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**Session 41930 - Introduction To Oracle's BI Foundation & Tools**

Tobin Gilman

Senior Director, BI Product Marketing

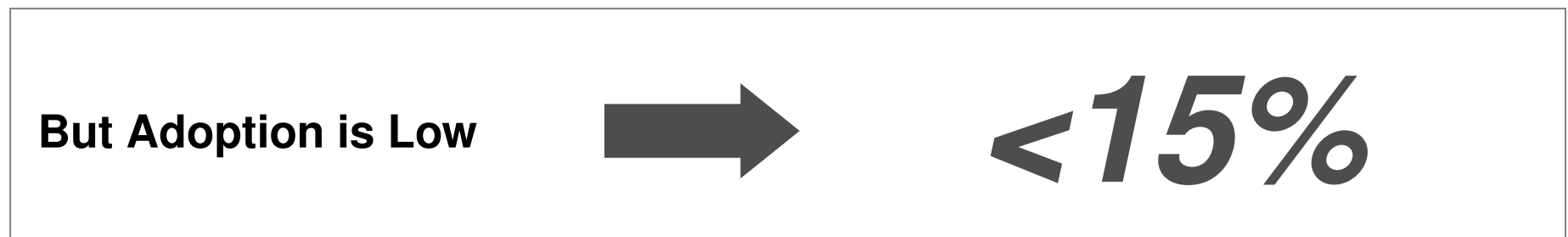


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# The BI Paradox

## More Tools, Fewer Users





# Agenda

- BI Market Trends
- Oracle's EPM System
- Oracle's BI Foundation & Applications
- Summary & Questions

# Business Intelligence Remains the #1 Priority

## Business Intelligence Tops the Strategic Technology List

Since customer service and growth are important, it makes sense that the most important technology in 2007 is business intelligence. BI is a family of technologies that promises to offer better insight into customer behavior and market opportunities. Business process management technologies should do the same for internal processes. However, while BI gets good grades for meeting expectations, BPM suites and platforms often fall short (as our Customer Strategies Survey found). The other top technologies on the list are no surprise—they've been critically important for years, not only for pulling data together, but also for helping users make sense of it.

### 2.1 Which five technologies will make the most significant contribution to your company's business strategy in 2007?

N=215

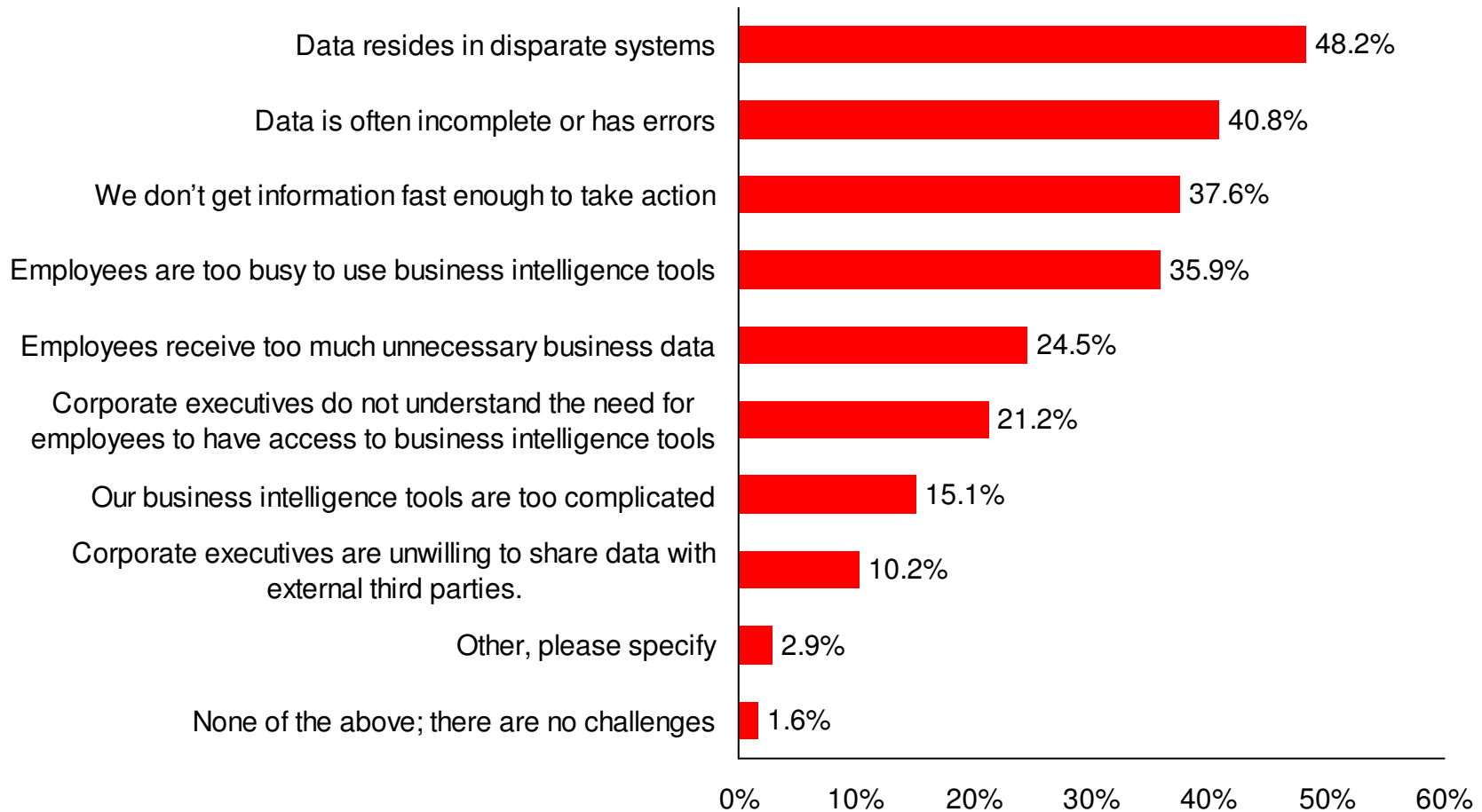
		total	● below \$1 billion	● \$1 billion or more
1	Business intelligence/data mining	37%	35%	39%
2	Business process management	34	32	36
3	Web services/service-oriented architecture	32	22	41
4	Collaboration and workflow	31	30	33
5	Data and systems integration	27	25	30

Source: CIO Insight, "The Future of I.T.: What's on Tap for 2007 and Beyond," January 16, 2007

# Major BI Challenges

Economist Intelligence Unit

The Economist



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# The IT Dilemma

IT WANTS
<ul style="list-style-type: none"><li>• Fewer tools</li></ul>
<ul style="list-style-type: none"><li>• User self-service</li></ul>
<ul style="list-style-type: none"><li>• Secure systems</li></ul>

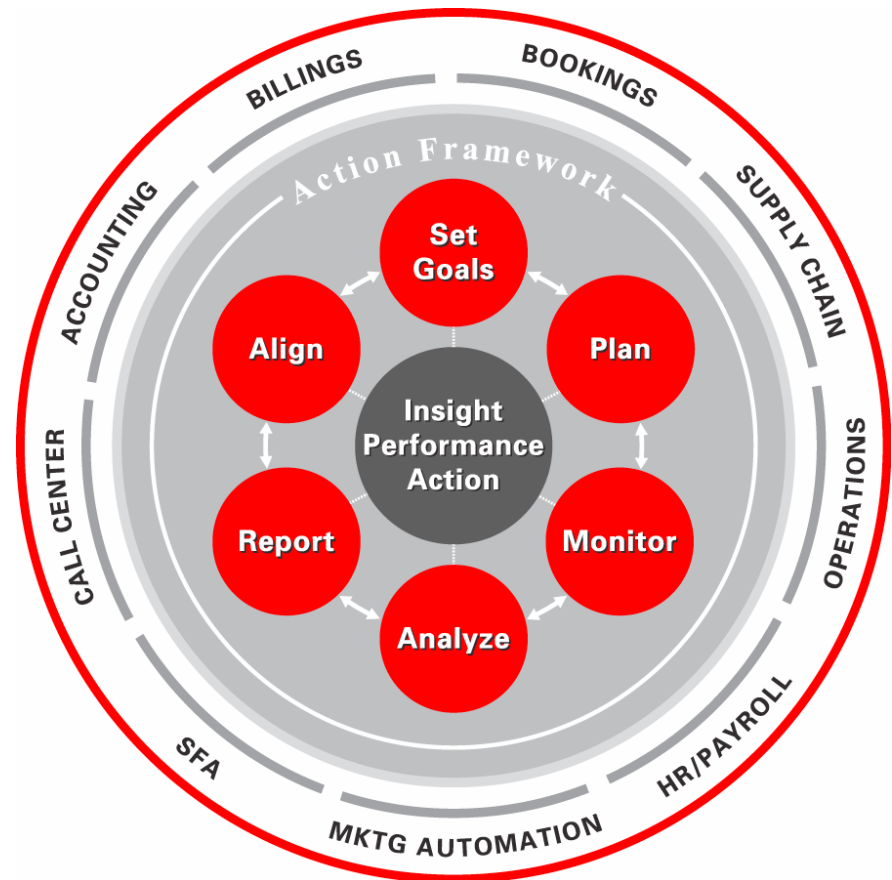
BUSINESS USERS WANT
<ul style="list-style-type: none"><li>• Flexibility &amp; choice</li></ul>
<ul style="list-style-type: none"><li>• Insight &amp; alignment</li></ul>
<ul style="list-style-type: none"><li>• Relevant access</li></ul>



