6th Annual Supply Chain & Logistics Management Workshop



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The Human Side of Sustainable Supply Chains

December 10, 2021; 10:00-15:00 ATS (Halifax, NS, Canada, GMT-4:00), online

The whole world runs on supply chains. And massive disruptions like pandemics and uncertainties around them once more proved the life-saving role of supply chain and logistics management (SC&LM). Amid emerging technologies to support efficiencies and under the pressing environmental, social, economic, and cultural imperatives, where and how do we stand for humans that make the "wheels of business" move? Are people at the right place and well-equipped to tackle the big problems we currently face and waiting ahead? Which qualifications are essential for an employer or an employee in successfully managing sustainable supply chains (SSCs)? How do SSCs relate to United Nations Sustainable Development Goals? It is time we revisit the human side of SSCs.

The flagship event of the Rowe School of Business, sponsored by CRSSCA (Centre for Research in Sustainable Supply Chain Analytics), and organized by Dr. M. Ali Ülkü, this series of annual SC&LM workshops not only brings in distinguished academics and industry leaders to share their knowledge on the latest trends and cutting-edge research and best practices in SC&LM but also provides an excellent opportunity to cross-pollinate ideas and network with academics, practitioners and students in a highly collegial environment

Program

Welcome Speech by Kim Brooks , Prof. of Law & Dean of Faculty of Management, Dalhousie U.
M. Ali Ülkü, Prof. of SCDS & Dir CRSSCA, Rowe School of Business, Dalhousie U.
The Human Side of Sustainable Supply Chains: A Thematic Introduction
Binod Sundararajan , Assc. Prof. of Management & DirRowe School of Business, Dalhousie U.
Sustainability Practices and Indigenous Ways of Knowing and Being: A Network Theoretic Perspective
Kent A. Williams, Asst. Prof. of Management, Rowe School of Business, Dalhousie U.
Embracing Climate Change: Exploring Sustainable Pathways Through the SDGs
Patrick Bohan, Dir. of Business Development, Halifax Port Authority
25 Years of Skills Evolution in Sustainable Supply Chains A Practitioner's Experience
Sajad Fayezi, Assc. Prof. & DirInt. Research and Engagement, Fac. Bus. Admin., Memorial U.
Modern Slavery in Supply Chains: Issues, Challenges, and Opportunities
Opher Baron, Prof. of OM & Acad. Dir MMA, Rotman School of Management, U. of Toronto
On Healthcare and Queuing: Pooled vs. Dedicated Service with Triage Errors
Iman Nosoohi, Asst. Prof. of SCDS, Rowe School of Business, Dalhousie U.
New Trends in Sustainability and Their Impacts on Human Side of Supply Chains
Panel Discussion
Break
Best Student Research Presentations - Finalists
Break
Announcement of Awards& Closing Remarks by M. Ali Ülkü
Networking

Invited Speakers

Dr. Opher Baron is a Distinguished Professor of Operations Management and the Academic Director, MMA Program at the Rotman



School of Management, University of Toronto. He was a visiting associate professor at the Industrial engineering and Management faculty of Technion (2009/10) and a visiting Professor at the School of Information Management and Engineering, Shanghai University of Finance and Economics (2016/17). He has a Ph.D. in Operations Management from the Sloan School of Management at the Massachusetts Institute of Technology, and an MBA and BSc in Industrial Engineering and Management from The Technion - Israel Institute of Technology. On the teaching front, Opher is especially proud of the modeling and analytics courses he introduced and teaches at Rotman. On the application front, he is proud of launching the Covidppehelp.ca platform with his colleagues. This platform has facilitated the flow of millions of PPE items to end-user customers during the global Covid19 pandemic. His research interests include queueing, business analytics, service operations (e.g., healthcare), autonomous vehicles, and revenue management. Opher's work

is published in leading journals such as *Operations Research*, and *Manufacturing & Service Operations Management*, and he has won several research and teaching awards and grants, including the *1000 Talents Plan Scholar* from the Shanghai Municipal Government, 2017. Opher is active in the operations research and operations management community. He has given numerous invited keynote lectures and seminars, chaired several conferences, clusters, and sessions, and is currently serving on the advisory board and editorial boards of several journals

On Healthcare and Queuing: Pooled vs. Dedicated Service with Triage Errors

We model an ED that serves acute (type 1) and non-acute (type 2) patients under differentiated service level (SL) requirements in the presence of, possibly inaccurate, triage. We evaluate the performance measures of the optimal pooled system with either (i) a first come first serve (FCFS) or a (ii) priority (PR) and the optimal (iii) dedicated system. We discuss the implications of different systems primitives on the optimal system design. For the benchmark case with no triage errors, we show that the capacity of the pooled server with PR may well be dictated by the, less demanding, SL requirement of the type 2 customers. Triage errors change the pattern of arrival rates to servers and the pattern of service rates to customers. We discuss the impact of these changes. For the dedicated system we show that dedicated systems with triage errors may be better than without errors simultaneously, in that servers may face a lower utilization (even though one capacity increases), customers are served faster (one type strictly faster), and costs are lower. We establish similar observations for the pooled system. (This is a joint work with Yonit Barron)

