

BIG DATA DRIVEN BUSINESS ANALYTICS: *We are just getting started!*

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- 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:**



US health care

- \$300 billion value per year
- ~0.7 percent annual productivity growth



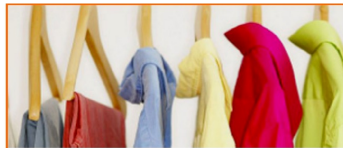
Europe public sector administration

- €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 possible
- 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

SOURCE: McKinsey Global Institute analysis

- US alone faces a shortage of 140~190k people with deep analytical skills and 1.5 million managers and analysts.

“Our colleagues caught many people’s attention.
**Unfortunately, achieving the level of impact MGI
foresaw has proved difficult.”**

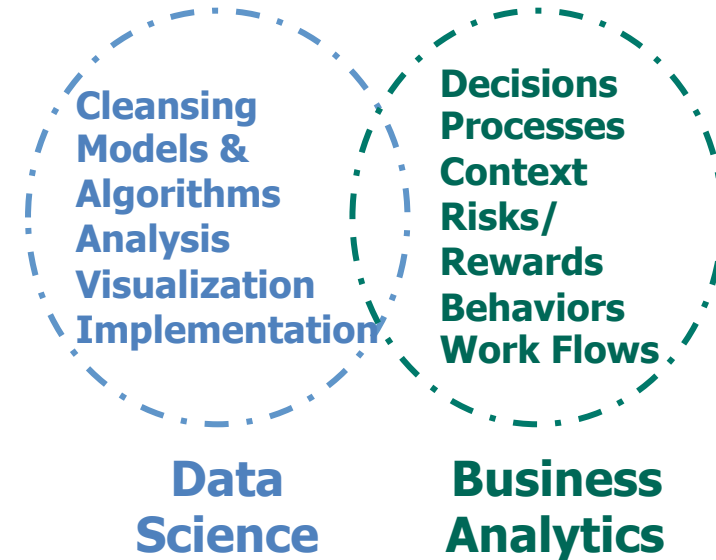
For most legacy companies, **data-analytics success has been limited** to a few tests or to narrow slices of the business. **Very few have achieved “big impact through big data,” or impact at scale.**

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%.**

SOURCE: David Court, *Getting big impact from big data*, McKinsey Quarterly, January 2015

- **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**

- **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
- **Examples:** Emergency Departments, Retail Inventory Management



