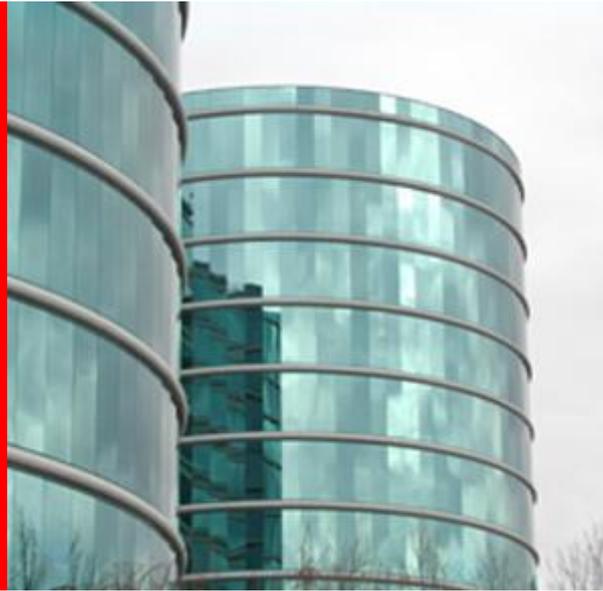


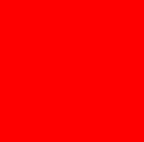
**ORACLE®**



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## **Oracle BI 11g: Actionable BI**

**Praveen Deshpande**  
**Principal Product Manager, Oracle BI**



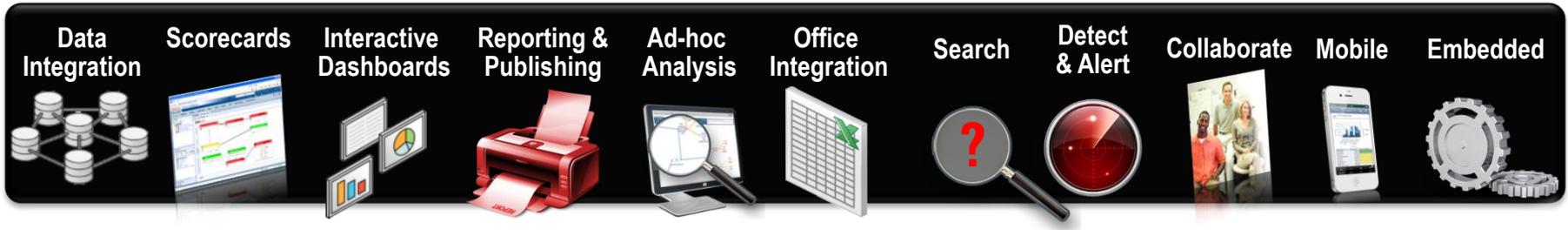
The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

# Product Strategy

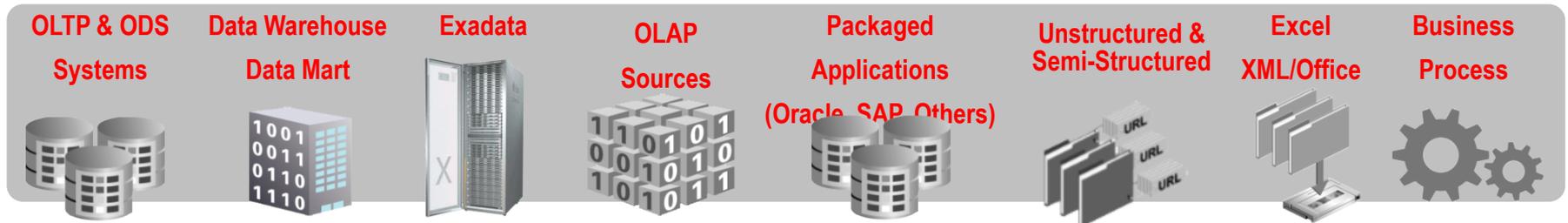
## Overview – Oracle Business Intelligence 11gR1

- Delivers best-of-breed products for Query and Analysis, OLAP, Reporting, and Scorecards
- On a complete, open, and architecturally unified Business Intelligence Foundation
- Coupled with leading packaged business intelligence and enterprise performance management applications
- Providing customers with superior alignment, visibility, and fastest time to value

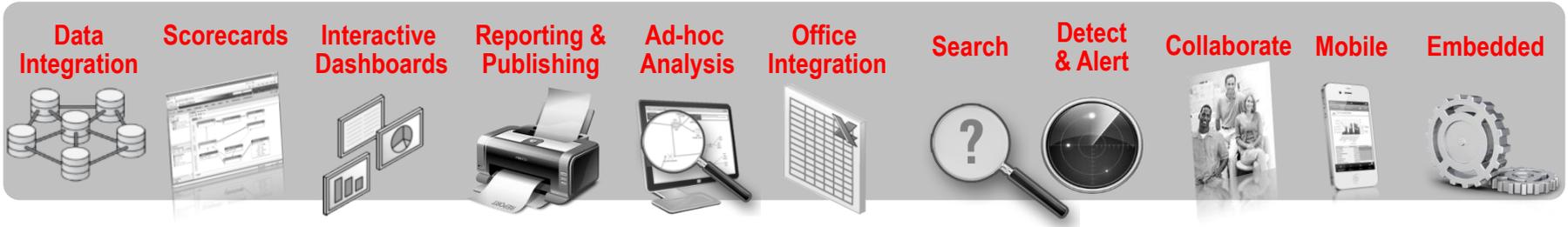
# Complete. Oracle Business Intelligence 11g



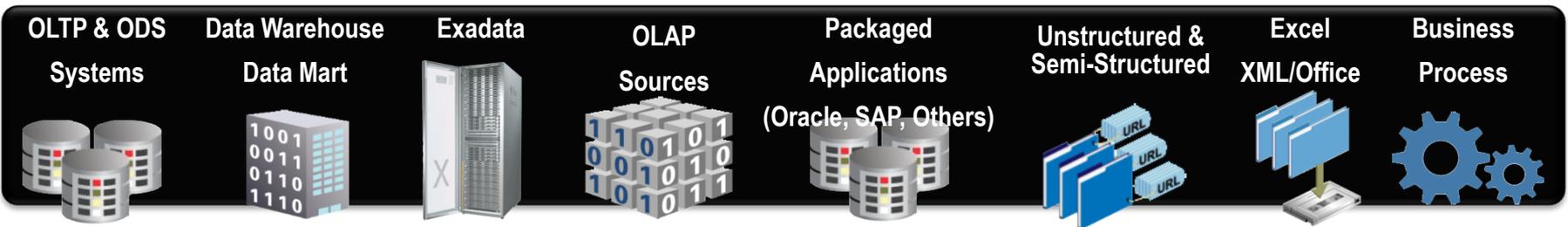
## Common Business Intelligence Foundation



# Open. Oracle Business Intelligence 11g



## Common Business Intelligence Foundation



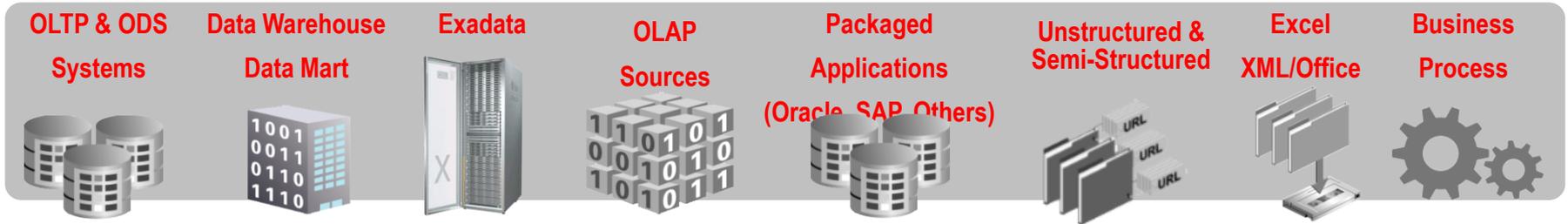
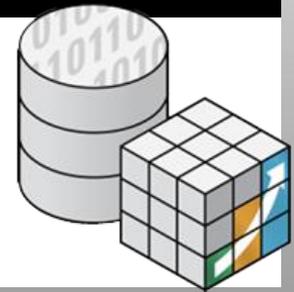
# Integrated.

