CENTER FOR BUSINESS ANALYTICS

EDUCATING, INVESTIGATING, INTEGRATING, PROMOTING... ANALYTICS

The UC Center for Business Analytics brings together managers and employees from Member companies, a renowned group of faculty from multiple disciplines and departments, and students from our graduate programs. This creates a rich forum to exchange ideas and learn about new ways to apply analytics to solve complex business problems and strengthen organizational performance. Our mission is to be recognized as a premier source of education, investigation, integration, and promotion of analytics worldwide.

Through its affiliation with the Department of Operations and Business Analytics the Center is able to source the best students from the MS and Certificate programs to work on projects for Members and provide well-trained candidates for internships and full-time openings. The programs are designed around the schedules of working professionals to allow full participation of Member company employees. The Center also offers special events and educational seminars to Members.

Center membership also provides access to a consortium of UC and visiting faculty to solve more challenging problems. This expanded group covers a wide range of disciplines and research interests and an extensive list of publications on analytics theory, applications, and best practices.

MEMBER BENEFITS

- Direct access to faculty and thought leaders in analytics
- Utilize top students for hands-on projects
- Registration fees waived for seminars and Center events.

To become a member, contact:
Carl H. Lindner College of Business
(513) 556-7140
business.uc.edu/centers/analytics-center
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 - 8:15</td>
<td>Registration and Continental Breakfast</td>
<td>TUC Great Hall</td>
</tr>
<tr>
<td>8:15 - 10:00</td>
<td>WELCOME &amp; OPENING REMARKS:</td>
<td>TUC Great Hall</td>
</tr>
<tr>
<td></td>
<td>David Szymanski – Dean, Lindner College of Business</td>
<td></td>
</tr>
<tr>
<td>10:00 - 10:30</td>
<td>KEYNOTE PRESENTATION:</td>
<td>TUC Great Hall</td>
</tr>
<tr>
<td></td>
<td>“Analytics 3.0: The Integration of Big Data and Small Data Analytics”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tom Davenport – Renowned Industry Thought Leader and Harvard University Visiting Professor</td>
<td></td>
</tr>
<tr>
<td>10:00 - 10:30</td>
<td>Morning Break</td>
<td>TUC Great Hall</td>
</tr>
<tr>
<td>10:30 - 11:20</td>
<td>Breakout Session Tracks</td>
<td>Room 417, Room 400 B</td>
</tr>
<tr>
<td>11:30 - 1:00</td>
<td>Lunch</td>
<td>TUC Great Hall</td>
</tr>
<tr>
<td>1:00 - 1:50</td>
<td>Breakout Session Tracks</td>
<td>Room 417, Room 400 B</td>
</tr>
<tr>
<td>2:00 - 2:50</td>
<td>Afternoon Break</td>
<td>TUC Great Hall</td>
</tr>
<tr>
<td>3:30 - 4:20</td>
<td>Breakout Session Tracks</td>
<td>Room 417, Room 400 B</td>
</tr>
<tr>
<td>4:30 - 5:30</td>
<td>CLOSING REMARKS</td>
<td>TUC Great Hall</td>
</tr>
<tr>
<td>5:30 - 6:30</td>
<td>Reception</td>
<td>TUC Great Hall</td>
</tr>
<tr>
<td>Finance &amp; Insurance Analytics</td>
<td>Healthcare Analytics</td>
<td>Supply Chain Analytics</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Room 400 A</td>
<td>Room 400 C</td>
<td>Room 427</td>
</tr>
<tr>
<td>“Applications of Quantitative Models in Property and Casualty Insurance”</td>
<td>“Using Natural Language Processing to Mine Electronic Medical Records”</td>
<td>“Simulation and Optimization Improves Pharmacy Inventory Management at Kroger Co.”</td>
</tr>
<tr>
<td>Luyang Fu - Head of Predictive Analytics  Cincinnati Financial</td>
<td>Imre Solti - Division of Biomedical Informatics  Cincinnati Children’s Hospital</td>
<td>Doug Meiser - Operations Research Manager  Kroger</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jin Zhang - Head of Predictive Modeling &amp; Advanced Analytics  American Modern Insurance</td>
<td>Chris Lindsell - Department of Emergency Medicine  University of Cincinnati</td>
<td>Jeff Camm - Director of Center for Business Analytics  University of Cincinnati</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>“Analytics for Operational Risk”</th>
<th>“Analytics’ Role in the Examination of Large Insurance Claims Data Sets”</th>
<th>“Leveraging Analytical Methodologies to Purchase Services and Materials”</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>“Modeling Practice of Risk Parameters for Consumer Portfolio”</th>
<th>“Improving Care and Efficiency through Analytics: Automating Patient Triage in Radiology”</th>
<th>“Designing an Integrated Analytical Decision Support System in Intermodal Freight Transportation at Hub Group”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junyi Lin - Quantitative Analyst of Consumer Risk  Fifth Third Bank</td>
<td>Craig Froehle - Department of Operations, Business Analytics &amp; Information Systems  University of Cincinnati; Anderson Center  Cincinnati Children’s Hospital</td>
<td>Mike Gorman - Department of MIS, Operations and Decision Sciences  University of Dayton</td>
</tr>
</tbody>
</table>
KEYNOTE SESSION

“Analytics 3.0: The Integration of Big Data and Small Data Analytics”
Thomas H. Davenport – Harvard Business School, Visiting Professor, and best selling author of Competing on Analytics and other titles.

Many companies and observers are excited about the possibility of competitive advantage from analytics on “big data,” but many don’t understand the differences between big and small data analytics. In this session, Tom Davenport will describe the concept of big data and what organizations are attempting to accomplish with it, and the role of the data scientist in extracting value from big data. Several leading examples of companies—large firms and startups—that are aggressively pursuing big data will be presented. Davenport will then describe how big data differs from previous approaches to analytics and data management on small data. Finally, he’ll address some of the key factors that big and small data analytics have in common, and will describe his ideas on their integration using the “Analytics 3.0” framework he has developed.

