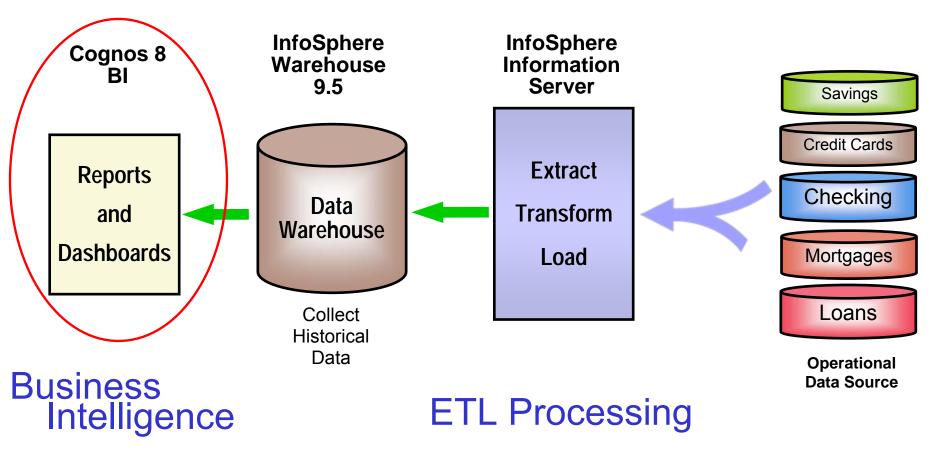


## **Information On Demand**

## **Unlock The Business Value Of Information**

Understanding Your Data With Cognos

## Use IBM Cognos 8 BI To Optimize Business Decisions



### **Scalable Database**

Connections

03 - IOD5 - Understanding Your Data With Cognos v2.2

## Service Oriented Finance Needs New Insight Into Their Business

That report was good but each employee needs different information to do their job. Cognos 8 BI provides easy to learn tools so that users can create the reports they need for themselves using only a web browser.

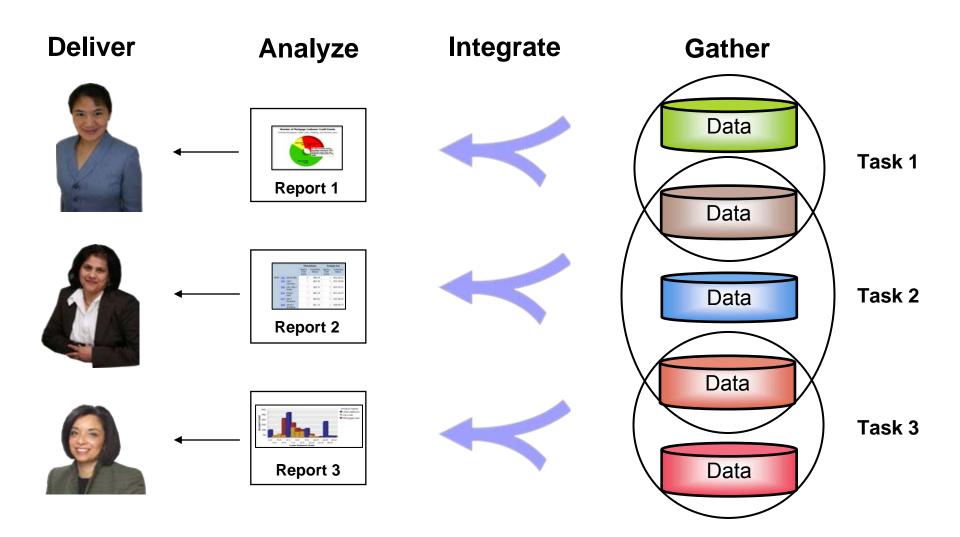
IBM



Mortgage Line of Business VP

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## Each Employee Role Needs Different Information



