



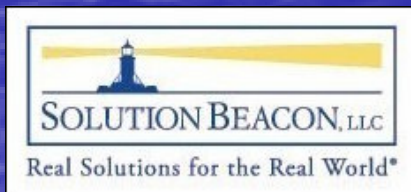
# Oracle E-Business Suite Release 11i

## Business Process Execution Language (BPEL) Wave to the Future and Fusion

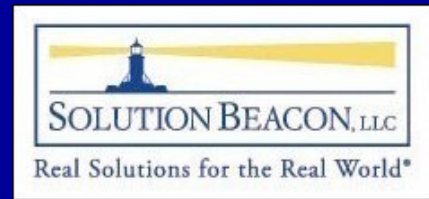
Michael Rulf, USi  
Paul Cyphers, Solution Beacon

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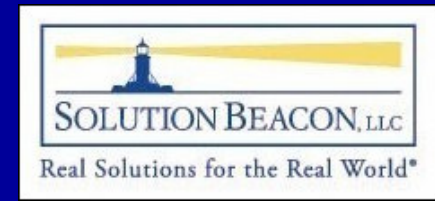
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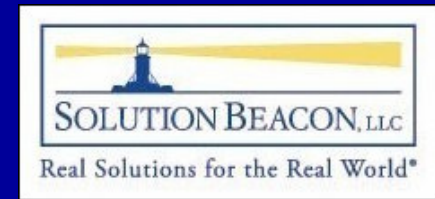
# Introductions / Experiences



- ◆ 30 years of Supply Chain and Manufacturing Experience in numerous industries, APICS Certified
- ◆ 20+ yrs experience in IT, including ERP implementation and development
- ◆ 10 years working on Business Processes
- ◆ Work on numerous systems varying in size and complexity
- ◆ 5+ yrs experience methodology development (Oracle Applications, SAP, PeopleSoft, JD Edwards, Siebel)



# Audience Profile



## ◆ Technical

- DB Version
- Application Version

## ◆ Functional

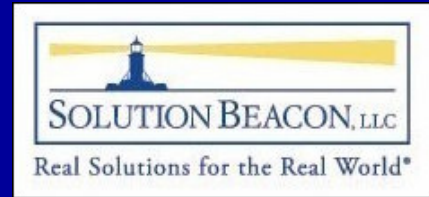
- Current Application
- Product Suites

## ◆ Business Processes

- Number Modeled
- State of Automation
- Tools deployed
- Level of Integration



# Overview



- ◆ Business Process History
  - Business Processes
  - Business Process Modeling
  - Business Process Standards
- ◆ Business Process Execution
  - Business Flows
  - Business Process Integration
- ◆ Business Process Tools
  - Workflow, EAI, BPMS, BAM
- ◆ BPEL
- ◆ Fusion

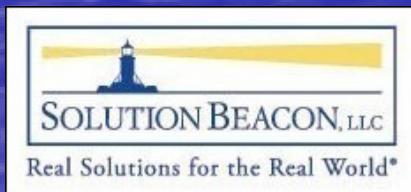


# Business Process History

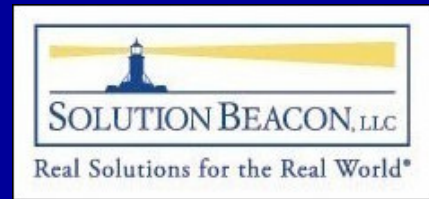
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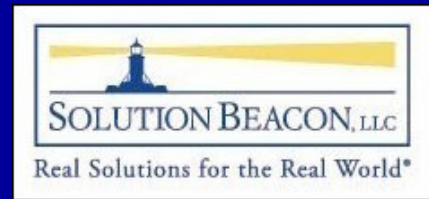
# Business Processes in the Enterprise



Origin	Methodology & Technology	Pros & Cons
1920's	Methods and Procedures Analysis (MPA) Ledger	+ Fine Grain Analysis - Implicit Business Processes - No Execution Capabilities
1990's	Business Process Re-engineering (BPR) Enterprise Resource Planning System (ERP)	+ Explicit Business Processes + Flexible Deployment - No Opportunity for Change
2000's	Business Process Management (BPM) Business Process Management System (BPMS)	+ End-to-End Business Processes + Continuous Business Process Improvement



# Drivers behind Business Processes



## ◆ Business drivers

- Increasingly complex and demanding environment
- Urgent need for speed in product innovation and change
- Push to reduce costs of existing operations

## ◆ Business Process Improvement

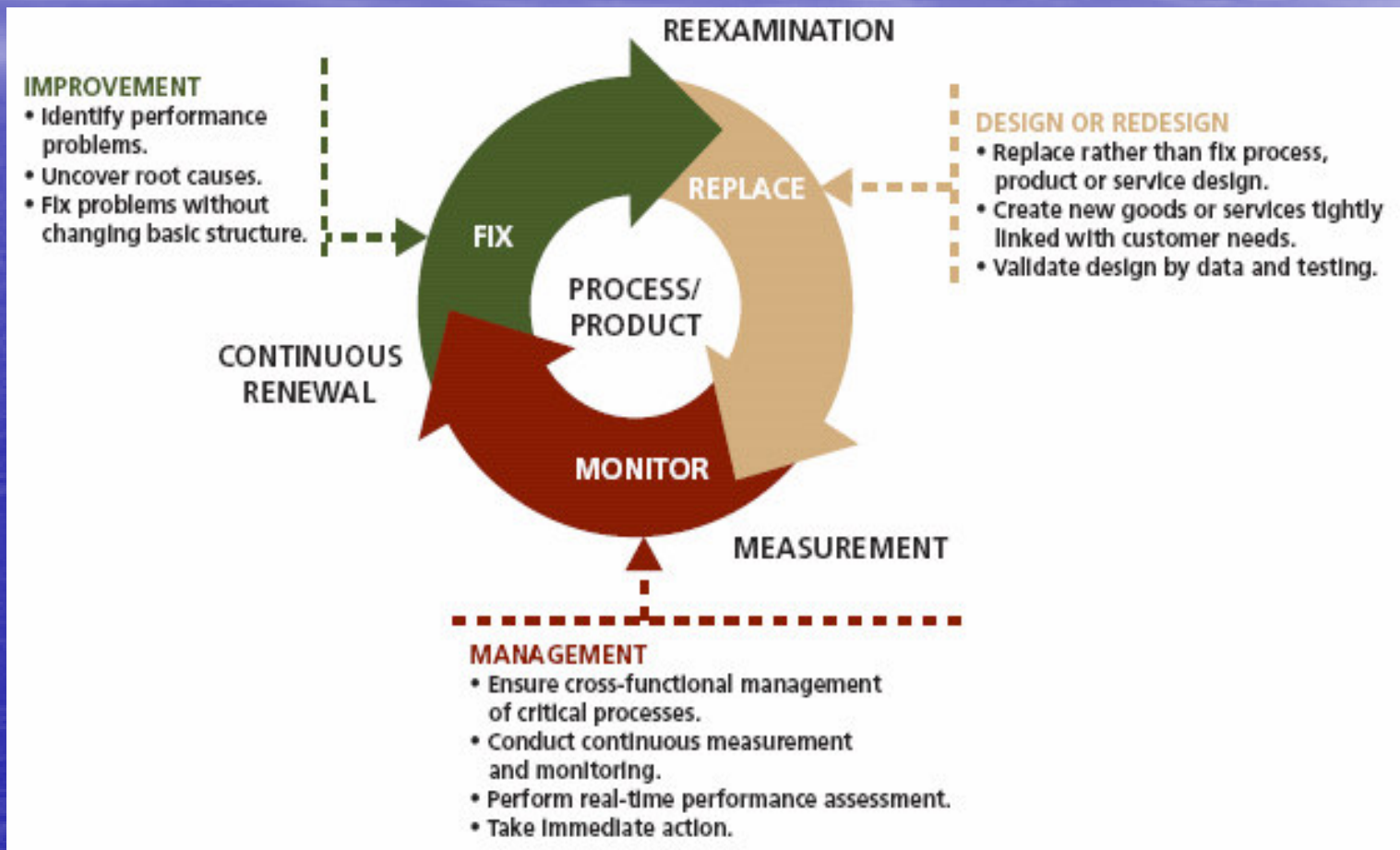
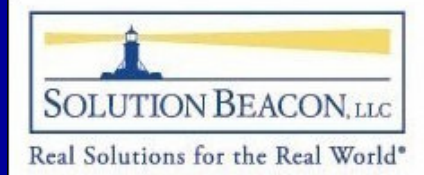
- Organization, Process and Job Level
- Set of standardized activities

## ◆ Business Process Re-engineering

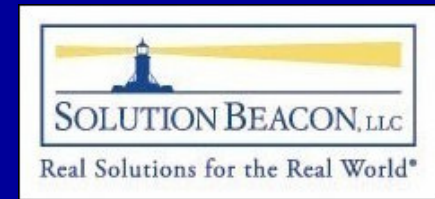
- Process performance standards
  - ◆ Performance benchmarks
  - ◆ Performance measurement
- Performance management



# Business Process Improvement



# Business Process Modeling



## ◆ Diagramming

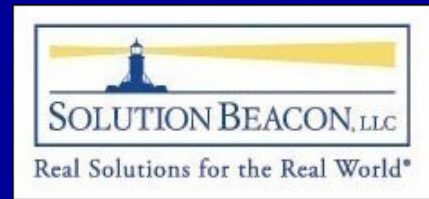
- Mapping processes
- Enterprise alignment

## ◆ Transformation

- Process design
- Process improvement
- Process re-engineering



# Market Definition/Description

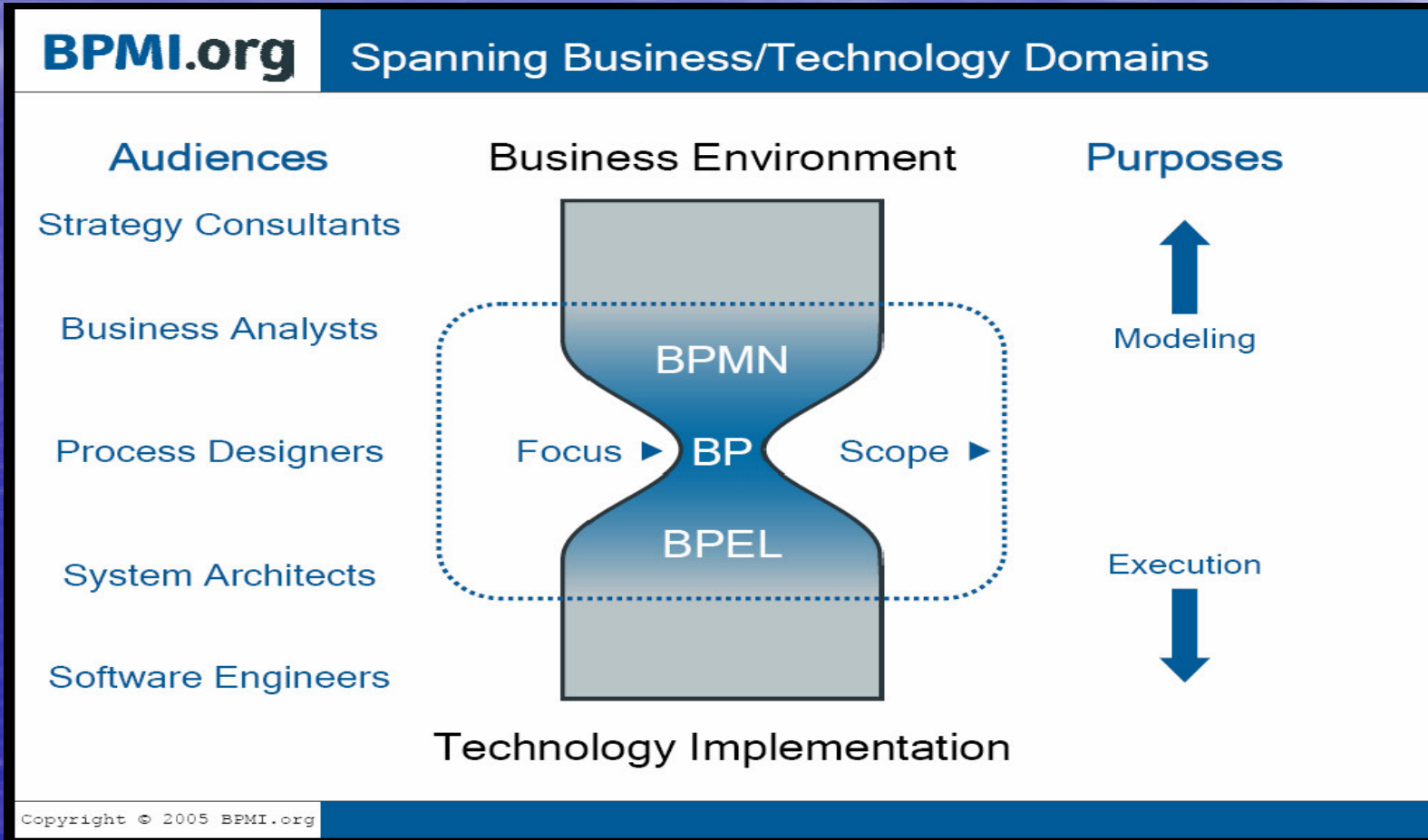
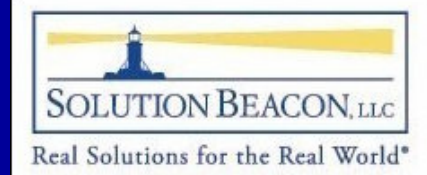


A BPMS enables the direct control and management of operational processes in near-real time to better meet today's business cycle time needs and enable more-agile processes. A BPMS integrates the following BPM-enabling technologies, many of which are also available as independent products, into a suite.