TOM DAVENPORT

Tom Davenport is a renowned thought-leader who has helped hundreds of companies worldwide to revitalize their management practices. He combines his interests in business, research, and academia as the President’s Distinguished Professor in Management and Information Technology at Babson College and as a Visiting Professor at the Harvard Business School for the 2012-2013 academic year. He’s also co-founder and research director of the International Institute for Analytics, and a Senior Advisor to Deloitte Analytics.

Tom has written or co-authored fourteen books, including several firsts in the areas of big data and analytics, business process reengineering, knowledge management, and the business use of enterprise systems. His concept of big data and analytics as a competitive differentiator, initially introduced in a Harvard Business Review article, Competing on Analytics, has been recognized by HBR editors as one of the most important management ideas of the past decade and remains one of HBR’s ten most-read articles in that magazine’s 90-year history. Together with two highly acclaimed books, Analytics at Work: Smarter Decisions, Better Results and Competing on Analytics: The New Science of Winning, cited by CIO Magazine as one of the all-time “Top 15 Most Groundbreaking Management Books,” his work in this area is credited with spawning “a new breed of organization.”


Recognized as one of the top 25 consultants in the world and one of the 100 most influential people in the IT industry, he has also directed research centers at Accenture, McKinsey & Company, Ernst & Young, and CSC.

Tom earned a Ph.D. from Harvard University in social science and has taught at the Harvard Business School, the University of Chicago, Dartmouth’s Tuck School of Business, and the University of Texas at Austin.
HR ANALYTICS TRACK

“Analyze This: Using Analytics for Successful Recruiting Programs”
Richard Newsom – Fifth Third Bank, VP Talent Acquisition
Bill Neese – Kendle International, Head of Recruiting

Hiring decisions are difficult. Finding and selecting the correct candidate can be a struggle and is an art form in which most organizations struggle. Learn how two of Cincinnati’s top companies are using analytics to help solve this problem and to make decisions that have significant implications to the success of the business and profitability.

“Driving Employee Engagement at P&G”
Silke McCance – Procter & Gamble, Manager Human Resources Research & Analytics

As the leader of Procter & Gamble’s annual, global census engagement and culture survey program, Dr. Silke McCance will discuss how P&G uses HR analytics to transform the business. The presentation will focus on how HR Analytics drive productivity, build from within, and simplification by providing those making human resource decisions with accurate organizational data, real-time and user-friendly reporting and visualization in cockpits, and new insights to understand the relationships between people and business outcomes now and in the future. In particular, Dr. McCance will bring these concepts to life through a case study of how P&G has leveraged its engagement survey program in this space.

“Using the ROI Model”
Kirk Smith – ROI Institute, Director ROI Implementation
Boyce Byerly – ROI Institute, Director of Analytics

The ROI Institute, founded in 1992, is a service-driven organization, which strives to assist professionals in improving their programs and processes through the use of the ROI Methodology. The ROI Methodology™ was developed by Dr. Jack J. Phillips in the 1970s, refined through application and use in the 1980s and implemented globally during the 1990s. This methodology is a critical tool for measuring and evaluating HR programs in more than 40 countries.

“Improving Workforce Metrics and Analytics Service Delivery: A Practical Guide to Sustained Performance”
Brian Kelly – Mercer, Global Leader of Analytics & Planning
Amy Tilles – Mercer, Principal

Workforce metrics and analytics are an increasingly important topic to businesses. Most organizations have invested significant resources in transactional systems designed to streamline and automate people processes. Unfortunately, these investments have not consistently paid off.

For example, Mercer’s 2013 research in partnership with the World Economic Forum, indicates that while 77% of participants have some sort of workforce plan, over 60% of these organizations are not clear on the value of their workforce plans and 14% do not believe their plans are effective at all.

In the age of Talentism, the impact of an ineffective Workforce Metrics and Analytics solution is real. Brian Kelly, Mercer’s Global Leader of Workforce Analytics and Planning, will describe how organizations can improve their Workforce Metrics and Analytics Service Delivery Model and ultimately their competitive positioning by focusing on the following key steps:

- Understanding their placement on the workforce analytics and planning continuum
- Identifying the workforce analytics and planning deployment model that most closely aligns to unique business and data needs
- Determining the role of analytics technology in the current business environment
CONSUMER / RETAIL ANALYTICS TRACK

“A Simulation Platform for Gaining Value from Big Data: Using an Agent-Based Model to Power Marketing Optimization”
Damon Ragusa – ThinkVine, Chairman & Chief Strategy Officer

Fundamental shifts in the consumer marketing landscape and access to an increasingly wide variety of data have created a demand for better ways to understand both consumers and the marketing used to influence them. Historically, firms have used a variety of statistical techniques to build mathematical representations of the relationship between marketing spend and the resulting outcomes. Today, the number of options available to connect with consumers has exploded – each with unique measurement systems, resulting in the need for a transformation in the way marketing attribution, ROI analysis and forecasting is done. This session will discuss:

» How agent-based modeling insights can tie consumer behavior to business performance to drive marketing investment decisions.
» How using an agent-based modeling approach can allow for greater granularity within marketing vehicles and across target segments.
» How agent-based models can deliver critical retailer insights against a constantly changing in-store dynamic.
» Case studies of how companies are implementing ABM in their marketing organizations today to achieve greater marketing effectiveness.