# Oracle's EPM System Vision

## Focus on Today and Plan for Tomorrow

- Link strategic goals to operational decisions
- Integrates all management processes
- Deliver consistent, reliable insights to drive action
- Lower costs and reduces system complexity
- Single version of the truth



# Oracle's Enterprise Performance Management System

EPM Workspace

Performance Management Applications

BI Applications

Business Intelligence Foundation

Fusion Middleware



OLTP & ODS Systems



Data Warehouse Data Mart



OLAP



SAP, Oracle, Siebel, PeopleSoft, Custom



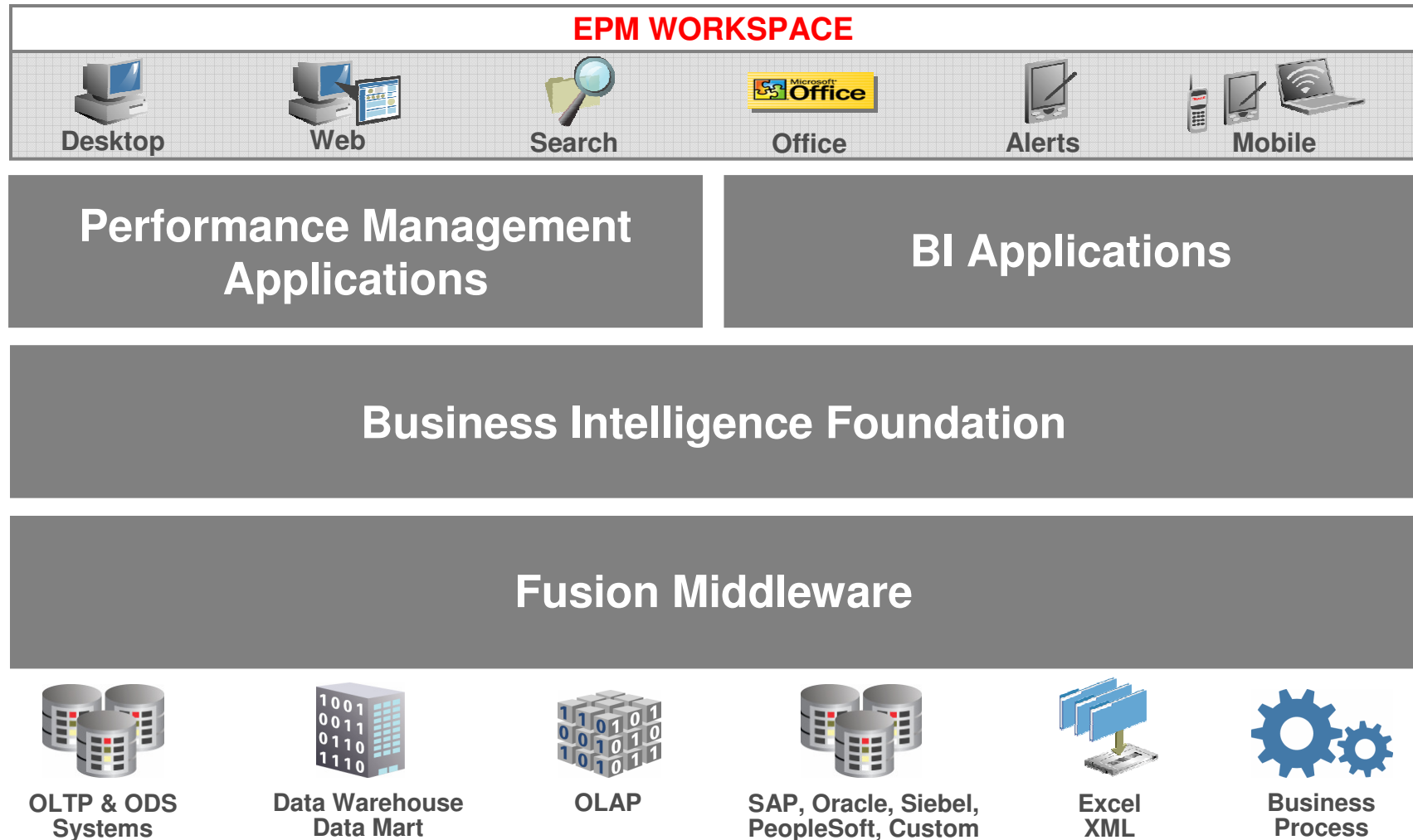
Excel XML



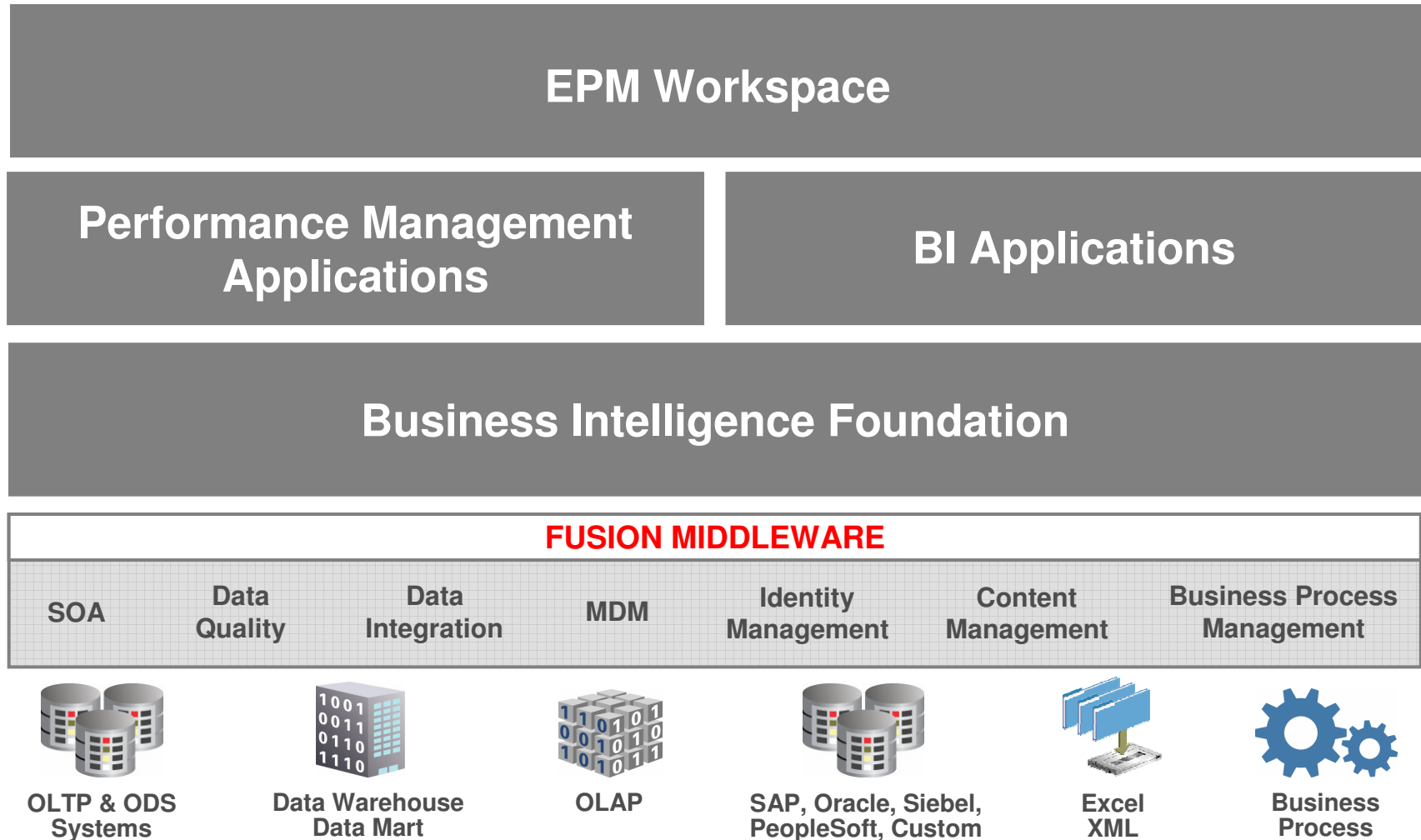
Business Process

ORACLE

# Pervasive Information Access Through a Multi-Channel EPM Workspace



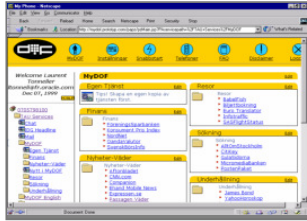
# Leverages Fusion Middleware



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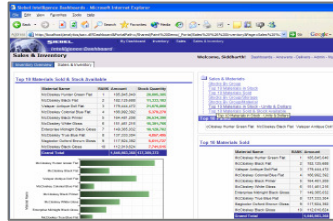
# Hot-Pluggable With Existing IT Investments

## PORTALS



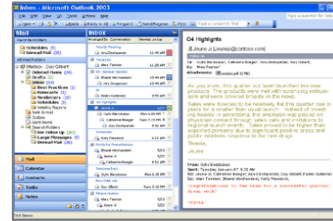
Any JSR 168 Portal

## DATA MINING



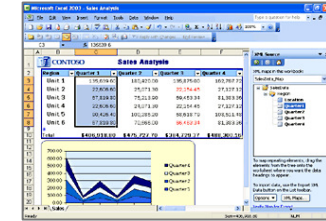
Oracle Data Mining,  
SPSS, SAS

## APPLICATIONS



Oracle EBS, Siebel, SAP,  
PeopleSoft, JD Edwards...