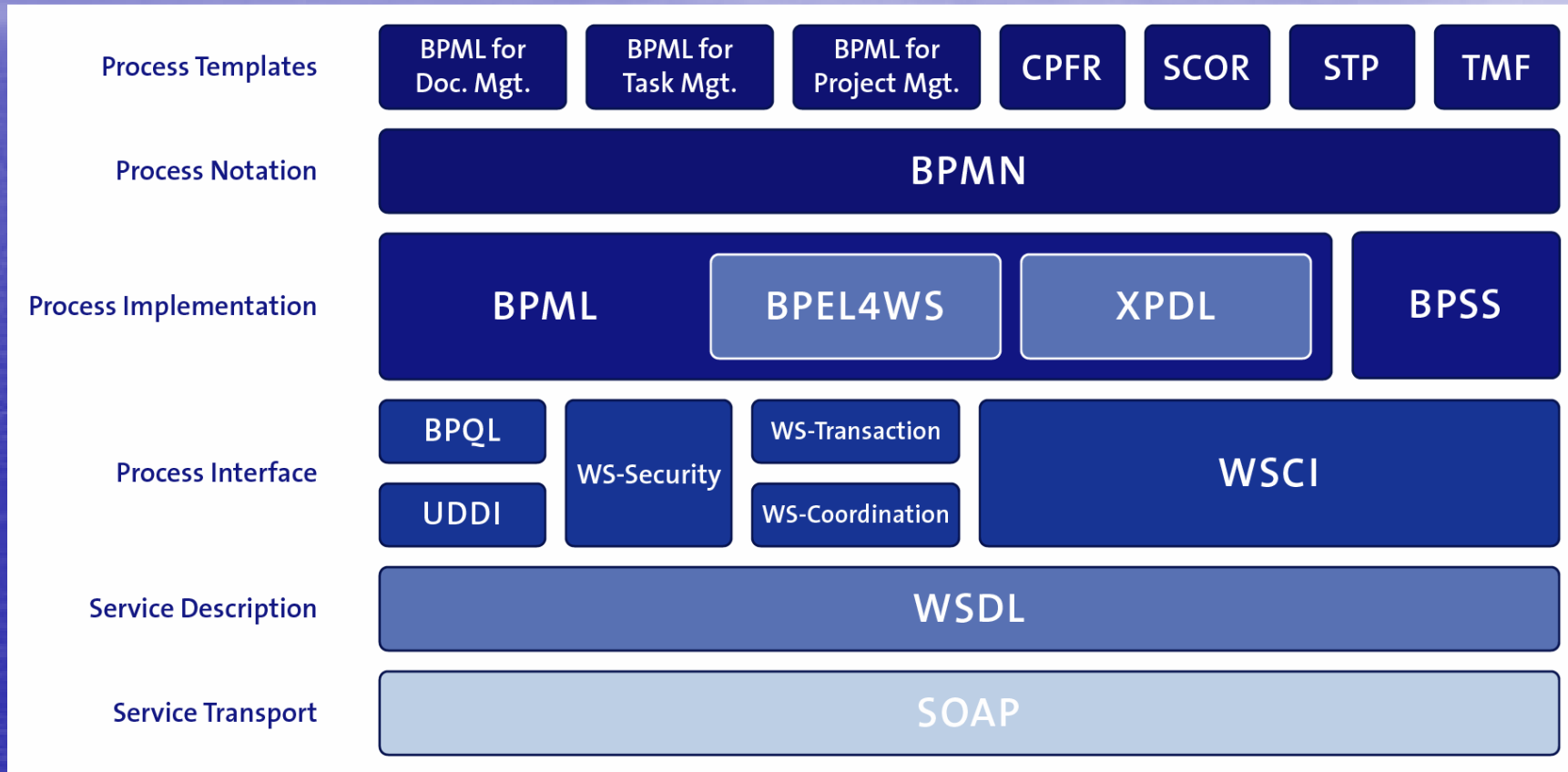
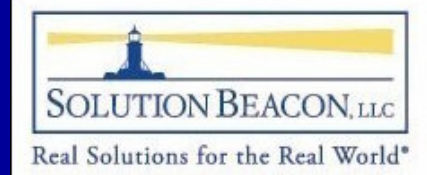
- Graphical business process modeling (BPM technology) to create visual representations of the work process.
- Transformation creates a graphical modeling environment reflects at least these two perspectives on the same process – one for business professionals and another for IT professionals (with greater technical details represented).
- Orchestration engine (such as a BPEL engine) to coordinate the sequencing of the steps and tasks (system steps and manual steps) according to the graphical flows and business rules described in the process model.



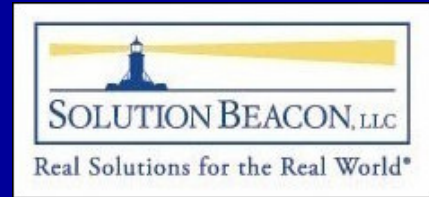
# BPMI Approach



# View of the BPM standards “stack”



# Business Process Standards



- ◆ BPMI.org recently joined with Object Mgt Group
  - BPMN (flow) and BMPL
- ◆ BPELWS – IBM standard
  - WSFL
  - BPEL4WS OR BPEL
- ◆ XLANFG – Micro Soft
- ◆ ebXML BPSS

*More than a dozen standards organizations*

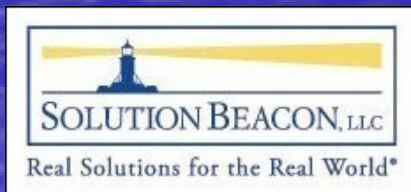


# Business Process Execution

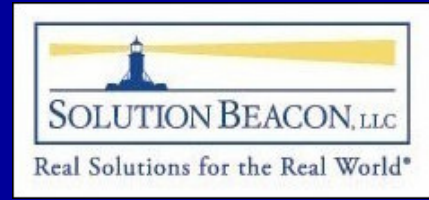
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# Capability Maturity Model

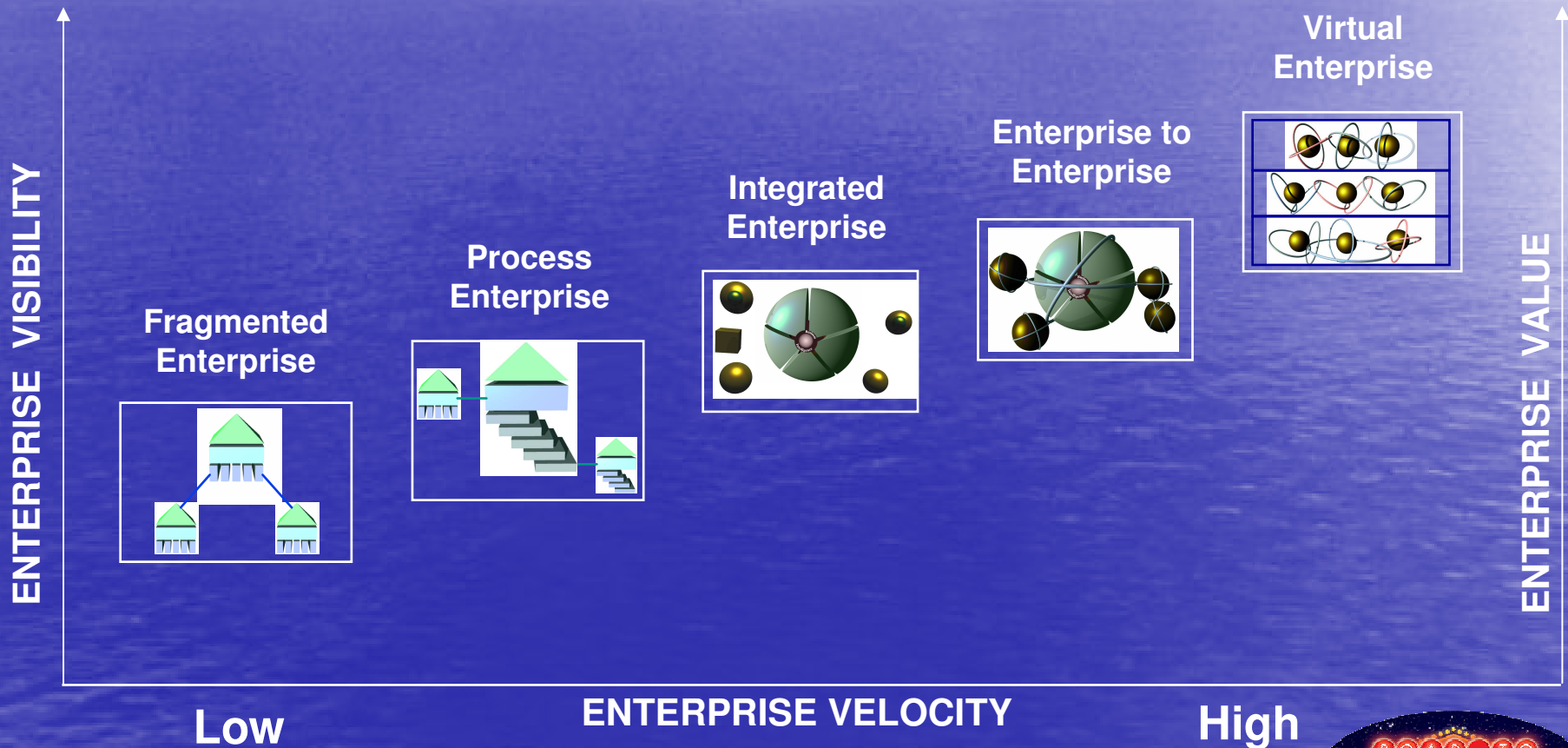
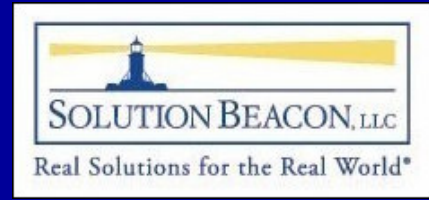


## ◆ Levels

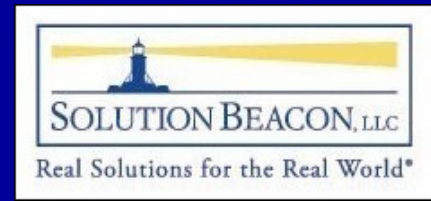
- Initial (ad hoc, ill defined, heroic)
- Repeatable (Basic processes, track cost, schedule, functionality)
  - ◆ Organize, repeat and measure
- Defined (Documented and standardized)
- Managed (Detailed measures of process and product quality)
- Optimizing (Continuous improvement and quantitative feedback)