“Customer Science: Using Customer-Centric Analytics to Drive Growth in Retail”
Michael Wilhite – dunnhumbyUSA, Senior Vice President of Insight Analytics

The dynamics of retail are changing quickly and the demands and desires of the consumer even faster: online and multi-channel retail are eroding the base of brick and mortar retailers, customers are migrating to differentiated retailers, and consumers are demanding convenience on their terms. A customer-centric retail strategy adapts traditional analytics approaches to leverage customer-based insights. During this talk, Wilhite will discuss the principles of customer-based analytics, highlight the importance of alignment of strategy and metrics, and demonstrate the value of customer-focus in the changing retail landscape.

“Fortune 500 Capability on a Mid-Market Budget”
John Lucas – Cincinnati Zoo, former Director of Operations

Learn about the real-world, tangible results that the Cincinnati Zoo has experienced from their use of Business Analytics. Hear details of how an executive-sponsored program resulted in a 700% ROI on the Zoo’s investment in analytics, and how the Zoo is able to take valuable insights from visitor behavior to fuel the Zoo’s mission through in integrated, 360 degree view of their business and most importantly their visitors.

“Analytics: Why Doesn’t Management Listen to Me?”
David Dittmann – Procter & Gamble, Associate Director – Retailer and Product Supply Analytics

The challenge of every analytical professional is translating models into insights that are truly acted upon. The days of management using models to simply confirm decisions have passed for leading companies. The transformation requires analysts to transform from viewing themselves as model developers to analytical general managers that understand barriers behind implementing and driving value in every engagement. In this discussion, Dittmann will discuss approaches to transforming your analytics organization from back-office thought leaders to leadership level ROI generators.
“PROM: Pricing and Retention Optimization Modeling for Property & Casualty Insurance”
Jin Zhang - American Modern Insurance Group, Head of Predictive Modeling & Advanced Analytics
Come learn how advanced modeling, data mining, statistical analyses, simulation and optimization techniques have been applied across the entire gamut of key Insurance Industry processes: product management, pricing, customer relationship management, financial planning and agent relationship management.

“Applications of Quantitative Models in Property and Casualty Insurance”
Luyang Fu – Cincinnati Financial Insurance, AVP, Department head of Predictive Analytics
In this session, the panelist will give a high-level overview on predictive analytics in property and casualty insurance industry. It will cover the applications of quantitative models on a wide range of practices, including pricing, underwriting, conversion, attrition, price elasticity, life-time value, claims, reserve, reinsurance, economic capital, catastrophe and exposure management, economic scenario, enterprise risk management, and dynamic financial analysis.

“Analytics for Operational Risk”
Eleni Pratsini – IBM Research/Watson, Director Optimization Research, Business Analytics & Mathematical Sciences
A number of methods have been developed for quantifying operational risk in various industries. In the financial sector, many of the published models exhibit experimental and methodological issues, such as limited data sets or uniform scaling laws. In this presentation we will give an overview of some of the techniques and highlight the work with a banking consortium aimed at using external data to meet Basel II risk measurement standards.

“Modeling of Risk Parameters for Consumer Portfolios”
Junyi Lin – Fifth Third Bank, Quantitative Analyst-Consumer Risk
Chang Wang – Fifth Third Bank, Quantitative Analyst – Credit Risk, Assistant Vice President
In credit risk, three risk parameters, namely Probability of Default (PD), Exposure at Default (EAD), and Loss Given Default (LGD), are key components of an Expected Losses (EL) calculation, which is essential in estimating Economic Capital, Basel Accords Regulatory Capital Requirement, and Risk Adjusted Return on Capital. While there are various means to model these three risk parameters, the approach presented here focuses on the information of individual accounts. Within this modeling framework, both account-level risk characteristics (e.g., updated credit score) and systematic risk factors (e.g., housing pricing index and unemployment rate), are used to develop a suite of statistical models for each risk parameter of interest. Compared with alternative methodologies, this practice allows a granular risk profiling at the account-level without losing the dynamic view of economic trends. In addition, related practices in back testing and stress testing will also be covered briefly.
HEALTHCARE ANALYTICS TRACK

“Using Natural Language Processing to Mine Electronic Medical Records”
Imre Solti – Cincinnati Children’s Hospital BioMedical Informatics, Assistant Professor

In this presentation, Dr. Solti will provide an overview of clinical Natural Language Processing, including principles, tools and technologies. He will introduce some of the fundamental concepts of clinical NLP including text processing “pipelines,” the development of a “gold standard”, and methods for evaluating NLP tools’ accuracy. In the second half of the presentation he will describe a prototype de-identification system to remove personal health identifiers from text to facilitate sharing clinical narratives for research purposes. Finally, he will present the algorithm development for an automated appendicitis risk stratification system for pediatric patients.

“An Analytic Journey Through Medical Decision-Making”
Chris Lindsell – University Cincinnati Department of Emergency Medicine, Professor, Vice Chair Research

When data are lacking to inform a medical decision, patient care approaches art instead of science. This talk will describe a multi-faceted approach to provide an evidence base for making decisions in the care of a sepsis patient. Beginning with the exploration of biological data to understand how to risk stratify disease and ending with the use of cost and reimbursement data to develop a value proposition for promoting uptake of a novel risk stratification system. We also review the application of a range of analytical methods throughout the process of discovery and implementation of new diagnostic tests.

“Analytics’ Role in the Examination of Large Insurance Claims Data Sets”
Edmund A. Berry – Humana, Research Scientist, BI and Informatics Competency Center
Boyang Bian – Humana, Research Scientist, Comprehensive Health Insight

High-powered analytics to solve healthcare problems are increasing in importance with the looming implementation of the Patient Protection and Affordable Care Act. The objective of this session is to give an overview of the health insurance industry and the role of large-data-analytics to solve healthcare problems. This presentation will take attendees through and beyond the challenges of large-data-analytics within the health insurance industry.

