

**IBM Cognos Performance**  
Better Intelligence. Better Business.

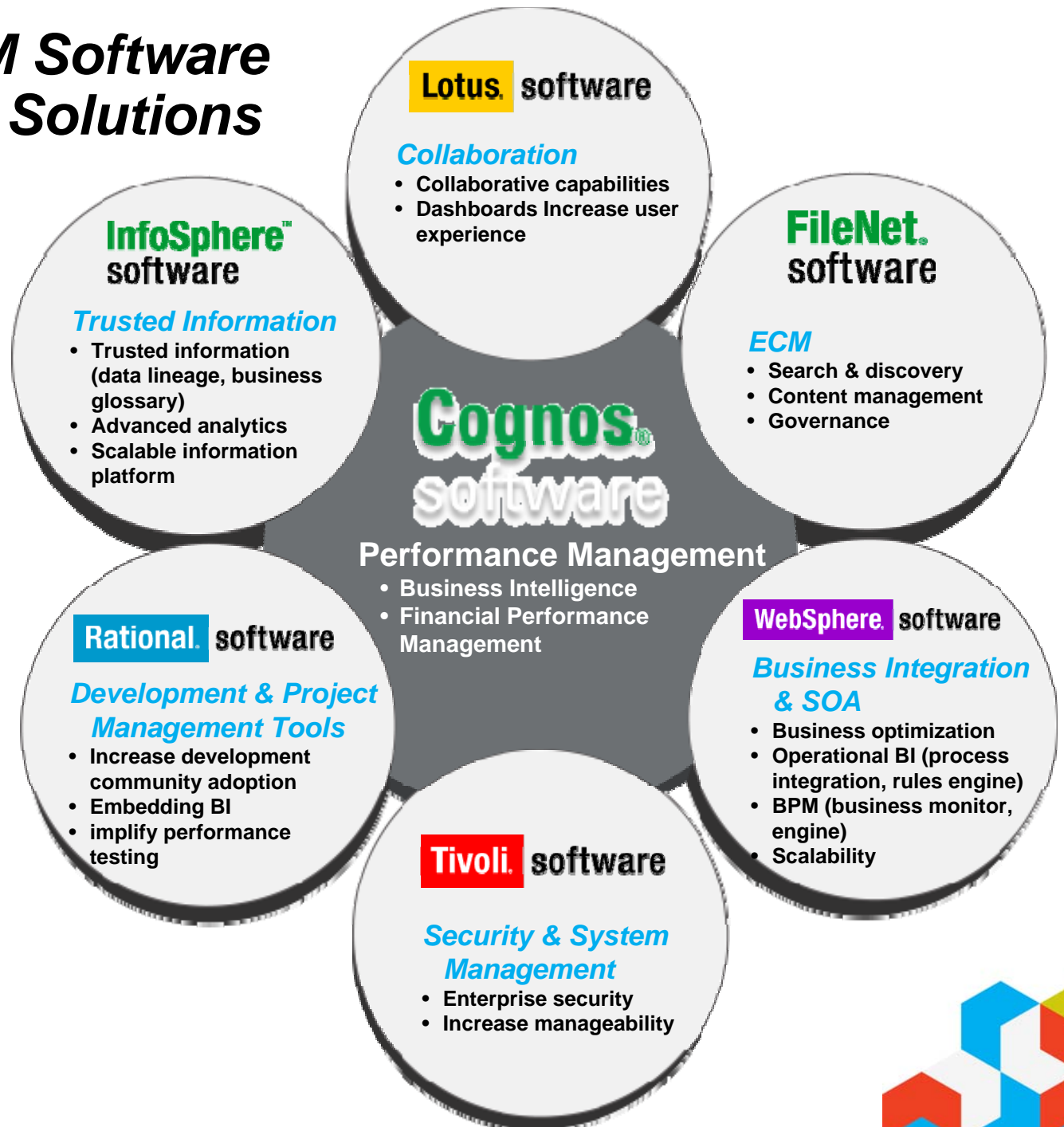
Combine IBM InfoSphere &  
Cognos Solutions to Deliver  
Greater Information Value



## 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**

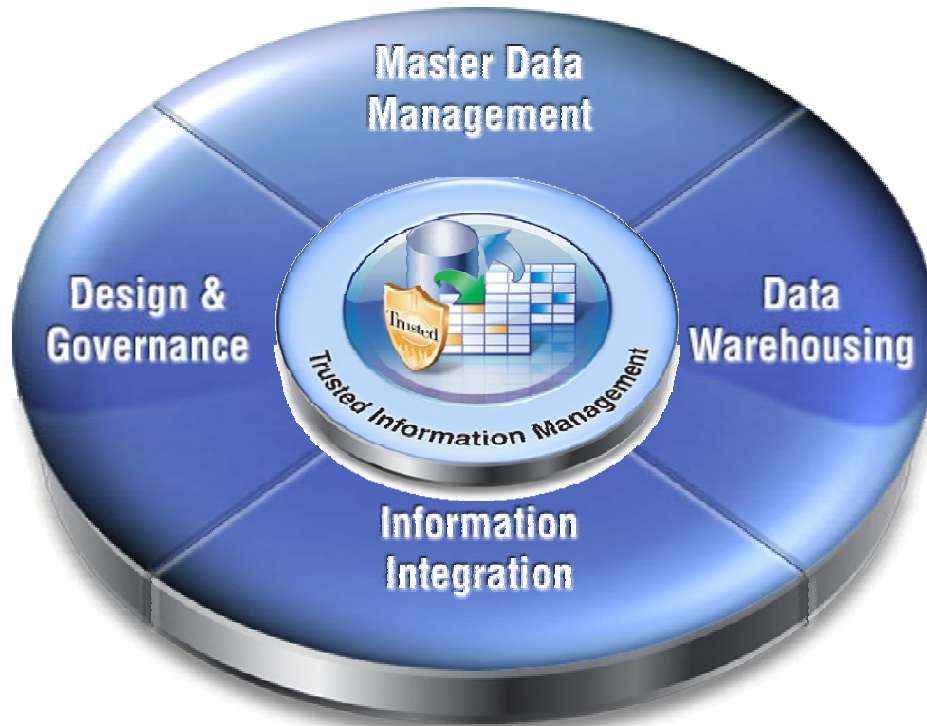
IBM InfoSphere MDM Server

Master Data  
Management

Design &  
Governance

**Get your arms  
around your data**

IBM InfoSphere  
Foundation Tools



Data  
Warehousing

**Deliver better business  
intelligence faster**

IBM InfoSphere  
Warehouse

Information  
Integration

**Consolidate your application  
infrastructure**

IBM InfoSphere Information Server





## IBM Cognos Software Investment Focus Areas

*Modular. Open. Integrated.*

**INVESTMENT AREAS**

**Beyond  
Just Data**

**Content and  
Context**

*...Cognos with  
InfoSphere*

**Part of  
Everyday Life**

**User Experience  
Transformation**

**Fast Time to  
Results**

**Accelerate with  
Best Practices**

**Rapid Response  
to Change**

**Deployment  
Agility**

**IBM Cognos Performance Management**



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

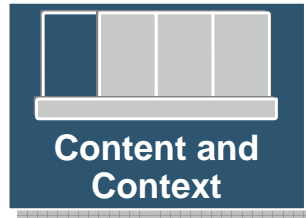
### **Content and Context**

- 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*



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

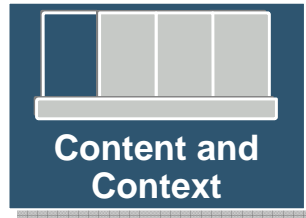
- Business can understand what terms mean and where data came from without calling IT

A screenshot of the InfoSphere software interface. It shows a data table with columns for product status and counts. A dropdown menu is open, showing options like "Call Down", "Call Up", "Go To", "Alert Using New Watch Rule...", "Glossary", and "Lineage". A large blue arrow points from the "Glossary" option to a list of return reasons: "Unsatisfactory product", "Defective product", "Incomplete product", and "Wrong product shipped".