## DESKTOP TOOLS



Excel, Outlook,  
Lotus Notes...

## Oracle Enterprise Performance Management System Oracle Business Intelligence Foundation

## SECURITY



Oracle Kerberos  
iPlanet  
MSFT AD  
Novell  
Custom  
Others...

## DATA ACCESS



Oracle RDBMS  
Oracle OLAP Option  
Microsoft SQL Server  
Microsoft Analysis Services  
IBM DB2  
Teradata  
Essbase  
SAP BW  
XML, Excel, Text

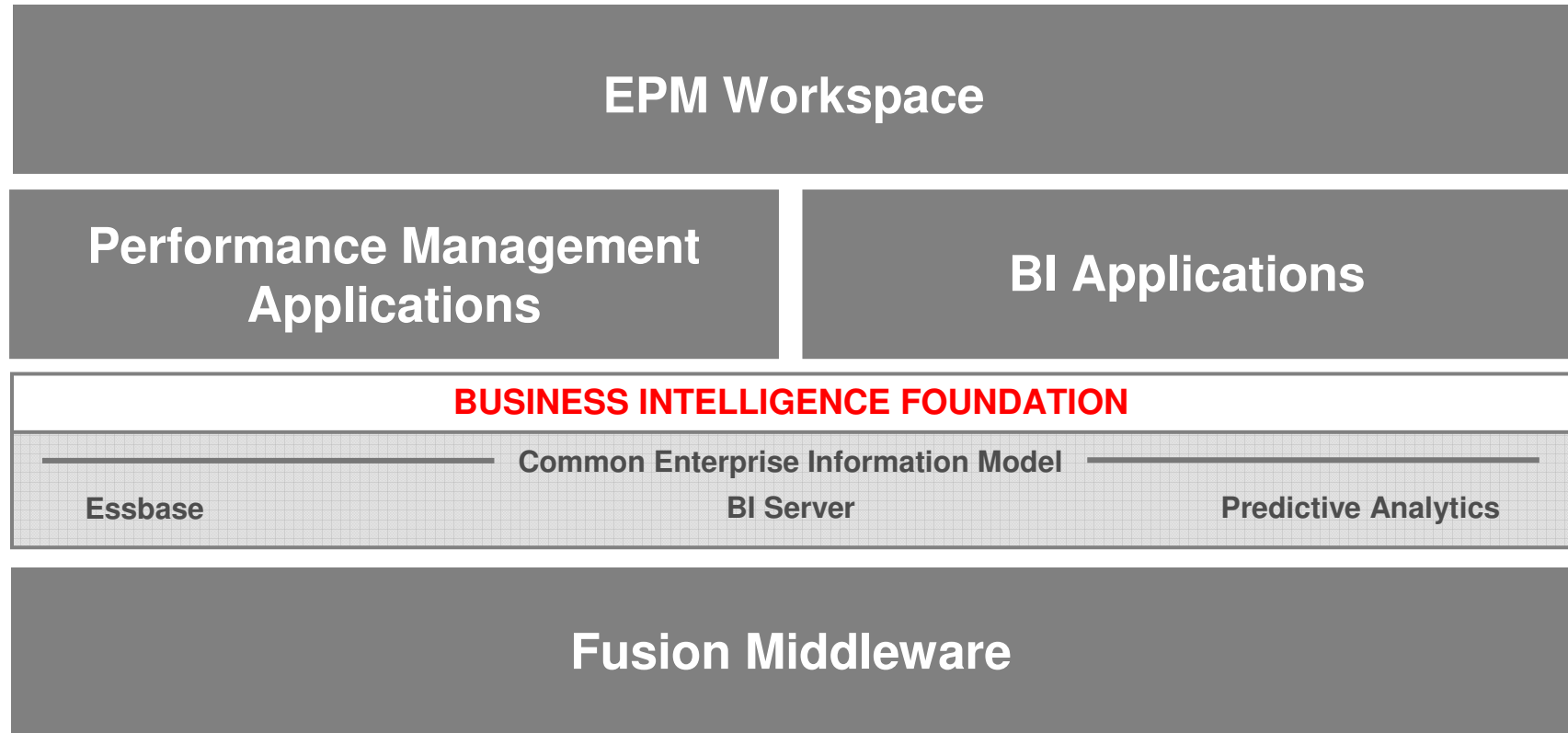
## DATA INTEGRATION



Oracle Data Integrator  
(Sunopsis)  
Oracle Warehouse  
Builder  
Informatica  
Ascential  
Others...

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# Highly Scalable BI Foundation



OLTP & ODS Systems



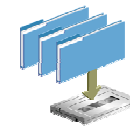
Data Warehouse Data Mart



OLAP



SAP, Oracle, Siebel, PeopleSoft, Custom



Excel XML



Business Process

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## Confucius Says...

“Not all Questions  
are Created Equal”



# Questions Can be Worlds Apart

## What is our performance?

- What are the top 10 markets?
- What is the gap to forecast?
- What customers are most profitable?
- What are revenues by product compared to last year?
- What are sales by product, store and quarter?
- What is the trend for employee-related costs?
- What is our open headcount?

Situational

## How can we improve performance?

- What if we increase promotional lift by 10% in our major markets?
- What happens to our forecast if the dollar declines by 5% to the Euro?
- What happens to gross margin if our materials costs increase by 20%?
- Which customers drive 80% of our overall profitability?
- What happens to same store sales if inventory turns increase by 5%?

Forward-looking

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# Diverse Needs in the “BI Pyramid”



**Standardized  
Reporting**

- Dashboards
- Publishing
- Pixel-perfect



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# 1250 Users, 400 Reports, 3 Months, 1 Admin



Pitney Bowes is the world's largest producer of postage meters. Implemented Oracle BI Applications (Sales, Service, and Marketing Analytics) to over 1,250 employees.

## BEFORE

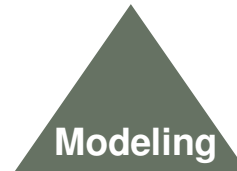
- Poor measurement of employee performance in sales and service
- Lack of customer insight - no consistent, real-time view
- Slow "Customer Inquiry Response Time"
- No single source of customer data for segmentation
- High reliance on IT for information



## AFTER

- "Turned the tides" in sales force with better insight into performance
- Enhanced sales productivity with 360° view of customer relationship
- Increased customer responsiveness, leading to greater satisfaction/retention
- Unified customer data for better marketing segmentation and targeting
- Customer-facing employees empowered with the information they need

# Diverse Needs in the “BI Pyramid”



- What-if
- Scenarios
- Allocations

**Standardized  
Reporting**

- Dashboards
- Publishing
- Pixel-perfect

# 9/11 Crisis in the Airline Industry

## Southwest Airlines adapts



83 million passengers a year

63 destinations

3300 flights a day

### Needs

- Determine how long cash balances of \$1 billion would last – immediately
- Develop capital spending plans and 15 month rolling forecasts in 1 day
- Create business cockpits for executives and other functional areas to track key metrics



### After

- Ability to forecast within 2% of outcome, providing top-bottom and bottom-top analysis
- Analysis provided comfort level (no employees laid off; no need for government loans)
- Finance moved to spending 10% accumulating data and 90% analyzing (75% / 25% before)



# Common Modeling Applications



## Modeling

- What-if
- Scenarios
- Allocations

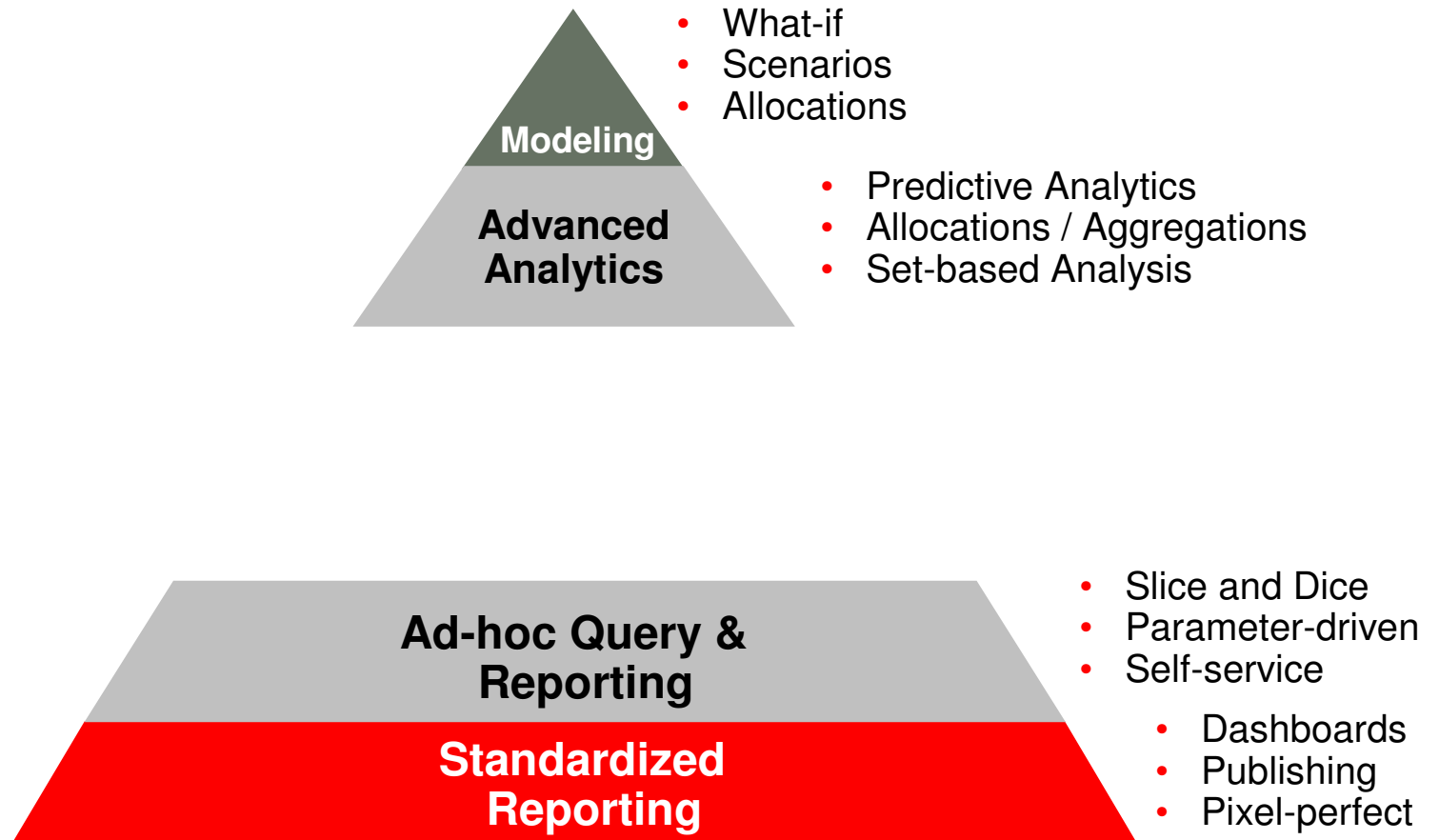
- Customer Profitability
- Demand Planning
- Brand Valuation
- Loan Default Risk
- Store Profitability
- Promotional Response
- Financial Planning
- Supply Chain Optimization
- Customer Churn
- Workforce Planning



