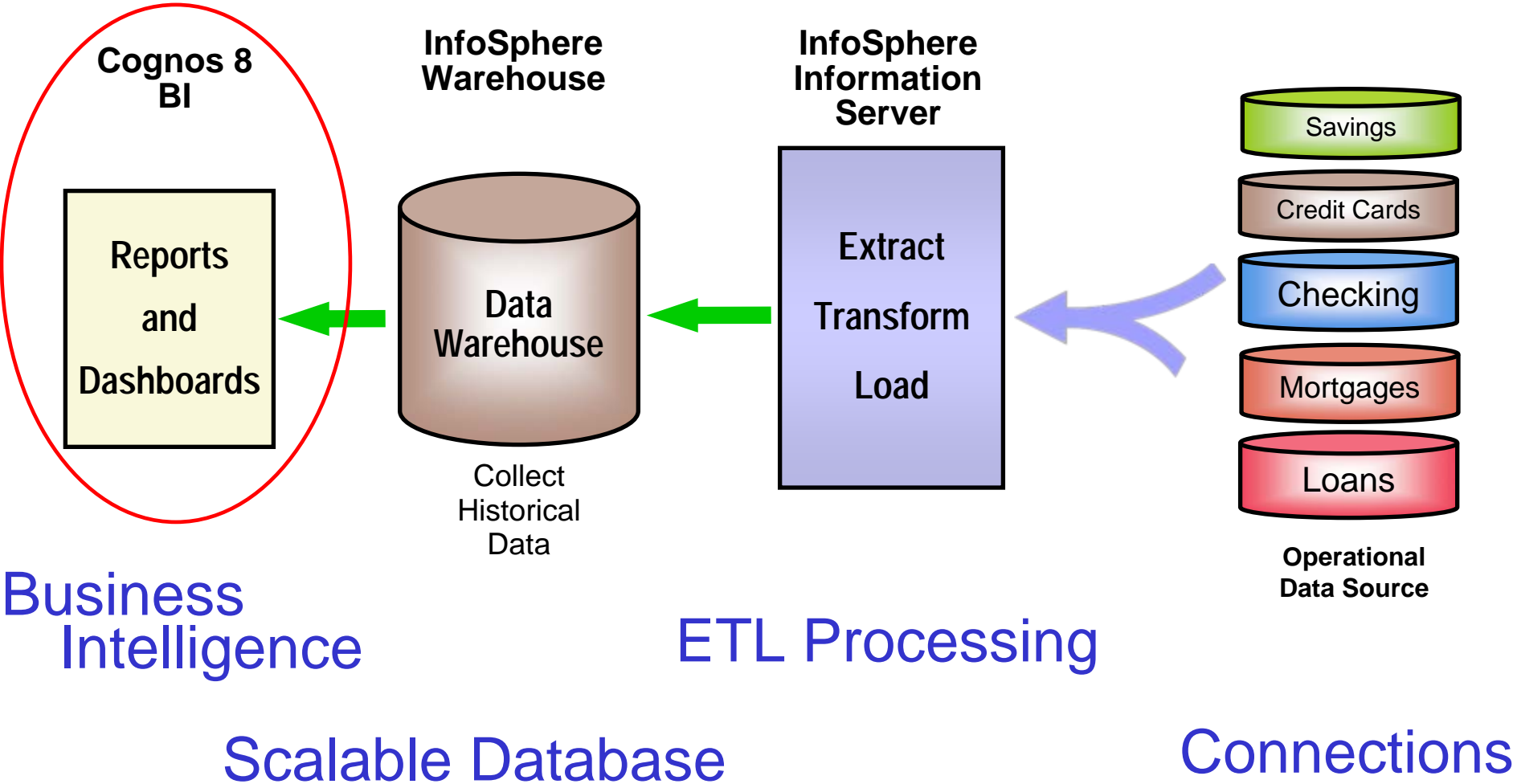# IBM Information On Demand
Unlock The Business Value Of Information

Understanding Your Data With Cognos

Use IBM Cognos 8 BI To Make Better Business Decisions

Cognos 8 BI

Reports and Dashboards

InfoSphere Warehouse

Data Warehouse

Collect Historical Data

InfoSphere Information Server

Extract Transform Load

Savings

Credit Cards

Checking

Mortgages

Loans

Operational Data Source

Business Intelligence

ETL Processing

Scalable Database

Connections

Service Oriented Finance Needs New Insight Into Their Business

The report we saw earlier was useful. We need to improve decision making across our entire organization.

Cognos 8 BI provides easy to learn tools so that users can create the reports they need for themselves using only a web browser.

Mortgage Line of Business VP

IBM

IBM Cognos Is An Integrated Platform Built On SOA

- Implemented in Java, runs on WebSphere

- 100% browser based access
  - Server side business intelligence
  - Users can access new intelligence from anywhere

- Easiest for IT to deploy and manage
  - Scales up and out across heterogeneous hardware and operating systems
  - Unified security
  - Unified administration

- Consistent user interface across tooling
  - Greater user satisfaction and increased business agility with lower IT costs

- Common metadata model
  - Author new intelligence assets once, consume anywhere
  - Common view enables open data strategy
 - Supports Unicode and multilingual features without recreating reports

