



BI Congress 3 Program

Marriott World Center Resort, Orlando, FL

Saturday, December 15, 2012 – Salon 7A

3:00 – 5:30 pm BI Congress Begins with Industry “TED-like” Talks

Deloitte, IBM, SAS, and Teradata each will present inspiring views of Big Data in a TED format: 20 minute presentations, followed by 10 minutes for Q&A. The intent is to expose academics to thought leadership from these leading analytics organizations to inspire exciting academic research efforts. Speaker bios included after program.

Note: The members of the MISQE academic workshop will be joining the BI Congress attendees for this portion of the program.

- 3:00 – 3:30 pm Deloitte - David Steier**
The insight economy: Big Data matters – except when it doesn't
- 3:30 – 4:00 pm IBM - John Hagerty**
Along Comes Big Data: Why your traditional analytics might not be enough
- 4:00 – 4:15 pm Break**
- 4:15 – 4:45 pm SAS - Manoj Chari**
Some Hard Analytics Problems on Big Data
- 4:45 – 5:15 pm Teradata - Bill Franks**
Cutting Through the Hype of Big Data
- 5:15 – 5:30 pm Wrap-up**

6:30 – 9:30 pm Social Event: Big Data Under the Big Top - The New Balancing Act! **Ballroom: Crystal G1**

Join us on Saturday night for a spectacular evening of Cirque du Soleil. Be mystified as you enjoy three amazing Cirque acts while you interact and share with other BI Congress attendees. The whimsical, unexpected performances are sure to make our opening reception truly unforgettable. During the social event, we will present the **BI Congress Awards** recognizing excellence in teaching and research.



Sunday, December 16, 2012 – Salon 7A

7:00 – 8:00 am **Continental Breakfast**

8:00 – 8:20 am **BI Congress 3 Welcome and Dedication to Paul Gray**

BI Congress Senior Advisors: Michael Goul - Arizona State University, Uday Kulkarni - Arizona State University, Gloria Phillips-Wren - Loyola University Maryland, and Barbara Wixom - University of Virginia

ICIS Chair: Joey George - Iowa State University

8:20 – 9:15 am **Keynote - *It's About the Data: A Decade+ Experiment in "Big Data"***



Dr. David Belanger, Chief Scientist, AT&T Labs, Stevens Institute of Technology B&A Program Research Fellow

Over the last decade, AT&T Shannon Labs developed a broad and deep capability to manipulate, analyze, and visualize large amounts of data -- what is now typically referred to as "Big Data." It has been done in a laboratory called AT&T InfoLab with live, real-time data for over a decade. The data, and associated business problems, both inform the technology created, and support value through many applications.

Recent topics of focus have included: real-time data mining, data stream management, interactive visualization, data mining of non-relational data (e.g., speech), and mining of data from distributed sensor networks, with applications ranging from customer experience, to recommender systems, to medical monitoring/predicting. This discussion will highlight a number of the approaches to maximize the value of data, as well as highlighting trends in the area.

9:15 – 9:30 am **Break**

9:30 – 10:30 am **Panel Presentation: Developing the Next Generation Big Data Workforce**

Moderator: Hugh Watson, University of Georgia

Panelists: Jane Griffin, Principal and Americas Lead - Deloitte Analytics, Henry Morris - IDC, David Schrader - Teradata, Barbara Wixom - University of Virginia

The excitement around Big Data continues to fuel companies' need for an increasing number of university students to fill BI/analytics jobs – which require more and different BI/analytics skills. During this session, results from the state of BI in academia survey will be shared along with perspectives from a panel of practitioners who are concerned with developing the next generation big data workforce. These folks will explain exactly what organizations expect and need from universities. *Panelist bios included after program.*

10:30 – 10:45 am Break

10:45 – 11:15 am Big Data Research Update

Moderator: Barbara Wixom, University of Virginia

Panelists: Tom Davenport - Harvard University, Sponsor representatives

As the interest and excitement around big data builds, academics are exploring the best ways to develop and hone relevant research programs. This panel will offer short “briefings” about current – or desired research activity in the area of “big data.”

