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<td>8:00-9:00am</td>
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<td>9:00-10:00am</td>
<td>KEYNOTE SPEAKER&lt;br&gt;A Statistician Asks Ethical Questions about Big Data Analytics</td>
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<td>10:00-10:30am</td>
<td>COFFEE/NETWORKING BREAK</td>
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<td>10:30-11:45am</td>
<td>BREAKOUT SESSION A&lt;br&gt;The Application of Analytics in the Student’s Academic Lifecycle</td>
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### Keynote Speaker: A Statistician Asks Ethical Questions about Big Data Analytics

**ROB CARVER, PHD**, Professor, Business Administration, Stonehill College; Adjunct Professor, International Business School, Brandeis University.

Like many disruptive innovations, Big Data and the explosive growth in analytics across disciplines are reshaping the conduct of commercial, medical, political and governmental organizations. In profound ways, big data analytics is fundamentally changing numerous social interactions — in ways that hold great promise, in ways that compromise traditional understandings of privacy, and in ways that are at best trivial. Some of the most serious concerns are ethical in nature.

Ethical issues arise in the generation, gathering, and analysis of Big Data, possibly resulting in new guidelines or laws. The news is not all bad: in some domains, the practice of analytics may resolve long-standing injustices or more equitably allocate resources.

To launch this symposium, Prof. Robert Carver considers some of the ethical dimensions of Big Data, bringing a statistician’s concern for faithful representation, respect for human subjects, the risk of erroneous conclusions, accuracy in reporting findings, and for sound logic in the design and conduct of statistical studies.

### Breakout Session A: The Application of Analytics in the Student’s Academic Lifecycle

**LEANNE BATEMAN, M.A.**, Principal Consultant, Beacon Strategy Group; Strategic Analytics Chair, Brandeis University.

Analytics are a powerful tool that can bring valuable insights to light that enable strategic decision making based on those insights. This is as true in higher education as any other industry, and across numerous areas throughout a student’s academic lifecycle. This lifecycle begins at the point of recruitment and continues through graduation to alumnus status.

In this session, we will discuss specific applications of analytics at various critical points in a student’s academic lifecycle. These applications involve measuring and improving academic performance, including student acquisition, selection and retention; course major/minor selection and curriculum management; academic performance and risk management; faculty effectiveness and instructor/student relationship management; behavioral indications and personal maturity levels; study and learning behaviors and overall potential for degree completion.

Session outcomes will focus on practical applications and approaches that can be readily applied without complex toolsets.
How CRM, Big Data Analytics, and Multi-Channel Marketing Enhance Profitability and Customer Lifetime Value (CLV)

LESLIE AMENT, PHD., SVP Research and Principal Analyst at Hypatia Research Group, LLC

Our primary research consistently shows that top performers report double-digit business return on technology investment (ROI) that is tangible for organizations with the most mature levels of experience in multi-channel customer engagement. We regularly survey and interact with business executives that actually utilize, recommend, influence, hold budget or veto power over customer management business processes and/or the purchase of customer management related software and service. Wouldn’t you want to know how they did this?

Using case studies and survey analysis, this presentation will provide insights into how and why top performers:

- Develop best practices for the effective use of multiple information sources for multi-channel customer engagement
- Align the right key performance indicators (KPIs) with corporate and/or departmental goals
- Design and effectively manage closed loop business processes
- Capture and benchmark meaningful metrics across multiple customer channels
- Leverage customer facing technologies using sophisticated workflows, alerts, personalization, and offers to enhance customer engagement
- Utilize maturity level benchmarks specific to my industry to set realistic goals for continuous improvement
- View primary accountability of both IT and marketing functions for the results of these cross-functional programs?
- Develop or hire a “Marketologist”

Attendees will learn which selection criteria, business process capabilities and decision support best practices are critical in making the right investment for their organization.

Text Mining the Largest Health Online Community in China

HAIJING HAO, PHD., UMass Boston & KUNPENG ZHANG, PHD., UMass Boston

There are emerging studies on online health community and online reviews on healthcare providers. According to Health Online Report by Pew Research Center 2013, about 58% American adults have at least one time used the internet to look at health information in the past year. In the U.S., one out of six physicians has been reviewed online (Gao et al. 2012). In Germany, 37% of all German physicians were rated on jameda in 2012 and two thirds of all ratings are in the best category (Emmert and Meier 2013). However there is little empirical study about how Chinese consumers use the internet to search health information, although China is the number one internet population in the world (The World Bank, 2013).

