measure to test the reliability. The results confirmed that the overall value of Cronbach's alpha was more than 0.7. We further examined the reliability of each item and calculated the value of Cronbach's alpha in situations where we planned to drop the item. The results confirmed that if we intended to drop certain items, the revised value of Cronbach alpha did not change significantly. Thus, the final questionnaire was retained. Next, we tested hypotheses and checked for the degree of association between the constructs. The psychometric properties for each of the constructs were assessed in the relationship and context of the study. Thus, it was followed by calculating scales' composite reliability (SCR), discriminant validity, and average variance extracted (AVE). The results presented in Table 7 confirm that individual factor loadings were greater than 0.5.

Additionally, we found that AVE was more significant than 0.5, and SCR was more than 0.7. Further, the discriminant validity of the scale was established by calculating the heterotrait-monotrait ratio of correlations (HTMT). The results presented in Table 8 highlight that the value of HTMT for all the study constructs is below 0.9, confirming discriminant validity (Hair et al. 2014).

Table 7
Convergent Validity Measures.

Items	Factor Loadings	Variance	Error	SCR	AVE
ITR1	0.73	0.5329	0.4671	0.856	0.605
ITR2	0.81	0.6561	0.3439		
ITR3	0.84	0.7056	0.2944		
ITR4	0.71	0.5041	0.4959		
ITC1	0.79	0.6241	0.3759	0.896	0.634
ITC2	0.78	0.6084	0.3916		
ITC3	0.82	0.6724	0.3276		
ITC4	0.79	0.6241	0.3759		
ITC5	0.8	0.64	0.36		
DC1	0.78	0.6084	0.3916	0.864	0.614
DC2	0.73	0.5329	0.4671		
DC3	0.78	0.6084	0.3916		
DC4	0.84	0.7056	0.2944		
ED1	0.73	0.5329	0.4671	0.814	0.594
ED2	0.81	0.6561	0.3439		
ED3	0.77	0.5929	0.4071		
LFC1	0.76	0.5776	0.4224	0.894	0.792
LFC2	0.82	0.6724	0.3276		
LFC3	0.84	0.7056	0.2944		
LFC4	0.77	0.5929	0.4071		
LFC5	0.77	0.5929	0.4071		
LFR1	0.72	0.5184	0.4816	0.828	0.616
LFR2	0.78	0.6084	0.3916		
LFR3	0.85	0.7225	0.2775		

Note: ITR: Information Technology related Resources; Information Technology related Resources; DC: Dynamic Capabilities; ED: Environment Uncertainty; LFC: Leveraging process of firm's capability; LFR: Leveraging process of firm's resources.

Table 8
HTMT values.

	ITR	ITC	DC	ED	LFC	LFR
ITR						
ITC	0.445					
DC	0.345	0.386				
ED	0.399	0.361	0.492			
LFC	0.501	0.432	0.301	0.394		
LFR	0.444	0.338	0.401	0.311	0.411	

Note: ITR: Information Technology related Resources; Information Technology related Resources; DC: Dynamic Capabilities; ED: Environment Uncertainty; LFC: Leveraging process of firm's capability; LFR: Leveraging process of firm's resources.

For testing the goodness of fit (GoF) and statistical fit of the model, we referred to the guidelines of Sarstedt et al. (2014) and calculated the following values i) average path coefficient (APC); ii) average R square (ARS); iii) average full collinearity VIF (AFVIF) and iv) Tenanhaus GoF. Results confirm that all the above indicators gave the required threshold values. We found APC = 0.364 ($p < 0.001$); ARS = 0.783 ($p < 0.001$); AFVIF = 3.64 (Acceptable < 5; ideally < 3.3) and Tenenhaus GoF = 0.554 (Large if greater than 0.36; medium if greater than 0.25 and small if < 0.1).Table 9 shows the model Fit and quality indices parameters.

Table 9
Model Fit and quality indices parameters.

Indexes of model fit and quality	There may be a threshold value (if any)
Average Path Coefficient (APC)	0.399 ($p < 0.001$)
Average R^2 (ARS)	0.688 ($p < 0.001$)
Average full collinearity VIF (AFVIF)	4.19 (Acceptable if value ≤ 5)
Tenenhaus Goodness-of-Fit (GoF)	0.492 (Large if value ≥ 0.36)

4.2. Common method bias (CMB) test results and discussion

We adopted a primary data collection approach. Data with a cross-sectional nature is prone to various issues, and the most frequent and challenging of these is CMB (Ketokivi and Schroeder, 2004; Guide and Ketokivi, 2015; Kock, 2015a). Following the guidelines of Kock (2015a), it is argued that giving a background of the study and offering detailed instructions to the potential respondents can help get variations in the responses. In addition, social desirability also triggers common method bias in the data and shows variations in the responses received by the respondents. To control the challenges faced by CMB, we adopted multiple techniques, as mentioned. First, we performed Harman's single-factor test and found that it explains 39.05 % of the total variation. This result confirmed that the data did not suffer from common method bias as the percentage is under acceptable limits (Podsakoff and Organ, 1986). We also performed a correlation marker test, an additional method to test for CMB, using a correlation-based approach (Dubey et al., 2019; Dubey et al., 2020; Dubey et al., 2021). Table 10 shows the ***assessment of Causality Indices***.

We found no significant change in the correlations between the two groups, thereby confirming the lack of CMB. Lastly, we tested for causality as a prerequisite for hypotheses testing, as Kock (2015b) pointed out. The causality direction ratio (NLBCDR) was applied to test the causation. We found the value of NLBCDR to be greater than 0.7 (0.753), which falls within the acceptable limits (Kock, 2015b), thereby confirming that causality is established in our study.