**InfoSphere™ software**

- Business Glossary
- Metadata Workbench
- Information Analyzer

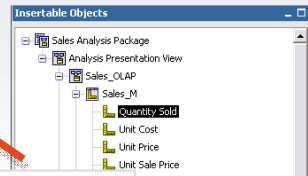




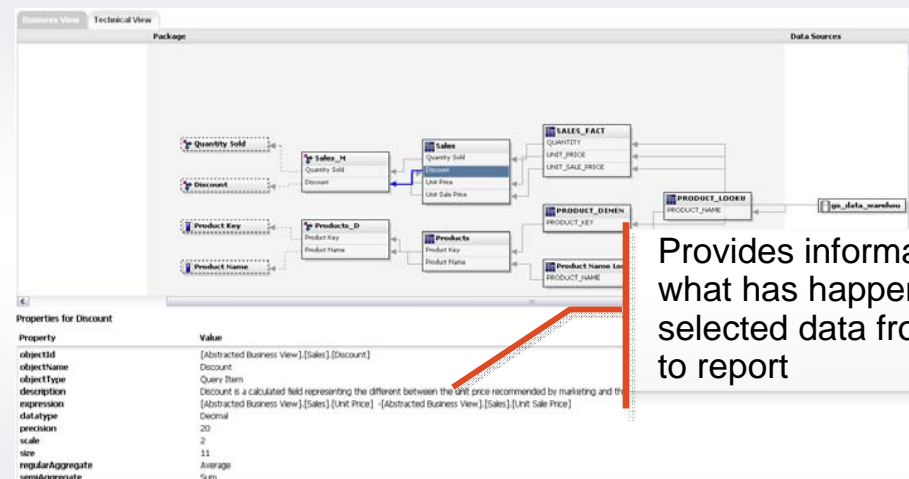
## Lineage in business terms

- 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	588.93333333	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



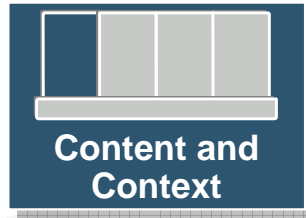
Provides information on what has happened to selected data from source to report



## 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

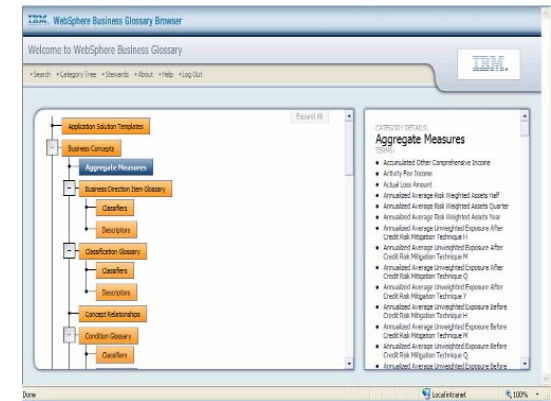


Any User

Design & Govern

InfoSphere Business Glossary

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



Business Context View





# IBM Cognos Performance

Returns by Order Method - Cognos Viewer - Windows Internet Explorer

http://cognosd2g/cognos8/cgi-bin/cognos.cgi?b\_action=cognosViewer&ui.action=view&ui.object

Google

Returns by Order M... IBM Information Server

## Cognos Viewer - Returns by Order Method

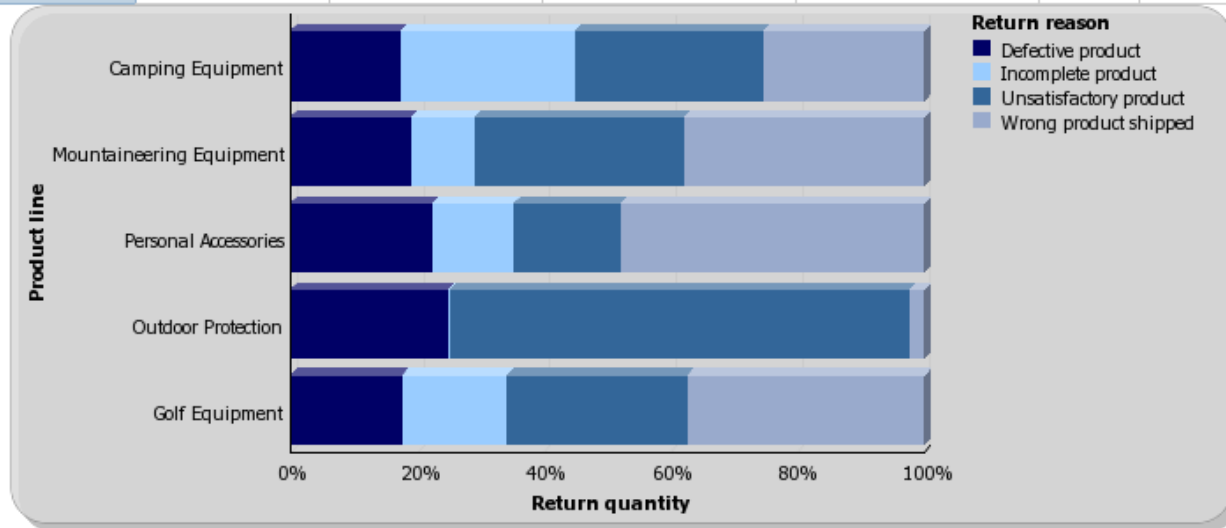
Log On | Home | About

Keep this version | Add this report | Watch new versions | Add comments



# Returns by Order Method

Return quantity	Defective product	Incomplete product	Wrong product shipped	Unsatisfactory product	2004	2005	2006	2007
Camping Equipment	36,046	57,043	52,199	61,549	33,817	50,769	57,013	65,238
Mountaineering Equipment	15,492	8,176	30,765	27,012		20,635	34,530	26,280
Personal Accessories	46,290	26,808	98,875	34,934	43,834	52,190	63,056	47,827
Outdoor Protection	79,351	374	7,210	230,481	217,622	62,349	30,670	6,775
Golf Equipment	6,221	5,817	13,105	10,068	6,287	6,731	14,047	8,146