Mr. Patrick Bohan, MBA, PPM, CCLP Patrick Bohan is a supply chain and international business development executive with over



25 years of executive-level business experience. Patrick has worked in supply chain and supply chain service provision since 1994 with expertise in global accounts, high-level logistics and industrial and consumer supply chain issues. Patrick has guest lectured and taught at Dalhousie University, York University and Rotman/University of Toronto to undergraduate, graduate and executive training programs dealing with global trade and supply chain topics since 2005. Patrick Bohan will speak about the high-level themes involved in the workplace and business world with sustainable supply chains - touching on technology, best practices and the human experience based on the 1994 – 2021 period.

Dr. Sajad Fayezi is an Associate Professor of Operations and Supply Chain Management and the Director of International, Research



& Engagement at Memorial University. Before joining Memorial University, he has held academic appointments at Monash University, Swinburne University of Technology, and La Trobe University. Dr. Fayezi obtained his Ph.D. in supply chain management from Deakin University in Melbourne, Australia. Dr. Fayezi's research and teaching engage with debates around creating responsible supply chains through, for example, protecting human rights, mitigating modern slavery risks, and promoting sustainable operations and ethical sourcing. He has also published research on tensions, risks, and resilience in global sourcing and supply chain management contexts. Dr. Fayezi has published high-impact research in major academic and practitioner journals such as International Journal of Operations & Production Management, International Journal of Management Reviews, Industrial Marketing Management, Supply Chain Management, International Journal of Physical Distribution & Logistics Management, and Supply Chain Quarterly.

Modern Slavery in Supply Chains: Issues, Challenges, and Opportunities

As a grand challenge of our time, modern slavery has been receiving increasing attention from various stakeholders across the supply chains. This is not surprising as modern slavery impacts more than 40 million individuals worldwide, including some 17,000 people in Canada according to the 2016 Global Slavery Index. The G20 countries, for example, are exposed to the risk of modern slavery pertaining to an estimated \$354 billion worth of imported products annually. Modern slavery and other exploitative practices are often hidden across the supply chain and can be driven not only by companies' decisions but also that of consumers who may unintentionally purchase slave-made goods and services. We delve into some of the key issues, challenges, and opportunities businesses and society face in combating this seemingly wicked problem.

Dr. Iman Nosoohi is an Assistant Professor of Supply Chain and Decision Sciences at Rowe School of Business, Dalhousie University.



Before joining The Rowe, he was a Sessional Faculty member at the Operations and Logistics Division at Sauder School of Business, University of British Columbia. Iman was a Post-doctoral fellow at John Molson School of Business, Concordia University. He obtained his Ph.D. in Industrial Engineering from Isfahan University of Technology (IUT) in 2014. Iman's research interests include supply chain coordination, revenue management in supply chains, operations-marketing interface, pricing in healthcare systems, and applied game theory. He has published in different journals such as *European Journal of Operational Research, Computers and Industrial Engineering, International Transactions in Operational Research, Journal of Retailing and Consumer Services*, and *Applied Mathematical Modelling*. Iman is a certified data analyst from Cornell University and is currently researching the effects of government policies on affordability in pharmaceutical markets. He is a member of INFORMS, DSI, and POMS.

New Trends in Sustainability and Their Impacts on Human Side of Supply Chains

Induced by climate changes and scarcity of natural resources, companies in recent years are taking more sustainable approaches to managing their supply chains. Sustainability helps them balance their economical, social, and environmental performance. Furthermore, after COVID-19 pandemic, companies are now moving more quickly towards integrating technology and automation to their sustainable supply chains. In this new environment, companies need to consider effects of their decisions on an ecosystem in the presence of people and human cooperation. In this talk, I will discuss some risks and opportunities for human communities as a result of recent changes in supply chains. I will introduce some potential directions for future research as well.

Dr. Binod Sundararajan is an Associate Professor of Management and currently serving as the Interim Director of the Rowe



School of Business, Dalhousie University, Canada. He teaches Corporate Communication, Business Communication, Managing People, Sustainable Leadership, and Doing Business in Emerging Markets. He has published (as lead author) a coursebook titled *Lean, Ethical Business Communication* by Oxford University Press. Holding a Ph.D. in Communication & Rhetoric, with undergraduate and Master's degrees in Electrical Engineering, Dr. Sundararajan has diverse research interests that lie in Organizational, Professional and Business Communication, Leadership Communication, Business Ethics, Technologically Mediated Communication, Social Network Analysis, and Organizational Diversity and has published several peer-reviewed articles in journals, conference proceedings, and book chapters, and presented at national and international conferences. He is also currently the lead author in an in-progress textbook on Cross-cultural Business and Financial Practices, Palgrave-MacMillan Publishers.

