From Smart to Smart or Dumb and Dumber?

How will your BI evolve?

Sogeti Ovum BI Symposium
4th October 2010

Tim Jennings, Research Fellow, Ovum Enterprise
tim.jennings@ovum.com
The Boeing 737 engine generates 10 Terabytes of information per 30 minutes of flight.
With around 30,000 flights in Europe per day, that’s a daily total of 2.4 Exabytes.

Welcome to the world of big data!
Agenda

- The explosion of data
- Business analytics
- How to be smart
- How to avoid being dumb
- Data wars
Great idea to have a marketing guy running the MDM team: he really knew how to drive adoption

“Smart Companies” is mainly a cultural challenge

Mobile only 4 publication not exploration thus not really BI: agree w. observation, not conclusion

BI doesn’t make companies smarter, it makes smart companies better
Exploding data volumes are creating a new wave of business opportunity and BI innovation

- Information increasing across all dimensions
  - Digital business processes
  - Unstructured documents and records
  - Embedded systems and sensors
- Storage is barely keeping pace
- New techniques emerge for processing large data sets
  - Private and public cloud services
  - Hadoop
  - R programming language
Opportunities and challenges in the media industry

- Convergence of traditional broadcast channels and Web is causing massive disruption
- Audience behaviour changing dramatically – new devices, new channels – requires unified experience
- Massive volumes of data enable sophisticated audience targeting and mass personalisation
- Data will be at the heart of the transformation of the media and broadcast industry
Opportunities and challenges in the energy industry

- Environmental concerns, aging infrastructure, and high fuel costs are forcing utilities to change decades-old business processes
- Smart grids and smart metering are transforming the energy value chain
- Smart infrastructure will create a huge surge in data volumes
- From generation, transmission and distribution, through to retail and into energy trading and risk management, utilities can extract value from this data
Similar patterns repeated across almost every industry sector

- “In-silico” drug discovery and clinical trials in pharmaceuticals
- Taking a global view of risk in retail banking
- Real-time analysis of trading data for compliance in financial markets
- Cross-channel analysis of customer data in retail
- Geophysical analysis in oil and gas
- Genome analysis and personalised treatment in healthcare
Key question:

How do you leverage this explosion of data?
Analytics is becoming an essential and transformative part of doing business

- Organisations must have the insights to help optimise
  - Internal processes
  - Customer relationships
  - Supply chain
  - Partner networks

- In many sectors, this intelligence is part of business and industry transformation

- Analytics must be an integral part of business applications and processes
Case study – marketing optimisation at Scotiabank

- Scotiabank analyses 7 million customer accounts to create highly targeted marketing campaigns
- Needed to improve data quality and integrate data assets as a precursor
- Moved from 5 campaigns per year to 60 campaigns per year
- Create highly personalised customer communications, and optimised campaigns
- Scotiabank has added 100,000 incremental accounts as a result
Case study – customer sentiment analytics at Unilever

- Highly successful campaign for Dove products, included viral marketing
- Used discussion board and social media to gain customer feedback
- Unilever wanted to quickly analyse text data to improve messaging
- Text mining used to analyse word combinations and sentiment over 40 dimensions
- Unilever was able to tune its campaign and respond to customer feedback
Key question:

What do you need to do to make your business smart?
Organisations become smart by making consumers, customers, citizens and business partners smart

- In an information economy, individuals and enterprises will choose to do business with those that can provide them with intelligence

- Examples:
  - Online stores such as Amazon which provide strong reviews and recommendations
  - Energy suppliers who give customers feedback on their usage
  - Suppliers who can provide additional intelligence to help retailers sell their products and services
  - Insurers providing clients with extended analysis of risk
  - Government providing citizens with details of road travel

- Information adds a premium to the transaction value
Case study – providing partner insights at Channel 4

- 4oD is Channel 4’s video on demand platform
- Works with delivery partners including Virgin Media, BT and Tiscali
- Monitors content creation and provisioning in real-time, consolidating data from three systems
- Partners provided with real-time insights and supported by individual SLAs
- Can now attract new service providers and grow Channel 4’s on-demand business
Case study – self-service customer intelligence at Emdeon

- Leading processor of healthcare transactions distributes 800,000 reports a day
- Integrated 12 different data sources into a single interface
- Analyses customer service calls, transaction volumes, claim rates and trends, and generates automatic alerts
- Allows business partners (payers and providers) to self-service
- Now presents information rapidly and flexibly to its customers
Your view?

- Would you select a supplier or business partner who could provide you with intelligence as an added value, rather than one who was less “smart”? 

Yes  
No
Smart and smarter, or dumb and dumber?
The volume of data, and its analysis, brings a number of challenges and risks

- Coping with storage
- Managing data quality
- Information security and privacy
- Scaling up BI infrastructure
- Analytics done in isolation
Key question:

How do you manage and mitigate the data risk?
Managing metadata has become a critical activity for aligning data with business processes

- Establishing a common view across disparate data sets
  - The foundation of data integration
  - E.g. Single customer view, unified product database
- Important in many business scenarios
  - Mergers and acquisitions
  - Compliance
  - Financial consolidation
- Creates a reference model for analysis of large data sets
- Makes the link between data and business entities
Case study – integrated business data at Energie Baden-Wurttemberg (EnBW)

- Acquisitions and market liberalisation saw data volumes soar to 1.5 billion records per month for settlement reporting, fees determination etc.
- Created a single data provider (metadata) layer across all data sources
- Business users can seamlessly create reports for specific audiences
- Embedded analytics into core business processes including customer support
- Decreased the time taken for period close and reconciliation
Case study – strategic data analysis at Brinker

- 1 million customers a day dine at Brinker’s restaurant brands
- Standardised menu item master data across all restaurants and systems to improve accuracy and speed up training
- Managers had previously worked with summary historic data
- Set up new data warehouse using food service industry data model
- Can now analyse table turn, cook times, takeaway volumes and other metrics, and act within 24 hours
Your view?

- Do you have a metadata management, or master data management project currently underway in your organisation?

Yes  No
The convergence of big data, cloud, and open source is creating a new BI landscape

- The major players are battling for data supremacy
  - EMC acquires Greenplum’s massively parallel data warehousing technology
  - Oracle releases new versions of its Exadata “database machine” and its Exalogic cloud platform
  - SAP acquires Sybase’s database and mobility technology
  - IBM acquires Netezza’s data warehousing and business analytics technology, and opens global analytics solution centers

- New technology models will be disruptive
  - Big data analysis
  - In-memory processing
  - BI in the cloud
Key Messages

- Exploding data volumes are creating a new wave of opportunity and BI innovation
- Analytics is becoming an essential and transformative part of doing business
- Organisations become smart by making consumers, citizens, customers and business partners smart
- Managing metadata has become a key goal for aligning data with business processes
Thank you

Tim Jennings
Research Fellow and Chief Analyst, Ovum Enterprise

tim.jennings@ovum.com

Twitter: @tjennings