Based on the hypothesis results, we found a positive relationship between technology-related resources and leveraging the firm's resources and capabilities. There is a positive correlation between information technology-related resources and leveraging processes of the firm's capabilities. In contrast, there is no correlation between information technology-related capabilities and leveraging processes of the firm's capabilities. Firm resources and capabilities were identified as dynamic capabilities and leveraging processes. There is a positive relationship between environmental uncertainty and the process of leveraging the firm's capabilities, but no relationship between environmental uncertainty and leveraging the firm's resources. Table 11 shows ***structural estimates*** in the study.

5. Discussion of the findings

The qualitative thematic analysis identified four themes: information technology resources, information technology capabilities, dynamic capabilities, and environmental uncertainty. Quantitative validation, however, indicated that environmental uncertainty did not affect the leverage process of the firm's resources. In addition, no relationship was found between information technology-related capabilities and the process of leveraging the firm's capabilities. Thus, our discussion of the findings is organized around the two major themes of dynamic capabilities and environmental uncertainty. The business community should abandon win–win solutions that only benefit the economy and the environment in the short term (Flammer & Bansal, 2017).

Using an integrated approach, economic and environmental concerns can be viewed as interconnected sustainability factors (Alber & Dabour, 2020; Barney, 1986; Chesbrough, 2020; Flammer & Bansal, 2017). As a result, there is little empirical evidence to suggest that a shift in organizational responses to environmental issues can be facilitated by adopting an integrative perspective. The development of new organizational capabilities may also be crucial for enterprises to achieve their marked goals (Budiningsih et al., 2021; Flammer & Bansal, 2017) as well as overcome the obstacles to achieving life cycle environmental sustainability (Testa, Annunziata, Iraldo, & Frey, 2016).

Table 10
Assessment of Causality Indices.

The Cause Assessment Indexes	There may be a threshold value (if any)
Sympson's Paradox Ratio (SPR)	0.803 (Acceptable if $\geq$ 0.7)
R^2 contribution ratio	0.942 (Acceptable if $\geq$ 0.9)
Statistical Suppression Ratio (SSR)	0.733 (Acceptable if $\geq$ 0.7)
Non-linear bivariate causality direction ratio (NLBCDR)	0.782 (Acceptable if $\geq$ 0.7)

Table 11
Structural Estimates.

Hypothesis	Effect of	Effect On	β	p-value	Results
H1a	ITR	LFC	0.65	***	Supported
H1b	ITR	LFR	0.72	***	Supported
H2a	ITC	LFC	0.60	***	Supported
H2b	**ITC**	**LFR**	**0.03**	*	**Not Supported**
H3a	DC	LFC	0.56	***	Supported
H3b	DC	LFR	0.68	***	Supported
H4a	**ED**	**LFC**	**0.08**	*	**Not Supported**
H4b	ED	LFR	0.64	***	Supported

Note: ITR: Information Technology related Resources; Information Technology related Resources; DC: Dynamic Capabilities; ED: Environment Uncertainty; LFC: Leveraging process of firm's capability; LFR: Leveraging process of firm's resources.
(*** Significance level – 0.001; * - Significance Level-0.1).

The increasing use of information technology appears to be associated with increased knowledge consumption and the demand for professionals with advanced knowledge. This qualitative study identified three important ideas, all closely related to the information technology resources discussed in this study. IT competence refers to an organization's capacity to locate IT that meets business objectives, install IT cost-effectively to improve company operations, and maintain and support IT-based systems over time (Jiang & McCabe, 2021; Karimi et al., 2021). In this situation, the organization's capability is more than the sum of its parts. When the functions are integrated, they are more effective (Budiningsih et al., 2021; Jiang & McCabe, 2021). Maintenance, upgrading machinery, long-term maintenance, and assistance for IT-based systems are among the significant topics highlighted in this qualitative investigation.

Dynamic capabilities focusing the knowledge management

Cross-border acquisitions have also become an essential tool for multinational corporations (MNCs) to remain competitive, as a result of which they have generated sustained scholarly interest (Kroon, Cornelissen, & Vaara, 2015). This widespread attention results from frequent difficulties and high failure rates (Foss & Saebi, 2017; Gunasekaran et al., 2017; Inman & Green, 2021). The firm's dynamic capacities with knowledge management aspects are defined as the ability to expand, change, or develop ordinary capabilities within the industry (Winter, 2003). As a result, corporations have developed a myopic view of their product's environmental performance, focusing exclusively on what happens within businesses, i.e., the production phase.

Moreover, the main findings indicated that expertise, IT knowledge, work experience, and language skills could be utilized to overcome these obstacles. In terms of expertise, this refers to a person's academic and professional skills and abilities (Morris et al., 2002; Pandey & Pal, 2020; Rimita et al., 2020; Sirmon & Hitt, 2003). In situations similar to COVID-19, the concept of expertise shows information stored in organizations for 'Not given up' when professionals encounter anything that contradicts their expertise, they should be sensitive enough to recognize a new circumstance by evaluating or delaying their activities (Mikalef et al., 2021; Ruan, Yan, & Wang, 2020; Teece et al., 1997; Wernerfelt, 1984). Similarly, IT knowledge plays a vital role in COVID-19 by showing workers how to shift to an online environment with more software usage. Main thematic findings demonstrated that work experience and fluency in several languages would help the organization to segregate its employees into multi-talented work roles (Mahoney & Pandian, 1992; Nagano, 2020; Peteraf, 1993; Sirmon, 2007; Wernerfelt, 1984). Using

more recent literature on maximizing human visual perceptual capacity for effective management communication, this thematic finding on work experience and fluency in several languages can be further justified (Zhang, 2012). Previous studies have shown that decisions based on dynamic capabilities focusing the knowledge management are important as adapting to new challenges requires different dynamic capabilities (Beal et al., 2013; Paliwoda & Thomas, 2013). An organization's employees must be able to learn quickly and build strategic assets. Strategic assets such as capability, technology, and customer feedback must be integrated within the organization (Zhang, 2012).

