Building a Smarter Planet

Business Optimization Through Information & Analytics

Suresh Kumar
Executive Consultant Information Agenda
Banking and Financial Markets
The world is changing and becoming more...

Instrumented
Interconnected
Intelligent

The resulting explosion of information creates a need for a new kind of intelligence

... to help build a Smarter Planet
We are Producing an Explosion of Information…

**Volume**
988 exabytes: The amount of digital information that will exist in 2010, equal to a stack of books from the sun to Pluto and back.

**Variety**
80% of new data growth is generated largely by email, with increasing contribution by documents, images, and video and audio.

**Velocity**
77% of executives say they do not have real-time information to make key business decisions.

Source: Various IBM and Public Studies
Many Organizations are Operating with Blind Spots; Those Applying Information & Analytics are Breaking Away

1 in 3
Business leaders frequently make decisions based on information they don’t trust, or don’t have

1 in 2
Business leaders say they don’t have access to the information they need to do their jobs

Source: IBM: Break Away with Business Analytics and Optimization Study
The Key is Leveraging Information and Analytics

*Informed, Real-time Decisions at the Point of Impact...*

**Breakaway Approach**

- **Lack of Insight**
- **Inefficient Access**
- **Velocity**
- **Volume**
- **Variety**
- **Inability to Predict**

- Sense and respond
- Instinct and intuition
- Skilled analytics experts
- Back office
- Automated
- Predict and act
- Real-time, fact-driven
- Everyone
- Point of impact
- Optimized
Imagine if you could...

...predict infection in premature newborns 24 hours earlier?

...apply social relationships of customers to prevent churn?

...adjust credit lines as transactions are occurring to account for risk fluctuations?

...determine who to offer discounts at time of sale instead of offering to all?

Medical

Telco Call Center Rep

Loan Officer

Retail Sales Associate
Transforming Business Through Information and Analytics
As Significant as ERP & CRM…

Client Investment in Business Analytics & Optimization Projects is Growing over Twice as Fast as Business Automation

- Creating Value
- Lowering Costs

Information & Analytics

Business Optimization

Automation
Accelerating Business Optimization…

An Industry Context & Technology Innovation to Accelerate the Journey
Information Agenda

A proven, industry-specific approach for aligning information with business objectives

Create Value

Establish end-to-end vision & business-driven value

Lower Costs

Align people, process & information

Define & Govern

Accelerate projects for short & long-term ROI

Plan an Information Agenda

Align an extensible information infrastructure
Information Agenda
Strategy, Roadmaps, Information Agenda Guides

- Over 300 Customer Workshops
- 465 Industry Accelerators
- 40 Industry-Specific Solutions
A Flexible Information Platform

Create Value

Establish a Flexible Information Platform

Plan an Information Agenda

Apply Business Analytics to Optimize Decisions

Costs

Trusted Information Platform

Workload Optimized Systems & Services
Taking it to the Next Level with Business Analytics & Optimization

IBM Smarter Business and Technology Series

Create

Plan an Information Agenda

Establish a Flexible Information Platform

Apply Business Analytics to Optimize Decisions

Costs

Business Analytics & Optimization Solutions

Profitable Growth
Cost Takeout & Efficiency
Proactive Risk Management

Business Analytics & Optimization Platform

Financial Services
Public
Distribution
Industrial
Communications

Cross Industry

Supply Chain Management
Customer Relationship Management

Performance Management & Analysis
Predictive Analytics
Process Optimization

Trusted Information Platform

Information Integration & Master Data Management
Data Warehousing
Enterprise Content Management
Data Management

Workload Optimized Systems & Services

IBM
Workload Optimized Systems and Services
Designed, integrated systems provide a foundation

<table>
<thead>
<tr>
<th>Smart Business Systems</th>
<th>Integrated hardware and software solutions, optimized for specific workloads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CloudBurst</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>System Optimizers</th>
<th>System technology enhancements that hone capabilities for specific workloads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IBM Smart Analytics Optimizer for DB2 for z/OS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Purpose Platforms</th>
<th>A choice of architectures – servers and storage – each fit for purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>System z</td>
</tr>
</tbody>
</table>

IBM Smarter Business and Technology Series
IBM Data Management
Manage data over its lifecycle

Capabilities
- Provides a solid foundation for managing all your data
- An integrated, modular environment to manage enterprise application data and optimize data-driven applications, from requirements to retirement across heterogeneous environments

Business Value
- **Grow the business** by accelerating solution delivery and maximizing data availability.
- **Manage Costs** by managing data growth, optimizing performance, streamlining upgrades and retirements and facilitating cross role collaboration.
- **Govern Information** with data privacy and security solutions to assure compliance.

