

IBM Cognos Performance
Better Intelligence. Better Business.

Combine IBM InfoSphere &
Cognos Solutions to Deliver
Greater Information Value

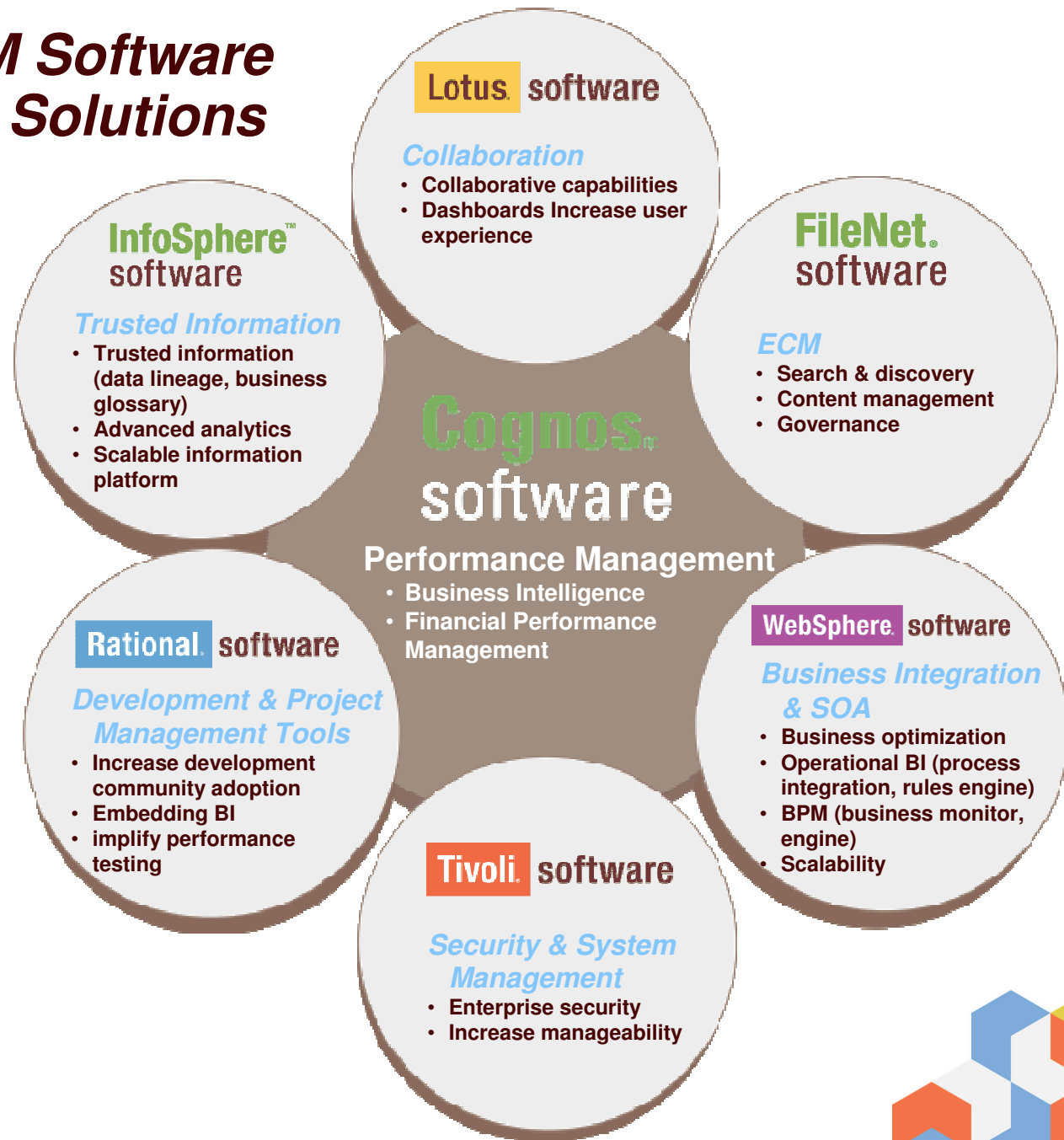
Becky Smith
Senior Product Marketing Manager, IBM



Synergy across IBM Software to Deliver Strategic Solutions

Strategic Initiatives that Drive Synergy Requirements

- **Collaboration**
- **Business Optimization**
- **Information Agenda**
- **Governance and Regulatory Compliance**
- **Standardization**



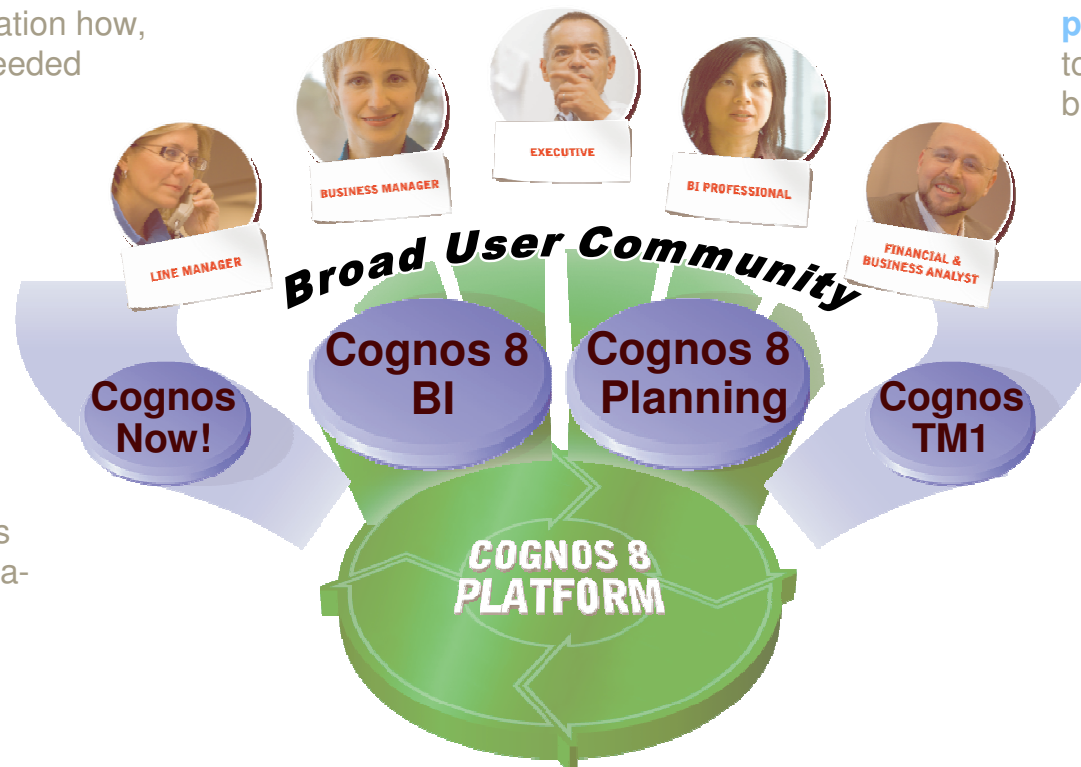
IBM Cognos Software Product Portfolio More Employees Make Better Decisions, Faster

Cognos 8 BI

Ensures **all user communities** receive relevant information how, when and where it is needed

Cognos 8 Planning

Ensures **high participation planning**, connecting finance to operations for higher business responsiveness



Cognos Now!

Continuous real-time monitoring of business operations for rapid intra-day decision making

Cognos TM1

What-if scenario modeling to formulate new business models to drive the business forward

Cognos 8 Platform

Complete consistent information in terms business understands with a purpose-built SOA for enterprise scale



Trusted Information Management

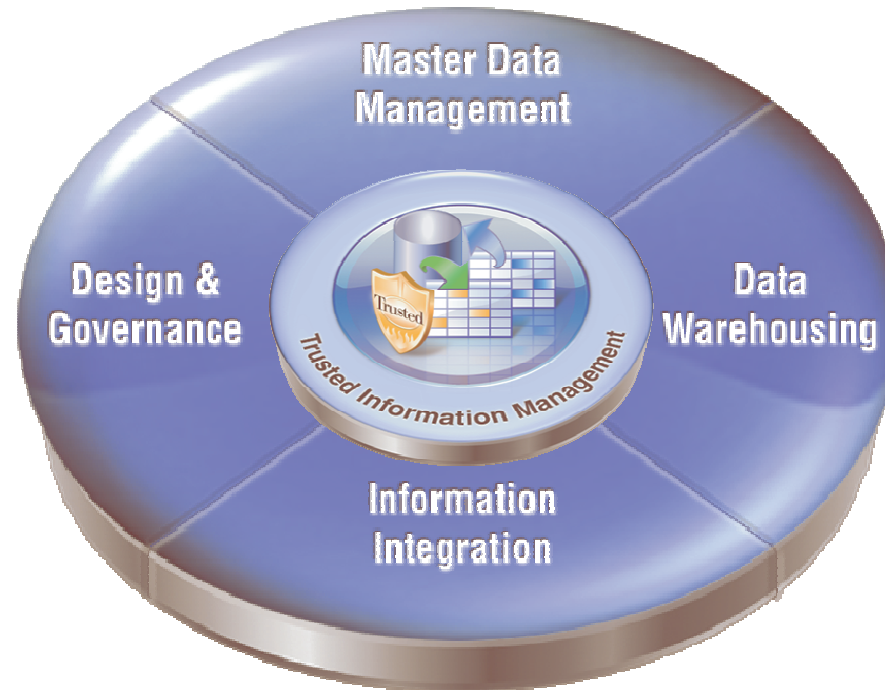
Create, manage, govern and deliver trusted information

