



Innovation and Competitive Differentiation with Data Dynamics

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Information Excellence Summit
Feb 25th, 2012 Bangalore
<http://Informationexcellence.wordpress.com>

Soumendra Mohanty: Profile



Background:

Soumendra Mohanty is a Partner and leads Accenture's Global Information Management Services practice.

Skills Summary

- Soumendra is an expert within the Information Management area, focusing primarily on BI architectures, data warehouse, CRM/Customer Insight, MDM, Analytics and PCM solutions. He is experienced in leading project teams through the lifecycle of a project, and has successfully helped sell and delivered BI and DW projects in multiple industries, including products, CPG, brokerage, banking, telecommunications, and retail.
- Soumendra has authored several books on data warehousing and Analytics and published numerous journals in DM Review. He recently authored a book, A Practical Guide to Data Warehousing Design and Implementation published by Tata McGrawHill.
- He has also presented in numerous international forums.

Education

Functional Expertise:

- BI Architecture
- Data Warehouse
- CRM/Customer Insight
- Supply Chain Analytics
- Marketing Insights
- Commercial Intelligence
- MDM
- CDI

Industry Expertise:

- Basel II
- Consumer Packaged Goods
- Pharma
- Retail
- Brokerage
- Banking
- Telecommunications
- Insurance

A Selection of Experiences:

- *Large US Investment Bank* – Partnered with client to architect and implement Basel II DW and Risk Reporting solution. Ongoing work involves defining strategic directives for AML implementation, KYC Analytics, KYT Analytics.
- *Large US Global Bank* – Basel II Data Mart. Acted as a Business Intelligence (BI) subject matter expert (SME). In his role as BI SME, Mr. Mohanty was responsible for architecting, defining deliverable and work plan direction, sharing relevant industry experience.
- *Large Retail Chain* – Enterprise Warehouse Roadmap, Consumer Analytics, MDM implementation. Was the Technical Architect and SME for creating and operationalizing the ETL framework for data integration across the enterprise business functions. The framework interfaced with various operational systems. The EDW was built on an application architecture that consisted of Teradata, Informatica, BO and SAS.
- *Large Pharma Company* - Enterprise Warehouse Roadmap and MDM implementation. Was the Lead Architect and SME for creating and operationalizing the ETL framework for data integration across the enterprise business functions. The framework interfaced with various operational systems. The EDW was built on an application architecture that consisted of Teradata, Informatica, SAS.
- *Financial Services Company* – Customer Insight & Marketing DW. As the delivery lead, Mr. Mohanty managed a delivery team of 260+ resources and was responsible for driving the following technical and business outcomes:
 - 1000+ daily high performance ETL streams
 - Logical, physical, and business models in Oracle
 - End-user reporting capabilities (Canned, Ad-hoc, and OLAP)
 - Increase in Marketing effectiveness, while reducing costs

The Value of Information



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"We have lots of information technology. We just don't have any information."

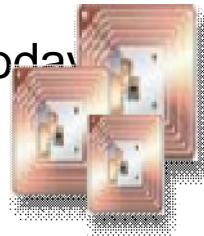
There is an Explosion in Data and Real World Events



4 Billion Internet users by 2012

1.3 Billion RFID tags in 2005

30 Billion RFID today



4.6 Billion Mobile Phones World Wide

Capital market data volumes grew **1,750%**, 2003-06



Twitter process **7 terabytes** of data every day

World Data Centre for Climate

- **220 Terabytes** of Web data
- **9 Petabytes** of additional data



Facebook process **10 terabytes** of data every day

Data is becoming part of every industry and business function...



Big Data is top of mind for virtually every industry, impacting core business processes.

Resources



Upstream Oil & Gas companies monitor 40K sensors per asset (combined with 4d seismic imagery) to drive real-time production operations and maintenance & reliability programs.

Health



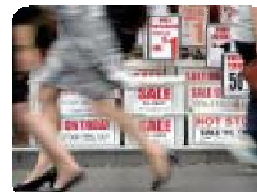
Electronic health records, home health monitoring, telehealth, and new medical imaging devices drive data deluge in a connected health world.

Public Sector



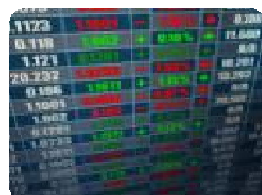
USPS applies unique barcodes so it can seamlessly induct and account for postage. This results in ~1B pieces per day, scanned multiple times throughout the supply chain.

Retail



Emerging location based data, group purchasing and online leads allow Retailers to continuously listen, engage and act on customer intent across the purchasing cycle.

Financial Services



Pioneers in Big Data, Capital Markets firms continue to innovate around low latency systems to unlock trading arbitrage opportunities.

Communications



Mobile usage data for Service Providers unlock new business models and revenue streams from Outdoor Ad placement to medical adherence.