# The Virtual Enterprise: Increased ROI and Cost Control = Stages of Value



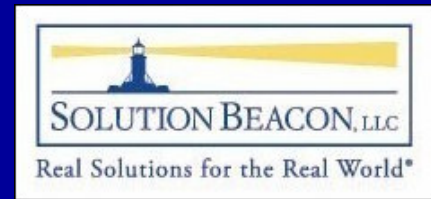
# 10 BPMS Major Features/Functionality



1. Human task support
2. Business process/policy modeling and simulation
3. Pre-built frameworks, models, flows, rules and services
4. Human interface support and content management
5. System task and integration support
6. Business Activity Monitoring (BAM)
7. Business policy/rule management support
8. Collaboration anywhere support
9. Runtime simulation, optimization and predictive modeling
10. Real-time agility infrastructure supports



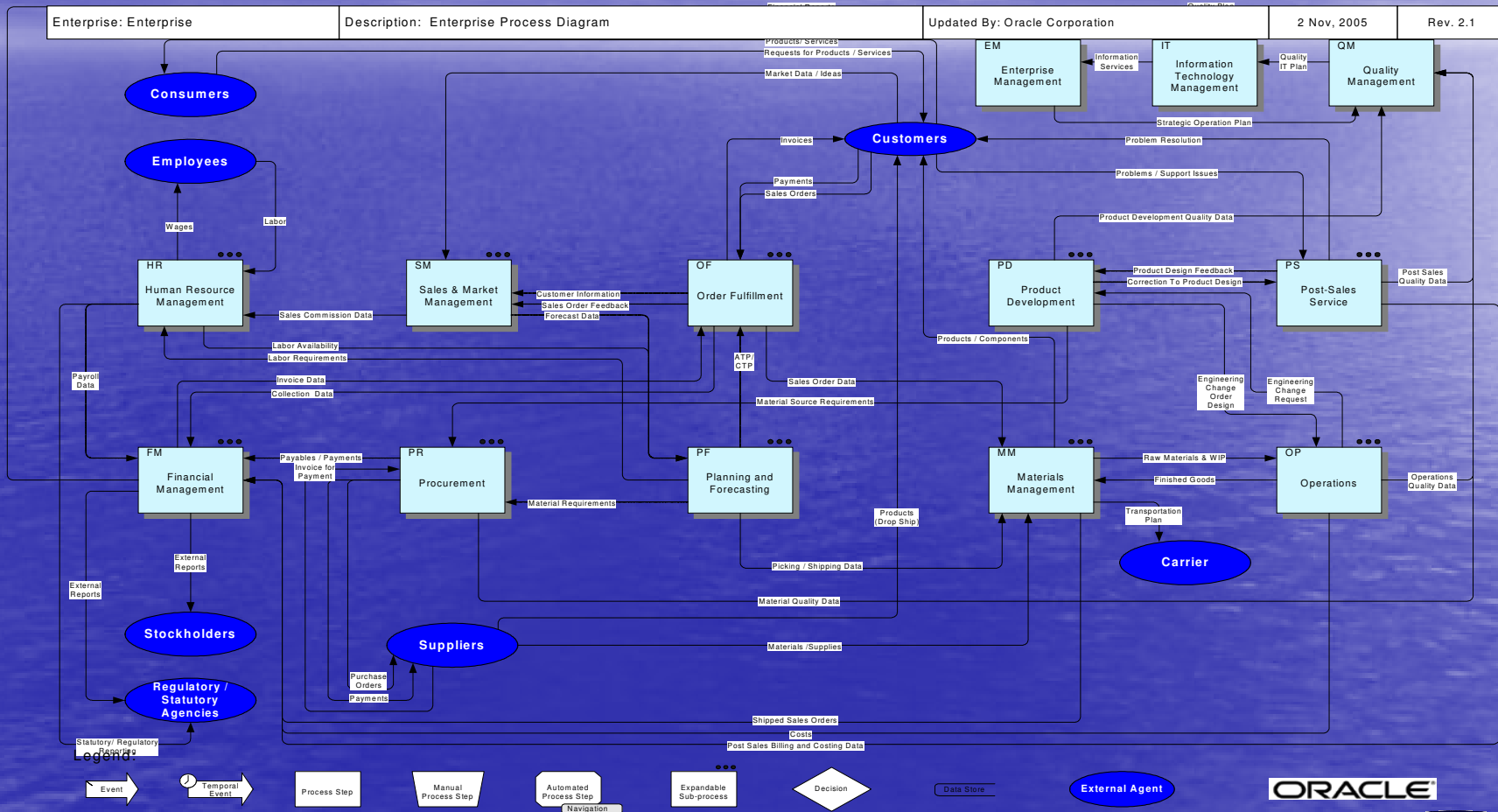
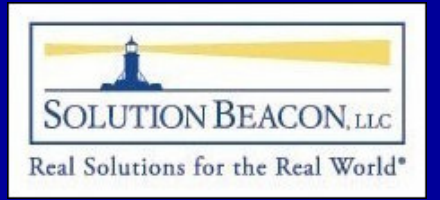
# Business Flows



- ◆ Model business processes
  - Business doing business
- ◆ Use an executable process modeling language
  - Reduces gaps between business and IT
- ◆ Break process into tasks
- ◆ Configure the tasks as services in SOA
- ◆ Involve the business in process modeling
- ◆ Divide and conquer
  - Business users model the processes
  - IT designs the services



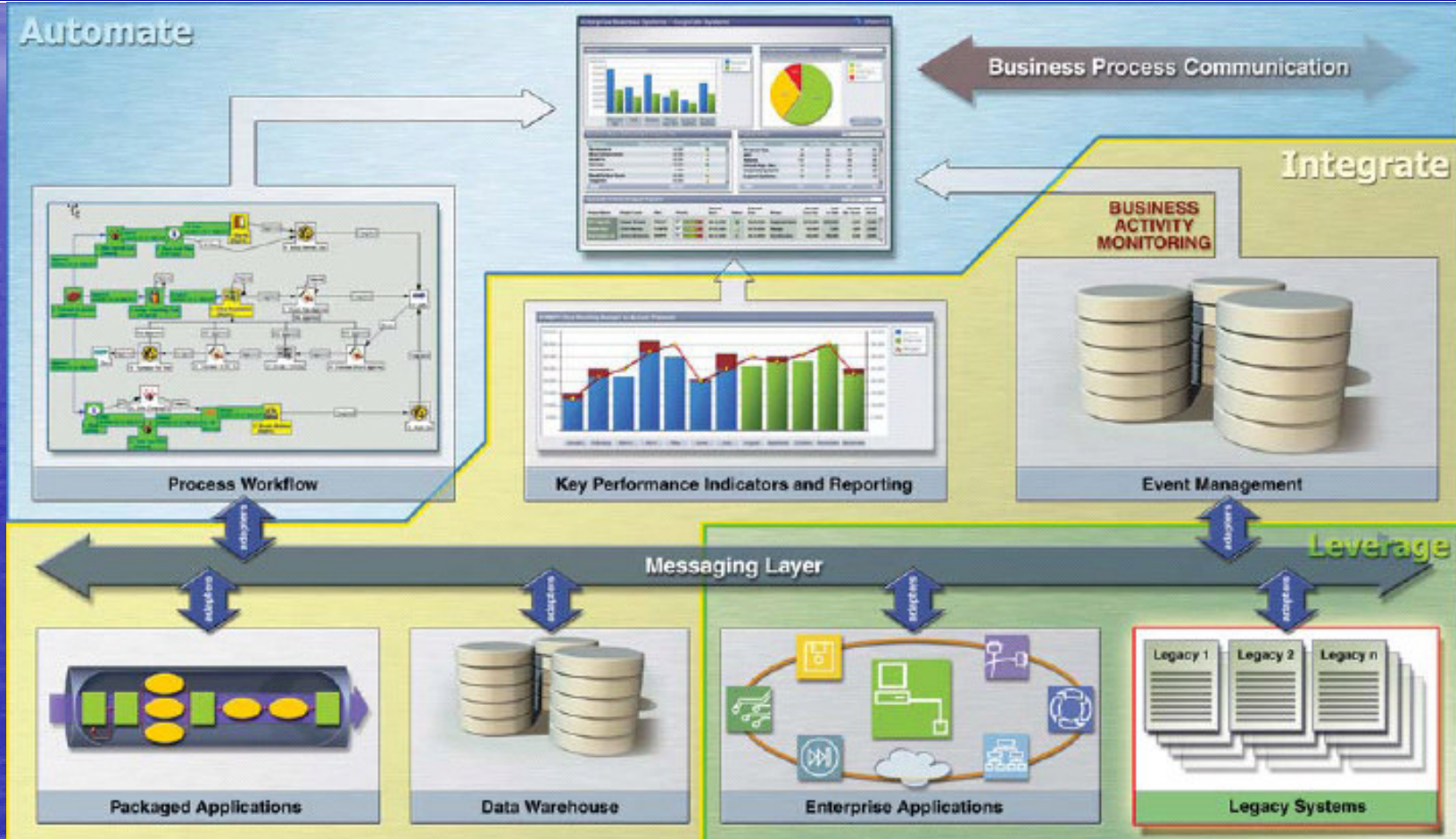
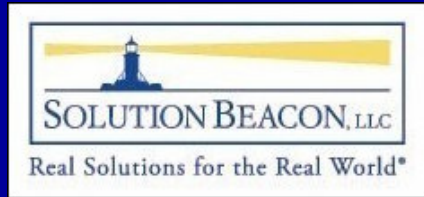
# Oracle Business Process Flows



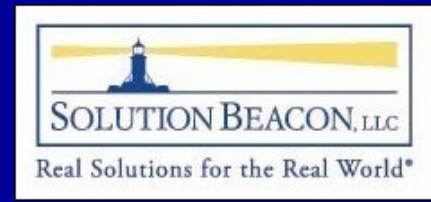
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# Business Process Execution



# Business Process Analysis

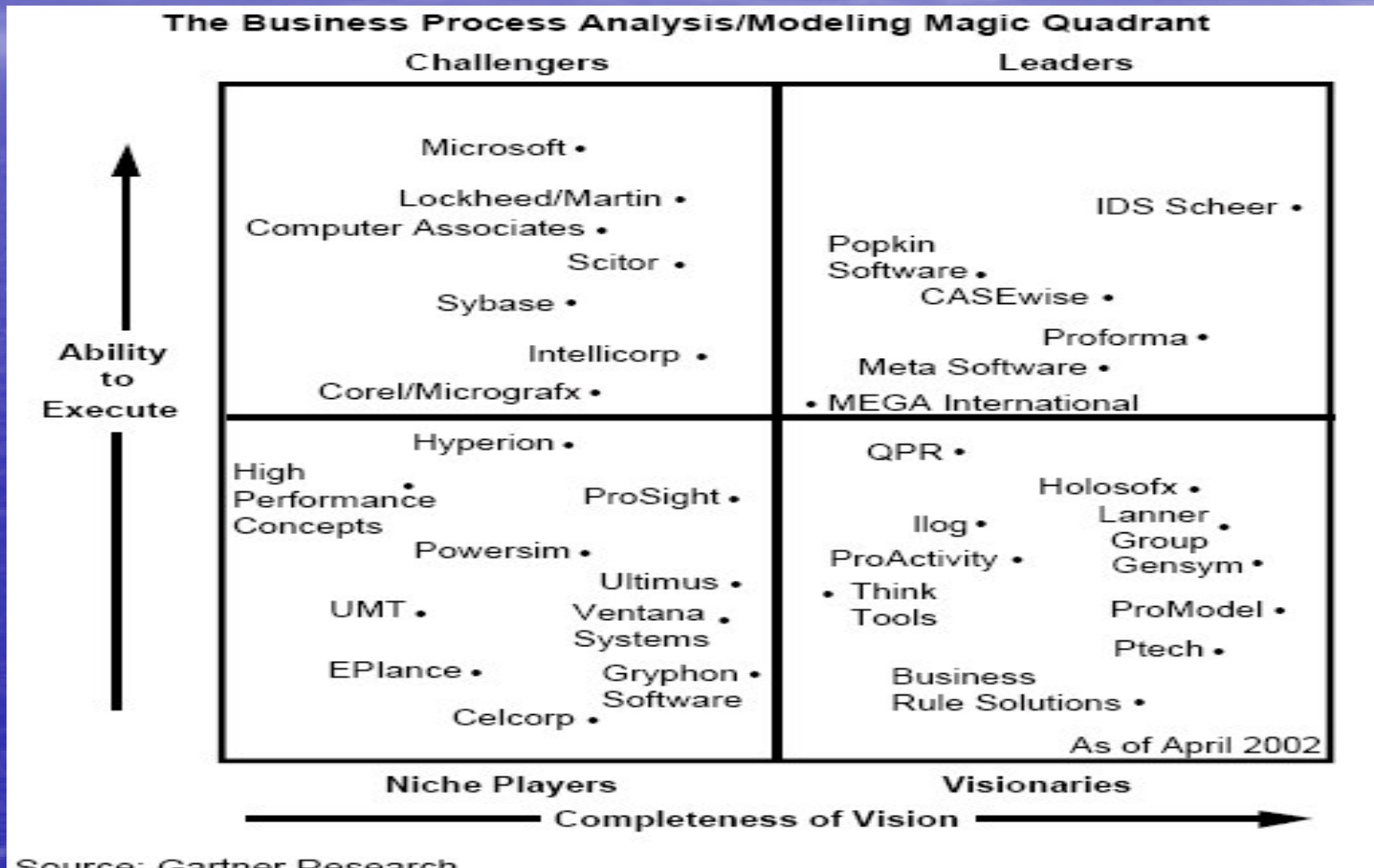
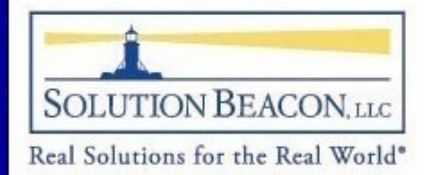


Process analysis tools (business intelligence and business activity monitoring [BAM] technology) to support analysis of data produced during process execution.