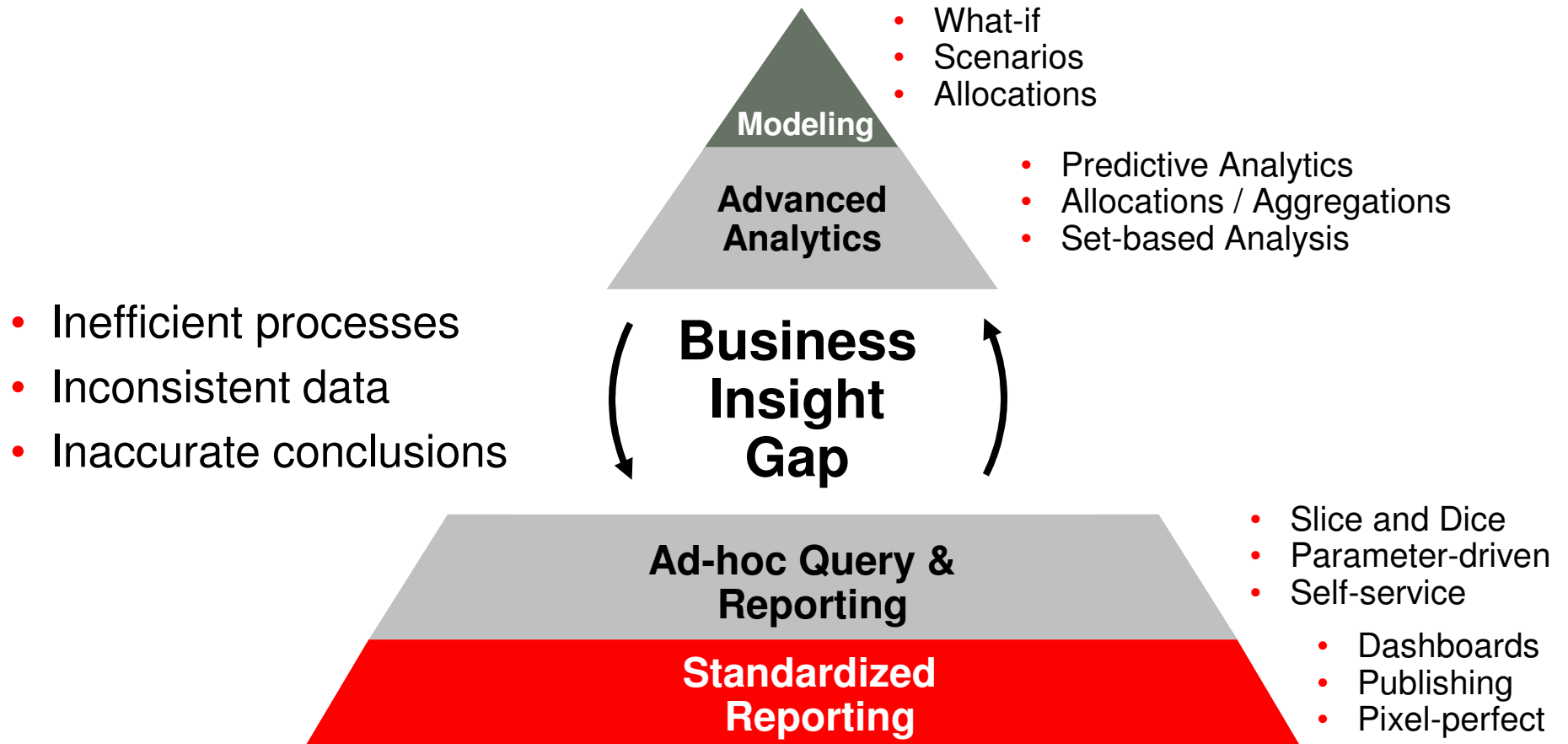
## Standardized Reporting

- Dashboards
- Publishing
- Pixel-perfect

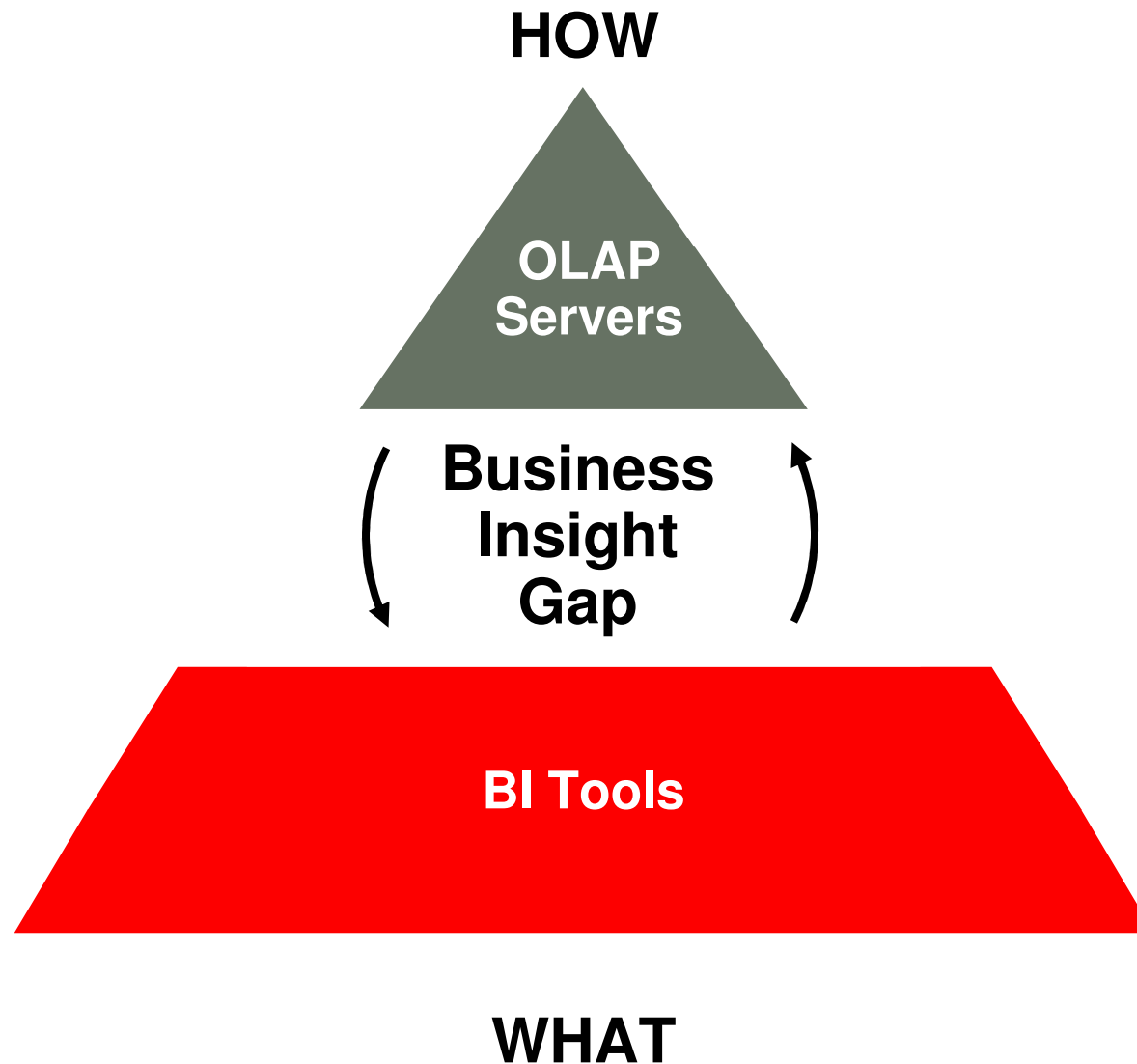
# Diverse Needs in the “BI Pyramid”



