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Biographical notes: Surajit Bag is an Associate Professor at the International University of Rabat, Morocco and an Associate Editor of the International Journal of Applied Logistics. He obtained his second PhD in Engineering Management from the University of Johannesburg (UJ), South Africa, and first PhD in Logistics and Supply Chain Management from the University of Petroleum and Energy Studies (UPES), India. At the University of Johannesburg, he was selected for best 'Doctoral Research' from the Postgraduate School of Engineering Management, UJ, in recognition of the outstanding academic excellence award. He is the proud recipient of the 'AIMS-IRMA Young Management Researcher Award 2016' for his significant contribution towards management research, and his scientific research has attracted more than 2000 citations. His substantive areas of interest include I4.0 technologies and supply chain sustainability.

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Lincoln C. Wood was a Senior Lecturer in the Graduate School of Management at the University of Auckland prior to joining the department in 2017, and having previously also worked at the Auckland University of Technology (Auckland, NZ) and Curtin University (Western Australia). He holds a PhD in Operations and Supply Chain Management from the University of Auckland. His research and connections with business have led to working closely with several industry association including the Chartered Institute of Logistics and Transport (CILT). His expertise has led to invitations to present and lead workshops and present at several international, industry-focused conferences. He is on the editorial boards for a number of international journals focused on supply chain management, including the *Journal of Supply Chain Management*.

Marcus Ambe is an esteemed supply chain management professional. He is a Professor at the School of Public and Operations Management, University of South Africa (Unisa). Between 2008–2017, he supervised and graduated numerous Masters and Doctoral students. He has published over 40 peer-reviewed articles in accredited journals, over 30 conference papers in local and international conferences, delivered over 15 papers as invited speaker, authored and co-authored numerous books and book chapters.

Kedar Pandurang Joshi is an Associate Professor in Operations and Information Science area at TA Pai Management Institute, Manipal. He holds a Doctorate in Operations Management from Indian Institute of Management, Lucknow, India and has more than a decade of teaching experience. He received his Master's in Production Engineering from University of Mumbai, India. His research interests include supply chain management, service operations and pricing.

1 Introduction

Supply chain management encompasses planning and management of all activities involved in sourcing, procurement, conversion, and logistics (CSCMP). The dynamic business environment has triggered competition between supply chains. Hence, the success or failure of organisations depends on their SCs'. When we talk about the best supply chain, we generally refer to the supply chains of Amazon, Walmart, Dell, Seven-Eleven Japan because they are agile, adaptable, and aligned (Lee, 2004). However, the recent COVID-19 pandemic has increased the uncertainty and attracted various risks for SCs'. Globally, as of 4:32 pm CET, 12 November 2021, there have been 251,788,329 confirmed cases of COVID-19, including 5,077,907 deaths, reported to WHO (https://covid19.who.int/). This pandemic has altogether increased the vulnerability of SCs'. COVID-19 pandemic has created situations like panic buying (Bag et al., 2021a). Neither the suppliers nor the producers were prepared to handle such a stochastic demand situation and therefore led to a crisis. The shelves in many retail outlets were empty for many days, particularly food items, toiletries, medicines, personal protective equipment (PPE) items, etc. These not only affected the common people but also the businesses such as plumbing, construction, healthcare, and other industries as there was a shortage of PPE items, medical equipment among others (Bag et al., 2021b). The supply and demand uncertainties rose in the past year and still, organisations are struggling to strike a balance

between responsiveness and efficiency. In this situation, the supply chain performance is impacted severely (Montoya-Torres et al., 2021). Organisations are failing to meet production schedules which are leading to delivery issues and failure to keep commitments made to the customers (Bag et al., 2021b). To develop resilience in the SCs', organisations are leveraging technologies such as big data analytics, additive manufacturing, and other advanced information and communication technologies (Bag et al., 2021b). Many large organisations, for instance, the Tata group are focusing not on the safety of their own employees but also on the safety of the local communities. Organisations are gradually learning to sustain themselves in this new-normal era. However, the situation is not yet stable, and in order to bridge the gap between theory and practices, we launched this special issue. Hence, the aim of this special issue is to explore how COVID-19 has affected supply chain management performance and to further explore sustainable approaches to meet the overall supply chain management objectives of the organisation and ensure supply chain viability.

