



POMS 2012 Conference Theme

Socially Responsible Operations

Track Title: Behavioral Operations

Track Chair(s): Feryal Erhun, Stanford University [ferhun@stanford.edu]

Yaozhong Wu, National University of Singapore [bizwyz@nus.edu.sg]

We invite papers with focus on the analysis of human behavior with relevance to operations management. This track is open to studies of all aspects of behavior that is not completely determined by perfect rationality. Examples include decision making under uncertainty and complexity, social preferences, team dynamics, decision making across cultures, collaboration across cultures, etc. Research submitted to this track should have a clear operations context. Examples include inventory planning and control, resource allocation, supply chain management, project management, and product development. We encourage submission of research focusing on design of management interventions (e.g., mechanisms) for suboptimal human behavior. All research methodologies are welcome.

Keywords: Human Behavior; Operations Management; Bounded Rationality; Behavioral Dynamics; Behavioral Economics; Laboratory Experiments; Judgment and Decision Making; Social Dynamics; Field Observations; Cross-Cultural Studies.

Track Title: Capacity Management

Track chair(s): Achal Bassamboo, Northwestern University [a-bassamboo@kellogg.northwestern.edu]

Ozalp Ozer, University of Texas at Dallas [oozer@utdallas.edu]

We want to invite a variety of submissions that study the capacity, inventory, and production related topics in manufacturing, service, and retailing operations. In addition to mathematical models and empirical studies, best practices and case studies are also welcome.

Keywords: Models addressing various capacity management options (Outsourcing/safety capacity, Option-based capacity management, Capacity allocation/planning, Supply diversification, Capacity investment/expansion); Application and justification of various inventory theories (Approximation/heuristics for capacity/inventory management, Inventory management software, Empirical and practice justification); Inventory/capacity management interacted with other functionalities (Budget constrained inventory management, Working capital management, other and new issues in inventory/capacity management).

Track Title: Empirical Research in OM

Track Chair(s): Sarvanan Kesavan, University of North Carolina Chapel Hill [kesavans@kenan-flagler.unc.edu]

Submissions in this track should focus on empirical methodology and application research, and operations or supply chain management research. Specifically, the research should be based on data from sources including but not limited to case studies, controlled experiments, archival records, surveys and simulations. The data could be from any industry including retail, manufacturing, financial, wholesale etc. The reported research should apply or advance operations and supply chain concepts and should provide insights helpful to make strategic and operational decisions.

Keywords: Econometrics, Time series, Retrospective, Path analysis, Statistics, Analysis of Variance, Case Study, Cluster Analysis, Content Analysis, Empirical Methodology, Data Envelopment Analysis, Event Study, Factor Analysis, Moderation, Mediation, Profile Deviation, Regression, Simulation, Structural Equation Model, Critical Incident, Cross Section, Experiment, Longitudinal, Panel, Population, Sample, Scale Development, Survey, Operations Strategy.

Track Title: Finance and OM Interface

Track chair(s): John Birge, University of Chicago [birge@chicagobooth.edu]

This track focuses on topics on the interface of operations and finance. These topics may include but are not limited to trade credit, inventory finance, foreign exchange risk, supplier default management, commodities price risk, effect of operational performance on financial performance, risk aversion, operational flexibility and operational hedging, financial hedging, asset based financing, etc. We invite presentations of research papers and case studies, tutorials, as well as panel discussions.

Keywords: Trade credit, inventory finance, commodities price risk, operational/financial hedging, financing.

Track Title: General Track

Track Chair(s): Kumar Rajaram, University of California Los Angeles [krajaram@anderson.ucla.edu]

Topics in production and operations management which do not fit in any other track would be considered in this track.