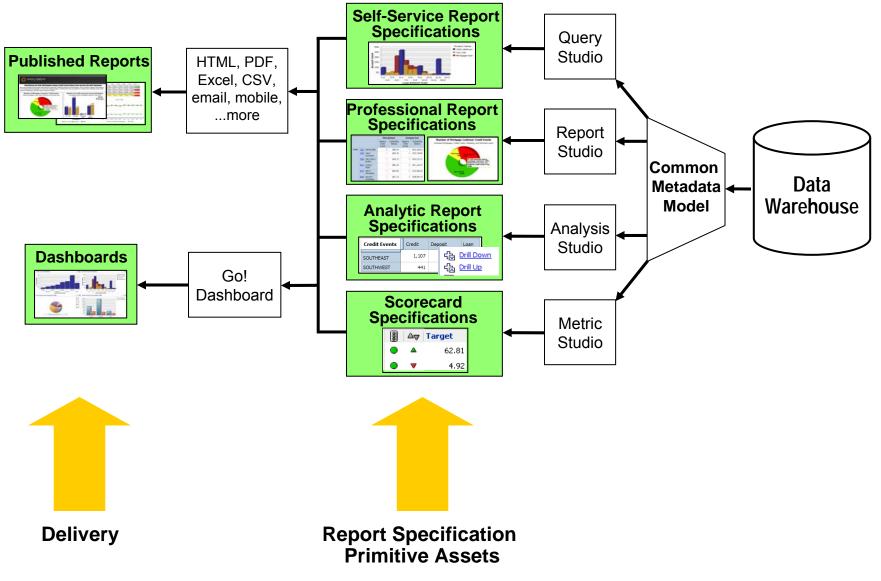
## **How Is New Intelligence Created?**

 Cognos tools create report specifications from gathered data

Report specifications can be thought of as New Intelligence "primitive assets"

Report specifications can be re-used and assembled into published reports and dashboards for delivery

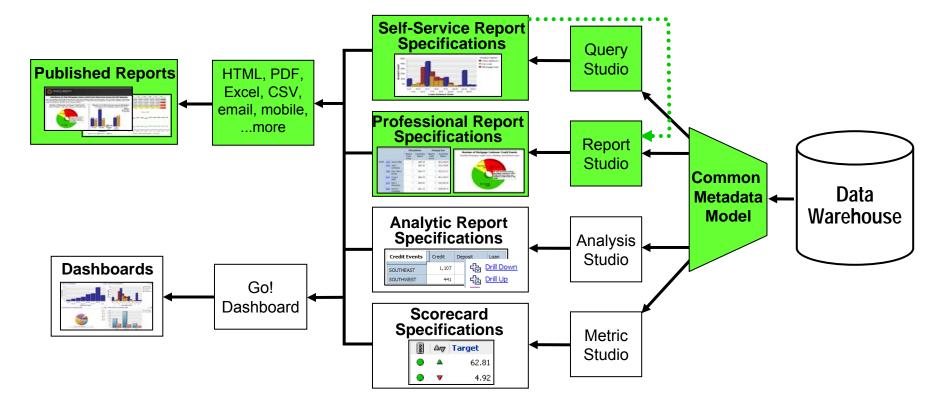
# New Intelligence Assets Created By Cognos



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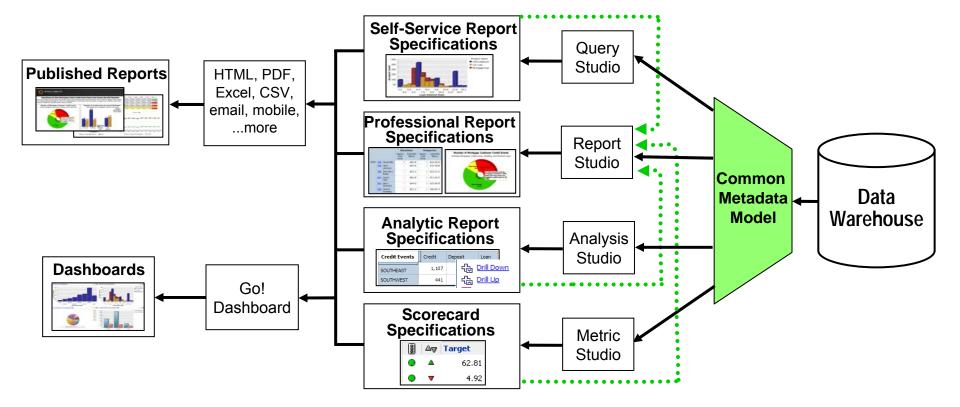
## Demo 1: Use Cognos Query Studio And Report Studio To Create And Enhance A Report

