

IBM Software

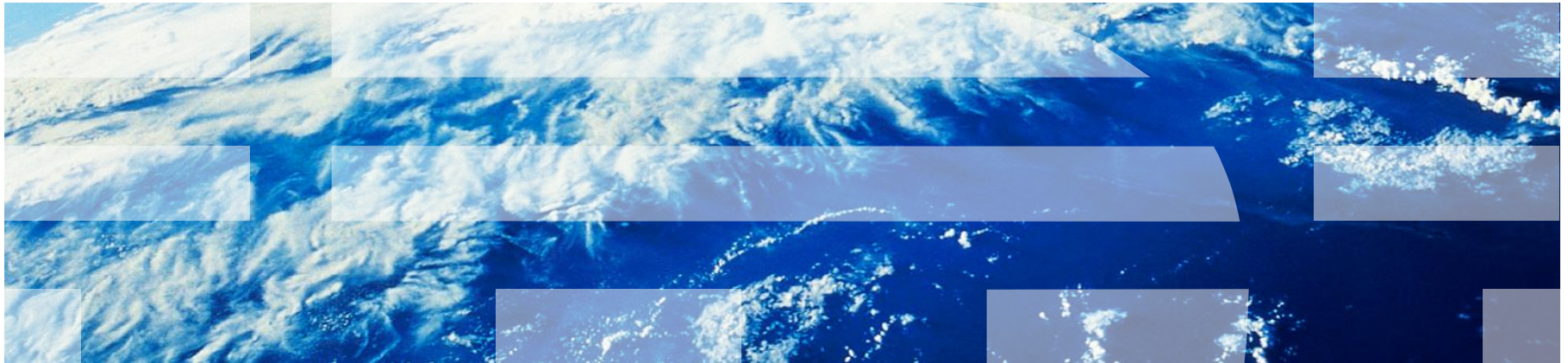
# Information On Demand **2010** Comes To You

Unlock the True Value of Your Information

# Turning Data into Actionable Insight - Financial Services Keynote

Laurence Trigwell

Worldwide FSS Executive & European Industry Leader, Business Analytics, IBM



## Financial Services Performance Challenges

Bank, consultants and analysts agree on a broad range of 'Multi-dimensional pressures on Performance'

- Demand for increased transparency driving **Governance, Risk & Compliance** agenda
- Continuing market & shareholder demand for **increased capital efficiency**
- **Sustainable growth** AND margin from increasingly **savvy customers** across all lines of business
- Efficient AND effective **client servicing AND selling** through **Multi-channel**, agency network etc
- **Improving operational performance** in the back and middle office, claims management etc.
- **Increased ROI from Information Technology** (est. 70% dedicated to maintenance, rather than innovation.)



**Sustainable insight & continuously improving performance necessitates alignment of plans, goals across matrixed functions, business lines, resources and systems**

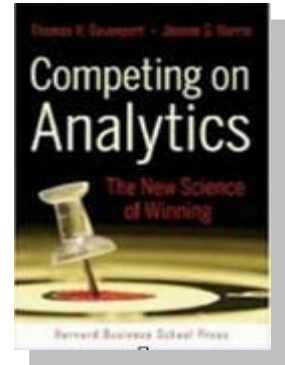
## Key Financial Services Performance Management Challenges

- Decision-makers rely on **manual spreadsheet-based processes**, or need to pull financial and operational data from **multiple, disconnected sources**.
- Information is often **difficult to get into the right hands quickly enough** to facilitate a customer interaction.
- **Inaccurate, incomplete and redundant data**.
- **Struggle to achieve a full view of their customers**, including all accounts, demographic information, and transaction history across all channels.
- Banks and Insurers have large, multiple data warehouses for risk and compliance and complex risk modeling methodologies, but are **unable to consolidate and make sense of the information**.
- **Unable to operationalise risk performance across the enterprise**, within departments and across channels.
- **Planning and forecasting does not incorporate risk management information**, leading to organizational misalignment between the finance and risk areas.
- **Company plans and forecasts grossly misrepresent credit and operational risk**, leading to major discrepancies between projected and actual financial results.

# Analytics Critical for Driving Competitive Advantage

**“At a time when companies in many industries offer similar products and use comparable technology, high-performance business processes are among the last remaining points of differentiation.”**