Environmental uncertainty

Changing dynamic surroundings and increasing global competition place a burden on businesses and start-ups (Tarim, 2022). An organization's competitive advantage can be enhanced by creating a culture and practices that encourage the discovery of new and important commercial discoveries (Miller, 2019; Nagano, 2020; Sharma et al., 2020; Zahra, 2021). As the environment becomes more complex, businesses face a difficult, volatile, and unpredictable situation (Weaven, Quach, Thaichon, Frazer, Billot, & Grace, 2021). However, in place of considering environmental uncertainty as a mediator/moderator for the relationship between organizational agility and its performance, the authors propose that taking into account environmental risk factors mediates this relationship - as others have done as a way to mitigate the COVID-19 pandemic (Honig & Samuelsson, 2021; Inman & Green, 2021). For example, studies show that SMEs are more affected by environmental uncertainty than large multinational organizations due to the COVID-19 pandemic (Thun, Drüke, & Hoenig, 2011; Tukamuhabwa, Stevenson, Busby, & Zorzini, 2015). The most prominent sources of organizational vulnerabilities for SMEs include their size, resource and capability constraints, supplier shortages, and lack of consumer demand for products due to environmental threats (Ciampi, Giannozzi, Marzi, & Altman, 2021; Lu & Beamish, 2001). When considering large-scale firms, it was identified that shifting from a state-dominated economic order to a market-based one is the major challenge in adjusting for environmental threats (Ahmadi, 2016; Allison, Davis, Webb, & Short, 2017).

The following risks have been identified based on the four categories: investment risk, time management difficulties, business agility, and market risk. Investors who purchase individual stocks face various risks, with company-specific risks being the most common (Billio, Getmansky, Lo, & Pelizzon, 2012). In finance, a particular risk affects a limited number of assets (Billio et al., 2012). This is sometimes referred to as "unsystematic risk" (Mandliya, Varyani, Hassan, Akhouri, & Pandey, 2020). There would be a gap between overall market risk and risks related to individual portfolio components in a well-balanced portfolio of assets (Asiaei et al., 2021; Barney et al., 2001; Flammer & Bansal, 2017). Time management difficulties have been identified as a direct consequence of lack of motivation and business agility due to a lack of ability to adapt to market changes (Shi et al., 2020). Investing in information technology (IT) during a downturn may be appropriate if the business sector is facing substantial problems (Balakrishnan, Dwivedi, Malik, & Baabdullah, 2021). Oh and Teo (2006) contend that both high IT capabilities and evidence of proactive activity contribute to organisational resilience during a crisis. Research has shown that innovation is one of the most valuable contributors to corporate success, particularly in competitive and complex environments (Rajapathirana & Hui, 2018).

5.1. Theoretical implications

This study aims to suggest a new methodology for international marketing managers in business firms to reorganise their resources by establishing new skills and exploiting these capabilities during COVID-19, based on the ROT by Sirmon et al. (2011). Since increasing competitive challenges, organizations must prioritize competitive advantage and strive to align better personnel policy decisions with corporate strategy. On the other hand, its significance in strategy implementation is undeniable. In prior research, its role was thoroughly characterized. Recent proposals have proposed the concept of resource orchestration to address past inattention to the mechanisms by which international managers collect, integrate, and leverage firms' resources to maximize current opportunities while also exploring future opportunities to gain a competitive advantage (Baert et al., 2016; Wright et al., 2018).

One major theoretical implication is that this study is the first attempt to integrate quantitative and qualitative methods to identify the revised international marketing strategies in communication during the COVID-19 pandemic by utilizing the firm's resources and capabilities through the theoretical constructs of ROT by Sirmon et al. (2011). Based on the theoretical constructs of ROT by Sirmon et al. (2011), current research reveals that the concepts of management, experience, workforce, innovation, skills, and resources directly link to information technology-related resources. The concepts of repair, updating machinery, long-term maintenance, and support for IT-based systems can be identified under information technology-related capabilities. The concepts of expertise, IT knowledge, work experience, and language skills are prominent among dynamic capabilities. The concepts of risks and uncertainty in the business environment are identified under the environmental uncertainty category.

5.2. Managerial implications

The study carries several managerial implications. The managerial contribution of our study comes from empirically establishing the role of ROT in relation to revised international retail marketing strategies in the communication aspects of the firms. The study's findings help international retail marketing managers restructure the resources within a business by developing new capabilities and then leveraging these capabilities during COVID-19 in the retail sector. The results suggested that information technology resources, capabilities, dynamic capabilities, and environmental uncertainty play a crucial role in leveraging the process of resources and firm capabilities. These operational tactics may be less applicable in today's uncertain and vulnerable business environment, and to manage exposure and insecurity (as illustrated by (Christopher & Holweg, 2011), agility may prove to be the most effective strategy (Amit & Schoemaker, 1993; Asiaei et al., 2021).