## Oracle Business Intelligence 11g

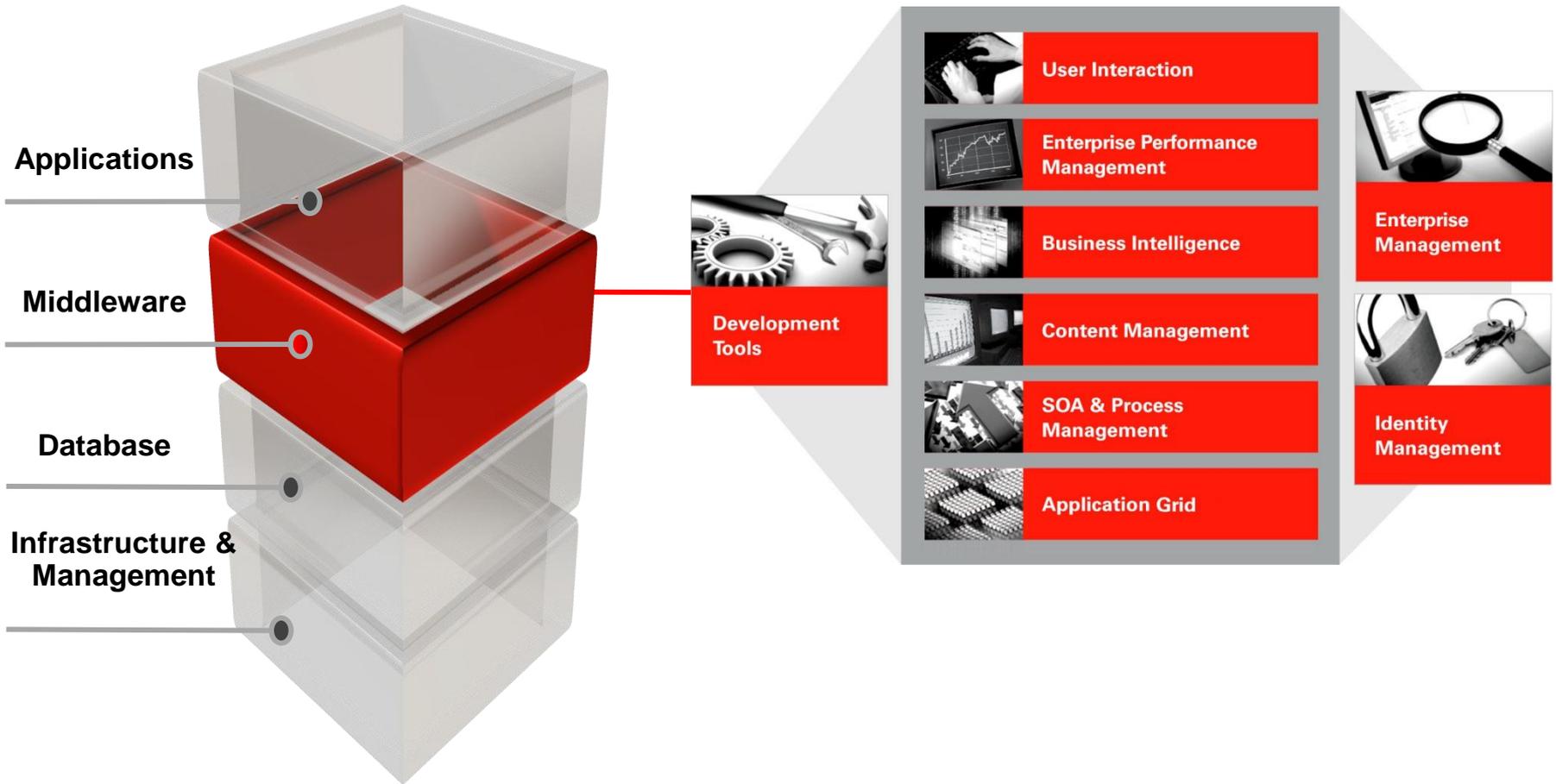


### Common Enterprise Information Model

- Common Metadata Foundation across all Data Sources
- Common Security, Access Control, Authorization, Auditing
- Common Request Generation and Optimized Data Access Services
- Common Clustering, Workload Management, & Deployment
- Common Systems & Operational Lifecycle Management



# Part of Oracle Fusion Middleware



# Leverage Fusion Middleware for Lower TCO

## Complete, Open, Integrated

EPM Workspace

Performance Management Applications

BI Applications

Business Intelligence Foundation

### FUSION MIDDLEWARE

SOA

Data Quality

Data Integration

MDM

Identity Management

Content Management

Business Process Management



OLTP & ODS Systems



Data Warehouse Data Mart



OLAP



SAP, Oracle, Siebel, PeopleSoft, Custom



Excel XML

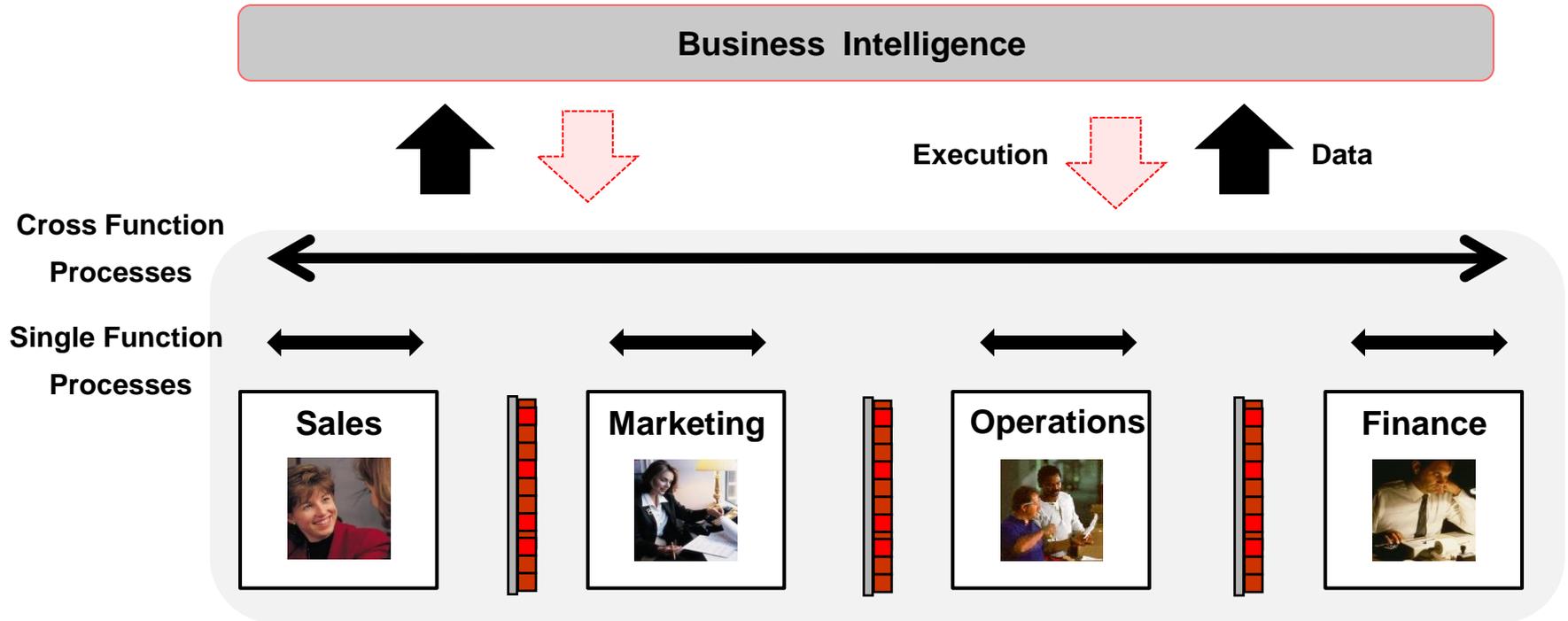


Business Process



# **The business case for Actionable Business Intelligence – Intelligent Business Process**

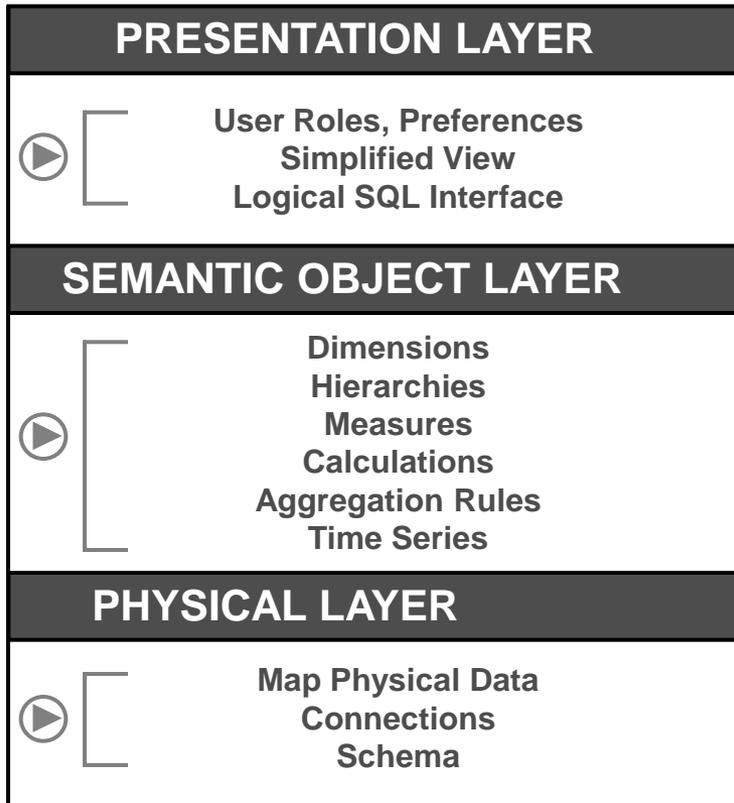
# Inability to Connect Business Analysis with Process Execution