IBM Cognos

User

Cognos Server

Query | Report | OLAP

Metadata Model

Data
(Multiple sources)
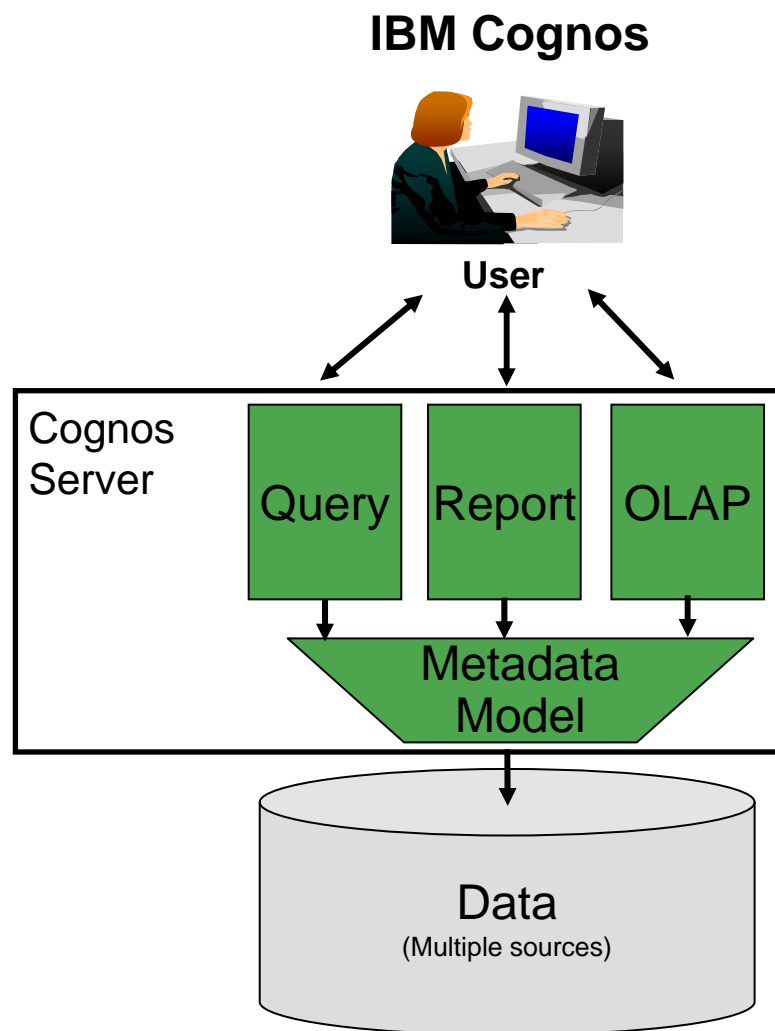
IBM Cognos

Reuse Trusted New Intelligence Assets Across The Cognos 8 Platform
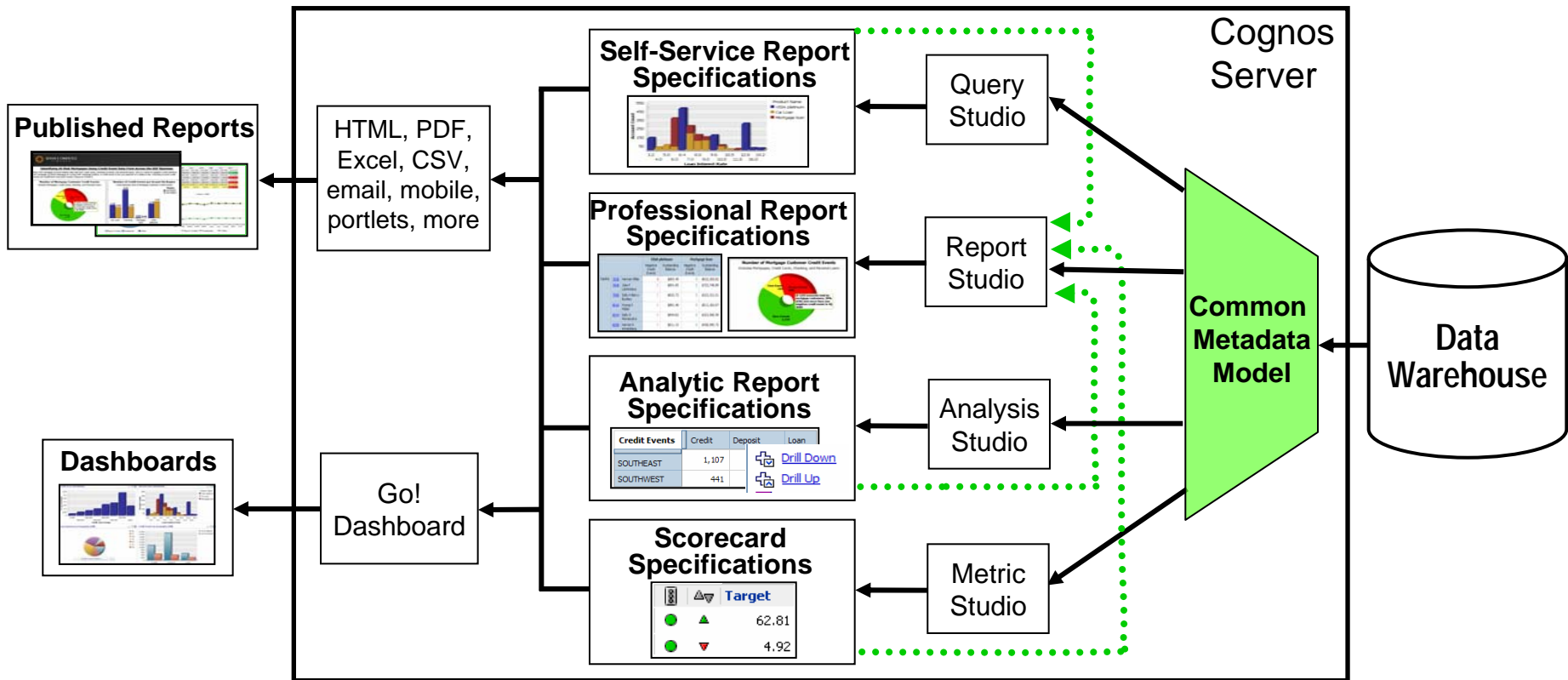
- **All new intelligence assets share a common metadata model and common report specification**

- **Author Once – Consume Anywhere**

- **Ensures consistent information and enables reuse across platform functions**

# Include Any Data Source In Your New Intelligence With The Cognos 8 Platform
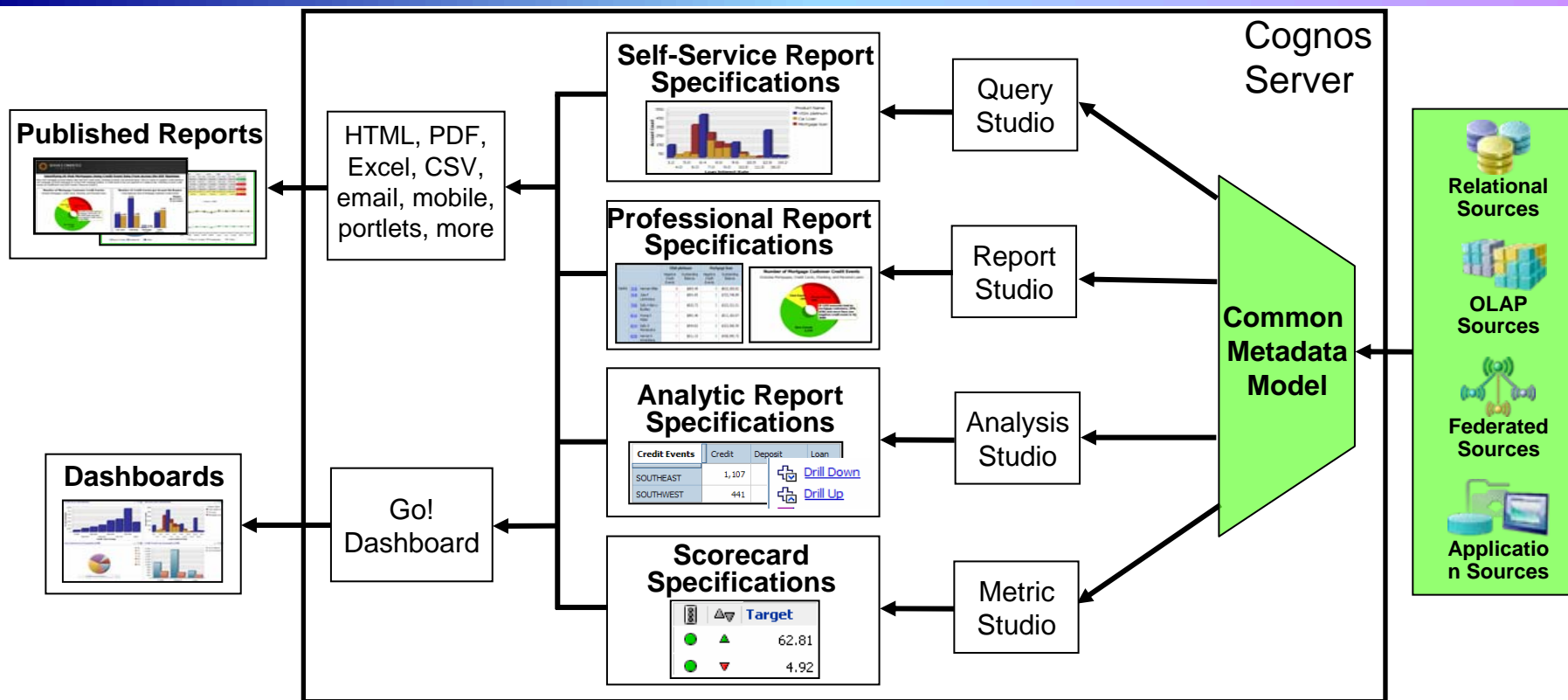
- **Open data strategy enables a common view across a variety of data sources**
- **Support for application data sources such as SAP ERP**
- **Combine relational, OLAP, federated, and other data sources in any tool**

- **All capabilities access a trusted set of information defined in the common metadata model**
- **As sources change, metadata model can control and identify impacts to report specifications**

Cognos Go! Dashboard Enables You To Monitor Business Operations

- Cognos report specifications can be incorporated into dashboards using Cognos 8 Go! Dashboards

- What goes into a dashboard?
  - ▶ Self service reports
  - ▶ Professional reports
  - ▶ Analytical reports
  - ▶ Scorecards
  - ▶ RSS feeds, HTML, search, more