# Reality: No Single Tool Spans the BI Pyramid



# Different Tools Answer Different Questions





# Deployments Have Differing Objectives

**HOW**

- Replaces Excel applications
- Modeling new outcomes
- Maintained by analysts

**OLAP  
Servers**

**Business  
Insight  
Gap**

- Replaces custom systems
- Information consistency
- Managed centrally by IT

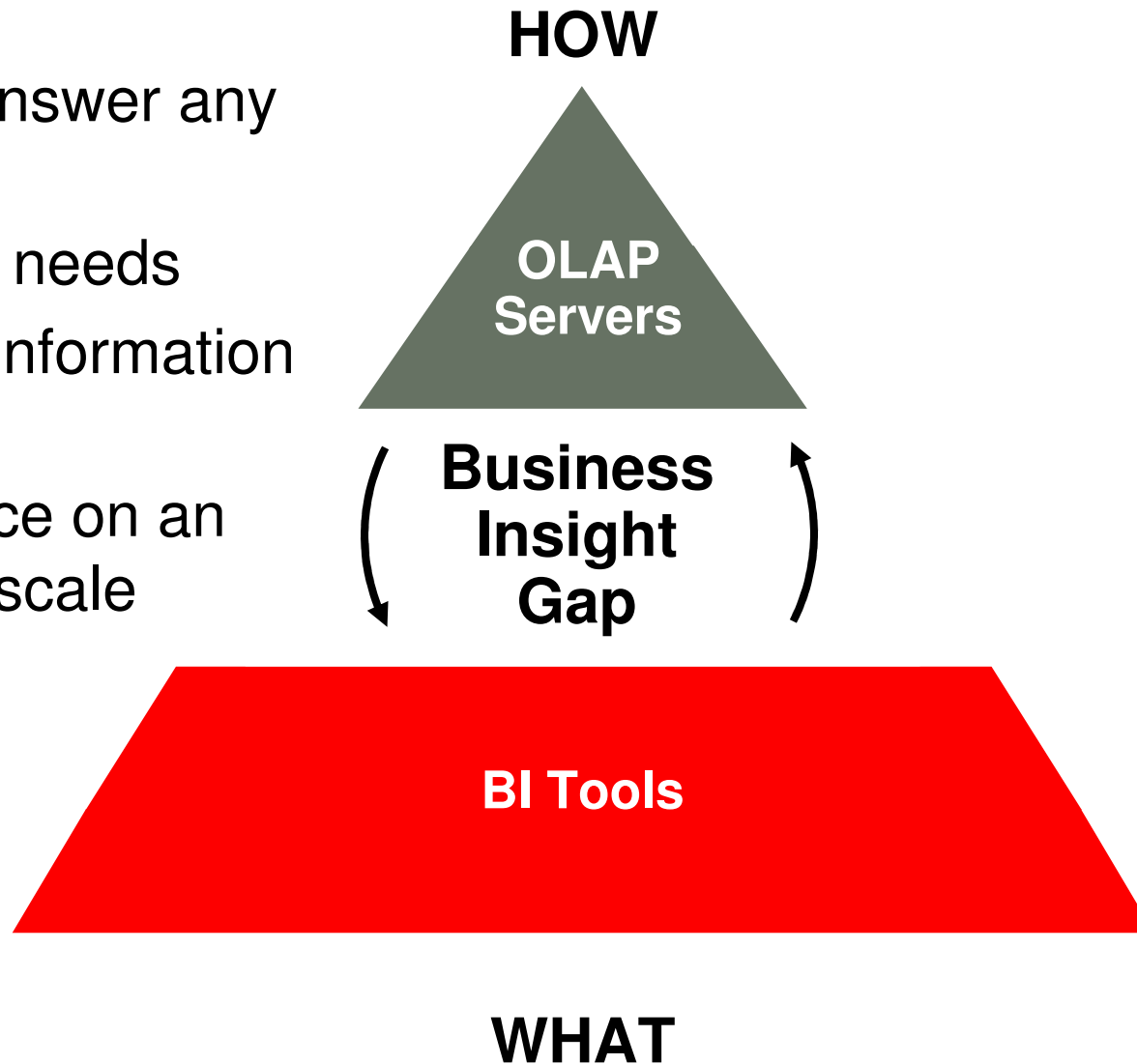
**BI Tools**

**WHAT**

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# What's Needed: A Single BI Foundation

- Power to answer any question
- Pyramid of needs
- Pervasive information access
- Performance on an enterprise scale



# Oracle's Unified BI Foundation Meeting All BI Pyramid Needs

- What-if
- Advanced Analysis
- Predictive Analytics

**Essbase**

- Consistent definitions
- Role-based views
- Model-driven

**Common  
Enterprise  
Information  
Model**

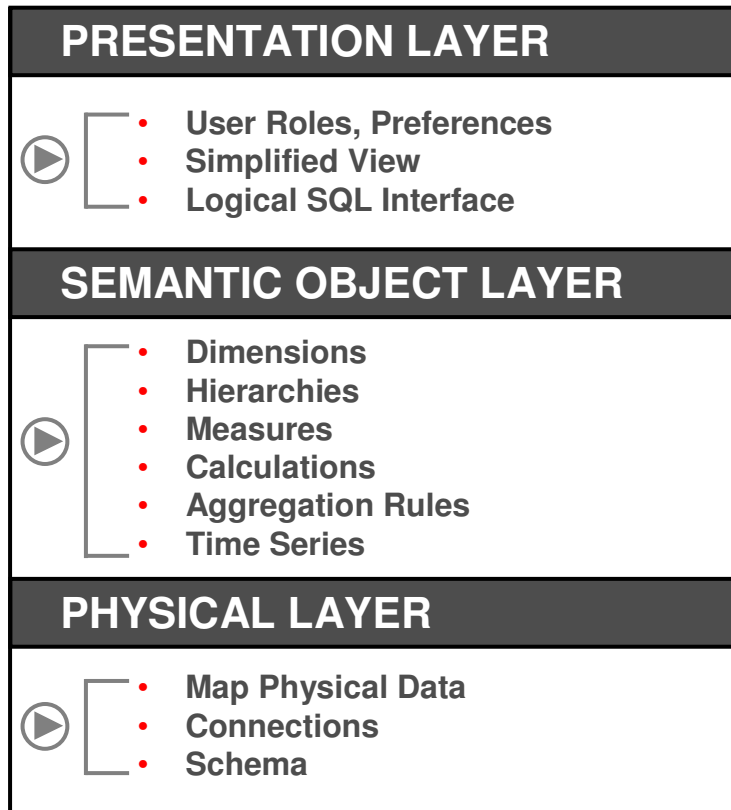
- Prepackaged applications
- Ad-hoc query
- Report Publishing

**Oracle BI Suite EE Plus**

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# Common Enterprise Information Model

## Enables Consistency, Security, Reuse, Flexibility



**Role-Based Views of the Information Relevant to the User**

**Consistent Definition of Business Measures, Metrics, Calculations**

**Model Once, Deploy Everywhere**



**Across Any Data Sources**

# Enterprise Information Model Benefits

## BUSINESS BENEFITS

Consistent, Accurate Information

Business User Self Service

Choice of Front End Tools

Role-Based, Secure Access

Transparent Information Access



## TECHNICAL BENEFITS

**Model Once, Deploy Anywhere**

**Reduced User Support**

**Enables Phased BI Standardization**

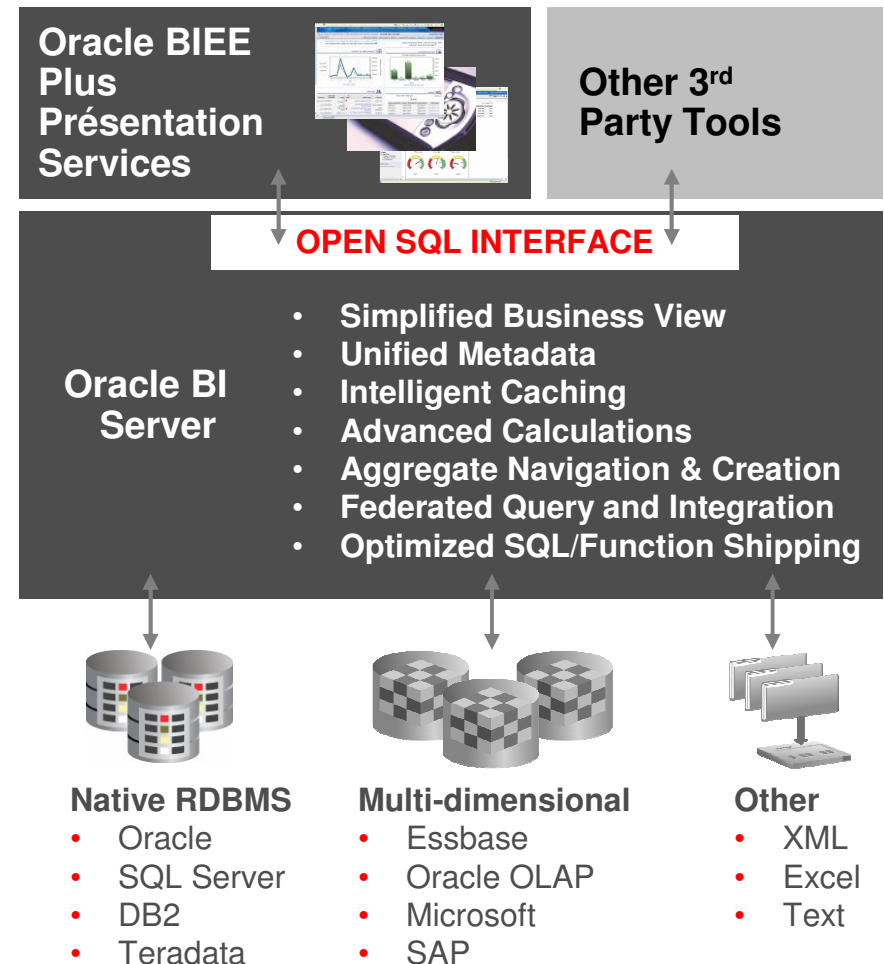
**Supports IT Compliance Initiatives**

**Easier Upgrades & Changes**

# Oracle BI Server

## Simplified, Powerful, Intelligence Across Sources

- Simplified business model view
- Advanced calculation & integration engine
- Intelligent request generation and optimized, distributed data access
- Mission critical scalability and performance
- Foundation for all OBIEE presentation services