Open Loop: unable to execute decisions from analytic platform

# Common Enterprise Information Model

## Single Consistent View and User Self-Sufficiency



**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**

# The Fusion of BI & Business Processes

## Three Key Requirements

### Insight Into Action

BI users or BI alerts invoke a business process or event

Oracle BI



Invoke a Business Process or Event from BI

### BI on the Business Process

BI provides insight into processes



Oracle BI & BAM



BI Analyzes Business Process Metrics

### BI in the Business Process

Insight-driven business processes

Oracle BI

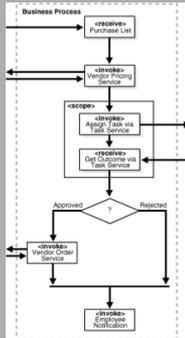


Business Process Calls into BI

# Linking Insight to Action

## Improving Business Performance with Oracle BI 11g

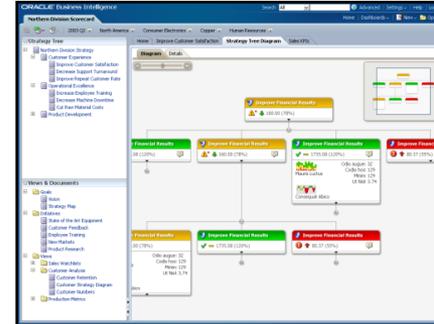
### THE OLD WAY



A screenshot of a data table with multiple columns and rows, likely representing a list of items or transactions. The table has a header row and several data rows.

**Disconnected. Chaotic. Open Ended.**

### THE NEW WAY



A screenshot of the 'Edit Action' dialog box in Oracle BI 11g. The dialog box contains the following information:

- Action Type: Invoke Business Process
- Action Name: Begin Marketing Campaign
- Registry: Marketing Server
- BPEL Process: My Campaign/Marketing Campaign
- Parameter Mapping table:

Name	Type	Required	Fixed	Value
City	String	<input type="checkbox"/>	<input type="checkbox"/>	
Actual Sales	Integer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Channel	String	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Internet

**Connected. Integrated. Closed Loop.**

# Analytic Workflows – “Insight to Action”

Business Objectives / Issues

Maximize Cash Flow

Is DSO on target?

Is Overdue Balances trending up?

How long is the underlying Overdue Balance pending?

Who are the Customers?

Drill to Overdue Invoice Detail

Target collection efforts to reduce overdue balances

Gain Insights

Take Action

Days Sales Outstanding	50
AR Due Amount to Total %	74.6%
AR Overdue Amount to Total %	25.4%
AR Due 1-30 Amount	\$10,280,983
AR Avg Invoice Amount	\$10,734
AR Invoice Count	61

	2005 Q 3
AR Overdue 1-30 Amount	\$8,442,387
AR Overdue 31-60 Amount	\$3,333,825
AR Overdue 61-90 Amount	\$0
AR Overdue 90+ Amount	\$0
Total AR Overdue Amount	\$11,776,212
AR Overdue Amount to Total %	25%

Customer Name	AR Overdue 31-60 Amount	% of Total
Sandy S	\$1,687,482	50.6%
World of Business	\$1,812,482	54.4%
Lauri Reilly	\$522,873	15.7%
General Motors	\$522,873	15.7%

Sales Invoice Number	Customer Name	Company Name	Sales Org Name	Date	Invoiced Date	Payment Due Date	Group Currency	AR Overdue 31-60 Amount **
9171	Sandy S	Vision France	Vision France	08/28/2005	07/31/2005	09/29/2005	USD	\$1,496,591
10008413	World of Business	Vision France	Vision France	08/28/2005	07/31/2005	09/29/2005	USD	\$1,496,591
10008413	Lauri Reilly	Vision Operations (USA) Set of Books	Vision Operations	08/28/2005	08/21/2005	10/20/2005	USD	\$348,582
10008413	General Motors	Vision Operations (USA) Set of Books	Vision Operations	08/28/2005	08/21/2005	10/20/2005	USD	\$348,582