Track Title: Healthcare Operations Management

Track Chair(s): Beste Kucukyazici, MIT-Zaragoza Logistics Center [bkucukya@mit.edu]
Ken Klassen, Brock University [kklassen@brocku.ca]
Carrie Queenan, University of Notre Dame [C_Queenan@nd.edu]
Sergei Savin, University of Pennsylvania, [savin@wharton.upenn.edu]

For the Healthcare Operations track, we seek submissions that highlight the effectiveness of operations management in improving overall patient outcomes by enhancing the processes and systems critical to the delivery of healthcare. While traditional issues ailing healthcare – inefficiencies, waste and redundancy, inadequate resources – remain unsolved, newer issues such as ever-decreasing reimbursements, conflict-of-interests among healthcare providers, pay-for-performance, private versus public financing of healthcare, etc. keep making the processes surrounding the delivery of care more

complicated. Addressing these challenges requires developing and applying knowledge and skills within the operations management domain to the healthcare industry. We seek a mix of research papers that highlight the variety of healthcare operations management approaches tackling both well-known and emerging challenges: (1) research that addresses operations management issues motivated by the healthcare industry, in order to build theoretical knowledge benefitting the greater operations management community; (2) research that adapts operations management techniques in fundamentally novel ways to address healthcare operations issues; (3) and research that applies existing operations management knowledge to solve healthcare issues at one or more healthcare organizations, and therefore demonstrates direct and implementable relevance to other healthcare providers.

Keywords: Patient and process flow modeling, analysis, and improvement; Scheduling models for staff, patients, or resources (e.g., operating rooms); Clinical capacity planning/management; Behavioral operations in healthcare delivery systems; Operations strategy in the healthcare sector; Healthcare logistics / supply chain management, including response to epidemics and pandemics; Quality and safety improvement in healthcare; Managing and forecasting patient demand; Designing and improving healthcare delivery environments and patient experiences; Knowledge transfer and learning in healthcare organizations; New product development in medical, pharmaceutical, and healthcare-related industries; Technology innovation and diffusion in healthcare; Analytical and empirical models of adoption of IT initiatives (EMR, CPOE, eMAR etc.) in healthcare organizations at local/regional/state-wide level; Application of Lean methodology in healthcare; Medical outcome measurement; Evidence-based delivery of medical care; Models of healthcare finance, including payer-provider issues; Competition in healthcare.

Track Title: Humanitarian Operations and Disaster Management

Track Chair(s): Aruna Apte, Naval Postgraduate School [auapte@nps.edu]
Sushil Gupta, Florida International University [poms@fiu.edu]
Martin Starr, Rollins College [mstarr@cfl.rr.com]

Recent disasters such as the earthquake in Haiti, floods in Pakistan, humanitarian challenges arising from conflicts in Sudan and various concerns in Africa have exposed significant problems that need solutions. In addition to the natural disasters, the homeland security issues related to domestic as well as international terrorism have increased the fear factor and have made 'readiness' the principal priority. Ability to conduct efficient and effective humanitarian operations is a critical element of a disaster relief process. Humanitarian operations encompass the lifecycle of a disaster including preparedness, response, and recovery. The vast scope and size of these operations such as managing response supply chain of critical supplies and services with challenges of demand surges, uncertain supplies, and critical time-windows in the face of infrastructure vulnerabilities render research in this area challenging and hence interesting. Supply chain trends such as globalization, decentralization, and a focus on efficiency, which may result in vulnerable supply chains, impact the need to address supply chain disruptions. Recent economic and human catastrophes (e.g., 911, SARS, hurricanes (Katrina), earthquakes (Haiti), mine disasters (Chile) and oil spills (BP), have motivated research in the topics of disaster management, homeland security, emergency response, and supply chain disruptions. Other issues of interest include disruptions mitigation in product development, manufacturing, transportation, storage, and demand. Also relevant is research dealing with policies, at government as well as company levels, which impact a supply chain's ability to manage disruptions. Case studies outlining mitigation strategies of a company or comparisons between companies are welcome. Studies on the impact of terrorist or natural catastrophes on infrastructure are relevant.

Keywords: Humanitarian, logistics, disaster, emergency, relief, response, supply chain, prepositioning, facility location, distribution, transportation, evacuation, inventory, analytical models, decision making, Supply chain disruptions, risk management in supply chains, catastrophe prevention and mitigation, disruptions mitigation strategies, supplier selection strategies, inventory policies under uncertainty, terrorist threats, natural catastrophes, government policies to avoid and mitigate terrorist attacks, impact of disruptions on infrastructure, case studies on disruptions, assessing the impact of a catastrophe, early warning systems, anomaly detection.

Track Title: Inventory Management

Track Chair(s): Rodney Parker, University of Chicago [rodney.parker@chicagobooth.edu]
Tava Olsen, University of Auckland [t.olsen@auckland.ac.nz]

We want to invite a variety of submissions that study production and inventory related topics in manufacturing, service, and retailing operations. In addition to mathematical models and empirical studies, best practices and case studies are also welcome.