*Tom Davenport, “Competing on Analytics”*

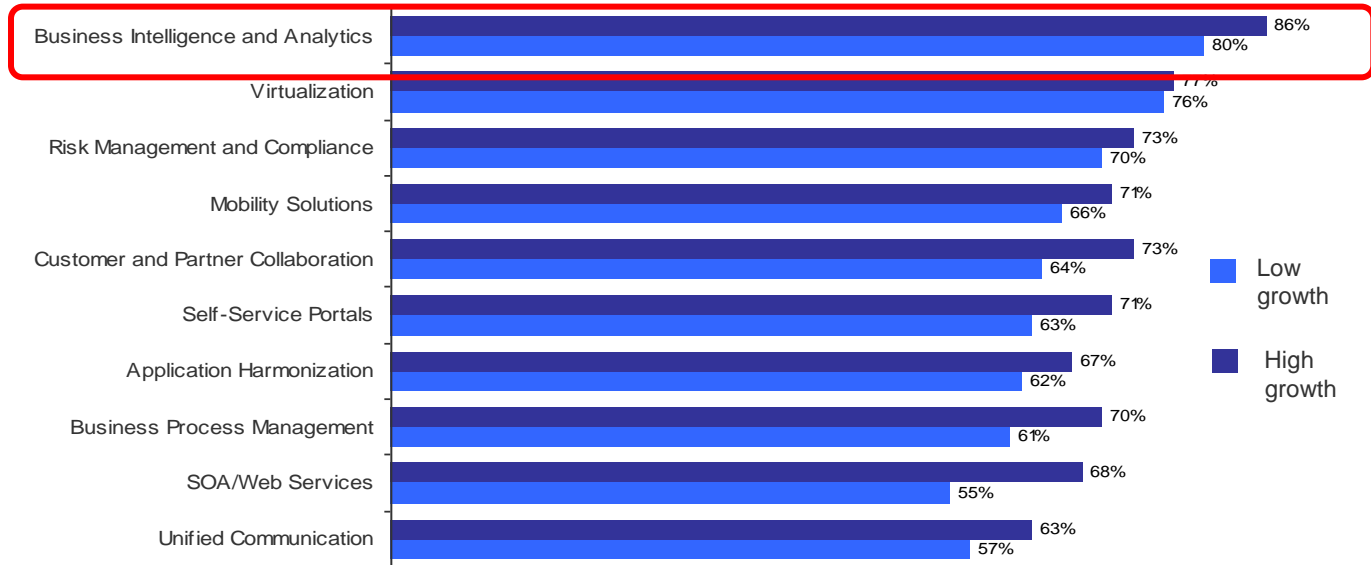


**BI/Analytics #1 investment to improve competitiveness**

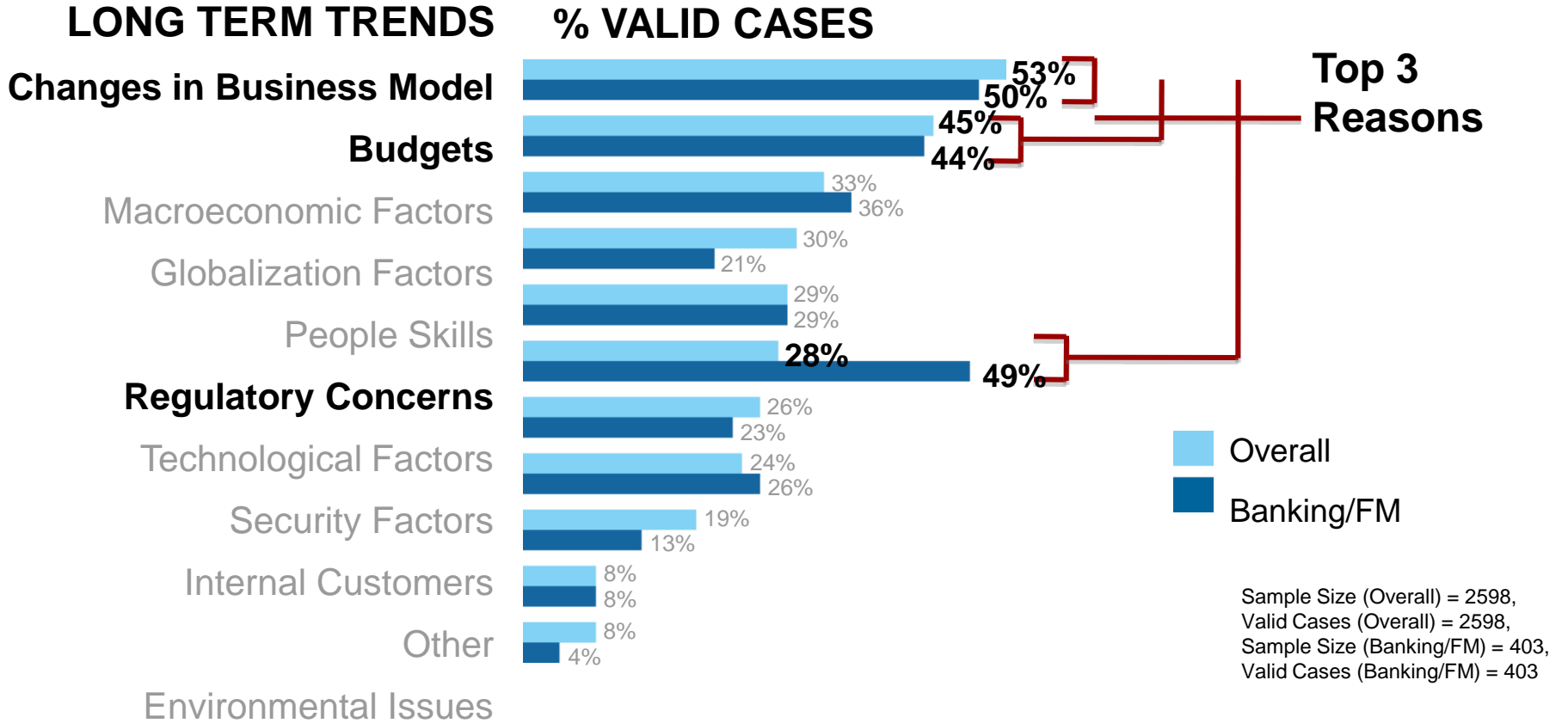
IBM Global CIO Study 2009

Source: IBM Global CIO Study 2009; n = 2345

Ten Most Important Visionary Plan Elements  
Interviewed CIOs could select as many as they wanted