**“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!**

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



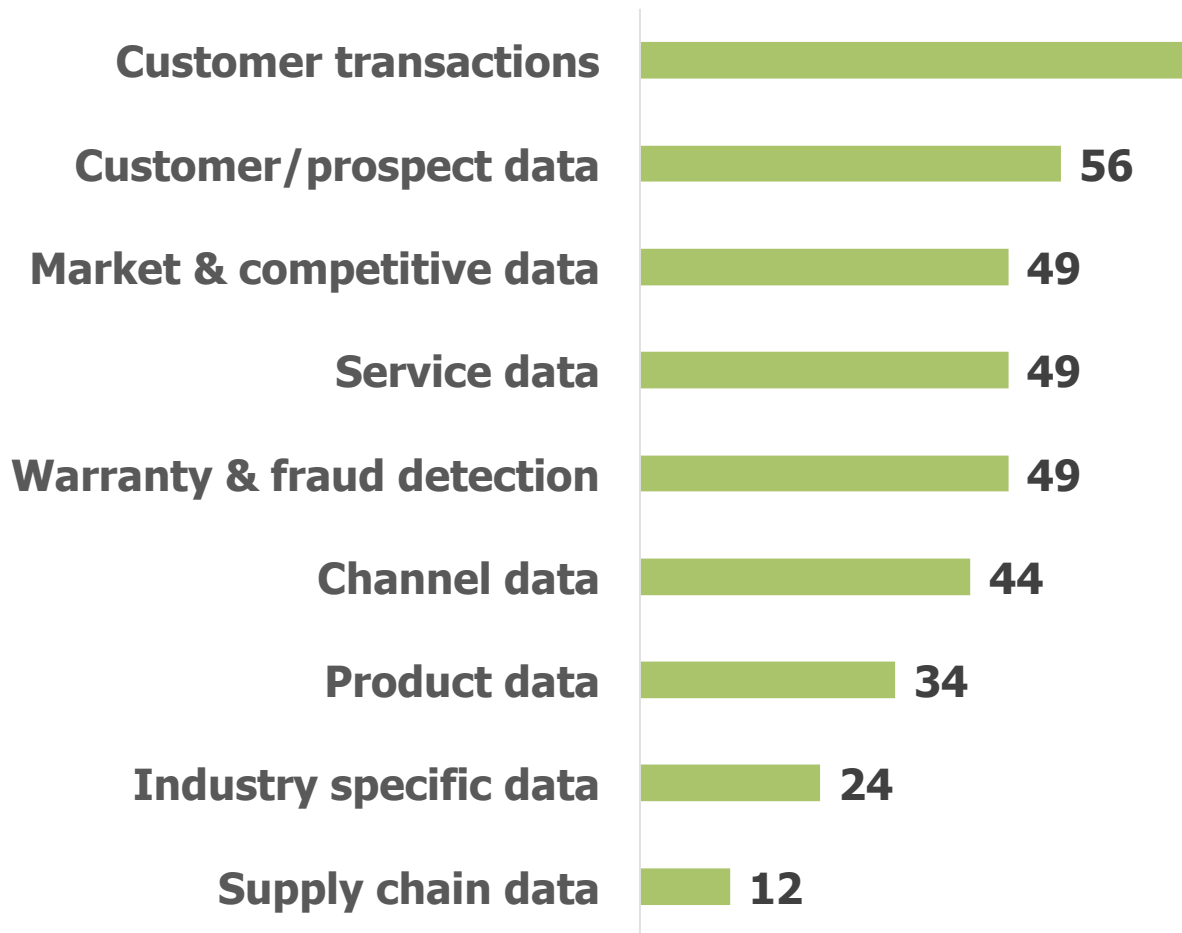
SOURCE: NEWVANTAGE PARTNERS, BIG DATA EXECUTIVE SURVEY 2012 & HBR.ORG

Reasons for Investing in Big Data

NEWVANTAGE Partners, Big Data Executive Survey (2012)

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WHAT DATA DOMAINS ARE YOU MOST FOCUSED ON?



OUR EXPERIENCE



SOURCE: NEWVANTAGE PARTNERS, BIG DATA EXECUTIVE SURVEY 2012 & HBR.ORG

GOALS:

- 1. Organizations need guidance, pilots, and proven return-on-investment (ROI) case studies.**
 - Areas/topics of mutual interest to our business and industry collaborators
 - 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.

Our spoke aims to assist businesses to help unlock the full potential of big data and the next wave of innovation and growth across the Midwest!

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Big Data & Business Analytics Annual Symposium: *Competing on Analytics*

March 24-25, 2016

Wayne State University, Detroit, MI

<http://bigdata.wayne.edu>

- ***Learn from top practitioners from leading companies*** - Learn strategies for managing, analyzing, and leveraging data captured through sales, service, marketing, PD, manufacturing, and distribution functions in local and global settings.
- ***Who should attend*** - Great opportunity for business executives, consultants, managers, and decision makers in information technology, product development, manufacturing, operations, supply chain, marketing, and finance.

Symposium features will include -

- **Tutorials** on big data platforms and technologies
- **Discussion from executives** from a broad range of industries who will share insights & case studies
- **Keynote addresses from experts** who understand big data
- **Panel discussions** on overcoming barriers to competing on analytics
- **Vendor showcase**
- **Networking opportunities**
- Meet and **recruit top talent**

Thank you!

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