DB2, Informix, SolidDB, Optim, Guardium
IBM Enterprise Content Management
Optimize content, process and compliance management

Capabilities
- Provides the foundation for managing production volume images, enterprise reports, office documents and consolidating multiple content repositories for the enterprise

Business Value
- **Capture, manage and leverage** enterprise content
- **Optimize** business processes
- **Create insight** from unstructured information
- **Manage** regulatory compliance

FileNet P8 Platform, IBM Content Manager/CMOD, IBM Content Collector, eDiscovery, OmniFind
IBM InfoSphere
Create, manage, govern and deliver trusted information

Capabilities
- Master Data Management, Information Integration and Data Warehousing can provide a single, trusted view of information across the enterprise.
- Helps in Information Governance

Business Value
- **Create a single view** of your business
- **Deliver** better business intelligence faster
- **Consolidate** your application infrastructure
- **Get your arms around** your data

InfoSphere Master Data Management, InfoSphere Data Warehouse, Smart Analytics System
Business Analytics
Integrated SOA-Based Open Platform for BI, Planning, and Analytics

Capabilities
- Improve your analytical and decision support capabilities by replacing manual decision-making and eliminating spreadsheet proliferation.
- Seamless integrated capabilities to improve analytical support capabilities
- Deploy industry-specific and cross-industry solutions tailored to your needs.

Business Value
- Make better, faster decisions by understanding, analyzing and sharing info
- Drive dynamic, reliable financial performance management practices
- Realize fast time to value with packaged applications and solution accelerators
- Dialogue with customers in real time, optimizing the outcome of each interaction
- Bridge the gap between lab-coat prediction and real time interactions
- Lower cost of ownership with unified SOA-based business analytics system

IBM Smarter Business and Technology Series
Packaged Analytics

Blueprints, Best Practices, Industry Assets…

Flexible Approach…
Based on Middleware for Open Platforms

- Sales Analytics
- Procurement Analytics
- Talent Analytics
Banking Data Warehouse Model (BDW)

Supported analysis using Business Solution Templates

<table>
<thead>
<tr>
<th>Relationship Marketing</th>
<th>Risk Management</th>
<th>Compliance</th>
</tr>
</thead>
</table>
| • Customer Interaction Analysis  
• Customer Investment Profile  
• Individual Customer Profile  
• Wallet Share Analysis | • Credit Risk Profile  
• Credit Risk Assessment  
• Asset Securitization Analysis  
• Operational Risk Assessment | • Financial Capital Adequacy Analysis  
• Structure Of Regulatory Capital  
• Suspicious Activity Analysis  
• SOX Balance Sheet Analysis |
| • Customer Complaints  
• Delinquency Analysis  
• Customer Loyalty  
• Market Analysis | • Outstandings Analysis  
• Portfolio Credit Exposure  
• Security Analysis  
• Liquidity Risk | • Capital Allocation Analysis  
• Capital Procurement  
• Credit Loss Provision  
• Funds Maturity Analysis |
| • Campaign Analysis  
• Cross Sell Analysis  
• Customer Attrition  
• Lead Analysis | • Debt Restructuring  
• Involved Party Exposure  
• Location Exposure  
• Non Performing Loan | • Cash Flow Indirect Financial Institution Analysis  
• Income Statement By Function Analysis  
• Statement Of Changes In Equity Analysis  
• Balance Sheet Portfolio Basis Approach Analysis |
| Profitability | Asset & Liability Management | |
Taking it to the Next Level: Industry by Industry and With Experts from IBM…

**Business Know-How**
Strategy & Change, 5,000 Dedicated Consultants
Q: Who invests in these integrations?

A: IBM

A: You
Approach for Business Analytics

- Don’t embark on a big bang approach to solve the business Analytics challenge
- We need to have a big vision (Complete) for the Bank’s need but execute on a manageable and prioritized scope of work in phases
- We need to have a trusted information foundation in place for achieving the big vision of business analytics
- Educate the business users on the use of business intelligence and prioritization. Share the plan of achieving the big vision with the business users. This is one of the most overlooked aspect of business intelligence and is also a major cause of failure of such projects
- Identify the quick wins for business analytics projects and plan for their execution first
Building a Smarter Planet

Business Optimization Through Information & Analytics

Suresh Kumar

17-Nov-2010 Hanoi