- Users can create their own dashboards from existing Cognos report assets

- Everything you need to monitor multiple areas of the business at the same time

- Provides dynamic and visually appealing capabilities by using Adobe Flash
  - ▶ Everything runs in a browser – only Adobe Flash is required
  - ▶ Easily change chart types and color palettes
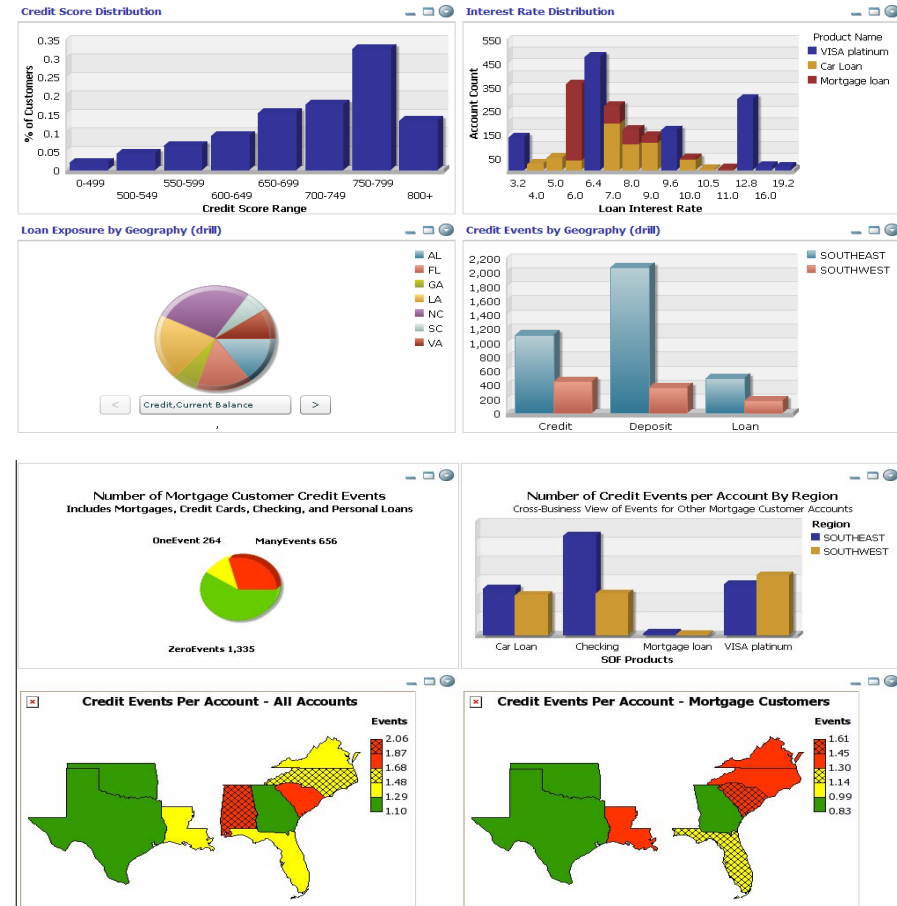
Demo: Cognos Go! Dashboard Provides Customized Insight For SOF

- Use Go! Dashboard to quickly monitor the business operations
- Show how elements of report specifications created in different Cognos functions can be included in a single dashboard
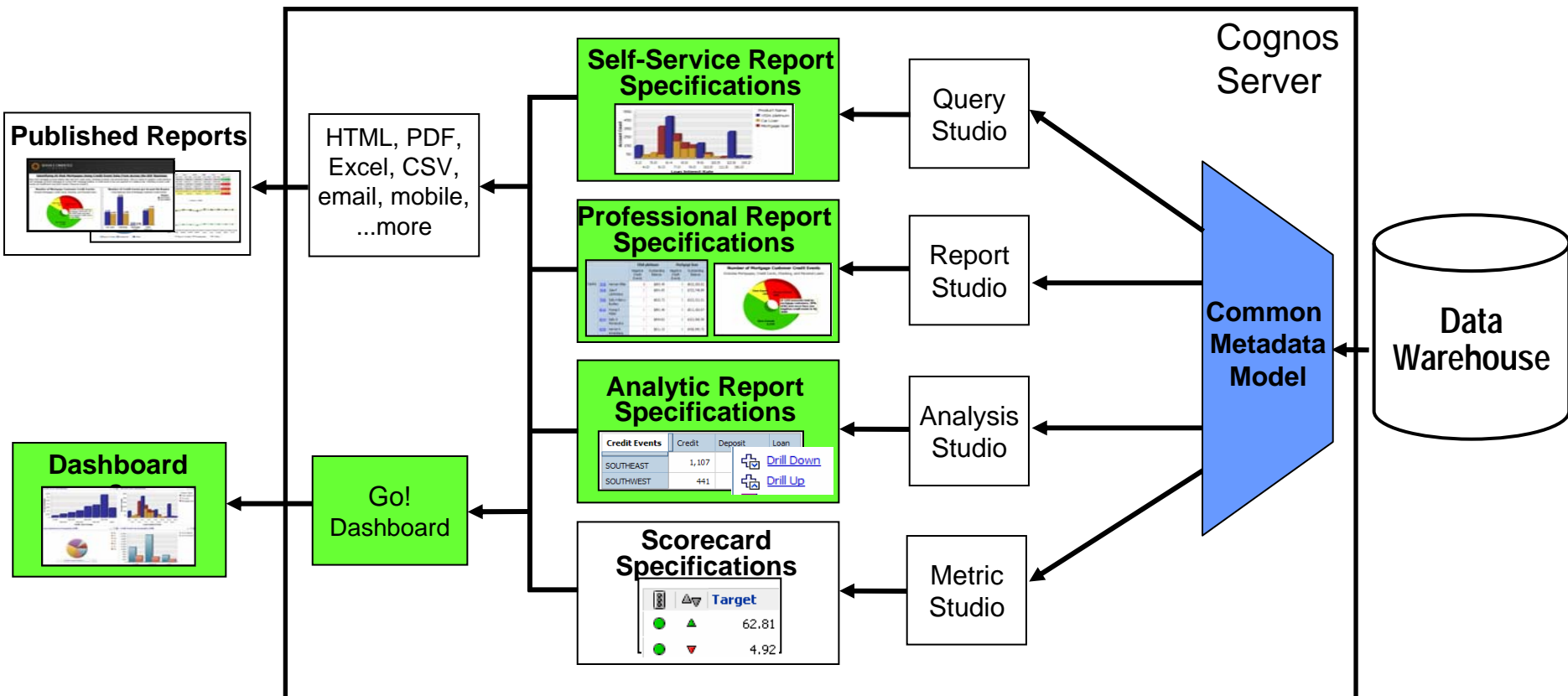
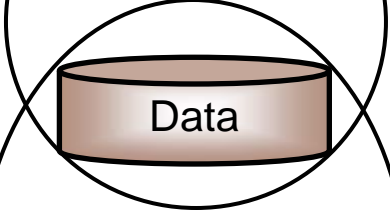# Different Employee Roles Need Access To Different Information And Capabilities
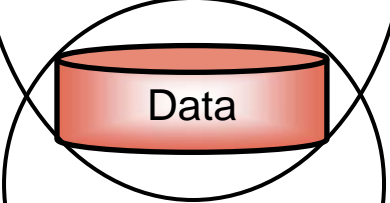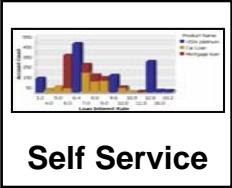
Deliver **Analyze** **Integrate** **Capture**

Reports

OLAP

Self Service

Data (Task 1)

Data (Task 1)

Data (Task 2)
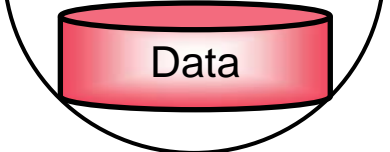
Data (Task 3)

Data (Task 3)

Task 1

Task 2

Task 3

Novice Users Can Create The Reports They Need Using Cognos 8 BI Query Studio

- Easy to learn self-service reporting requiring minimal reporting knowledge

  ▶ Helps alleviate report authoring backlog

- Query Studio allows users to create, modify, save, and publish self-service report specifications

