



**INFORMS Roundtable Spring Meeting Agenda
April 9-10, 2011
Marriott Chicago Downtown Magnificent Mile
Chicago, IL**

THEME: "Roundtable Companies"

Saturday, April 9

6:30PM *Reception* *Purdue*

Sunday, April 10

7:00AM *Continental Breakfast* *Halsted*

8:00AM *President's Welcome and Member Introductions* *Avenue Ballroom*

8:30AM *Session 1: Steve Sashihara, Princeton Consultants Inc. – "The Optimization Edge: Some Practical Lessons learned for getting the most out of Industry/ Consulting/ Academia Collaboration."*

Steve Sashihara, CEO of Princeton Consultants, will share his lessons he has learned in his 30 years of implementing optimization for businesses. He will highlight cases from his new book: "The Optimization Edge: Reinventing Decision Making to Maximize All Your Company's Assets" (book website: www.OptimizationEdge.com), which attempts to explain optimization/advanced analytics to non-technical business executives. Steve will present his firm's 5 Step "RAD" (Rapid Action Delivery) process for Optimization projects, and will discuss his firm's lessons learned in building world-class project teams for large-scale optimization projects.

Steve Sashihara is the CEO of Princeton Consultants Inc (www.princeton.com), which specializes in a unique blend of information technology and management consulting. While many firms today provide both services, they invariably do so with separate staffs: typically, computer scientists for IT and M.B.A.s for management consulting. Princeton Consultants blends the two together: the same staff members are responsible for both software design and process design, which the firm believes are inextricably mixed. Over one third of the firm's professional staff hold Ph.D.s.

Consulting Magazine has written: "when consulting firms say they hire only the best and brightest, they are usually engaging in a bit of hyperbole. Not so with Princeton Consultants." Princeton's project work has been called "revolutionary" in the Wall Street Journal.

Steve is a director of the Association of Management Consulting Firms and has served in a variety of leadership roles, including cochairman, the association's highest elected office. As an active leader in the AMCF, Steve has spoken at and moderated dozens of events with top leaders of other consulting firms.

Steve leads his firm's Optimization practice - transforming businesses by designing and installing software that makes tangible recommendations for action. Princeton Consultants has distinguished itself as a leader in this field, with its optimization software managing the real-time scheduling of the global NetJets fleet, the layout of The Wall Street Journal, and trading for high frequency hedge funds.

Steve's book, "The Optimization Edge: Reinventing Decision Making to Maximize All Your Company's Assets" (McGraw Hill: 2011), is the first book to introduce and explain Optimization without jargon or mathematics to a general business executive.

Steve graduated in 1980 from Princeton University with a degree in Philosophy. He lives in New Hope, PA.

9:15AM **10 minute Break**

9:25AM **Session 2: Jim Williams, Land O'Lakes, Inc – “Advanced Analytics Helps Drive Sustainable, Continuous Improvement”**

Land O'Lakes, Inc., a food and agricultural cooperative, has a long history of using advanced analytics to help solve difficult business problems. As the company accelerates a continuous improvement journey, the opportunities to contribute only get better. This talk will provide several examples to illustrate the breadth of problem types our team encounters, including:

- Locating strategic assets
- Synchronizing the supply chain
- Optimizing the plant floor
- Accelerating product development
- Simplifying complexity

Ample evidence will highlight a principle of “problem first, methods as needed”. Borrowing from Lean, Six-Sigma, TOC, OR/MS, and any other

discipline is encouraged. A discussion of implementation lessons learned over the years will be included at no extra charge.

Jim Williams leads an Advanced Analytics team as part of Land O'Lakes' Supply Chain Process Optimization Group. The team is responsible for providing model-based insight and support to help management solve difficult business problems. He has 28 years of experience as an analytics consultant and supply chain manager. Project implementations span companywide business units, with strategic and tactical margin enhancement in sourcing, manufacturing, logistics, sales and marketing. Jim led the initial implementation of Sales and Operations Planning (S&OP) in the Dairy Foods unit as an effective process to connect functional leaders along a consistent forward operating plan. His role synchronized milk procurement and utilization, production scheduling, commodity trading and inventory management, providing timely and efficient response to customer demand.

Jim has been a member of TIMS and INFORMS since 1983, and a Roundtable member since 2006. He has served on the INFORMS Membership Committee and the Practice Conference Advisory Board. Jim received a MS degree in Forestry with Operations Research concentration, from the University of Minnesota.

