The Enterprise Brain: Advanced Analytics

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1. Quick Recap from Day One: Enterprise Analytics Defined

2. Where to start (hint: you’re already there today).

3. Manufacturing Use Cases

4. Banking and Finance Use Cases

5. Healthcare Use Cases

6. “Real World” Company Example
Organizations can use big data and predictive analytics to deliver the right information, product, service or action at the right time.

High-volume, high velocity / high variety information assets that demand cost effective, innovative forms of information processing for enhanced insight and decision making.

Analytics is fastest growing space in Enterprise Applications Marketplace

Integrate & analyze relevant data sources.

Move beyond basic BI to diagnostic, predictive and prescriptive analytics.

Closely tie insights to business decisions.

Secure-24’s Use Case: Our Integrated Operations Center (IOC) uses metadata and keyword tracking to define patterns in data, resolve tickets faster, and reduce ticket volumes. This ultimately leads to very happy customers (98% client satisfaction rating) and an industry leading First-Tier-Resolution (87% of issues resolved on the first call).
EPM and Big Data

Accelerate and Enhance EPM using Big Data

Product Line Profitability
Contribution Margin

Hyperion Planning, Hyperion Essbase, Tableau

DWH & Datamarts (Teradata)

ETL (ODI)

OLTP (Oracle), ERP (SAP), CRM (Microsoft Dynamics), Legacy

ETL (ODI, Sqoop)

Trafodion SQL, Spark, Scala, Hive, Hadoop MR

Data Lake (HDFS, HBase)

Queue (Kafka)

Stream (Flume)

Documents, Emails, Web logs, Clicks, Social Networks, Scanner data, geolocation data

Social vectors & sentiment analysis data as drivers

Warranty Analysis

Customer Retention Analysis

Acceleration and Enhancement EPM using Big Data

EPM and Big Data

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USE WHAT YOU HAVE TODAY (ASSUMING YOU HAVE A DW)

1. Get visibility down pat.

Use OBIEE (or what you may already be using today) as a reporting front-end for Hadoop.

2. Start collecting data sources.

Today, traditional databases acting as a DW... Knowing tomorrow it may change.

3. Add streams for the future

Foresee the DW can be a Hadoop cluster with the ability for structured, unstructured, sensor, geo, logs, social and other types of data streams.
Example industry uses for Enterprise Big Data

Manufacturing
- Quality Assurance
- Predictive Analytics
- Supply Chain Economics

Financial, Banking and Insurance:
- Fraud Detection
- Market Intelligence
- Social Sentiment

Healthcare
- Patient Billing Data
- Electronic Health Records
- Social Sentiment

...AND EVERYONE IS CONCERNED ABOUT SECURITY
Automobile Quality Assurance

Industry: Automobile Quality Assurance

Pamplin College of Business wondered if social media postings by consumers could be a source of useful information about vehicle safety and performance defects for automobile manufacturers.

The first large-scale case study ultimately confirmed the value of social media for vehicle quality management. Pamplin’s research shows that the existence of safety and performance defects is strongly predicted by the incidence of automotive problem reports in social media.

What are people saying about Toyota?
- Bad for Toyota: 26%
- Good for Competitors: 13%
- Scared of Toyotas Now: 12%
- Poor Response by Toyota: 12%
- Jokes (making fun of Toyota): 15%
- Supports Toyota: 12%
Other Business Use Cases

- Replacing Legacy from Data Warehouses
  - Netezza, Teradata, Exadata, Greenplum

- Enterprise Performance Management (EPM) – Customer sentiment analysis for budgeting and forecasting

- Low-cost implementation of IoT Solutions
- Operational Data Analytics
- 360 Views (e.g. Customer 360)
- Data Science – Model accelerators
XYZ Automotive Systems
A “Fictitious” Company located in Michigan

- Decreased ticket volumes by 35% using analytics + meta keyword trending analysis.
- Testing BI dashboard to supply chain analytics using Hadoop

- Hyperion EPM & BI Environment
- 1,000+ business users
- Using Analytics & BI for product mix analytics across geographies
- HFM, FDMEE, DRM, Essbase, Planning, OBIEE, Oracle 11gR2 RAC w/ Hadoop, HDFS
- Social and Supply Chain streams in place
- Ability to scale resources on-demand
- Automated installation of Oracle Linux, Microsoft, and Oracle Databases
- Entire environment deployed in weeks opposed to months
IT Dependency Visualization

- Understand system and application interdependencies
- Review communication pathways
- Validate design
- Develop migration map
- Review existing challenges
Contact Us

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