  ▶ Use existing self-service reports to create a new reports

  ▶ Modify the style and layout of self-service reports

  ▶ Add or remove data using the Cognos common metadata model

 ▶ Create filters, summaries, and calculations
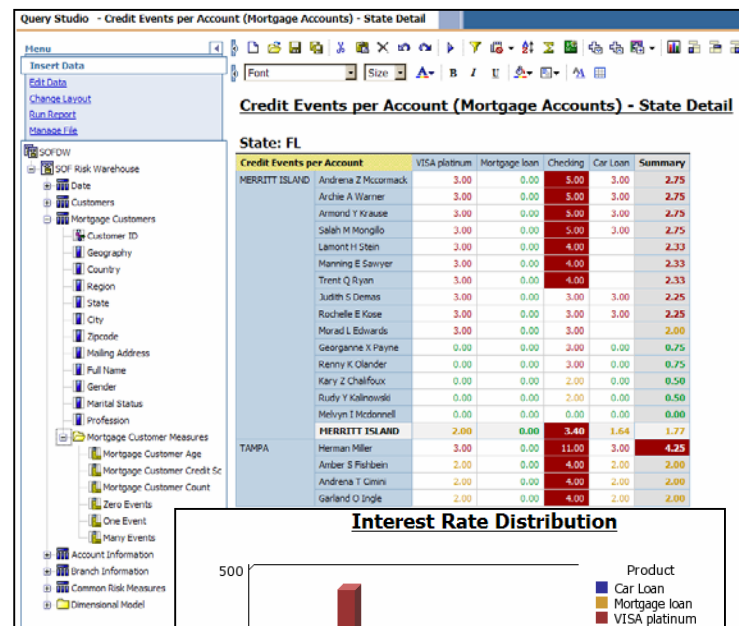
Cognos 8 BI Report Studio Creates Professional Report Specifications To Run Your Business

- Advanced reporting tool to create any style of report like invoices, financial statements, inventory, payroll, etc.

- Designed to provide sophisticated capabilities and advanced features required by professional report authors

  ▶ Provides "pixel-perfect" formatting with absolute control over visual layout and formatting

  ▶ Large library of lists, crosstabs, charts, maps, operators, constants, functions, filters, more

  ▶ Prompts add interactivity allowing users to customize reports

  ▶ Bursting delivers reports with only the data relevant to the recipient

  ▶ Express Authoring Mode is designed specifically for financial report authors

Demo: Gain Business Insight Through IBM Cognos 8 BI

- Use Cognos Query Studio to customize an existing report
- Open self-service report in Cognos Report Studio and show capabilities
- Open the original "risky mortgage" report in Cognos Report Studio
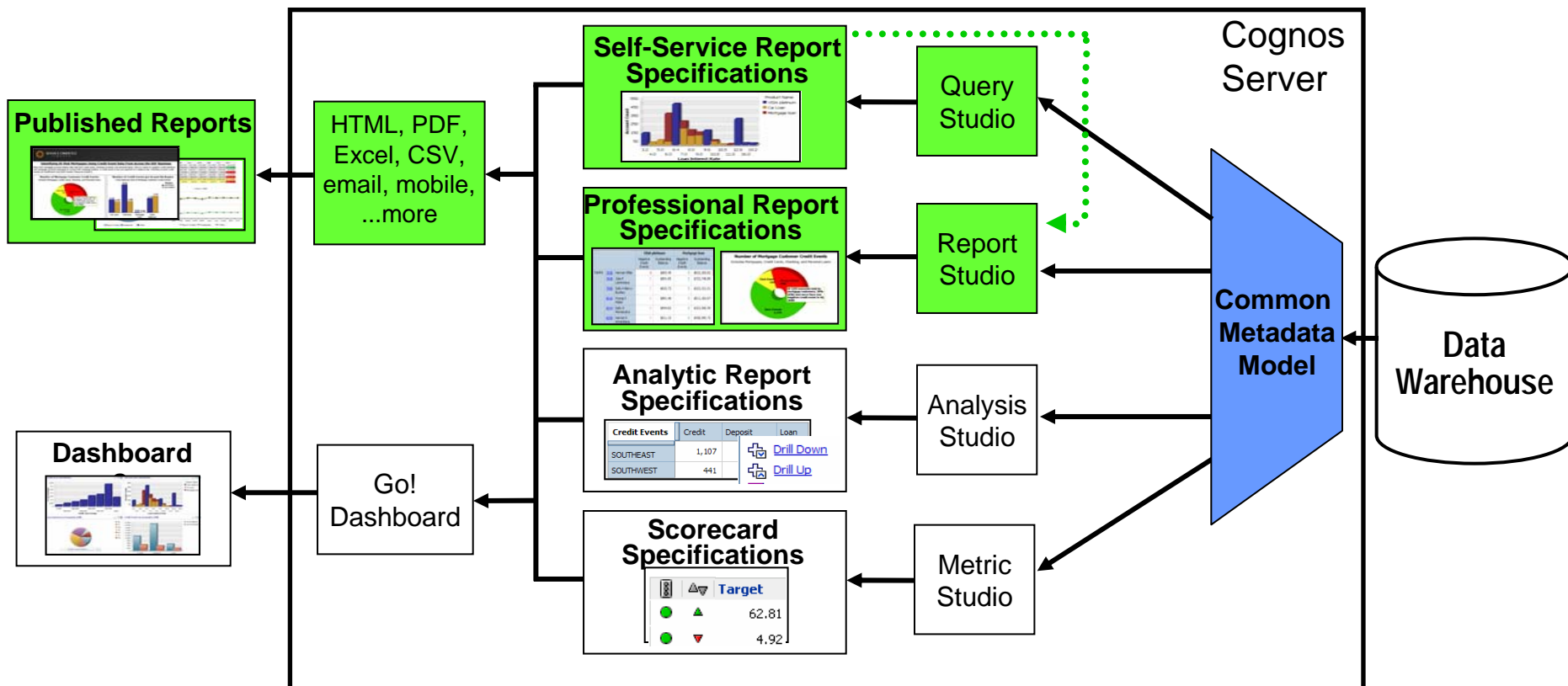
Use Cognos 8 BI Analysis Studio To Gain Insight Into Your Business

- **Cognos Analysis Studio provides multidimensional OLAP analysis**

- **Use Analysis Studio to interactively explore data to find answers to business questions**

  ▶ Use drill up or drill down to "slice and dice" the context and view of data

  ▶ Identify trends, compare actual results to plans, or highlight the best or worst performers

  ▶ Create calculations using many built-in operators such as growth, rank, average, percentile
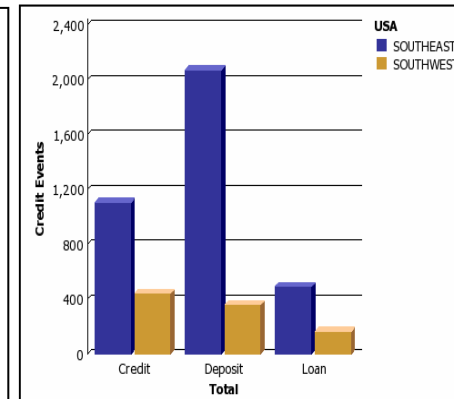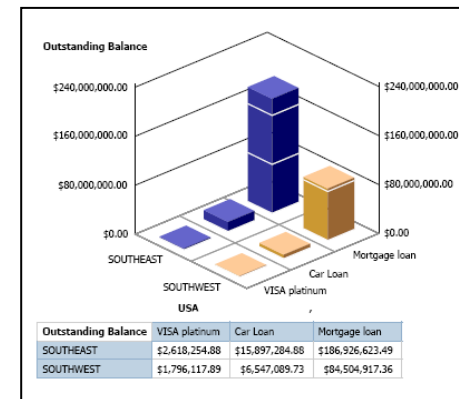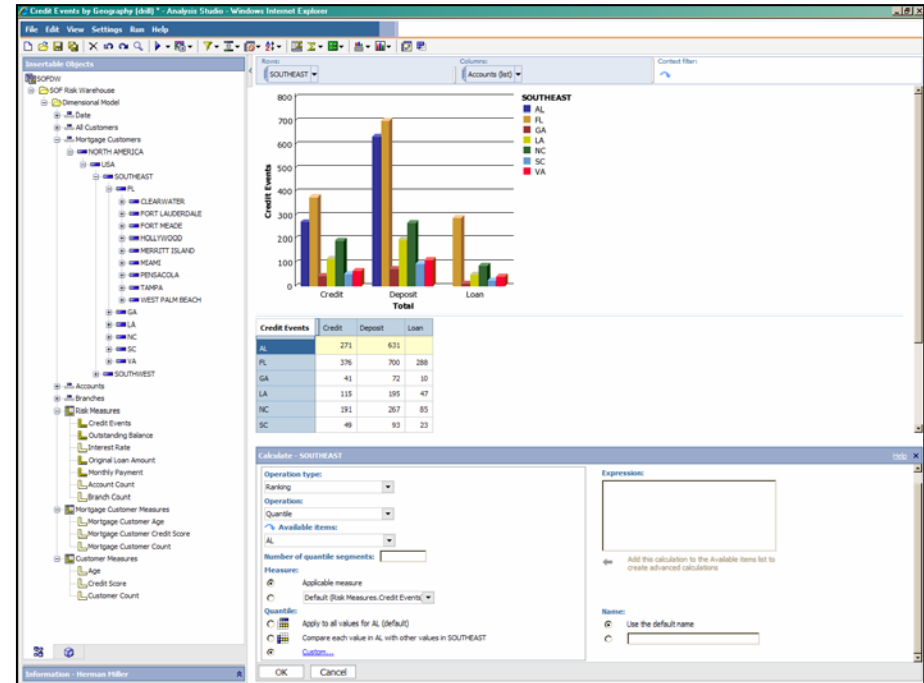
Create Scorecards With Cognos 8 Metric Studio To Track Key Business Metrics