**Get a single view of your
business**

IBM InfoSphere MDM Server

**Get your arms
around your data**

IBM InfoSphere
Foundation Tools



**Deliver better business
intelligence faster**

IBM InfoSphere
Warehouse

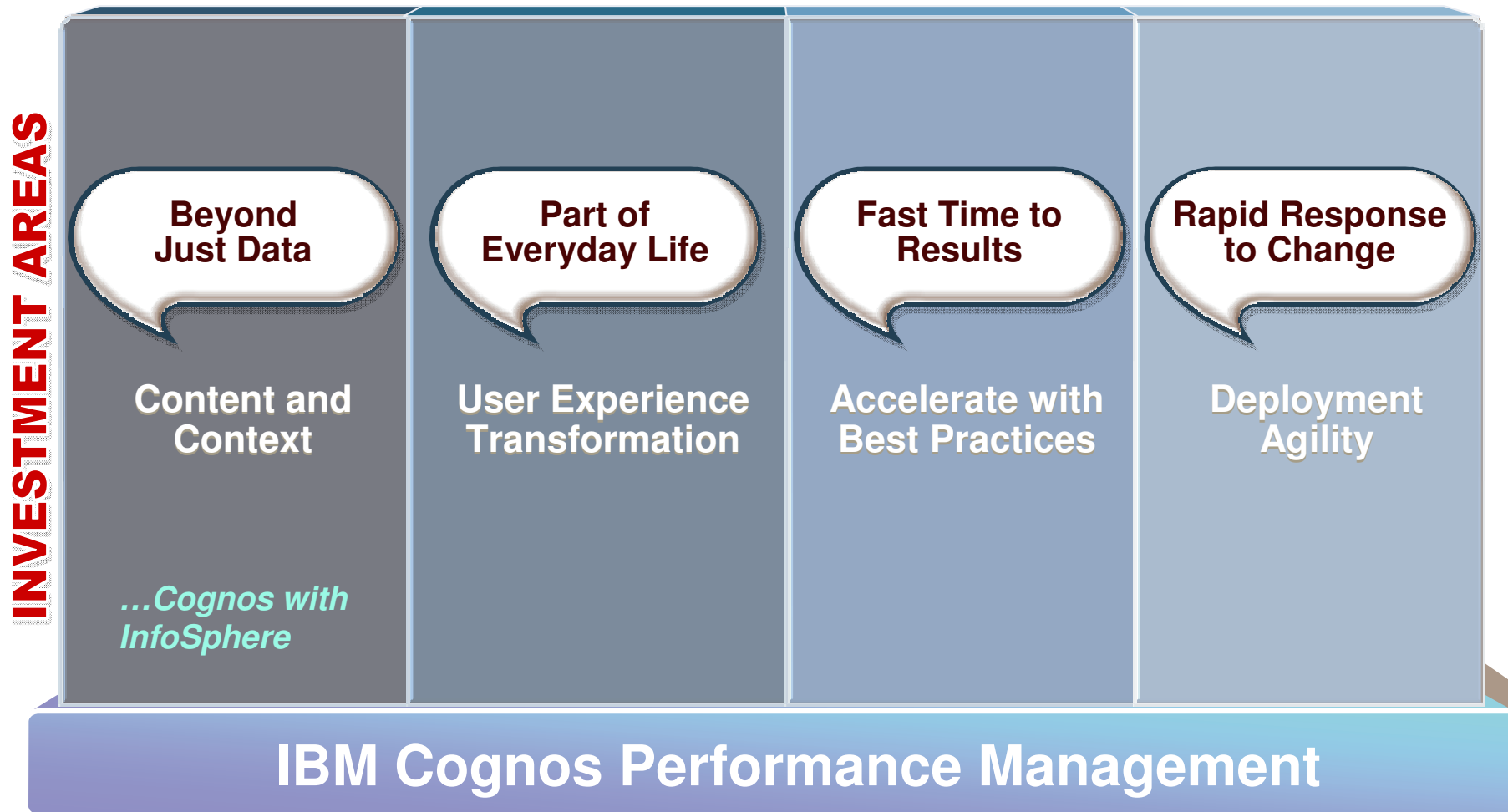
**Consolidate your application
infrastructure**

IBM InfoSphere Information Server



IBM Cognos Software Investment Focus Areas

Modular. Open. Integrated.



Focus Areas of IBM Software and Systems *Beyond Just Data*

Content and Context

- Increase business confidence in information
- Optimize data access
- Address breadth of OLAP requirements
- Align dimensions with master data

...Cognos with InfoSphere



Integration with InfoSphere Information Server *Dictionary of Terms, Lineage and Data Quality Visibility*

Content and
Context

Challenge: Improve business understanding and trust of information

Solution

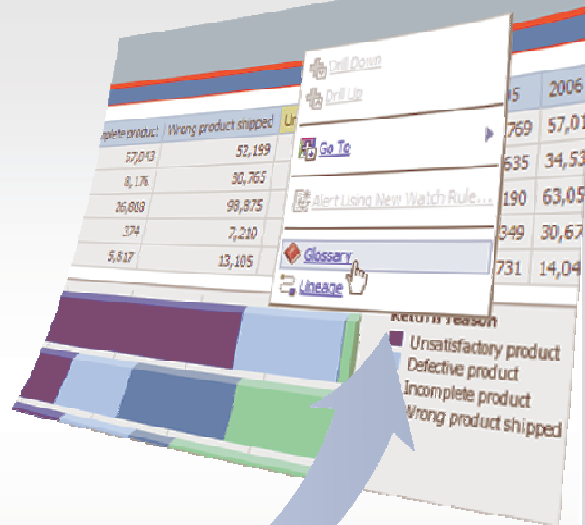
- Direct user access to Business Glossary and Metadata Lineage
- Business Glossary add-on for Cognos use
- Metadata exchange with Metadata Workbench
- Source-to-report lineage in Metadata Workbench
- Quality Assessment Services with Information Analyzer for understanding data quality

Roadmap Considerations

- Enhance fidelity, breadth and depth of bi-directional metadata exchange for end-to-end lineage
- Enhance visibility into data quality metrics

Value

- Business can understand what terms mean and where data came from without calling IT



The screenshot displays a data quality dashboard with a table of metrics. A dropdown menu is open, showing options for 'Drill Down', 'Drill Up', 'Go To', 'Alert Using New Watch Rule...', 'Glossary', and 'Lineage'. A callout box on the right lists quality issues: 'Unsatisfactory product', 'Defective product', 'Incomplete product', and 'Wrong product shipped'.

InfoSphereTM software

- Business Glossary
- Metadata Workbench
- Information Analyzer



Lineage in business terms



- Easily understand in business terms where data in reports comes from
 - One-click access from report elements provides descriptions, lineage and source
 - Business view of lineage for each and every report element
 - Technical view with graphical technical view of BI metadata model from report element to source

Select objects of interest from report view or package

| Year | Product | Order Method | Quantity Sold | Discount Amount | %Discount |
|------|---------------|--------------|---------------|-----------------|-----------|
| 2005 | Husky Rope 50 | Fax | 140 | 588.9333333 | 0.1667327 |
| | | Telephone | 1,140 | 4,847.4 | 1.0673801 |
| | | Mail | 330 | 1,456.95 | 0.3499802 |
| | | E-mail | 512 | 1,064.65882353 | 0.2335183 |
| | | Web | 536 | 3,132.49684211 | 0.7335183 |
| | | Sales visit | 972 | 3,468.27272727 | 0.7778438 |
| | | Special | 24 | 181.92 | 0.0500727 |

Insertable Objects

- Sales Analysis Package
 - Analysis Presentation View
 - Sales_OLAP
 - Sales_M
 - Quantity Sold
 - Unit Cost
 - Unit Price
 - Unit Sale Price

Technical View

Provides information on what has happened to selected data from source to report

Properties for Discount

| Property | Value |
|------------------|---|
| objectId | [Abstracted Business View].[Sales].[Discount] |
| objectName | Discount |
| objectType | Query Item |
| description | Discount is a calculated field representing the different between the unit price recommended by marketing and the actual unit sale price. |
| expression | [Abstracted Business View].[Sales].[Unit Price] - ([Abstracted Business View].[Sales].[Unit Sale Price] |
| dataType | Decimal |
| precision | 20 |
| scale | 2 |
| size | 11 |
| regularAggregate | Average |
| semiAggregate | Sum |



IBM InfoSphere Business Glossary

Common enterprise vocabulary with one-click access

- Consistent use of terms and descriptions for information consumed in reports
- Common enterprise vocabulary for each and every report element
- One-click access from any element provides visibility into common and agreed definitions of terms in reports Starting point for designing information governance
- Web-based authoring, sharing & management of business metadata
- Enhanced collaboration
 - Aligns the goals of the business with the efforts of IT
 - Accelerate project delivery with information sharing
- Establish accountability
 - Creation of stewards and assignment of responsibilities
- Define relationship between business definitions and IT assets



Governance Stewards

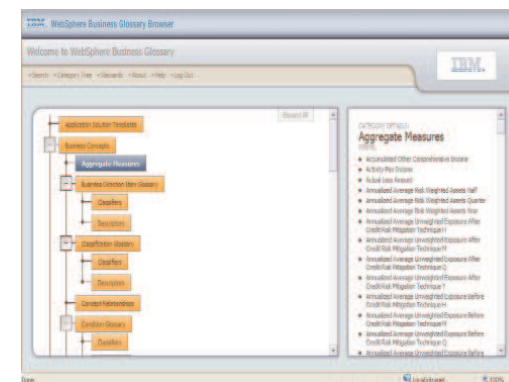


Any User

Design & Govern

InfoSphere Business Glossary

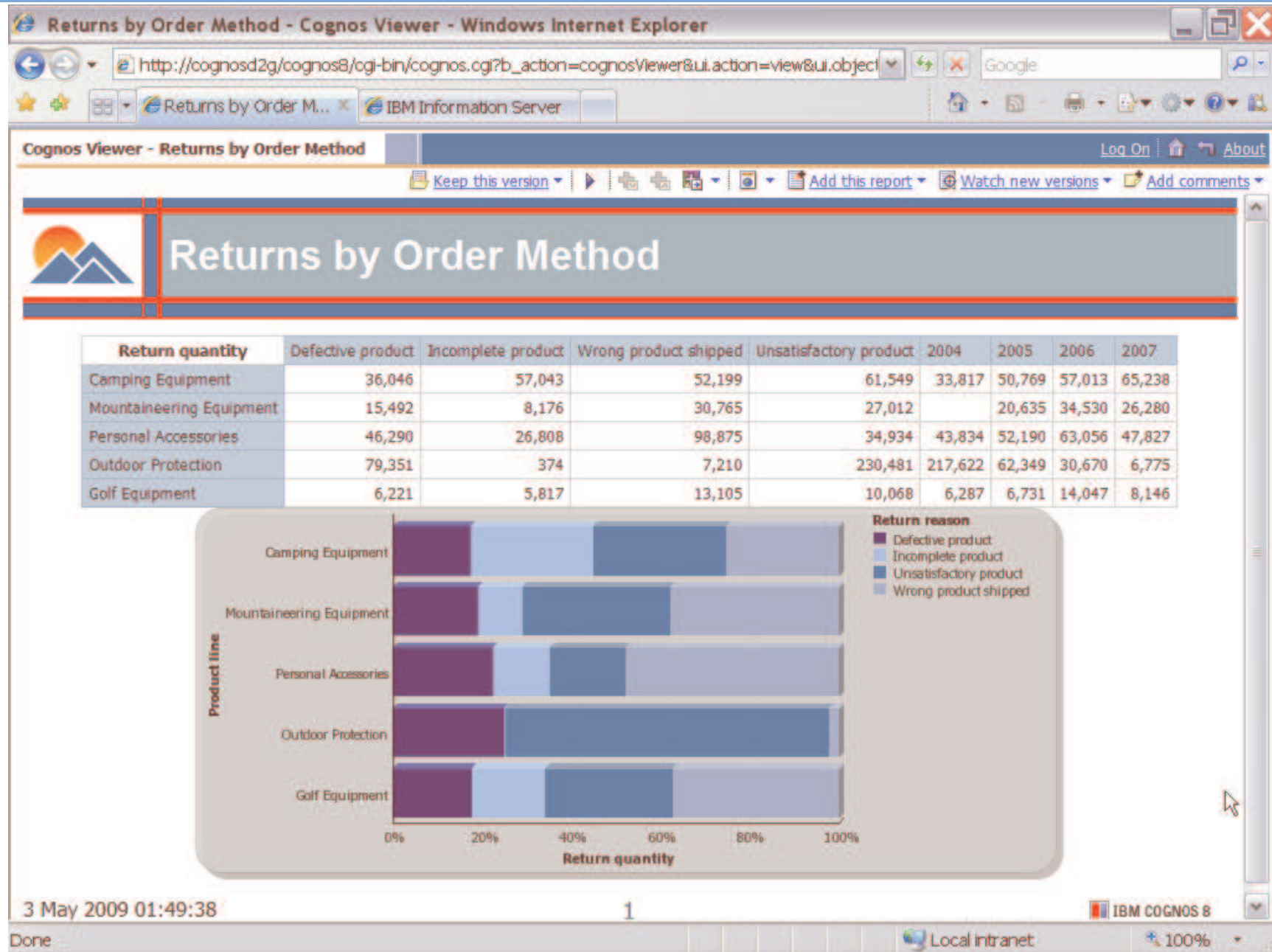
Create and manage business vocabulary and relationships and related to physical sources