10:10AM ***10 minute Break***

10:20AM ***Session 3: Arnie Greenland, IBM – “Advanced Analytics and Optimization at IBM”***

The disciplines of Operations Research and, more generally, Business Analytics and Optimization (BAO) are a critical part of the IBM Corporation strategy. The new IBM that emerged from the late 1990's has become both a products and a services company selling primarily to public and private sector organizations and businesses. Robust capabilities in analytics reside in all of major divisions of the company including hardware, software and services.

The first part of this talk we will focus on describing the analytics capabilities and assets that reside within the company, where they fit within the strategies of those divisions, what they do within each division where they reside, and how they collaborate or interoperate within the company. In the second portion of the talk we will describe some recent analytics projects within IBM Global Business Services, the division in which the speaker resides.

Arnie Greenland, Ph.D., is an IBM Distinguished Engineer, the title within IBM for a Technical Executive. Including his years with Price Waterhouse and PricewaterhouseCoopers Consulting which was purchased by IBM in 2002, Arnie has 17 years with company. He founded an advanced analytics group within the company's Supply Chain practice that is now part of IBM's Advanced Analytics and Optimization (AAO) Practice. For the last few years, Arnie has been responsible for BAO solution development, new business development and delivery of BAO services. Over more than 35 years in professional services consulting, he has worked in almost every area of advanced analytics including operations research, statistics, survey research, and data and text mining.

Arnie received his PhD in Mathematics from the University of Rochester and BS in Mathematics from Case Western Reserve University.

11:05AM ***10 minute Break***

11:15AM ***Session 4: Manoj Chari, SAS Institute Inc. – “Analytical Solutions at SAS Institute: an OR Perspective”***

From its early days as a software system for analyzing agricultural research data, SAS has been known for providing powerful tools for data management, statistical and econometric analysis, and data mining. But OR has also assumed a very significant role as SAS Institute continues its long term strategy of augmenting its software product portfolio with analytical business applications and industry specific solutions. In addition to significant R&D investment in resources and skills, this evolution has entailed changes in organizational process and culture. This presentation will provide an OR perspective on this ongoing journey and will highlight some recent OR R&D initiatives at SAS.

Manoj Chari is R&D Director for Operations Research in the Advanced Analytics R&D Division at SAS Institute in Cary, NC. His department is responsible for development and support of the SAS/OR product, which comprises a broad portfolio of software tools for optimization, discrete event simulation and project management. In addition, the department provides specialized OR based routines for SAS customer intelligence and supply chain solutions as well as for industry-specific solutions for retail and financial services industries. A recent addition to the department is the OR Center of Excellence which supports SAS customer engagements that require advanced OR modeling and algorithmic expertise. Manoj was a recipient of the SAS CEO Award of Excellence in 2008. Prior to joining SAS in 2003, he spent just over a decade in academia with research and teaching interests in combinatorics and operations research. His last

academic position was as Associate Professor of Mathematics at Louisiana State University. He has also held visiting positions at University of Waterloo, Technical University of Berlin, and the Indian Institute of Science. Manoj has a Ph.D. in operations research from the University of North Carolina at Chapel Hill and an undergraduate degree in engineering from Indian Institute of Technology, Bombay.

12:00PM **Lunch** *Halsted*

12:55PM **Transition back to meeting area**

1:00PM **Lunch Discussion: Honoring Jeppesen Research** *Avenue Ballroom*
- Kathy Lange, Roundtable President to host

Speaker: Stefan Karisch, Jeppesen – “Operations Research at Jeppesen”

For more than 75 years Jeppesen has made it possible for pilots and their passengers to safely and efficiently reach their destinations. Today this pioneering spirit continues as Jeppesen delivers essential information and optimization solutions to improve the efficiency of air, sea and rail operations around the globe. Jeppesen is a subsidiary of Boeing Commercial Aviation Services, a unit of Boeing Commercial Airplanes.

In 1997, Jeppesen saw its service deteriorate when a growing line of over 100,000 aviation charts overwhelmed its production system. The company responded by establishing a small Operations Research group to analyze its production problems. In just two short years, Jeppesen was able to eliminate late delivery of product orders, reducing costs by nearly \$3 million annually. Since then, the expanding OR department has consistently applied a wide variety of OR techniques throughout the enterprise to improve operations and to support decision-making related to resource utilization, inventory optimization, capital investments, market strategy, product development and pricing. We will give an overview of how more than 75 professionals with an OR background, led by and connected to the central OR department through a strategic community of practice are today helping Jeppesen apply analytics to make better decisions, build better products, and offer better services.