Drill to Detail

# Analytic Workflows – “Insight to Action”

**Business  
Objectives /  
Issues**

**Gain  
Insights**

**Take Action**

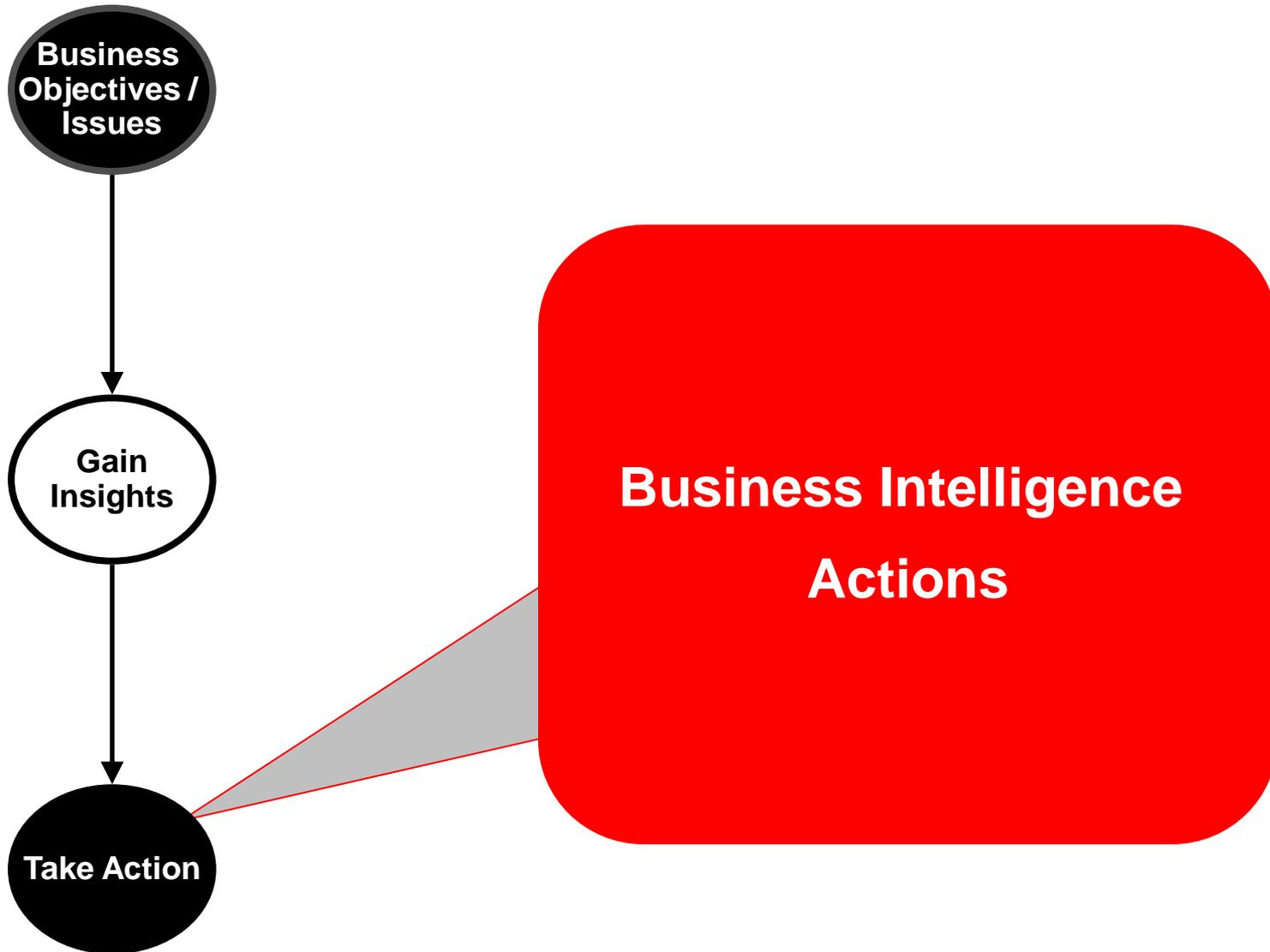
**How do we initiate the Action?**

**How do we pass the context?**

**What about security?**

**Is it easy to create a different  
Action?**

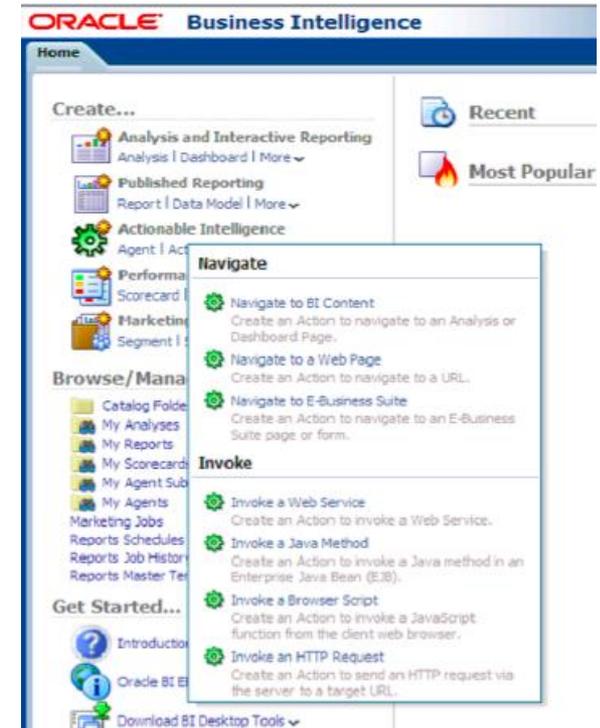
# Analytic Workflows – “Insight to Action”



# Actionable Business Intelligence

## Empower Users to take Appropriate Action from Insight

- **Define** actionable response to insight
  - Associate with key business conditions
- **Navigate** – guide users to relevant analysis, web content and transactional systems
- **Take Action** – initiate workflows & business processes, scripts and Java programs



**Extensible, Secure, Action Framework**

# Standards-based Framework for initiating Action

- Initiate

- Workflow / Business Process (BPEL)
- Message / Post Event (ESB)
- Web Service
- Delivers Agent