Secondly, If the business sector is facing significant challenges, investing in information technology during a downturn. Oh and Teo (2006) propose that both high levels of IT capability and evidence of proactive activity contribute to the resilience of organizations during times of crisis. The research has shown that innovation contributes significantly to corporate success, particularly in competitive and complex environments in retail sectors (Barrick et al., 2015; Ratten, 2020).

6. Conclusion, limitations, and future studies

Accordingly, the scope of this study is limited to a new process that allows international marketing managers to restructure the company's resources by developing new capabilities and, eventually, leveraging these capabilities by using the ROT by Sirmon et al. (2011) to change the existing marketing communication method of companies during COVID-19. Dynamic capabilities, founded on organizational routines and management skills, allow firms to integrate, create, and reconfigure internal competencies to respond to changes in the business environment (Mikalef et al., 2021).

Qualitative analysis identified the following significant concepts: expertise, IT knowledge, work experience, and language skills. It further demonstrates that the COVID-19 pandemic makes employees and employers realize that it is essential to have knowledge and expertise on multiple fronts within the organization (Zahra, 2021). An effective strategy is to build a firm's competitive advantage on tacit expertise, which in turn is supported by the organization's culture and practices

that foster the discovery of unique and significant commercial discoveries (Miller, 2019; Nagano, 2020; Sharma et al., 2020; Zahra, 2021).). The authors propose that rather than focusing on environmental uncertainty as a moderator or mediator of agility and performance, they should look at the risk factors in the environment as a facilitator, as some have done in the past during the COVID-19 pandemic, which is a major concern in public policy making (Honig & Samuelsson, 2021; Inman & Green, 2021).

This paper provides directions for academics and future researchers by showing how business firms can restructure the resources in a firm by building new capabilities and eventually leveraging these capabilities based on the resource orchestration theory, which is another interesting future research area. Further, we believe future studies could also consider the applicability of ROT to emerging markets which the COVID pandemic affected a lot (Combs & Ketchen, 1999; Crick & Crick, 2020; Filimonau et al., 2020). Therefore, the authors used the theoretical constructs of resource orchestration theory which limits the findings of this study due to the limited scope. In addition to some limitations, the study suggests some directions for future research. Our research extends the previous literature, which has been chiefly applied to single-retail settings. However, the two main variables of environmental uncertainty and dynamic capabilities can be further investigated to examine the contribution of existing marketing communication methods of firms during COVID-19.

Furthermore, thematic results indicated four major factors (information technology-related resources, information technology-related capabilities, dynamic capabilities, and environmental uncertainty) affecting the retail firms' existing marketing communication strategies. It would be beneficial to examine these four variables with a larger sample size with dependent variables of leveraging the process of the firm's resources and the process of the firm's capabilities. Despite the points made, our paper has limitations, as with all academic work. Primarily, it is based on one theoretical framework, which discusses resource utilization. However, this study could be further extended based on different theoretical constructs by using various theoretical models.

CRediT authorship contribution statement

Abhishek Behl: Writing – original draft, Resources, Methodology, Investigation, Data curation, Conceptualization. **Nirma Jayawardena:** Writing – review and editing, Writing – original draft, Resources, Validation. **Achint Nigam:** Writing – original draft, Visualization, Validation, Methodology, Conceptualization. **Vijay Pereira:** Conceptualization, Methodology, Supervision. **Amit Shankar:** Writing – original draft, Resources, Project administration, Methodology, Formal analysis. **Charles Jebarajakirthy:** Writing – review & editing, Writing – original draft, Methodology.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Acknowledgement

None.

References

Agag, G., & El-Masry, A. A. (2016). Understanding consumer intention to participate in online travel community and effects on consumer intention to purchase travel online and WOM: An integration of innovation diffusion theory and TAM with trust. *Computers in Human Behavior, 60*, 97–111.

Ahammad, M. F., Glaister, K. W., & Gomes, E. (2020). Strategic agility and human resource management. *Human Resource Management Review, 30*(1), 1–3.

Ahmadi, & O'Cass. (2016). The role of entrepreneurial marketing in new technology ventures first product commercialisation. *Journal of Strategic Marketing, 24*(1), 47–60.

Alber, N., & Dabour, M. (2020). The dynamic relationship between FinTech and social distancing under COVID-19 pandemic: Digital payments evidence. *International Journal of Economics and Finance, 12*(11).

Alexy, O., West, J., Klapper, H., & Reitzig, M. (2018). Surrendering control to gain advantage: Reconciling openness and the resource-based view of the firm. *Strategic Management Journal, 39*(6), 1704–1727.

Allison, T. H., Davis, B. C., Webb, J. W., & Short, J. C. (2017). Persuasion in crowdfunding: An elaboration likelihood model of crowdfunding performance. *Journal of Business Venturing, 32*(6), 707–725.

Allison, T. H., Davis, B. C., Webb, J. W., & Short, J. C. J. J. o. B. V. (2017). Persuasion in crowdfunding: An elaboration likelihood model of crowdfunding performance. *32*(6), 707–725.

Am, E. N., Affandi, A., Udobong, A., & Sarwani, S. (2020). Implementation of Human Resource Management in the Adaptation Period for New Habits. *International Journal of Educational Administration, Management, Leadership, 32*(1), 19–26.

Amit, R., & Schoemaker, P. J. (1993). Strategic assets and organizational rent. *Strategic Management Journal, 14*(1), 33–46.