“Improving Care and Efficiency through Analytics: Automating Patient Triage in Radiology”
Craig Froehle – University of Cincinnati, OBAIS, Professor; Anderson Center for Health Systems Excellence; Cincinnati Children’s Hospital Medical Center

Responsive, cost-effective radiology services depend on giving timely attention to the right patient with minimal delay. In this talk, we examine the problems of the order in which radiology patients should be served and how to coordinate various stages of the radiology service chain. The results of analytically modeling the process included a novel patient triage algorithm as well as an automated workflow management system, leading to better service for patients and fewer interruptions for radiologists.
Kroger, one of the largest food retailers in the world, in collaboration with faculty from Wright State University, designed an innovative simulation and optimization model for pharmacy inventory management to help the business better predict pharmacy demand and reduce out-of-stock prescriptions. The Kroger Operations Research team delivered an automated inventory management system that could model empirical distributions, visualize inventory results, and provide end users an intuitive experience that could adapt to user feedback and allow “plug-and-play” experimentation. The results of implementing the new inventory optimization system have been tremendous. Since the system was implemented at scale in October 2011, every Kroger pharmacy has reduced out-of-stock prescriptions by 1.5 million per year, ensuring greater patient access to medications when they need it. Since its inception, the new inventory optimization system has become a critical platform for the application of advanced analytics and operations research throughout Kroger, which, as a retail industry leader, aims to deliver the right products at the right time to customers in every store.

Network Optimization is a strategic tool for assessing the structure of a supply chain. Through the use of an optimization model, network optimization allows management to help determine the number and location of production/sourcing facilities and distribution centers and the flow of goods through the supply chain. A typical objective is to minimize costs subject to service constraints. We will discuss when network optimization is needed, the value proposition, basic models and analysis and lessons learned from over twenty years of consulting experience.

Sourcing allocation decisions vary widely in complexity, even within individual organizations. This presentation will focus on the use of mathematical optimization to enable better decision making during these events. The selection of appropriate tools and a discussion of sensitivity analysis will be included. The speaker will also share tactics to better manage events and improve the likelihood of favorable outcomes.

Hub Group, a North American intermodal freight rail transportation company, developed an integrated analytical system to improve its yield management and container allocation. The system combines forecasting, error distribution analysis, expected value-based heuristics, and optimization. In 2008, Hub improved its revenue per load by 3 percent and increased its container velocity by 5 percent, resulting in a net return of $11 million in cost savings, which equals 22 times Hub’s initial investment. In 2009, a fundamental shift in the economy and the business spelled disaster for this system. I share the thrill of victory and the agony of defeat from this experience.
SPEAKER BIOGRAPHIES

Edmund A. Berry, Ph.D.
Humana, Business Intelligence and Informatics Competency Center, Research Scientist
Edmund is a research scientist for Humana within the health economics division. In his current role, Dr. Berry specializes in retrospective longitudinal claims research to measure the economic and clinical impact of Humana patient focused health intervention programs. Dr. Berry has published several papers in health economics and health service research journals. He received a Bachelor of Science in Industrial Management, a Master of Science in Finance, a Master of Science in Quantitative Analysis, and a Doctorate in Pharmaceutical Sciences from the University of Cincinnati.

Boyang Bian
Humana Comprehensive Health Insight, Research Scientist
Boyang Bian serves as a Research Scientist for Competitive Health Analytics. Prior to coming to Humana, Bo graduated in 2001 with a Bachelor of Science in Pharmacy, a Master of Science in Social and Administrative Pharmacy from the China Pharmaceutical University and joined the College of Pharmacy at the University of Cincinnati for a Doctor of Philosophy in Pharmacoeconomics and Outcomes Research in 2008. He has co-authored several scientific abstracts and publications in the topic of drug utilization, drug pricing, and drug safety research.

Dennis Bird
The Kroger Company, Manager Corporate Pharmacy
Dennis Bird joined the Kroger Company in 1992 as a registered Pharmacist in the Michigan area. He graduated in 1977 with a BS in Pharmacy from Ferris State University. He coordinated the conversion of the Kroger pharmacy systems and obtained a MBA degree from Northwood University in 1997. He was transferred to the Kroger general office in 1998 to coordinate the computer changes and testing needed for Y2K. The position was later changed to Manager of Pharmacy Systems for the Kroger Company. In this position he coordinated the support and enhancement process for all 1,500+ Kroger pharmacies across the nation. Dennis is currently leading a team of 45+ associates who are supporting the pharmacy system and many operational functions across the nation.

Brett Bonner
The Kroger Company, Sr Director, Research & Development
Brett Bonner is a Senior Director Research and Development for The Kroger Co. and a Kroger employee since 2006. Previously, Brett worked for Federal Express and Kellogg Company where he held the positions of Managing Director and Vice President, FedEx Internet Technologies Corporation. He has created numerous operational and technical enhancements -- 19 patents with additional patents pending. His team received the Planet Retail “Innovator of the Year” award in 2011. Brett’s organizations specialize in serial innovation using a wide spectrum of technologies, inventions, and algorithms. Direct measurements of bottom line contributions of his innovations now exceed 9 Billion U.S. Dollars since 1996. Brett graduated with a Bachelor of Science degree in Mechanical Engineering from the University of Memphis, Magna Cum Laude. He was the Valedictorian of the Herff College of Engineering. He also attended graduate programs at Western Michigan University, Rennesslaer Polytechnic Institute, and Concord University School of Law. He is a registered Professional Engineer.