Keywords: Inventory/production models dealing with various uncertainties (asymmetric/partial information, random yield, censored demand, demand learning/forecasting, procurement/sale price uncertainty, stochastic lead-time, risk adjustment/mitigation, robust inventory management techniques); Application and justification of various inventory theories (approximation/heuristics for inventory management, inventory management software, empirical and practice justification); Inventory management interacted with other functionalities (budget constrained inventory management, working capital management, other and new issues in inventory management).

Track Title: Manufacturing Operations

Track chair(s): Candi Yano, University of California Berkeley [yano@ieor.berkeley.edu]

We invite submissions dealing with all aspects of production and manufacturing planning. Both, analytical modeling based research and empirical research is welcomed.

Track Title: Operations Management in China and East Asia

Track Chair(s): Janny M.Y. Leung, The Chinese University of Hong Kong [janny@se.cuhk.edu.hk]
Chih-peng Chu [chpchu@mail.ndhu.edu.tw]
Jian Chen, Tsinghua University [chenj@sem.tsinghua.edu.cn]

We invite submissions on various issues related to operations management in Greater China, East Asia and other developing and emerging economies. Topics of interest include operations strategy, sourcing, procurement, quality management, financial and operational risks, supply chain logistics, international expansion, contracting and supply chain coordination, etc. We invite presentations of research papers, case studies, tutorials, as well as panel discussions.

Keywords: Emerging economies, development, Asian business, global logistics, operations strategy, international operations.

Track Title: OM in India / SE Asia

Track Chair(s): Chung Piaw Teo, National University of Singapore [bizteocp@nus.edu.sg]
Mohan Sodhi, Indian School of Business [mohansodhi@gmail.com]

This track focuses on various issues related to operations management in India and SE Asia, such as operations strategy, sourcing, procurement, quality management, financial and operational risks, supply chain logistics, international expansion, contracting and supply chain coordination, etc. We invite presentations of research papers and case studies, tutorials, as well as panel discussions.

Keywords: Operations, Emerging Economies, India, Singapore

Track Title: OM in Latin America and the Caribbean

Track Chair(s): Sergio Maturana Valderrama, Pontificia Universidad Catolica de Chile
[smaturan@ing.puc.cl]

This track focuses on various issues related to operations management in Latin America and the Caribbean, such as operations strategy, sourcing, procurement, quality management, financial and operational risks, supply chain logistics, international expansion, contracting and supply chain coordination, etc. Applications of OM in agriculture, forestry, and mining are of particular interest. We invite presentations of research papers and case studies, tutorials, as well as panel discussions.

Keywords: Operations, Emerging Economies, Americas, Caribbean, Brazil

Track Title: Operations Management and Economic Models

Track Chair(s): Laurens Debo, University of Chicago [laurens.debo@chicagobooth.edu]
Xuanming Su, Wharton [xuanming@wharton.upenn.edu]

This track focuses on research that studies how the self-interested behavior of economic agents affects the performance of operational systems. Models of interest typically consider individual agents with conflicting objectives, divergent information, or control rights over different parts of the system. These economic agents may include firms, customers, managers, employees, buyers, suppliers, or competitors.

Keywords: game theory, incentives, contracts, information.

Track Title: OM – Marketing Interface

Track Chair(s): Steve Smith, Santa Clara University [ssmith@scu.edu]
Saibal Ray, McGill University [saibal.ray@mcgill.ca]

Operations Management and Marketing overlap in many ways in supply chains. Pricing influences demand, which in turn impacts inventory management decisions. Consumers' purchase decisions may also be influenced by behavioral or strategic considerations. Inventory decisions can influence demand through the management of assortments and changes in the availability of products. Consumers' preferences with regard to the substitutability of alternative products also have implications for inventory management decisions. This track invites sessions with talks in any of these areas, as well as related topics.