- Use Query Studio to customize an existing report
- Open Report Studio and add a chart to the report



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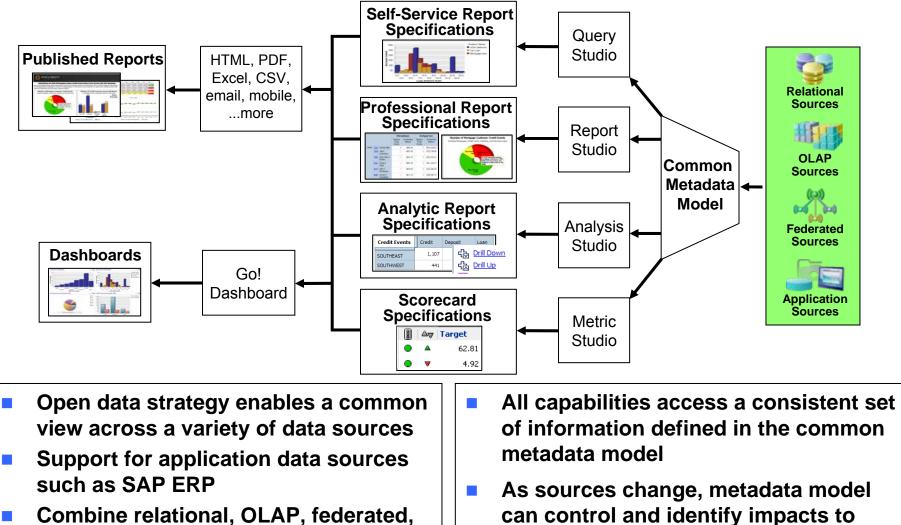
## Common Metadata Model Enables Reuse Of New Intelligence Assets



- All new intelligence assets share a common metadata model and common report specification
- Author Once Consume Anywhere
- Enables reuse between tools

- Microsoft and Oracle have multiple metadata models depending on source type
- Microsoft and Oracle have multiple different report formats
- Microsoft and Oracle often cannot reuse assets between tools

## Aim The Cognos Platform At Any Data Source To Supplement The Data Warehouse



and other data sources in any tool

report specifications

## 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
- Creates self-service report specifications in the Cognos common report format
  - Self-service report specifications can be opened and extended into professional report specifications using Cognos 8 BI Report Studio
- 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

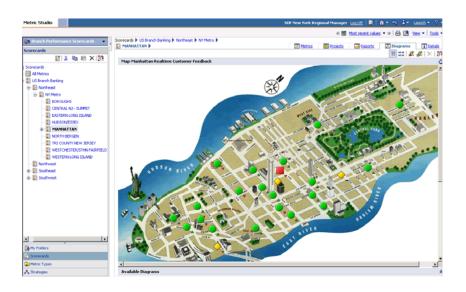
## Use Cognos 8 BI Analysis Studio To Gain Insight Into Your Business

- Cognos Analysis Studio provides multidimensional analysis
- Creates analytic report specifications using the Cognos common report format
  - Analytic report specifications can be opened and extended into professional report specifications using Cognos 8 BI Report Studio
- Use Analysis Studio to interactively explore data to find answers to business questions
  - ► Use drill up or drill down and 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

