# BUSINESS ANALYTICS SPOKE Overview

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### The Promise of Big Data

MGI Report on Big Data (June 2011)

- Big data has now reached every sector. Modern economic activity simply couldn't take place without it.
- Big data will underpin new waves of productivity:



- per year
- ~0.7 percent annual productivity growth



#### administration €250 billion value per year

 ~0.5 percent annual productivity growth



#### Global personal location data

- \$100 billion+ revenue for service providers
- Up to \$700 billion value to end users



#### US retail

- 60+% increase in net margin
- 0.5–1.0 percent annual productivity growth



#### Manufacturing

- Up to 50 percent decrease in product development, assembly costs
- Up to 7 percent reduction in working capital
- US alone faces a shortage of 140~190k people with deep analytical skills and 1.5 million managers and analysts.

# Midwest Big Data Hub











### The Reality

McKinsey on Getting Big Impact from Big Data (Jan 2015)

"Our colleagues caught many people's attention.

Unfortunately, achieving the level of impact MGI foresaw has proved difficult."

For most legacy companies, data-analytics success has been limited to a few tests or to narrow slices of the business. Very few have achieved "big impact through big data," or impact at scale.

Three-quarters of analytics leaders from major companies quite committed to realizing the potential of big data and advanced analytics estimate that revenue or cost improvement achieved is less than 1%.











### Reasons for Lack of (Big) Impact

- Key Building Blocks: Good Plan, Management Support, Address Cultural and Skill-building Challenges for the Front Line to embrace Change
- Major Reasons for Failure:
  - Front line managers lack understanding and confidence in analytics
  - Organizational processes unable to accommodate advancements in analytics and automation
  - Analytics efforts that lack focus and clear business justification
  - Not involving the end users
  - Lack of robustness in analytic solutions
  - Analytics and data science methods unable to deal with the complexities of the real-world













### **Business Analytics vs. Data Science**

- Data Science: Extracting knowledge and insights from data
  - Can be applied to a number of domains including business
- Business Analytics: Enabling effective decisions and business processes
  - Benefits from data science
  - Has a well-defined context
  - Addresses or accounts for a number of other elements/nuances:
    - Behavioral aspects (decision makers, customers, ...)
    - Competing objectives and resources
    - Risks
    - Difficulty of execution

Cleansing
Models &
Algorithms
Analysis
Visualization
Implementation

Cleansing
Processes
Context
Risks/
Rewards
Behaviors
Work Flows

Data Business Science Analytics

"Predictive" vs. "Prescriptive" Analytics

Data science has a lot to offer for driving business analytics. Particularly now, as many businesses want to become data driven!













### Reasons for Investing in Big Data

**NEWVANTAGE Partners, Big Data Executive Survey (2012)** 

# WHAT TANGIBLE BENEFITS DO YOU HOPE TO ACHIEVE THROUGH YOUR BIG DATA INITIATIVES?

Improved customer experience **[VALUE]%** Better fact-based decision making 22 Increased sales New product innovations Reduced risk Higher quality products & services More efficient operations













### **Business Analytics Spoke @ MBDH**

### **GOALS:**

- 1. Organizations need guidance, pilots, and proven returnon-investment (ROI) case studies.
  - Areas/topics of mutual interest to our business and industry collaborators
    - Focus Area: Platforms for automation of prescriptive analytics
  - Pooled resources from industry, the hub, partner universities, and other funding organizations
- 2. Training and development of work force well versed with analytics and big data tools and technologies.
  - Effective workshops, short courses, and full academic programs ...
- 3. Data intermediaries
  - Information from multiple data sources, often from third parties.

Spoke aims to assist businesses to help unlock the full potential of big data and the next wave of innovation and growth!











### **Business Analytics Spoke @ MBDH**

#### SPOKE LEADERSHIP:

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### **Business Analytics Spoke @ MBDH**

### **CURRENT LIST OF COLLABORATORS:**

























































# **Midwest Big Data Hub**











## Big Data & Business Analytics Symposium

March 23-24, 2016 | Student Conference Center, Wayne State University

SPEAKERS FROM:

amazon Cleo

DOW CORNING









Hitachi Data Systems













### Learn from top practitioners from leading companies -

Learn strategies for managing, analyzing, and leveraging data captured through sales, service, marketing, product development, manufacturing, and distribution functions in local and global settings.

**Who should attend** - Great opportunity for business executives, consultants, and decision makers in IT, product development, manufacturing, operations, supply chain, marketing, and finance.

### Symposium features will include -

- Tutorials on Big Data Platforms and IBM Watson Analytics
- Discussion from executives and directors from a broad range of industries share their insights, case studies, and ROI
- Keynote addresses from experts who understand the potential for big data to improve operations and the business case that they made in implementation
- Panel discussions on empowering your organizations
- Vendor showcase to demonstrate latest tools and products
- Networking opportunities to meet with your big data peers





















# **THANK YOU!**

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