- Cognos Metric Studio tracks progress toward business objectives

- Creates scorecard specifications using the Cognos common report format
  ▶ Scorecard specifications can be included within professional report specifications using Cognos 8 BI Report Studio

- Metrics display results relative to targets
  ▶ Defined on any indicator of business performance
  ▶ Actual results imported on a scheduled basis
  ▶ Scorecards organize metrics logically
  ▶ Diagrams organize metrics visually
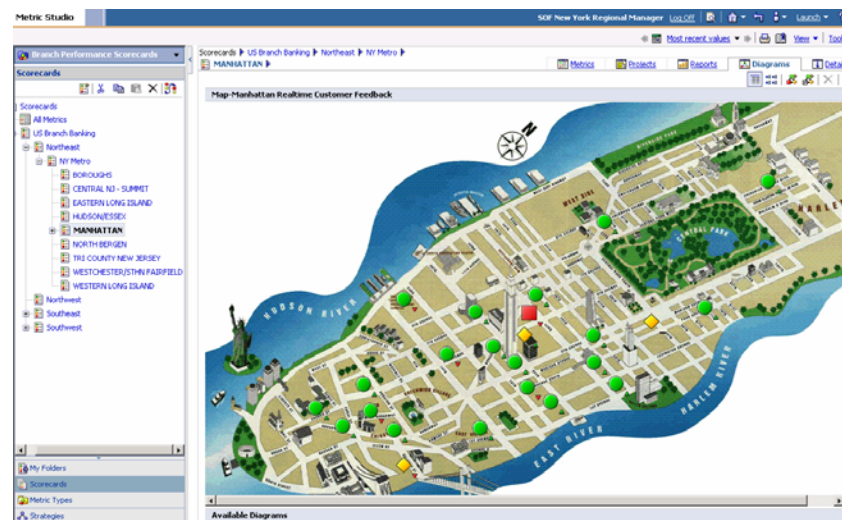
All These Functions Access A Common Metadata Model And Create Assets In A Common Format

- All run in a browser, no need to install desktop applications

- All use trusted information from the Cognos common metadata model
  - Includes relational, OLAP, federated, application, and many other data sources

- All create report specifications using the Cognos common report format
  - Any report specification can be opened and extended into a professional report specifications using Cognos 8 BI Report Studio

- All report specifications share a single viewer and can be viewed in a browser or delivered in many formats and modes
  - Formats: HTML, PDF, Excel, XML, CSV
  - Modes: print, email, scheduled, browser, mobile, search, Microsoft Office, search

- All allow users to configure watch items, alerts, and watch rules to automatically receive updated reports via email or browser

- All Cognos report specifications can be incorporated into dashboards using Cognos 8 Go! Dashboard

Service Oriented Finance Needs To Do More With Less

This needs to be simple to deploy.

Service Oriented Finance CIO

Cognos is an integrated platform that fits into your existing environment.

The competition is not so simple.

IBM

Cognos 8 BI Fits Into Your Existing Environment

Interoperable and Extensible

Standards	SOAP, XML, WSDL, HTTP(S), OMG CWM, XML/XMI, REST
Extend	Open, Web Services API to programming language of choice including Java, Microsoft .NET Framework, COM & Perl
Embed	Industry Standard Portals including IBM, SAP, Plumtree, WSRP)
	Enterprise Search, BPM, Office, 3rd party Applications
Security	Any combination of LDAP, NTLM, Active Directory, Netegrity, SAP, custom

Environments

App Servers	Any J2EE application server Apache Tomcat, IBM WebSphere, SAP NetWeaver, BEA WebLogic, Oracle Application Server, Sun, JBoss
Operating Systems	32 or 64 bit scale-out with any combination of Linux, Unix, or Windows
Platforms	IBM Power, IBM System z, Intel, HP, Sun
Routers/ Firewalls	All standard gateways supported

Cognos.
software

Metadata Integration

Modeling tools	CA ERwin, Oracle Designer, Business Objects Designer, Sybase PowerDesigner, CA COOL, Rational Rose, XML/XMI, OMG CWM
ETL & EII	Cognos Data Manager, Informatica PowerCenter, IBM Information Server (Ascential) Metabroker, Composite, IBM II
Source catalogs	Relational databases, ERP

Open Data Access

Relational	IBM DB2 UDB, Oracle, Microsoft SQL Server, Teradata, other…
Modern	XML, WSDL, LDAP, JDBC, JDBC…
ERP	SAP, PeopleSoft, Oracle, Siebel, salesforce…
OLAP	PowerCubes: High Performance Dimensional Cache
	Industry Standard OLAP Providers: Microsoft, IBM, SAP, Essbase

IBM Lab Tests Show That Cognos 8 BI Delivers Exceptional Scalability And Economies Of Scale

Testing demonstrated that Cognos 8 BI delivers faster response time when hardware capacity is increased

Horizontal Scalability
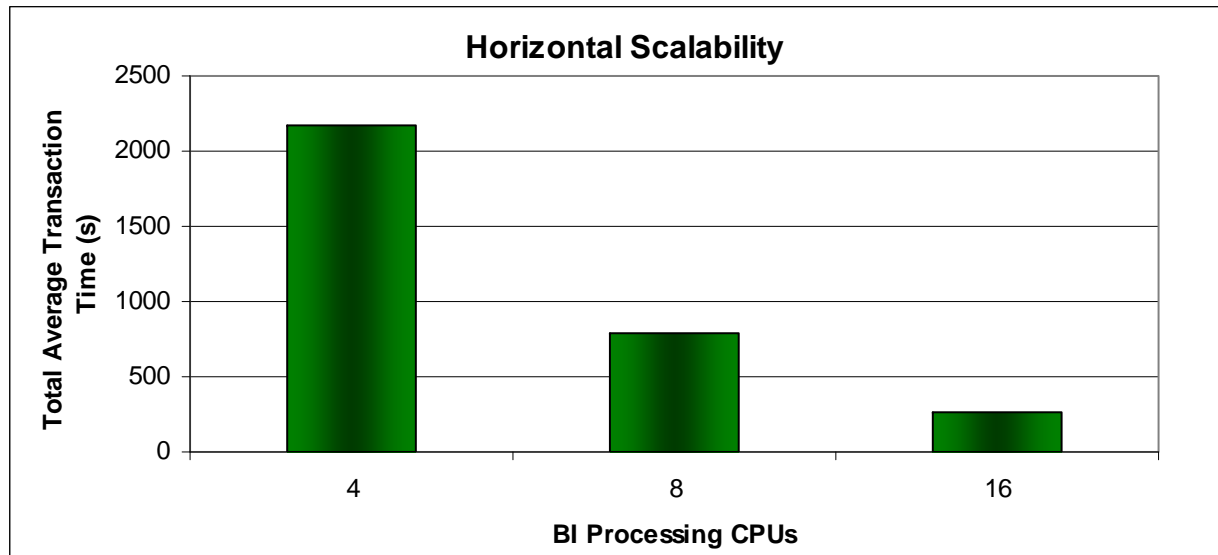
When hardware was doubled, response times were reduced by an average of **65%**