8	$\Delta_{\nabla} \mid \square$	Name	Actual	Target
•	▲ …	NY Metro Profitability Index	65.82	62.81
•	•	NY Metro Composite Index	5.10	4.92
٠	•	NY Metro Customer Retention/Attrition	2,085.87%	2,077.21%
$\diamond$	▼ …	NY Metro Realtime Customer Feedback	198.00	200.00
	▲ …	NY Metro Revenue	US\$8.97M	US\$9.50M
	<b>A</b> 📿	NY Metro % Revenue Growth	39.56%	44.00%

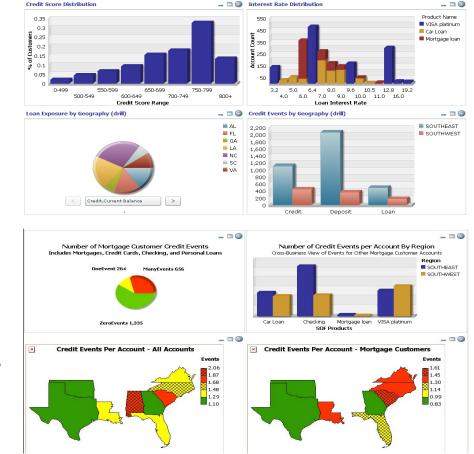


## Cognos 8 BI Report Studio Creates Professional Report Specifications To Run Your Business

- Professional reporting tool to create any style of report like invoices, financial statements, inventory, payroll, etc.
- Creates Professional report specifications using the Cognos common report format
- 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

## 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 a particular aspect of the business
  - Information from several different subjects areas presented 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

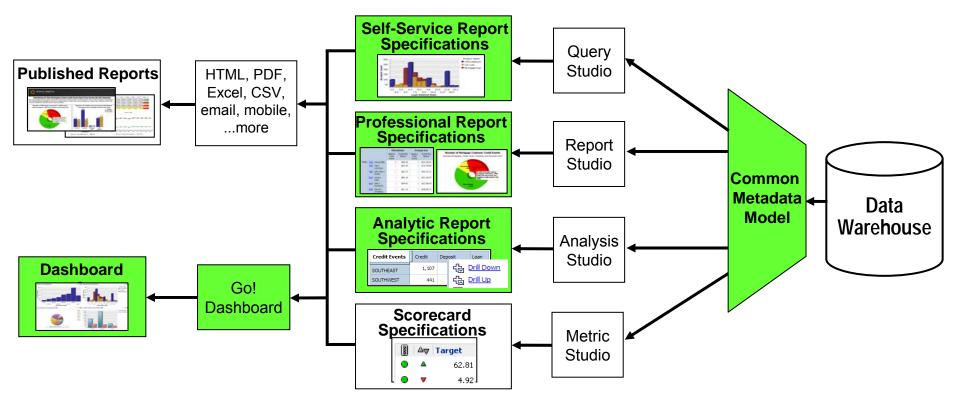


## All These Functions Access A Common Metadata Model And Create Assets In A Common Format

- 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

## DEMO 2: Service Oriented Finance Uses IBM Cognos Go! Dashboard To Monitor Their Business

- Show the dashboard assembly environment and how a dashboard is constructed.
- Explore a finished dashboard that includes various reports for the mortgage business



# Service Oriented Finance Needs To Do More With Less



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

The competition is not so simple.

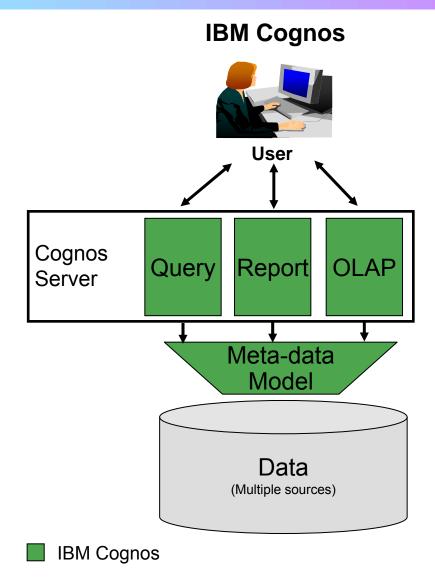


IBM

## 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
- Common meta data model
  - Author new intelligence assets once, consume anywhere
  - Common view enables open data strategy
  - Supports Unicode and multilingual features allowing support for multiple languages without recreating reports