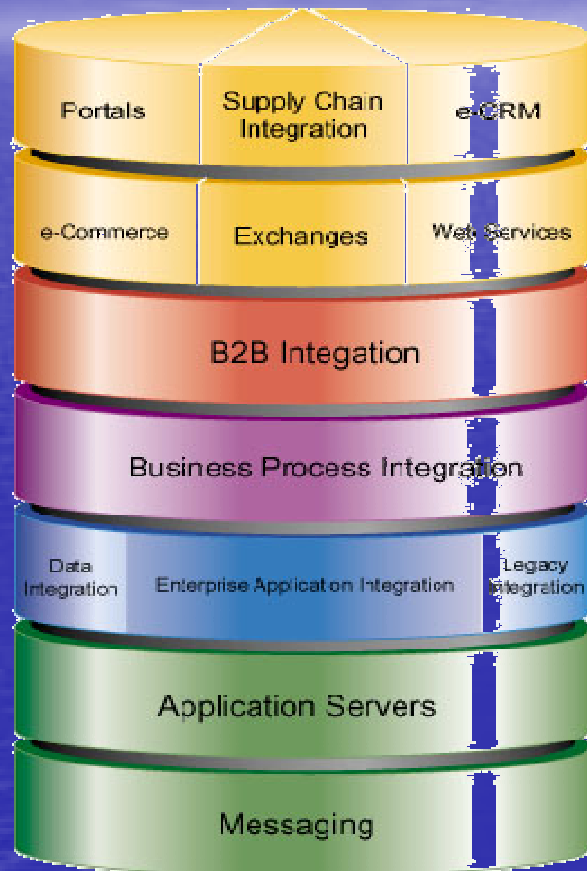
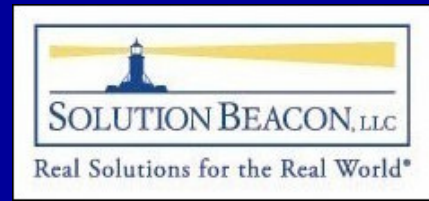
- Process registry/repository to contain process models, business rules and other process metadata to enable real-time execution and component reuse.
- Rule engines execute rules that abstract business policies, flows and decisions from the underlying applications and make process change easier.
- Simulation and optimization (BPA technology again) enable business managers to compare new process designs with current operational performance.
- Integration (enterprise service bus [ESB] and integration broker suite technology) link the orchestration engine to other systems' (data and logic) assets that support automated work steps included in the process model.
- Document/content repository (enterprise document management [EDM] technology) to contain structured and unstructured content that is either created or consumed as part of the work process. In a BPMS, these are modules that work together to deliver a single product experience.



# Process Analysis and Modeling



# Business Process Integration



- Top-down business approach to drive IT requirements
- Address each layer separately
  - Business applications (logic)
  - Component connectivity
  - Process modeling
- Prepare for the future with re-usable infrastructure

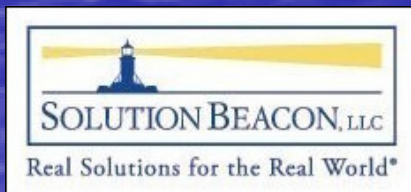


# Business Process Tools

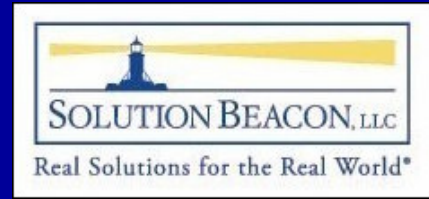
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# Workflow History



## ◆ Transactional Process

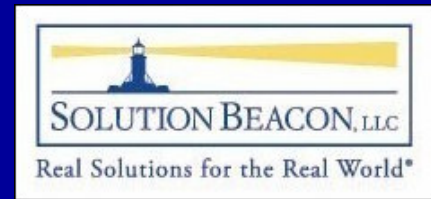
- Automation of business process during which information is passed to another action according to rules

## ◆ Management System

- System that defines, creates and manages through software
- Workflow engines interpret process
- Invoke use of IT tools and applications



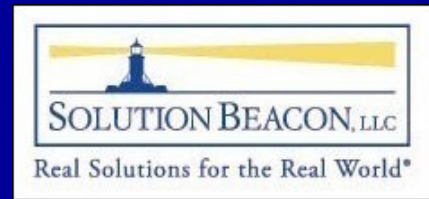
# Generations of Workflow



- ◆ First generation – Focused coordination of processes with a department
- ◆ Second generation – Coordinate tasks across departments, possible use of multiple workflow systems
- ◆ Third generation – XML Protocols, web technologies, linked distributed activities



# BPM vs. EAI



## ◆ BPM

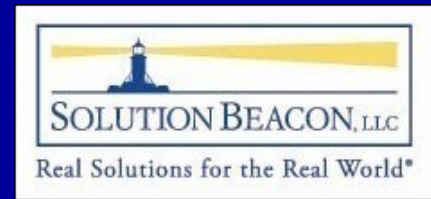
- Process Modeling
- Process Automation

## ◆ EAI

- Process Integration
  - ◆ Messaging
  - ◆ Data transfer between disparate systems
- Web services based



# BPM Tools

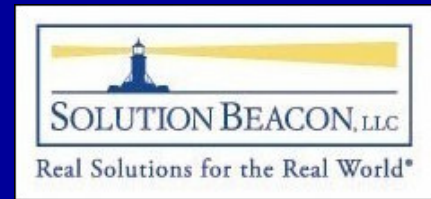


- ◆ Adobe Lifecycle Workflow v7.0
- ◆ Fuego BPM v5.5
- ◆ Global 360 Enterprise BPM Suite v9.3
- ◆ IBM Websphere BPM Suite v6.0
- ◆ Pegasystems SmartBPM Suite v4.2
- ◆ Savvion BusinessManager v6.5
- ◆ Vitria BusinessWare v4.3
- ◆ Oracle BPEL

*Over 170 vendors selling BPM solutions*



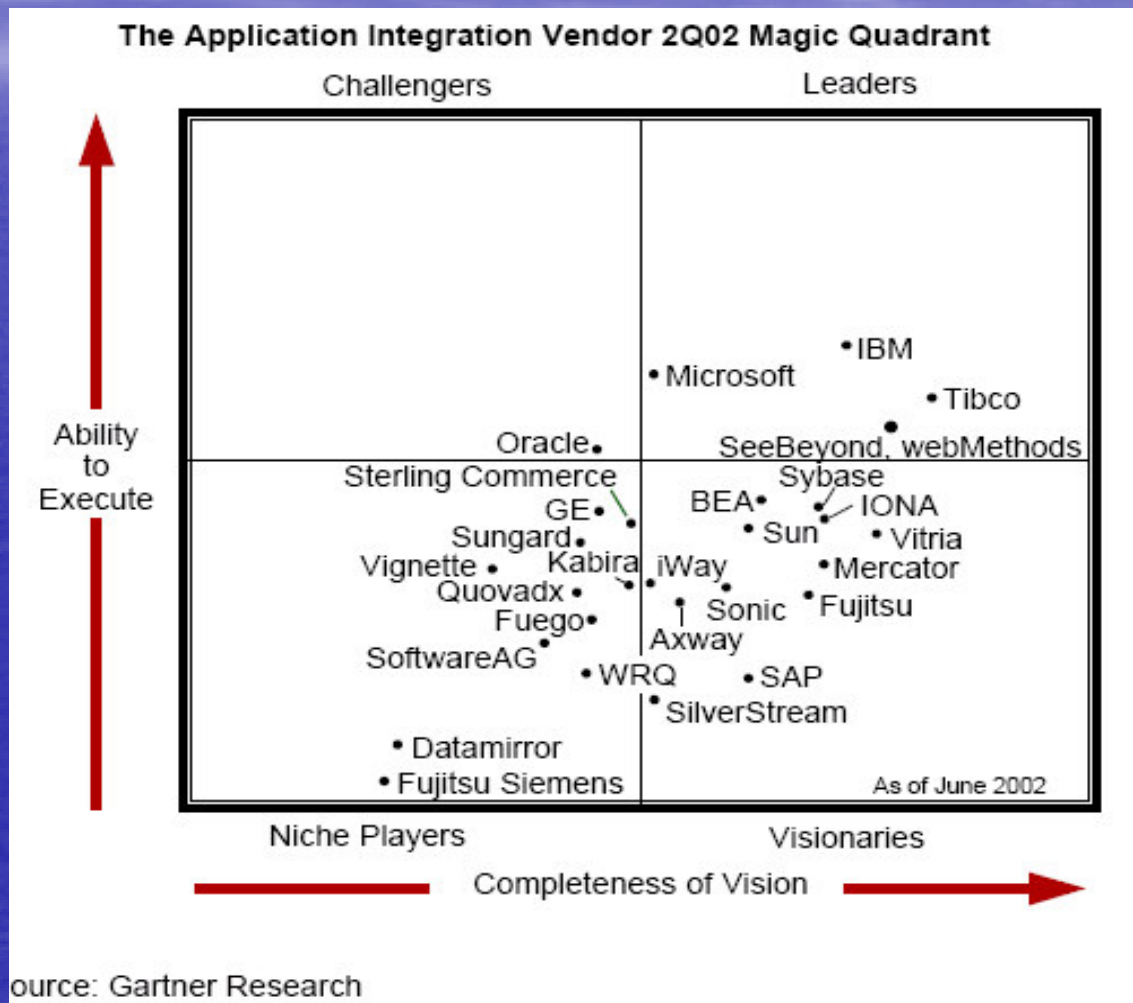
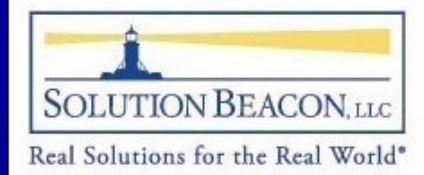
# EAI Tools



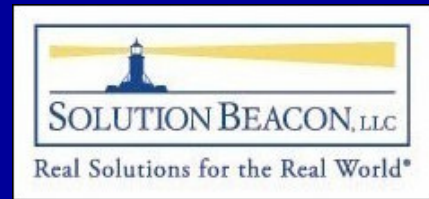
- ◆ IBM
  - Websphere
  - BPM Suite
- ◆ SeeBeyond
- ◆ TIBCO
- ◆ Webmethods
- ◆ BEA
- ◆ Vitria



# EAI Vendors



# Business Process Tools Evolution



- ◆ Users' needs for BPM-enabling technology have continued to advance
- ◆ Users now understand that the interactions of people, systems, information and business policies contribute to optimal work outcomes and operational process excellence
- ◆ In late 2005, Gartner defined a new and growing market, the BPMS market
- ◆ Provide a technology base for business users (with assistance from IT professionals) to create and manage dynamic business processes for business advantage