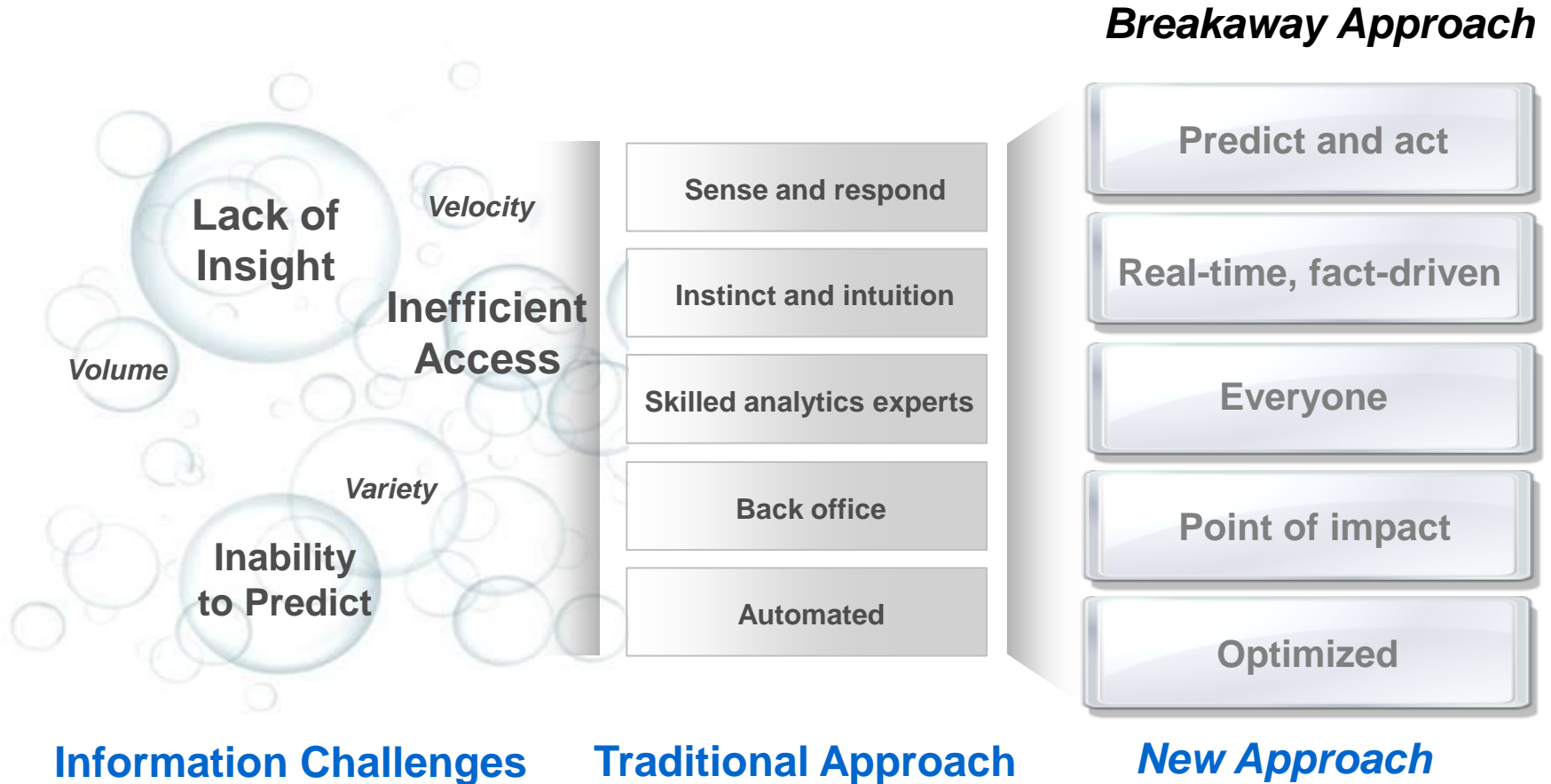


# Financial Services CIO's Top 3 external factors affecting industry



# The Key is Leveraging Information and Analytics

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



# Broad, Large, Informed and Complex Analytic Insight Community



**Executive**



**Business Manager**



**Line Manager**



**Casual Business User**



**Business Analyst**



**Financial Analyst**

**DASHBOARDING**



**SCORECARDING**



**REPORTING**



**QUERY**



**ANALYSIS**



**PLANNING**



*Real-time or historical;  
operational or strategic*

*Guided or self-service  
access and  
exploration...*

*Foresight using  
Statistical, Content,  
'What-if' and Predictive*

*Business Modelling &  
Enterprise Planning  
throughout the business*

**What is  
happening?**

**Why are we on/off track ?**

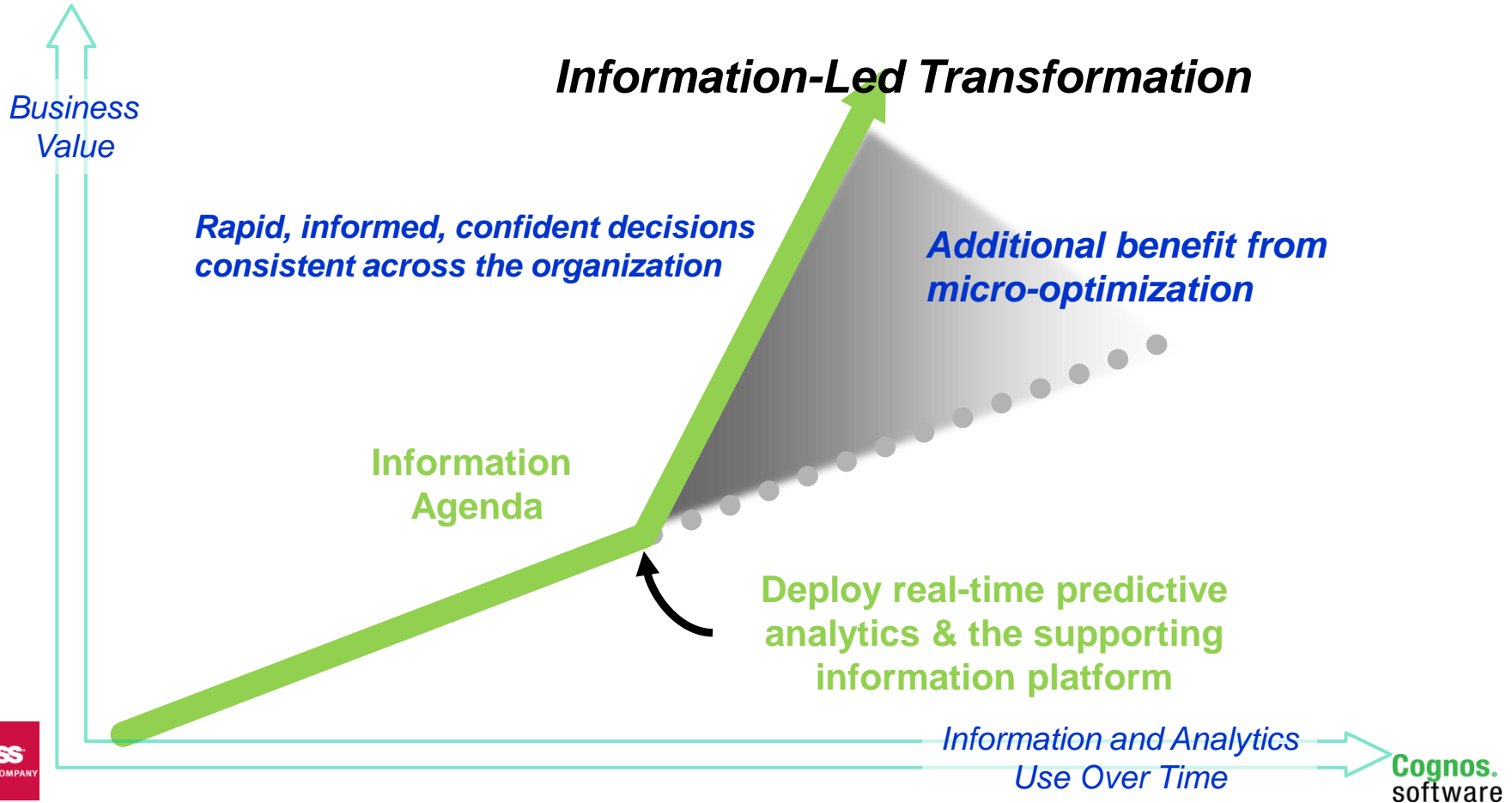
**What is likely  
to happen?**

**What should we do next ?**



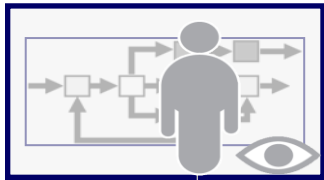


# Organizations Will Reach a Tipping Point When They Apply Real-time Analytics at the Point of Impact



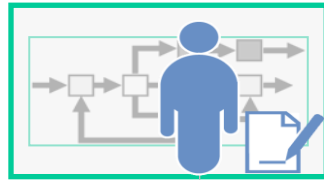
## Example: Imagine If Your Bank Could ...

*...offer new customer, menu-selected products, price and terms within Bank's optimal levels*



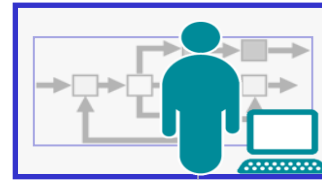
**Product Manager**

*...use adaptive risk control at the customer and transaction level?*



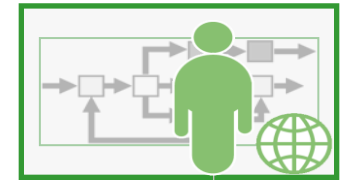
**Loan Officer**

*...cross sell optimal product, right customer, right time?*



**On-line Channels Manager**

*...stop a large wire transfer when predictive analytics shows likely fraud?*

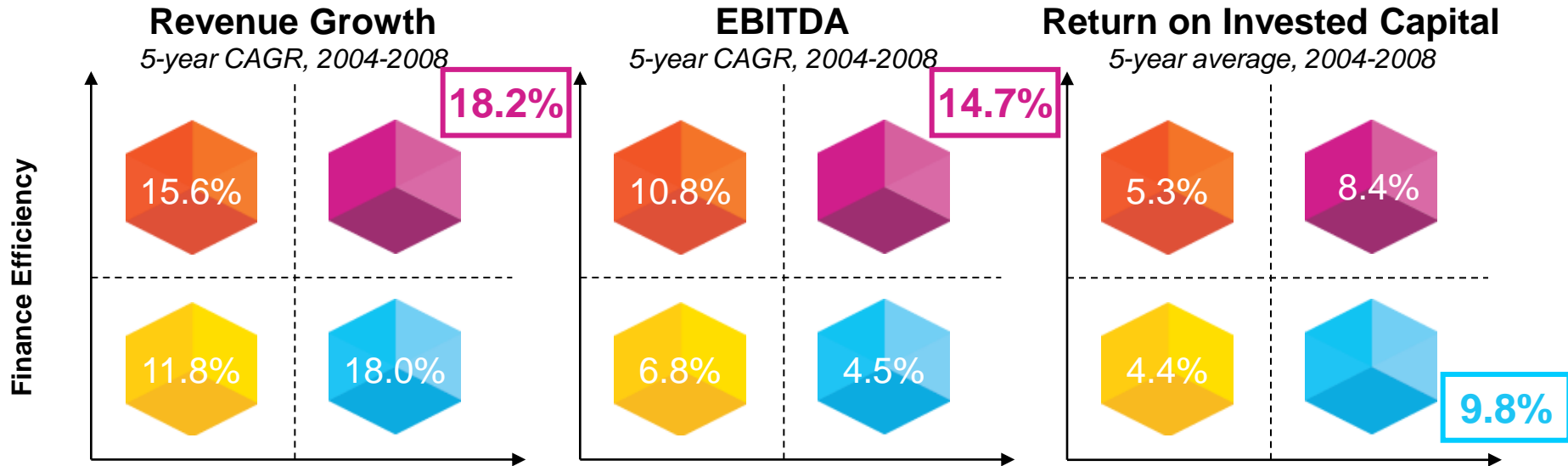


**Branch Manager**

***Next generation of efficiencies will come from applying analytics to optimize decisions at every contact point....made possible by enabling pervasive, predictive real-time decisions at the point of impact***

# Value Integrators in Banking outperform, on average, other banks in Revenue Growth and EBITDA

## Efficiency + Business Insight Contributes to Outperformance



- Value Integrators
- Constrained Advisors
- Disciplined Operators
- Scorekeepers

### Business Insight



*Value Integrators also have a more than 5% better operating efficiency ratio than all other companies examined.*

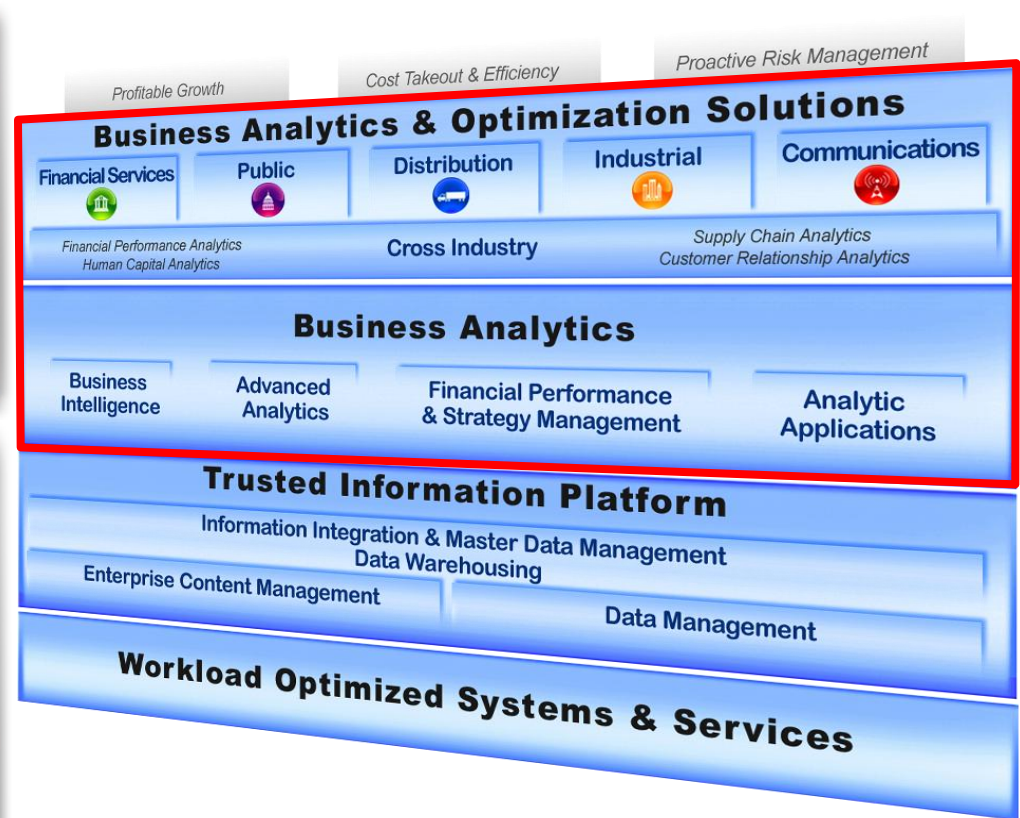
# Business Analytics

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.