- Execute

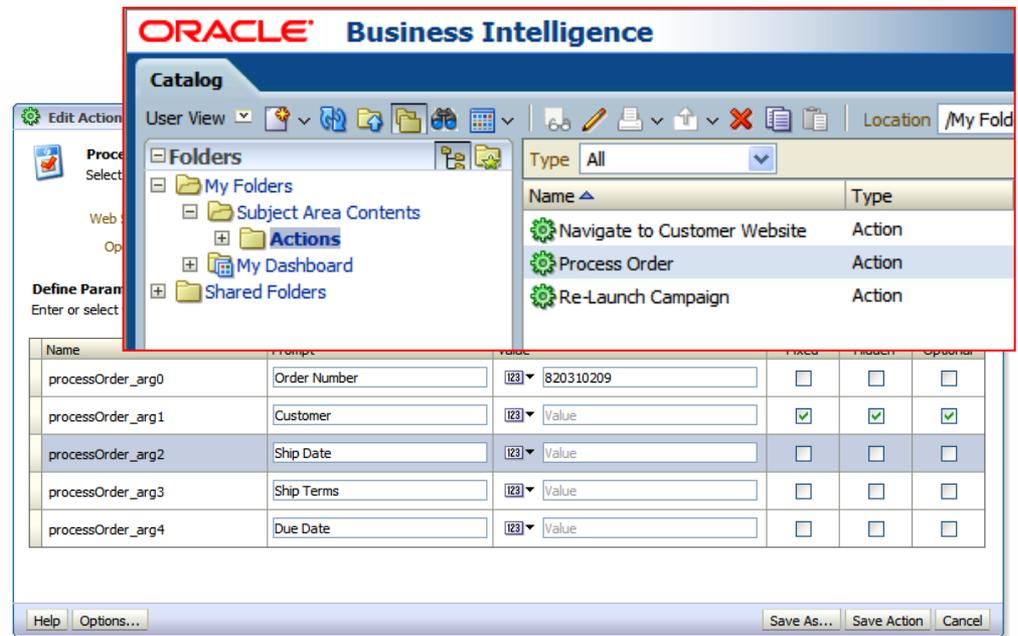
- Java Method
- Siebel Workflow

- Navigate

- BI Content
- Web Content
- Operational Systems

- Deliver

- BI Content
- Web Content

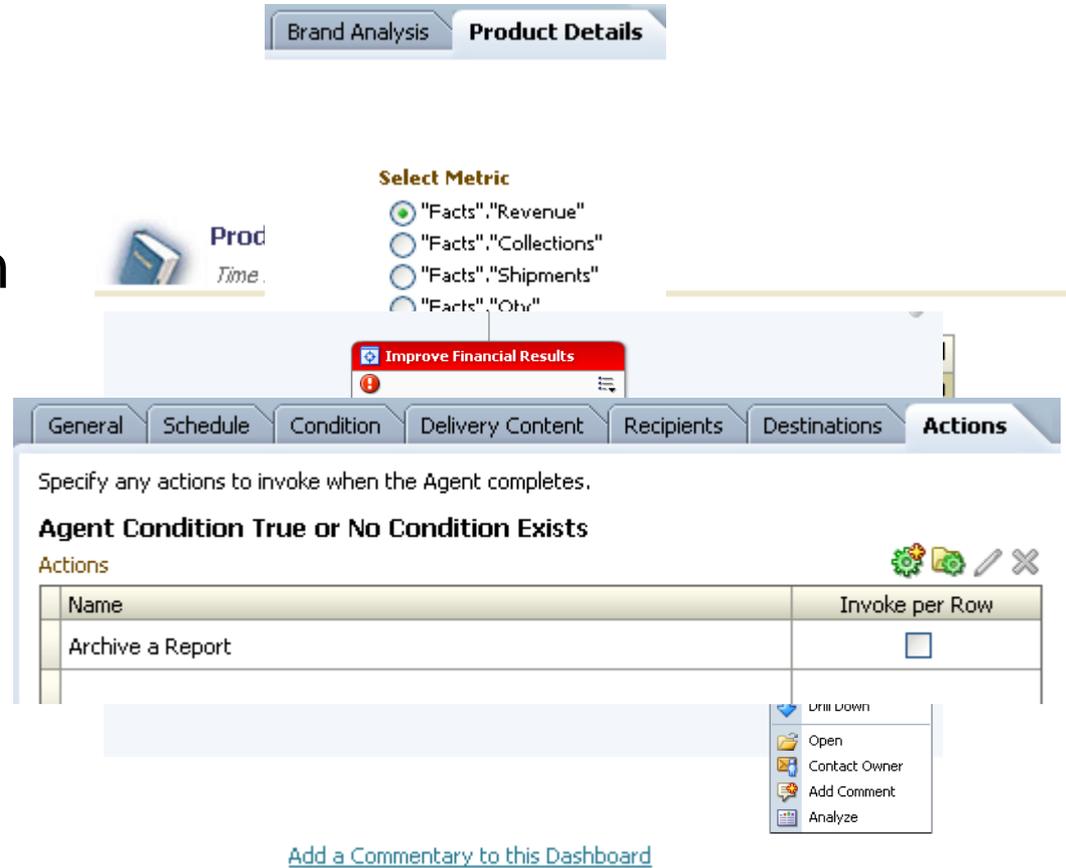


# Action Framework

## Actions Everywhere

Actions used consistently in

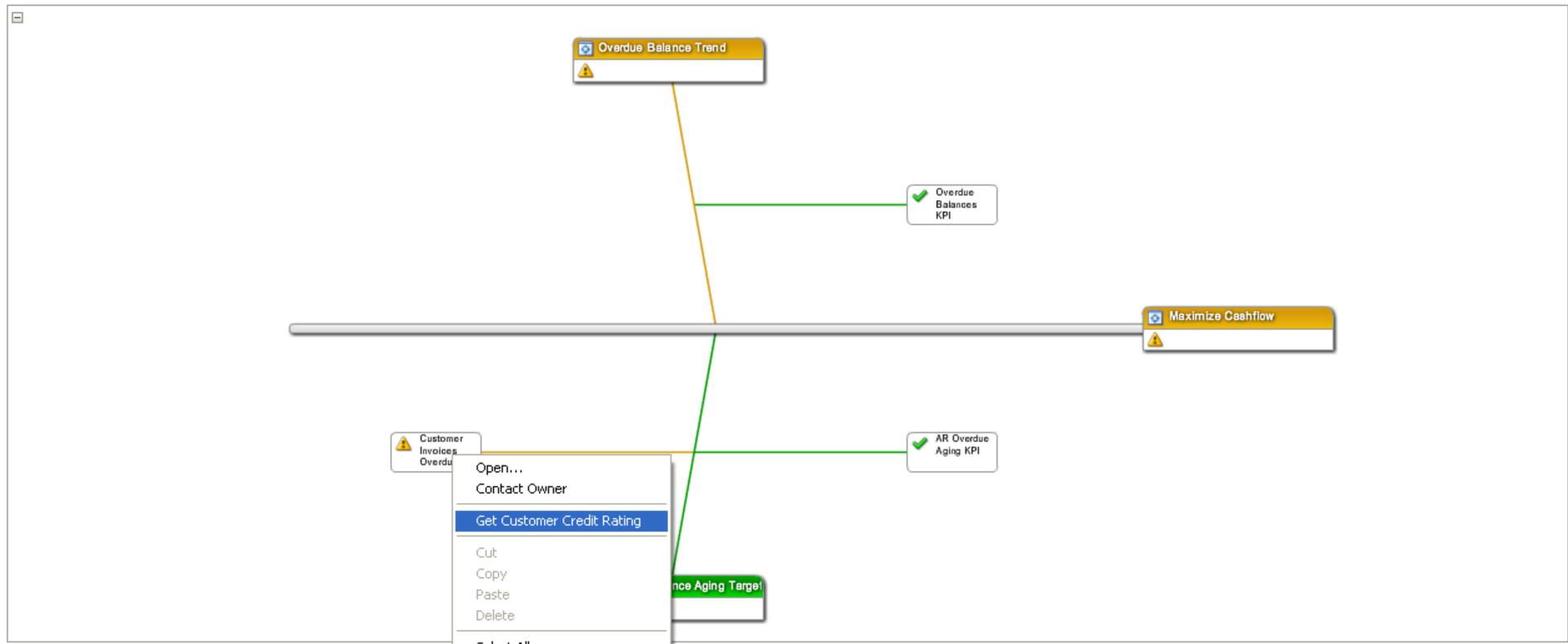
- Answers
- Dashboards
- Delivers
- Scorecard
- Charts
- Delivered Content – email



The screenshot displays the Oracle Action Framework configuration interface. At the top, there are tabs for "Brand Analysis" and "Product Details". Below this, a "Select Metric" section lists several options: "Facts", "Revenue" (selected), "Facts", "Collections", "Facts", "Shipments", and "Facts", "Qty". A red banner with a warning icon and the text "Improve Financial Results" is visible. The main configuration area has tabs for "General", "Schedule", "Condition", "Delivery Content", "Recipients", "Destinations", and "Actions". The "Actions" tab is active, showing the instruction "Specify any actions to invoke when the Agent completes." and the condition "Agent Condition True or No Condition Exists". Below this is a table with the following structure:

Name	Invoke per Row
Archive a Report	<input type="checkbox"/>

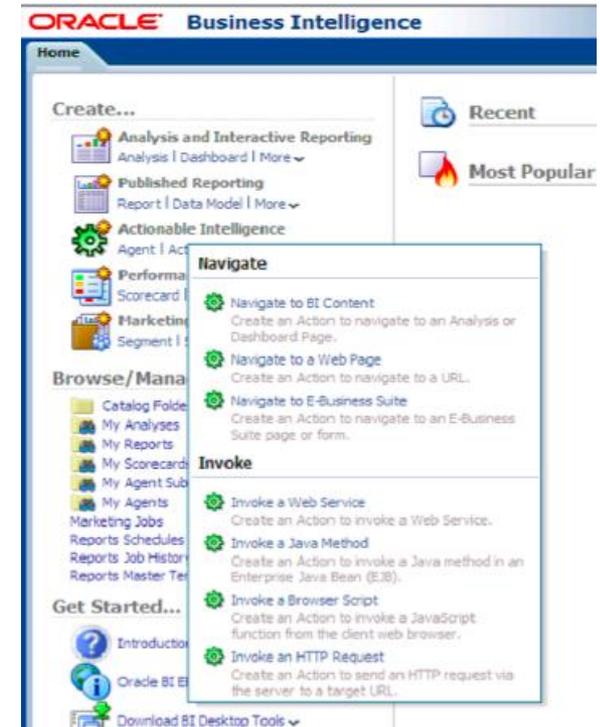
At the bottom right, a context menu is open, showing options: "Drill Down", "Open", "Contact Owner", "Add Comment", and "Analyze". A link at the bottom center reads "Add a Commentary to this Dashboard".



# Business Intelligence Agents

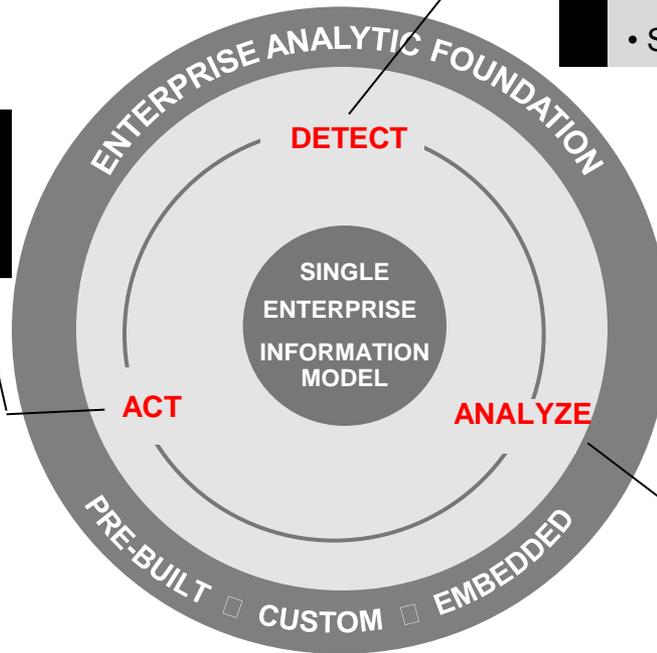
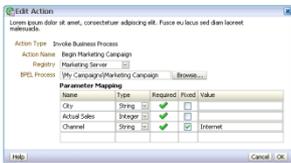
## Sense & Respond to Business Events with Oracle BI 11g

- **Detect** –key business events and conditions.
- **Respond** – generate reports, alerts, **take action**
- **Monitor** – track resolution and progress



# 11g Provides Closed Loop Intelligent Business Processes

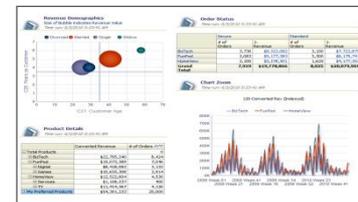
- Standards-based process execution
- User-centric process design
- Closed-loop process metrics