11:15 – 11:30 am Introduction to the Tracks

11:30 am – Noon Working / Networking Lunch – bring to your afternoon track

Noon – 4:45 pm Parallel Tracks for Research and Teaching

_____ Research Track _____ - Salon 4-6

Co-Chairs: Lakshmi Iyer, The University of North Carolina at Greensboro and Thilini Ariyachandra, Xavier University

Noon – 1:30 pm Working Lunch: BI Themed Round Table Discussions

Table 1: Architecture and Agility

1. Towards Agile Business Intelligence: Improving Data Warehouse Architectures by Applying In-Memory Technology
Tobias Knabke and Sebastian Olbrich, University of Duisburg-Essen, Germany
2. IT Architecture and Information Quality in DW and BI Environments: Case Study of a Brazilian Company
Samuel Otero Schmidt and Edmir Parada Vasques Prado, University of Sao Paulo, Brazil

Table 2: Architecture and Agility

1. Emerging Principles for Guerrilla Analytics Development
Enda Ridge, KPMG and Edward Curry, National University of Ireland at Galway
2. Towards a Stability of Process Oriented Decision Support Concepts Using the Example of Operational Business Intelligence
Tom Hänel and Carsten Felden, Technische Universität Bergakademie Freiberg

Table 3: Knowledge and Skills

1. An Organizational Learning Perspective on Business Analytics
Stella Pachidi, Frans Feldberg, Marleen Huysman, and Inge van de Weerd, VU University Amsterdam
2. Decision maker satisfaction in a web analytics context: the impact of analysts’ skills
Stephen Verspan and Ozgur Turetken, Ryerson University

3. Targeted Ontology for Data Analytics (TODA): Using Semantic Technology to Facilitate Business Intelligence Interpretation
Shane Givens and Veda Storey, Georgia State University; Vijay Sugumaran, Oakland University

Table 4: Advances in BI/BA Techniques

1. Curing the 'TMI' Syndrome: A Segmented Random Sampling Approach to Data Reduction
Michael Walker and Uzma Raja, The University of Alabama
2. A Longitudinal Analysis of Volatility and Corporate News Network
Germán Creamer, Yong Ren and Jeffrey Nickerson, Stevens Institute of Technology.
3. Lean Theory Building in an Age of Applied Business Analytics: Moving Survey-Based Science to the Fourth Paradigm
Jason Kuruzovich, Rensselaer Polytechnic Institute.

Table 5: Social Media

1. Predicting Image Perception Using Business Intelligence Tools: A Case Study of a County Government
Wingyan Chung and Lewis Hershey, Fayetteville State University
2. A Hybrid Text Regression Model for Predicting Online Review Helpfulness
Thomas L. Ngo-Ye, Dalton State College and Atish P. Sinha, University of Wisconsin-Milwaukee
3. Risk Intelligence in Social Media Using Text Mining
Paul Alpar and Daniel Ohliger, University of Marburg

1:30 - 2:45 pm Research Panel I: Theme – BI Success

Moderator: Joseph Clark, University of Nebraska at Omaha

1. Realizing the Benefits of Enterprise Performance Management Systems
Jeremy Glassman and Robert St. Louis, Arizona State University
2. A Temporal Understanding of Knowledge Transfer after the Implementation of a Customer Relationship Management System
Xixi Li, Georgia State University, J.J. Po-An Hsieh, Hong Kong Polytechnic University, and Arun Rai, Georgia State University
3. Towards a Model of Organizational Competencies for Business Intelligence Success
Lewis Chasalow, University of Findlay and Gurpreet Dhillon, Virginia Commonwealth University
4. An Empirical Study of the Role of Business Intelligence in Corporate Performance Management, Gregory Richards, University of Ottawa and William Yeoh, Deakin University

2:45 - 3:00 pm Break

3:00 - 3:50 pm Research Panel II: Theme – BI and Social Media

Moderator: Mary Jones, University of North Texas

1. Bulls, Bears...and Birds? Studying the Correlation between Twitter Sentiment and the S&P500
Eric D. Brown, Dakota State University
2. PIN it to WIN it: Leveraging Business Intelligence to Uncover Winning Marketing Strategies in Online Affinity-Based Social Networks
E. Mitchell Church, Lakshmi S. Iyer and Xia Zhao, The University of North Carolina at Greensboro
3. An ROI-Driven Campaign Planning Tool with Real Time Predictive Modeling
Sule Balkan, Visiting Associate Professor, National Chiao Tung University, Taiwan