- ✓ **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



Cognos 8 BI, Cognos TM1,  
SPSS, Analytic Applications

Cognos.  
software

# Business Analytics

Integrated SOA-Based Open Platform for BI, Planning, and Analytics

## FSS Industry Accelerators

Integrated Risk Management  
Customer Care & Insight  
Operational Efficiency

## SPSS

Predictive & Advanced Analytics

## Cognos 8

Scorecarding, Dashboarding, Reporting, Analysis, Alerts ...

## Cognos NOW!

Real-time operational BI

## TM1

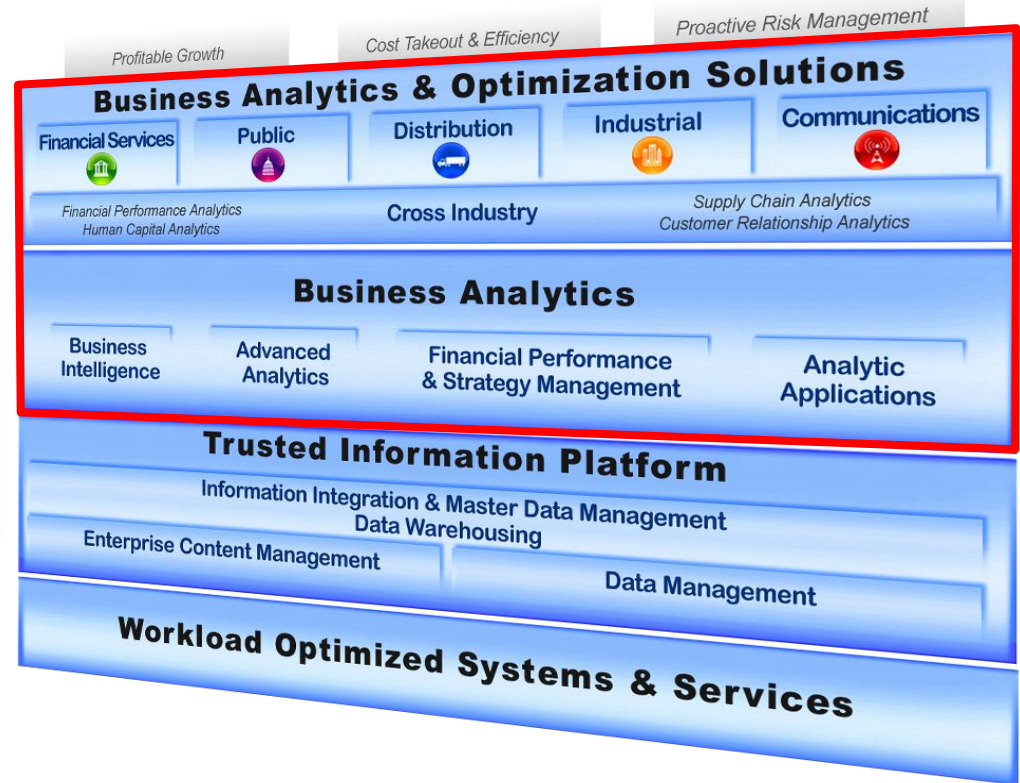
Scenario Modelling, What-if analysis

## FPM

Business Modelling, Financial Planning, Forecasting

## Analytic Applications

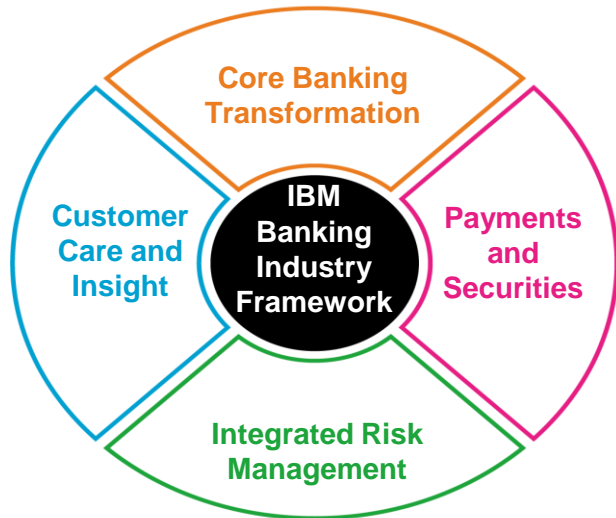
High business value application, out of the box



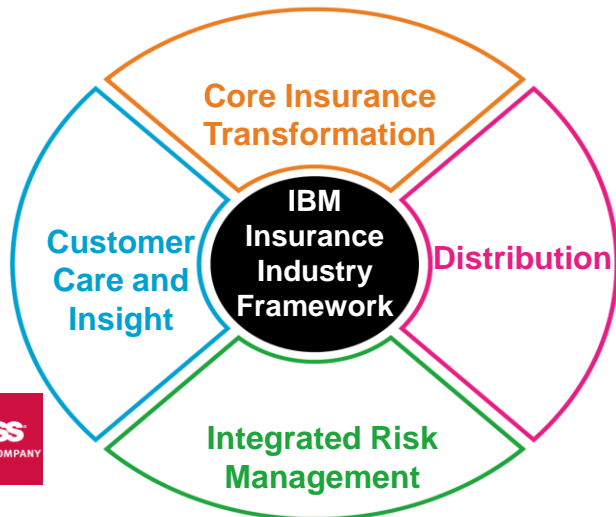
**Cognos 8 BI, Cognos TM1,  
SPSS, Analytic Applications**

**Cognos.**  
software

# IBM Financial Services Frameworks



- Support critical business challenges for the industry
- Proven business models and processes
- Customer validated and implemented solutions
- Captured best practices
- Implementation accelerators deliver faster time to value and increased ROI



## IBM Business Analytics experience in Financial Services

**4 of 5**

**World's largest  
banks use  
IBM Business  
Analytics<sup>1</sup>**

*1 – IBM Cognos customers on the Forbes Global 2000 list of largest banks*

**All Top 5**

**North American  
Banks companies use  
IBM Business  
Analytics<sup>1</sup>**

**All Top 10**

**European  
banks use  
IBM Business  
Analytics<sup>1</sup>**

**4 of Top 5**

**global P&C  
Insurers use  
IBM Business  
Analytics<sup>1</sup>**

**4 of Top 5**

**North American  
insurance companies  
use IBM Business  
Analytics<sup>2</sup>**

**5 of Top 7**

**Insurance  
companies use  
IBM Business  
Analytics<sup>2</sup>**



*1– IBM Cognos customers on the Fortune 500 list of largest P&C insurers*

*2 – IBM Cognos customers on the Forbes Global 2000 list of largest insurers*

## Top 5 Global Bank - Retail and Commercial Bank Performance Insight

- *Key Business Requirement*
  - Global Country view of Retail Unsecured Lending, Liabilities, Mortgage sales and FTE v Headcount performance by Country and Branch
- *Approach*
  - Leveraged country performance feeds and delivered plasma screen display to senior exec office and floor displays

### Top 5 Global Bank

**Geography** – UK (Global View)

**Solution** – Cognos BI & Google Maps

### Challenges

- Minimal user interaction
- Available 24 hours
- Live daily updates from Countries Globally
- Deliver performance metrics at Country and Branch level

### Solution

- Dashboard application called the “Live Monitor” using graphical reporting and automated screen scrolling
- Integration with Google maps API to drive overview on performance and local management contact details
- Integration of updatable news tickers contribute to maximise delivery of key management information.