IBM Cognos Is Also Integrated With InfoSphere Information Server And InfoSphere Warehouse

- Users can understand the meaning of business terms used in reports
  - ▶ Access InfoSphere Business Glossary from within Cognos tooling and reports

- Users can see the source of data used in Cognos reports
  - ▶ Access to InfoSphere Metadata Workbench from within Cognos tooling and reports

- Cognos easily connects to InfoSphere Warehouse Cubing Services
  - ▶ Integration allows simple setup and optimized performance when accessing cube data in the warehouse (ROLAP)

- InfoSphere Warehouse data mining and unstructured analytics results can be incorporated into Cognos reports

Microsoft Has Separate Unintegrated Products And Desktop Applications

- **Multiple desktop tools**
  - ▶ Report Builder (v1, v2)
  - ▶ BI Development Studio (BIDS) Report Designer
  - ▶ Excel, Office

- **Fragmented metadata approach**
  - ▶ Direct query, Report Builder Models, BIDS datasets, MSAS cubes (data source views), …

- **Programming required**

- **Creates IT Burden**
  - ▶ Install, update, user support all happen at the desktop
  - ▶ Not SOA – Only works with Microsoft product stacks
  - ▶ Multiple security models

Microsoft

User

(Browser)

| Report Builder (Desktop) | BI Dev Studio (Desktop) | Excel (Desktop) |

Multiple Desktop Applications

Sharepoint Portal

Reporting Services

Analysis Services

Multiple Server Products

Report Model Designer

Data Source Views

Multiple View Designers

SQL Server

■ MS Sharepoint ☐ MS SQL Server ☐ MS Office
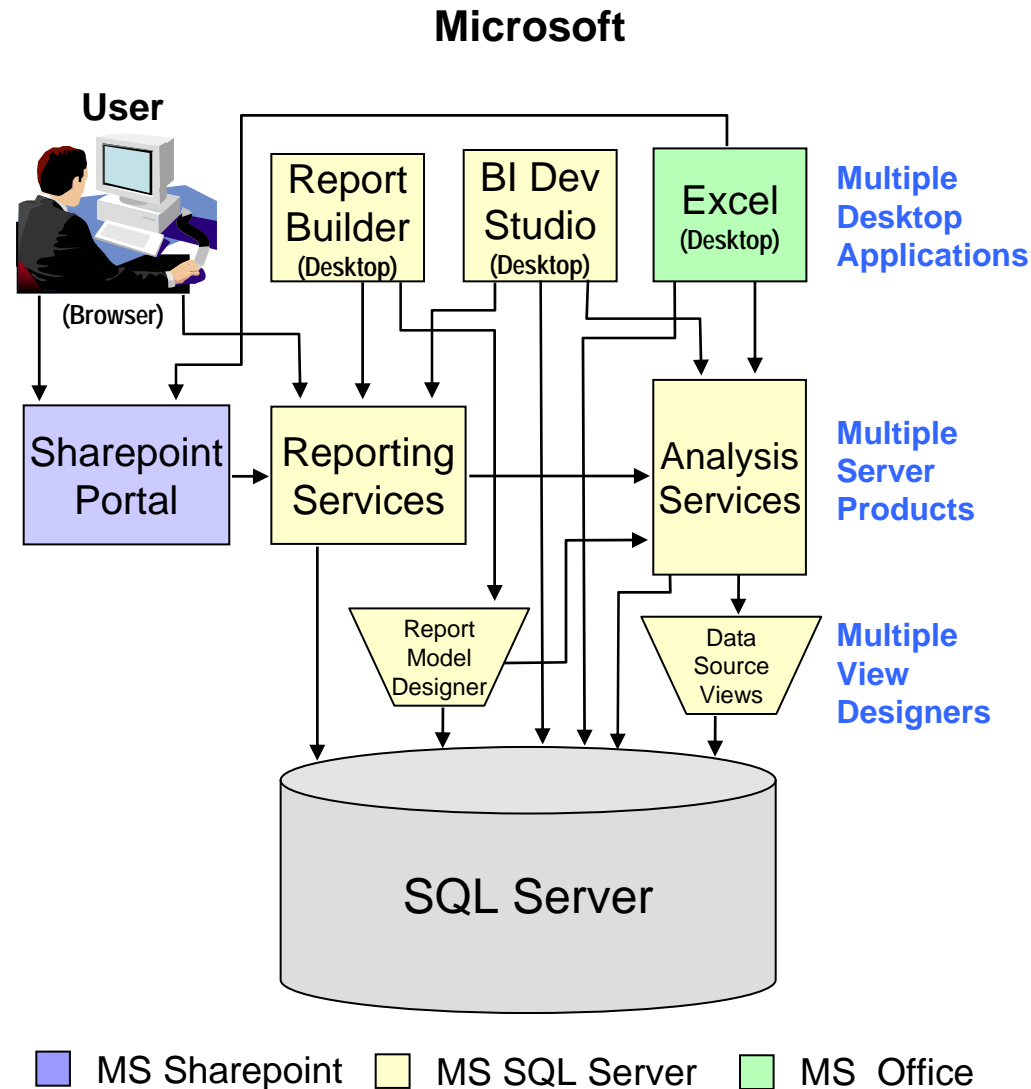
Microsoft Lacks Common Metadata And Common Report Format So Tools Cannot Share Assets

- **Multiple Report Formats**
  - ▶ Report Definition Language (RDL) v2.0 not supported by all tools

- **Limited sharing of assets between Report Builder, BI Dev Studio Report Designer, Excel**

- **Version incompatibilities**
  - ▶ BI Dev Studio 2008 reports cannot be viewed using Visual Studio 2008 ReportViewer control. Waiting for updated ReportViewer in Visual Studio 2010…[1]
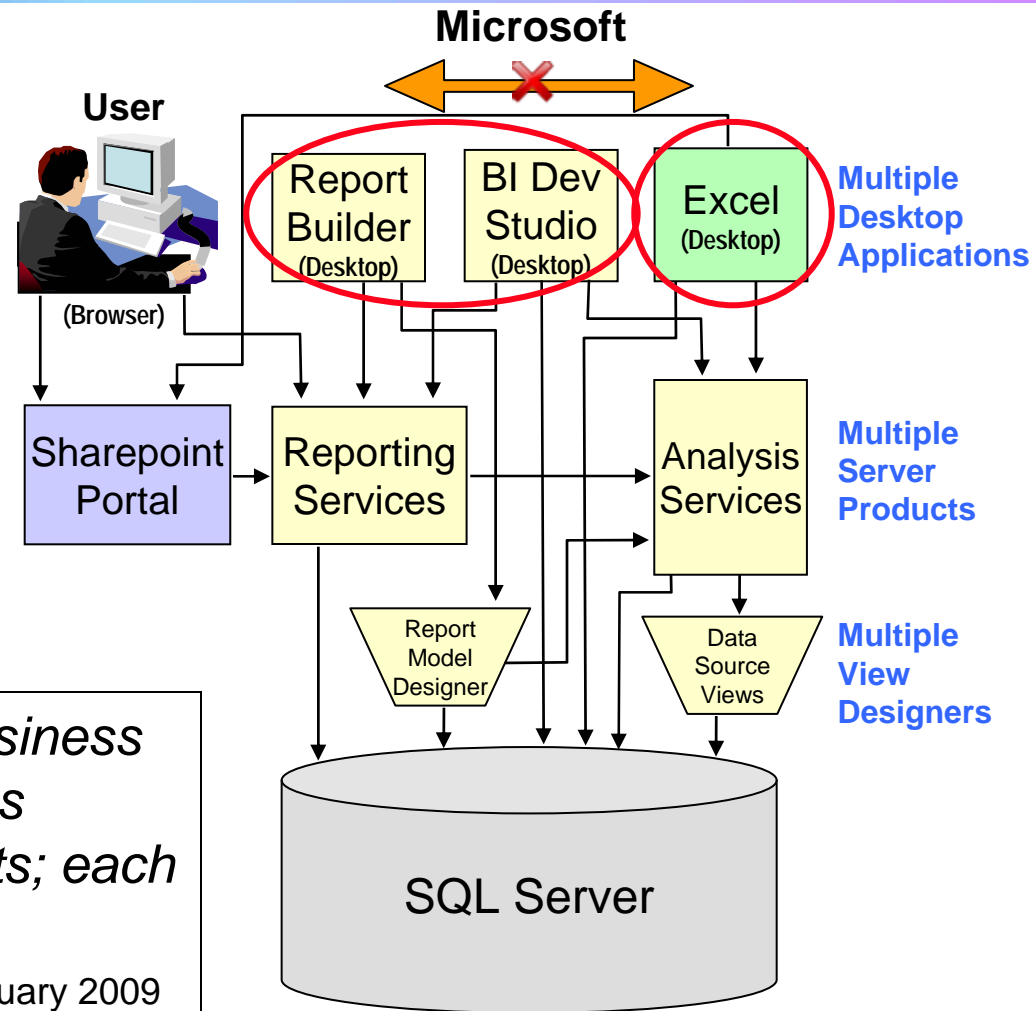
> "…*there is no single, enterprise business metadata layer or capability across Microsoft's BI platform components; each has its own metadata model,…*"
>
> -- Gartner Magic Quadrant For BI Platforms, January 2009