# BPMS Tools 2006

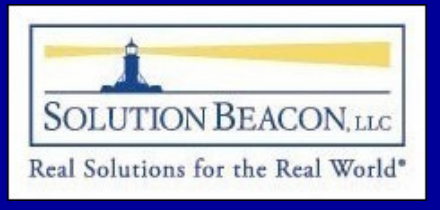
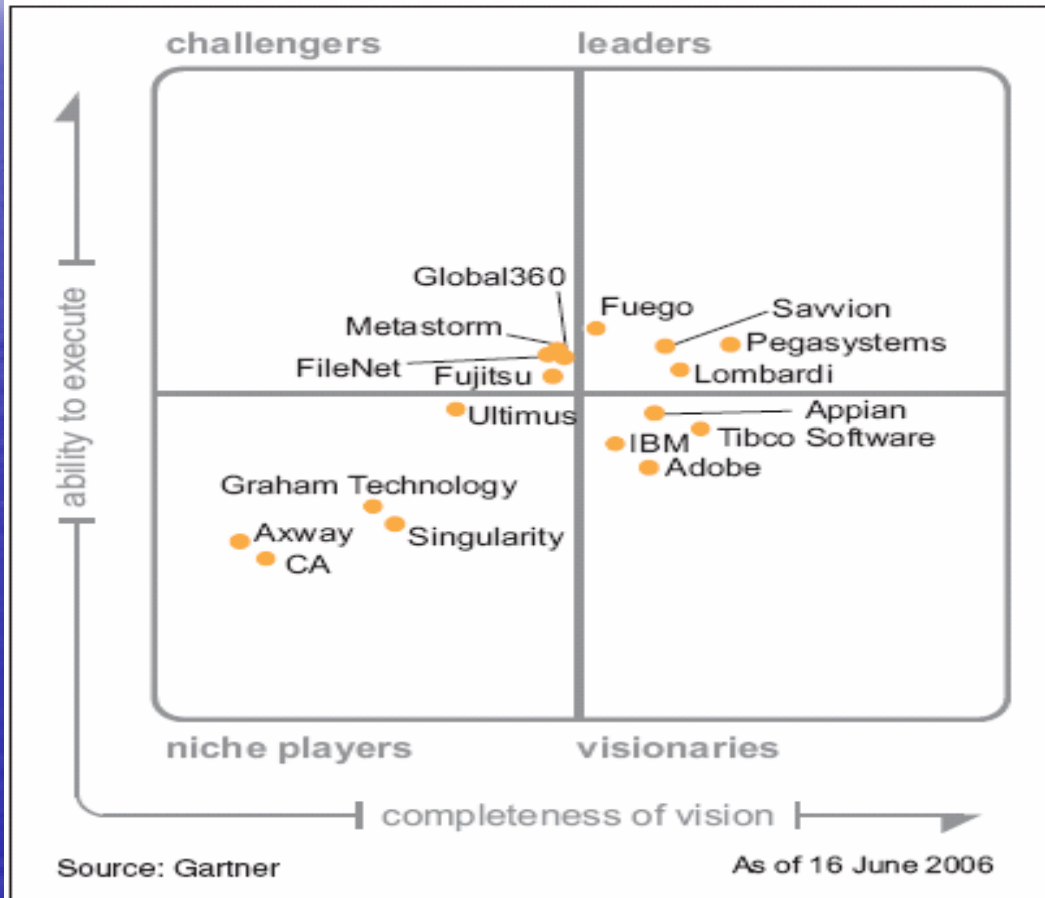


Figure 1. Magic Quadrant for BPMSs, 2006

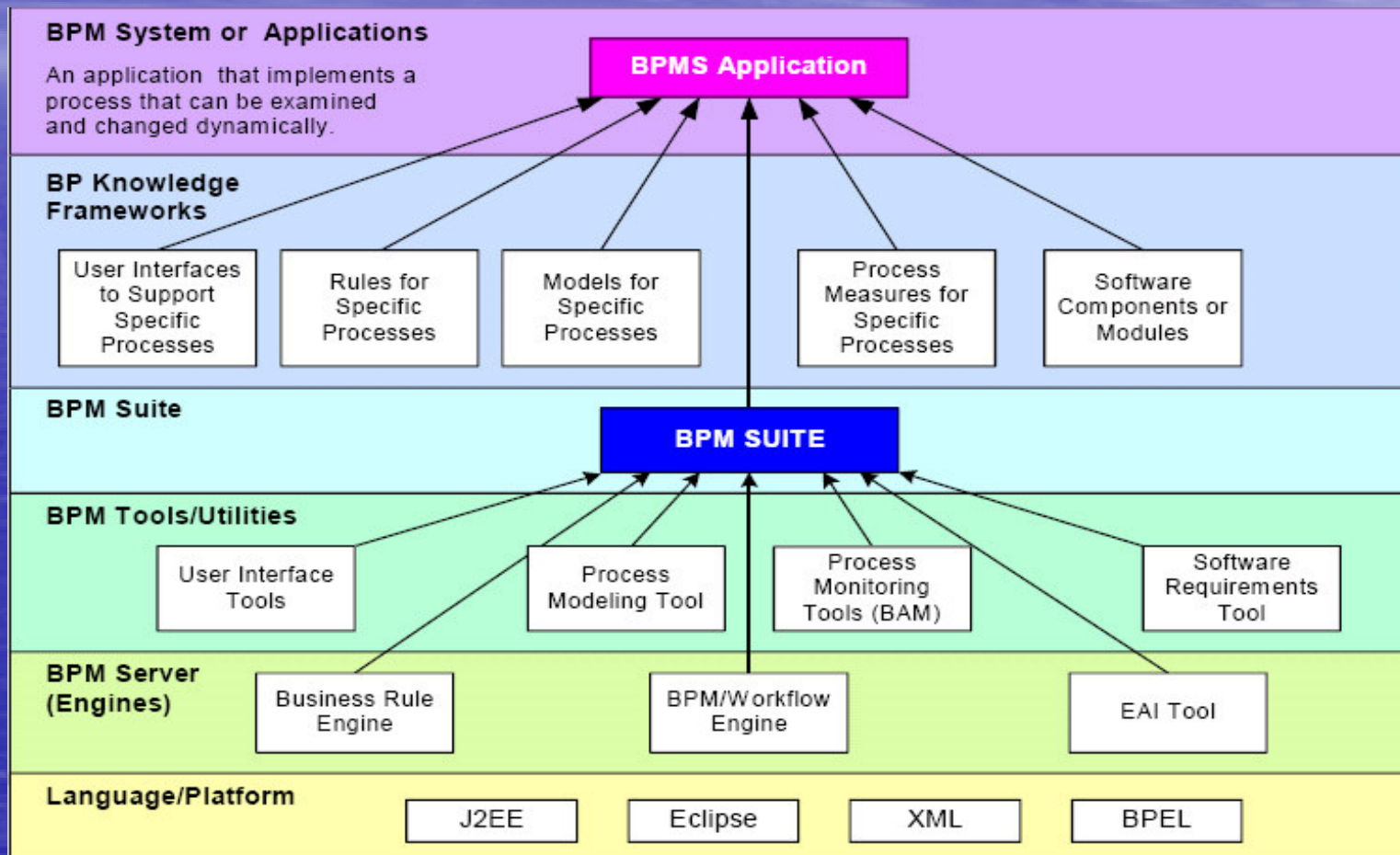
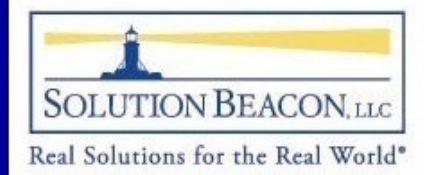


Gartner



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# IBM's BPM Products

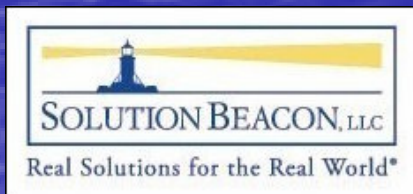


# Business Process Extensible Language (BPEL)

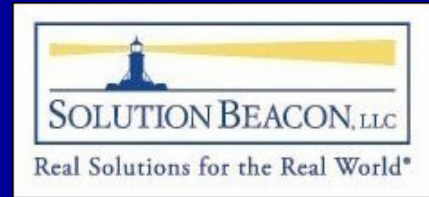
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# Business Process Execution

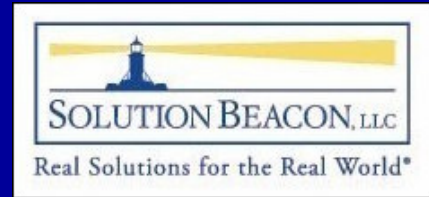


- ◆ Define Business Process
- ◆ Coordinate transactions through rules
  - Distribute long-running transactions
  - Directly connecting transaction services
- ◆ Monitor success or failure of transactions
- ◆ Benefits
  - Built on top of Web Services
  - Extensible
  - Flexible
  - Durable and reliable

*Handles complexity in consistent way*



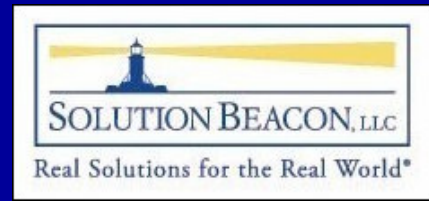
# Business Process Execution Language



- ◆ Send XML messages
- ◆ Manipulate XML data structures
- ◆ Manage events and exceptions
- ◆ Design parallel flows of process execution
- ◆ Interface with business rules
- ◆ Undo portions of processes when exceptions occur



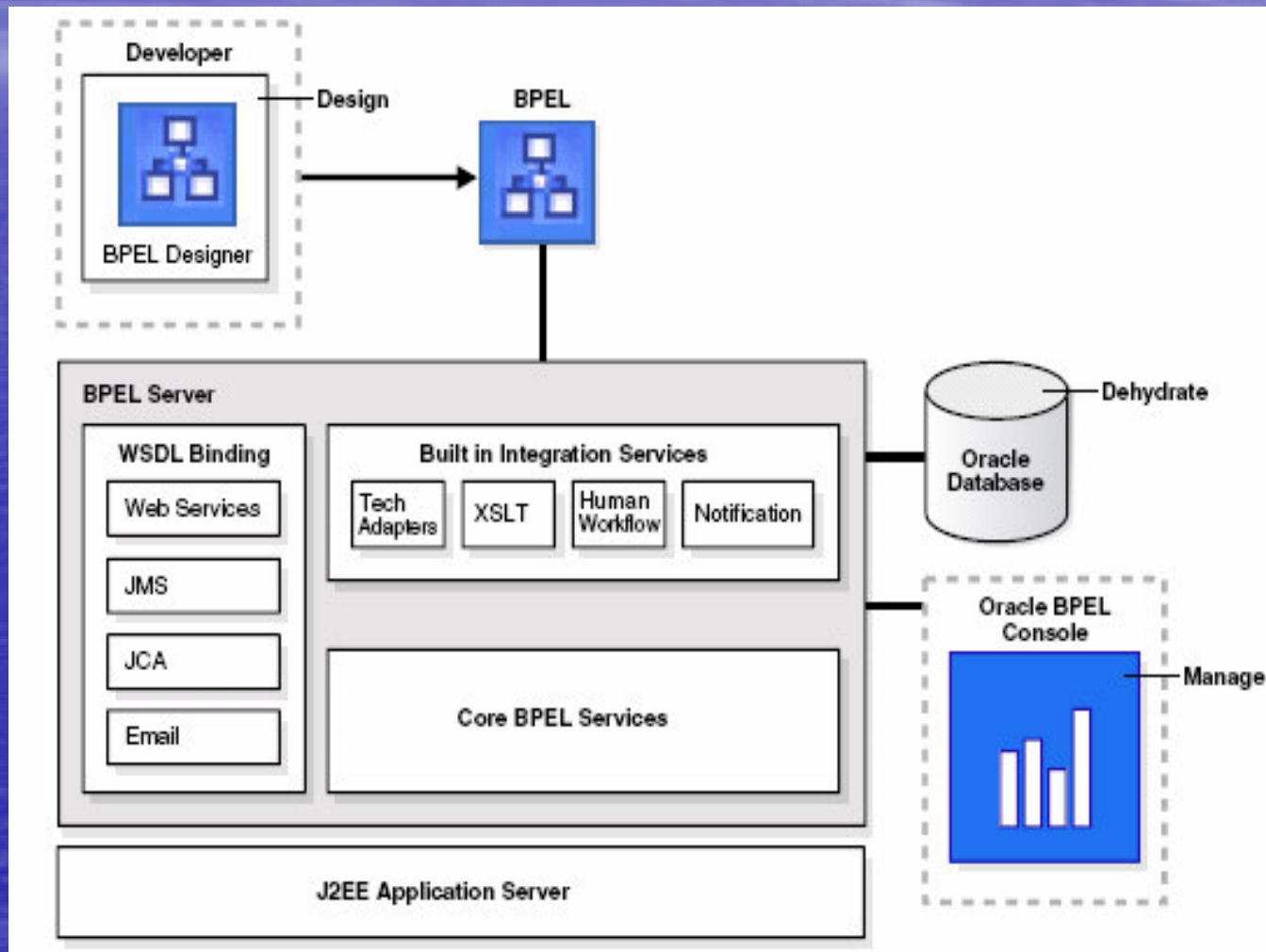
# Business Process Execution Language



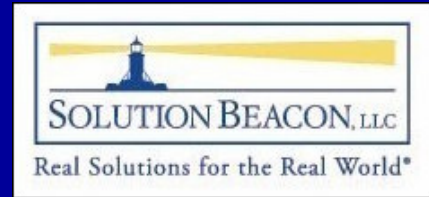
- ◆ Oracle BPEL Process Manager
  - Design, deploy, monitor and manage
  - Features
    - ◆ Web service standards (XML, SOAP)
    - ◆ Service Oriented Architecture (SOA)
    - ◆ Event Timeout and Notifications
    - ◆ Scalability and reliability of processes
  - Multiple install options
    - ◆ Applications servers (websphere, WebLogic, OA)
    - ◆ Databases