Business Context View



IBM Cognos Performance



InfoSphere Metadata Workbench

Full data lineage

- Understand your end-to-end information infrastructure
- Proactively manage and administer your information infrastructure
 - Web-based exploration of metadata relationships – InfoSphere, modeling and BI applications
 - Explore and analyze both graphically and textually
 - Perform searches and customized queries
- Assess and mitigate change management risk
 - Assess dependencies across InfoSphere and 3rd party tools
- Support compliance and governance initiatives (e.g. Sarbanes-Oxley, Basel II)
 - Trace data lineage of modeling, Cognos reports and InfoSphere objects



Subject Matter Experts



Governance Stewards

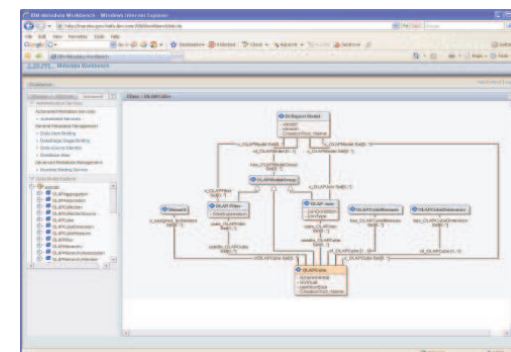


Architects

InfoSphere Metadata Workbench

Design & Govern

Support information governance with traceability on InfoSphere data movement, modeling & BI applications



Impact Analysis & Lineage

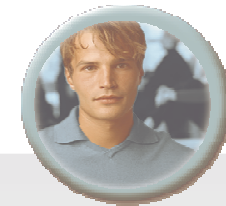


IBM InfoSphere Information Analyzer Data Profiling and Quality Monitoring

- Analyze data sources to discover structure, contents and quality of information
 - Find missing, inaccurate and inconsistent data
- Secure in-depth analysis of heterogeneous data sources
 - Column Analysis
 - Table Analysis
 - Primary Key Analysis
 - Cross Table Analysis
 - Relationship Analysis
- Enable ongoing measurement and baseline reporting of information quality
 - Duplicate Analysis
- Create/identify physical metadata from profiling results



Subject Matter Experts

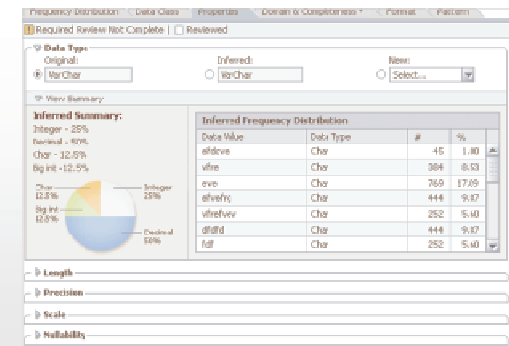


Data Analysts

InfoSphere Information Analyzer

Analyze source data structures, and monitor adherence to integration and quality rules

Understand



Physical View



IBM InfoSphere Information Analyzer

Demo
InfoSphere Information Analyzer

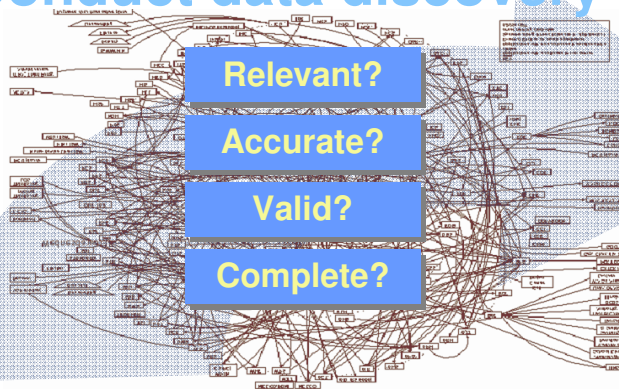


IBM Data Quality Assessment

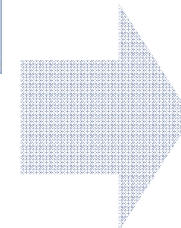
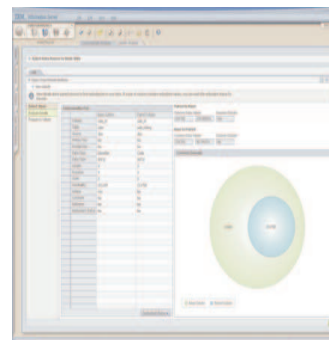
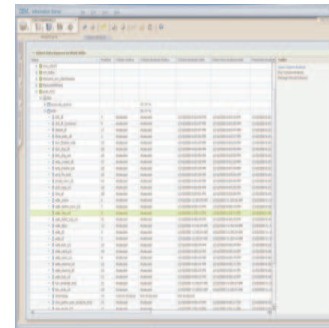
1 Define business problems

- Increase revenue by cross selling more effectively our services to all clients
- Reduce materials costs by negotiating better prices from our suppliers
- Reduce parts inventory across our manufacturing plants
- Reduce IT costs and improve service levels by consolidating overlapping applications

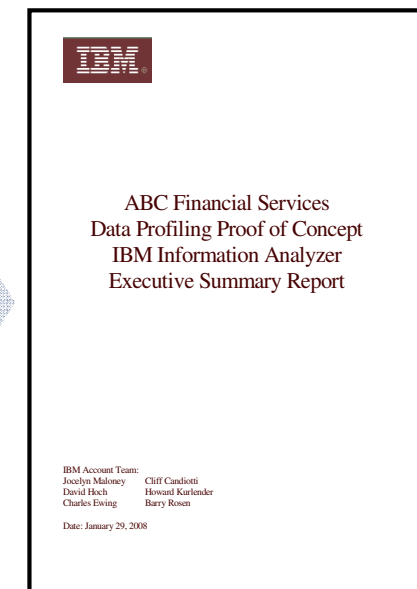
2 Conduct data discovery



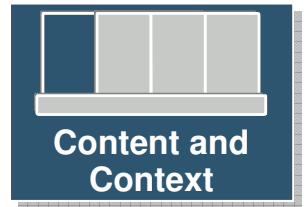
3 Perform Data Quality Assessment



4 Present results and recommendations



Integration with InfoSphere Information Server Data Reach, Integration and Dimensional ETL



Challenge: Access and deliver breadth and volume of information

Solution

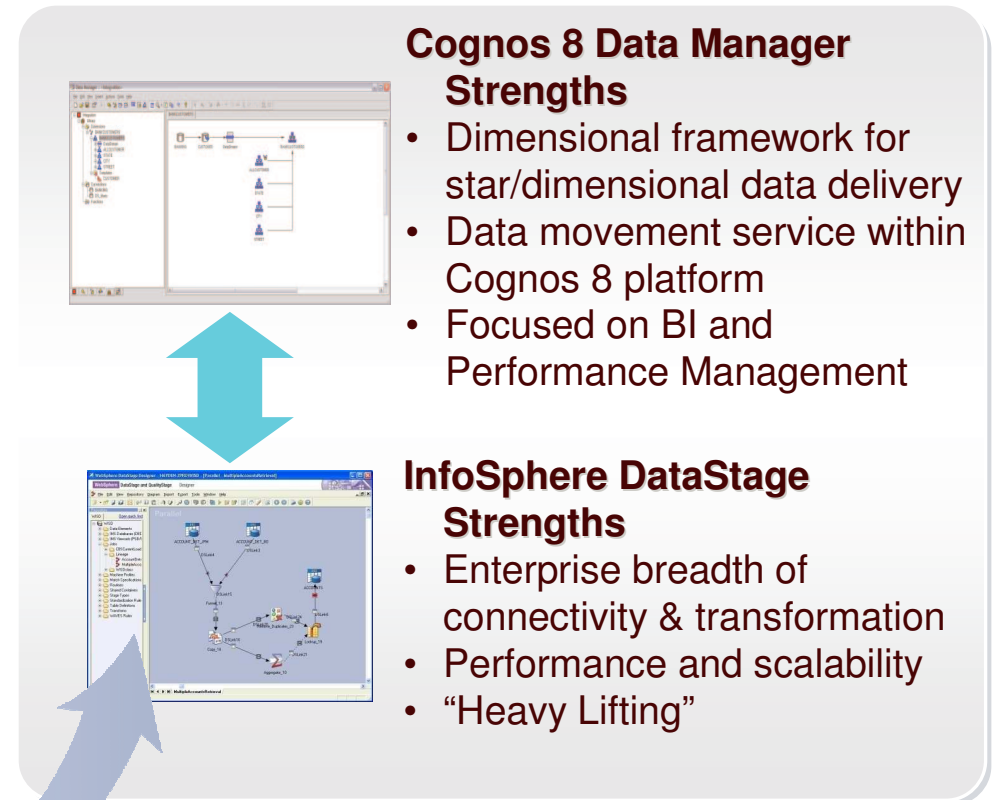
- Batch and real-time integration of DataStage with Data Manager jobs
- Leverage of QualityStage transformations within Data Manager

Roadmap Considerations

- Leverage InfoSphere ERP packs

Value

- Combined industrial strength ETL with dimensional last mile to BI for optimal data sourcing



Cognos 8 Data Manager Strengths

- Dimensional framework for star/dimensional data delivery
- Data movement service within Cognos 8 platform
- Focused on BI and Performance Management

InfoSphere DataStage Strengths

- Enterprise breadth of connectivity & transformation
- Performance and scalability
- “Heavy Lifting”

InfoSphere™
software
DataStage



This represents current product plans and strategy that are subject to change. All release dates and capabilities are subject to the Disclaimer.



