McCormick

Northwestern Engineering

**Northwestern University
Transportation Center**

CCITT Center for the Commercialization of
Innovative Transportation Technology

Data Driven Business:
Challenges and Best Practices in the Transportation Industry

Tuesday, October 30, 2012
2:00–4:45 p.m.

James L. Allen Center · Tribune Foundation Auditorium
Northwestern University
2169 Campus Drive, Evanston, IL

About the Workshop

Data Driven Business: Challenges and Best Practices in the Transportation Industry

Transportation companies are confronted with growing—some may say exploding—and diverse sources of data. This data may be mined from social media, obtained from customer surveys, collected from environmental sensors, and gleaned from geo-positioning radios, among others. Looking through the windshield of the transportation industry, the Northwestern University Transportation Center's Fall Industry Workshop will examine challenges and best practices in data-driven business.

Event Co-Chairs

Dr. Hani Mahmassani, William A. Patterson Distinguished Professor of Transportation; Director, Northwestern University Transportation Center

Mr. Breton Johnson, Associate Director, Northwestern University Transportation Center; Director of the Center for the Commercialization of Innovative Transportation Technology

About NUTC

Since 1954, the Northwestern University Transportation Center (NUTC) has been recognized as a leading interdisciplinary education and research institution. It is dedicated to the long-term improvement of domestic and international systems for the movements of materials, people, energy, and information. NUTC serves industry, government, and the public through its research, Northwestern's graduate-level degree programs, and other educational and outreach programs. NUTC works with an affiliated faculty group of over 50 members, drawn from diverse departments of the University - economics, engineering, marketing, finance, logistics, operations, information systems, management, the social sciences, and law.

About CCITT

The Center for the Commercialization of Innovative Transportation Technology (CCITT) fosters the implementation of innovative technologies for all modes of surface transportation including, but not limited to, railways, mass transit, highways and waterways. To accomplish this mission, CCITT awards funding to Northwestern faculty to conduct translational "innovation gap" research projects that reduce technical risk barriers and enhance opportunities for technology adoption (commercialization) by industry and transportation agencies.

Program

Panel 1	**2:00–3:15 p.m.** **Case Studies in Transport Operations**
Dr. Diego Klabjan	Professor of Industrial Engineering and Management Science, McCormick School of Engineering and Applied Science *Big Data or Not Big Data? Opportunities and Strategies in Transportation*
Mr. Ken Sain	Managing Director, Professional Services, Boeing Commercial Airplanes *The Digital Airline: Using Data to Improve Performances*
Mr. Ogi Redzic	Vice President, Traffic, Nokia Location & Commerce *Big Data Driven Traffic*
Mr. Steve Wooledge	Senior Director of Marketing, Teradata Aster *Delivering Value in Transportation*

Break	**3:15–3:30 p.m.**

Panel 2	**3:30–4:45 p.m.** **Freight Transportation & Logistics**
Dr. Hani Mahmassani	William Patterson Distinguished Professor of Transportation; Director, Northwestern University Transportation Center *Beyond the Data: Extracting Knowledge, Deriving Insight, Delivering Intelligence*
Mr. Zahir Balaporia	Director of Intermodal Operations, Schneider National, Inc. *Conquering the Data Mountain*
Ms. Pooja Dewan	General Director of Decision Support Systems, BNSF Railway *Developing Tools to Deliver Value in Transportation Operations*
Mr. Bill Driegert	Chief Innovation Officer, Coyote Logistics *Transforming Data into Action in Third Party Logistics*

Speaker Bios

Zahir Balahoria
Director of Intermodal Operations, Schneider National, Inc.

Zahir is responsible for the implementation of technology and related processes within the Intermodal division at Schneider National, a premier provider of truckload, logistics and intermodal services. His primary objective is to improve business performance by improving the use technology. For the last two years, he has been leading the Intermodal transition team as part of a multiyear multimillion dollar process and technology transformation effort that is moving Schneider off its legacy technology platforms into a new operating environment. Prior to moving into the Intermodal line of business, he led the Decision Engineering team within IT which specializes in the application of advanced analytical techniques for operational, tactical and strategic decision support. Zahir has an MS in Industrial Engineering from Purdue University and a BS in Computer Engineering from Clarkson University. His interests are in the area of information and decision quality, and extracting insight from business intelligence.

Pooja Dewan
General Director of Decision Support Systems, BNSF Railway

Pooja Dewan is the General Director of Decision Support Systems at Burlington Northern Santa Fe Railway (BNSF) where she leads the OR group for the past 9 years. In her 14 years with BNSF, Pooja has worked as an internal consultant for several groups, managed the OR group and lead 2 regional teams for Locomotive Distribution and Planning. Pooja Dewan has been a member of INFORMS (Operations Research Society) since 1993 and RAS (INFORMS Railway Application Section) since 1999. Over the years, she has lead several initiatives that have touched upon all the activities conducted by RAS and INFORMS, and has been instrumental in sponsoring activities that help bridge the gap between practice and academia. Among the several leadership initiatives, the major ones include: RAS officer, organized RAS Workshop, Newsletter Editor (2004 – current), Student Paper Chair (2004-2008), Semi-finalist in Edelman (2009), Edelman Organizing Committee (2011-12), Edelman Judging Committee (2012) Analytics Award Judge (2011-2012) and Analytics Award Committee Chair. She received her M.S. and Ph.D. from Pennsylvania State University and is the author of several research publications that appeared in various scientific journals.