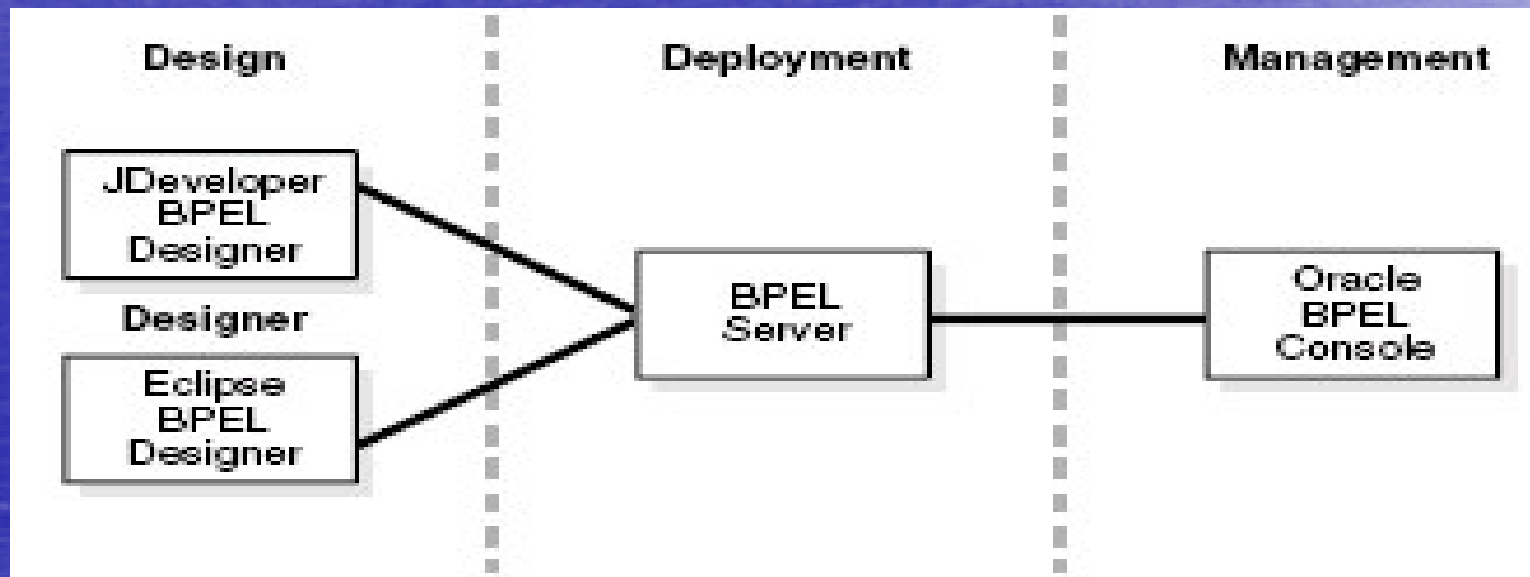
# Oracle BPEL



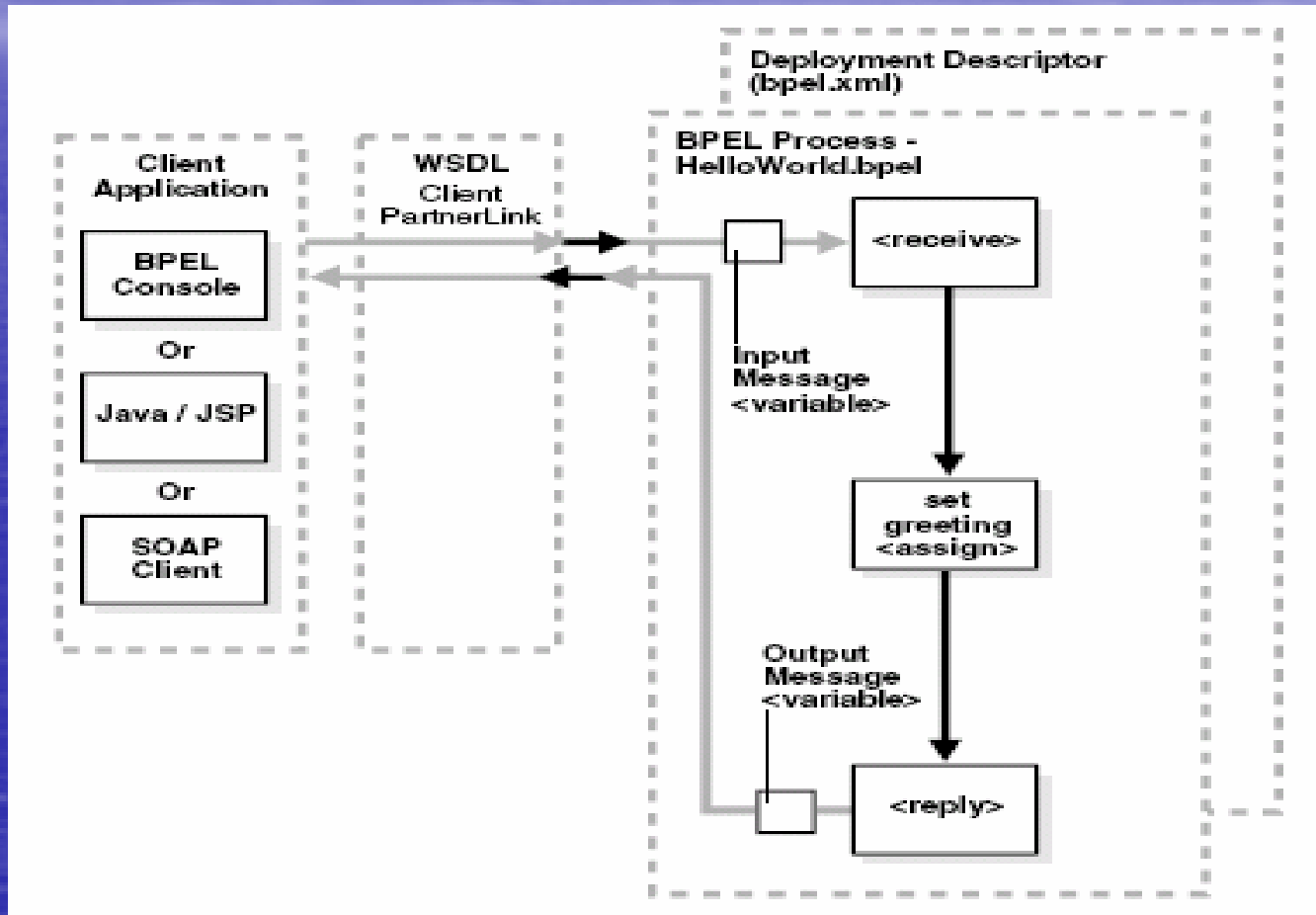
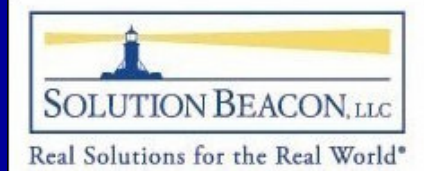
# BPEL Process Manager Components



- ◆ Design
- ◆ Deployment
- ◆ Management



# Simple BPEL Process

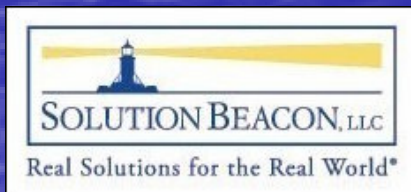


# BPEL Demo

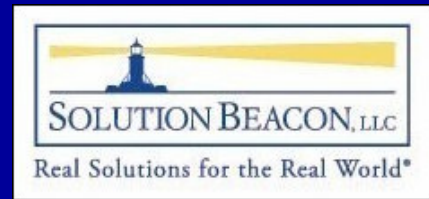
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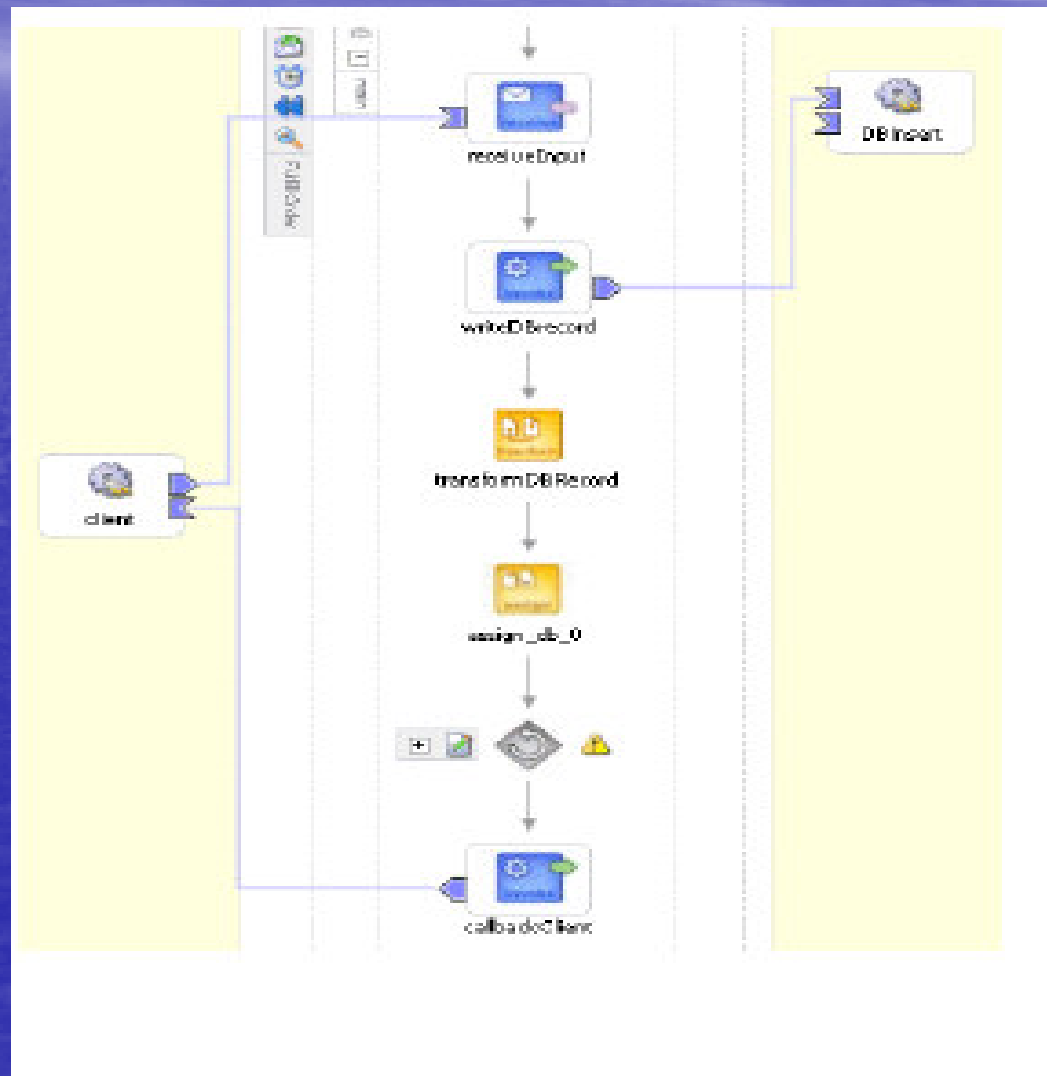
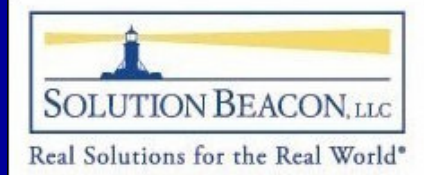
# BPEL Designer Components