Andersen, O. J. J. (1993). On the internationalization process of firms: A critical analysis. *24*(2), 209–231.

Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research, 14*(3), 396–402.

Asiaei, K., Rezaee, Z., Bontis, N., Barani, O., & Sapiei, N. S. (2021). Knowledge assets, capabilities and performance measurement systems: A resource orchestration theory approach. *Journal of Knowledge Management., 25*(8), 1947–1976.

Aurier, P., Evrard, Y., & N'goala, G. (2004). Comprendre et mesurer la valeur du point de vue du consommateur. *Recherche et Applications en Marketing (French Edition), 19*(3), 1–20.

Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: Measuring hedonic and utilitarian shopping value. *Journal of Consumer Research, 20*(4), 644–656.

Baert, C., Meuleman, M., Debruyne, M., & Wright, M. (2016). Portfolio entrepreneurship and resource orchestration. *Strategic Entrepreneurship Journal, 10*(4), 346–370.

Balakrishnan, J., Dwivedi, Y. K., Malik, F. T., & Baabdullah, A. M. (2021). Role of smart tourism technology in heritage tourism development. *Journal of Sustainable Tourism*, 1–20.

Balkau, Bezama, Leroy-Parmentier, & Sonnemann. (2021). A review on the use of life cycle methodologies and tools in sustainable regional development. *Sustainability, 13*(19), 12.

Barney, J. B. (1986). Organizational culture: Can it be a source of sustained competitive advantage? *Academy of Management Review, 11*(3), 656–665.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.

Barney, J. B., & Arikan, A. M. (2005). The resource-based view: Origins and implications. In *The Blackwell handbook of strategic management* (pp. 123–182).

Barney, J. B., Ketchen, D. J., Jr, & Wright, M. (2011). The future of resource-based theory: Revitalization or decline? *Journal of Management, 37*(5), 1299–1315.

Barney, J., Wright, M., & Ketchen, D. J., Jr (2001). The resource-based view of the firm: Ten years after 1991. *Journal of Management, 27*(6), 625–641.

Barrick, M. R., Thurgood, G. R., Smith, T. A., & Courtright, S. H. (2015). Collective organizational engagement: Linking motivational antecedents, strategic implementation, and firm performance. *Academy of Management journal, 58*(1), 111–135.

Beal, C. D., Stewart, R. A., & Fielding, K. J. J. o. C. P. (2013). A novel mixed method smart metering approach to reconciling differences between perceived and actual residential end use water consumption. *60*, 116–128.

Behl, A., Jayawardena, N., Ishizaka, A., Gupta, M., & Shankar, A. (2022). Gamification and gigification: A multidimensional theoretical approach. *Journal of Business Research, 139*, 1378–1393.

Budiningsih, I., Soehari, T. D., & Alfulailah, F. (2021). The strengthening innovation and information technology capabilities in vocational schools as an HRD enter point that can improve the performance of SMEs. *Jurnal Pendidikan Teknologi dan Kejuruan, 27*(2).

Carnes, C. M., Chirico, F., Hitt, M. A., Huh, D. W., & Pisano, V. (2017). Resource orchestration for innovation: Structuring and bundling resources in growth-and maturity-stage firms. *Long Range Planning, 50*(4), 472–486.

Christopher, M., & Holweg, M. (2011). "Supply Chain 2.0": Managing supply chains in the era of turbulence. *International Journal of Physical Distribution & Logistics Management.*

Ciampi, F., Giannozzi, A., Marzi, G., & Altman, E. I. J. S. (2021). Rethinking SME default prediction: a systematic literature review and future perspectives. *126*(3), 2141–2188.

Collins. (2021). Expanding the resource based view model of strategic human resource management. *The International Journal of Human Resource Management, 32*(2), 331–358.