Boyce Byerly, Ph.D
ROI Institute, Director of Analytics
Boyce Byerly, Ph.D., is the Director of Analytics at the ROI Institute and a Professor in the Business School at Bellevue University. His research passions include human learning and cognition, and he has published numerous works on measurement and evaluation, including the recent book Human Capital Analytics: How to Harness The Potential of Your Organization’s Most Important Resource. He was the recent founder and Chief Scientist of Capital Analytics, where he lead the consulting and software engineering teams. He holds a Master’s in Computer Science and a Ph.D. in Cognitive Psychology from Duke.
Jeffrey D. Camm, Ph.D.
University of Cincinnati, Carl H. Lindner College of Business, Department Head - Operations, Business Analytics & Information Systems (OBAIS)

Jeffrey D. Camm is Head of the Department of Operations, Business Analytics and Information Systems, Founding Director of the Center for Business Analytics, and Fellow of the Graduate School at the University of Cincinnati. He has published five texts in management science and applied statistics and over 30 papers in the general area of optimization applied to problems in operations management. A firm believer in practicing what he preaches, he has served as an operations research consultant to numerous companies and government agencies. In 1999, Dr. Camm was named the Dornoff Fellow of Teaching Excellence at UC and he was the 2006 recipient of the INFORMS Prize for the Teaching of Operations Research Practice. In 2006, he received DC Velocity Magazine's Rainmaker Award for the impact he has had on numerous companies using network optimization.

Dave Dittman
Procter & Gamble, Associate Director, Retailer/Supply Chain Analytics

David Dittmann is the Associate Director for GBS's Global Retailer and Product Supply Analytics Organization. With more than 15 years of experience at P&G, David's career has focused on Analytics across P&G’s Marketing, Product Supply and Customer Business Development organizations. Before moving into his current role, David had responsibility for the Business Analysis & Business Intelligence organizations for the Asia region while also serving as the trusted analytic advisor to the Asia Group President.

Craig Froehle, Ph.D.
University of Cincinnati, Department of Operations, Business Analytics & Information Systems (OBAIS); Anderson Center for Health Systems Excellence; Cincinnati Children's Hospital Medical Center

Dr. Froehle's research examines problems of efficiency and operational effectiveness in healthcare delivery systems. His work focuses on issues such as patient flow, scheduling, workflow management, and how information technology can be used to improve the quality, timeliness, and cost of healthcare delivery. His award-winning research has appeared in top journals in the fields of operations management and health services research. He also teaches courses on healthcare operations management, services management, and operations strategy.

Luyang Fu, Ph.D.
Cincinnati Insurance Company, AVP, Predictive Analytics

Luyang leads the development of predictive models for all lines of business and claims. Prior to joining Cincinnati Insurance, he led the development of pricing, underwriting, and enterprise risk models at State Auto Insurance Companies. Dr. Fu has published several papers in actuarial journals and gave numerous presentations in insurance conferences. He holds a master in finance and a doctorate in economics from University of Illinois at Urbana-Champaign and is a Fellow of the Casualty Actuarial Society (FCAS).

Michael F. Gorman, Ph.D.
University of Dayton Department of MIS, Operations and Decision Sciences, Professor; MFG Consulting, President

Mike Gorman has ten years of experience leading systems development at BNSF Railway, and regularly consults for both shippers and carriers in transportation and logistics issues as the president of MFG Consulting, Inc. Dr. Gorman has published over 35 scholarly articles in journals. He has been a finalist in INFORMS Daniel Wagner Competition for 2005 and 2010, and the Edelman competition in 2009. He currently holds editorial positions at major leading journals. Dr. Gorman graduated from Indiana University with a Ph.D. in Business and Economics in 1994. He has a Masters in Economics from Indiana, and a Bachelors Degree in Computer Science and Economics from Xavier University in Cincinnati.

Stacie Furst Holloway, Ph.D
University of Cincinnati, Program Director, BA Organizational Leadership and Human Resources Associate Director

Stacie Furst Holloway, Ph.D. is an Assistant Professor and Director of the undergraduate Organizational Leadership and Human Resources programs at the University of Cincinnati. She received her doctorate in Management from the University of North Carolina at Chapel Hill in 2004 and has more than 15 years of industry experience working in HR and Organizational Development. Her current research focuses on the impact of mobile communication technologies on employee and organizational outcomes as well as HR's role in managing the virtual workplace.
Jim Jacobs
Procter & Gamble, Systems Manager
Jim Jacobs has been employed for 15 years by Procter & Gamble where he has been involved in distribution network design, transportation management, and mathematical optimization in strategic sourcing. His current role is focused on manufacturing siting and sourcing for the Americas. Prior to P&G he worked in quality assurance for Rockwell Collins Avionics. He holds a BS in Statistics and an MS in Industrial Engineering from the University of Florida.

Brian J. Kelly
Mercer, Global Leader of Analytics & Planning
Brian is a Partner at Mercer and is the global leader for the Workforce Analytics and Planning Practice. Brian recently served as the Co-Chair of the Institute of Human Resources Workforce Planning & Analytics Working Group and Vice Chair of the Society of Human Resource Professional's (SHRM) workforce metrics taskforce. Prior to Mercer, Brian was the President, North America of Infohrm, the recognized industry leader in workforce reporting, analytics and planning solutions across the globe. Brian led Infohrm's North American operations and was responsible for the firm's global sales, marketing and partner strategy leading to the firm's acquisition by SuccessFactors in July 2010. Brian is a graduate of Boston College.

Chris Lindsell, Ph.D.
University of Cincinnati Dept. of Emergency Medicine, Professor, Vice Chair - Research
Since joining the University of Cincinnati in 2001, Dr. Lindsell has dedicated his career to the application of biostatistics and study design to emergency care research. He has published over 150 peer-reviewed papers, and has been the principal methodologist for clinical trials, observational studies and translational research. As well as being responsible for the Department of Emergency Medicine's research mission, he is the co-Director of the Biostatistics, Epidemiology and Research Design core for Cincinnati's Clinical and Translational Science Award.