3 May 2009 01:49:38

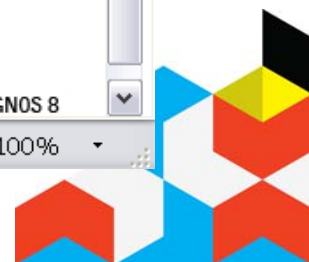
1

IBM COGNOS 8

Done

Local intranet

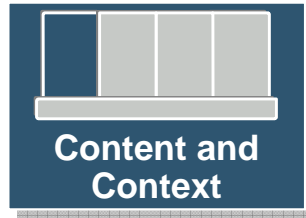
100%



## 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



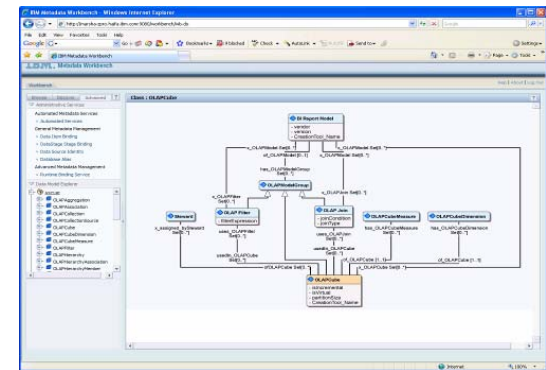
Governance Stewards



Architects

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

**Design & Govern**



**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

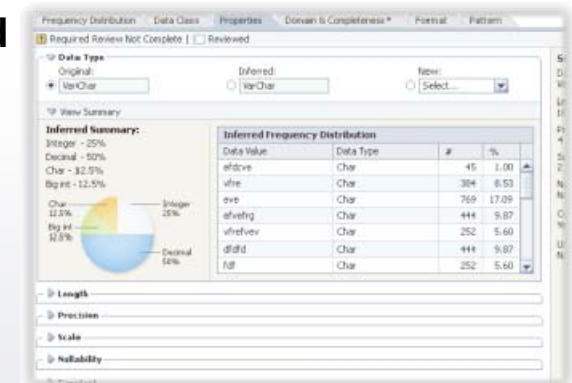


Data Analysts

### InfoSphere Information Analyzer

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

### Understand



Physical View

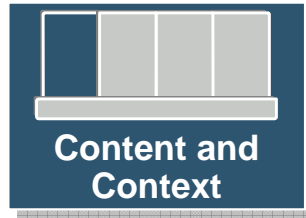


*IBM InfoSphere Information Analyzer*

**Demo**  
**InfoSphere Information Analyzer**

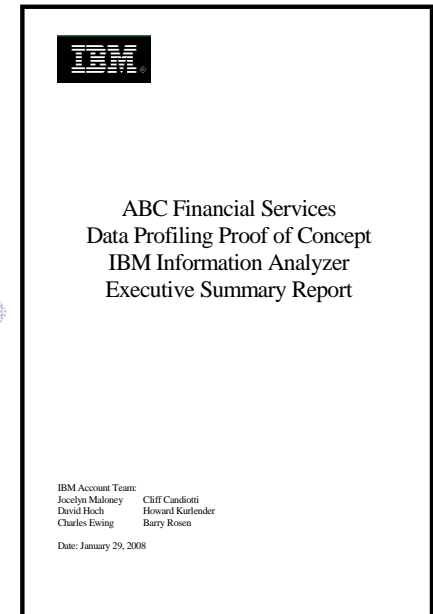
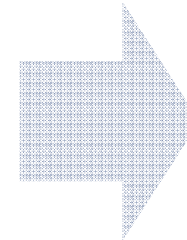
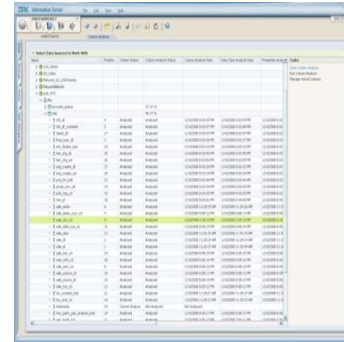


## IBM Data Quality Assessment

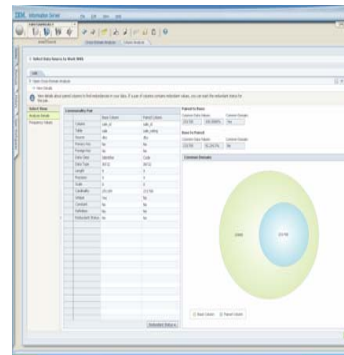
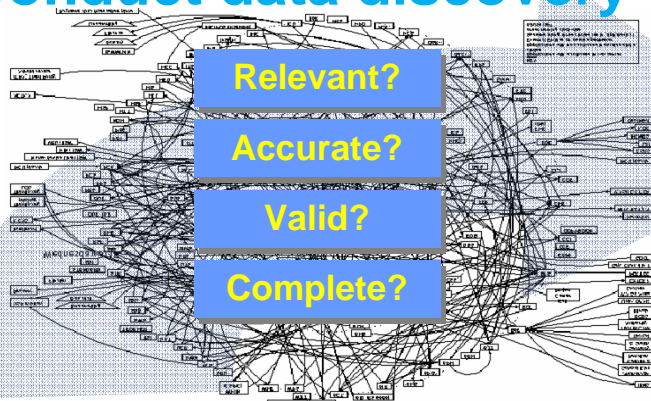


### 1 Define business problems

- 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



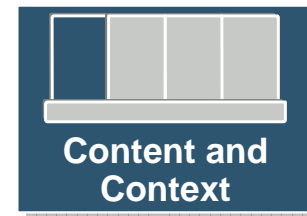
### 4 Present results and recommendations

### 3 Perform Data Quality Assessment





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



Challenge: Access and deliver breadth and volume of information

### Solution

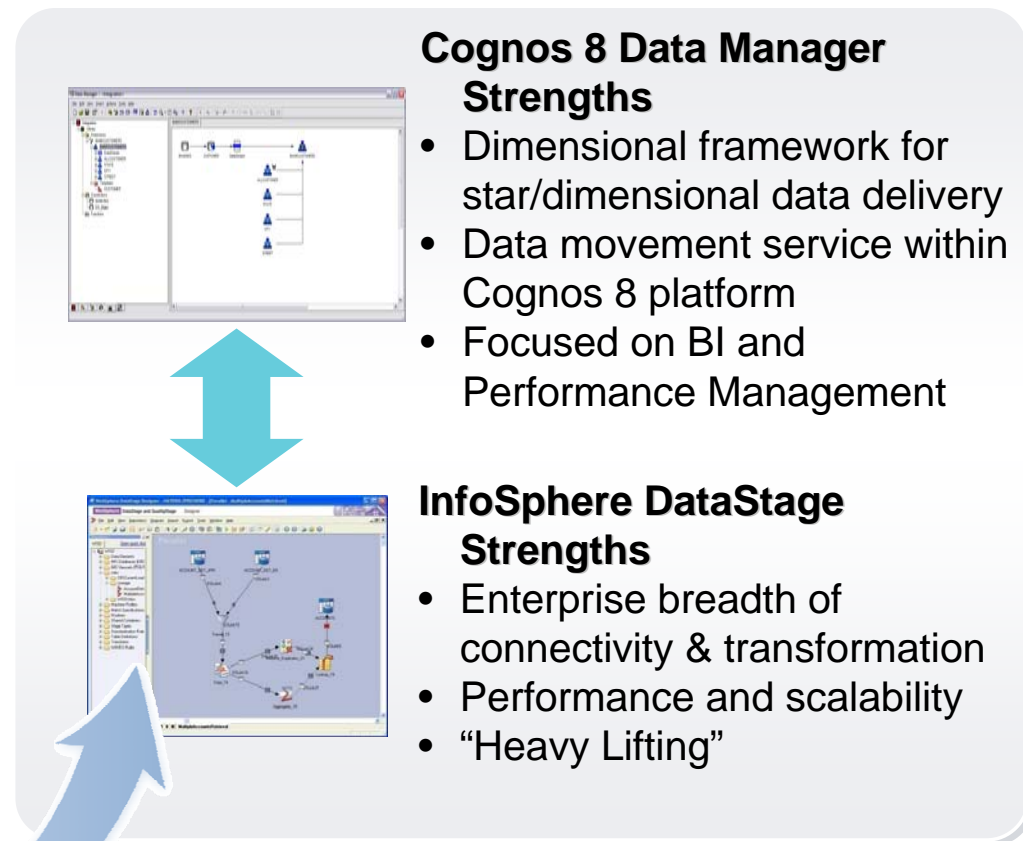
- Batch and real-time integration of DataStage with Data Manager jobs
- Leverage of QualityStage transformations within Data Manager

### 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**

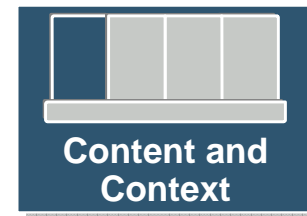
- Enterprise breadth of connectivity & transformation
- Performance and scalability
- “Heavy Lifting”