Combs, & Ketchen. (1999). Explaining interfirm cooperation and performance: Toward a reconciliation of predictions from the resource-based view and organizational economics. *Strategic Management Journal, 20*(9), 867–888.
Conner, K. R. (1991). A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *Journal of Management, 17*(1), 121–154.
Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist, 35*(2), 236–264.
Crick, J. M., & Crick, D. (2020). Coopetition and COVID-19: Collaborative business-to-business marketing strategies in a pandemic crisis. *Industrial Marketing Management, 88*, 206–213.
Crook, T. R., Ketchen, D. J., Jr., Combs, J. G., & Todd, S. Y. (2008). Strategic resources and performance: A meta-analysis. *Strategic Management Journal, 29*(11), 1141–1154.
Cui, M., & Pan, S. L. (2015). Developing focal capabilities for e-commerce adoption: A resource orchestration perspective. *Information & Management, 52*(2), 200–209.
Elsafty, A. S., & Ragheb, M. (2020). The role of human resource management towards employees retention during Covid-19 pandemic in medical supplies sector-Egypt. *Business and Management Studies, 6*(2).
Feng, X., & Behar-Horenstein, L. (2019). Maximizing NVivo utilities to analyze open-ended responses. *The Qualitative Report, 24*(3), 563–572.
Filimonau, V., Derqui, B., & Matute, J. (2020). The COVID-19 pandemic and organisational commitment of senior hotel managers. *International Journal of Hospitality Management, 91*, 1–13.
Flammer, C., & Bansal, P. (2017). Does a long-term orientation create value? Evidence from a regression discontinuity. *Strategic Management Journal, 38*(9), 1827–1847.
Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research, 19*(4), 440–452.
Foss, K., & Foss, N. J. (2005). Resources and transaction costs: How property rights economics furthers the resource-based view. *Strategic Management Journal, 26*(6), 541–553.
Foss, N. J., & Saebi, T. (2017). Fifteen years of research on business model innovation: How far have we come, and where should we go? *Journal of Management, 43*(1), 200–227.
Ganotakis, P., D'Angelo, A., & Konara, P. (2021). From latent to emergent entrepreneurship: The role of human capital in entrepreneurial founding teams and the effect of external knowledge spillovers for technology adoption. *Technological Forecasting and Social Change, 170*.
Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review, 33*(3), 114–135.
Guide, V. D. R., Jr, & Ketokivi, M. (2015). Notes from the Editors: Redefining some methodological criteria for the journal. *Journal of Operations Management, 37*(1), v–viii.
Gunasekaran, A., Papadopoulos, T., Dubey, R., Wamba, S. F., Childe, S. J., Hazen, B., & Akter, S. (2017). Big data and predictive analytics for supply chain and organizational performance. *Journal of Business Research, 70*, 308–317.
Hair, J., Risher, J., Sarstedt, M. and Ringle, C. (2014). "When to use and how to report the results of PLS-SEM", *European Business Review*, *31*(1), 2–24.
Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice, 19*(2), 139–152.
Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2–24.
Harrison, J. S., Hitt, M. A., Hoskisson, R. E., & Ireland, R. D. (1991). Synergies and post-acquisition performance: Differences versus similarities in resource allocations. *Journal of Management, 17*(1), 173–190.
Harrison, R. L., & Reilly, T. M. (2011). Mixed methods designs in marketing research. *Qualitative Market Research: An International Journal, 14*(1), 7–26.
Hart. (1995b). A natural-resource-based view of the firm. *Academy of Management Review, 20*(4), 986–1014.
Hart. (1995a). Corporate governance: some theory and implications. *The Economic Journal, 105*(430), 678–689.
Hart, & Dowell. (2011). Invited editorial: A natural-resource-based view of the firm: Fifteen years after. *Journal of Management, 37*(5), 1464–1479.
He, H., & Harris, L. (2020). The impact of Covid-19 pandemic on corporate social responsibility and marketing philosophy. *Journal of Business Research, 116*, 176–182.
Honig, B., & Samuelsson, M. (2021). Business planning by intrapreneurs and entrepreneurs under environmental uncertainty and institutional pressure. *Technovation, 99*, 102–124.
Inman, R. A., & Green, K. W. (2021). Environmental uncertainty and supply chain performance: The effect of agility. *Journal of Manufacturing Technology Management, 33*(2), 239–258.
İpek, İ. (2020). The relevance of international marketing strategy to emerging-market exporting firms: From a systematic review towards a conceptual framework. *International Marketing Review, 38*(2), 205–248.
Ireland, Hitt, & Sirmon. (2003). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management, 29*(6), 963–989.
Jiang, Y., & Wen, J. (2020). Effects of COVID-19 on hotel marketing and management: A perspective article. *International Journal of Contemporary Hospitality Management, 32*(8), 2563–2573.
Jiang, & McCabe. (2021). Information technology and destination performance: Examining the role of dynamic capabilities. *Annals of Tourism Research, 91*, 1–12.
Johanson, J., & Mattsson, L. (1989). *Strategic action in industrial networks and the development towards the "Single European Market"*. Paper presented at the IMP Conference (5th).
Ketokivi, M. A., & Schroeder, R. G. (2004). Perceptual measures of performance: fact or fiction? *Journal of Operations Management, 22*(3), 247–264.
King, D. R., Covin, J. G., & Hegarty, W. H. (2003). Complementary resources and the exploitation of technological innovations. *Journal of Management, 29*(4), 589–606.
Kock, N. (2015a). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (IJeC), 11*(4), 1–10.
Kock, N. (2015b). One-tailed or two-tailed P values in PLS-SEM? *International Journal of e-Collaboration (IJeC), 11*(2), 1–7.
Kock, N. (2019). Factor-based structural equation modeling with WarpPLS. *Australasian Marketing Journal, 27*(1), 57–63.
Kraaijenbrink, J., Spender, J. C., & Groen, A. J. (2010). The resource-based view: A review and assessment of its critiques. *Journal of Management, 36*(1), 349–372.
Kroon, D. P., Cornelissen, J. P., & Vaara, E. (2015). Explaining employees' reactions towards a cross-border merger: The role of English language fluency. *Management International Review, 55*(6), 775–800.
Leonidou, L. C., Samiee, S., Aykol, B., & Talias, M. A. (2014). Antecedents and outcomes of exporter–importer relationship quality: Synthesis, meta-analysis, and directions for further research. *Journal of International Marketing, 22*(2), 21–46.
Lippman, & Rumelt. (1982). Uncertain imitability: An analysis of interfirm differences in efficiency under competition. *The Bell Journal of Economics*, 418–438.
Lu, J. W., & Beamish, P. W. J. S. (2001). The internationalization and performance of SMEs. *22*(6–7), 565–586.
Mahoney, J. T., & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal, 13*(5), 363–380.
Mandliya, A., Varyani, V., Hassan, Y., Akhouri, A., & Pandey, J. (2020). What influences intention to purchase sustainable products? Impact of advertising and materialism. *International Journal of Productivity and Performance Management, 69*(8), 1647–1669.
Massa, Tucci, & Afuah. (2017). A critical assessment of business model research. *Academy of Management Annals, 11*(1), 73–104.
Mikalef, P., van de Wetering, R., & Krogstie, J. (2021). Building dynamic capabilities by leveraging big data analytics: The role of organizational inertia. *Information & Management, 58*(6).
Miller, D. (2019). The resource-based view of the firm. In *Oxford research encyclopedia of business and management*. Oxford, UK.
Morris, Schindehutte, & LaForge. (2002). Entrepreneurial marketing: A construct for integrating emerging entrepreneurship and marketing perspectives. *Journal of Marketing Theory Practice, 10*(4), 1–19.
Nagano, H. (2020). The growth of knowledge through the resource-based view. *Management Decision, 58*(1), 98–111.
Nguyen, Sharma, & Crick. (2021). Potential absorptive capacity and performance of Vietnamese contract manufacturing exporters: Mediating factors in entrepreneurial marketing behaviour. *Journal of Strategic Marketing, 29*(1), 47–70.
Oh, L. B., & Teo, H. H. (2006). The impacts of information technology and managerial proactiveness in building net-enabled organizational resilience. In *IFIP international working conference on the transfer and diffusion of information technology for organizational resilience* (pp. 33–50). Boston, MA: Springer.
Paliwoda, S., & Thomas, M. (2013). *International marketing*. Routledge.
Pandey, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice. *International Journal of Information Management, 55*, 102–171.
Penrose, E. T. (1959). *The theory of the growth of the firm*. Oxford, UK: Blackwell Publishers.
Peteraf. (1993). The cornerstones of competitive advantage: a resource-based view. *Strategic Management Journal, 14*(3), 179–191.
Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management, 12*(4), 531–544.
Powell, T. C., & Dent-Micallef, A. (1997). Information technology as competitive advantage: The role of human, business, and technology resources. *Strategic Management Journal, 18*(5), 375–405.
Przychodzen, W., & Przychodzen, J. (2018). Sustainable innovations in the corporate sector–The empirical evidence from IBEX 35 firms. *Journal of Cleaner Production, 172*, 3557–3566.
Ratten, V. (2020). Coronavirus (covid-19) and entrepreneurship: Changing life and work landscape. *Journal of Small Business & Entrepreneurship, 32*(5), 503–516.
Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing, 26*(4), 332–344.
Rimita, K., Hoon, S. N., & Levasseur, R. (2020). Leader readiness in a volatile, uncertain, complex, and ambiguous business environment. *Journal of Social Change, 12*(1), 1–2.
Rossolatos, G. J. P. (2019). Negative brand meaning co-creation in social media brand communities: A laddering approach using NVivo. *36*(12), 1249–1266.
Sarstedt, M., & Mooi, E. (2019). Regression analysis. In *A concise guide to market research* (pp. 209–256). Berlin, Heidelberg: Springer.
Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair, J. F., Jr (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy, 5*(1), 105–115.
Sharma, P., Leung, T. Y., Kingshott, R. P., Davcik, N. S., & Cardinali, S. (2020). Managing uncertainty during a global pandemic: An international business perspective. *Journal of Business Research, 116*, 188–192.
Shi, S., Wang, Y., Chen, X., & Zhang, Q. (2020). Conceptualization of omnichannel customer experience and its impact on shopping intention: A mixed-method approach. *International Journal of Information Management, 50*, 325–336.
Sirmon, Hitt, & Ireland. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of Management Review, 32*(1), 273–292.