Microsoft

User

(Browser)

| Report Builder (Desktop) | BI Dev Studio (Desktop) | Excel (Desktop) | **Multiple Desktop Applications** |

Sharepoint Portal — Reporting Services — Analysis Services — **Multiple Server Products**

Report Model Designer — Data Source Views — **Multiple View Designers**

SQL Server

■ MS Sharepoint ☐ MS SQL Server ☐ MS Office

Oracle Business Intelligence Enterprise Edition Is Complex And Is Not Integrated

Multiple Thick Client Tools

- Multiple report formats
- Multiple metadata models
- Creates more work

Too Many Products!

Creates IT Burden

- Install, Patch, User Support all happen at the desktop

Oracle BI Enterprise Edition (OBIEE)

| Oracle | Siebel | Hyperion | Brio |
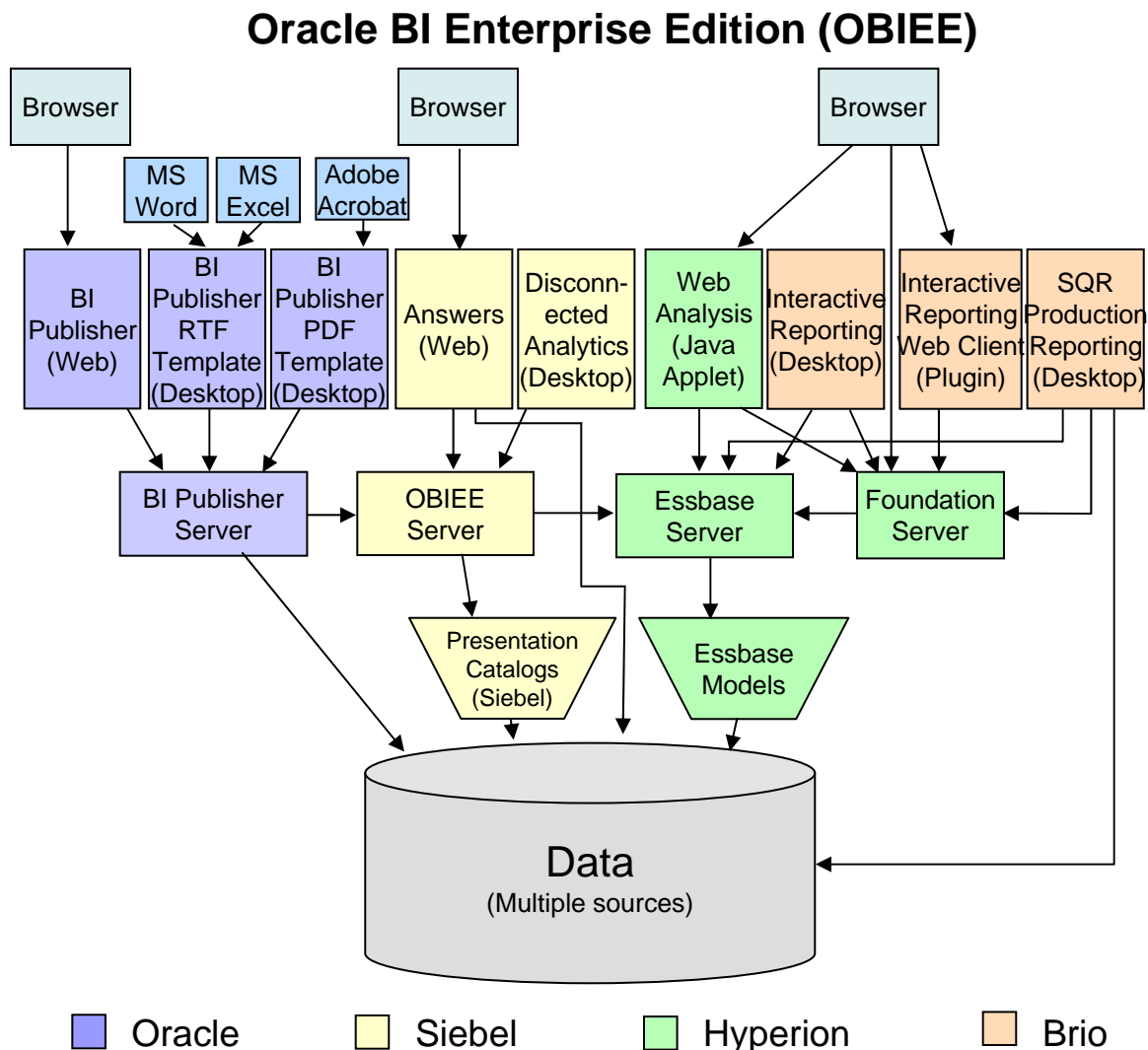
Compare For Yourself: Cognos Is Simple, Oracle Is Complex

IBM Cognos

100% browser-based web access

User

Cognos Server

| Query | Report | OLAP |

Metadata Model
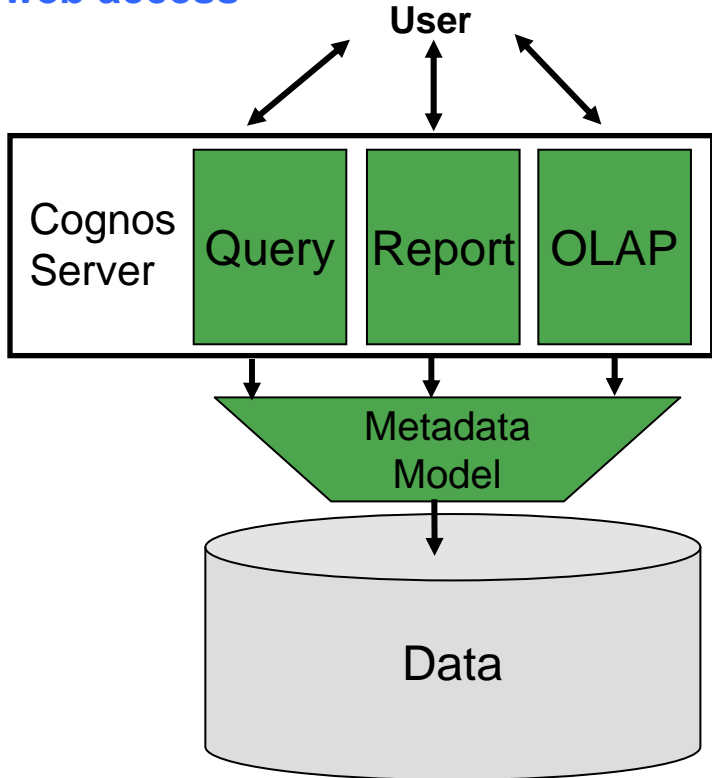
Data

■ IBM Cognos

Oracle BI Enterprise Edition (OBIEE)