- Data-driven alerts
- Mobile devices
- Scorecard / KPI's

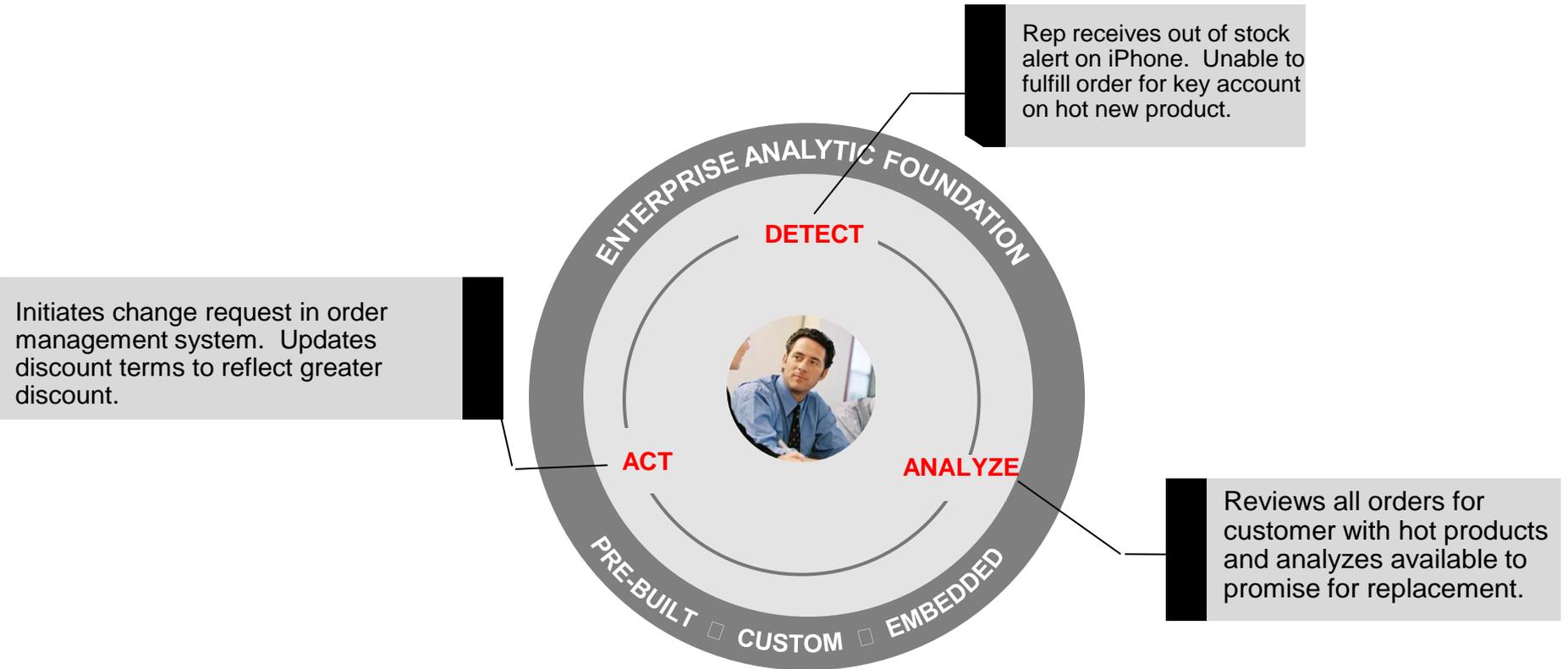


- Ad-hoc OLAP query
- Interactive visualization
- Role-based dashboards



# Intelligent Business Process

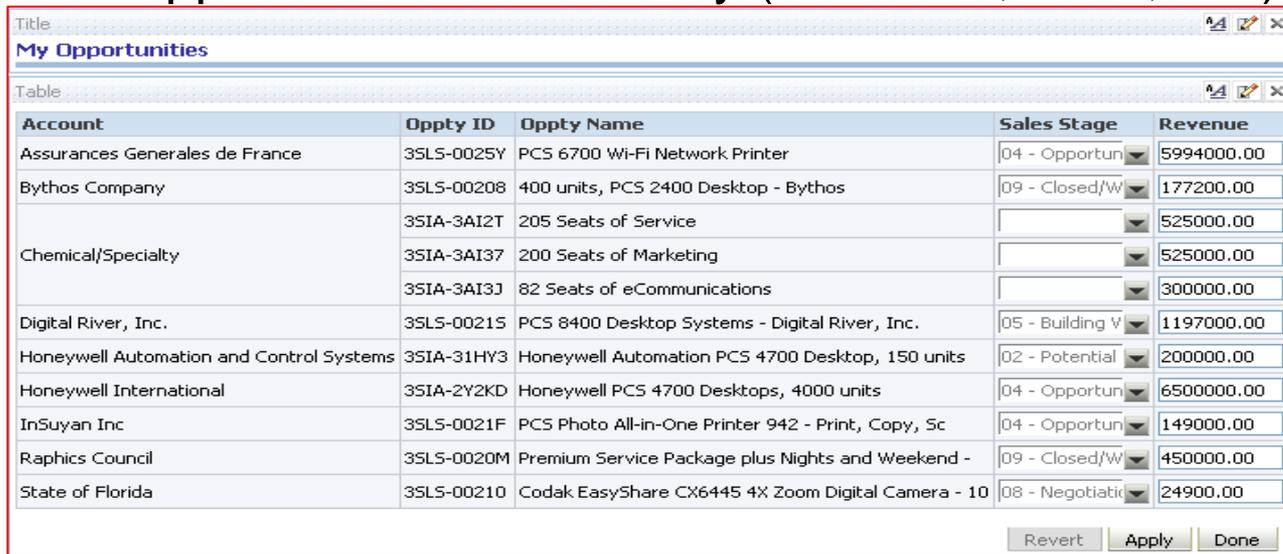
## Sales Rep in Consumer Electronics Manufacturer



# Fusion Integration Technologies

## 11g Action Framework

- Fusion application as an OBIEE data source
  - Query ADF Business Components (BCs), join BCs
  - Write back to BCs with full application logic (Actions)
  - Performance optimizations
  - Supports Data Extensibility (flex fields, trees, etc.)



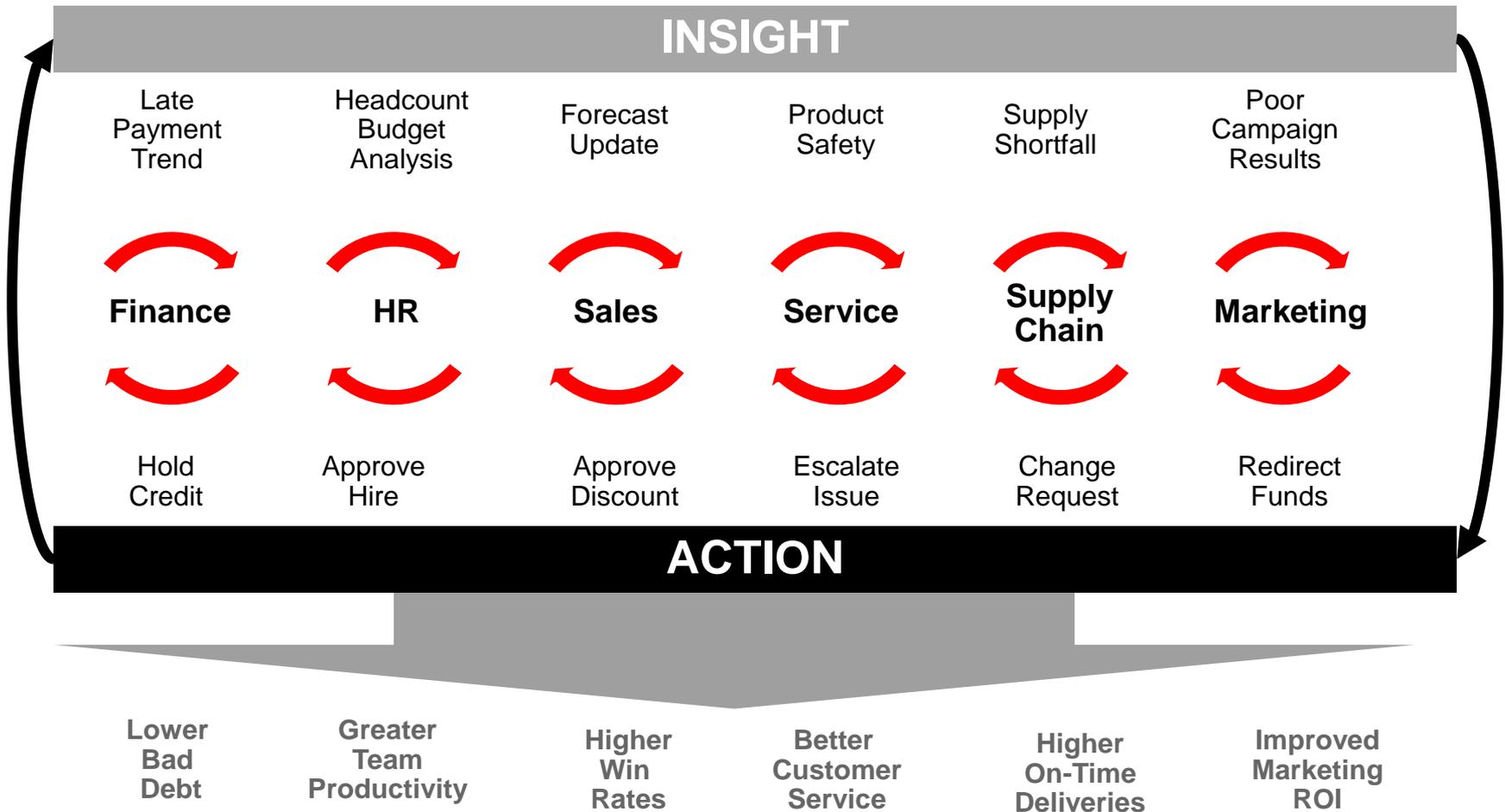
The screenshot shows a web application window titled "My Opportunities". It contains a table with the following data:

Account	Oppty ID	Oppty Name	Sales Stage	Revenue
Assurances Generales de France	3SLS-0025Y	PCS 6700 Wi-Fi Network Printer	04 - Opportun	5994000.00
Bythos Company	3SLS-00208	400 units, PCS 2400 Desktop - Bythos	09 - Closed/W	177200.00
	3SIA-3AI2T	205 Seats of Service		525000.00
	3SIA-3AI37	200 Seats of Marketing		525000.00
Chemical/Specialty	3SIA-3AI3J	82 Seats of eCommunications		300000.00
	3SLS-00215	PCS 8400 Desktop Systems - Digital River, Inc.	05 - Building V	1197000.00
Honeywell Automation and Control Systems	3SIA-31HY3	Honeywell Automation PCS 4700 Desktop, 150 units	02 - Potential	200000.00
Honeywell International	3SIA-2Y2KD	Honeywell PCS 4700 Desktops, 4000 units	04 - Opportun	6500000.00
InSuyan Inc	3SLS-0021F	PCS Photo All-in-One Printer 942 - Print, Copy, Sc	04 - Opportun	149000.00
Raphics Council	3SLS-0020M	Premium Service Package plus Nights and Weekend -	09 - Closed/W	450000.00
State of Florida	3SLS-00210	Codak EasyShare CX6445 4X Zoom Digital Camera - 10	08 - Negotiat	24900.00

At the bottom of the window, there are three buttons: "Revert", "Apply", and "Done".