Sirmon, Hitt, Ireland, & Gilbert. (2011). Resource orchestration to create competitive advantage: Breadth, depth, and life cycle effects. *Journal of Management, 37*(5), 1390–1412.
Strusani, D., & Houngbonon, G. V. (2020). What COVID-19 means for digital infrastructure in emerging markets. Retreived from. openknowledge.worldbank.org.
Symeonidou, N., & Nicolaou, N. (2018). Resource orchestration in start-ups: Synchronizing human capital investment, leveraging strategy, and founder start-up experience. *Strategic Entrepreneurship Journal, 12*(2), 194–218.
Tarim, E. (2022). Valuations, marketing and uncertainty: A field study of financial analysts and salespeople. *Qualitative Research in Financial Markets*.
Tashakkori, A., & Teddlie, C. (2009). Integrating qualitative and quantitative approaches to research. *The SAGE Handbook of Applied Social Research Methods, 2*, 283–317.
Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533.
Te'eni-Harari, T., Lampert, S. I., & Lehman-Wilzig, S. J. J. o. A. R. (2007). Information processing of advertising among young people: The elaboration likelihood model as applied to youth. *47*(3), 326–340.
Terpstra, V., Foley, J., & Sarathy, R. (2012). *International marketing*: Naper Press. Retreived from books.google.com.
Terpstra, V., Foley, J., & Sarathy, R. (2012). *International marketing*. Illinois, USA: Naper Press.
Testa, F., Annunziata, E., Iraldo, F., & Frey, M. (2016). Drawbacks and opportunities of green public procurement: An effective tool for sustainable production. *Journal of Cleaner Production, 112*, 1893–1900.
Thun, J.-H., Drüke, M., & Hoenig, D. J. I. J. (2011). Managing uncertainty–an empirical analysis of supply chain risk management in small and medium-sized enterprises. *49*(18), 5511–5525.
Tohidi, H. (2011). Human Resources Management main role in Information Technology project management. *Procedia Computer Science, 3*, 925–929.
Tohidi, H., & Jabbari, M. M. (2012). The effects of motivation in education. *Procedia-Social and Behavioral Sciences, 31*, 820–824.
Tukamuhabwa, B. R., Stevenson, M., Busby, J., & Zorzini, M. J. I. J. (2015). Supply chain resilience: definition, review and theoretical foundations for further study. *53*(18), 5592–5623.
Weaven, S., Quach, S., Thaichon, P., Frazer, L., Billot, K., & Grace, D. J. J. o. B. R. (2021). Surviving an economic downturn: Dynamic capabilities of SMEs. *128*, 109–123.
Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal, 5*(2), 171–180.
Westhues, A., Ochocka, J., Jacobson, N., Simich, L., Maiter, S., Janzen, R., & Fleras, A. J. Q. H. R. (2008). Developing theory from complexity: Reflections on a collaborative mixed method participatory action research study. *18*(5), 701–717.
Whalen, P., Uslay, C., Pascal, V. J., Omura, G., McAuley, A., Kasouf, C. J., … Deacon, J. (2016). Anatomy of competitive advantage: Towards a contingency theory of entrepreneurial marketing. *Journal of Strategic Marketing, 24*(1), 5–19.
Willis, E. D., Woodward, M., Brown, E., Popmihajlov, Z., Saddier, P., Annunziato, P. W., … Gershon, A. A. J. V. (2017). Herpes zoster vaccine live: a 10 year review of post-marketing safety experience. *35*(52), 7231–7239.
Winter. (2003). Understanding dynamic capabilities. *Strategic Management Journal, 24*(10), 991–995.
Wright, T., Huang, D. L., & Bercovitz. (2018). Knowledge worker mobility in context: Pushing the boundaries of theory and methods. *Journal of Management Studies, 55*(1), 1–26.
Wright, M., Tartari, V., Huang, K. G., Di Lorenzo, F., & Bercovitz, J. (2018). Knowledge worker mobility in context: Pushing the boundaries of theory and methods. *Journal of Management Studies, 55*(1), 1–26.
Xia, W., Song, Z., & Qian. (2019). How and when workplace ostracism influences task performance: Through the lens of conservation of resource theory. *Human Resource Management Journal, 29*(3), 353–370.
Yin. (2017). Institutional drivers for corporate social responsibility in an emerging economy: A mixed-method study of Chinese business executives. *56*(5), 672–704.
Yuan, C., Wang, S., Liu, Y., & Ma, J. W. (2022). Factors influencing parasocial relationship in the virtual reality shopping environment: The moderating role of celebrity endorser dynamism. *Asia Pacific Journal of Marketing and Logistics*.
Zahra, S. A. (2021). The resource-based view, resourcefulness, and resource management in startup firms: A proposed research agenda. *Journal of Management, 47*(7), 1841–1860.
Zhang, K. (2012). Using visual languages in management. *Journal of Visual Languages & Computing, 23*(6), 340–343.