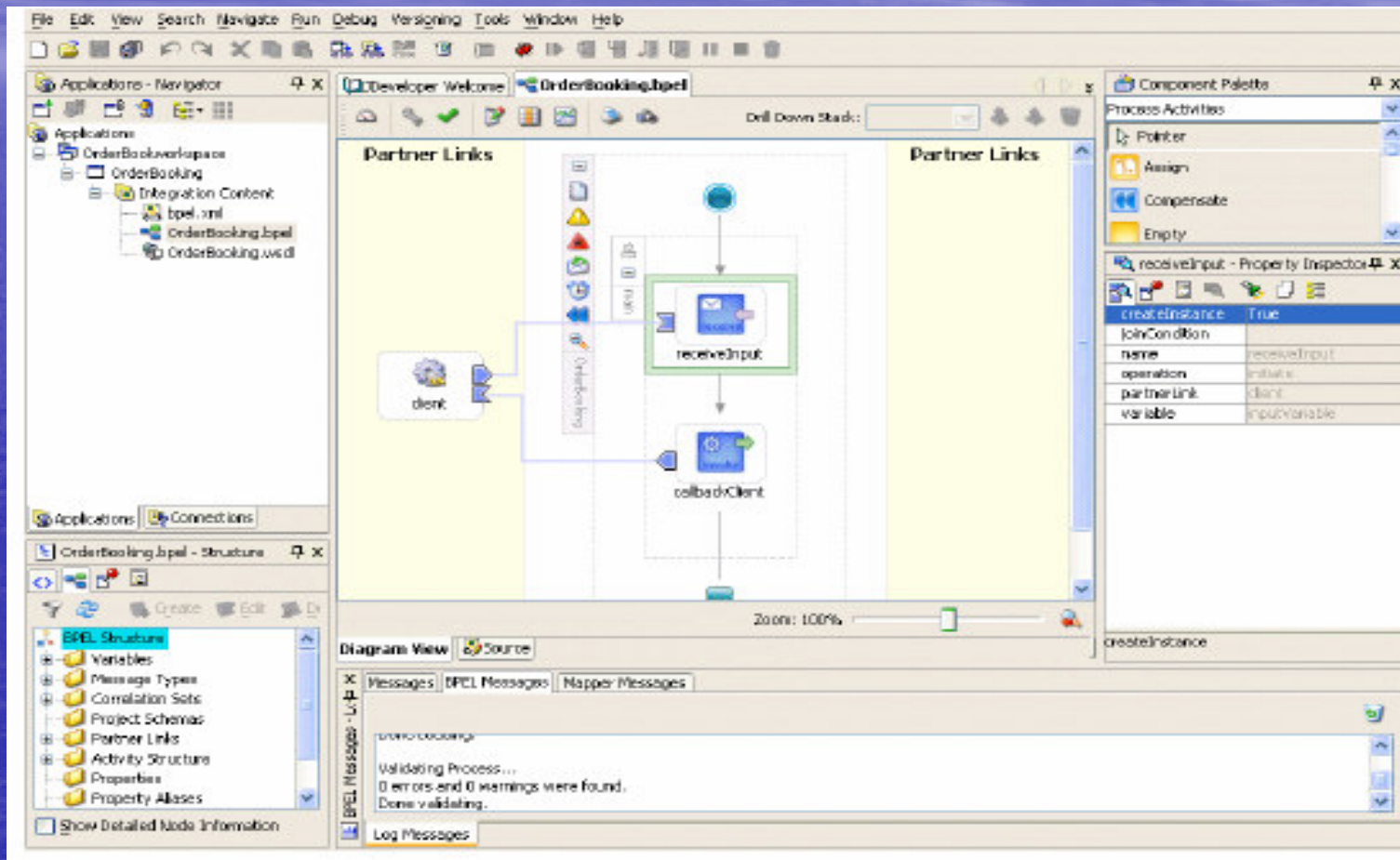
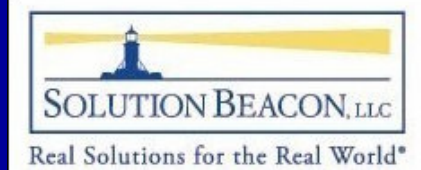
- ◆ Navigator
- ◆ Source and Diagram View
- ◆ Process Activities
  - Component Palette
- ◆ Property Inspector
- ◆ Structure Window
- ◆ Log Window



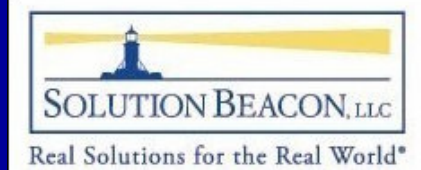
# Diagram View



# JDeveloper BPEL Designer



# BPEL Console



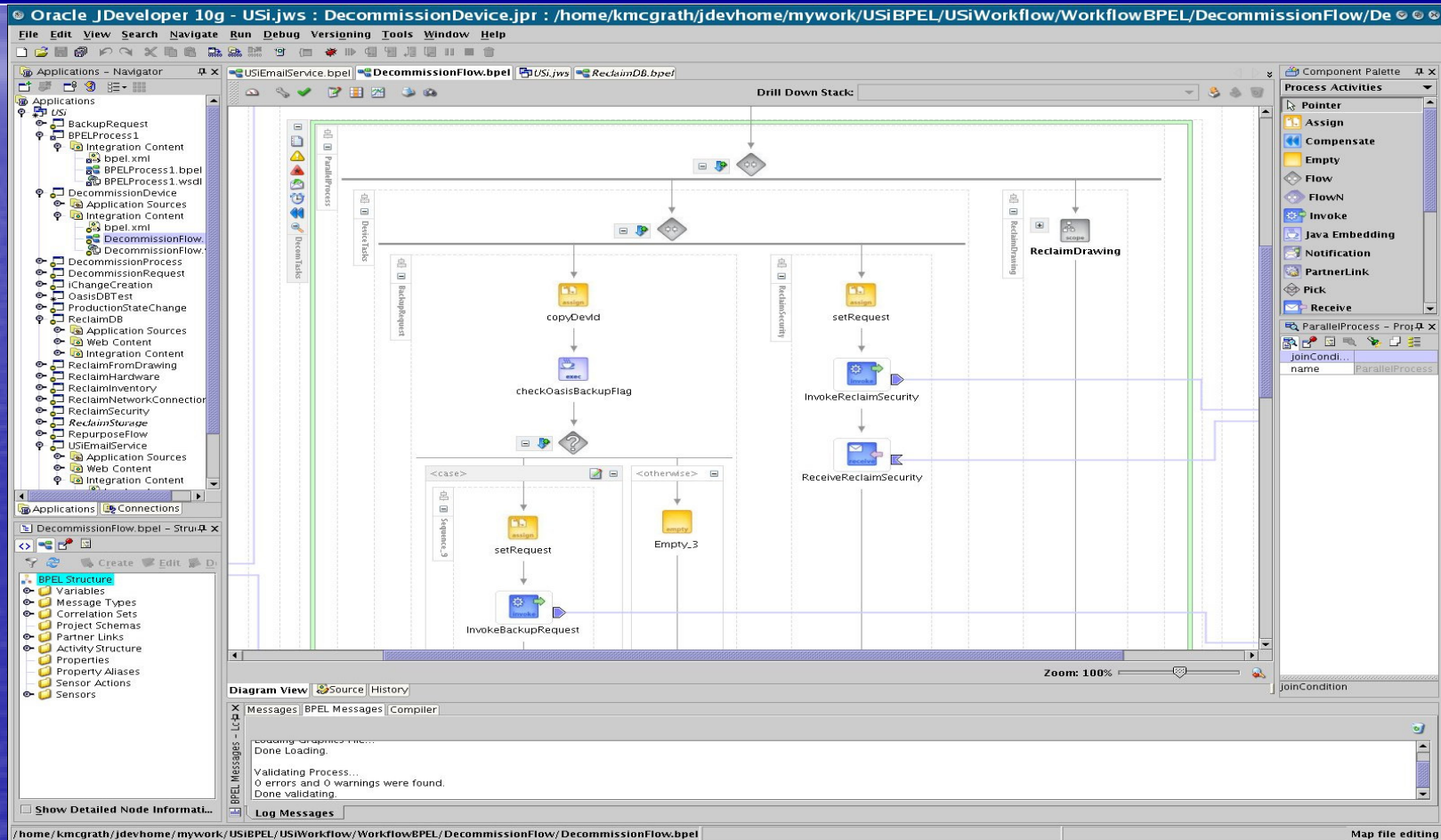
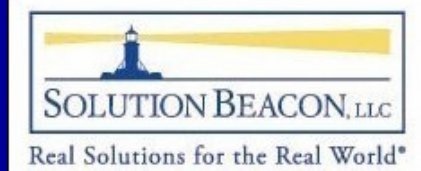
**ORACLE** BPEL Console Manage BPEL Domain | Logout | Support

Dashboard | **BPEL Processes** | Instances | Activities

Deployed BPEL Processes		In-Flight BPEL Process Instances 1 - 11		
Name	Instance	BPEL Process	Last Modified ↑	
BatchOrderBooking	412 : Instance #412 of TaskActionHandler	TaskActionHandler ( v. 1.0 )	2005-02-20 09:08:08.699	
CreditRatingService	206 : Instance #206 of TaskManager	TaskManager ( v. 1.0 )	2005-02-13 14:06:40.894	
FulfillOrder	204 : Instance #204 of SelectManufacturing	SelectManufacturing ( v. 1.0 )	2005-02-13 14:06:35.286	
OrderApproval	201 : Instance #201 of BatchOrderBooking	BatchOrderBooking ( v. 1.0 )	2005-02-13 14:06:24.4	
OrderBooking	111 : Instance #111 of TaskManager	TaskManager ( v. 1.0 )	2005-02-13 13:23:41.525	
POAcknowledge	109 : Instance #109 of SelectManufacturing	SelectManufacturing ( v. 1.0 )	2005-02-13 13:23:35.776	
RapidDistributors	106 : Instance #106 of TaskManager	TaskManager ( v. 1.0 )	2005-02-13 13:23:26.944	
SelectManufacturing	104 : Instance #104 of SelectManufacturing	SelectManufacturing ( v. 1.0 )	2005-02-13 13:23:19.042	
TaskActionHandler	18 : Instance #18 of BatchOrderBooking	BatchOrderBooking ( v. 1.0 )	2005-02-12 15:31:33.87	
TaskManager	17 : Instance #17 of TaskManager	TaskManager ( v. 1.0 )	2005-02-12 14:16:21.802	
x	15 : Instance #15 of SelectManufacturing	SelectManufacturing ( v. 1.0 )	2005-02-12 14:16:17.496	



# USi Case Study

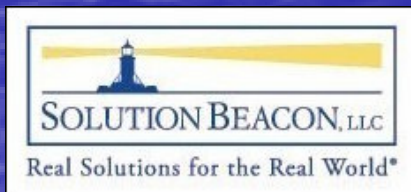


# Fusion Effect

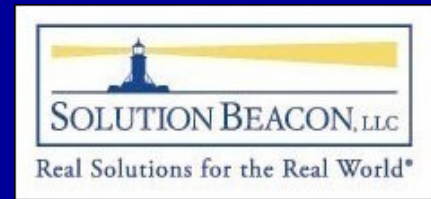
Release 11 / Workshops

Dallas, TX • Raleigh, NC • Cincinnati, OH  
Denver, CO • Atlanta, GA • Detroit, MI

[www.solutionbeacon.com](http://www.solutionbeacon.com)



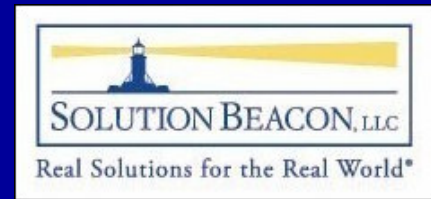
## Oracle as Gartner Sees It



*Oracle is a sleeping giant in this market. Once it adds a business-analyst-oriented modeling tool and completes its human-to-human (H2H) capability in 2006, we expect that Oracle will focus on competing as a BPMS vendor. Its capabilities hold great potential for the Oracle client base and new Oracle buyers.*



# Oracle vs. SAP



Although SAP recognizes that business processes should increasingly be adaptable by business users "... on their individual level of influence and capabilities," it also recognizes that this will require substantial changes to the business applications that enable these processes.