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# The Value of Oracle BI Suite EE Plus

CUSTOMER CHALLENGES	ORACLE VALUE
Fragmented view	Single view, 14 TB across 3 systems
Unintuitive	7,000 out of 7,400 employees use
Data latency	Real-time global view – 500 top execs
Expensive to maintain	400 dashboards, 1,250 users, 1 admin
Slow deployments	3,000+ users live in 3.5 months
Limited scalability	1,000,000+ users on 15 TB of data
ROI	500%; \$30M savings



# Essbase OLAP Server

<b>Rich Business User Experience</b>	<ul style="list-style-type: none"><li>• Superior tools for the business user</li><li>• Broadest analytic functionality</li><li>• “Speed of thought” response</li></ul>
<b>Highly Advanced Calculation Engine</b>	<ul style="list-style-type: none"><li>• Superior calculation power</li><li>• Comprehensive library of functions</li><li>• Extensive financial and time intelligence</li></ul>
<b>Custom Analytic Environment</b>	<ul style="list-style-type: none"><li>• Optimized storage</li><li>• Enterprise scale forward looking applications</li><li>• Premium performance</li></ul>



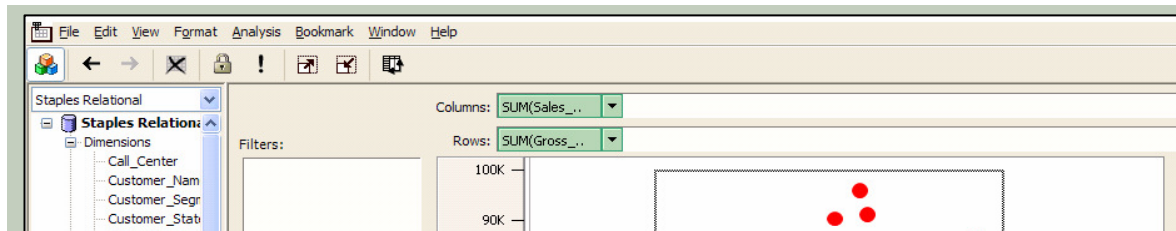
# Modeling & Analysis Problems Solved With Essbase...

CUSTOMER CHALLENGES
Forecast accuracy
Scalable query performance
Massive data sets
Brand valuation
Customer profitability
Delayed reporting cycles



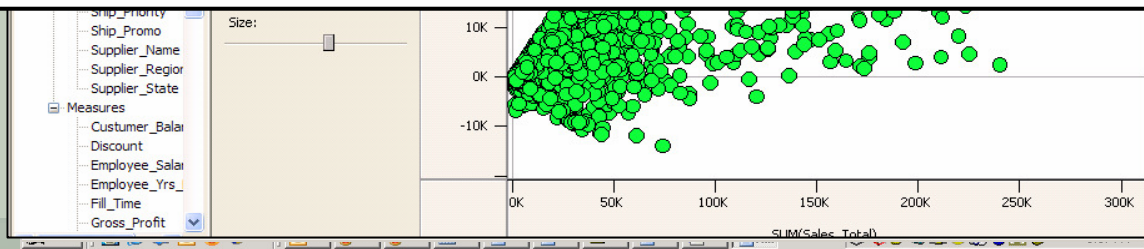
ORACLE VALUE
98% accuracy on \$1B cash balance
<4 second SLA, 30,000 users
100GB, 39 dimensions, 14 yrs.
Relative contribution of 4,000 brands
14 million customers, .2 seconds
30% reduction

# Plus a Range of Superior Reporting Tools...



**“Visual Explorer is not just a slick way to visualize, it’s a slick way to visually analyze.”**

**– Wayne Eckerson, Industry Analyst, TDWI**



# Analytics Made Easy - Search Integration

- Multiple search providers
  - Oracle Secure Search
  - Google One Box
- Returns structured response to unstructured query
- Query governed by user's security credentials – SSO token

ORACLE Secure Enterprise Search [Help](#) [Sui](#)

essbase qtr1 sales  [Advanced Search](#)  
[Browse Source Groups](#)

There are no results for your search.

ORACLE | Hyperion [kliao2:Sample:Basic](#)

	Product	Market	Scenario	Qtr1
Sales	Jan	Feb	Mar	
	31538.00	32069.00	32213.00	95820.00

**Hyperion Essbase**  
Query Description: qtr1 broken down by Measures  
Query Executed on : Wed Jun 20 20:43:56 PDT 2007

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Google [Web](#) [Images](#) [Groups](#) [News](#) [Froogle](#) [Local](#) [Appliance](#)

essbase market jan sales  [Advanced Search](#)  
[Search Tips](#)

Search:  public content  public and secure content

**Search** Results 1 - 3 for **essbase market jan sa**

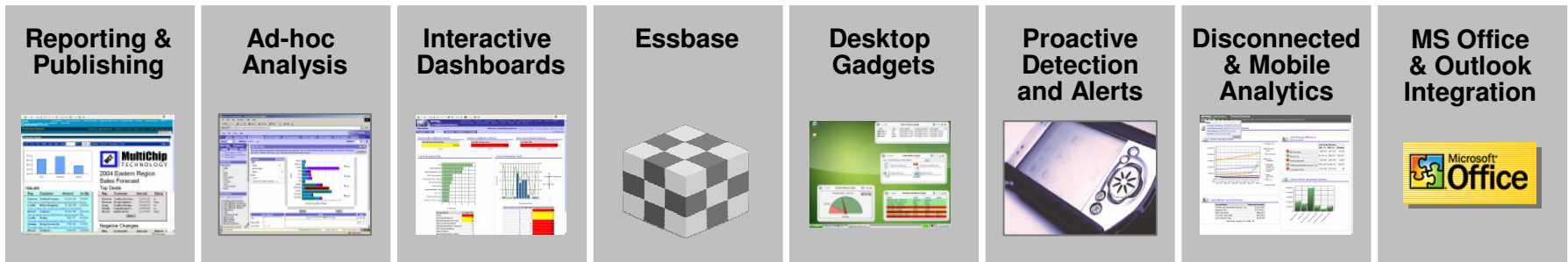
ORACLE | Hyperion [kliao2:Sample:Basic](#)

	Sales	Product	Scenario	Central	Market
	East	West	South		
Jan	6780.00	10436.00	3976.00	10346.00	31538.00

**Hyperion Essbase**  
Query Description: market broken down by Year Measures  
Query Executed on : Wed Jun 20 20:34:14 PDT 2007

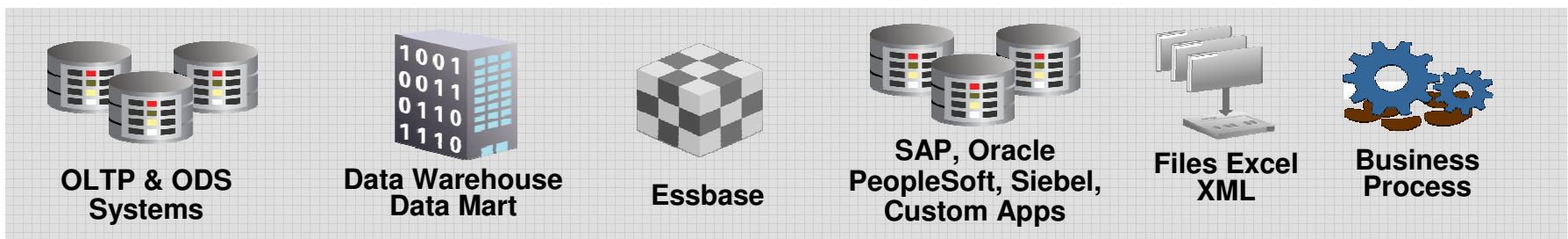
# Pervasive Information Access

## One Platform, One Model, Multiple Delivery Channels



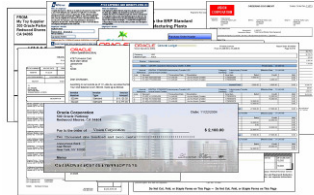
### Common Enterprise Information Model

Integrated Security, User Management, Personalization  
Multidimensional Calculation and Integration Engine  
Intelligent Request Generation and Optimized Data Access Services



# Pervasive Information Delivery

## Production Reporting



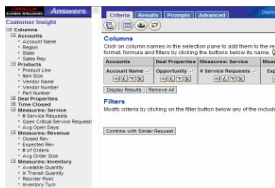
- “Pixel-perfect” reporting and publishing
- Report layout using Microsoft Word and Adobe Acrobat
- Single product for all document needs – invoices, checks, financial statements, government forms, etc.