**InfoSphere™**  
**software**

DataStage



## 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

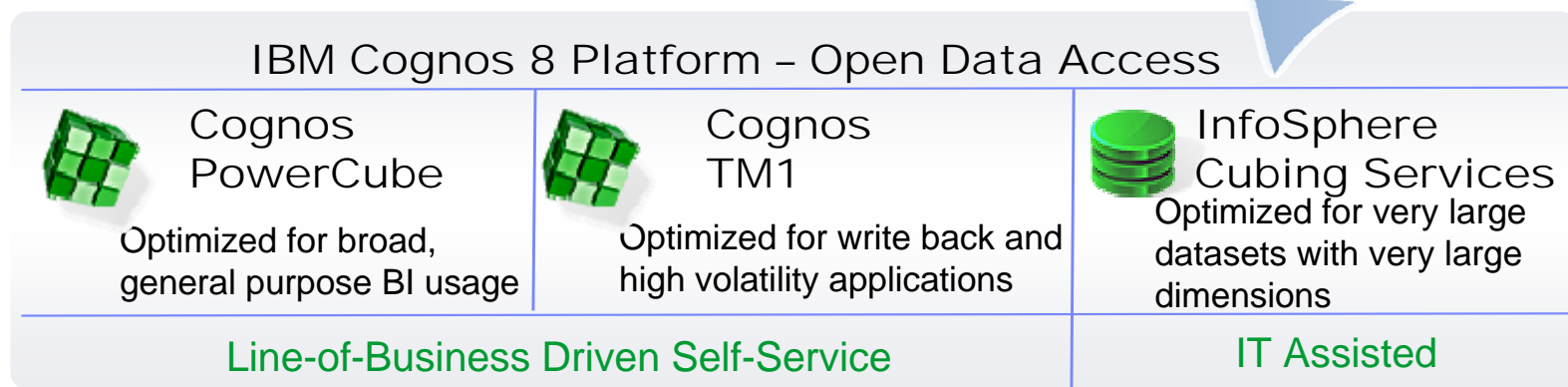
Roadmap Considerations

- 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

### Cognos 8 Business Viewpoint



### Strengths

Enable business users to define, govern and share hierarchies and attributes to shape their decision-making



### InfoSphere MDM Server Strengths

Reconciles operational master data into single source of truth for all applications across an organization

**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*

### Content and Context

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

### User Experience Transformation

- Deliver advanced analytics with data mining and text analytics
- Make BI more accessible via Portals
- Make BI more actionable with collaboration and mashups
- Integrate search experience with BI

...Cognos with InfoSphere,,  
WebSphere, Lotus & FileNet

## IBM Cognos Performance Management



## Integration with InfoSphere Warehouse Data Mining and Text Analytics



Challenge: Enable more advanced and predictive analytics

Today

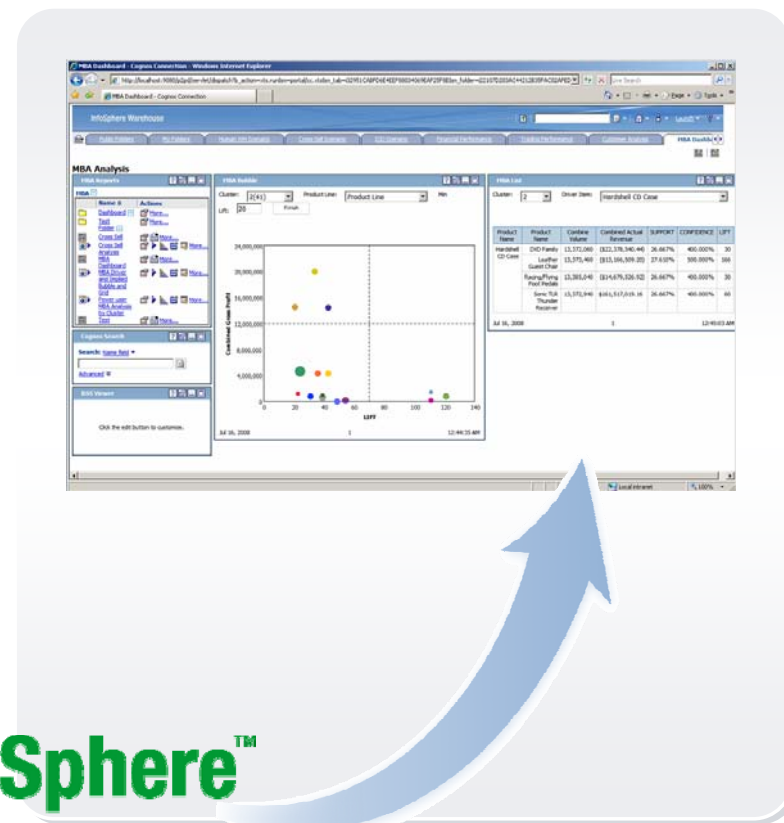
- Deliver data mining results to a broader audience of users with Cognos 8 BI
- Text analytics to transform text to structured data for reporting and analysis with Cognos 8 BI