Business Expectations: Maximize Return on Data



$$\text{Return on Data} = \frac{\text{Value of Data}}{\text{Cost of Data}}$$

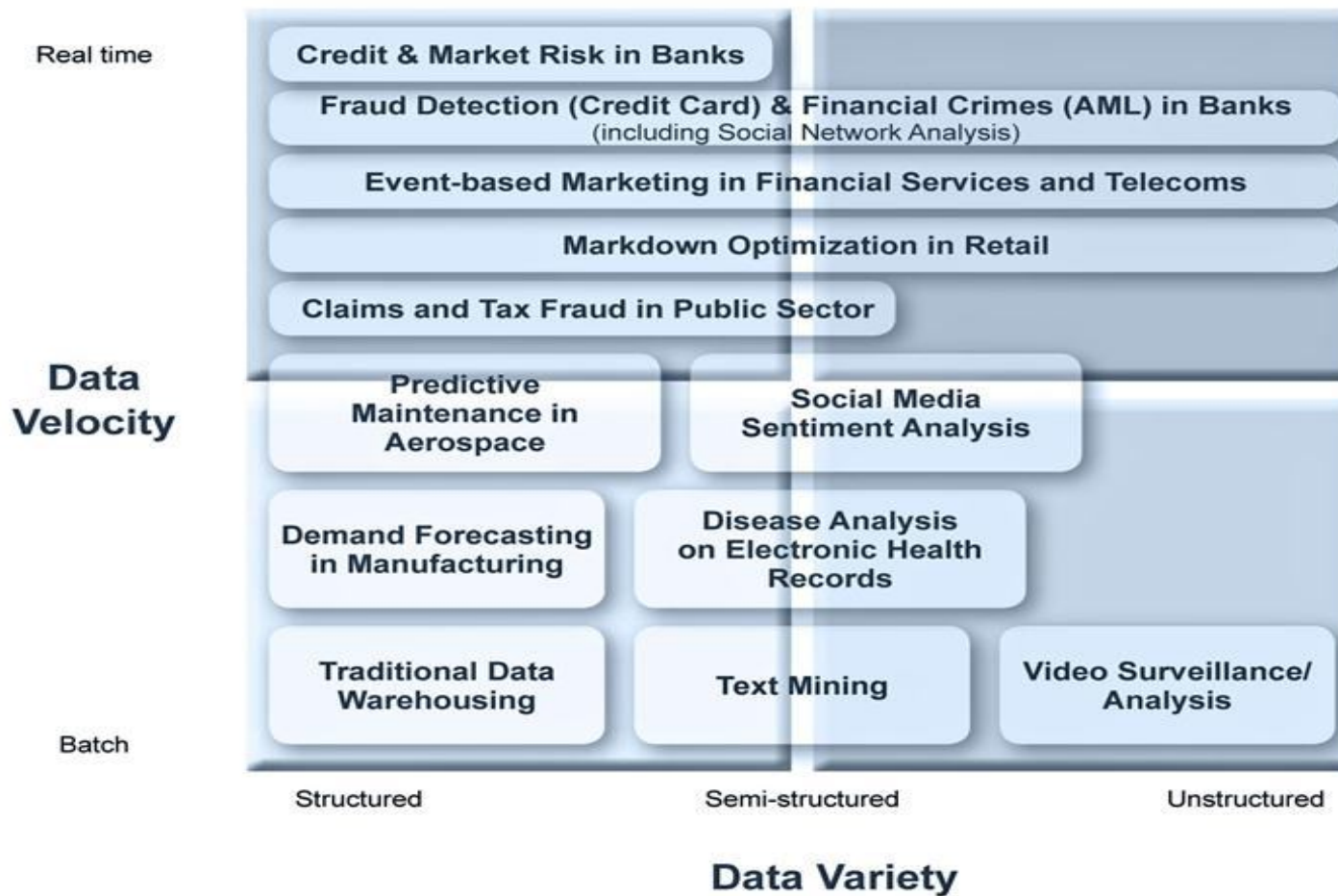
“Definitive Value of Data” – Data within the firewalls, in the EDWs, Data Marts, Reports, Dashboards, this data is currently used today to help/run businesses; proven, tried, tested!

“Perceived Value of Data” – Data outside the firewalls, we have a view that this data is valuable, but it is not proven yet!

What are the Industry use cases?



Potential Use Cases for Big Data Analytics



What Innovations we are seeing in this space?



COURSEKICK.COM
THE CLIMATE CORP
DECIDE.COM
CATAPHORA
DATAWRANGLING
FLIGHTCASTER
AARDVARK
FACTUAL

The Data Driven Organization



Treat data as a strategic asset, seek to maximize it's value to the organization



Invest in common services, data platforms and tools



Rapidly prototype, deliver, and measure value-added data services, evolve over time

- Data-driven decision making
- Experimentation and continuous improvement with academic rigor
- End-to-end ownership of services
- Sharing of platform, tools and code

Culture

The Value of Information