Jeppesen was awarded the Franz Edelman Award for Achievement in Operations Research and the Management Sciences in 2000, and the INFORMS Prize in 2010.

Stefan Karisch began his career in 1998 with Carmen Systems, a leading provider of resource optimization solutions for airlines and railways purchased by Jeppesen in 2006. He has worked in a variety of commercial and technical roles for Carmen Systems and then Jeppesen in Gothenburg (Sweden), Montreal (Canada), and now Denver (USA). In his current position, Stefan oversees Jeppesen's corporate Operations Research, Lean, and Six Sigma programs. Prior to his career in industry, he held positions at the Technical University of Denmark, the University of Copenhagen (Denmark), and Graz University of Technology (Austria). Stefan received the degrees Doctor technicae and Diplom-Ingenieur in Mathematics from Graz University of Technology, and a Masters of Mathematics degree from the University of Waterloo (Canada). In addition, he serves on the board of directors of the Institute for Operations Research and the Management Sciences (INFORMS), and on the council of the Airline Group of the International Federation of Operational Research Societies (AGIFORS).

1:30PM ***Session 5: Margery Connor, Chevron – “Operations Research at Chevron”***

After a brief description of Chevron, one of the largest, integrated energy companies in the world, Margery will provide an overview of how they apply operations research to make decisions.

She will include:

- Where Operations Research fits in the organization
- Applications of mathematical programming projects
- Applications of discrete event simulation projects
- Recap of our journey building Decision Analysis competency
 - Chevron was awarded the 2010 Decision Analysis Practice Award at Fall INFORMS conference
- Challenges in applying operations research at Chevron

Margery Connor is a Senior Research Consultant at Chevron; she uses modeling and analytics to help Chevron make hard business decisions. Her ‘toolbox’ includes optimization, simulation, statistics and decision analysis. She has worked in many business areas, including supply chain planning, strategic staffing, and information technology.

Margery received a BS in systems engineering from the University of Virginia and a MS in Operations Research at UC Berkeley. She has worked at Chevron for over twenty years. Prior to Chevron, she was a Network Planner for US Sprint.

2:15PM ***10 minute Break***

2:25PM

Meeting with INFORMS President-Elect, Terry P. Harrison – “The INFORMS Analytics Initiative: Current Status and Expected Developments”

Terry P. Harrison is the Earl P Strong Professor of Executive Education and Professor of Supply Chain and Information Systems in the Smeal College of Business. He teaches courses in all areas of the College’s programs: undergraduate, MBA, Executive MBA, M.S. and Ph.D., in addition to Executive Programs. His primary teaching interest is in the area of large-scale production and distribution systems, and supply chain design. He has created seven new courses at the undergraduate and graduate levels, in areas such as optimization, operations, manufacturing, supply chain management and computing. He is a multiple winner of the Penn State MBA graduate teaching award, and has been recognized nationally for his teaching.

His research interests match his teaching interests. He has authored many papers on various aspects of optimization and its use in manufacturing, distribution and supply chain management. He currently is working on research questions relating to the performance of service supply chains, sustainable procurement and SKU rationalization in product portfolios. In 1994, he was a co-author on a project that was named a finalist for the Edelman Award for his work in global supply chain management. This prize is awarded by INFORMS (Institute for Operations Research and Management Science) for the best applications of management science and operations research. It is INFORMS highest recognition for management science practice.

In October 2001, Professor Harrison was named a co-recipient of the U. S. Army’s Wilbur S. Payne Award for innovative research on “Operations Research methods for Enabling Strategic Responsiveness.”

Professor Harrison has served on the editorial boards of a number of journals. He is active in professional societies and has held a variety of positions of national and international scope. He is a frequent consultant to Fortune 200 companies on various aspects in the design and execution of supply chains. He is a co-editor of the 2003 book published by Kluwer, *The Practice of Supply Chain Management*. He is a past Editor-in-Chief of the journal *Interfaces*, past Vice President of Publications for INFORMS and currently is President-Elect.

His leisure interests are reading, running, skiing, riding motorcycles and the design and construction of furniture.