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



**InfoSphere™**  
software

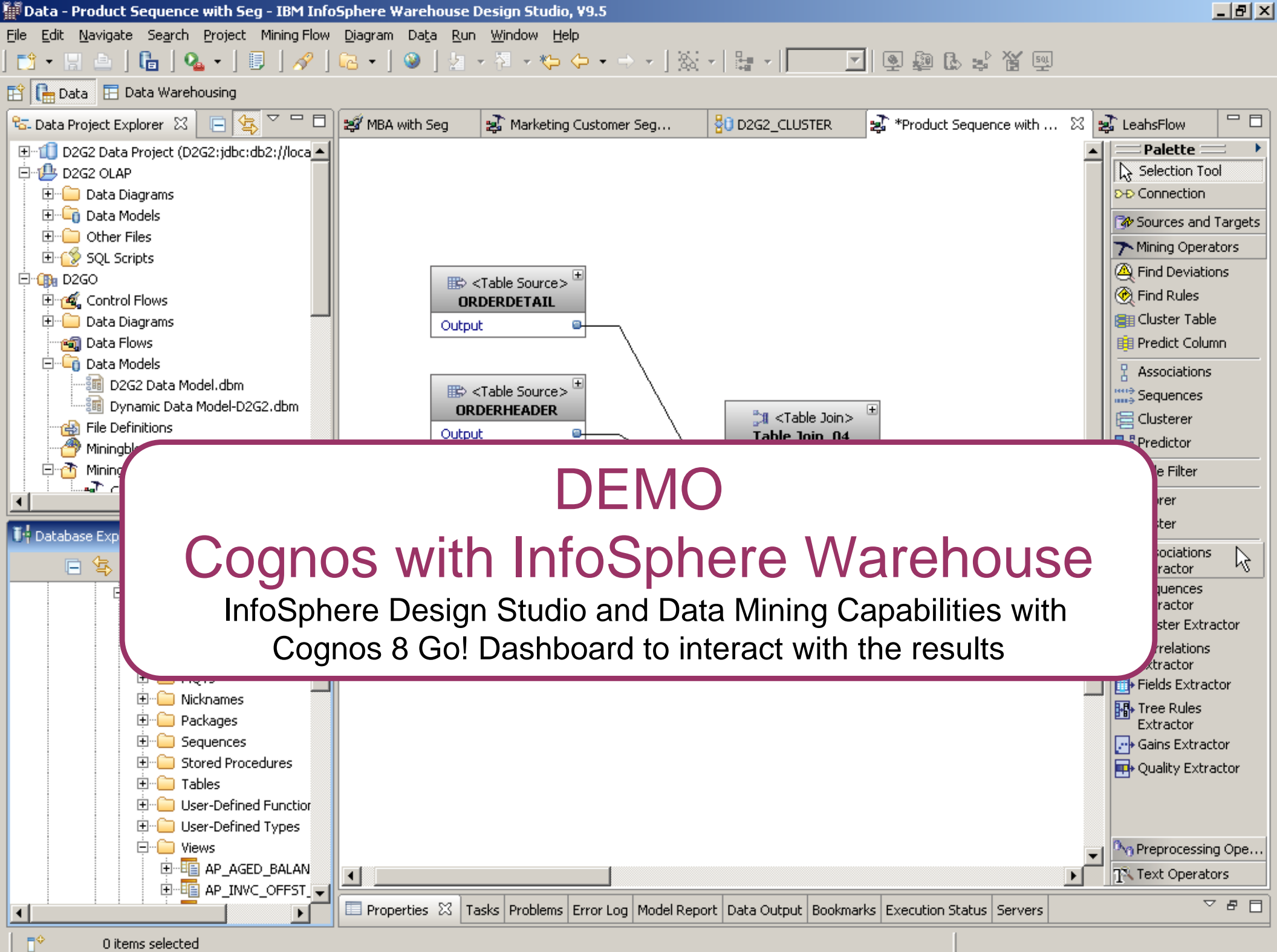
- Warehouse Data Mining Capabilities



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







DEMO

# Cognos with InfoSphere Warehouse

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

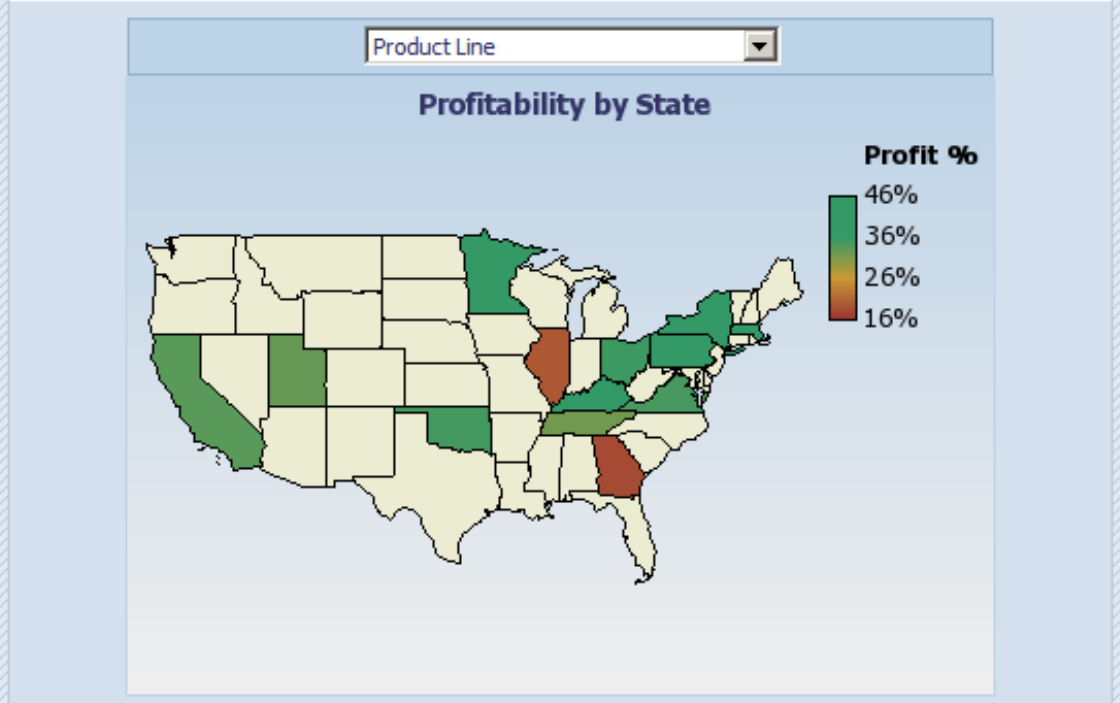
# D2G SALES ANALYSIS

## TOP SELLING PRODUCTS

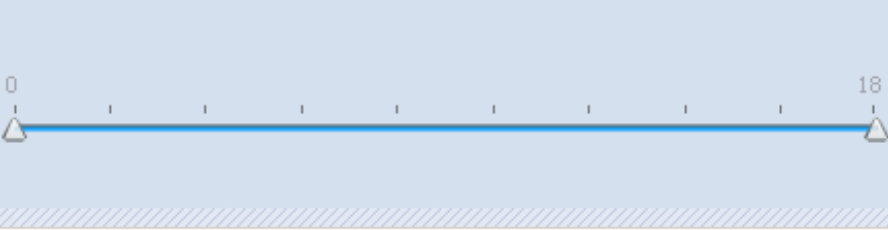
Top: \* 3

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

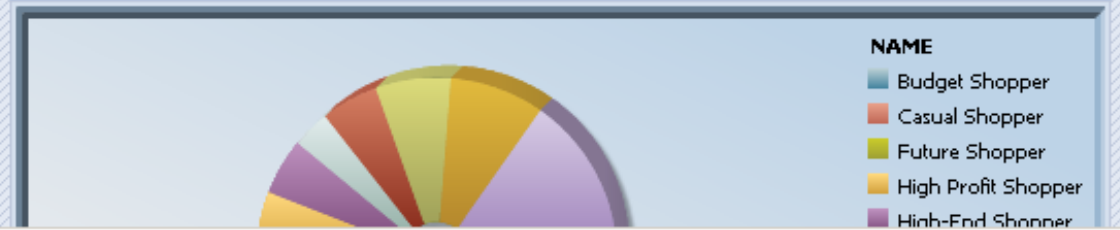
## PROFITABILITY BY STATE



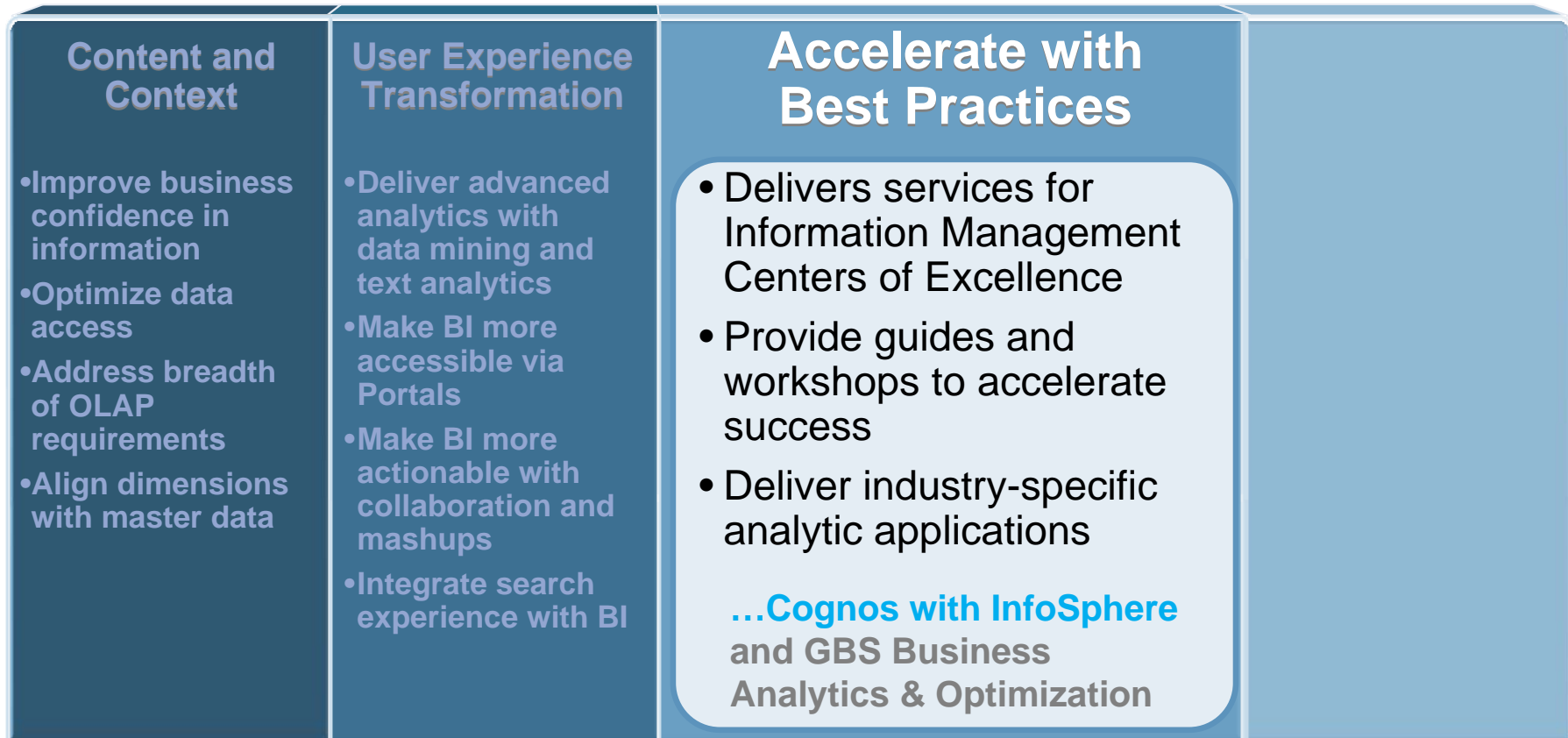
## RESTRICT CUST SEGMENTCOUNTS TO...