# Value of Linking Insights to Action

## Shortens Decisioning Cycle Time



# The Fusion of BI & Business Processes

## Three Key Requirements

### Insight Into Action

BI users or BI alerts invoke a business process or event

Oracle BI



Invoke a Business Process or Event from BI

### BI on the Business Process

BI provides insight into processes



Oracle BI & BAM



BI Analyzes Business Process Metrics

### BI in the Business Process

Insight-driven business processes

Oracle BI



Business Process Calls into BI

# Visibility and Insight

## Understanding Enterprise Business Process Performance

- Insight into Transactional Systems

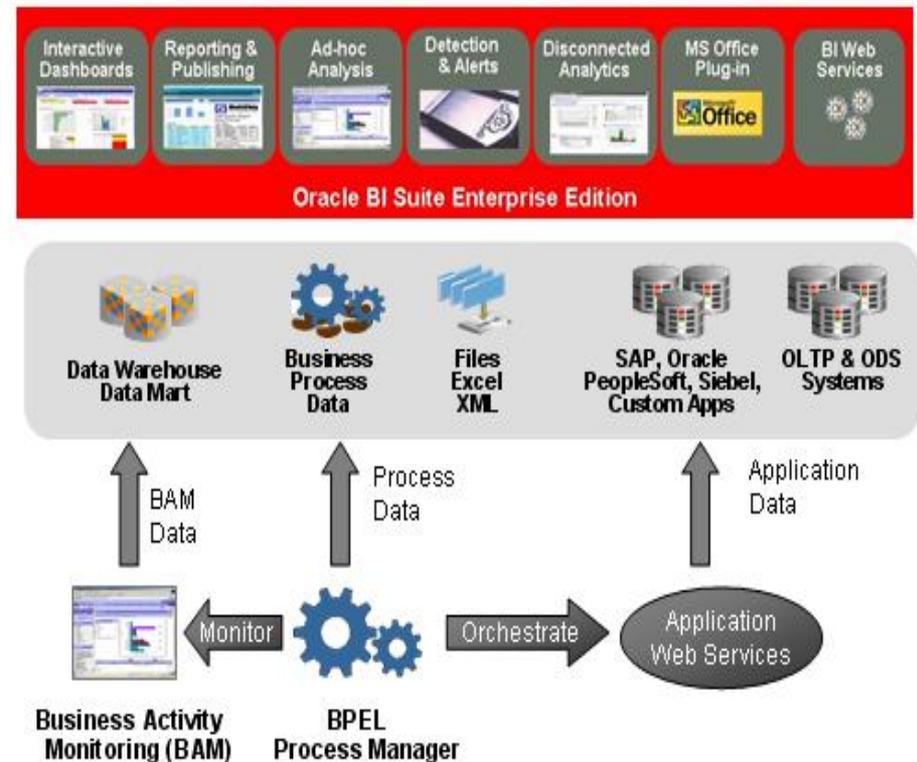
- E-Business Suite
- PeopleSoft
- Siebel, JDEdwards,
- SAP
- Custom

- Business Process Metrics

- BPM, BPEL and ESB

- Real-Time Performance Management

- BI and BAM



# Visibility and Insight

## Understanding Enterprise Business Process Performance

### Pending Purchase Orders

Click Pending Status to Approve POs in Transactional System

Process Instance ID **90002**

Approval Outcome	⚡ APPROVE	9/8/09 4:37:21
Route to Manual Approval	⚡ Pending Approval	9/8/09 4:30:53
PO OrderID	⚡ Tuesam	9/8/09 4:30:47
PO Received	⚡ Initial	9/8/09 4:30:46

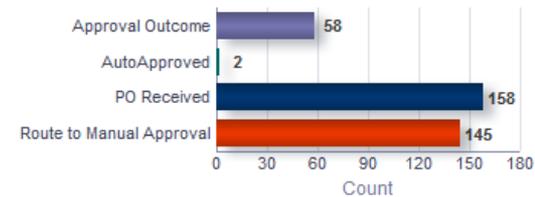
Process Instance ID **90001**

Route to Manual Approval	⚡ Pending Approval	9/8/09 4:30:53
PO OrderID	⚡ Tuesam	9/8/09 4:30:47
PO Received	⚡ Initial	9/8/09 4:30:46

Process Instance ID **80016**

### Purchase Orders by Status

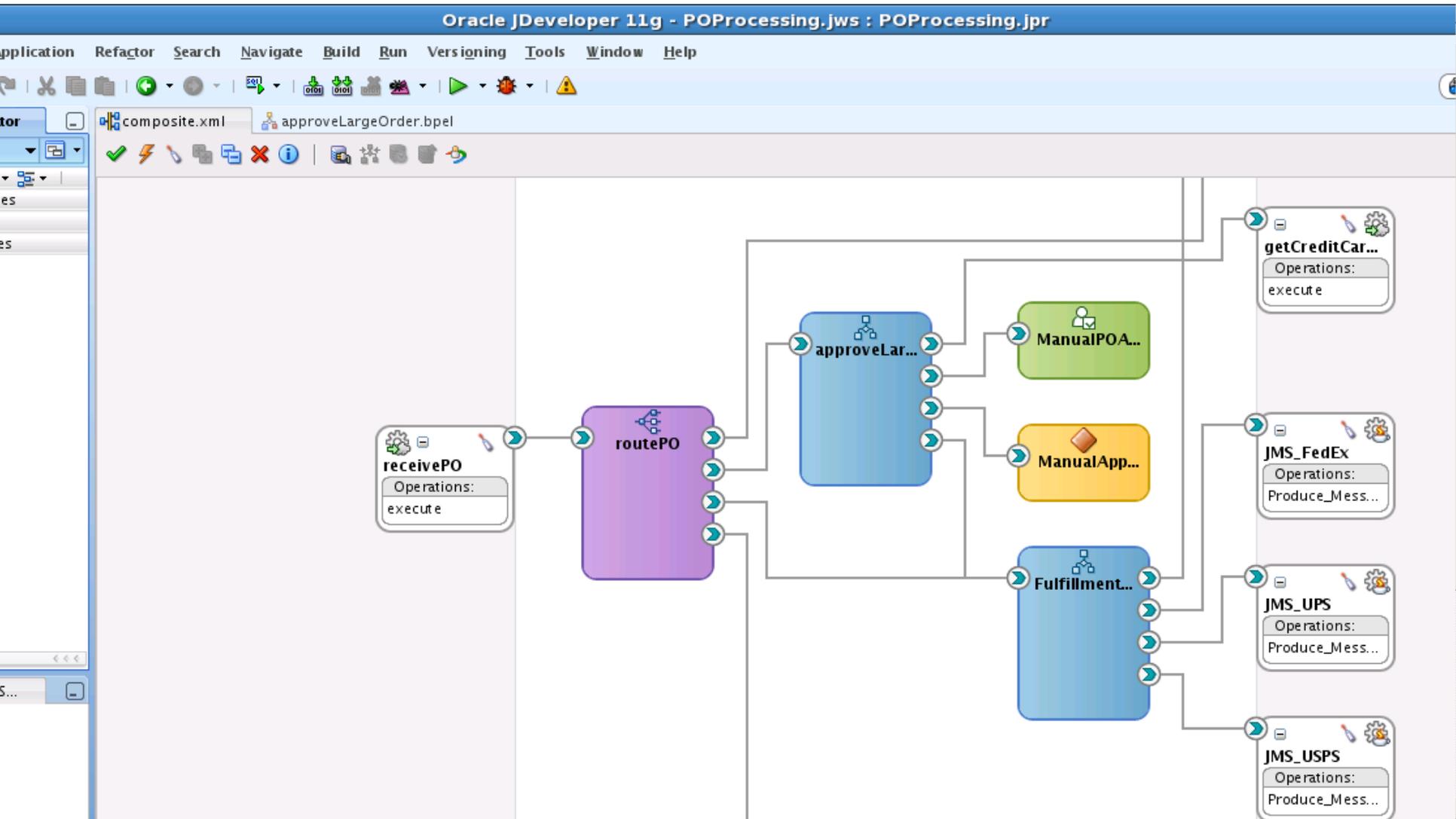
SENSOR_NAME	Status	Count
PO Received	Initial	158
Route to Manual Approval	Pending Approval	145
Approval Outcome	APPROVE	55
	REJECT	3
AutoApproved	Automatically Approved	2