## Financial Reporting



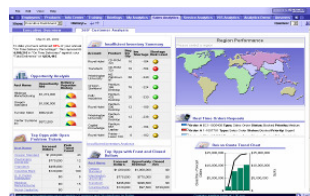
- Formatted financial statements
- Built-in financial intelligence
- XBRL support

## Ad Hoc Query



- Powerful ad-hoc analysis via 100% Web UI
- Create & modify charts, pivots and dashboards
- True business user self sufficiency via intuitive, simplified business model

## Interactive Dashboards



- Live, intuitive, personalized dashboards
- Immersive experience with limitless dashboard to dashboard navigation
- Dynamic, event-driven guided analytics lead users from insight to action

# Pervasive Information Delivery (continued)

## Detections & Alerts



- Automated problem/opportunity detection and alerts
- Notification and content delivered to any device in multiple formats (PDF reports, Briefing Books, etc.)
- Multi-step analysis, analytic workflows, and business process integration

## MS Office Integration



- Excel, PowerPoint, Word, & Outlook
- Dynamic updates across applications
- Authoring and consumption

## Disconnected & Mobile Analytics



- Offline interactive reports, briefing books and dashboards
- Connect, synch and go
- PDA's, Phones, Laptops

## Desktop Gadgets



- Always on
- Personalized functionality & insight
- Collaboration via report sharing, discussion, chat

# Comprehensive BI Applications

EPM Workspace

Performance Management Applications

BI APPLICATIONS

Sales	Service	Marketing	Order Mgmt.	Supply Chain	HR	Finance
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Business Intelligence Foundation

Fusion Middleware



OLTP & ODS Systems



Data Warehouse Data Mart



OLAP



SAP, Oracle, Siebel, PeopleSoft, Custom



Excel XML



Business Process

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# Comprehensive BI Applications

**Complete, Prebuilt, Best Practice BI Solutions**



Sales	Service & Contact Center	Marketing	Order Management & Fulfillment	Supply Chain	Financials	Human Resources
Pipeline Analysis	Churn Propensity	Campaign Scorecard	Order Linearity	Supplier Performance	A/R & A/P Analysis	Employee Productivity
Triangulated Forecasting	Customer Satisfaction	Response Rates	Orders vs. Available Inventory	Spend Analysis	GL/Balance Sheet Analysis	Compensation Analysis
Sales Team Effectiveness	Resolution Rates	Product Propensity	Cycle Time Analysis	Procurement Cycle Times	Customer & Product Profitability	HR Compliance Reporting
Up-sell/Cross-sell	Service Rep Effectiveness	Loyalty and Attrition	Backlog Analysis	Inventory Availability	P&L Analysis	Workforce Profile
Cycle Time Analysis	Service Cost Analysis	Market Basket Analysis	Fulfillment Status	Employee Expenses	Expense Management	Turnover Trends
Lead Conversion	Service Trends	Campaign ROI	Customer Receivables	BOM Analysis	Cash Flow Analysis	Return on Human Capital

Prebuilt adapters:



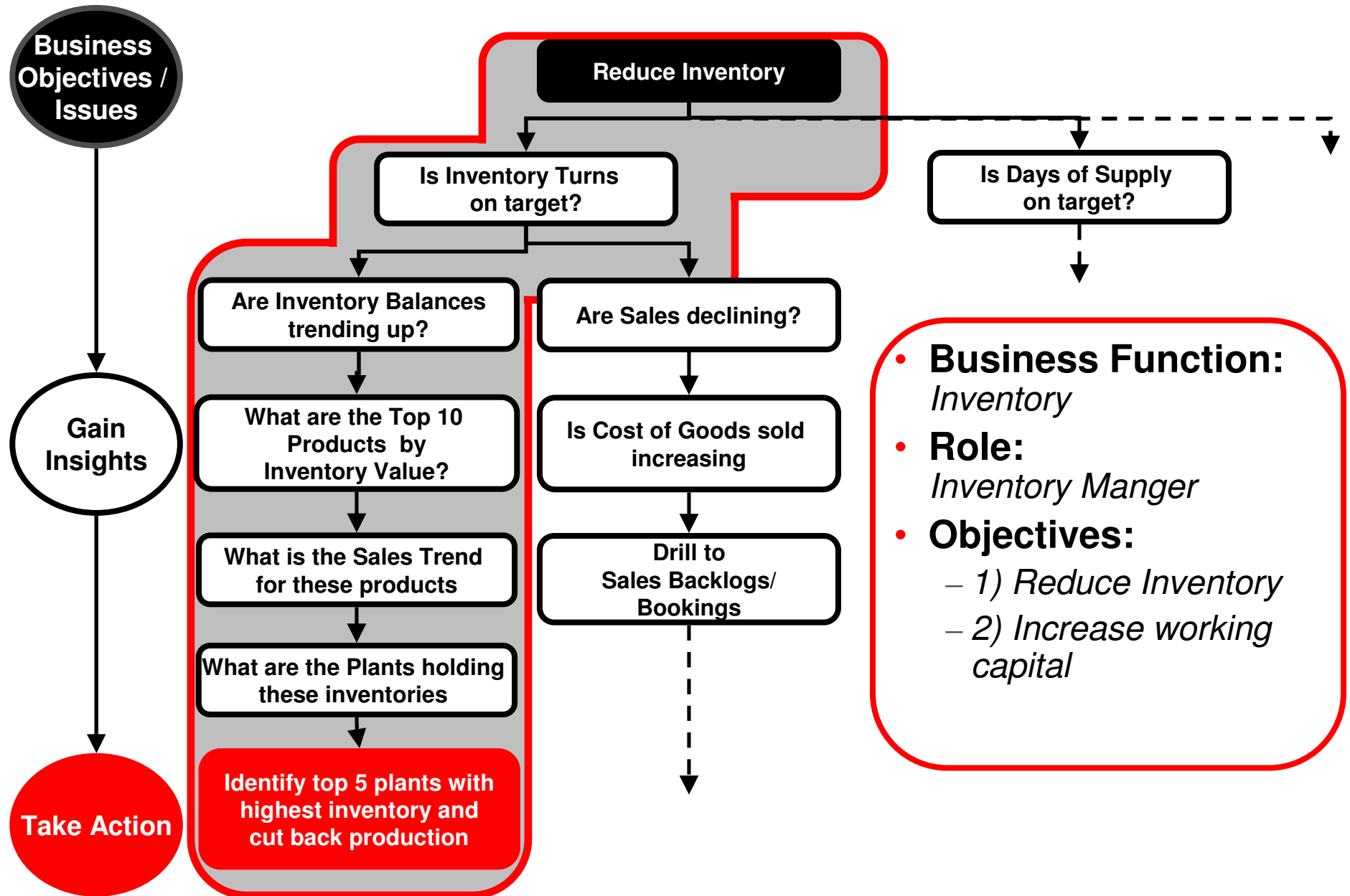
Other Operational & Analytic Sources

Oracle BI Suite Enterprise Edition

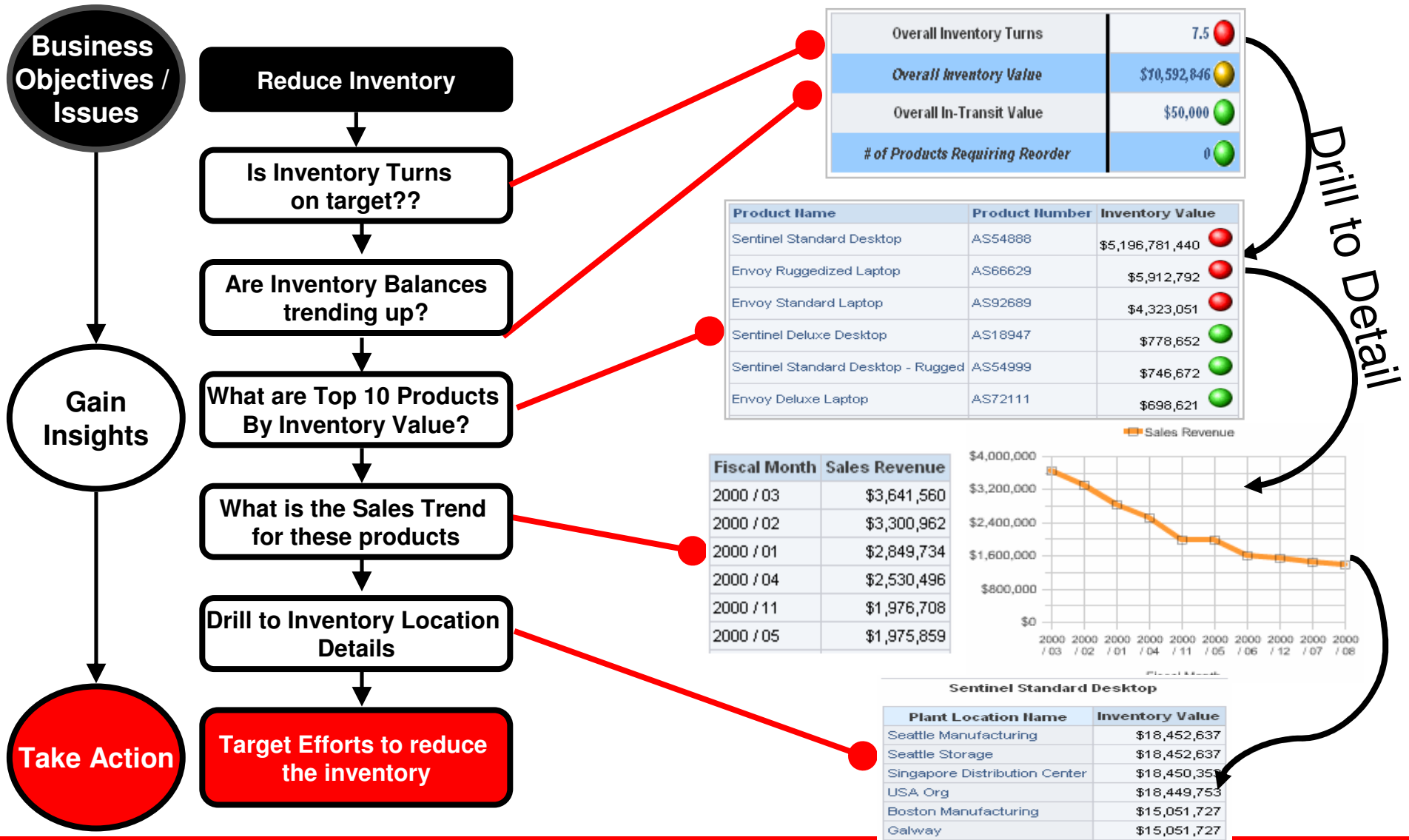




# Analytic Workflows – Supply Chain Analytics



# Analytic Workflows – Supply Chain Analytics

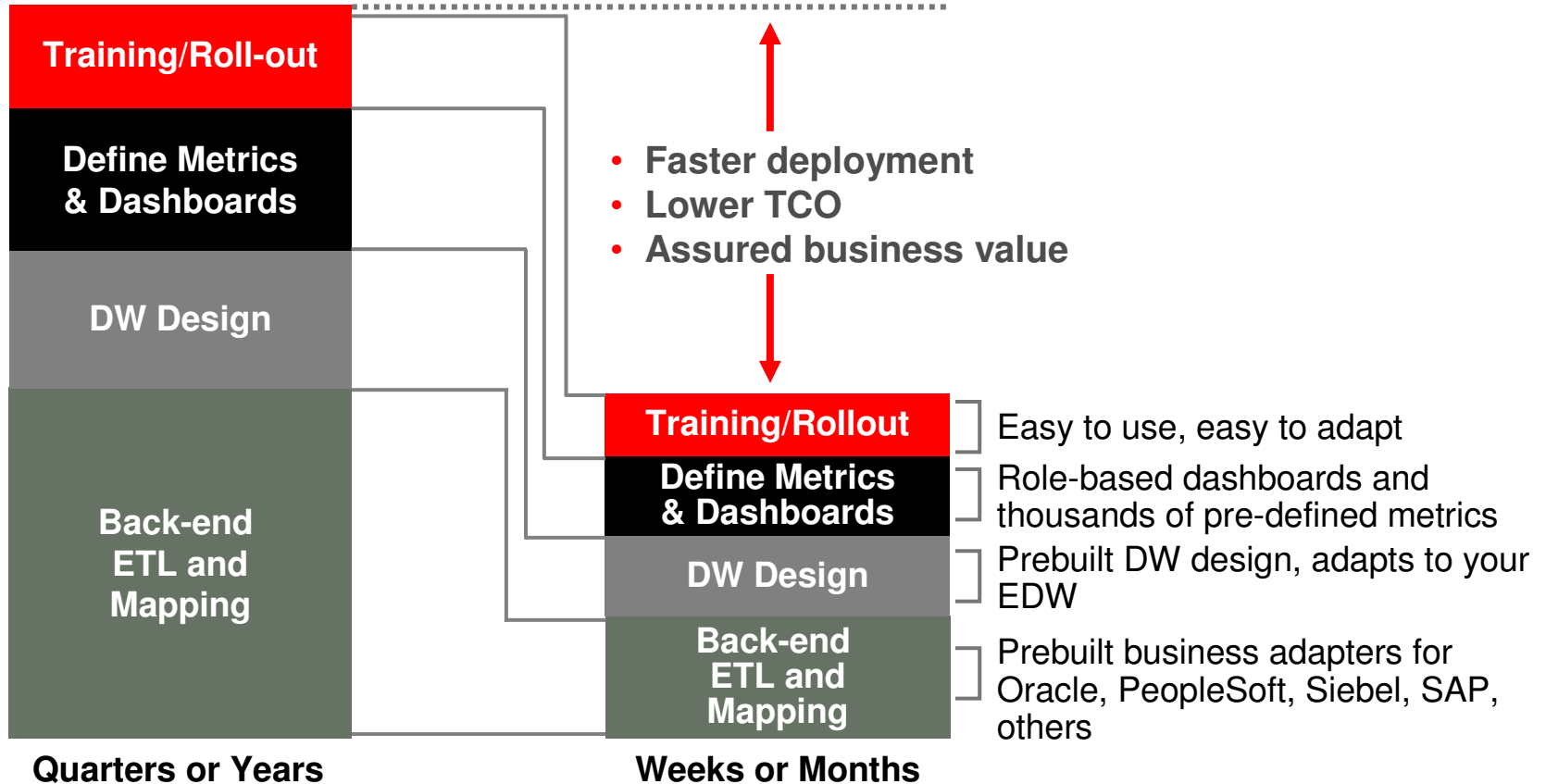


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# Speeds Time To Value and Lowers TCO

Build from Scratch  
with Traditional BI Tools

Oracle BI  
Applications



Source: Patricia Seybold Research, Gartner, Merrill Lynch, Oracle Analysis

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# Unrivaled Integration with Oracle Apps

## Extends BI Value. Lowers TCO.

### ACTION LINKS – “INSIGHT TO ACTION”

Seamless navigation from analytical information to transactional detail

**Top 10 Orders**

Sales Order Number	EBS Action Link	Customer Name	Source Order Status Description	Total Ordered Amount
100173		Computer Service and Rentals	Closed	\$739,418
100174		Business World	Closed	\$738,893
120043		Imaging Innovations, Inc.	Closed	\$74,063
200133		Imaging Innovations, Inc.	Closed	\$59,548
120018		Hilman and Associates	Closed	\$54,149
100037		Imaging Innovations, Inc.	Closed	\$54,100
120040		Imaging Innovations, Inc.	Closed	\$50,576

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Sales Order 100173

**General**

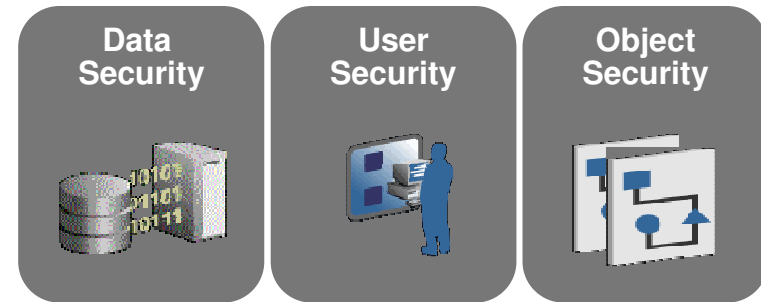
Customer Name	Computer Service and Rentals	Ship	1
Customer PO		Ship	Deliv
Order Date	18-Dec-2001 04:25:06	Deliv	
Need By Date	18-Jan-2002 04:25:21		
Booked Date	18-Jan-2002 04:27:35		
Status	Closed		
Quality Plan	View Quality Plan		
Invoice Information	View Invoice Information		

**Lines**

Line Num	Item	Item Description	Ordered Quantity UOM	Fulfilled By Quantity UOM
1.1	42000	Consulting/Training 420	Es 420	1.

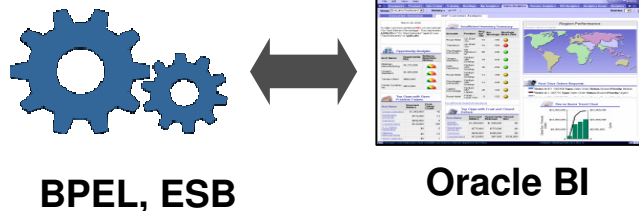
### INTEGRATED SECURITY

One login. Right content for each user.



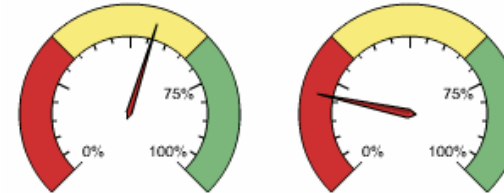
### INTEGRATED WORKFLOW

Intelligence-driven business processes



### INTEGRATED WITH PLANNING AND EPMS

View performance “in-context” with budgets and plans



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# Market Leading Performance Management Applications

EPM Workspace

## PERFORMANCE MANAGEMENT APPLICATIONS

Strategy Management	Business Planning	Profitability Management	Financial Reporting & Compliance
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BI Applications

Business Intelligence Foundation

Fusion Middleware



OLTP & ODS Systems



Data Warehouse Data Mart



OLAP



SAP, Oracle, Siebel, PeopleSoft, Custom



Excel XML



Business Process

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# Enterprise BI Foundation

## Comprehensive

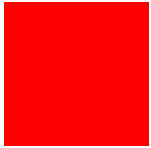
- Integrated BI platform & broad range of BI applications
- Powerful OLAP
- Foundation for EPM system

## Hot Pluggable

- Heterogeneous ERP, CRM, DW, & OLTP systems
- Heterogeneous database technologies
- Heterogeneous middleware, ETL, & BI tools

## Pervasive

- User self-service
- Multi-channel information access & delivery
- Consistent, accurate information



*O&A*

*[Tobin.gilman@oracle.com](mailto:Tobin.gilman@oracle.com)*

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