3:10PM

10 minute Break

3:20PM

***Session 6: Ebru Demirkol, United-Continental Holdings, Inc –
“Overview of Business Analytics and Optimization at UNITED”***

United has invested in O.R. as a core competency for more than three decades with applications in multiple business areas. Throughout this journey, the O.R. function has transformed organizationally from Finance, to IT and has been back to Finance since 2006 under Enterprise Optimization. In 2011, Enterprise Optimization (EO) has been complemented with the Continuous Improvement (CI) department leveraging Lean and Six Sigma principles for sustainable business process harmonization and optimization to form CIEO. CIEO is an innovative team with a proven track record in creating significant value and making United’s business more competitive. The presentation will focus on how CIEO partners with multiple business units at United for value generation by giving examples from past and recent initiatives.

Ebru Demirkol creates innovative business solutions for bottom line growth. Through strategic partnership with multiple business units from commercial to operations, she engages teams with conflicting goals in creative problem solving for complex business problems. She has done this multiple times over the last 17 years in a variety of industries such as manufacturing, electronics, semiconductor and transportation and most recently at United Airlines as the Managing Director of Continuous Improvement and Enterprise Optimization. During her 12 years at United, she has served several leadership roles in Human Resources, IT and Finance. She designed the corporate *Leadership Effectiveness* index to leverage leadership in driving business outcomes, which became part of 2010 performance management. She also played a significant role in identifying enterprise efficiency improvements as a core team leader representing one third of the enterprise, and the following year, as the Project Management Office tracking the implementation of all enterprise ideas. She holds a Ph.D. degree in Industrial Engineering from Purdue University, IN and a Master of Science degree in Industrial Engineering from Bosphorus University, Istanbul-Turkey.

4:05PM

10 minute Break

4:15PM

***Srinivas Bollapragada, GE Research, “Interfaces Journal and the
INFORMS Roundtable”***

For 40 years, *Interfaces* has been serving the field of operations research and management science (OR/MS) as the premier practice journal. Articles from the journal help advance the practice of OR/MS, stimulate research in academia and industry, and are widely used for classroom instruction. The journal is home to Edelman and Wagner prize papers,

which describe outstanding examples of the practice of OR/MS and help bring visibility to the profession. As an organization dedicated to promoting OR/MS excellence in practice and the professional growth of its members, the INFORMS Roundtable can leverage and contribute to the journal in achieving its goals. In his role as the new editor-in-chief of the journal, Srinivas will discuss the focus of Interfaces, his vision for the journal, and opportunities for the Roundtable members to contribute and leverage the journal to achieve shared objectives.

Dr. Srinivas Bollapragada is a Principal Scientist at the General Electric's Global Research Center (GEGRC) in Niskayuna, NY. His research interests are in business applications of optimization technologies. During the past 16 years at GE Research, he had led the development of numerous innovative, algorithms-based business systems that are currently in use at several businesses including NBC-Universal, GE Finance, GE Energy, GE Aviation, and Norfolk Southern Railroad. Srinivas has published over 20 articles in journals such as *Operations Research*, *Interfaces*, *European Journal of Operational Research*, *IIE Transactions* etc. He has a Ph.D. in Operations Management from Carnegie Mellon University, and Master's and Bachelor's degrees in Electrical Engineering from IISc, Bangalore and IIT Madras respectively. He is the recipient of a number of awards including the Edelman (2001), Wagner (2009, 2004, 2002) and Nicholson (1996) finalist awards, IIE Transactions best paper award (2009), GE's Blodgett Award (2009) for technical excellence and the Saul Dushman award for team leadership. He represents GE Research on the INFORMS Roundtable, served as the Chair of the Edelman award committee and the Area Editor of OR Practice. He was named an INFORMS Fellow in 2009 and was recently named the Editor-in-Chief of Interfaces.

4:35PM ***Pulse Taking 2010***

4:55PM ***Conclude ROUNDTABLE Meeting***

Tuesday, April 12

11:30AM ***Outing – McDonald's Innovation Center***

McDonalds Innovation Center 1253 N Schmidt Rd, Romeoville

11:15AM - Pick Up at Marriott 540 N. Michigan Ave. Chicago, IL

3:30PM - Drop off at Marriott 540 N. Michigan Ave. Chicago, IL

6:00PM ***Informal Networking Dinner (Dutch Treat)***

Turquoise Cafe Restaurant

2147 West Roscoe Street
Chicago, IL 60618-6271
(773) 549-3523