Junyi Lin, Ph.D.
Fifth Third Bank, Quantitative Analyst of Consumer Risk
Junyi Lin, Ph.D., is currently a Quantitative Analyst of Consumer Risk at Fifth Third Bank. He received his Ph.D. in Statistics from the Pennsylvania State University, and has extensive experience in the areas of survival analysis, financial time series, quasi-Monte Carlo in computational finance, statistical classification/clustering, feature screening/model selection and semi-parametric regression. Junyi also has research articles published/being reviewed in Journal of Complexity, Journal of Royal Statistical Society and Statistics in Medicine.

John Lucas
BrightStar Partners, Director of Solutions Delivery Partners
John Lucas is the former Director of Operations at the Cincinnati Zoo, where he led the Zoo’s business analytics project that focuses on key business insights including analysis of where visitors come from, their buying and visitation trends, and integration with the NOAA weather database to enable the Zoo to better understand and predict their business. John has since joined BrightStar Partners where he has taken what was done at the Cincinnati Zoo and made it into a pre-built solution that can be easily deployed at cultural attractions, sporting venues and retail businesses resulting in unprecedented time to value with business analytics.

Lincoln Lutz
The Kroger Company, Vice President, Pharmacy
Lincoln Lutz is Vice President of Pharmacy for The Kroger Co., based in Cincinnati, Ohio. In his role, he oversees procurement, Pharmacy Benefit Management sales and service, sales planning, technology and store support, clinical initiatives, third party contracting, and regulatory compliance. In 1988, Lincoln began his career in Kroger’s Central Division as a pharmacist, then as pharmacy manager before entering an administrative management role as assistant pharmacy sales promoter. Shortly after, he
was promoted to pharmacy merchandiser for the Delta Division. In 2000, he was named vice president of Pharmacy. From 2003 thru 2005, Lincoln also took on a leadership role for the Health and Beauty Care business. Lincoln earned a bachelor’s degree in Pharmacy from North Dakota State University. He is a member of The Little Clinic advisory board, and serves on the board of managers for Econdisc Contracting Solutions LLC.

Silke McCance, Ph.D.
Procter & Gamble, Manager, HR Research & Analytics
Dr. Silke McCance is Manager – Human Resources Research & Analytics, within the Leadership Development group at Procter & Gamble in Cincinnati, Ohio. She owns the global corporate survey program that is delivered annually to over 100,000 employees, in 80+ countries, in 20+ languages, and analyzed using advanced analysis (factor analysis, IRT, SEM, LGCM, text analysis). Before the company survey, she had global ownership of all external selection and assessment tools and systems used at P&G, including candidate reactions, job analysis/competency modeling, development, deployment, maintenance, training and legal consultation/audit support. Prior to joining P&G, she worked as a consultant in both the public and private sector, where her experience included conducting job analysis; designing, administering, and serving as certified assessor for a developmental assessment center; and developing and validating work simulation tests. Dr. McCance received her Ph.D. in Industrial-Organizational Psychology from the University of Illinois at Urbana-Champaign.

Doug Meiser
The Kroger Company, Operations Research Manager
Doug Meiser joined The Kroger Co. in 2004 as he started the MBA program at Northern Kentucky University. He started at The Kroger Co. as a forecasting system administrator. In 2007, Meiser transitioned to Research and Development to lead the development and growth of the Operations Research team. Since that time, the team has worked and implemented projects in facility layouts at the stores, distribution centers, and manufacturing plants, along with many efforts in Research and Development, inventory optimization, staff scheduling, and strategic supply chain analysis. Meiser completed his MBA in 2008, and before rejoining The Kroger Co. completed his B.S. in Mathematics and Physics from NKU.

Bill Neese
Kendle International, Head of Recruiting
Bill Neese brings over 12 years of experience leading Global Recruitment/Human Resource strategies for mid-large size companies. Most recently, Bill was an executive committee member of Total Quality Logistics, where he served as Vice President of Recruitment while leading a team of 125 associates. Before joining Total Quality Logistics in 2010, he led Kendle International’s Global Recruitment team. Bill spent his early Human Resource career working for Convergys and L’Oreal USA. He holds an M.A. in Labor and Employment Relations from the University of Cincinnati and a B.A. in Psychology from Shawnee State University.

Richard Newsom
Fifth Third Bank, VP of Talent Acquisition
Richard Newsom joined Fifth Third Bank in 2003 and is currently Vice President of Talent Acquisition Analytics and Customer Experience with the responsibility for Bank-wide Recruiting processes and measurement. Prior to his current position, Newsom held the position of senior process improvement manager in the Process Improvement Group. Newsom previously worked as the director of Project Management for Broadwing Technology Solutions. Newsom obtained his Lean Six Sigma Master Black Belt and is Project Management Professional Certified from the Project Management Institute. He also earned his bachelor’s degree in Marketing and Finance from the University of Cincinnati and his master’s degree in Business Administration from Xavier University located in Cincinnati, Ohio. In addition, Newsom has been published in the Corporate Recruiting Leadership Journal as well as presented numerous Recruiting topics at ERE, IQPC-HR, and other events.

Eleni Pratsini, Ph.D.
IBM T.J. Watson Research Center, Director of Optimization Research
Eleni is the Director of Optimization Research at the Business Analytics and Mathematical Sciences Department of the Watson Research Center. She holds a B.Sc. in Civil Engineering (U. Birmingham, U.K.), an M.B.A. (UCLA), and a Ph.D. in Quantitative Analysis (U. Cincinnati). Prior to joining IBM in 2003, she was at the Swiss Federal Institute of Technology, Zurich (ETHZ). Eleni is a member of the IBM Academy of Technology and the Academy Leadership Team.
Michael J Schroeck  
*IBM, Competency Center Leader-Business Analytics & Optimization Practice*

With more than 25 years of consulting experience, Michael Schroeck has a proven track record in Business Intelligence, Performance Management, and Analytics. He is considered an industry luminary and thought leader and is frequently quoted in leading business and technical publications. Michael has authored several articles on Business Intelligence, Performance Management, and Analytics, has co-authored a book on Enterprise Information Architecture, has been a featured speaker at many industry conferences and major seminars. Mr. Schroeck was twice named as one of the world’s top “25 Most Influential Consultants” by Consulting Magazine and was named a Distinguished Engineer by IBM for his outstanding and sustained technical achievement and leadership.