Integration with InfoSphere Warehouse Complete OLAP Portfolio



Challenge: Deliver data optimized for analysis

Today

- InfoSphere Cubing Services as a data source
- Embedded Cognos OLAP technology into InfoSphere Warehouse

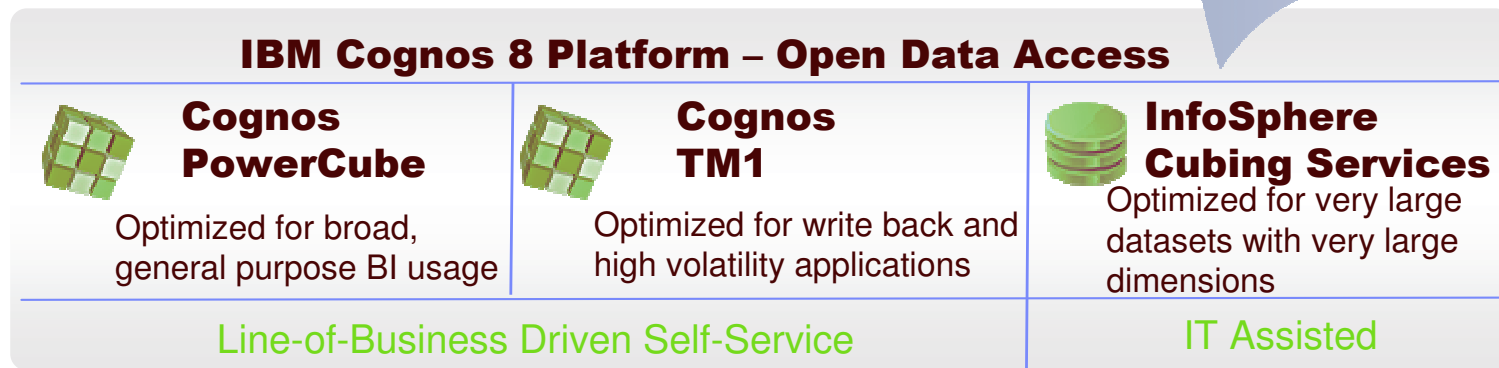
Roadmap Considerations

- Streamline modeling experience
- Further integration across OLAP portfolio

Value

- Provide an OLAP experience across very large data sets

InfoSphere™
software
Cubing Services



This represents current product plans and strategy that are subject to change. All release dates and capabilities are subject to the Disclaimer.



Integration with Master Data Management Complete MDM Portfolio



Challenge: Align business dimensions and master data across IT and business

Today

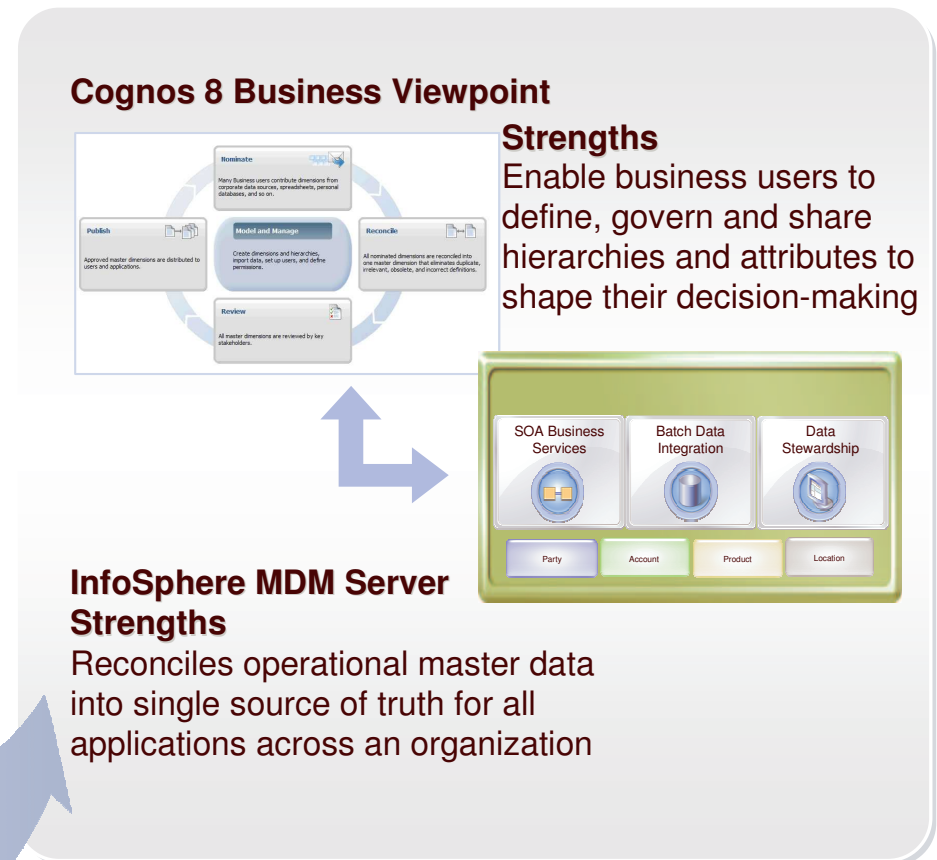
- Integration with MDM Server aligns business authored dimensions, hierarchies, and attributes with operational master data

Roadmap Considerations

- Enhance fidelity, breadth and depth of integration with MDM Server

Value

- Address analytical and operational MDM requirements with an integrated solution



InfoSphere™
software

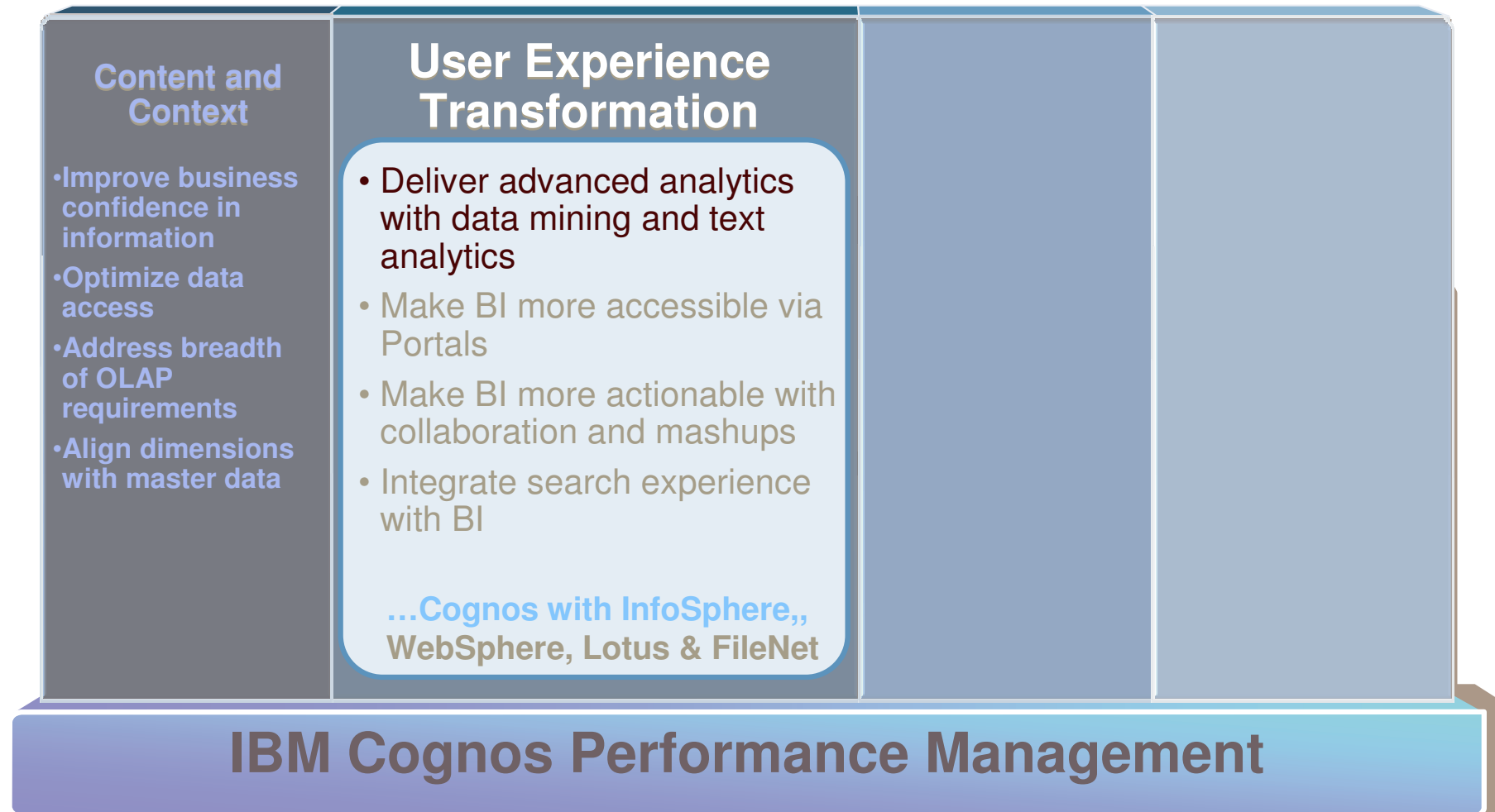
- MDM Server



This represents current product plans and strategy that are subject to change. All release dates and capabilities are subject to the Disclaimer.



Focus Areas of IBM Software and Systems *Part of Everyday Life*



Integration with InfoSphere Warehouse Data Mining and Text Analytics



Challenge: Enable more advanced and predictive analytics

Today

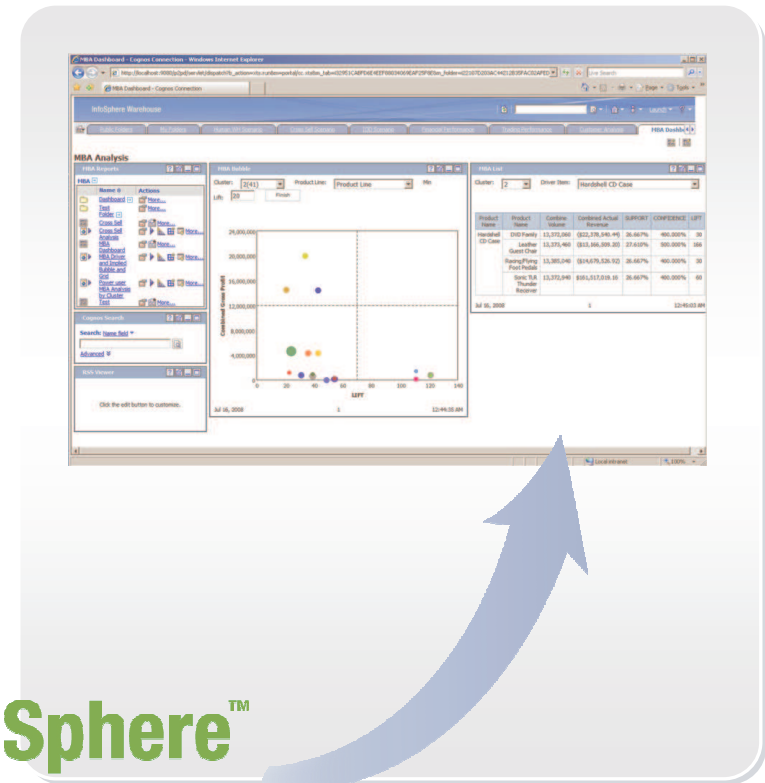
- Deliver data mining results to a broader audience of users with Cognos 8 BI
- Text analytics to transform text to structured data for reporting and analysis with Cognos 8 BI

Roadmap Considerations

- Enhance integration to streamline time to value
- Increasing leverage of predictive models within Cognos 8 BI