Bill Driegert
Chief Innovation Officer, Coyote Logistics

Bill Driegert is the Chief Innovation Officer for Coyote Logistics, the fastest growing logistics company in North America. Driegert has a serious crush on big ideas. He has the freedom to continually improve and re-imagine Coyote's technology platform and set his team of developers loose on insanely challenging problems. When he's not plotting data points and Coyote's next move, he can be found playing monster with his three-year-old daughter. Or racing mountain bikes. Or playing drums. Or rebuilding motorcycles. He has a bachelor's degree in Business form SMU, a Masters in Logistics from MIT, and an MBA from the Chicago Booth School of Business.

Diego Klabjan

Professor of Industrial Engineering and Management Science, McCormick School of Engineering and Applied Science

Diego Klabjan is a professor of industrial engineering and management sciences at Northwestern University. His research is centered around analytics with the focus on the smart grid, transportation, supply chain management and retail. After obtaining his doctorate from the School of Industrial and Systems Engineering of the Georgia Institute of Technology in 1999, Klabjan first joined the University of Illinois at Urbana-Champaign before moving to Northwestern University. He is the recipient of the first prize of the 2000 Transportation Science Dissertation Award and he received various other awards with graduate students. He is a former president of the Institute of Operations Research and the Management Sciences (INFORMS) Aviation Applications Section. He is an associate editor for Naval Research Logistics, IIE Transactions, and two areas in Operations Research. Klabjan is the director of the Master of Science in Analytics.

Hani Mahmassani

William Patterson Distinguished Professor of Transportation; Director, Northwestern University Transportation Center

Dr. Mahmassani joined Northwestern University on September 1, 2007, with joint appointments in the McCormick School of Engineering and the Kellogg School of Management. He joins Northwestern from his position as the Charles Irish Sr. Chaired Professor in Transportation Engineering and Director of the Maryland Transportation Initiative at the University of Maryland. Before that, he served for 20 years on the faculty at the University of Texas at Austin. Dr. Mahmassani has nearly 30 years of professional, academic and research experience in the areas of multimodal transportation planning and network modeling, freight and logistics systems analysis, homeland security and emergency systems operations, intelligent transportation systems, econometric modeling and applications to travel and freight demand forecasting, integrated systems management, travel and shipper behavior analysis..

Ogi Redzic

Vice President, Traffic, Nokia Location & Commerce

Ogi Redzic is responsible for Nokia's global Traffic business. As the leading provider of traffic services to Automotive, Consumer Electronics, Internet, Wireless and Enterprise markets, Nokia offers real-time traffic coverage in 31 countries, and also provides historical traffic patterns and predictive traffic around the world. Prior to leading Traffic, Ogi served as Vice President of Business Development and Sales, APAC for NAVTEQ, acquired by Nokia in 2008. In this role, he managed sales, business development and customer marketing for Southeast Asia, the Indian subcontinent and Korea, expanding Nokia's presence in these regions and growing customer base. Ogi holds a B.S. in Computer Science from Northeastern Illinois University, an MS in Computer Science from the Illinois Institute of Technology, and an MBA from Northwestern University Kellogg School of Management.

Ken Sain
Managing Director, Professional Services, Boeing Commercial Airplanes

Ken Sain is the managing director of Professional Services for Information Services, a business unit of Boeing's Commercial Aviation Services division. As the Professional Services business leader, Sain is responsible for creating and implementing an integrated CAS Professional Services strategy, operating model and business plan to position BCA as a leader in the market and enable services growth. Sain previously served as director of strategy and business development for Fleet Services, another division of Boeing's Commercial Aviation Services. In this role, he managed strategy development and implementation across the Fleet Services business units – freighter conversions, airplane modifications, maintenance services, maintenance engineering, fleet customer support, aviation information services and GoldCare, Boeing's new fleet management offering. Previously, Sain was a principal within the transportation practice of A.T. Kearney, a global management consulting firm and helped start-up and operate Part 121 commercial airline. Sain completed a Master of Business Administration degree from the Kellogg School of Management in June 1997. He majored in management and strategy, marketing, finance, and transportation. He was also recipient of the 1997 United Parcel Services Transportation Fellowship.

Steve Wooledge
Senior Director of Marketing, Teradata Aster

Steve Wooledge is Senior Director of Marketing at Teradata Aster, where he drives big data strategy and market awareness across the Teradata product line and within the data scientist community. Steve has more than 10 years of experience in product marketing and business development for business intelligence, data management, Web analytics, and e-commerce products. Steve came to Teradata through the Aster Data acquisition where he held various roles in product and corporate marketing. Prior to Aster Data, Steve held product marketing positions at Interwoven and Business Objects as well as sales and engineering roles at Business Objects, Dow Chemical and Occidental Petroleum. Aster Data was an early entrant and is a current leader in the Big Data space, bringing deep insights on massive, multi-structured data analyzed on clusters of commodity hardware. The company was acquired by Teradata in early 2011 and is now an innovation center within the company. Steve has an MBA from Kellogg School of Management at Northwestern, and a degree in Chemical Engineering from the University of Akron.

Notes

Northwestern University Transportation Center

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