## SEGMENTATION COUNTS



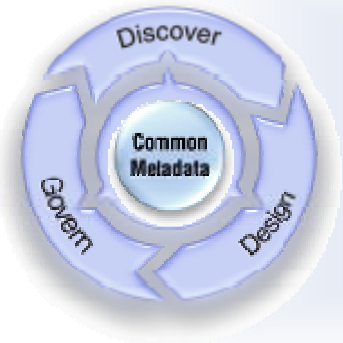
## ***Focus Areas of IBM Software and Systems*** *Fast Time to Results*



**IBM Cognos Performance Management**



# 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

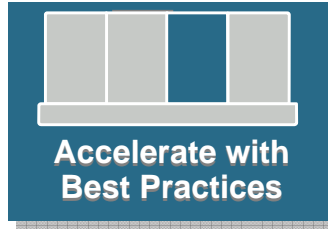
Industry tailored sessions to guide future state design, identification of key information requirements and gap analysis

## Information Accelerators

Industry specific assets to speed deployment



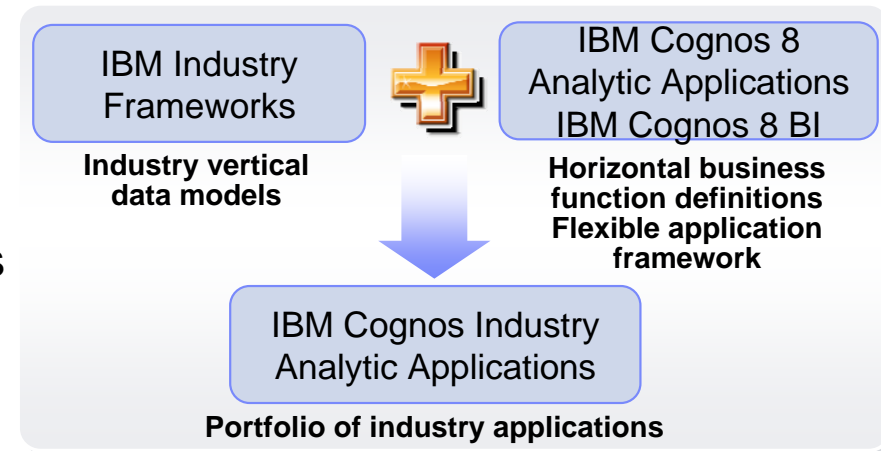
## Integration with Industry Models Solutions



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



Accelerate with Best Practices

### Business Drivers

Reduced Charge-offs

Early Credit Risk Insight

BASEL II Compliance

Receivables Risk

Credit Policy Monitoring

Financial Oversight

### Key Analysis Dimensions

BUSINESS UNIT

PRODUCT

GEOGRAPHY

CUSTOMER SEGMENT

LOAN VINTAGE

ACTUAL/ PLAN/ FORECAST

DAYS PAST DUE

RISK RATING

PROBABILITY OF DEFAULT

### Risk Insight Capabilities

#### ORIGINATIONS ANALYSIS

- Characteristics of Loans Originated
  - Average Credit Score
  - Average LTV
- Origination Volume

#### FRONT-END PERFORMANCE

- Delinquency Analysis
  - Days Past Due
  - Lagged Delinquencies
- Current Loans

#### BACK-END PERFORMANCE

- Losses
- Restructures
- Foreclosures
- Repossessions
- Bankruptcies
- Recidivism

#### FINANCIAL OVERSIGHT & PROFITABILITY

- Profitability
- Loss Reserves
- Actual v. Plan v. Forecast
  - A/R
  - Charge-offs
  - Delinquencies

#### BASEL II REPORTING

- Exposure at Default
- Probability of Default
- Loss Given Default
- Capital Ratios

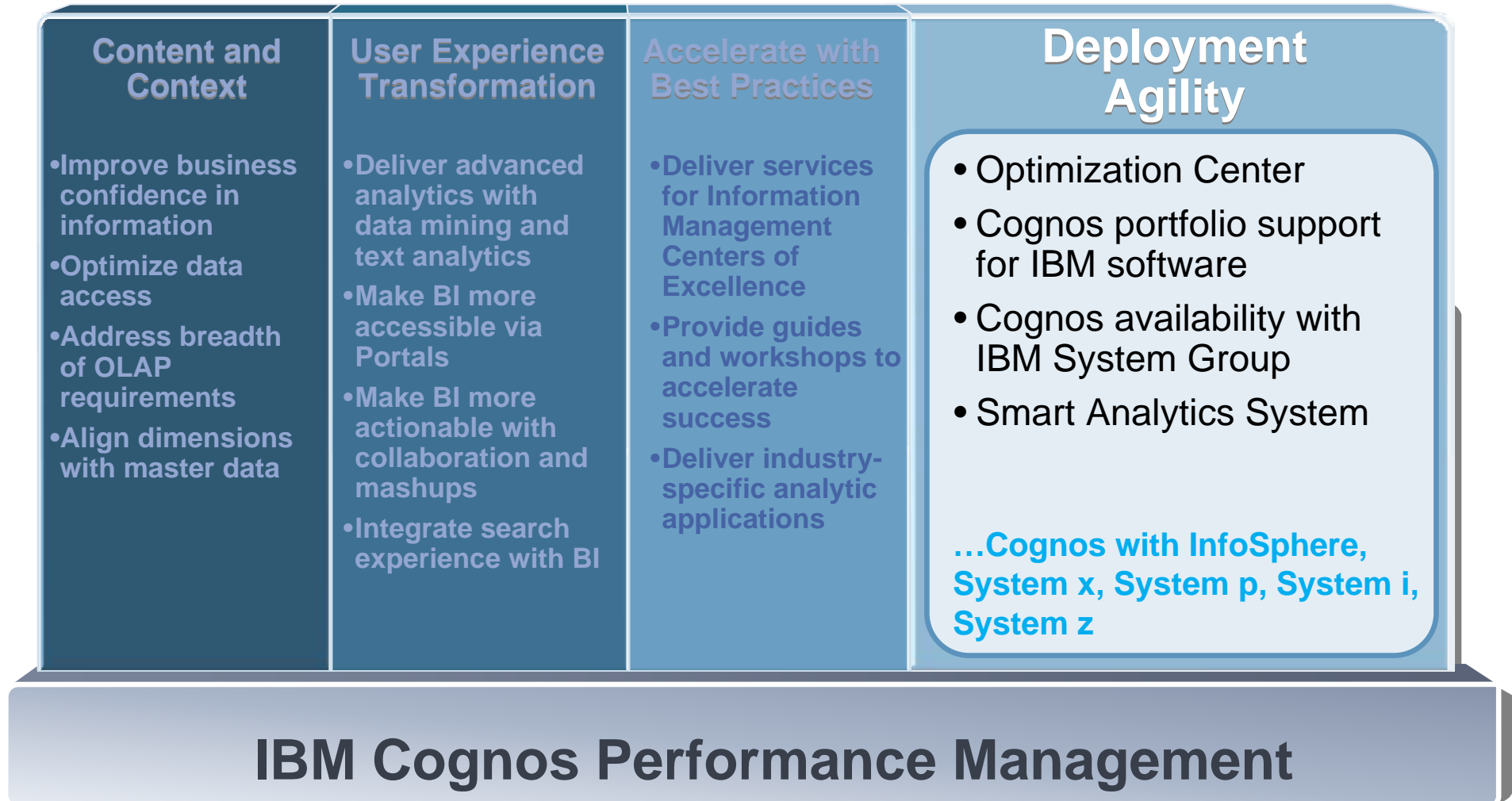
#### POLICY EXCEPTIONS

- Credit Policy Exceptions
- Exceptions that are Delinquent



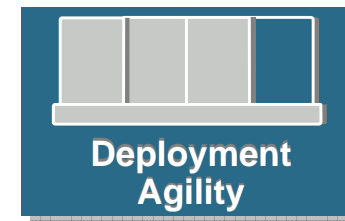
## Focus Areas of IBM Software and Systems