Piyush Singh  
*Great American Insurance Company, SVP & CIO*

Piyush Singh is SVP and CIO of Great American Insurance Company, Inc. He is responsible for creating the vision and direction of American Financial Group’s IT strategy and operationally executing that vision to take the specialty insurer to the next generation. Singh holds a master’s degree from the University of Delhi, an MBA from Bradley University and CPCU designation. Singh was on the board of directors of International Accounting and Systems Association, Advisory Council of College of Business for Bradley University, Editorial Advisory Board of Insurance and Technology magazine and the Executive Committee of the Cincinnati Chapter of American Red Cross.

Kirk Smith, Ph.D., PMP  
*ROI Institute, Director of ROI Implementation*

Kirk Smith is the Director of ROI Implementation for the ROI Institute. In this role, he teaches, conducts ROI impact studies, and helps organizations around the world implement the Phillips ROI Methodology. Smith has been affiliated with the ROI Institute since 2006. Prior to joining the ROI Institute Dr. Smith spent 15 years in the workplace learning and performance field as a manager, consultant, and facilitator. He has published several book chapters and articles on measurement and evaluation including in Human Capital Analytics (Barnett & Berk, 2007), ROI in Action Casebook (Phillips & Phillips, 2008), The ASTD Handbook of Measurement and Evaluation (Phillips, 2010), and The New HR Analytics (Fitz-enz, 2010). He is also an Assistant Professor of Human Resources and Leadership at Western Carolina University in their MS in Human Resources Program.

Dr. Smith holds a bachelor’s degree in Engineering Economic Systems from Georgia Tech, a M.S. in Industrial Technology from East Carolina University, and a Ph.D. in Technology Management with a specialization in Human Resource Development from Indiana State University. Kirk is also a Certified ROI Professional (CRP) with the ROI Institute and Project Management Professional (PMP) with the Project Management Institute.

Imre Solti, Ph.D.  
*Cincinnati Children’s Hospital Division of Biomedical Informatics, Assistant Professor*

Dr. Solti is an Assistant Professor on the tenure track at the Division of Biomedical Informatics, Cincinnati Children’s Hospital Medical Center. He has a medical degree and a Ph.D. in Health Services Organization and Research and a Master of Arts in Computational Linguistics. His team is using natural language processing and machine learning algorithms for electronic health record text and data mining to facilitate health care quality improvement, patient safety and clinical research.

Amy Tilles  
*Principal, Mercer*

Amy Tilles is a principal within Mercer’s Talent Business, specializing in HR Effectiveness and Analytics and Planning. Amy’s primary focus is helping HR organizations provide optimum HR services to their businesses. With over fifteen years for consulting experience, Amy has led projects to align HR work to organizational strategies and objectives and is an expert in utilizing diagnostic tools to develop a clear course of action for HR improvement initiatives. Amy earned a bachelor’s degree in business administration from the University of Kansas.
Andy Walter
*Procter & Gamble, Vice President, Business Intelligence*

Andy Walter is Vice President, Business Intelligence, Consumer & Global Business Units for P&G’s Global Business Services (GBS) organization. He is responsible for developing cutting-edge business intelligence and consumer capabilities for P&G. He’s empowering executives across the company to “lead at the speed of change.” With more than 23 years of experience at P&G, Andy’s career has spanned a variety of assignments including R&D, Product Supply, Marketing, and International Sales & Operations. Before moving into his current role, Andy ran the Global Business Services organization for P&G’s entire Western European market. Andy was born in Cincinnati, Ohio. He holds a Bachelor of Science degree in Computer Science from the University of Cincinnati.

Glenn Wegryn
*Analytic Impact, LLC, Principal*

A dynamic and engaging speaker, Glenn Wegryn has driven advanced analytic applications in supply chain, planning, sourcing, inventory, revenue, consumer and trade analytics at Procter & Gamble for over 28 years. He has held organizational leadership, project management, technology development and analysis roles of increasing impact and responsibility for the Company. Most notably, he re-built the Operations Research practice at P&G into a world-class practitioner’s organization and became the acknowledged expert in strategic sourcing of manufacturing capacity on a global basis and for overall methodologies for creating effective supply networks for P&G and its affiliates. Now retired from P&G and leading an independent consultancy, Glenn is a regular speaker at INFORMS and related conferences and holds a BS in Quantitative Analysis from Indiana University Kelly School of Business.

Chang Wang
*Fifth Third Bank, Quantitative Analyst – Credit Risk, Assistant Vice President*

Chang Wang is a quantitative analyst for Fifth Third Bank on the consumer credit risk modeling team. In his current role, one of Chang’s primary responsibilities includes performing Dodd-Frank Act stress tests (DFAST) on the Bank’s auto, consumer credit card, and mortgage portfolios. Chang is responsible for the development, implementation, and validation of quantitative credit risk models related to Comprehensive Capital Analysis and Review (CCAR). He participates in the development and on-going maintenance of internal Probability-of-Default (PD), Loss-Given-Default (LGD), and Exposure-at-Default (EAD) databases.