Sustainability Practices and Indigenous Ways of Knowing and Being: A Network Theoretic Perspective

Pidgeon (2016) describes the Wholistic Framework representing the Indigenous ways of knowing and being, which has the individual at the centre, surrounded by family in the first circle, followed by a growing circle of community, nation, federal, and provincial bodies. Through these entities, the individual receives intellectual, physical, emotional, and spiritual inputs, all of which are encompassed by the principles of Relevance, Reciprocity, Responsibility, and Respect. In this explorative study, we combine this approach to Indigenous ways of knowing and being with significant work done in social networks, to identify clear actional elements for sustainable action by all network actors that takes into the quadruple bottom line of economic prosperity, environmental sustainability, social equity, and cultural vitality.

Dr. Kent A. Williams, DSocSci, is an Assistant Professor with the Faculty of Management, Rowe School of Business, and has a



leadership consulting practice, *Integral Dialogue Project*. He holds a Doctor of Social Science, where his research and praxis focus on leadership studies that are underpinned by fairness, prosperity, and sustainability. His 'why he does what he does' is to co-inspire human potential for positive impact. He espouses pedagogy of 'education as the practice of freedom'—where he facilitates learning spaces that embrace failure, reflexivity, creativity, diversity, and critical & resilient thinking. He believes this approach enables desired futures for living in our rapidly changing world of complexity and embraces climate change through action. He lives in Wolfville, NS, with his family. Kent loves time connecting in Nature, good laughs with his family...and yes, time out on his bike!

Embracing Climate Change: Exploring Sustainable Pathways Through the SDGs

Living in the suggested epoch of the Anthropocene, which is characterized by rapidly changing complexity and the societal grand challenge of climate change (and pandemics) through human impact, leaders are finding traditional ways of leading are not effective. Also, this change connects to living in a globalized world where many cultures and beliefs intersect to create polarities in perspective—adding to the chaos and conflict. With our many societal challenges, we are sensing cracks in the foundations of civil society with no definitive ways forward. This opens the question of 'how do we build pathways for sustainable development that lead to desired futures that offer hope for humankind?' In his talk, Kent will allude to the SDGs and Planetary Boundary frameworks as they relate to quadruple-bottom-line (QBL) in providing possible openings for sustainable development.

Workshop Organizer and Chair

Dr. M. Ali Ülkü is a Full Professor and the Director of the Centre for Research in Sustainable Supply Chain Analytics (CRSSCA) in the



Rowe School of Business at Dalhousie University, Canada. Dr. Ülkü's research streams include the theoretical modelling of sustainable supply chain and logistics systems, operations-marketing interface, circular economy, and mathematical modelling of consumer behaviour and societal problems. He has published in such leading scholarly journals as *European Journal of Operational Research, Int. Journal of Production Economics, Journal of Business Research, Journal of Cleaner Production, Journal of Retailing and Consumer Services,* and Service Science. He has taught at various universities in Canada, Turkey and the USA. Dr. Ülkü is honoured to have received the university-wide 2007 Exceptional Teaching Award at the University of Waterloo and the 2019 Distinguished Professor Award from the Industrial Engineering and Operations Management Society International. He co-edited a book entitled Big

Data Analytics in Supply Chain Management: Theory and Applications published in 2021 by CRC Press - Taylor & Francis.

Workshop Moderators

Dawne M. Skinner



Simranjeet S. Chadha



About CRSSCA (<u>www.dal.ca/crssca</u>)

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The mission of the Centre for Research in Sustainable Supply Chain Analytics (CRSSCA) is to provide big data-driven, innovative and analytical solutions to, and to disseminate scholarly knowledge in the understanding of, complex modern global supply chain problems through the lens of sustainability (economic, environmental, social and cultural). Housed in the Rowe School of Business, Dalhousie University, CRSSCA is the supply chain research hub in Eastern Canada. CRSSCA fosters interdisciplinary research that sheds light on complex issues in supply chain management. Keeping sustainability imperatives front and centre, CRSSCA creates new knowledge in prescribing solution models for data-driven industrial problems, devises analytical tools for better decision-making and develops insights into the intricate relationships between supply chain operations, green logistics (global trade, inventory, process and product design, procurement, manufacturing, transportation) and sustainable consumption. A member of the Network for Business Sustainability, CRSSCA enables research collaborations between faculty, industry and students, supports the SC&LM Major in the Bachelor of Commerce program at Dalhousie University and supply chain case competitions.