### Rapid Response to Change



## Formation of Optimization Center

Deliver optimized and open software



### Objectives

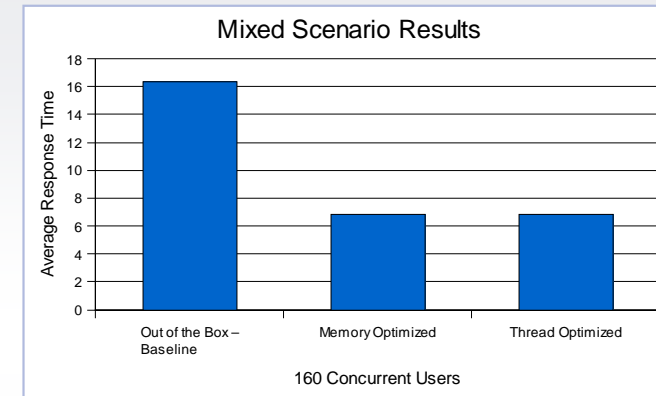
- Reduced time to market
- Lower ownership costs for customers
- Easy to digest

### Focus

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

### Activities

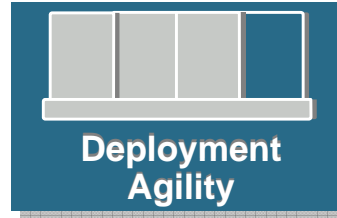
- Simultaneous support
- Development alignment (features, testing, etc.)
  - Query optimization for DB2
  - Advanced DB2 feature leverage (mining, unstructured)
  - Tuning for AIX
- Published best practices
- Market-driven bundles



**Achieve 60% performance improvement** – with best optimized configurations compared to “out of the box” deployment – **by tuning AIX environmental variables**



## **Availability with Systems Group** *Leverage Existing System Investment*



### Today

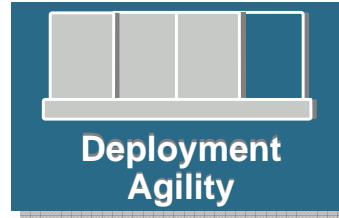
- System z –
  - Cognos 8 BI for Linux on System z
  - content store in DB2 for zOS,
  - DB2 for zOS as source for Planning
- System x – BI, FPM, Cognos Now!
- System p – BI, TM1
- System i – as a source or content store

### 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

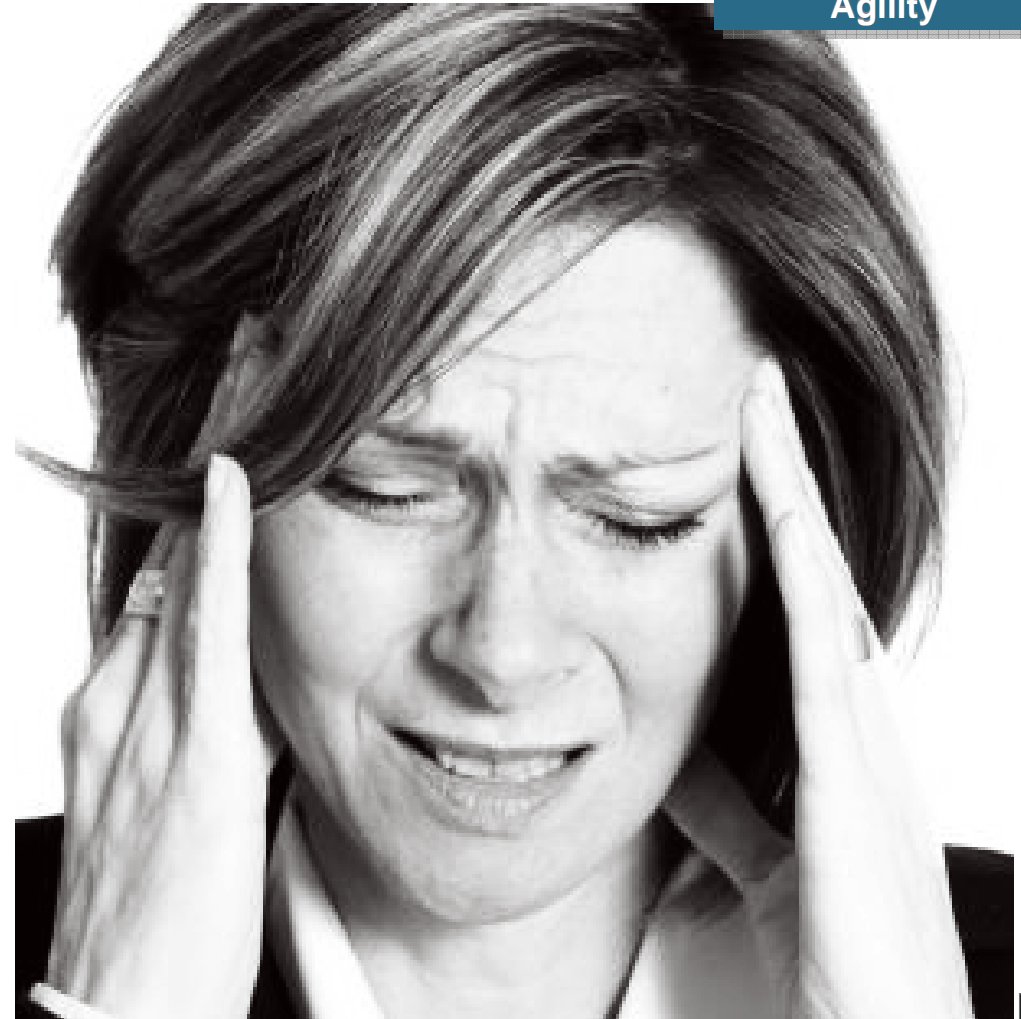




## ***Getting To The Answers Is Not Always Easy*** ***The Pressure is On!***

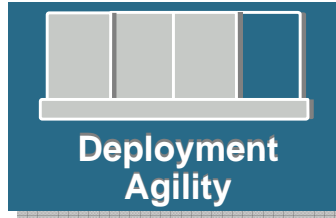


- ☑ No way I can deploy a new system by next quarter!
- ☑ What is our consolidated revenue?, I keep getting different answers...
- ☑ One solution, five vendors, ten support numbers, ..we might as well be system integrators.
- ☑ Revenue & profits are down,..... only thing that is up is my quota.
- ☑ Whatever 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

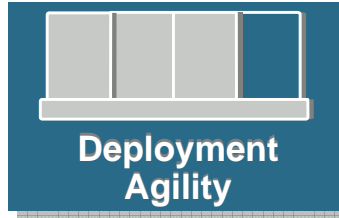
- ☑ Server Platform
- ☑ Storage capacity
- ☑ Build, Deploy, Health Check & Premium Support Services

***Delivering results in days instead of months!***



## **IBM Smart Analytics System**

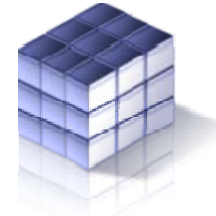
*Delivering Information How, When & Where Needed*



- ➔ 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



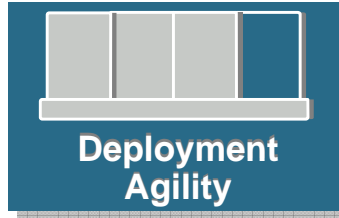
- ➔ Gain complete understanding with Data Mining and Unstructured Information Analytics
  - Extract knowledge & insights from untapped information