## Cognos 8 BI Fits Into Your Existing Environment

#### Interoperable and Extensible

Standards	SOAP, XML, WSDL, HTTP(S), OMG CWM, XML/XMI, WSRP,REST	
Extend	Open, Web Services API to programming language of choice including Java, Microsoft .NET Framework, COM & Perl	
Embod	Industry Standard Portals including IBM, SAP, Plumtree, WRSP)	
Embed	Enterprise Search, BPM, Office, 3 <sup>rd</sup> party Applications	
<b>Security</b>	Any combination of LDAP, NTLM, Active Directory, Netegrity, SAP, Cognos 7, custom	

#### **Environments**

App Servers	Any J2EE application server Apache Tomcat (incl.), IBM WebSphere, SAP NetWeaver, BEA WebLogic, Oracle Application Server 10G	
Operating Systems	Any combination of Windows, Unix or LINUX (RedHat)	
Platforms	Intel, AIX, HP/UX, Solaris	
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 & Ell	Cognos Data Manager, Informatica PowerCenter, IBM Information Server (Ascential) Metabroker, Composite, IBM II
Source catalogs	Relational databases, ERP

#### **Open Data Access**

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

## 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 quickly connects to information in DB2
  - Cognos can connect directly to InfoSphere Warehouse Cubing Services via XML/A
- InfoSphere Warehouse data mining and unstructured analytics results can be incorporated into Cognos reports

## **Microsoft Is Harder To Deploy And Use**

### Multiple desktop tools

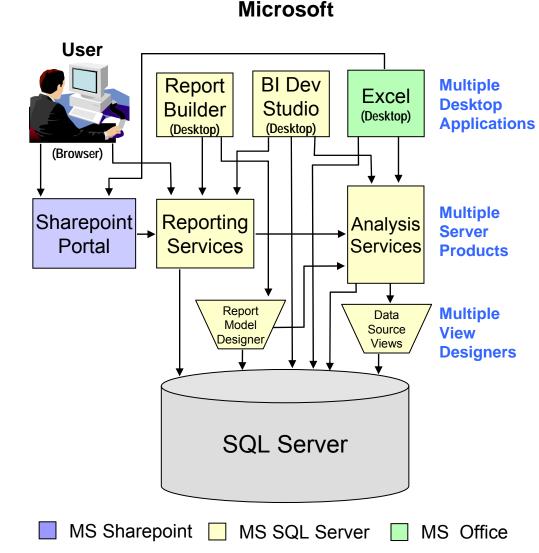
- Multiple report formats
  - Report Builder (Ad-Hoc)
  - BI Development Studio (BIDS) Report Designer
  - Excel
  - Format incompatibilities
- Fragmented metadata approach
  - Direct query, Report Builder Models, BIDS datasets, MSAS cubes (data source views), ...

### Multiple desktop tools

- Programming required
- MS Office required

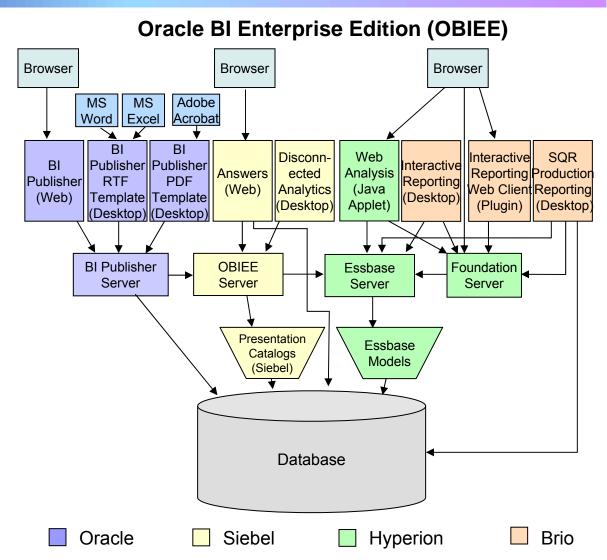
#### Creates IT Burden

- Install, Patch, User Support all happen at the desktop
- Not SOA Only works with Microsoft product stacks
- Multiple security models