# The Fusion Effect

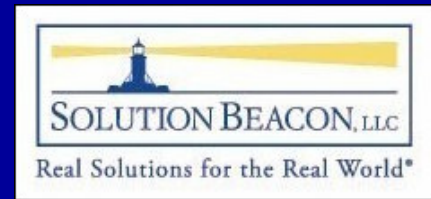
## *Continuous Improvement*



The sustainable competitive advantage achieved by continuous blending of business insight and process execution.



# IDS Scheer's ARIS Platform



Oracle Expands Fusion Middleware's Business Process Management Offering with New Oracle Business Process Analysis Suite Designed to Help Organizations Improve Alignment of Business and IT Strategies

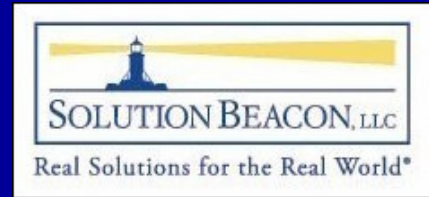
Oracle Business Process Analysis Suite complements Oracle's existing standards-based BPM products, including Oracle SOA Suite and Oracle BPEL Process Manager

Standards-based, BPM technologies allow organizations to build, adapt and optimize business processes to increase their competitive advantage, meet regulatory compliance requirements and improve operational efficiencies

Closed-loop process automation and optimization via shared metadata and unified repository



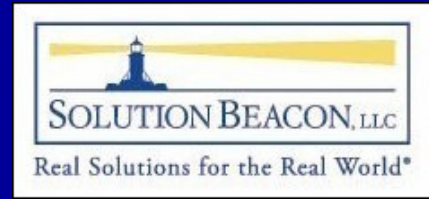
# Extending All Product Lines



- ✓ *PeopleSoft Enterprise*
- ✓ *E-Business Suite*
- ✓ *JD Edwards EnterpriseOne*
- ✓ *JD Edwards World*
- ✓ *Retek*
- ✓ *Siebel*
- ✓ *iFlex*



# BPEL Process Manager



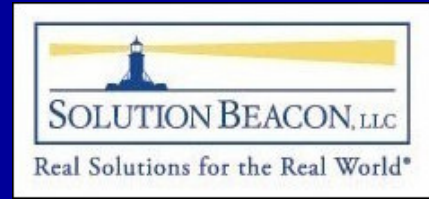
Process Orchestration Engine to design, deploy and manage service enabled, cross system business processes

- ◆ Combines discrete services into an end-to-end process flow
- ◆ Flexible Service Framework to invoke any application as a service
- ◆ Workflow Framework
- ◆ Integrated Monitoring
- ◆ Built- In Integration/ Messaging
- ◆ Process Metrics via Sensors



# Customer Data Hub

## *Customer Data Quality Management*

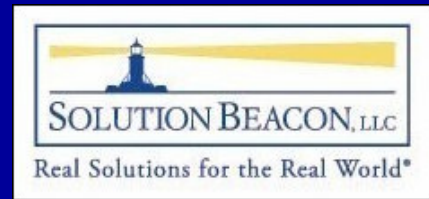


- ◆ A single source of truth about your customers
- ◆ Near real-time data synchronization
- ◆ Data cleansing
- ◆ Key interactions
  - Orders
  - Contracts
  - Service history
- ◆ 360 degree view with pre-built analytics

Customer Data Hub



# Path to Fusion



## Protect Current Applications Portfolio

Leverage Current Applications

Take advantage of new support policy

## Extend Value with Incremental Applications

Upgrade to Current Release(s)

Add New Application(s)

Leverage Oracle Fusion Middleware

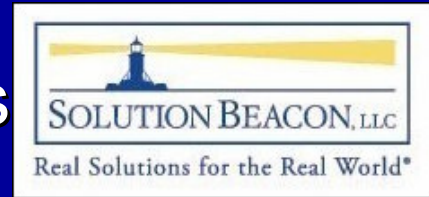
## Evolve to Next Generation Application Suite

Built on Fusion Middleware in Fusion Architecture

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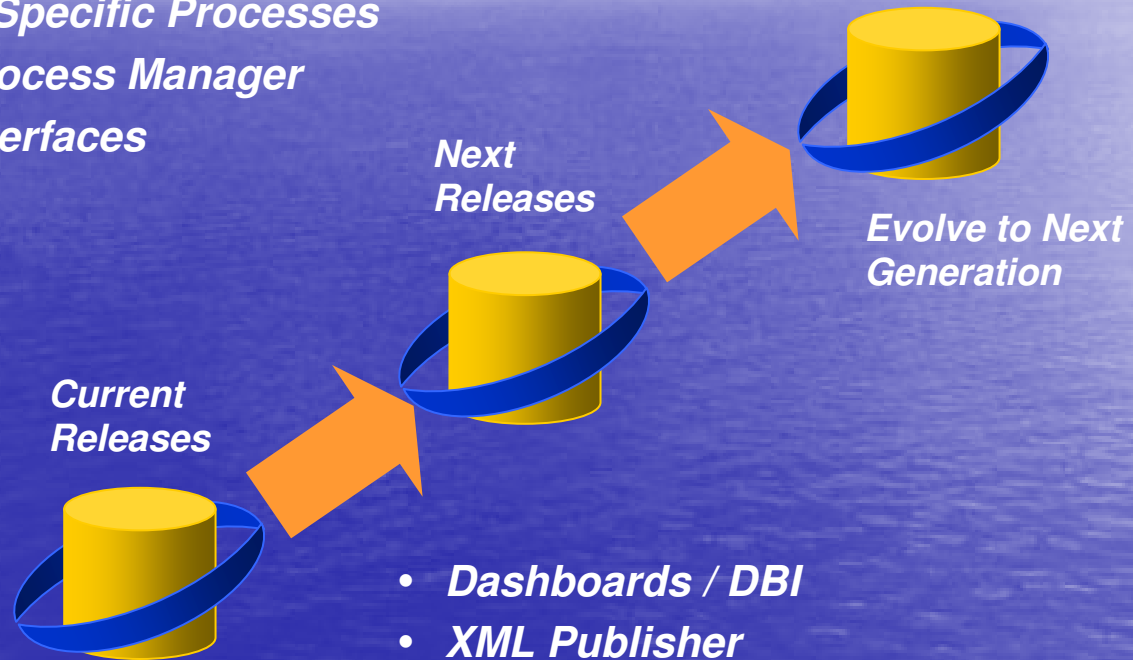


# Extend The Value of Existing Applications



- *Vertical Specific Processes*
- *BPEL Process Manager*
- *Open Interfaces*

*Process  
Adaptability*

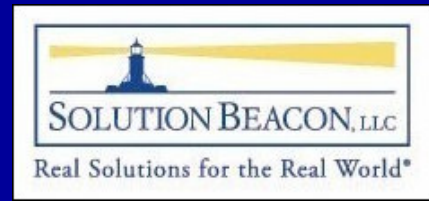


- *Dashboards / DBI*
- *XML Publisher*
- *Discoverer pre-built Reporting*
- *Data Hubs*
- *Business Activity Monitoring*

*Business Insight*



# Extending Your Software Value



## Greatest Business Insight

Daily Business Intelligence, EBS11i      XML Publisher, E9  
 XML Publisher, EBS11i      Manufacturing Dashboard, E1-8.11+  
 CRM Dashboards, E9

## Adaptable Business Processes

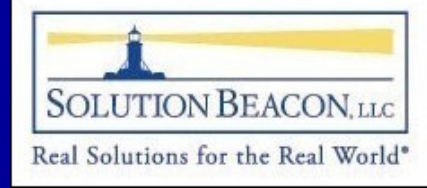
Data Hubs, EBS11i      CRM BPEL, E9      Retek to E9 (BEPL)  
 Data Hubs, E9      Enterprise Service Repository  
 HCM BPEL, E9      Retek to EBS12 (BEPL)

## Superior Ownership Experience

Setup Manager, E9      Rapid Impl. Workbench, EBS11i  
 Performance Monitor, E9      Apps Service Level Monitoring  
 Rapid Start, E1      World Express, JD Edwards



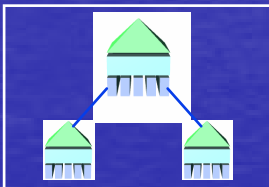
# The Virtual Enterprise: Increased Benefits = Stages of Value



ENTERPRISE VISIBILITY

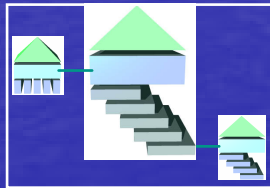
ENTERPRISE VALUE

**Fragmented Enterprise**  
inhibiting efficient process management and decision making



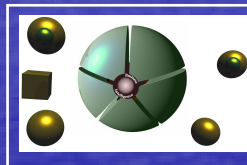
- Business Transformation
- Finance Transformation
  - Workforce Strategy

**Process Enterprise**  
moving towards a process focus, breaking down silos



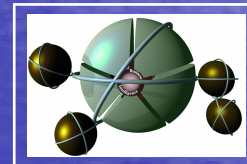
- Integrated ERP
- Shared Services
- HR Systems Integration

**Integrated Enterprise**  
reaching a high level of process and systems integration



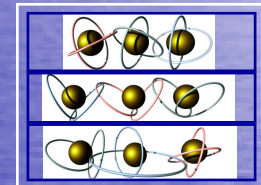
- Self Service
- Enterprise Portals
- Finance Systems Integration

**Enterprise to Enterprise**  
achieving internal process integration and extending focus outside of the enterprise



- Virtual Close
- Managed Services
- Wireless

**Virtual Enterprise**  
processes are non-redundant, high velocity, automated, and seamless. Real time information visibility



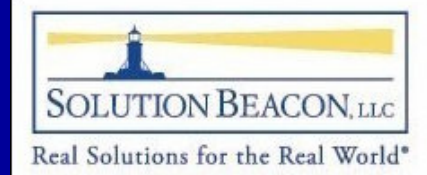
Low

ENTERPRISE VELOCITY

High

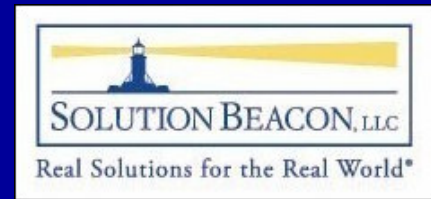


# Global World



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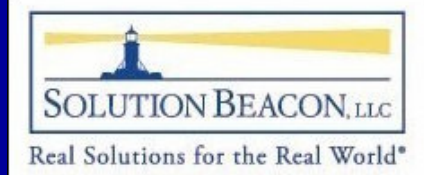
# Information Sources



- ◆ BPML.org, BPMS Report Series
- ◆ Business Process Trends, IBM's BPM Strategy, Products and Architecture
- ◆ Gartner, BPA and BPM Magic Quadrants 2002/2006
- ◆ Oracle Keynote, *Fusion Effect*
- ◆ Oracle BPEL Process Manager Developer's Guide, 10g Release 2 (10.1.2)
- ◆ Infoconomist, *Dec 10, 2002*

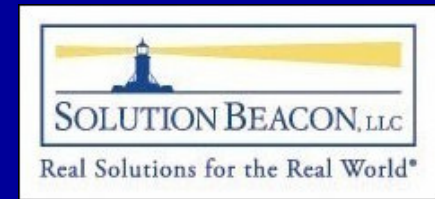


# On the ROAD Again !!!!!



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# Questions and Answers



Thank you!

Paul Cyphers

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[www.solutionbeacon.com](http://www.solutionbeacon.com)

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