### Results

- High visibility on performance leading to increased in country focus
- Head office insight to the branch level across the globe





## Top 5 Global Bank – “From Volume to profitable customer relationships”

- *Key Business Requirement*
  - Drive Customer Profitability agenda at the Branch level as well as Balance scorecard of additional measures (sales operations, customer satisfaction, local cost management)
- *Approach*
  - Reporting and analysis, of customer relationship value at Branch level and Reporting to drive local contact strategy

<i>Top 5 Global Bank</i>
<b>Geography</b> – UK 20,000 users
<b>Solution</b> – Cognos BI

Challenges	Solution	Results
<ul style="list-style-type: none"> <li>▪ Limited insight into Branch or customer relationship management</li> <li>▪ Support cultural change from volume to Retail relationship.</li> </ul>	<p>Deployed Cognos BI to 20,000 users:</p> <ul style="list-style-type: none"> <li>▪ Monthly profitability reporting</li> <li>▪ Daily branch and staff performance reporting</li> <li>▪ Executive reporting providing performance insight throughout the hierarchy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improved profitability</li> <li>▪ Improved customer retention</li> <li>▪ Consistency and alignment to strategic drivers</li> <li>▪ Improved customer satisfaction levels</li> </ul>

## Global Sell Side - 'Near Real Time Risk Adjusted Trading P&L Analysis

- *Key Business Requirement*
  - Increase visibility to daily trading results for better, more timely decision making and reporting to Business Unit Controllers, management and regulatory authorities
- *Technical Requirement*
  - Analyse high-level daily metrics and provide financial reporting for regulators, but drill quickly to investigate real-time positions on trade desks if needed.

### Top 10 Sell Side

**Division** – Fin Mkts

**Geography** – UK, USA & Global

**Solution** – TM1, C8 BI

### Challenges

- Could not track deals or the exposures when the sub prime crisis hit
- Lack of data integration meant information was not timely
- Tracking calculations of values at risk, based upon each trade was difficult

### Solution

- IBM Software: TM1 & Cognos 8 BI
- IBM Consulting: SWG Cognos Services and IBM Partners

### Results

- Hundreds of users worldwide
- Scale and Performance are Key!!!
- Provides the ability to operate more efficiently, with better information, to minimize and better manage risk.



# Infinity Insurance

*Improving cycle times and customer service*

Integrated Risk  
Management

## The Need:

Infinity Property & Casualty Corporation (IPACC) specializes in drivers who have higher incidences of accidents and claims. They needed to reduce payments on fraudulent claims and improve its ability to collect subrogation payments from other insurance companies. To do this IPACC wanted to automate workflows and data gathering related to fraudulent and subrogated claims to enable more rapid identification and investigation of suspicious claims.

## The Solution:

IPACC chose IBM Business Analytics to help build its accelerated payment collection capabilities. Now when an IPACC policy holder submits a claim in which another driver is partially or fully responsible, IPACC can more rapidly collect payment from that driver's insurer. Additionally, the SPSS software enables investigators to begin investigations earlier which leads to more successful investigations and reduced costs related to fraudulent claims activity.

## What Makes it Smarter:

- Reduced claims payments and accelerated collection of subrogation payments.
- Prioritizes collection so insured drivers are pursued first
- Faster, automated access to accident information to speed investigations, leading to fewer fraudulent claims and lower costs.



*“Take better control of our data, reduce cycle times and reduce costs and focus claims efforts where they need to be focused... so we can better compete in the marketplace.”*

*Parks Mann*  
Assistant VP, Strategic Projects  
**Infinity Insurance Company**

## Solution components:

- IBM SPSS

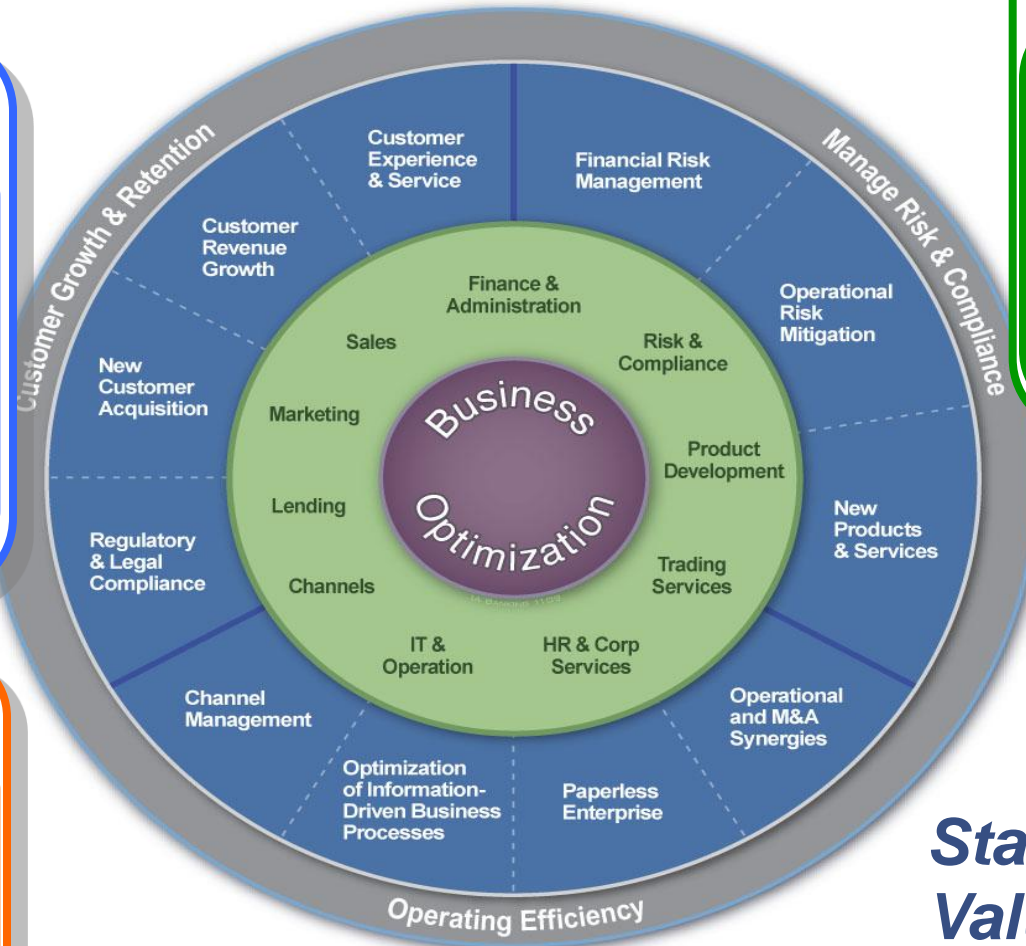
# Banking Imperatives & Business Analytics Solutions

## Customer Care & Insight

- Relationship Pricing
- Customer Profitability
- Branch Performance
- Client Servicing
- Campaign Insight & Optimisation
- Customer Analytics (2010)*

## Operational Efficiency

- Cost Transparency
- Ent Payments Monitoring
- Financial Perf Man.
- Workforce Performance



## Int Risk Management

- Finance & Int Risk Man
- BRP – Credit Risk App
- Risk Scenario Analytics
- Risk Adjusted Profitability
- Relationship Based Pricing

**Start Anywhere,  
Value at Every  
Step!**

## Business Analytics Accelerators for Banks & FM organisations

### Integrated Risk Management

- Finance & Integrated Risk Management
- BRP – Credit Risk Application
- Risk Scenario Analytics
- Relationship Based Pricing

### Customer Care & Insight

- Relationship Pricing
- Customer Profitability
- Branch Performance
- Client Servicing
- Campaign Insight & Optimisation
- Customer Analytics

### Operational Efficiency

- Cost Transparency
- Payments Monitoring
- Financial Performance Management
- Workforce Performance

# Integrated Risk Management

- **IBM Business Analytics can help you:**
- Integrate **finance and risk data**
- Communicate **risk insight to decision makers** throughout the organization
- Deliver timely, accurate information to **optimize risk processes and management.**
- Use information to accurately **identify and mitigate fraud and operational risk.**
- Help you **address regulatory requirements** like scenario analysis, liquidity risk, Basel II

# IBM BA Solutions/ Accelerators for Integrated Risk Management (Banking)

## ■ Finance and Integrated Risk Management (FIRM)

– Enterprise risk management covering credit, operational, market, liquidity risk & scenario analysis

## ■ Banking Risk – Credit Risk Application

– Credit risk management reporting application covering credit risk from origination to collections.