Abhishek Behl is a faculty member at MDI Gurgaon and a researcher in the area of information technology and analytics. He has earned his second Ph.D. from the Indian Institute of Technology, Bombay where his research is in the area of crowdfunding and gamification. He holds a rich experience of teaching, research, and consultancy. His research is in the area of business analytics and decision sciences with a focus on gamification, stakeholder engagement, sustainability, and e-commerce start-ups.

Nirma Sadamali Jayawardena is a faculty member at O P Jindal Global University, attached to Marketing Department. She completed BSc in Business Management with a first-class Honours from National School of Business Management, Sri Lanka, and completed MBA in international business from University of Colombo, Sri Lanka. Her research interests include social cognition, consumer visual memory and advertising.

Achint Nigam is a Ph.D. in marketing from the Indian Institute of Management, Lucknow and is currently a faculty member at BITS, Pilani. His areas of interest are business (marketing) applications of Big Data, Blockchain, & Artificial Intelligence; Gamification; Sports Marketing, Digital Marketing; Pricing and Promotions. Before joining BITS Pilani, he has worked with ICFAI Business School, Hyderabad.

Vijay Pereira is Full Professor of International and Strategic Human Capital Management at NEOMA Business School. He was Associate Dean (Research) at the Australian University of Wollongong (Dubai). Professor Pereira is the Associate Editor (Strategic Management and Organizational Behavior) for the Journal of Business Research and the Global Real Impact Editor for the Journal of Knowledge Management and the editorial and advisory board for the journals Production and Operations Management and Journal of Management Studies (both listed in Financial Times ranking). He has a record of attracting funding and has published widely, in over 100 outlets, 20 special issues and 10 books, including in leading international journals such as the Human Resource Management (Financial Times ranked), Academy of Management Perspectives, Academy of Management Discoveries, and Journal of Business Ethics.

Amit is faculty in the area of marketing at IIM Visakhapatnam. Prior to joining IIM Visakhapatnam, he was associated with IMT, Ghaziabad as Assistant Professor. He has obtained his Ph.D. in Marketing from Vinod Gupta School of Management, IIT Kharagpur. He has academic experience of 5 years working with renowned Institutes. He has published in leading journals. He has conducted several workshops on Marketing analytics, SPSS, Amos, SmartPLS, Advanced Excel, and Process Macro in premier institutes of India

Charles is a research focused marketing academician and more interested in researching in the areas of retailing, services marketing and customer behavior. His career objective is to ensure my research supports businesses in enhancing their performance as well as contribute to society to improve social wellbeing. He have currently collaborated with the industry to provide industry-relevant research and consultancy. He is open to providing further consultancy and commercial research. His research has been published in the European Journal of Marketing, Journal of Business Research, Psychology & Marketing, Journal of Marketing Management, Journal of Travel Research and International Journal of Hospitality Management among others.