- ➔ 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



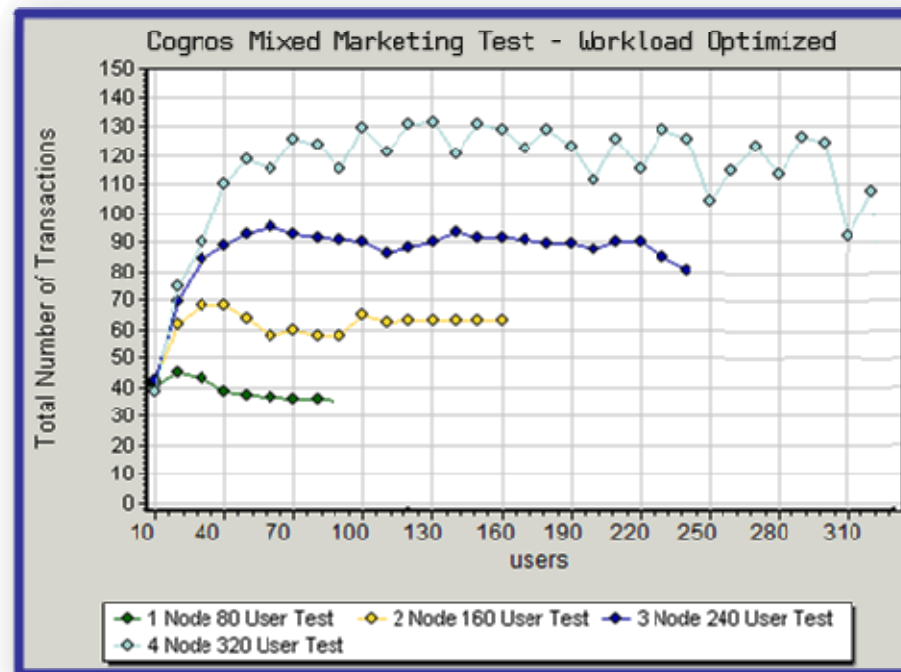
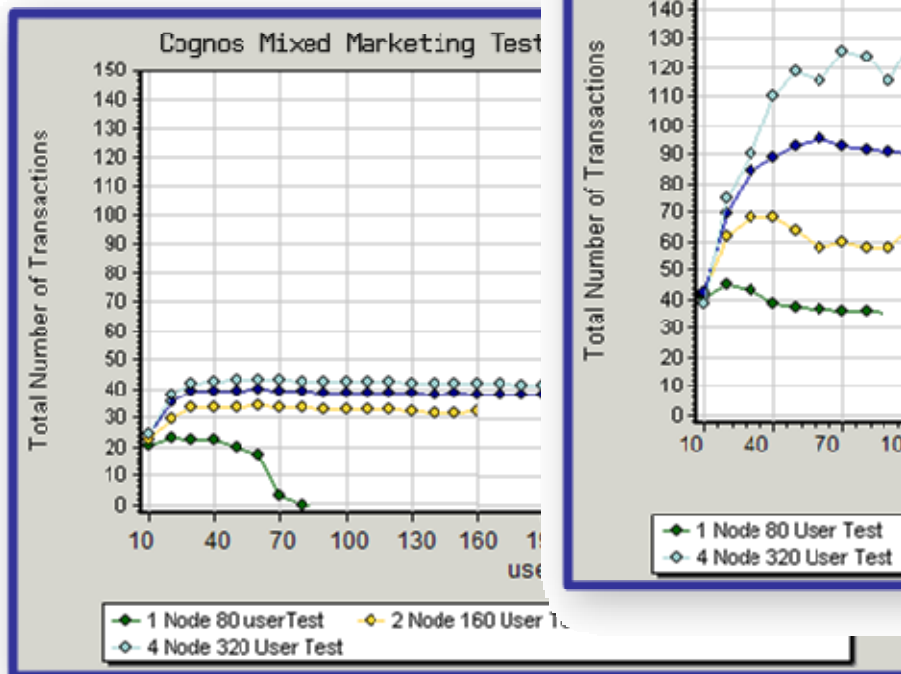
**50% Less**

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



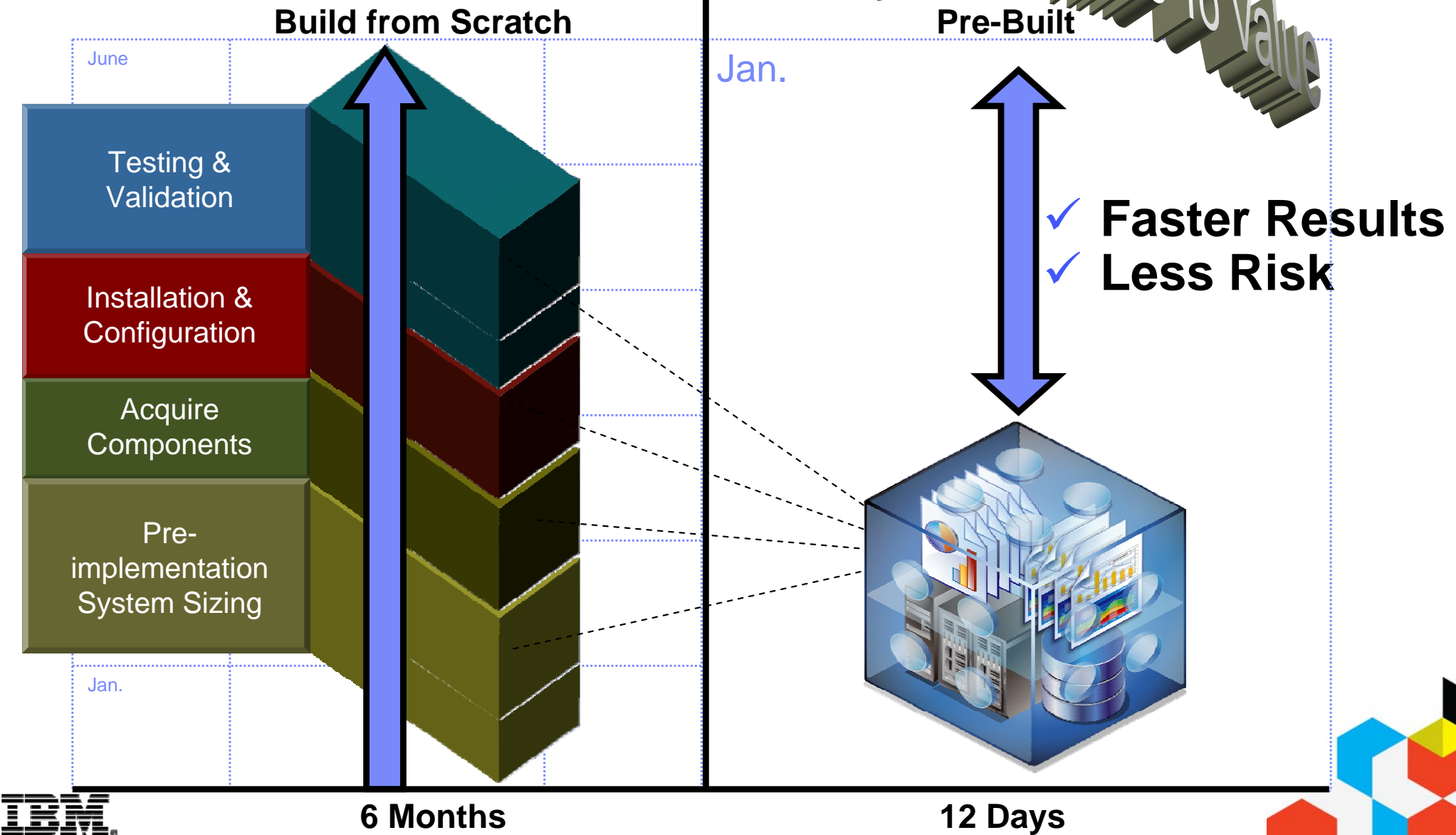
**3X Faster**

*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.

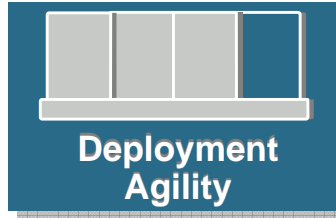
## IBM Smart Analytics System Results in Days Versus Months





## **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**