Keywords: Pricing; strategic consumer behavior, inventory management; capacity decisions, market segmentation; supply chain management, marketing strategies

Track Title: OM-Practice

Track Chair(s): Srinagesh Gavirneni, Cornell University [nagesh@cornell.edu]

The OM-Practice track will focus on the recent developments in application of Operations Management methods to improve the efficiency of activities in the areas of healthcare, sustainability, humanitarian logistics, new product development, transportation, food and agriculture, commodities managements, risk and financial management, etc. Thus, these presentations will be an illustration on how OM is contributing to the society and what can be done to increase the translation of academic research to practice. Presentations in the session will highlight not only the application of OM to diverse industrial problems, but also, how addressing practical issues aid in OM knowledge building.

Track: OM in Travel, Tourism and Hospitality

Track Chair(s): Liana Victorino, University of Victoria [lianav@uvic.ca]
Rohit Verma, Cornell University [rv54@cornell.edu]

According to the WTTC (World Travel & Tourism Council) the Travel, Tourism, and Hospitality directly contribute over US\$ 1.85 trillion to the GDP with the net impact of well over US\$ 5.99 trillion directly employing over 99 million people worldwide. Together, these industries provide much opportunity for operations management scholars to study complex, interesting and relevant problems that are of interest to both academic scholars and practitioners. Some examples of recent research related to Travel, Tourism, and Hospitality include pricing and revenue management; sustainability and corporate responsibility-related issues (e.g. energy usage; carbon foot printing; global food supply chains); service process and capacity analysis (e.g. waiting lines; service scripting, customization, and improvisation); service innovation (both product and process), among others. We invite scholars to submit papers related to all aspects of Operations Management in Travel, Tourism, and Hospitality.

Keywords: Travel, Tourism, and Hospitality, Pricing and Revenue Management; Sustainable Services; Service Innovation; Process and Capacity Planning; Operations/Marketing Interface

Track Title: Product Innovation and Technology Management

Track Chair(s): Sriram Narayanan, Michigan State University [Narayanan@bus.msu.edu]
Karthik Ramachandran, Southern Methodist University [karthik@cox.smu.edu]

Innovation and new product development are major drivers of growth, renewal, and competitive advantage for firms across all industries. Managing both the creation and application of rapidly changing technologies is a critical challenge for many organizations. For the purposes of this track, this includes product, process, service, and business-model innovation, identification and commercialization of new technologies, the management of research, and the design, engineering, introduction of new offerings, technology innovation, diffusion and transfer, technology strategy, technology change and uncertainty, knowledge management, adoption and implementation of new technology, performance measurement and the justification of new technology, technology forecasting, technology and environmental sustainability.

Keywords: Product development, innovation, development process, execution, technology management, innovation, justification, transfer

Track Title: Product Management

Track Chair(s): Aydin Alptekinoglu, Southern Methodist University [aalp@cox.smu.edu]
Gurhan Kok, Duke University [gurhan.kok@duke.edu]

We invite submissions that study any aspect of product management in retailing, manufacturing, and distribution. Topics of interest include product variety management, inventory management, assortment planning, pricing, quality and product line decisions, store formats, supplier relationships, incentive and information issues related to these topics, retail operations management, supply chain management, marketing-operations interface. In addition to mathematical models and empirical studies, best practices and case studies are also welcome.

Keywords: Inventory Management; Pricing; Quality; Service Levels; Lead Time Considerations; Location; Assortment; Choice models; supply chain management.

Track Title: Production Planning and Scheduling

Track Chair(s): Ling xiu Dong, Washington University St. Louis [dong@wustl.edu]

We invite submissions that consider any aspect of production planning and scheduling.

Production planning entails the acquisition and allocation of limited resources, and any other activities needed to satisfy customer demand over a specified time horizon. We welcome variety of topics related to production planning, including but not limited to capacity planning, location planning, layout planning, inventory management, lot-size models, forecasting, aggregate planning, lean systems, game-theory application in production planning, production innovations.

Classical scheduling addresses various shop environments, including single-machine, parallel machines, flow shops, job shops, open shops). Supply chain scheduling coordinates the production and delivery functions in systems with little or no inventory between the two. Currently, service scheduling is most commonly applied to the health care field (e.g., patient scheduling, nurse scheduling). Timetabling is used to schedule this conference's sessions and your university's classes. Studies of any other scheduling topics are welcome, too.

Keywords: capacity planning, location planning, layout planning, lot-size models, forecasting, aggregate planning, lean systems, production innovations, shop scheduling, supply chain scheduling, zero-inventory systems, service scheduling, timetabling, sequencing.

