Analytics in Action

“What do Jeopardy, Pampers, and Major League Baseball all have in common?”

October 24, 2012
University of Cincinnati
Tangeman University Center Theater

Sponsored by LUCRUM, Inc.
ABOUT THIS EVENT
The purpose of these events is to provide thought leadership in the rapidly evolving area of analytics. By bringing together business and IT professionals from various industries, each can share best practices, lessons learned, and walk away with actionable information.

CENTER FOR BUSINESS ANALYTICS
The University Of Cincinnati Carl H. Lindner College Of Business is also home to the Center for Business Analytics. The Center’s mission is to be recognized as the premier source of education, investigation, integration, and promotion of analytics. Center membership offers access to students and faculty for projects and research as well as events like the Symposia and other programming.

MASTER OF SCIENCE IN BUSINESS ANALYTICS
The Master of Science (MS) in business analytics program integrates course work in applied statistical analysis, predictive modeling, optimization and simulation with electives such as data visualization, data mining, and experimental design applied to problems in business. Graduates are well prepared to be analysts in many industries, including supply-chain management, operations, healthcare, marketing research, financial risk analysis, manufacturing and consulting.

GRADUATE CERTIFICATE IN DATA ANALYTICS
The University of Cincinnati Carl H. Lindner College of Business is pleased to offer a series of graduate-level courses in Data Analytics. Data Analytics is now driving decision-making throughout the world of business and will be one of the highest IT priorities in leading companies for many years to come. Enclosed is more information about the courses.

FREE PARKING
When you arrived today, you pulled a #1 ticket. You also received a #2 ticket at registration. When you exit the garage, you will need to insert the #1 ticket, and then insert the #2 ticket.

PHOTOGRAPHY
University of Cincinnati reserves the right to use photographs of any event attendee for future promotions. Videotaping and/or photography are not allowed without prior written approval.
### SCHEDULE

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:30am - 8:00am</td>
<td>Registration &amp; Continental Breakfast</td>
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<tr>
<td>8:00am – 8:15am</td>
<td>Welcome &amp; Introduction</td>
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<td><strong>Jeffery D. Camm, Ph.D.</strong> Department Head - Operations, Business Analytics, and Information Systems Lindner College of Business University of Cincinnati</td>
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<td>8:15am – 9:15am</td>
<td>“Putting Watson to Work” - February 14, 2011, IBM Watson changed history by introducing a system that rivaled human ability to answer questions posed in natural language with speed, accuracy and confidence. Key questions to be discussed are: What is IBM Watson and why is it important? How is IBM putting Watson to work? What can we expect in the future? The speaker will focus on issues that are relevant to executives and business leaders interested in analytics application including the use of Natural Language Processing algorithms, data mining and predictive analytics.</td>
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<td><strong>Arnie Greenland</strong> Distinguished Engineer, IBM</td>
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<td>9:15am – 9:30am</td>
<td>Break &amp; Networking</td>
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<td>9:30am – 10:30am</td>
<td>“Analytics in Sports &amp; Entertainment“ - How can organizations make optimal business decisions in passionate consumer contexts like Sports and Entertainment? Gershenfeld will discuss an innovative conjoint-based pricing application that produced an improved fan experience. The approach married fan preferences with financial implications and utilized visualization and interactive interfaces to drive adoption.</td>
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<td><strong>Gabe Gershenfeld</strong> Strategic Analyst, Cleveland Indians</td>
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<td>10:30am – 11:30am</td>
<td>“Driving Competitive Advantage with Analytics” - Advanced Analytics have a long history of broad impact across virtually every business area and market where it is applied. Wegryn will discuss trends in the field of analytics and their implications over the next 3-5 years. He will discuss real-world applications ranging from large, big-payoff projects to methodology-driven analyses that become institutionalized in a company’s culture. Wegryn will conclude with keys for Management – how to start, structure, and source talent to successfully bring analytics into an organization.</td>
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<td><strong>Glenn Wegryn</strong> Principal Analytic Impact, LLC</td>
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<td>11:30am – 12:30pm</td>
<td>Wrap-up and Box Lunch</td>
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<td></td>
<td><strong>Q&amp;A Panel All Speakers</strong></td>
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Arnie Greenland, Distinguished Engineer, IBM

With over 35 years of experience delivering analytics solutions, Arnie has earned the title of Distinguished Engineer in IBM’s Global Business Services focusing on public-sector clients with management consulting services.

Gabe Gershenfeld, Strategic Analyst, Cleveland Indians

As a founding member of the Indians’ Strategy and Analytics Department, Gabe’s role is to advance decision-making across the Business through the use of quantitative and qualitative methods.

Glenn Wegryn, Principal, Analytic Impact, LLC

Glenn has driven advanced analytic applications in supply chain, planning, sourcing, inventory, revenue, consumer and trade analytics at Procter & Gamble for over 28 years. Most notably, he re-built the Operations Research practice at P&G into a world-class practitioner’s organization.