Michael Wilhite, Ph.D.
*dunnhumbyUSA, Senior VP of Insight Analytics*

Michael is Senior Vice President of Insight Analytics, for dunnhumbyUSA, leading both Kroger Insights and Customer Knowledge. As dunnhumbyUSA’s first employee, Michael was instrumental in the development of analytics for customer strategy, customer-centric pricing, promotion planning and loyalty. Michael has also led Solutions in the non-grocery retail sector and held the role of General Manager of dunnhumby’s third largest office in Gurgaon, India. Michael’s career began by developing analytics capabilities for Fortune 50 companies in the telecom, financial services, and technology sectors. Michael obtained his doctorate in Social Psychology from the University of California with an emphasis on decision-making processes.

Jin Zhang
*American Modern Insurance Group, Head of Predictive Modeling & Advanced Analytics*

Jin has been working as an actuary in insurance product pricing, modeling and product development for seven years for American Modern, Hanover and Travelers and as a consulting actuary in financial modeling for three years for Oliver Wyman. Prior to working in the Insurance/Finance Industry, Jin worked as a research engineer at National University of Singapore on transportation network statistical analysis and land usage optimization (three years) and as a transportation and structural engineer in China for five years. Jin has an M.S. degree in Math from University of Connecticut.

Xinhui Zhang, Ph.D.
*Wright State University, Associate Professor*

Xinhui Zhang is an associate professor of industrial engineering at Wright State University. He received his Ph.D. in Operations Research and Industrial Engineering from the University of Texas at Austin. Dr. Zhang’s research interests are in mathematical programming and optimization, especially solving large problems in the field of manufacturing, logistics and transportation, media management, service operations as well as engineering design optimization. He has participated and lead several research projects such as airline crew recovery, advertising allocation, production planning, staff scheduling, vehicle routing, and inventory simulation and optimization. He is an active member of INFORMS.
BUSINESS ANALYTICS

Master of Science

Among the top 20 Business Analytics programs in North America.
-InformationWeek

Analyze the data. Apply the model.
Regardless of industry, understanding past business performance is crucial to gaining insights that drive future planning. By combining the skills, technologies, applications and practices to develop new insights, business analytics provides powerful decision-making tools to all levels of an organization.

The Lindner Master of Science in Business Analytics is one of the few programs of its kind in the country. The internationally-ranked program integrates operations research and statistics, using applied mathematics and advanced software, in a business environment.

By studying the core topics of optimization, simulation, probability modeling and statistical analysis, students learn to be analysts in a wide variety of industries ranging from supply chain management and operations to healthcare and market research.

Our graduates have taken positions at Amazon.com, eBay, PayPal, dunnhumbyUSA, IBM, Ethicon Endo-Surgery, Procter & Gamble, Yahoo!, Walt Disney and many more.

For more information, contact:
Dr. W. David Kelton
MS - Business Analytics Program Director
(513) 556-6834 | david.kelton@uc.edu
business.uc.edu/msbana

KEY PROGRAM HIGHLIGHTS

- Our program is one of just eight business schools across the country that are internationally ranked by InformationWeek.

- Lindner is also home to the UC Center for Business Analytics (CBA). The center works to apply analytical methods for enhancing business and organizational performance. Corporate partners of CBA include Procter & Gamble, dunnhumbyUSA, Kroger, Fifth Third Bank and others.

- Our professors not only teach but write the text books, including one of the first in the field: Business Analytics by James R. Evans.

- The program can be completed in as little as nine months.
Big Data Analytics Masters Degrees: 20 Top Programs

Doug Henschen January 08, 2013 - It's well documented that there's a big data talent gap, but what's being done about it? What's needed is knowledge and experience. On the first front, hundreds of colleges and universities worldwide are gearing up business analytics, machine learning and other programs aimed at analysis of data in a business context.

Data growth is headed in one direction, so it's clear that the skills gap is a long-term problem. But many businesses just can't wait the three to five years it might take today's undergrads to become business-savvy professionals. With that and InformationWeek's readership in mind, there's a great opportunity for experienced information management professionals and even data-savvy IT generalists to fill the talent void. Thus, here's our short list of one- and two-year business analytics and big-data-oriented masters programs in North America.

All of these programs are geared to candidates who already have undergraduate degrees, and most favor professionals with three or more years of work experience. In many cases part-time options are available, so students can continue to work as they learn more about big data analytics.

These one-year and two-year graduate programs are just what's needed to close the big-data talent gap (in alphabetical order):
INFORMATION SYSTEMS

LEVERAGE TECHNOLOGY.
BUILD BUSINESS SOLUTIONS.

Information systems (IS) spans the worlds of business and technology, integrating business acumen with technical skills to realize computer-based solutions to organizational challenges. Technological advances continue to transform business, creating high demand for individuals with degrees in this fast-growing field.

The master of science (MS) in information systems degree prepares students to serve as leaders in helping businesses solve problems through the creative application of information technology (IT). A solid background in all functional business disciplines, combined with a thorough grounding in IT, gives students an unparalleled combination of depth and breadth.

Graduates of the program work at leading companies such as SAP, Citi, GE, P&G, Goldman Sachs, Yahoo!, Kroger, Deloitte, Ernst & Young, Convergys, HSBC, Great American, dunnhumby and itelligence.

Stay two steps ahead of the competition with this dynamic, innovative program that offers state-of-the-art, practical coursework, plus a mandatory co-op for real-world experience, all leading to long-lasting, tangible career results.

For more information, contact:
Graduate Programs Office
(513) 556-7020 | graduate@uc.edu
business.uc.edu/msis

KEY FEATURES

» Get hands-on experience with products from SAP, Microsoft, Oracle, IBM and Bluespring

» Benefit from 100% placement record for domestic graduates

» Complete the program full-time or earn your degree part-time
Not All IT Providers Are Created Equal

Sogeti Is Different
> Local Touch - Global Reach
> Proven solutions in Business Intelligence, Mobile, Program Management, Application Modernization, Testing and Cloud
> Over 45 years experience in industry

To learn more contact us at:
Bill Blaxton
(513) 403-9433
us.sogeti.com