Browser   Browser   Browser

MS Word   MS Excel   Adobe Acrobat

BI Publisher (Web)

BI Publisher RTF Template (Desktop)

BI Publisher PDF Template (Desktop)

Answers (Web)

Disconnected Analytics (Desktop)

Web Analysis (Java Applet)

Interactive Reporting (Desktop)

Interactive Reporting Web Client (Plugin)

SQR Production Reporting (Desktop)

BI Publisher Server

OBIEE Server

Essbase Server

Foundation Server

Presentation Catalogs (Siebel)

Essbase Models

Data

■ Oracle   ■ Siebel   ■ Hyperion   ■ Brio

Oracle Lacks Common Metadata And Common Report Format So Tools Cannot Share Assets

- Limited sharing of assets between BI Publisher, Answers, Web Analysis, Interactive Reporting, etc

- Cannot promote self-service (Answers) reports into BI Publisher

  ▶ Different technologies, different formats

- Multiple metadata strategies

- Complexity = More Work

Oracle BI Enterprise

	Oracle		Siebel		Hyperion		Brio
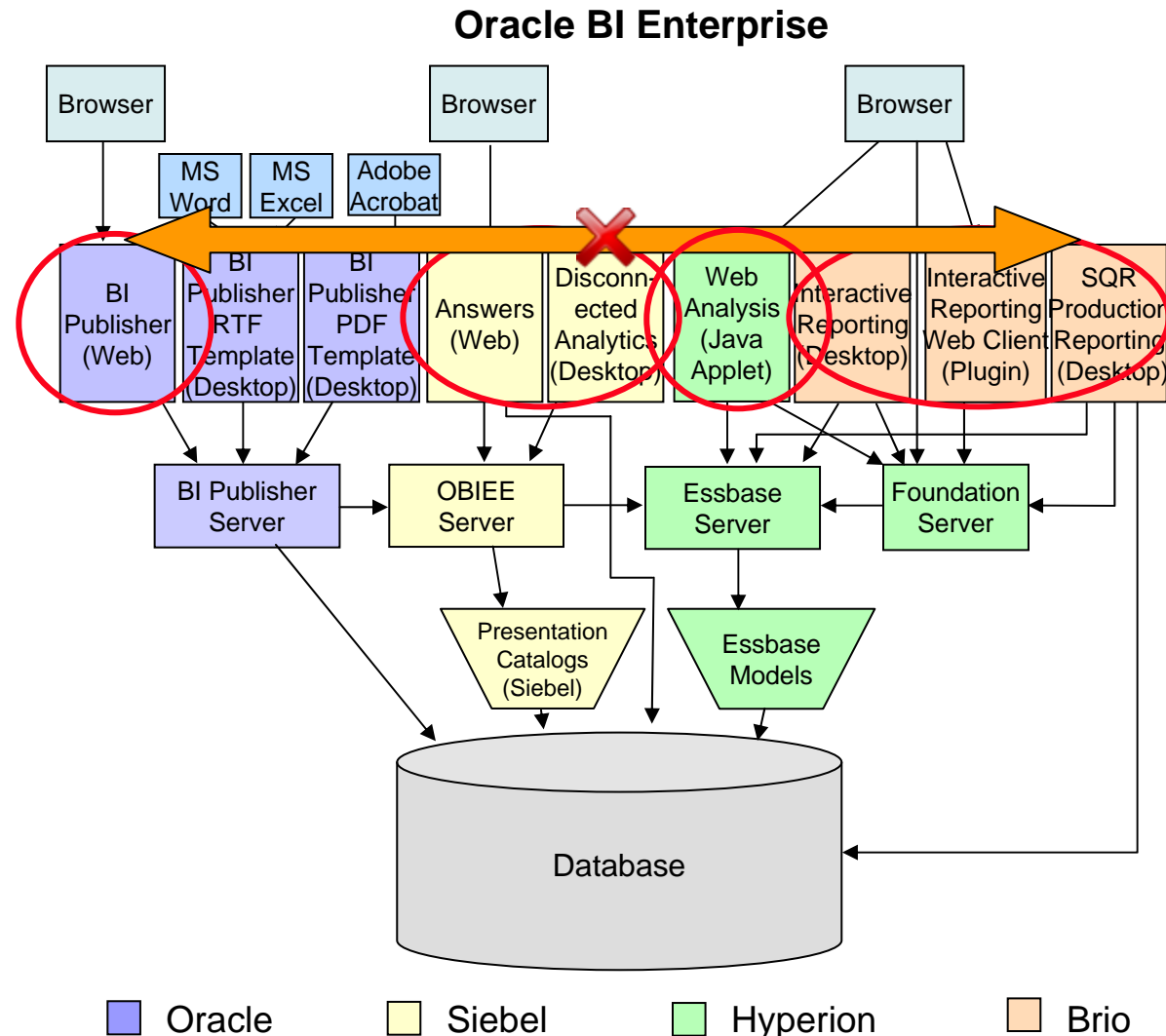
Deliver New Intelligence Quickly With The IBM Smart Analytics System

How can we get started quickly?

The IBM Smart Analytics System provides a complete ready-to-deploy system for delivering New Intelligence

Service Oriented Finance CIO

IBM

The IBM Smart Analytics System Delivers New Intelligence

A complete, ready-to-deploy system including hardware, software, storage, and network

- System is installed, tuned, and ready for your data

- Choose from standard configurations, add capacity with hardware and software modules

- Single point of contact for support

Analytics
- ☑ Cognos 8 Business Intelligence
- ☑ Cubing Services
- ☑ Text Analytics & Data Mining

Data Warehouse Software
- ☑ InfoSphere Warehouse
- ☑ Advanced Workload Management
- ☑ Tivoli System Automation

Hardware/OS
- ☑ AIX 6.1
- ☑ IBM Power 550
- ☑ IBM System Storage DS5300

Faster Time To Value

- Deploy in days instead of months

- Focus on creating business value, not installing hardware and software

Costs less than building it yourself

- Less staff and expertise required to implement, tune, and maintain

Find out more: http://www-01.ibm.com/software/data/infosphere/smart-analytics-system/

Blue Cross Blue Shield Delivers New Intelligence With The Smart Analytics System

Challenge:

Give Employers, Consumers, and Providers:

- ☑ Decision Support
- ☑ Actionable Information
- ☑ Predictive Analysis

BlueCross BlueShield Association

Chicago, IL-based Blue Cross and Blue Shield Association (BCBSA), a national federation of 39 independent BCBS health insurance companies

Solution:

Blue Cross and Blue Shield is using components of IBM's Smart Analytics System, (InfoSphere Balanced Warehouse and Cognos) as the backbone of the new "Blue Health Intelligence (BHI)," a unique resource that will help to improve healthcare quality. BHI is now able to **better understand and detect demographic trends**, such as comparing an employer's plans to those of companies in the same industry, to improve workforce health while better managing costs for the employee.

Benefits:

- ☑ **Gain insight** into healthcare trends and clinical best practices
- ☑ **Deliver information about treatment and medical technology effectiveness**
- ☑ **Identify emerging trends** in healthcare practice and delivery

> *"This is revolutionizing the way we deliver healthcare analytics while giving us faster access to the types of information we didn't have before."*
>
> *Shirley Lady,*
> *Vice President, Blue Health Intelligence*

IBM Cognos vs. Oracle And Microsoft – Summary

	IBM	Microsoft	Oracle
Integrated, Comprehensive Performance Management Platform	**IBM Cognos**	**NO** Multiple unintegrated products tied to Microsoft OS	**NO** Multiple separate products (Oracle, Hyperion, Siebel, Brio)
100% web-based zero footprint BI	**IBM Cognos**	**NO** Requires MS Office, BI Dev Studio, Report Builder, more	**NO** BI Publisher uses MS Word, Many BI functions require desktop apps and plug-ins
Common metadata model	**IBM Cognos**	**NO** Each component has its own metadata model	**NO** Multiple separate metadata strategies
Common report specification format	**IBM Cognos**	**NO** RDL not used by all tools, incompatibilities between versions	**NO** Multiple technologies using different report formats
Purpose-built architecture for IT simplification	**IBM Cognos**	**NO** Collection of many technologies	**NO** Collection of many technologies