

POMS 2011 Conference Theme

Operations Management: The Enabling Link

Track Title: Active Learning: Cases, Games, Contests, and Simulations

James P. Gilbert, Rollins College, jgilbert@rollins.edu

Sushil Gupta, Florida International University, poms@fiu.edu

This track is for those of us who believe that learning is the active pursuit of knowledge. This definition of learning suggests that students must do more than just listen—they must read, write, discuss, and be engaged in solving problems. With active learning, students must engage in higher-order thinking tasks such as analysis, synthesis, and evaluation. This track promotes strategies illustrating active learning, defined as instructional activities involving students in doing things and thinking about what they are doing.

That deep understanding of OM is centered on mutual respect, collaboration, commitment to learning, and dignity. OM courses involve concept learning, problem solving, and the development of higher level thinking skills. If you have evidence that a structural approach to teaching that facilitates student interaction and cooperation leads to deep student understanding; or if you have evidence that students learn better and retain more if they engage in learning activities that require them to think and process information rather than passively listen to lectures, come and participate. Finally, if you are using a process, method, or technique where students engage in some activity that forces them to reflect upon ideas and how they are using those ideas, this track gives you an opportunity to share your findings.

It is argued that students are likely to learn more when they learn with others than when they learn alone. If you have had success with team-based learning, cooperative learning, collaborative learning, simulations, games, contests, or problem-based learning, share your experiences in this track.

Keywords: Active Learning, mental models, concept mapping, mind mapping, case method, simulations, cooperative learning, collaborative learning, peer learning, problem-based learning, team-based learning.

Track Title: Behavioral OM

Pauline Found, Cardiff University, foundpa1@cardiff.ac.uk

Mirko Kremer, Pennsylvania State University, mirko.kremer@psu.edu

We would like to invite papers on all aspects of human behavior and behavioral dynamics and, their impact in operations management research and practice; where human behavior is often the enabling link. Examples of topics can include “Behavioral impact in change management”, “Social networks and Intelligence”, “Human behavior in operations strategy execution” and “Effects of human behavior in the transferability of practices across cultures.” Along with the emergence of the new POMS College of Human Behavior in Operations Management and the successful mini-conference, we plan to build on our 2010 momentum in developing an excellent program for our 2011 meeting. Descriptive, theory building, theory testing and case-grounded papers based on rigorous research methodologies are all welcome.

Keywords: Human Behavior; Behavioral Dynamics; System Dynamics; Behavioral Economics; Leadership; Change Management; Culture Change; Laboratory Experiments; Psychology; Social Dynamics; Field Observations; Practice.

Track Name: Centralized Supply Chain Management

Nicole DeHoratius, University of Portland, dehorati@up.edu

Nagesh N. Murthy, University of Oregon, nmurthy@uoregon.edu

We invite submissions that use mathematical or empirical approaches to address current or emerging challenges within the purview of centralized 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: centralized supply chain; supply chain network design; multi-echelon supply chains; supply networks; heuristics; supply base design; supply chain contract; coordination in supply chains; alignment of incentives; information asymmetry; risk management; disruption management.

Track Name: Empirical Research in OM

Saravanan Kesavan, University of North Carolina, skesavan@unc.edu

Sriram Thirumalai, University of Utah, sriram.thirumalai@business.utah.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 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 Name: Ethical and Sustainable Operations

Michael Galbreth, University of South Carolina, galbreth@moore.sc.edu

Gilvan Souza, Indiana University Bloomington, gsouza@indiana.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, social, 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; carbon foot printing; 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 theoretical, empirical, and field studies. 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, Design, Disposal, Landfill, WEEE Directive, Extended Producer Responsibility, Emissions Trading, Alternative Energy, LEED Certification, Carbon Taxes, Triple Bottom Line, Environmental Footprint, Corporate Social Responsibility, Industrial Symbiosis, Byproduct Synergy.

Track Title: Global Operations and Strategic Sourcing

Burak Kazaz, Syracuse University, bkazaz@syr.edu

Prem Vrat, Management Development Institute, premvrat@mdi.ac.in

This track focuses on the challenges that accompany the global issues of operations and supply chain management, both from an academic and practitioner perspective. Specifically, the track invites presentations of research and case studies that examine: economic and financial fluctuations in global markets, tax-rate differentials between countries, outsourcing and offshoring-related decisions such as transfer pricing, duties and transportation-related challenges in light of the increasing fuel prices, disruptions in sourcing, risk mitigation in sourcing, supply uncertainty and risk, intellectual property right, and political, legal, and ethical concerns in global supply chains. The track also welcomes comparisons of varying practices in emerging versus developed markets.

Keywords: global operations management, global supply chain management, global sourcing, international supply disruptions, supply uncertainty and risk, exchange-rate uncertainty and risk, risk mitigation in sourcing, tax-rate differentials, transfer prices, outsourcing, back-sourcing, offshoring, increasing transportation costs, global enterprise management.

