Collaboration among Data Scientists, Statisticians, and Domain Experts

Interface 2015 : 45th SYMPOSIUM Computing Science and Statistics West Virginia University

Ashu Kumar
BI and Big Data Strategist
Director of Enterprise Business Analytics, Mylan Inc.
Global Director of Enterprise Business Analytics

**Mylan Inc.**

- Manage team of BI Analysts and Data Scientists
- Interface and bridge between business and technology
- Plan and execute Big Data strategy, roadmap and Implementation
- Incubate and roll out Data Science capabilities

8 Years as Tier-1 consultant

**SAP America - Strategic Advisory division**

- Practice Lead for Advanced Analytics/Big Data
- Principal Consultant

Adjunct Faculty & IST Advisory Board Member

**Penn State University**

8 Years as News Reporter/Editor in previous life
Why we need Data Scientists?

Analyzing what has happened…

… to control what will happen
Competitive Advantage

- Sense & Respond
  - Business Visibility
  - Cleaned Data
  - Standard Reports
  - Ad Hoc Reports & Analysis
  - Performance Analytics
  - Dashboards
  - What happened?

- Predict & Act
  - Business Insight
  - Optimization
  - Predictive Modeling
  - Statistical Analysis / Data Mining
  - What will happen?
  - What is the best that could happen?
  - Why did it happen?

... to move up the Analytics Maturity Curve

Data ➔ Information ➔ Knowledge ➔ Intelligence
... to enable Insight 360
What would a data scientist do?

...enable data driven decisions and actions
How would it help the business?

Descriptive
Data Analysis
Basic Metrics and KPIs
Reports and Dashboards
What-if analysis

Diagnostic

Predictive
Simple Mathematics
Prescriptive Models

Prescriptive
Monitor Business Operations
Designing Business Strategies

Data Science
Problem Solving
Complex Algorithms
Finding a needle in hay
Data Science Skills: IT vs Statistics vs Business

Source: Gartner
Thank you

Let’s be in touch: https://www.linkedin.com/in/ashukumar

References

Emerging Role of the Data Scientist and the Art of Data Science
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Analyst(s): Douglas Laney, Lisa Kart (Gartner)

Organizational Principles for Placing Advanced Analytics and Data Science Teams
Published: 4 September 2013
Analyst(s): Alexander Linden, Gareth Herschel, Neil Chandler, Josh Parenteau (Gartner)