2 Literature review

On the 12th of November 2021, we have performed a literature search in the Scopus database using keywords such as COVID-19 and supply chain management performance. As a result of the search, we found 111 documents (refer to search syntax in Figure 1).

Figure 1 Search syntax (111 document results)

(TITLE-ABS-KEY (covid-19) AND TITLE-ABS-KEY (supply AND chain AND management AND performance))

We further limited our results to journal papers, papers published in the area of business, management, and accounting. We have only considered articles and review papers and lastly restricted papers only published in the English language. As a result of the search, we found 38 documents (refer to search syntax in Figure 2). The list of 38 papers has been included in the annexure

Figure 2 Search syntax (38 document results)

(TITLE-ABS-KEY (covid-19) AND TITLE-ABS-KEY (supply AND chain AND management AND performance)) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "re")) AND (LIMIT-TO (SUBJAREA, "BUSI")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (SRCTYPE, "j"))

We present some further analysis below. First, we checked the documents by subject area and noticed the maximum number of publications in the area of COVID-19 and SCM performance has been published in the area of business, management, and accounting (refer to Figure 3).

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Documents by subject area
Psychology (1.1%)
Environmental S... (1.1%)



Second, we checked the documents by year and noticed the number of publications in the area of COVID-19 and SCM performance has gone up significantly in one year (refer to Figure 4).





Third, we checked the documents per year by source and noticed the number of publications in the area of COVID-19 and SCM performance has been published mostly in the journals like *Uncertain Supply Chain Management*, *International Journal of Logistics Management*, *Transportation Research Part E*, and *Transportation Review*, *Operations Management Research and Production Planning and Control* (refer to Figure 5).

Figure 5 Documents per year by source (see online version for colours)



Fourth, we checked the documents by author and presented the results in Figure 6.





Documents by author

Compare the document counts for up to 15 authors.

Fifth, we checked the documents by affiliation and presented the results in Figure 7.

Sixth, we checked the documents by country or territory and presented the results in Figure 8.

Figure 7 Documents by affiliation (see online version for colours)

Documents by affiliation ①

Compare the document counts for up to 15 affiliations.



Figure 8 Documents by country or territory (see online version for colours)



Compare the document counts for up to 15 countries/territories.



The analysis of results from Scopus will give SCM researchers an idea of where we are currently standing and help in developing future projects.

3 Contribution

In response to the call for papers, we have attracted several papers. The papers which somehow were not a proper fit for this SI, we desk rejected so that authors may find any

suitable outlets for their manuscript. We have undertaken an extensive review process guided by journal guidelines. Finally, we accepted five papers that we believe make a significant contribution to the logistics and supply chain management literature in context to the COVID-19 pandemic. We now discuss each contribution in detail. Hence, with these five articles our SI, addresses some of the key issues related to the COVID-19 pandemic and supply chain management are:

The first paper, 'Applying linear programming for logistics distribution of essential relief items during COVID-19 lockdown: evidence from Bangladesh' develops a model to aid the national relief distribution process during a pandemic. This study considers the capacitated plant location model and applies the linear programming tool to formulate and solve the model. The model assigns a target and service zones to relief organisations based on their capacity and proximity and avoids redundant reliefs to easily accessible areas. The model can be used by government, private, and non-profit alike to distribute relief during any similar future events as well.

The second paper, 'A study on reviews of online grocery stores during COVID-19 pandemic using sentiment analysis' focussed on analysing the online customer reviews and developed a supervised machine learning model.

The third paper, 'Prolonging retailer-supplier relationship: a study of retail firms during COVID-19 pandemic', made an effort to identify the key determinants of retailer-supplier relationship and assess retail firms' supply chains appropriate as per key determinant to be intensive in a pandemic situation. The work reveals collaboration efficiency and co-creation are the prominent determinants for dealing with the retailer-supplier association. The study shows that order fulfilment is the most suitable RSCs for creating co-creation and capabilities in managing humanitarian logistics to survive in the COVID-19 pandemics.