## ■ Risk Scenario Analytics

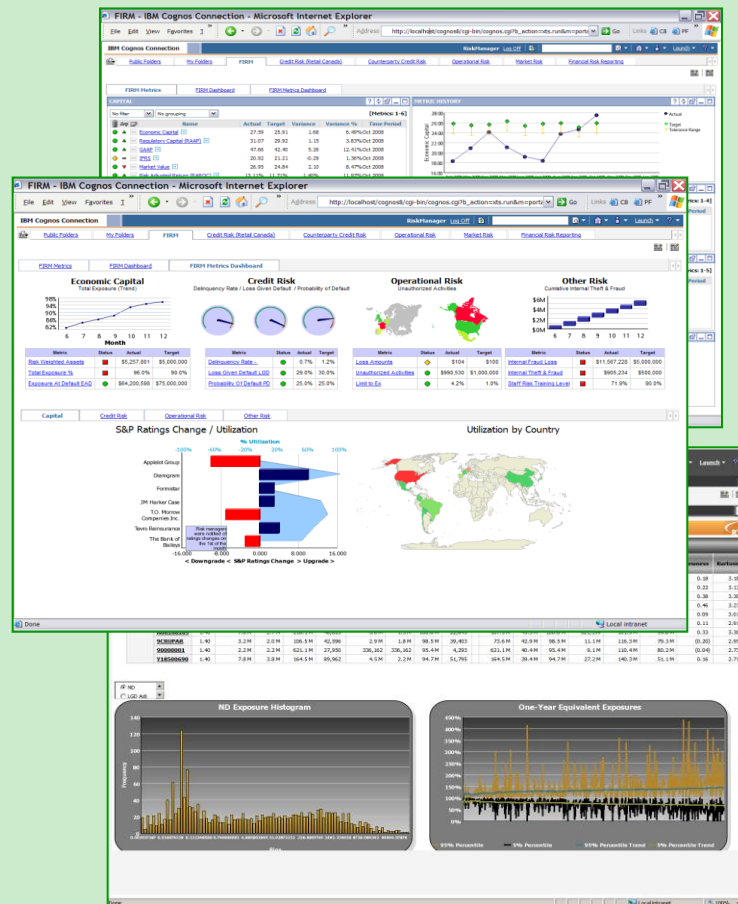
– ‘What if’ scenario risk analytics for trade book market risk, credit risk and capital. Built with R<sup>2</sup> Financial (IBM partner)

## ■ Liquidity Risk

– Liquidity data model and stress testing supporting in-house analysis, presentation and disclosure.

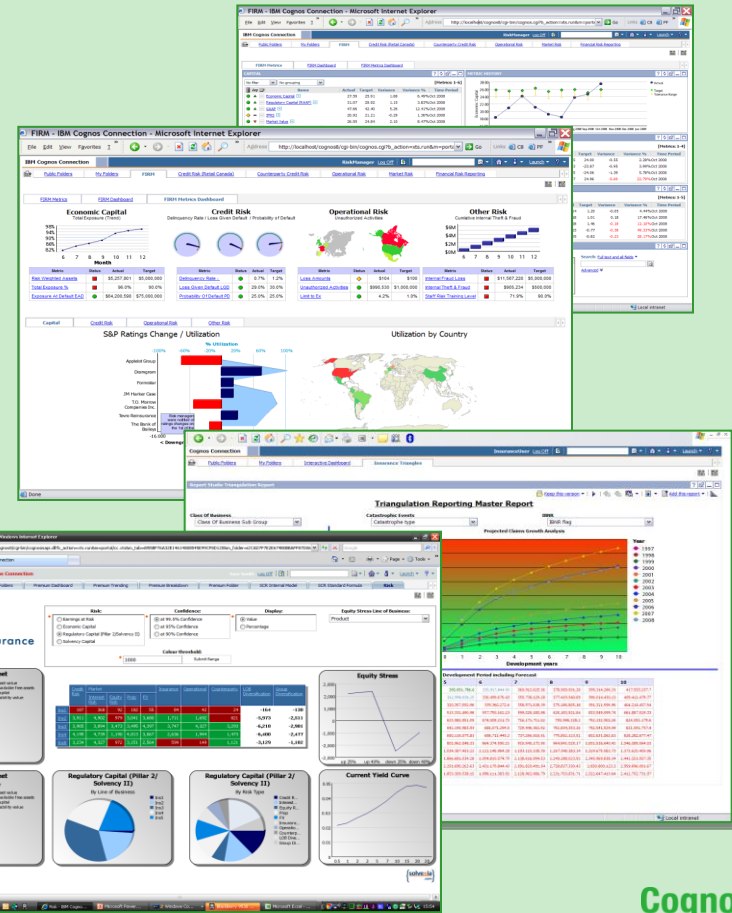
## ■ Risk Adjusted Profitability

– Integrated risk management and financial planning capabilities to maximize RAROC (Risk Adjusted Return on Capital) for risk-based profitability management.



# IBM BA Solutions/ Accelerators for Integrated Risk Management (Insurance)

- Finance and Integrated Risk Management (FIRM)**
  - Enterprise risk management solution covering credit, operational, market, liquidity risk & scenario analysis
- Investment Analytics & Reporting**
- Actuarial Loss Development & Risk Scenario Analytics**
  - Optimize actuarial analyses
  - Integrate with GIS/Location Intelligence
- Fraud detection**
  - Use predictive models to identify potentially fraudulent claims
- Solvency II and Insurance Risk Management**
  - Meet regulatory requirements and improve risk insight and communication





## “Risk Management Lessons from the Global Banking Crisis of 2008”

“Ten Areas for Continued Improvement” *October 09*

### 1. Board Direction & Oversight

- Firms are generally undertaking adjustments...however not yet clear whether these changes have contributed to stronger governance

### 2. Articulating Risk Appetite

- Supervisors see insufficient evidence of board involvement in setting and monitoring adherence to firm's risk appetite
- Risk appetite statements are generally not sufficiently robust...actionable measures..

### 3. Compensation Practices

- ...past compensation practices ...to attract & retain staff, not integrated with financial control. Firms need to better align compensation & risk appetite

### 4. Information Technology Infrastructure

- Firms are constrained ...to effectively aggregate & monitor exposures across counterparties, businesses, risk strands & other dimensions because of ineffective information technology & supporting infrastructure

### 5. Risk Aggregation & Concentration Identification

- Identification of risk concentrations is an area of weakness...automating ..concentrations by counterparty, product, geography and other classes

### 6. Stress Testing

- Enhancements & increased use... significant gaps to conduct firm wide stress tests

### 7. Counterparty Risk Management

- Flexibility in CCR management systems key determinant of responsiveness to sharp changes in exposures

### 8. Valuation Practices & Loss Recognition

- Loss of stakeholder confidence directly contributed to funding withdrawal and liquidity drains

### 9. Operations & Market Infrastructure

- Significant strides to improve position and collateral management, more still to do