Value

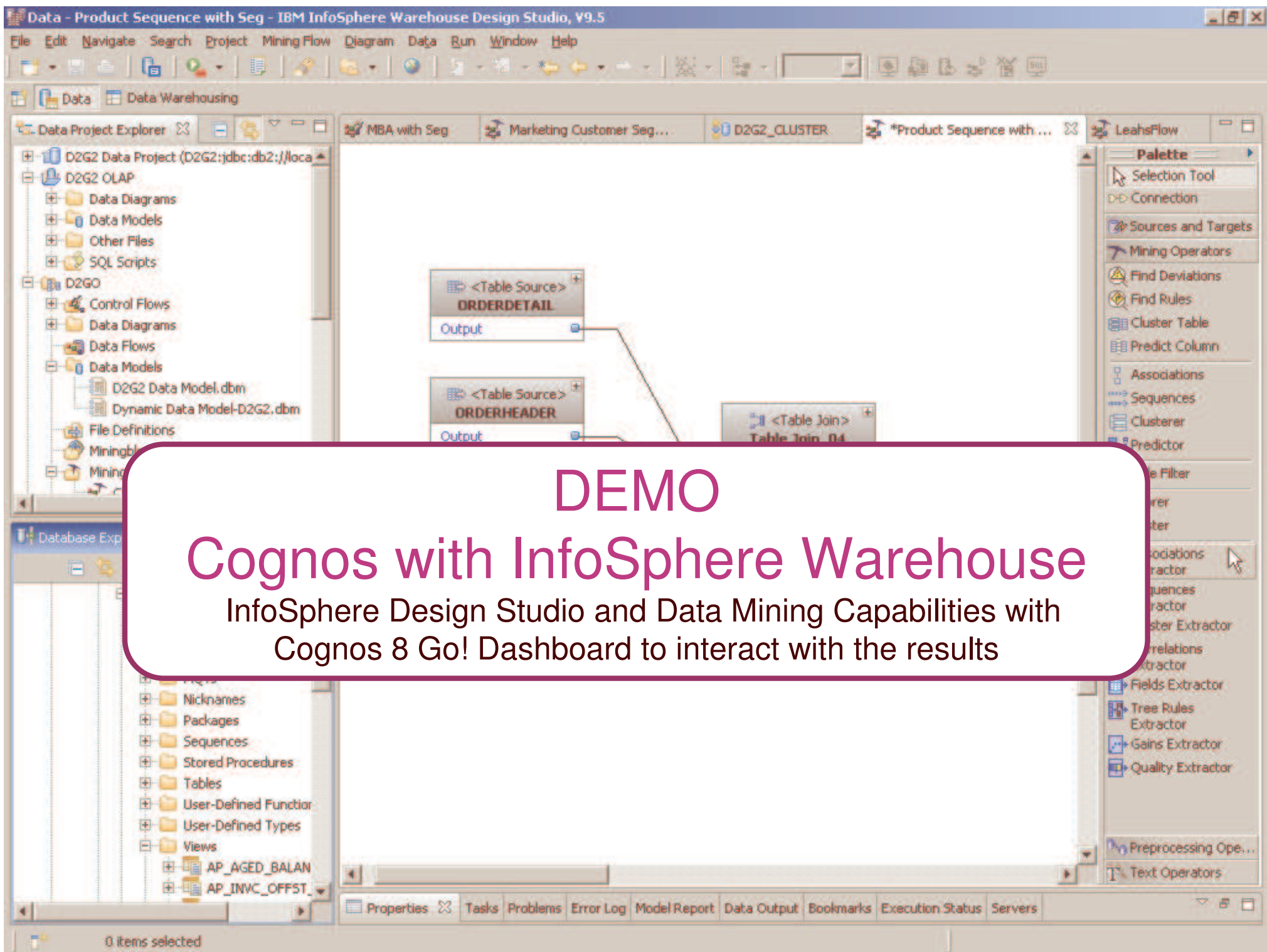
- Understand complex patterns in data and predict the future
- Simplify deliver of data mining results to large business user community



InfoSphereTM
software

- Warehouse Data Mining Capabilities





DEMO
Cognos with InfoSphere Warehouse
InfoSphere Design Studio and Data Mining Capabilities with
Cognos 8 Go! Dashboard to interact with the results

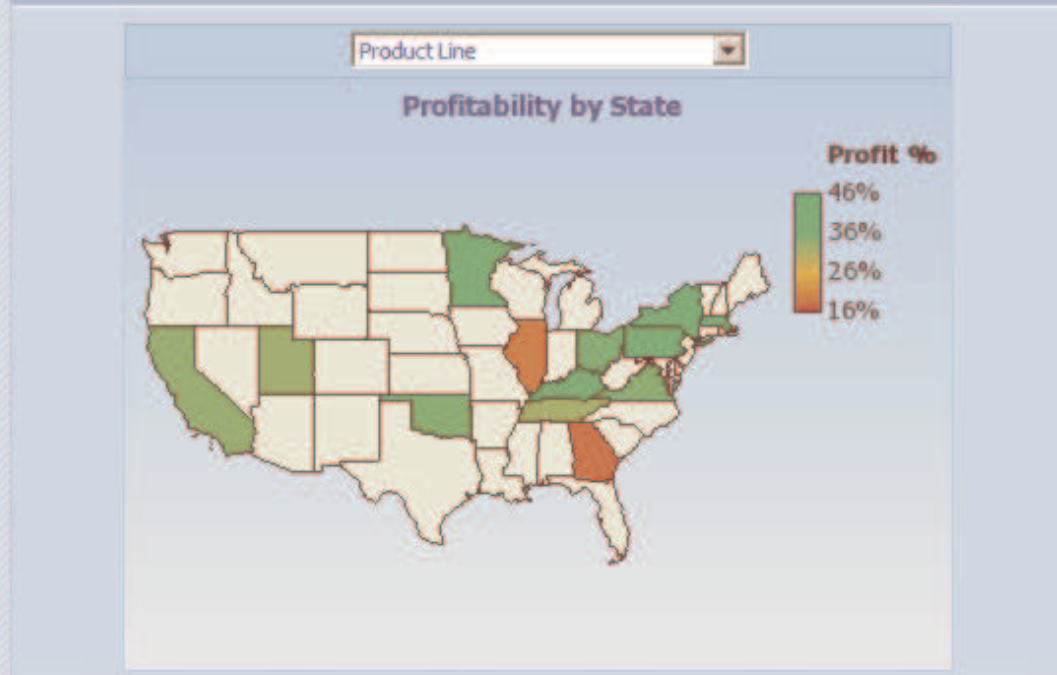
D2G SALES ANALYSIS

TOP SELLING PRODUCTS

Top:

| Rank | Product Name | MBA | SEQ | Sales [\$ 000] |
|-----------------------------|--|-----|-----|------------------|
| 1 | Sonic DTC Digital Advance | | | \$85,849 |
| 2 | Sonic 101 DTS/ES Receiver | | | \$47,091 |
| 3 | Sonic TLR Thunder Receiver | | | \$46,184 |
| Consumer Electronics | | | | \$179,123 |
| 1 | D2G Blast Em | | | \$25,938 |
| 2 | Microsoft Xbox | | | \$6,385 |
| 3 | Sega Dreamcast | | | \$5,632 |
| Entertainment Media | | | | \$37,955 |
| 1 | Computer Extended Desk | | | \$51,852 |
| 2 | Computer Desk Ultra | | | \$41,539 |
| 3 | Standard Stool | | | \$38,477 |
| Home Office | | | | \$131,867 |
| 1 | Wavestation 4200 FP | | | \$384,344 |

PROFITABILITY BY STATE



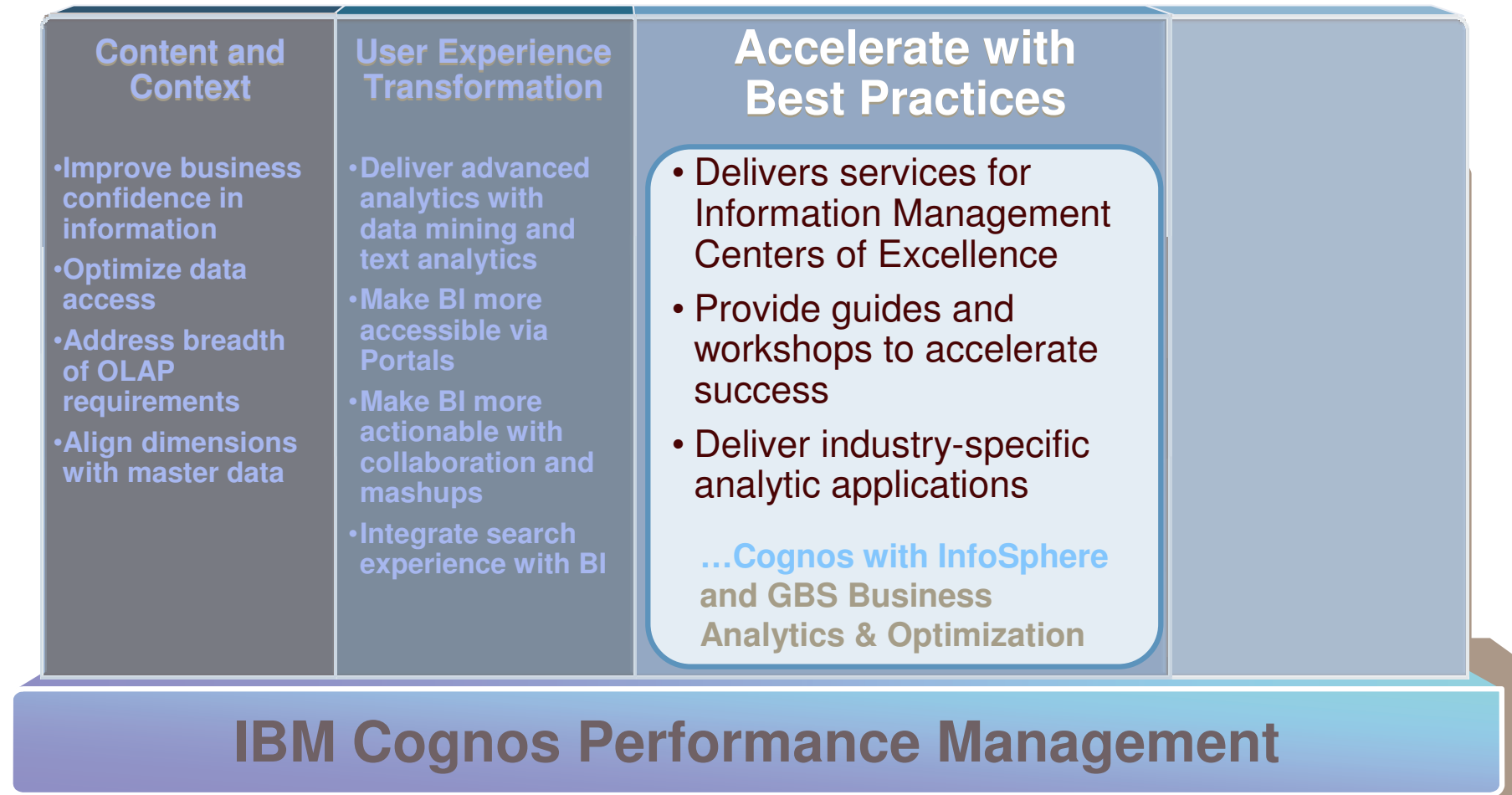
RESTRICT CUST SEGMENT COUNTS TO...