Jeffrey D. Camm, Ph.D., University of Cincinnati Carl H. Lindner College of Business

Jeffrey D. Camm Head of the Department of Operations, Business Analytics and Information Systems and Director of the Center for Analytics, University of Cincinnati. He has published four texts and over 30 papers in applied optimization.
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
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 a powerful decision-making tool to all levels of an organization.

The master of science (MS) in business analytics 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 many industries, including supply-chain management, operations, healthcare, marketing research, financial risk analysis, manufacturing and consulting.

Additional study in data mining, forecasting, multivariate analysis and visual basic for applications (VBA) further prepares students to find rewarding professional positions in all corners of the business world in a wide variety of companies, such as Amazon, eBay, PayPal, dunnhumbyUSA, Ethicon Endo-Surgery, Walt Disney, and Yahoo!

Place yourself at the forefront of business decision making with this in-demand degree.

For more information, contact:
Carl H. Lindner College of Business Graduate Programs Office
(513) 556-7020
business.uc.edu/msbana

KEY FEATURES
- Obtain a highly marketable toolkit in the core analytics topics
- Benefit from the program’s international reputation and 30-year history of success
- Learn from globally-recognized researchers in the field
- Gain experience applicable to diverse business functions, not just a single industry
- Benefit from strong, sustained demand for graduates
- Complete the program full-time in as little as nine months or earn your degree part-time
Graduate Certificate in Data Analytics

The University of Cincinnati, Carl H. Lindner College of Business is pleased to offer a series of graduate-level courses in Data Analytics. Data Analytics is now driving decision-making throughout the world of business and will be one of the highest IT priorities in leading companies for many years to come.

The series of courses prepares students to lead Data Analytics initiatives in their businesses by providing a broad and deep understanding of the fundamentals of Data Analytics. In designing the course series, UC has partnered with LÜCRUM, Inc., a leading Data Analytics consulting firm and industry thought leader based in Cincinnati.

UC plans to offer a total of 14 credit hours in the course series, all of which count towards the Master of Science (MS) – Business Analytics and the MS – Information Systems degrees. Additionally, all of the classes are offered in the evening hours for the convenience of business professionals. UC will begin offering these courses in the Winter Quarter of the 2011/2012 school year.
# Data Analytics Course Descriptions

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<tr>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Description</th>
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<tr>
<td><strong>Data Analysis Methods</strong>&lt;br&gt;(2 credit hours)</td>
<td></td>
<td>This course covers: Fitting and drawing inferences from simple and multiple linear regression models; Variable selection procedures; Residual diagnostics; Cross validation; Logistic regression for binary response; Introduction to SAS and R for Linear and Logistic regression and change management, and maintenance/retirement.</td>
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<td><strong>Business Intelligence</strong>&lt;br&gt;(2 credit hours)</td>
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<td>This course covers data warehousing, dimensional modeling, and on-line analytic processing (OLAP). Students will learn the various architectural models for Data Warehouses and the tradeoffs among them. The course will also cover principles of dimensional modeling, star schemas, the role of time in data warehouses, and ETL processes.</td>
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<td><strong>Data Modeling</strong>&lt;br&gt;(2 credit hours)</td>
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<td>This course provides in-depth coverage of the principles of data modeling. Starting at the highest level of abstraction, the data requirements culled out from user requirements specifications are rendered as a conceptual data model using the entity-relationship modeling grammar.</td>
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<td><strong>Managing Business Intelligence Projects</strong>&lt;br&gt;(2 credit hours)</td>
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<td>This course will introduce students to the major challenges (and solutions) at each stage in the life cycle of Business Intelligence Projects, including cost-benefit analysis, electing user requirements, design and development, implementation.</td>
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<td><strong>Data Mining 1</strong>&lt;br&gt;(2 credit hours)</td>
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<td>Topics include: Data Processing, Variable Selection for linear regression and generalized linear regression, Out-of-sample Cross Validation, Generalized Additive models, nonparametric smoothing methods, Classification and Regression Tree, Neural Networks, and Monte Carlo Simulations.</td>
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<tr>
<td><strong>Data Mining 2</strong>&lt;br&gt;(2 credit hours)</td>
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<td>Topics include: Missing Data Imputation, Bootstrapping, Boosting and Multiple Additive Regression Trees, Bayesian Trees, Support Vector Machine, Discriminate Analysis, Cluster Analysis, Factor analysis, and Principle Component Analysis.</td>
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**Registration and Information:** Graduate Programs Office, (513) 556-7021
LÚCRUM combines deep business knowledge and strong technology expertise to drive your company’s future growth by Making Data Meaningful.

“Information is not knowledge.”

Albert Einstein