### 10. Liquidity Risk Management

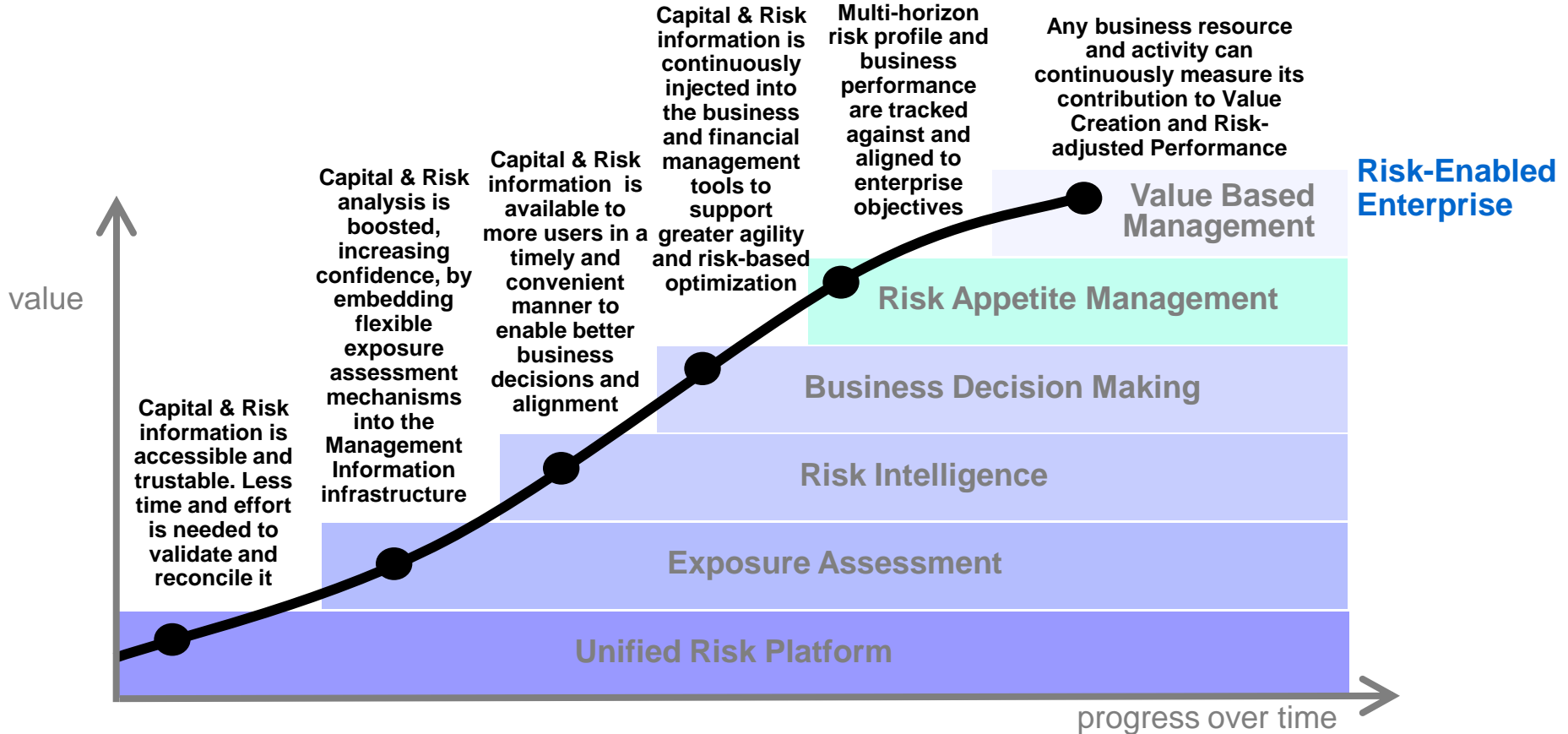


OSFI  
BSIF



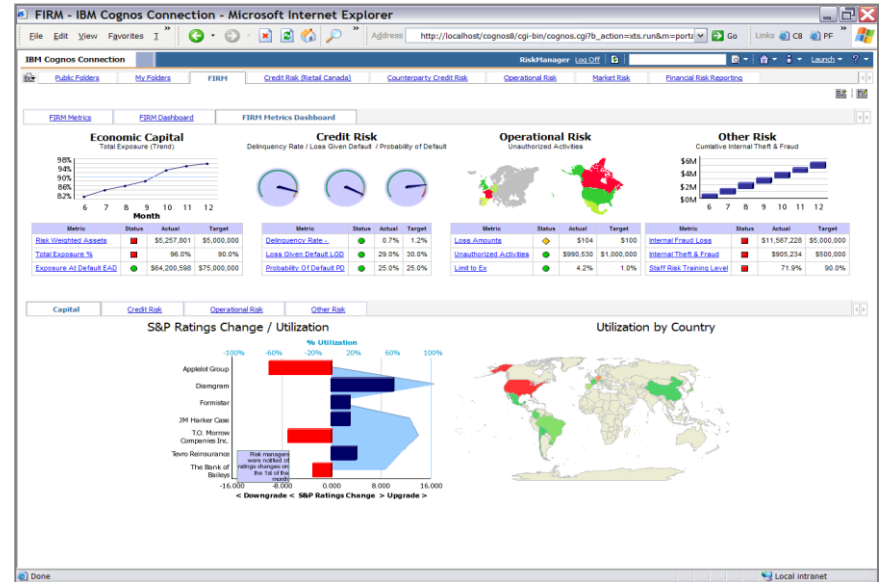
## Risk-Enabled Enterprise:

The Risk-Enabled Enterprise maximises value creation by treating every single risk that is attached to its business as a costly resource governed by a Risk Appetite Management policy.



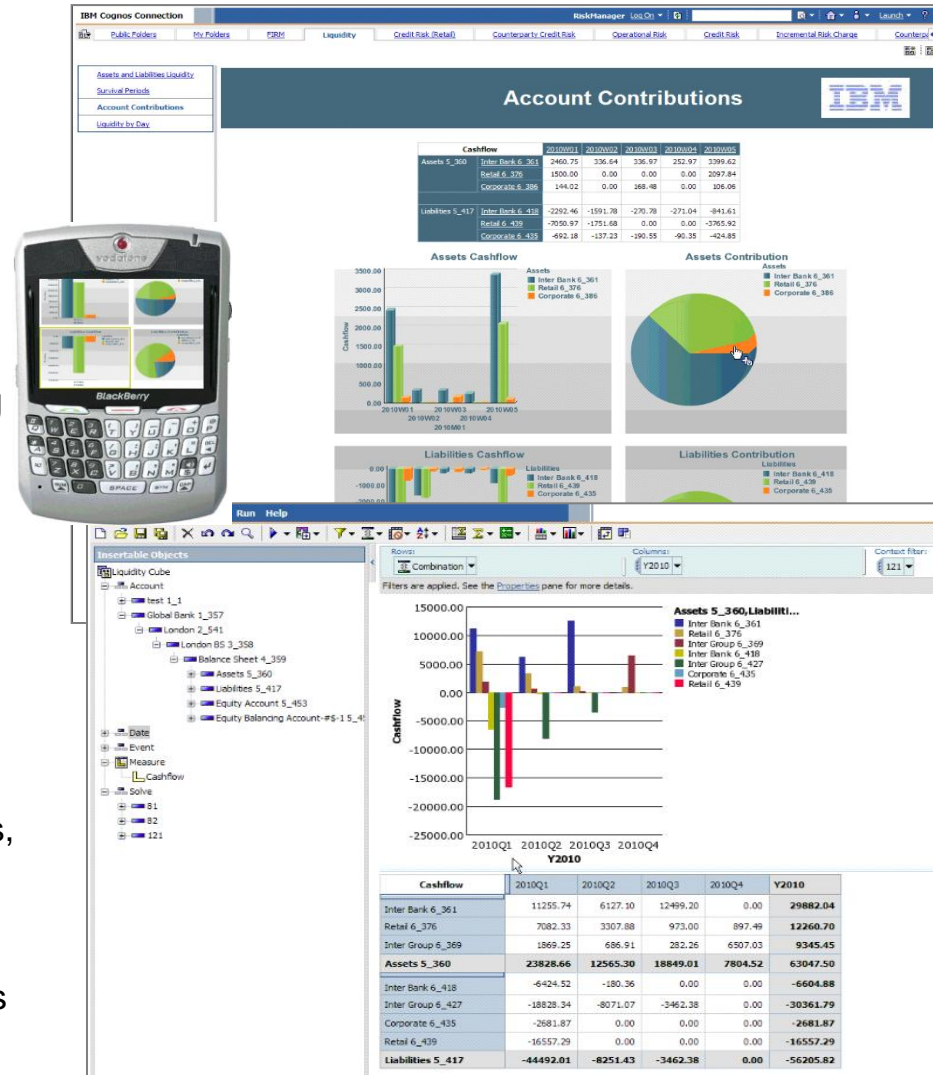
# Finance and Integrated Risk Management (FIRM)

- What is it?
  - Sample BI content and metadata leveraging multiple back end sources including banking data warehouse models, best practice analytic reports and dashboards.
  
- What does it do?
  - Provide banks an enterprise view of risk across risk classes, geographies, lines of businesses, etc including:
    - Credit Risk (Retail)
    - Credit Risk (Wholesale / Counterparty)
    - Operational Risk
    - Market Risk
    - Financial Reporting
  
- What does it include?
  - Sample dashboards and hundreds of detailed Risk/Finance metrics
  - Supporting sample datamarts based on numerous sources including the BDW
  - Multiple BI metadata models
  
- Why?
  - To provide a set of templates that can act as accelerators for requirements and implementation



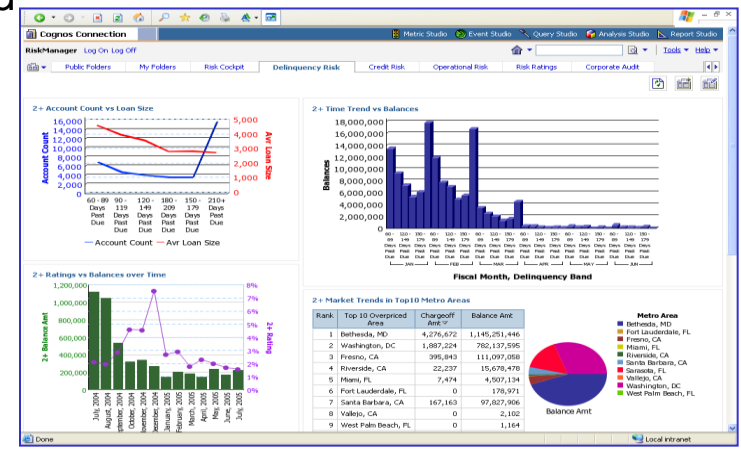
# Liquidity Risk Governance and Regulatory Response