4:00 - 4:45 pm Research Panel III: Theme – Advances in BI/BA Techniques

Moderator: Dursun Delen, Oklahoma State University

1. An intelligence based knowledge-driven decision support system for Social Protection Programs
Ricardo Anderson and Gunjan Mansingh, The University of the West Indies, Mona Campus
2. Context-Dependent Topic Modeling Using Multinomial Probit Random Effect Regression (MPR), Hsin-Min Lu, National Taiwan University
3. Competitive Analysis Of Business Filings Using Ontologies and Linguistic Analytics
Seán O’Riain and Edward Curry, NUI Galway, and Robert Pinsker, Florida Atlantic University

Noon – 4:45 pm Parallel Tracks for Research and Teaching

_____ Teaching Track_____ - Salon 7A

Co-Chairs: Babita Gupta, California State University Monterey Bay and Ozgur Turetken, Ryerson University

Noon - 1:00 pm Networking Lunch

1:00 - 2:00 pm The Teaching Track Panel: Diversity of BI Programs - Starting a new analytics program

As companies increasingly embrace analytics to enhance business value, academia is responding with innovative curricula in DSS/BI/Analytics providing a variety of degree programs, minors, certificate programs in online, traditional, and hybrid format. This panel brings together a group of innovative academics leading analytics programs to share their experiences – strategies starting new programs, challenges faced, and best practices. This will be an interactive session during the BI Congress event. *Panelist bios included after program.*

Panel Moderator: Bradley J. Prince, University of West Georgia, USA

Panelists: Greg Richards, University of Ottawa, Canada
José Antonio Robles, Universidad ESAN, Peru
Ramesh Sharda, Oklahoma State University, USA

2:00 - 2:45pm **Theme: BI Pedagogy Research**

Session Chair: David Schuff, Temple University

1. Design of Nine: identify nine different BI project designs which show a considerable breadth of possible student research projects, ranging from simple blog analysis to predictive surveillance research
Bendik Bygstad and Wanda Presthus, Norwegian School of IT
2. Teaching Basic Analysis: A Current Trial
Camille Schuster, California State University San Marcos
3. Facing the Challenges of 'Big Data': Towards Model Curriculum for Business Intelligence in Undergraduate and Graduate IS and MBA Programs
Barbara Dinter, University of St. Gallen, Michael Goul, Arizona State University and Babita Gupta, California State University Monterey Bay

2:45 - 3:00 pm **Break**

3:00 – 4:00 pm **Theme: Designing a BI Course**

(5 minutes for each paper presentation followed by discussions in Round Tables for extended discussion and Q&A)

Session Chair: Michael Goul, Arizona State University

1. Teaching Business Intelligence: A Research and Practical Technology Approach
Jerry Fjermestad and Karen Patten, New Jersey Institute of Technology
2. Pedagogical Materials for an Undergraduate Course on Business Intelligence
Anand Jeyaraj, Wright State University
3. Infusing Analytics into the Core Skills of Business School Students
David Schuff, Steven L. Johnson and Sunil Wattal, Temple University
4. Enhancing Student Data Warehousing Knowledge through Online Labs
Jiangping Wang and Janet L. Kourik, Webster University

4:00 - 4:45 pm **Theme: BI Course Materials**

(5 minutes for each paper presentation followed by discussions in Round Tables for extended discussion and Q&A)

Session Chair: Barbara Dinter, University of St. Gallen

1. Teaching Data Mining Using VisMiner
Russ Anderson, VisMining Technologies and Douglas Dean, Brigham Young University
2. How Do We Fix an App Like That!
Daniel Mazzola, Irfan Kanat, and Michael Goul, Arizona State University
3. Building Integrative Analytics Competencies
Greg Richards, University of Ottawa
4. Optimization of Staffing Assignments in an IT Shop with Monte Carlo Simulations
Ozgur Turetken, Ryerson University

4:30 – 5:30 pm **SIGDSS Executive Committee and SIGDSS Business Meeting**

Note: Electronic proceedings will be available via www.teradatauniversitynetwork.com



The BI Congress has been brought to you by a hard-working program committee:

Program Chairs: Michael Goul, Arizona State University, Uday Kulkarni, Arizona State University, Barbara Wixom, University of Virginia; Gloria Phillips-Wren, Loyola University Maryland

Teaching Track Chairs: Babita Gupta - Cal State Monterrey Bay, Ozgur Turetken - Ryerson University

Research Track Chairs: Thilini Ariyachandra - Xavier University; Lakshmi Iyer - University of North Carolina at Greensboro

Industry Liaisons: Amit Deokar- Dakota State University, David Douglas - University of Arkansas

Teaching Panel Chair: Hugh Watson - University of Georgia

Keynote Chair: Linda Pittenger - Stevens Institute of Technology

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Academic Sponsors: University of Virginia's McIntire School of Commerce, Loyola University Maryland, Stevens Institute of Technology

Please visit the **BI Congress** booth at the ICIS Conference where we will further promote SIGDSS and our Platinum and Gold **BI Congress 3** sponsors and their academic resources.