Track Title: Retail Operations Management

Track Chair(s): Felipe Caro, University of California Los Angeles [fcaro@anderson.ucla.edu]

This track seeks papers that address issues related to the retail sector of the economy, comprised of both traditional brick & mortar retailers and internet retailers. The track is open to papers based on all types of methodologies, including theoretical, empirical, and field based research. Papers that tackle real problems and those that have high potential to impact practice are encouraged. Topics that are of interest in this track include but are not limited to:

- (1) Retail merchandising, demand forecasting, and inventory planning;
- (2) Retail store operations – planning and execution including inventory, pricing, sales force planning, store design, and store location;

- (3) Interface of retail operations with other functions such as finance, human resources, marketing, risk management, and strategy;
- (4) Internet retailing and synergies in multi-channel retailing;
- (5) Organizational structure of retailers, e.g., centralized versus decentralized operations;
- (6) Usage of technology in retail operations, e.g., use of RFID technology, data mining;
- (7) International expansion and retailing in emerging economies;
- (8) Store location, formats, and network design for retail firms.

Keywords: retail operations, merchandising, forecasting, inventory control, assortment planning, shelf-space allocation, store location, store execution, promotions, markdown pricing, staffing, e-tailing, electronic commerce.

Track Title: Scheduling and Logistics

Track Chair(s): Chung-Yee Lee, Hong Kong University of Science & Tech [cylee@ust.hk]
Chung-Lun Li, Hong Kong University of Science & Tech [Chung-Lun.Li@inet.polyu.edu.hk]

Scheduling and Logistics are important fields in operations management. Major topics in these fields include, but not limited to, machine scheduling, manpower scheduling, vehicle routing, distribution planning, cargo handling, and material flow. Some research in these fields focuses on the development of efficient and effective tools for problem solving. Other research investigates the use of advanced information technologies, solution implementation issues, and other managerial issues.

Track Title: Service Operations

Track Chair(s): Guillaume Roels, University of California Los Angeles [groels@anderson.ucla.edu]

This track is designed along the objectives of the POMS College of Service Operations. We invite submissions from scholars and practitioners interested in all aspects of research, teaching, and practice in Service Operations Management. Subjects may include, but are not limited to, service productivity, service processes, service supply chains, queuing models of services, workforce scheduling, service pricing, product-service systems, service design, service positioning, service quality, service recovery, service process improvement, lean service, and teaching service operations. We welcome all research methodologies, including theoretical, empirical, and field studies. Tutorials and panel sessions are also encouraged.

Keywords: Joint production, queuing theory, service strategy, service productivity, service design, service outsourcing, service quality, lean service, teaching service operations.

Track Title: Supply Management

Track Chair(s): Thomas Choi, Arizona State University Tempe [thomas.choi@asu.edu]
Soo-Haeng Cho, Carnegie Mellon University [soohaeng@cmu.edu]

We invite submissions describing significant advances in theory and practice of Sourcing and Supply Chain Management. Topics include auctions, supply contracts, outsourcing, information issues in supply chains, competitive and cooperative supply chains, managing global sources, social and environmental issues in supply chains, and behavioral issues in supply management.

Track Title: Supply Chain Management

Track Chair(s): Nicole DeHoratius, University of Portland [Nicole@Dehoratius.com]

Jay Swaminathan, University of North Carolina Chapel Hill [msj@unc.edu]

We invite submissions that use mathematical or empirical approaches to address current or emerging challenges within the purview of supply chain management. Potential topics/issues that facilitate centralized design, planning, and operations of supply chains include: supply chain network design, multi-echelon supply chains, assembly/disassembly networks, supply networks, managing lead times, heuristics, alignment of incentives, coordination in supply chain, demand pooling, efficiency and performance, e-procurement, reverse auctions, supplier selection and management, information asymmetry, information management and sharing, risk management, and managing disruptions.

Keywords: supply chain; network design; multi-echelon supply chains; supply networks; heuristics; supply base design; supply chain contract; execution, coordination in supply chains; alignment of incentives; information asymmetry; risk management; disruption management, retail.