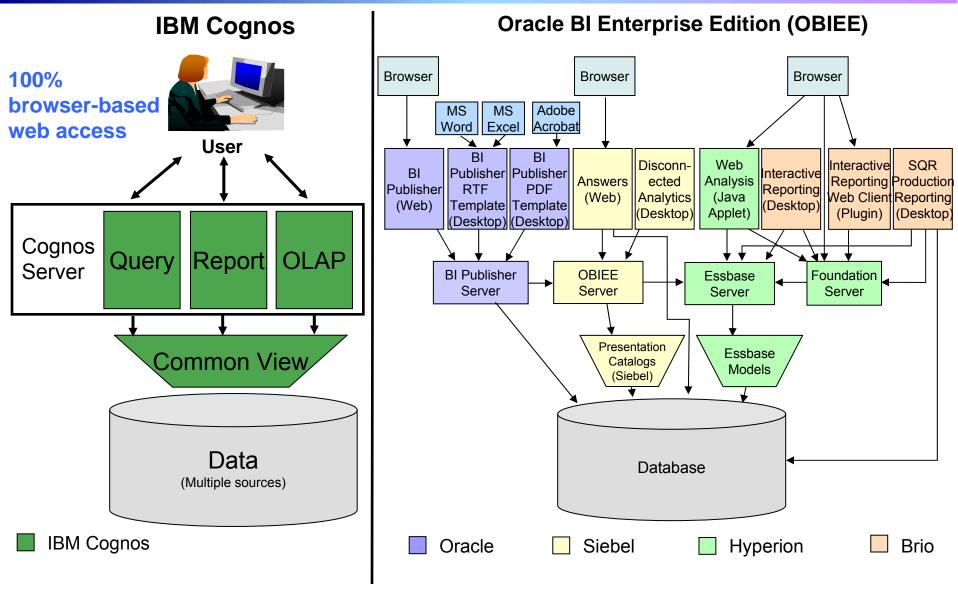


## Oracle Business Intelligence Enterprise Edition Is Even Harder To Deploy And Use

- 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



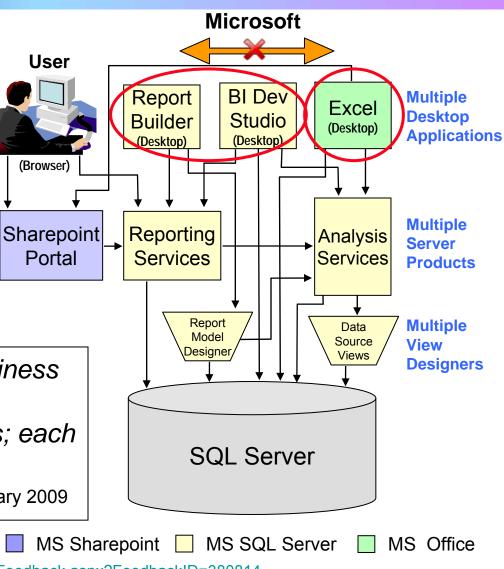
## Compare For Yourself: Cognos Is Simple, Oracle Is Complex



## Microsoft Lacks Common Metadata And Common Report Format So Tools Cannot Share Assets

- Limited sharing of assets between Report Builder, BI Dev Studio Report Designer, Excel
- Report Definition Language (RDL) v2.0 incompatibilities
  - BI Dev Studio 2008 creates reports that cannot be viewed with MS Visual Studio 2008 ReportViewer control. Waiting for Visual Studio 2010 ReportViewer...<sup>1</sup>
- Complexity = More Work
- "...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