Also, there is very limited study using text mining method to explore what the consumers are thinking about their healthcare providers and the healthcare service. Therefore, in the present study, we text mining the largest online health website in China to explore what are the Chinese consumers commenting about their doctors. We collected more than 770 thousand public reviews on 112 thousand doctors from the largest healthcare website in China (The Economist, Jul. 24, 2014). Then we particularly analyze the consumers’ qualitative reviews on four specialty areas which received most reviews, Surgeon, Gynecology and Obstetrics, Internal Medicine, and Chinese Traditional Medicine, by using topic modeling algorithm, Latent Dirichlet Allocation (LDA), which has been widely used in many domains, especially in text summarization.

BREAKOUT SESSION B

A Holistic Approach to Being Data Science Driven

DAVID DIETRICH, M.S., Head of Data Science Education, EMC

In the new world of Big Data, confusion persists about what Big Data is, the skills needed to use it, and how organizations are taking advantage of Big Data to drive innovation. In this session, we will discuss:

- EMC’s approach to teaching Big Data and data science
- Common skills of people trying to move into data science roles
- Educating customers at different levels of an organization about Big Data and how to implement data science projects
- A methodology for successfully implementing data science projects
- Examples of data science projects from across his organization
Show Me The Data! - How to Improve the Learning Experience Using Operational Analytics

SHLOMI DINOOR, MBA, Principal, ExtensionEngine, founder: Degology

Available online courses are on the rise with millions of participating students. Despite the vast amount of collected data, educators lack transparency and valuable insights for their courses. It makes the task of managing online courses and improving the learning experience an uphill battle.

This session will identify why operational analytics is critical to ensure continuous improvement of students’ learning experience. Attendees will be presented with new perspectives, practical approaches, and real world case studies. Specific strategies will be examined, including:

- How is real input separated from white noise? Engagement buckets (“interested”, “active”, and “addicted”) will be presented, as well as characteristics and significance of each bucket.
- Are different target audiences adequately addressed? Various segmentation strategies will be discussed.
- What are the effective learning hours, and how can they be optimized?
- Can the overall sentiment be detected? Are participants buying into the presented ideas?
- How to identify participants’ activity levels. Can these levels be effectively managed? Strategies for peak management will be reviewed.

The session is intended for organizations offering or planning to offer online courses, looking to better understand the role of operational analytics. Acquired concepts will allow these organizations to better manage their online initiatives, and continuously improve students’ learning experience.

BREAK
2:15-2:30pm

BREAKOUT SESSION C

10 Steps to Tracking Engagement and Influence Online

JOHN MCDougall, Founder & CEO, McDougall Interactive

This presentation will cover why building thought leadership is important in marketing and how to track your progress. Authority marketing is the systematic process of increasing your reputation as an expert in your specific niche. This is done through content marketing, blogging, social media, public relations and off-line activities like writing a book and doing public speaking. These activities will have a significant impact on your website’s ability to rank in the search engines and have something significant to share in social media. Using a variety of tools including Google analytics I will show what authority metrics can be used to directly improve your bottom line.

The Open Data Analytics Initiative

ALAN GIRELLI, PHD., Director at UMass Boston Center for Innovation and Excellence in eLearning (CIEE)

The Open Data Analytics Initiative is a prototype cross-platform LMS data analytics engine and academic data consortium project focused on learning analytics for instructional design / course-learner customization.

Our presentation crosses two related areas of applied research in Learning Analytics:

- Data mining for educators
- Tools and approaches in learning analytics

This session will be of interest to professionals in each of the following fields:

- Instructional Design
- Academic Support Services
- Institutional Research
- Enrollment Services
- LMS administration
- Data Architecture and Analytics

Members of the ODAI team from the UMass Boston and Pathheer.Com will describe our two-year project to develop a prototype learning analytics engine suitable for cross-platform comparison and reporting of analogous data collected from disparate learning management systems (ie. Blackboard, Canvas, Desire to Learn, Sakai, Moodle). http://www.openedudata.org/

NETWORKING/CLOSING/VENDOR GIVEAWAYS

3:45-4:30pm