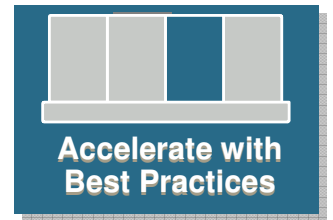
SEGMENTATION COUNTS



Focus Areas of IBM Software and Systems *Fast Time to Results*



Accelerating An Organization's Information Agenda

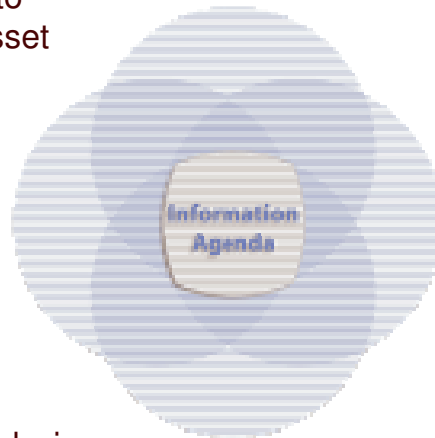


Foundational Tools

Software to help you convert your information into a trusted strategic asset

Information On Demand Competency Centers

Services to help you build information centers of excellence

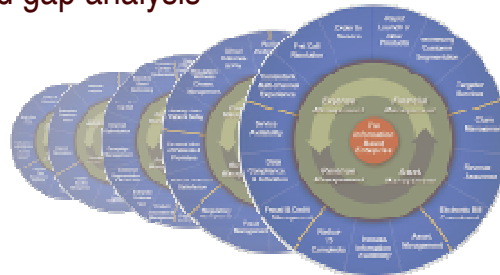


Information Agenda Guides & Workshops

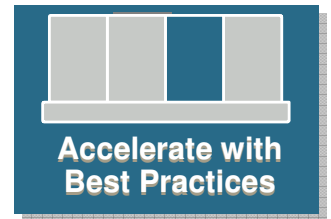
Industry tailored sessions to guide future state design, identification of key information requirements and gap analysis

Information Accelerators

Industry specific assets to speed deployment



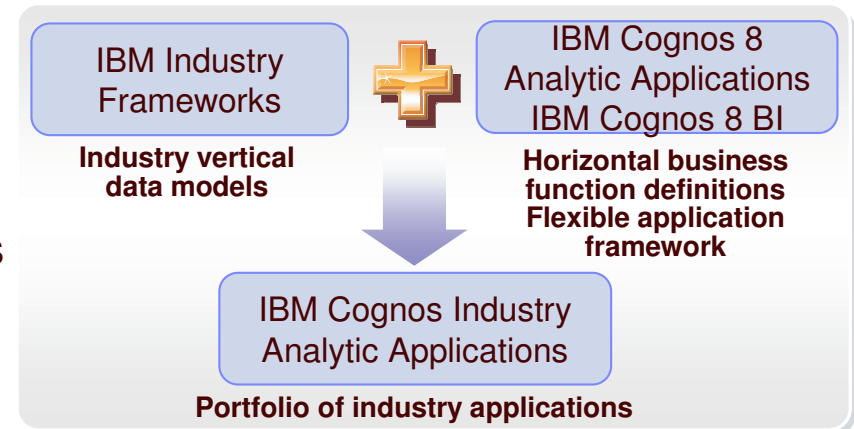
Integration with Industry Models Solutions



Challenge: Accelerate time to value with solutions

Today

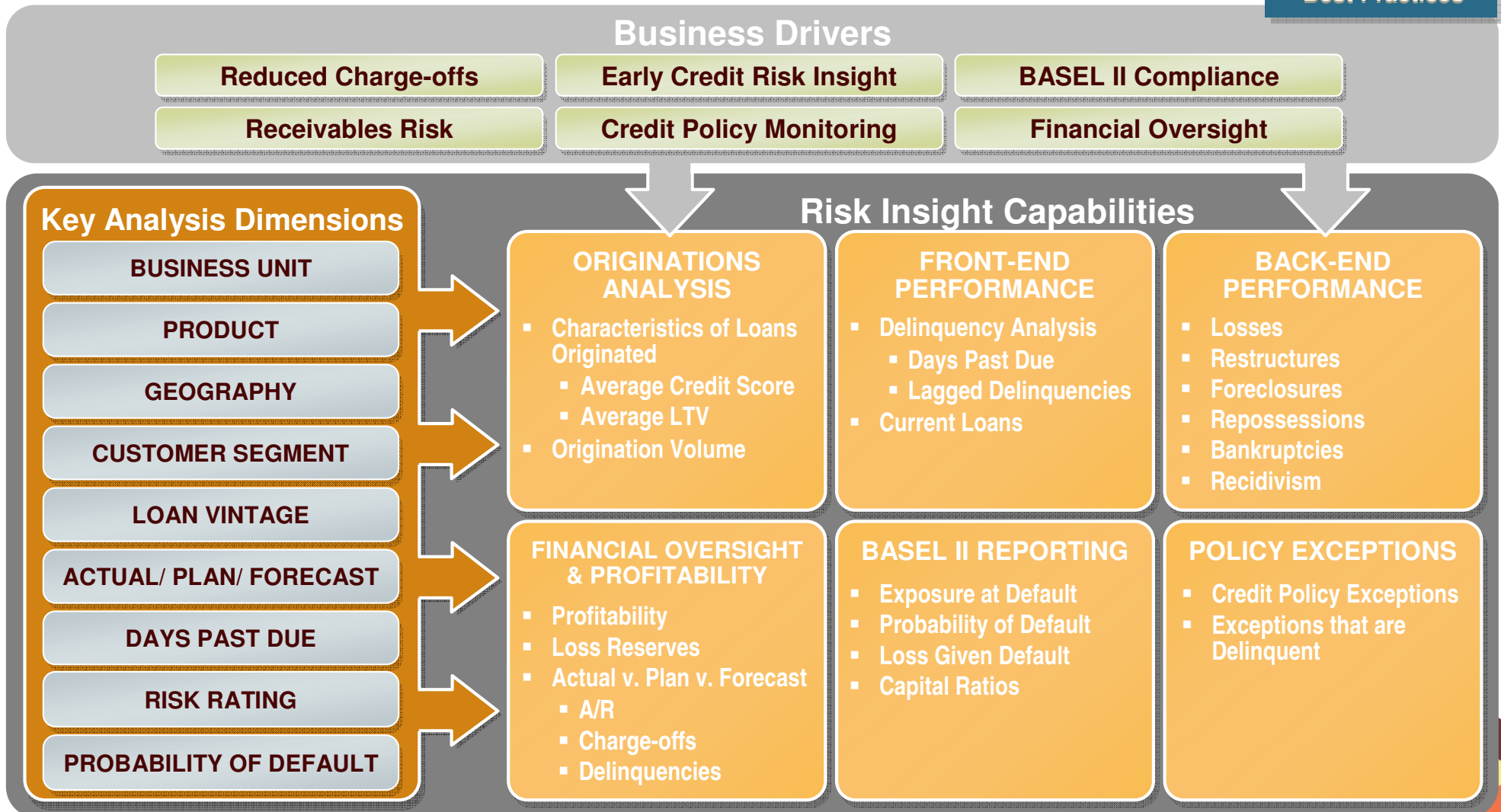
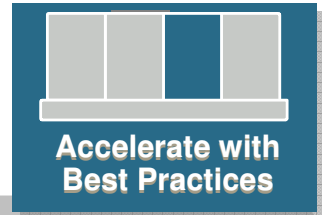
- Leverage Industry Frameworks to fast track solutions
 - Workforce Performance in IBM HRO
 - DB2 as target mart for Performance Applications
 - 10 New & Enhanced Industry Solutions with Implementation Services Offerings
 - Leverage GBS Services for solution implementations
- Banking Risk Performance – analytic application leveraging Banking Industry Framework
- Roadmap Considerations
- Assess Industry Frameworks for analytic applications
- DB2 embedded in Performance Applications
- Enhance with GBS Services offerings



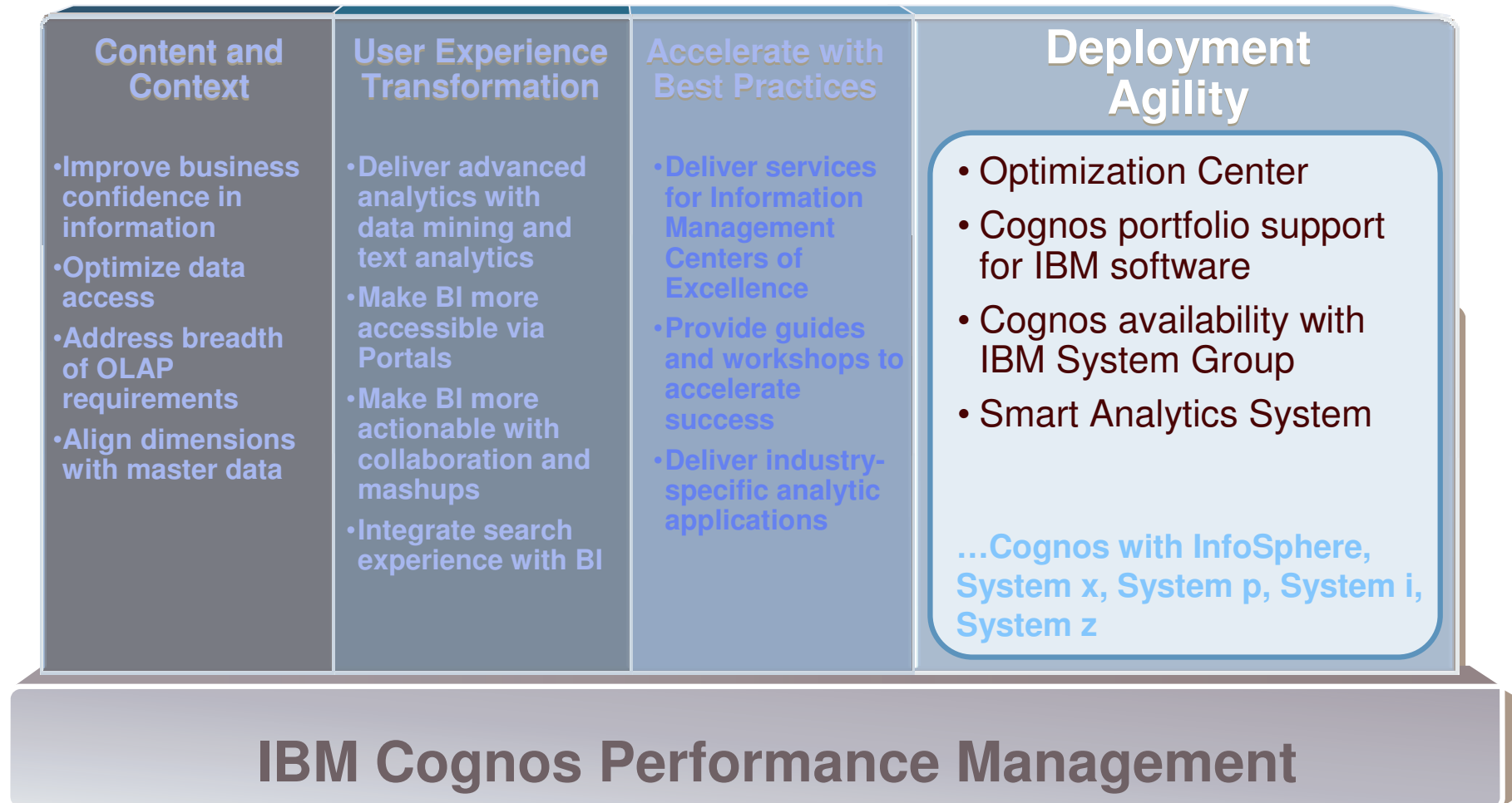
- Banking (Banking Data Warehouse)
- Financial Markets (Financial Markets Data Warehouse)
- Insurance (Insurance Information Warehouse)
- Retail (Retail Data Warehouse)
- Telco (Telecommunications Data Warehouse)
- Health Plan (Health Plan Data Warehouse)