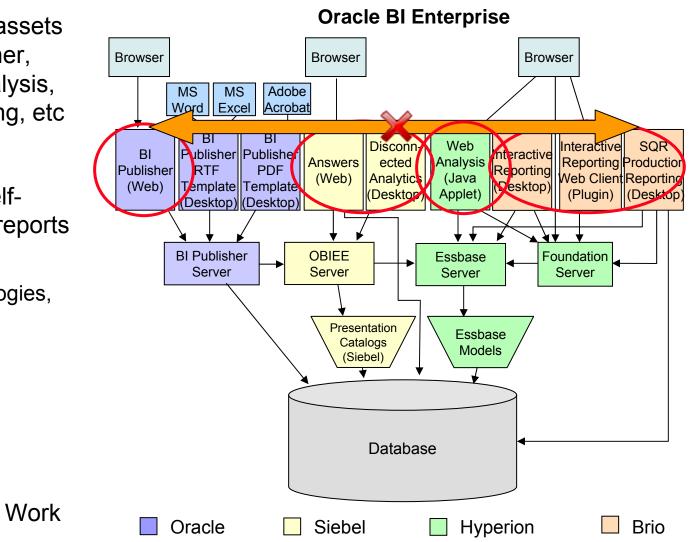


<sup>1</sup> <u>https://connect.microsoft.com/VisualStudio/feedback/ViewFeedback.aspx?FeedbackID=380814</u> <u>http://www.gotreportviewer.com/</u>

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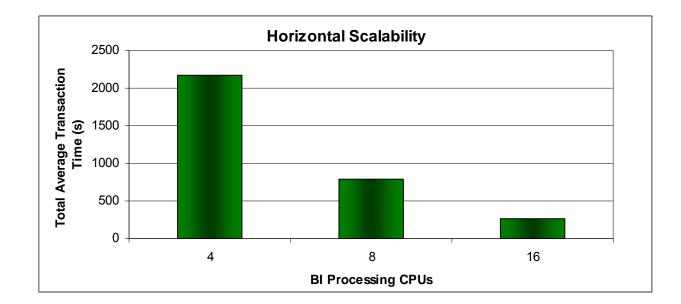
## Oracle Lacks Common Metadata And Common Report Format So Tools Cannot Share Assets

- Limited sharing of assets between BI Publisher, Answers, Web Analysis, Interactive Reporting, etc
- Cannot promote selfservice (Answers) reports into BI Publisher
  - Different technologies, different formats
- Multiple metadata strategies
- Complexity = More Work



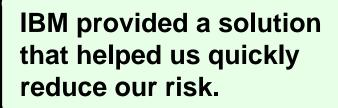
## IBM Lab Tests Show That Cognos 8 BI Delivers Exceptional Scalability – Economies Of Scale

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



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

## Service Oriented Finance Is Making Effective Use Of Their Data



Service Oriented Finance CEO We resold 10% of our loan portfolio and defaults have been cut in half.



Mortgage Line of Business VP

## City of Albuquerque, New Mexico, USA

City Boosts Efficiency And Enhances Information Sharing By Standardizing On IBM Software

#### **Business challenge**

The City of Albuquerque was using a mishmash of home-grown and off-the-shelf systems to manage disparate data in multiple formats. Collecting data to provide critical information to city personnel required substantial manual effort. The city needed to automate data collection and information sharing and standardize its IT systems with a scalable business intelligence solution.

#### Solution

The city deployed IBM Cognos 8 Business Intelligence software and has now standardized on Cognos software across more than 20 departments and many applications.

#### **Benefits**

- Streamlined data collection, reporting and analysis
- Facilitated information sharing, empowering city employees to make better decisions and enhancing citizen outreach
- Realized a 2,000 percent ROI from Cognos investment and achieved the scalability needed to accommodate future growth

*"With Cognos, it is now possible for us to use relatively few resources to provide information to a large and diverse audience."* 

*— Brian Osterloh, applications development manager for CRM & BI, City of Albuquerque* 

## IBM Cognos vs. Oracle And Microsoft – Summary

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