Track Title: Healthcare Operations Management

Carrie Queenan, University of Notre Dame, c_queenan@nd.edu

Vikram Tiwari, University of Houston, vtiwari@central.uh.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 variability of healthcare operations in tackling both well-known and emerging challenges: (1) research that addresses operations management issues motivated by 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 Crisis Management

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 and Capacity Management

Xinxin Hu, Indiana University, hux@indiana.edu

Ruixia Shi, University of Richmond, rshi@richmond.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: 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); 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: Logistics Management

John E. Tyworth, Pennsylvania State University, jet@psu.edu

Within the supply chain management framework, logistics primarily encompasses product flows across supply chain networks and elements such as order management, transportation, inventory, warehousing, material handling, and packaging. The track welcomes presentations which address management and analysis of logistics issues involving total landed cost, operational logistics risks, reverse logistics, retail logistics, healthcare logistics, logistics service providers, transportation, inventory, and warehousing. Consistent with the enabling-link theme, the priority for this track is for studies that consider industry-driven problems from cross-functional, integrated systems perspectives. Studies using empirical, analytic, or qualitative methods are welcome.

Keywords: Logistics management, total landed cost, risk mitigation, reverse logistics, retail logistics, logistics service providers, third party logistics, transportation, inventory, systems approach, total cost concept, and inventory visibility.

Track Title: Negotiations, Contracts, and Conflicts in Decentralized Supply Networks

Qi (Annabelle) Feng, UT Austin, anabelle.feng@mcombs.utexas.edu

Xiao Huang, Concordia University, xiaoh@jmsb.concordia.ca

Lauren Xiaoyuan Lu, UNC Chapel Hill, lauren_lu@unc.edu

We welcome submissions on decentralized supply networks that focus on understanding business practices, resolving managerial challenges, identifying opportunities, and proposing strategies. We especially encourage talks discussing cooperative or noncooperative negotiations, contracting, and incentive conflicts in various supply chain contexts. Topics may include, but are not restricted to, contract design and negotiation, supply and demand risk sharing and mitigation, information asymmetry and sharing, outsourcing of production or services, managing long-term relationships, collaboration, incentive issues and mechanisms, quality management across organizational boundary, vertical integration of supply chains, governmental procurement, environmental responsibilities of supply chain members, ethics and policy.

Keywords: Supply management, supply chain risks, contract negotiation, quality management, supply chain coordination, manufacturing outsourcing, service outsourcing, design outsourcing, business process outsourcing, incentive issues in decentralized supply chains, competitive supply chain strategy, information asymmetry, supply chain visibility, efficiency and performance, collaboration, e-procurement, sustainability.

Track Title: OM-Finance Link

Rene Caldentey, Stern School, New York University, rcaldent@stern.nyu.edu

Daniel Corsten, IE Business School, daniel.corsten@ie.edu

Ling Dong, Olin School, Washington University, dong@wustl.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: OM-Marketing Link

Kathryn E. Stecke, University of Texas at Dallas, kstecke@utdallas.edu

Xuying Zhao, University of Notre Dame, xzhao1@nd.edu

Marketing decisions and strategies can change demand significantly. Demand changes can have a great impact on operations management. Issues concerning operations management and marketing interfaces can be critical to a firm's profits. The objective of this track is to encourage submissions in all areas of the OM/Marketing interface.

Keywords: Pricing; Quality; Service Levels; Lead Time Considerations; Inventory Management; Location; Capacity; Market Segmentation; Sales Effort; Rebates; Returns; Supply Chain Management; Marketing Strategies.

Track Title: Operations in Emerging Countries

Rebecca Arkader, around Brazil, COPPEAD, Federal University of Rio de Janeiro, rebecca@coppead.ufrj.br

Çagri Haksöz, around Turkey, Sabanci University, cagri.haksoz@sabanciuniv.edu

Jayashankar Swaminathan, around India, University of North Carolina, msj@unc.edu

Houmin Yan, around China, The Chinese University of Hong Kong, yan@se.cuhk.edu.hk

Description: This track focuses on various issues related to operations management in emerging economies, 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, Brazil, China, India, Turkey.

Track Title: Practice Forum

Rafael Menda, Johnson & Johnson Consumer Products Co., rmenda@gmail.com

We are inviting members to share their experiences in working with practitioners on collaborative research, highlighting the rewards and pitfalls of industry-academia interaction. Research employing case study and action research methodologies will be most suited for this track. Papers focusing on the process of collaboration and highlighting the unique opportunities created through this kind of work will be just as suitable as those focusing on the content of the research. Naturally, this track is also open to practitioners who may have collaborated with academia to solve a business problem, and, in the process, have created new knowledge. Co-authored papers are

especially encouraged. Authors can use completed projects, on-going research, or even planned projects that could benefit from feedback from practitioners and other academics in the audience.

Keywords: POM practice; Industry-academia collaboration; Collaborative research; Action research; Case study; Field-based research; Field experiment; Real-world application; Impact on business practice; Reality of organizational settings.

Track Title: Product Development and Innovation

Raul Chao, University of Virginia, chaor@darden.virginia.edu

Enno Siemsen, University of Minnesota, siems017@umn.edu

Innovation and new product development are major drivers of growth, renewal, and competitive advantage for firms across all industries. 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, and introduction of new offerings. While the track approaches innovation and new product development with an Operations orientation, emphasizing processes and execution, designing successful new products is inherently cross disciplinary, and therefore we encourage close ties to other disciplines.