Track Title: Supply Chain Risk Management

Track Chair(s): Vlad Babich, Georgetown University [vob2@georgetown.edu]
Cagri Haksoz, Sabanci University [cagrihaksoz@sabanciuniv.edu]

This track focuses on supply chain risks and their effective assessment, mitigation, and recovery. Recent socio-economic trends such as globalization, outsourcing, and off-shoring, stretched and thinned supply chains. As a consequence, the frequency and the magnitude of adverse events in supply chains increased and the ability of companies to anticipate, prepare for, and respond to disruptions decreased. Therefore, for most companies, supply chain risk management is of strategic importance and we invite presentations of the novel research in this important area. We especially welcome submissions that look at the new kinds of supply chain risks, study new risk management tools, and provide new insights into the importance of strategic interactions among companies engaged in supply chain risk management. We invite presentations of theoretical, empirical papers, case studies, tutorials as well as panel discussions.

Keywords: Supply chain risk, credit risk, market risk, supply chain disruptions, product recall risk, supply chain contract risks, breach of contract, non-compliance risks, commodity price risk, operational hedging, financial hedging, insurance, business continuity management, integrated risk management, managerial risk taking, risk perception, risk transfer, risk avoidance, natural disaster risks, robust and resilient supply chains, crisis management in supply chains.

Track Title: Sustainable Operations

Track Chair(s): V. Daniel R. Guide, Jr., The Pennsylvania State University [dguide@psu.edu]
Charles Corbett, University of California LA [charles.corbett@anderson.ucla.edu]

We invite submissions that are related to the mission of the College of Sustainable Operations, which seeks to encourage research that applies operations management principles and tools to improve environmental and economic outcomes. Examples of topics of interest for this track include (but are not limited to): closed-loop supply chains and remanufacturing; sustainable product design; environmental legislation; life cycle analysis; industrial symbiosis; corporate social responsibility; market valuation of environmental and social initiatives; and interdisciplinary approaches to sustainability research (OM/Marketing, OM/Finance, OM/Strategy). We welcome all research methodologies, including analytic, empirical, and field studies. Grounded research is especially encouraged. Tutorials and panel sessions are also encouraged.

Keywords: Sustainable, Sustainability, Environment, Collection, Recycling, Product Recovery, Remanufacturing, Refurbishing, Closed-Loop Supply Chains, Reverse Supply Chains, Product Take-Back, Legislation, Industrial Ecology, Life Cycle, WEEE Directive, Extended Producer Responsibility, Emissions Trading, Alternative Energy, LEED Certification, Carbon Taxes, Triple Bottom Line, Environmental Footprint, Corporate Social Responsibility

Track Title: Teaching in OM

Track Chair(s): Gal Raz, University of Virginia [razg@darden.virginia.edu]

Kyle Cattani, Indiana University Bloomington [kcattani@indiana.edu]

In this track we focus on "Teaching in Operation Management". Operations management is taught across multiple disciplines including business schools, engineering schools, and math/OR departments, and multiple programs including undergraduate, Masters and PhDs. In this track we focus on teaching Operations Management in a business school environment in both undergraduate and MBA programs. The objective of this track is to provide a forum for sharing best practices and ideas and providing visibility to innovations by current leaders in the field. We explore the issues of teaching operations management across three dimensions: First, some sessions focus on the topics taught within the OM discipline such as supply chain management, service operations, and innovation and sustainability. Second, we examine the difference in teaching OM in different programs to different audiences, such as undergraduates and MBAs. Lastly, we examine methodologies used in teaching OM and specifically the use of games and simulations in teaching OM.

Keywords: teaching; undergraduate; MBA; supply chain management; service operations management; innovation and sustainability.

Track Title: Vendor and Supply Contracts

Track Chair(s): Fernando Bernstein, Duke University [fernando.bernstein@duke.edu]

Suman Mallik, University of Kansas [suman@ku.edu]

We invite submissions that explore vendor and supplier relationships in a supply chain context using any methodology. Submissions might study any issue in supplier relationship management, contracting between multiple parties, strategic behavior in supply chains, modeling competition and risks. The key words below further elaborate the range of encouraged topics for submission.

Keywords: Sourcing, supply contracts, supplier selection, supplier development, supply disruptions, contracting, outsourcing, supply chain management, decentralized supply chains, game theory and competition, alignment of incentives, supply chain coordination, vendor managed inventory and retail operations, risk management in supply chains, inventory competition, capacity allocation in manufacturing and services, capacity allocation games, analytical models, empirical models, behavioral models.