Biographies: 'TEDTalk' Speakers

Deloitte - David Steier - The insight economy: Big Data matters - except when it doesn't

David Steier is a Director at Deloitte LLP, where he leads the Deloitte Analytics Solution Group. David and his team have developed numerous solutions applying advanced analytics, primarily for the financial services, health care and retail industries. Most recently, David has been helping to develop Deloitte's point of view around making Big Data work in the enterprise. David is Deloitte's designated "Technology Black Belt" in Unstructured Analytics. Prior to joining Deloitte, David was director of the Center for Advanced Research at PricewaterhouseCoopers (PwC). David's research interests are in applications of artificial intelligence, especially data mining and machine learning. He has authored and co-authored numerous publications and presentations, including two books, a dozen journal papers, and a dozen conference papers and workshop presentations. David holds a PhD in computer science from Carnegie Mellon (where he served on the research faculty for three years after getting his doctorate) and a BS in computer science from Purdue University.

IBM - John Hagerty - Along Comes Big Data: Why your traditional analytics might not be enough

John Hagerty is Business Unit Executive, Market Strategy, IBM Business Analytics. John recently joined IBM from Gartner where he was VP Distinguished Analyst focused on the BI market and led the publication of the Gartner magic quadrant for BI platforms. Prior to Gartner, John was VP and Research Fellow at AMR Research for 11 years focused on analysis of strategies, practices and trends driving BI, Performance Management and GRC for corporations worldwide. Prior to that John spent a brief time at Cognos in Channel Marketing, and 15 years at Dun and Bradstreet as Product Director for their Financial Systems.

SAS - Manoj Chari - Some Hard Analytics Problems on Big Data

Manoj Chari is Senior 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, simulation and project management. In addition, his team supports specialized OR based algorithms for SAS customer intelligence, supply chain and industry-specific business solutions. A recent addition to his department is a services group that supports SAS customers with advanced OR modeling and algorithmic expertise. Prior to joining SAS in 2003, he spent over a decade in academic research and teaching. He has a Ph.D. in Operations Research from the University of North Carolina at Chapel Hill, USA

Teradata - Bill Franks - Cutting Through the Hype of Big Data

Bill Franks is Chief Analytics Officer for Teradata's global alliance programs, providing insight on trends in the Advanced Analytics space and helping clients understand how Teradata and its analytic partners can support their efforts. In addition, Bill is a faculty member of the International Institute for Analytics and the author of the book *Taming The Big Data Tidal Wave* (John Wiley & Sons, Inc., April, 2012). He is also an active speaker and blogger. Bill's focus has always been to help translate complex analytics into terms that business users can understand and to then help an organization implement the results effectively within their processes. His work has spanned clients in a variety of industries for companies ranging in size from Fortune 100 companies to small non-profit organizations. Bill earned a Bachelor's degree in Applied Statistics from Virginia Tech and a Master's degree in Applied Statistics from North Carolina State University.

Biographies: Developing the Next Generation Big Data Workforce Panel

Jane Griffin

Griffin is the Deloitte Analytics Canada and America's practice leader and the former Deloitte Analytics and national service line leader for Deloitte Consulting US LLP Information Management practice. Throughout her career, she has developed and led practices in a number of leading professional services firms, including one she founded in 1986. In this capacity, she has assisted and advised multi-industry clients in designing, developing, and implementing technology and processes to leverage information. Jane has served a very impressive list of clients across our firm's entire range of industry practices, including Citibank, Rogers Communications, Toronto Dominion Bank, Disney, Wal-Mart, Home Depot, Target, HCSC, Bank of America, Food and Drug Administration, Department of Homeland Security, The Coca-Cola Company and Textron. Jane has served on partner advisory boards for analytics vendors and maintains high-level relationships with leading vendors in the business analytics sector. She authors a monthly column in Information Management magazine and has also published hundreds of articles in various trade journals. In addition, Jane participates in frequent international speaking engagements on topics such as big data, analytics, social media, data governance, master data management and performance management.