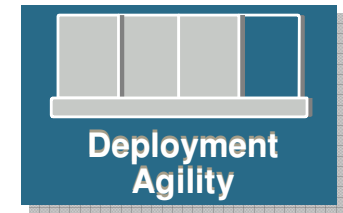
IBM Cognos 8 Banking Risk Performance



Focus Areas of IBM Software and Systems *Rapid Response to Change*



Formation of Optimization Center *Deliver optimized and open software*



Objectives

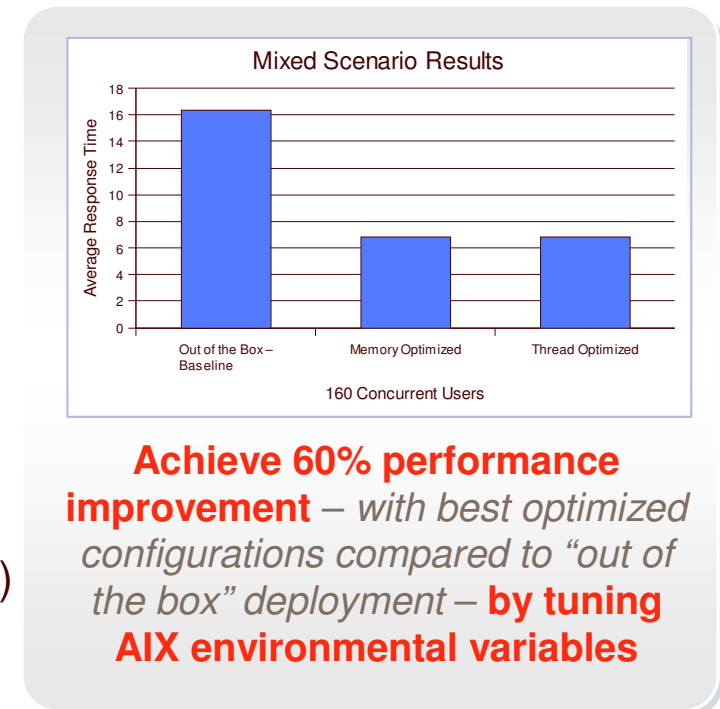
- Reduced time to market
- Lower ownership costs for customers
- Easy to digest

Focus

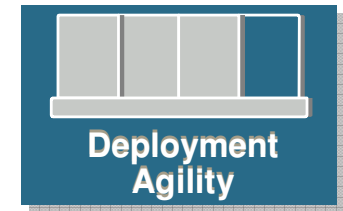
- IBM Cognos BI and FPM initially with InfoSphere / DB2 and AIX

Activities

- Simultaneous support
- Development alignment (features, testing, etc.)
 - Query optimization for DB2
 - Advanced DB2 feature leverage (mining, unstructured)
 - Tuning for AIX
- Published best practices
- Market-driven bundles



Availability with Systems Group *Leverage Existing System Investment*



Today

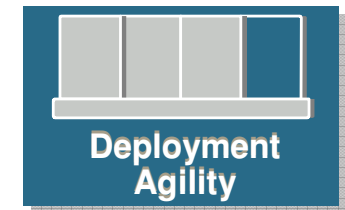
- System z –
 - Cognos 8 BI for Linux on System z
 - content store in DB2 for zOS,
 - DB2 for zOS as source for Planning
- System x – BI, FPM, Cognos Now!
- System p – BI, TM1
- System i – as a source or content store

Roadmap Considerations

- Expanded breadth of capabilities and coverage for Linux on System z
- Continued investment for OS support across BI/FPM



IBM Smart Analytics System *Solution with Software, Hardware and Services*



Challenge: Meet business need for diverse analytics, better, faster and cheaper

Today

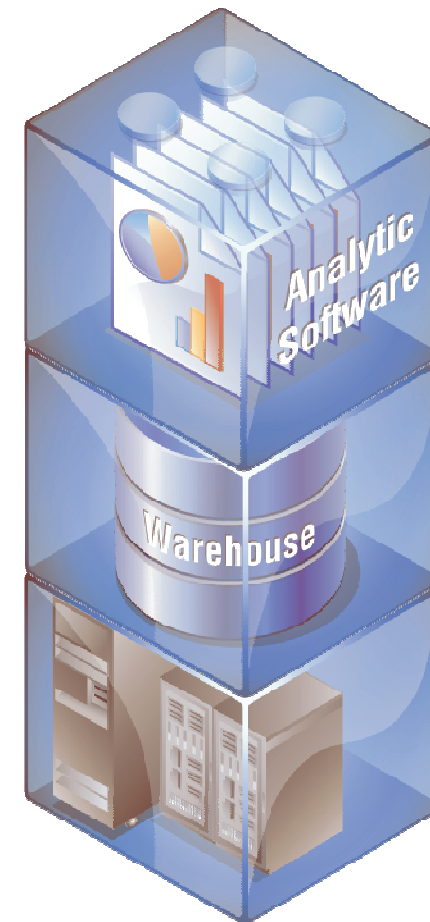
- Smart Analytics System with
 - broad analytic capabilities
 - powerful warehouse capabilities
 - scalable and full-integrated IBM hardware
 - setup services and single point of premium support

Roadmap Considerations

- Expand breadth of capabilities available

Value

- Able to adjust and grow to respond to ever changing business needs
- Deeply integrated and optimized to deliver high performance analytic workloads
- Deliver results in days not months

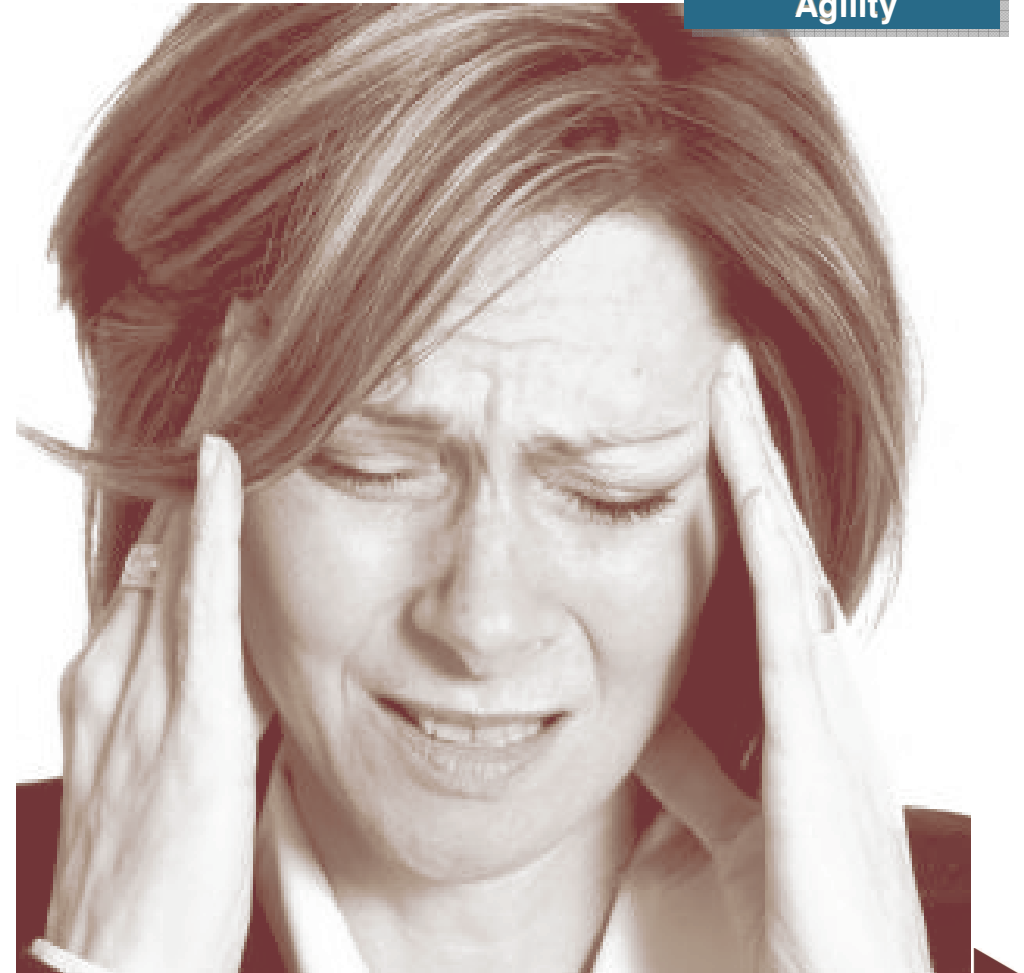


Getting To The Answers Is Not Always Easy

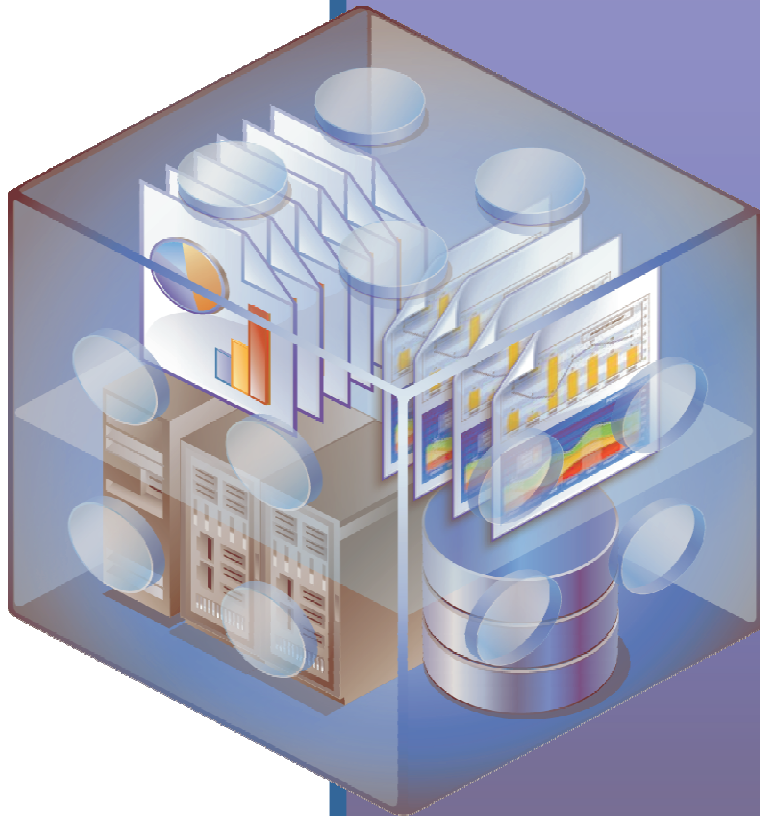
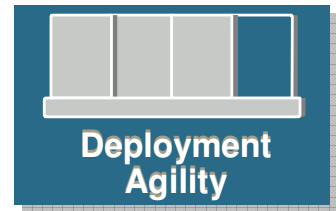
The Pressure is On!



