

MIS - Business Analytics

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Format

- Five text and additional papers
- Discussion forum
 - I tried not to harp on Cache' too much
 - Overdid it at times
- Decent amount of writing
- SAS, Postgress, SQL, ETL

Business Intelligence

- BI should be separate from IT
 - Ferguson, B. (2014). GE and the culture of analytics. *MIT Sloan Management Review*, 55(3), 1-4.

Business Analytics

- Good information in the text
 - Bartlett, R. (2013). *A practitioner's guide to business analytics*. New York, NY: McGraw-Hill.
 - Statistics oriented author
 - Distracting amount of idioms
 - Business decisions have to be based on analytics.
 - Managers that aren't analytical and need an explanation of everything are costly
 - Managers and executives need to be groomed from analytics capable individuals

BSP

- Best statistical practice
 - Statistical diagnostics
 - Responsible for quality and encompass analysis accuracy
 - Error detection
 - Reliability of analysis result interpretation
 - Investigation into possible improvements
 - Statistical qualifications
 - Statistical review

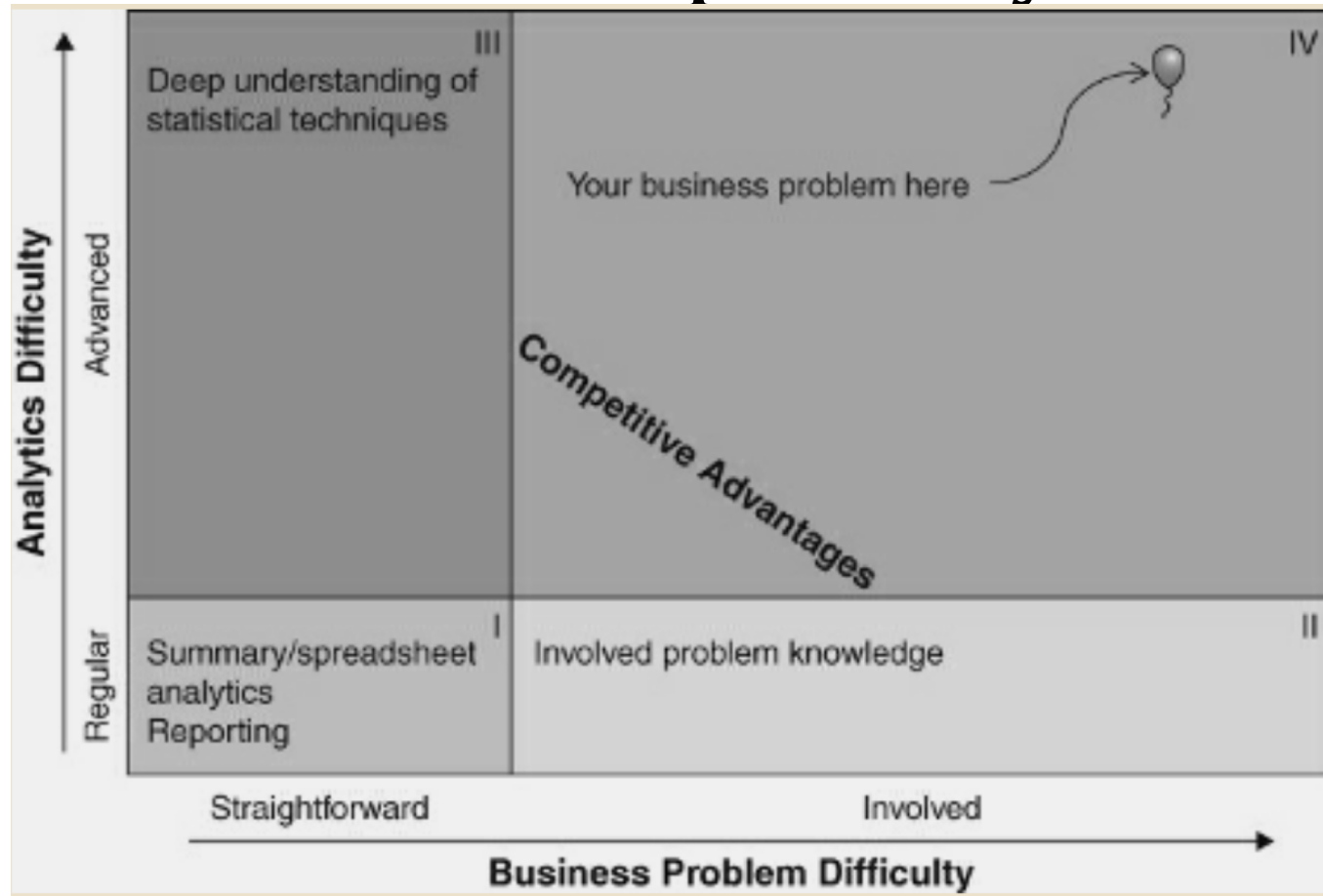
BA Team

- Mix of team members
 - Computer science
 - Data warehouse
 - Statistical experts
 - Don't worry about unicorns
 - Ongoing training and certifications

BA Needs a Leader

- Zaleznik, A. 1977 Managers and leaders: Are they different? *Harvard Business Review*, 55(3):67-78
 - Motivated by different behavioral indicators
 - “They differ in motivation, personal history, and how they think and act”
 - leadership has more to do with persuading people to act on and follow a corporate vision along with the leader developing the corporate vision
 - Managerial tasks focus more on planning, organizing and problem solving

BA Capability



- Analytically challenged companies fail in III and IV without even realizing it (Bartlett, 2013).

Project Selection

- Timeliness
 - Completed soon enough to recognize value
- Expectations
 - Marketing hype
 - “Perception is reality”
 - Client education
- Cost
 - BA work from a strong team is too valuable to waste
 - ROI as a arbiter

Data Warehousing

- Fun Book
 - Kimball, R., & Ross, M. (2013). *The data warehouse toolkit: The complete guide to dimensional modeling (3rd ed)*. Hoboken, NJ: Wiley.
- Data Mart bus architecture - dimensional
 - Built on business process – not a department
 - Requires MDM
 - No stand alone data marts or data warehouses
- Versus single normalized data structure

Enterprise Performance Management

- Good text - Marr, B. (2015). *Big Data: Using SMART Big Data, Analytics and Metrics To Make Better Decisions and Improve Performance*. Wiley. Kindle Edition.
 - Case study text light
 - SMART model
 - Strategy 1st, not data – what is the business objective
 - Measure – how to access the data
 - Analytics
 - Report
 - Transform

Retail Predictive Pricing

- Bradlow, E., Gangwar, M., Kopalle, P., Voleti, S. (2017). The role of big data and predictive analytics in retailing. *Journal of Retailing* 93(1), 79-95.
 - Excellent case study
 - Their example in the paper is not big data but their work may have been obfuscated
 - Thorough coverage of pricing dynamics and justification for their model parameters
 - Examples of their analytics

Gartner 2018 Predictions

- As business problems become more complicated, the sophistication of the analysis required to solve them continues to increase. Also, the level of knowledge required to understand the analysis becomes more sophisticated (albeit at a lower level), placing a continual brake on the adoption of more sophisticated analysis.
- Strategic Planning Assumption: By 2024, a scarcity of data scientists will no longer hinder the adoption of data science and machine learning in organizations.