The fourth paper, 'Impact of sustainable supply chain management on performance of SMEs amidst COVID-19 pandemic: an Indian perspective' made an effort to introduce a conceptual model to evaluate sustainable practices and dynamic capabilities to ensure performance in a disruptive environment. The analytical outcomes of this research contribute to the existing literature and also enable practitioners to design and implement sustainable supply chain activities and monitor and evaluate the impact of such activities on business sustainability among Indian firms.

The fifth paper, 'Modelling the barriers of supply chain transparency in the post-COVID-19 scenario' identified the barriers that companies face while implementing supply chain transparency using technologies such as Blockchain, IoT, RFID, etc. Results suggest that customer privacy drives other barriers in the system and hence should be given adequate importance. Vague short-term ROI, low technology adoption, and underdeveloped infrastructure are the three most critical barriers that managers should be careful of while implementing transparency across supply chains.

4 Future research directions

We are sure that each of the accepted articles in this SI has made a significant contribution and pushed the scientific boundaries.

Future research directions should include:

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- a Resource allocation and logistics distribution: COVID-19 pandemic is the worst pandemic in this 21st century. Its severe impact has led policymakers, academicians, and practitioners to rethink SC strategies, planning, and operations. Future researchers need to emphasise the proper resource allocation and distribution among SC partners in this new-normal era.
- b Consumer behaviour and reshaping SC strategies: The COVID-19 pandemic has changed buying behaviour of customers. To match the supply and demand and retain customers it is important that organisations identify the leading factors influencing consumer behaviour and reshape the SC strategies accordingly.
- c Relationship management with channel partners: Managing relationships with channel partners is important to sustain in this highly uncertain environment. Future researchers can investigate how psychological contracts can be useful in managing SC sustainability in this new-normal era.
- d Sustainable SCs' in the new-normal era: Achieving SC sustainability is essential, particularly social sustainability of supply chain network including suppliers and sub-suppliers are critical for the success of SC. Moreover, research is required on the social sustainability aspects of the local community that supports the business and future researchers should aim to develop a holistic framework that can be meaningful for the society.
- e The role of emerging technologies in enhancing SC transparency: This area is indeed very interesting and future researchers can examine the benefits of big data and predictive analytics in improving SC transparency.

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Annexure

List of 38 papers

DOI
10.1016/j.jclepro.2021.129050
10.1108/BPMJ-01-2021-0050
10.1016/j.tre.2021.102463
10.1111/1467-8551.12529
10.1016/j.tre.2021.102412
10.1016/j.indmarman.2021.05.003
10.35611/jkt.2021.25.3.21
10.1016/j.techfore.2021.120643
10.1080/09537287.2021.1993373
10.1007/s12063-021-00206-y
10.1108/IJLM-02-2021-0127
10.1108/SRJ-10-2020-0415
10.5267/j.uscm.2021.8.007
10.5267/j.uscm.2021.6.012
10.1108/MRR-09-2020-0600
10.1080/13675567.2021.1958768
10.1108/IJLM-01-2021-0043
10.1080/00207543.2021.1946726
10.1108/IJLSS-06-2020-0071
10.1007/s12063-021-00199-8
10.1007/s12063-021-00200-4
10.5267/j.uscm.2021.5.009
10.5267/j.uscm.2021.4.010
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10.1108/ECAM-12-2020-1010
10.1108/IMDS-01-2021-0022
10.5267/j.uscm.2021.3.010
10.1108/IJLM-12-2020-0486

List of 38 papers (continued)

- 10.1108/IJLM-11-2020-0452
- 10.1111/jscm.12251
- 10.5267/j.uscm.2020.11.007
- 10.1080/09537287.2020.1768450
- 10.1016/j.tre.2020.102064
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- https://pesquisa.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/pt/covidwho-827229
- 10.1016/j.tre.2020.101922
- 10.1108/SCM-07-2020-0313
- 10.22306/al.v7i4.185