- ✓ No way I can deploy a new system by next quarter!
- ✓ What is our consolidated revenue?, I keep getting different answers...
- ✓ One solution, five vendors, ten support numbers, ..we might as well be system integrators.
- ✓ Revenue & profits are down,..... only thing that is up is my quota.
- ✓ Whatever I spend to solve today's problem must be relevant to solve tomorrows as well.
- ✓ Even if I had the applications I do not trust my information.
- ✓ No way my infrastructure can support these new requirements.



IBM Smart Analytics System *What's in the system?*



Deeply optimized by IBM experts

Flexible growth to meet changing business needs

Analytics Software Options

- ☑ Business Intelligence capabilities
- ☑ Cubing Services
- ☑ Text Analytics & Data Mining
- ☑ . . . more to come

Powerful Data Warehouse

- ☑ Warehousing Platform
- ☑ Advanced Workload Management
- ☑ System Automation

Hardware & Services

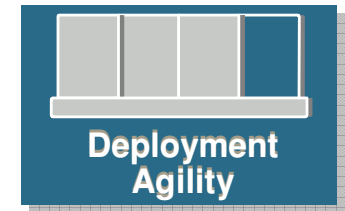
- ☑ Server Platform
- ☑ Storage capacity
- ☑ Build, Deploy, Health Check & Premium Support Services

Delivering results in days instead of months!



IBM Smart Analytics System

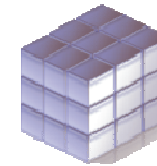
Delivering Information How, When & Where Needed



- ➔ A Broad Range of Analysis, Dashboards and Reporting
 - Cost-effectively scale as user communities grow



- ➔ Deep Analysis of Multiple Business Variables with Cubing Services OLAP
 - Multi-dimensional analysis within the warehouse without copying data



- ➔ Gain complete understanding with Data Mining and Unstructured Information Analytics
 - Extract knowledge & insights from untapped information



- ➔ Leverage BI for Operational Business Processes with Advanced Workload Management
 - Consolidate warehouses and marts for a broad set of users with high performance levels



IBM Smart Analytics System High Performance Drives Lower Costs



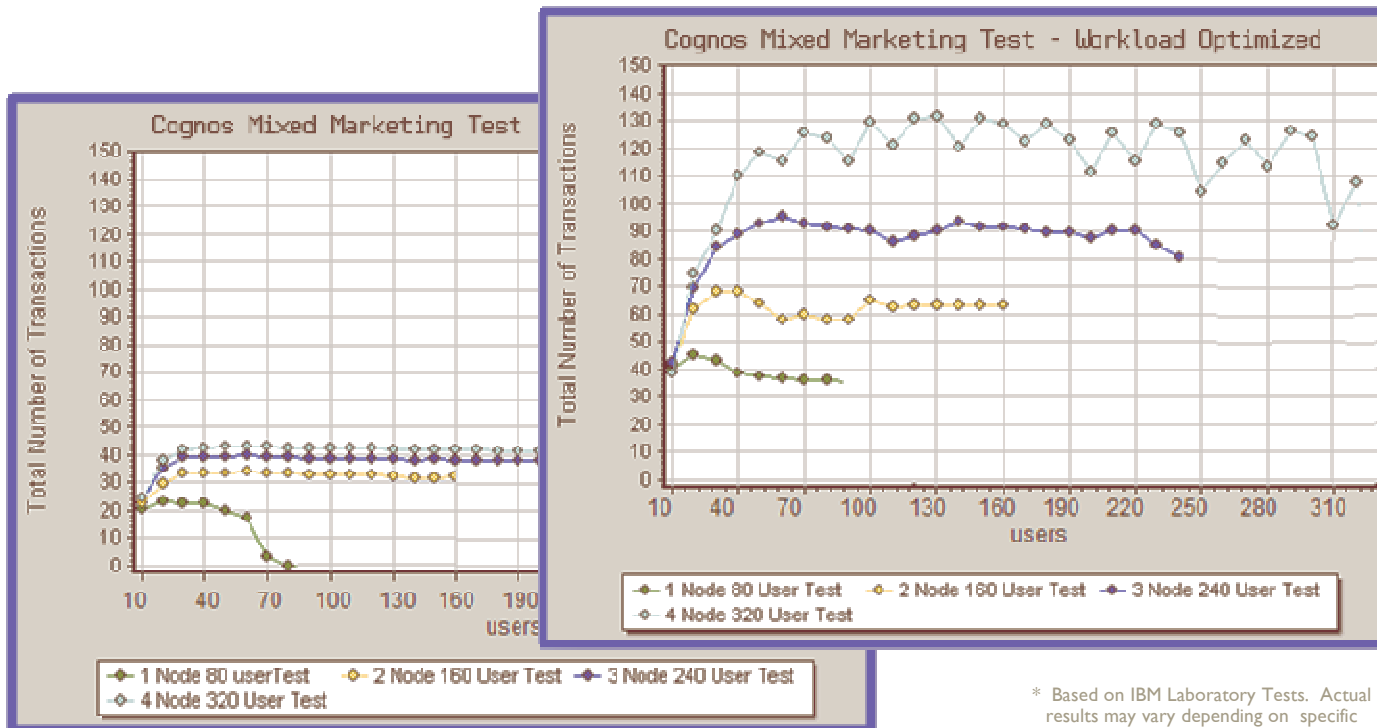
50% Less

*50% less floor space than competitors from superior database compression, server & storage performance**



3X Faster

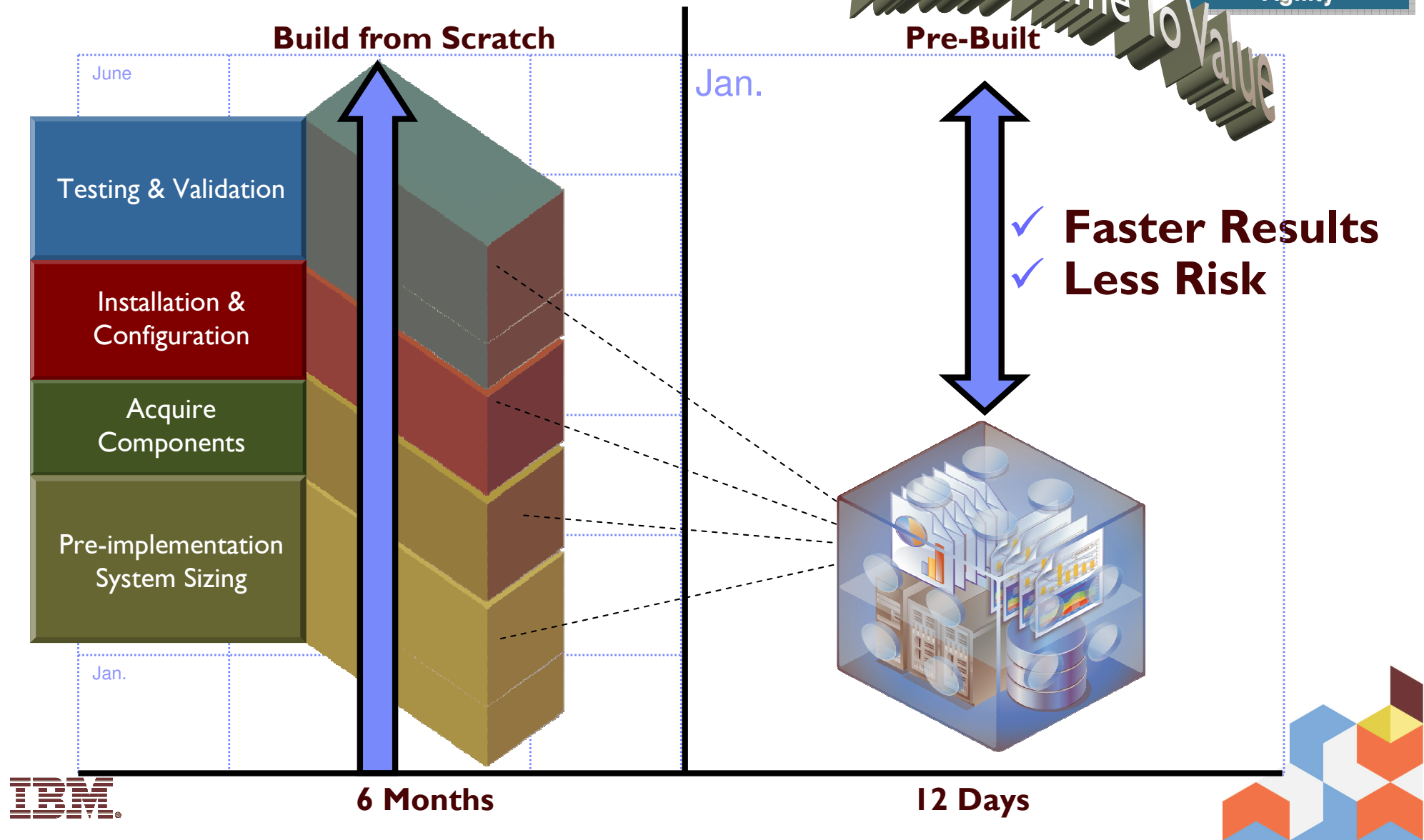
*Pre-optimized Business Intelligence Software triples out of the box performance**



* Based on IBM Laboratory Tests. Actual results may vary depending on specific environment and configuration.

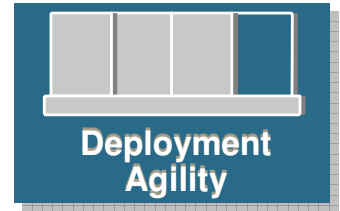


IBM Smart Analytics System Results in Days Versus Months



IBM Smart Analytics System

The right insight at the right place and right time



- ✓ Uncovering
New Business
Opportunities
- ✓ Fast Answers to
Business Questions
- ✓ Making Better, Faster
Decisions
- ✓ Optimizing Business
Performance



IBM Cognos Software Investment Approach

Flexibility and Value with Cognos and InfoSphere



- Modular.** Organizations can **address immediate pain points**
- Open.** Organizations can **utilize existing IT standards and infrastructure** they have in place
- Integrated.** Organizations looking for a **more complete solution** from IBM gain greater value from components **working in concert**