Keywords: Product development, innovation, development process, execution.

Track Title: Quality, Processes and JIT

Rachna Shah, University of Minnesota, shahx024@umn.edu

Kevin Watson, Iowa State University, kwatson@iastate.edu

We invite research papers, case studies, and tutorials dealing with process improvement irrespective of the improvement method used (e.g., lean production, quality management, and/or six sigma), the implementation context (shop floor, new product development, supply chain, or enterprise level), and the implementation industry (e.g., manufacturing, healthcare, or high tech). All types of papers, analytical, applied, empirical, and field research based, are encouraged. In keeping with this year's theme, we particularly encourage submissions addressing unique challenges and opportunities faced by those who seek to introduce process improvement methods into new culturally or geographic distinct areas or those that seek to maintain such systems in an increasingly complex and extended global supply chain.

Keywords: behavioral implications of process improvement; cellular manufacturing; case study; CONWIP; employee training; employee turnover; implementation issues; inventory control; JIT; JIT II; kanban; Lean; lot-sizing; mixed-model production; performance evaluation; process capability; product design; production control; setup time reduction/SMED; six sigma and lean manufacturing; statistical process control; strategic implications of process improvement; synchronous manufacturing; system design; target costing; total productive maintenance; and Toyota production system.

Track Title: Revenue Management and Dynamic Pricing

Yuri Levin, Queen's School of Business, ylevin@business.queensu.ca

Huseyin Topaloglu, Cornell University, ht88@cornell.edu

We invite contributions to the theory and practice of Revenue Management (RM) and Dynamic Pricing from both academic and industrial researchers. Submissions may be research papers based on analytical, empirical or field studies, panel discussions, tutorials, or articles related to the teaching of RM.

Keywords: Pricing, Consumer Choice Models, Market Response Models, Network RM, Demand Learning and Estimation, Robust RM, Auctions, Game-Theoretic Models, Economics of RM, Behavioral Models in RM, Industrial Applications of RM, Overbooking, RM in Manufacturing, Operations Management-RM Interfaces.

Track Title: Scheduling

Neil Geismar, Texas A&M University, ngeismar@mays.tamu.edu

We invite submissions that consider any aspect of scheduling. 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: shop scheduling, supply chain scheduling, zero-inventory systems, service scheduling, timetabling, sequencing

Track Title: Service Operations

Alistair Brandon-Jones, University of Bath, abj20@bath.ac.uk

Sin ad Carey, University of Bath, s.carey@bath.ac.uk

Richard Metters, Emory University, Richard_Metters@bus.emory.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 process improvement, lean service, service supply networks, product-service systems, teaching service operations, service scripting, service recovery, service supply chains, internal service, layout of service operations, service definitions, through-life service, queuing, service measurement, performance analysis and improvement, workforce scheduling, etc. Submissions may be research papers based on conceptual, analytical, empirical or field studies, panel discussions, tutorials, or articles related to the teaching of service operations. If you have any other ideas, please don't hesitate to contact us.

Keywords: Service measurement, analysis, improvement, lean service, service supply networks, queuing.

Track Title: Sourcing and Procurement

Volodymyr Babich, Georgetown University, vob2@georgetown.edu

Damian Beil, University of Michigan, dbeil@umich.edu

Christopher Tang, University of California Los Angeles, chris.tang@anderson.ucla.edu

We invite submissions of papers, case studies, and tutorials describing significant advances in theory and practice of Sourcing and Procurement. The submissions both on traditional sourcing and procurement problems (e.g., performance measurement, cost reduction, e-procurement, outsourcing, supplier management, auction design, contracting) and emerging problems (e.g., risk management, sustainability, cooperative procurement, integration of procurement with other business functions) are welcome.

Keywords: Auctions, Supplier Selection, Supplier certification, Procurement mechanisms, Procurement Optimization, Supplier Management, Risk Management, Cooperative Procurement, Sustainability, Contracting.

Track Title: Technology Management

Raul Chao, University of Virginia, chaor@arden.virginia.edu

Enno Siemsen, University of Minnesota, siems017@umn.edu

Managing both the creation and application of rapidly changing technologies is a critical challenge for many organizations. The Technology Management track seeks submissions focused on the development, planning, implementation, and assessment of technological capabilities to shape and accomplish the strategic and operational objectives of an organization or a network of organizations. Topics of interest to the Technology Management track include (but are not limited to) the following: 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: Technology management, innovation, justification, transfer

Track Title: Teaching: Course/Program Design, Assessment, and Promotion

Shawn Alborz, University of Texas at Dallas, salborz@utdallas.edu

This track aims to create a broad base of submission in the area of supply chain program as an umbrella that includes course development, teaching effectiveness, program assessment, and effectively marketing/promoting a supply chain program. We welcome all submissions that address the issues and challenges faced by both academics and students. This track is also open to practitioners who may have collaborated with academia to address such challenges and issues and created some new frameworks/knowledge.

Keywords: Teaching practices, teaching effectiveness, industry-academia collaboration, program assessment, curriculum development.