- Regulators mandating liquidity risk response
- In development with customers & regulators
- Including:
  - Liquidity reg data model supporting in-house analysis, presentation and disclosure
  - Liquidity risk stress test and scenario modelling
  - Liquidity dashboard, scorecards, alerting, reporting and analysis
- Delivers:
  - Single view for the aggregate portfolio
  - Shared appropriately between functional constituencies (Risk, Treasury, Capital, Snr Man, Compliance)
  - ‘Insight’ and ‘Control’ in multiple forms:
    - Presentation: Reporting, Dashboards, Scorecards, Office tools, Mobile
    - Analysis: ad hoc, what-if, scenario, predictive
    - Intraday: event management, real-time
    - Governance: KRI framework for leading indicators
    - External disclosure: regulatory submission



# Risk-Adjusted Profitability for Commercial Banking

- Integrated risk-adjusted planning and forecasting within a commercial segment (ie, industry) at the product type and region level
  - For instance, RMs, LOB execs forecast sales & net income for a specific industry segment, within a region, either across products or for a single product type
  - Changes in risk factors e.g. PD & EL drive adjustments to loan loss provisions, and ultimately to net income
  - Final result is profit and loss statement
- Multi-dimensional risk management and profitability reporting and analysis leveraging the FIRM
- Initiative planning allows comparison of multiple scenarios
- Incorporation of activity-based management /costing



Commercial Banking Risk Adjusted Performance | Contributions | All - Cognos Planning - Contributor

File Edit View Tools Actions Help

Initiative Volume Activity Calc Assigned Expenses Initiative Assumptions **Credit Risk Assumptions**

	Total	Natural Gas	Electronics
Total Target Credit Portfolio	1,200,000,000	1,200,000,000	1,200,000,000
Target Concentration Limit	100%	45%	55%
Target Exposure	1,200,000,000	540,000,000	660,000,000
Hurdle Rate (Required Return on Capital)	15%	15%	15%
PD	0.03	0.04	0.03
LGD	0.60	0.60	0.60
EAD	100%	100%	100%
EL %	0.0191	0.0240	0.0150
Risk Based Capital Ratio	0.08	0.08	0.08
Economic Capital %	0.20	0.20	0.20



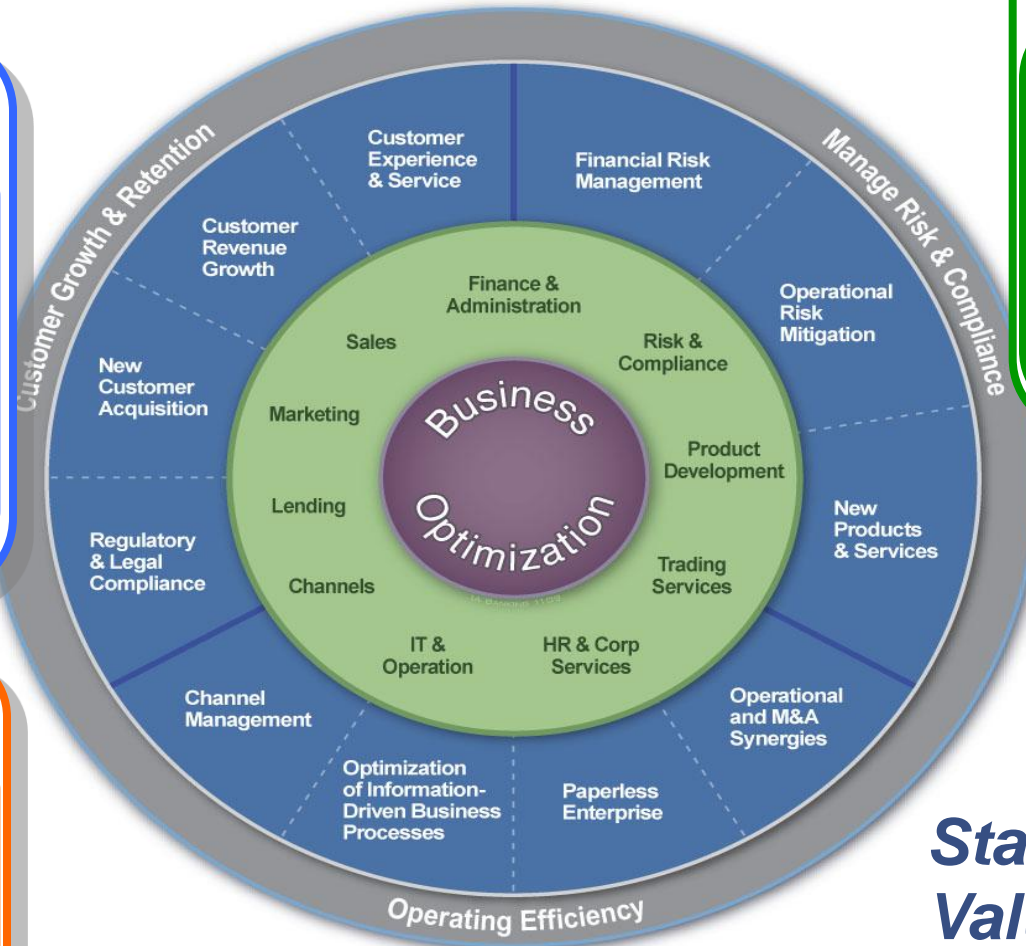
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# Information Agenda – Business Outcome Based Approach

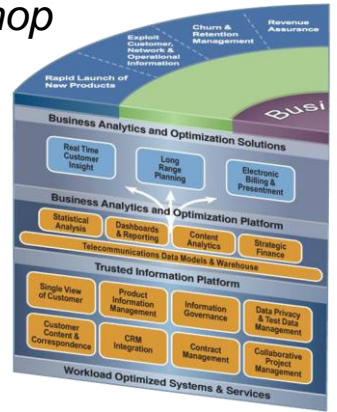
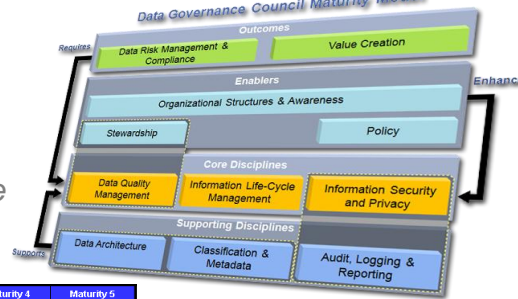


**IA Roadmap Workshop**  
*Dynamic BOM, IA Business Maturity Assessment and KPIs*

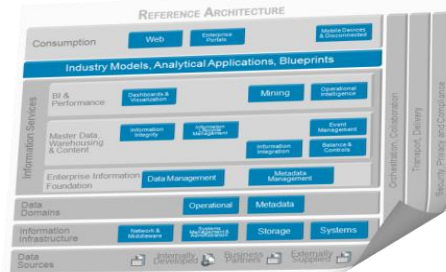
**IA Solution Workshop**  
*Business Use Cases, Reference Architectures, ROI models*

**Information Governance Workshop**  
*Data Maturity Model, Best practices*

**Industry Software POC**  
*Hardened Accelerators*



	Business Initiative	KPI	Maturity 1	Maturity 2	Maturity 3	Maturity 4	Maturity 5
	Churn & Retention Management	Monthly % churn annual % churn	No churn measurement in place	Measurements reported but no link to action	...	.....	Predictive churn analysis linked to marketing campaigns
IBM Customer Examples			Verizon	Verizon AT&T		AT&T	



**Provides a fast track approach to accelerate Business Analytics and Information enabled transformation**

Information Agenda (IA) is SWG's Information Led Transformation consultative selling approach for engaging clients at the senior business and IT levels to help first clarify their own information strategy and resulting business value then define the right approach to execute. The IA approach has been strongly validated in 2009 helping our clients accelerate their information execution while elevating IBM into a trust advisor and increasing the rev size/breadth.

# Business Analytics and Optimization: Competencies and Offerings

## BAO Strategy



- BAO Strategy and Roadmap
- BAO Process Improvement
- BAO Governance

## Business Intelligence & Performance Management



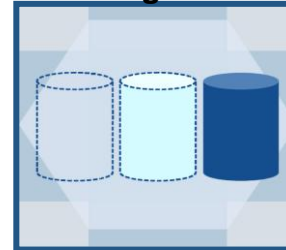
- Dashboards & Scorecards
- Planning, Budgeting, & Forecasting
- Business Analytics & Reporting

## Advanced Analytics and Optimization



- Advanced Analytics
- Analytic Applications
- Predictive Modeling
- Business Optimization
- Visualization

## Enterprise Information Management



- Data Integration
- Data Quality
- Data Architecture
- Master Data Management

## Enterprise Content Management



- Document & Records Management
- Web 2.0 / Web Content Management
- Digital Asset & Rights Management
- Archiving & Record Management



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# Any Questions?





IBM Software

# Information On Demand **2010** Comes To You

Unlock the True Value of Your Information