[Refresh](#)

# Visibility and Insight

## Understanding Enterprise Business Process Performance



# The Fusion of BI & Business Processes

## Three Key Requirements

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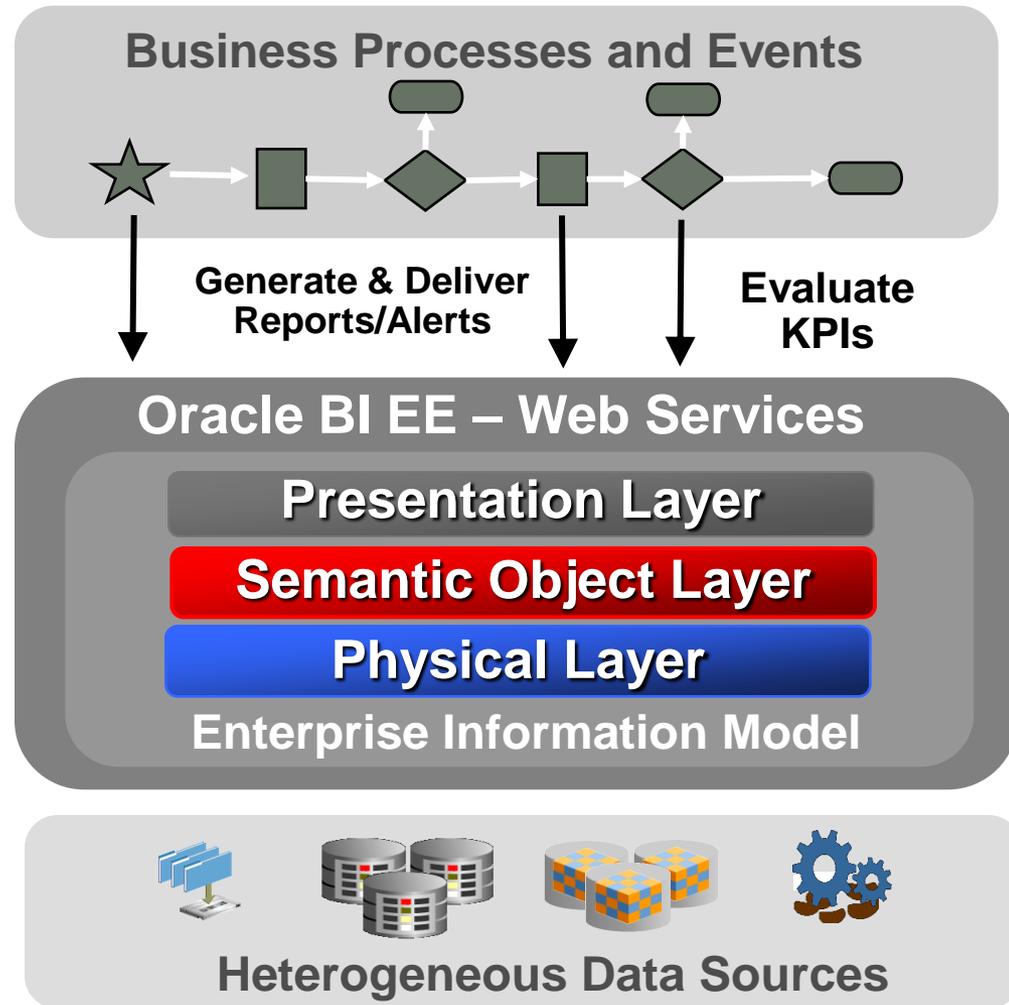


Business Process Calls into BI

# Insight Driven Business Processes

## Business Intelligence as a Service

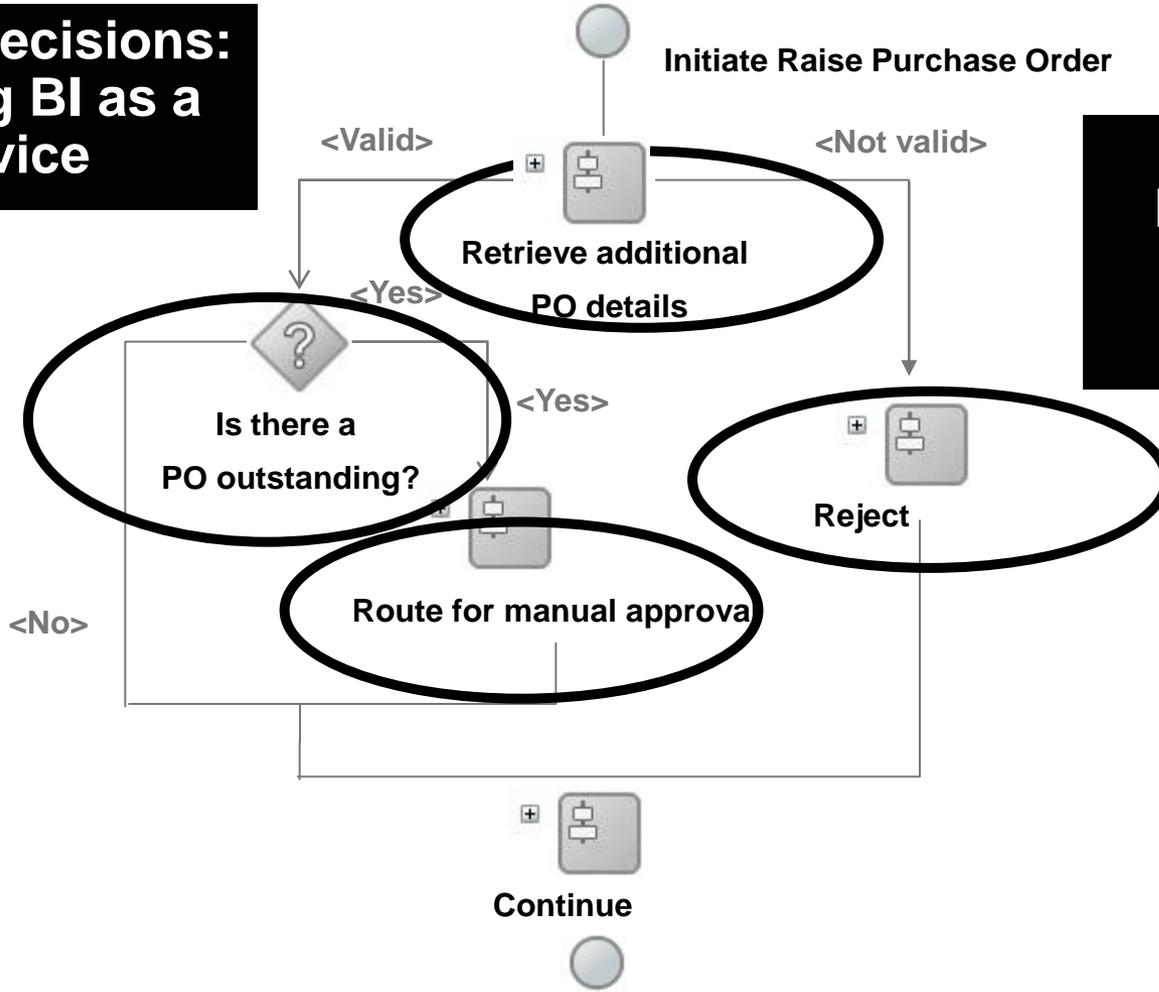
- Generate, access and deliver reports from business processes
- Evaluate KPIs, business metrics and conditions within business processes
- Access business data using Enterprise Information model



# Insight Driven Business Processes

## Intelligent approval routing example

**Analytic Decisions:  
Invoking BI as a  
service**



**Invoking BI  
Reporting and  
Alerting  
Services**

# The Fusion of BI & Business Processes

## Summary

### Insight Into Action

BI users or BI alerts invoke a business process or event

Oracle BI



Invoke a Business Process or Event from BI

### BI on the Business Process

BI provides insight into processes



Oracle BI & BAM



BI Analyzes Business Process Metrics

### BI in the Business Process

Insight-driven business processes

Oracle BI



Business Process Calls into BI



*O* & *A*