Henry Morris

Henry Morris is the Senior Vice President for IDC's Worldwide Software and Services research groups. Dr. Morris started the Analytics and Data Warehousing research service at IDC, and coined the term "analytic applications" in 1997. In addition, Dr. Morris led a major study on the financial impact of business analytics, which examined the ROI of analytics projects at 43 sites in North America and Europe. Currently, Dr. Morris is the executive lead for IDC's research on Big Data/Analytics including the move to unified access to structured and unstructured data. Prior to joining IDC in 1995, Dr. Morris served in a variety of technical and management positions at Digital Equipment Corporation, where he specialized in software for application development. Dr. Morris has been an instructor in technical writing at Northeastern University and Bentley College, and an Assistant Professor of Philosophy at Colgate University. He earned a B.A. with distinction from the University of Michigan and his Ph.D. in philosophy from the University of Pennsylvania.

Dr. Dave Schrader

Dr. Dave Schrader is one of the Marketing Directors for Teradata. He is responsible for marketing the Active Intelligence initiative, intended to help Teradata customers and prospects derive more value from their Enterprise Data Warehouses by writing new applications and portlets using traditional and big data to create insights for front-line employees and systems. This includes frontline systems like Call Centers and the web, as well as industry-specific points of contact like banking ATMs and retail scanner. He is currently focused on collecting the best customer practices of AI, and helping customers fast-track new uses of Teradata, Teradata Aster, and Aprimo technologies. In the past 2 years, he invented and has produced episodes of "Business Scenario Investigations" (BSI), a CSI-like "show" on YouTube that shows how data forensic investigators solve business problems by analyzing tweets, social media, geospatial, and other types of data. He is on the board of the Teradata University Network, and regularly gives talks to students and faculty.

Biographies: Diversity of BI Programs - Starting a New Analytics Program

Teaching Track Panel Members

Dr. Greg Richards

Gregory S. Richards, MA, MBA, PhD, FCMC is a Professor of Performance Management at the Telfer School of Management at the University of Ottawa and Director of the IBM Center for Business Analytics and Performance. He has a background in industry having consulted for over 20 years. He has also worked at Cognos Incorporated as Director of Market Development for Analytic Applications. His current research focuses on performance management practices in private and public sector organizations, organizational learning, and the effective use of Business Intelligence and analytics.

Dr. José Antonio Robles-Flores

José Antonio is an assistant professor (research track) at the Graduate School of Business, Universidad ESAN, in Lima, Perú. He earned his PhD at Arizona State University - W.P. Carey School of Business, concentration in Computer Information Systems. He went to ASU with a Fulbright grant. Previously, he earned an MBA degree from ESAN and a B.S. in Computer Science from Francisco Marroquin University (Guatemala) where he graduated as a Systems Engineer. He teaches Information Systems/Technology and Statistics courses at ESAN. He also had experience in software development and software process improvement. He contributed to the Internet Community Centers Project in Peru when he was working for the Peruvian Scientific Network (Red Científica Peruana - Internet Peru). He also worked as a software engineer for Peru's Tax Administration. José Antonio's research has been published in journals such as *Decision Support Systems*, *Communications of the ACM*, *Communications of the AIS*, *International Journal of Business Intelligence Research*, *International Journal on Internet and Enterprise Management*; and in conference proceedings such as AMCIS, HICSS, WWW, TREC, SIGIR, JCDL, CLADEA, etc.

Dr. Ramesh Sharda

Ramesh Sharda is Director of the PhD in Business for Executives Program, the Institute for Research in Information Systems (IRIS), ConocoPhillips Chair and a Regents Professor of Management Science and Information Systems in the Spears School of Business at Oklahoma State University. His research has been published in major journals in management science and information systems including *Management Science*, *Operations Research*, *Information Systems Research*, *Decision Support Systems*, *Interfaces*, *INFORMS Journal on Computing*, and many others. He has coauthored two text books (*Decision Support and Business Intelligence Systems*, 9th edition, Prentice Hall and *Business Intelligence: A Managerial Approach*, 2nd Edition, Prentice Hall, 2010). He serves on the editorial boards of journals such as the *Decision Support Systems*, *ACM Transactions of MIS*, and *Information Systems Frontiers*. He is currently serving as a member of the Executive Board of Teradata University Network. Ramesh is also a cofounder of a company that produces virtual trade fairs, iTradeFair.com.