



IBM SOA

# Business Process Management Enabled by SOA

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Application and Integration Middleware



9/17/2007

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# CEO's Cite Innovation as Top Priority for Business

*Business Model Innovation delivers the greatest returns*

*Results of 765 CEO interviews worldwide:*

Out Performers place 2X emphasis on **Business Model innovation** than under performers

- CEOs are under intense pressure to innovate
- Corporate culture is critical to sustained innovation
- Business model innovation is the new strategic differentiator



## Which key business priorities will your IT organization implement or support in 2007?



Note: Multiple responses allowed.  
Data: InformationWeek Research Outlook 2007 study of 300 business technology professionals

# Inflexible and Outdated Processes

## *Are the Root Cause of Many Corporate Disasters*

Major Airline strands passengers on runway for 10 hours  
– no food, overflowing toilets



Market-leading cell-phone provider exits market after small fire

**Why? Inability to modify processes on the fly.**

# BPM Projects are *Disguised* in Various Ways

**Financial Management**  
(SOX Compliance)



**Marketing, sales, and services**  
(Contact Center Optimization)



**Supply Chain**  
(Inventory Management)

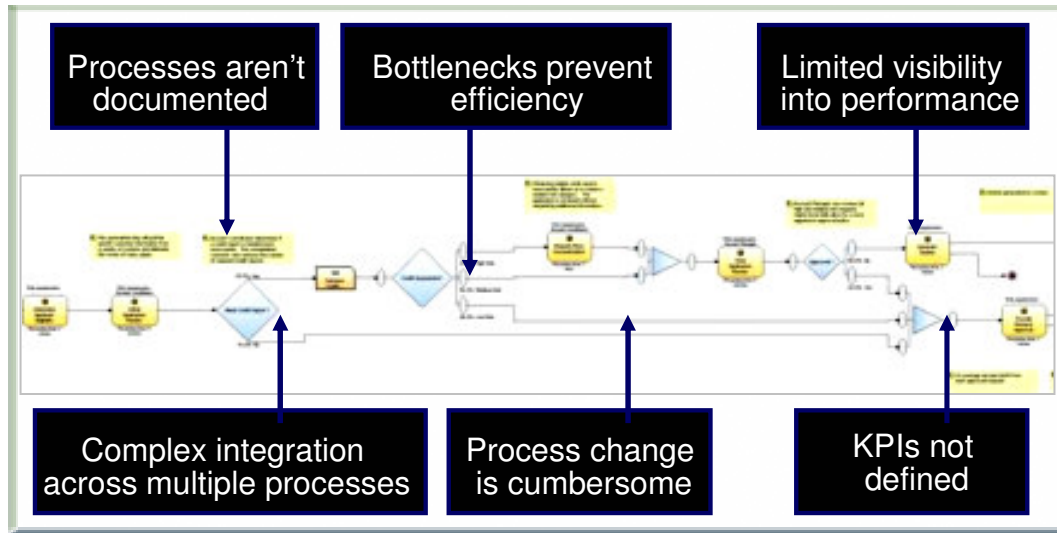
**Product Lifecycle Management**  
(Category Line Extension)



**Human Capital Management**  
(Employee Self-Service)

# Business Process Management is a Discipline...

BPM Solves:



Integration      Modeling      Monitoring

**Software that Enables BPM**

Forms      Rules Engine      Workflow

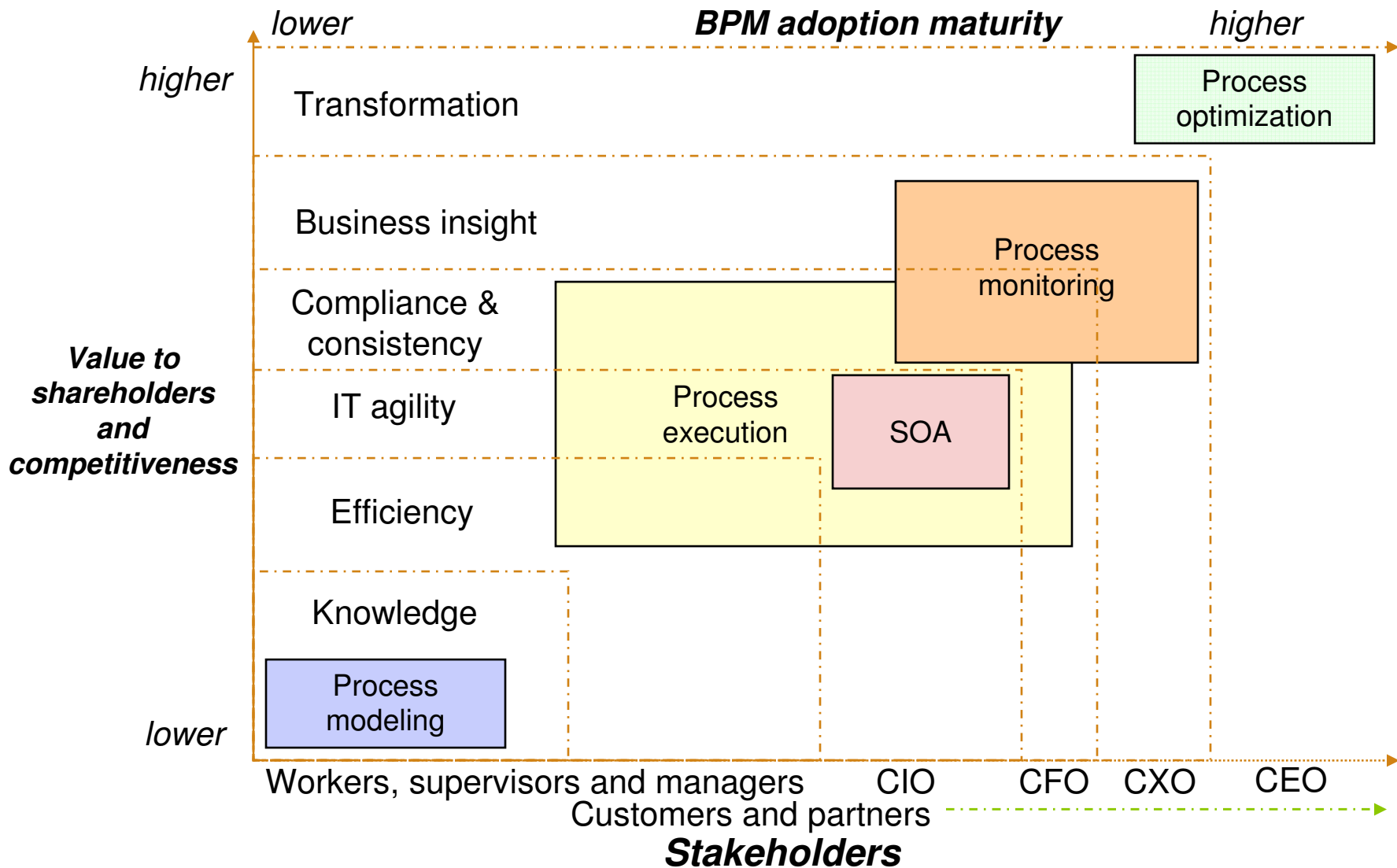
Models      Process Knowledge      Metrics

**Expertise that Delivers BPM**

Policies      Business Logic      Methodology

*BPM governs organizational and operational activities*

# Optimizing the business is the ultimate goal





## BPM and SOA – Better Together

**Gartner**

Publication Date: 9 February 2007

**Research**

ID Number: G00145586

### SOA and BPM Are Better Together

***“...SOA and BPM initiatives...are more successful and the benefits are compounded when they are united”***

***“Organizations that align their BPM and SOA initiatives in 2007 will double their likelihood of becoming an industry leader by 2011”***

Source: BPM and SOA, Better Together, Paolo Malinverno, Janelle B. Hill, Gartner, Feb 2007.

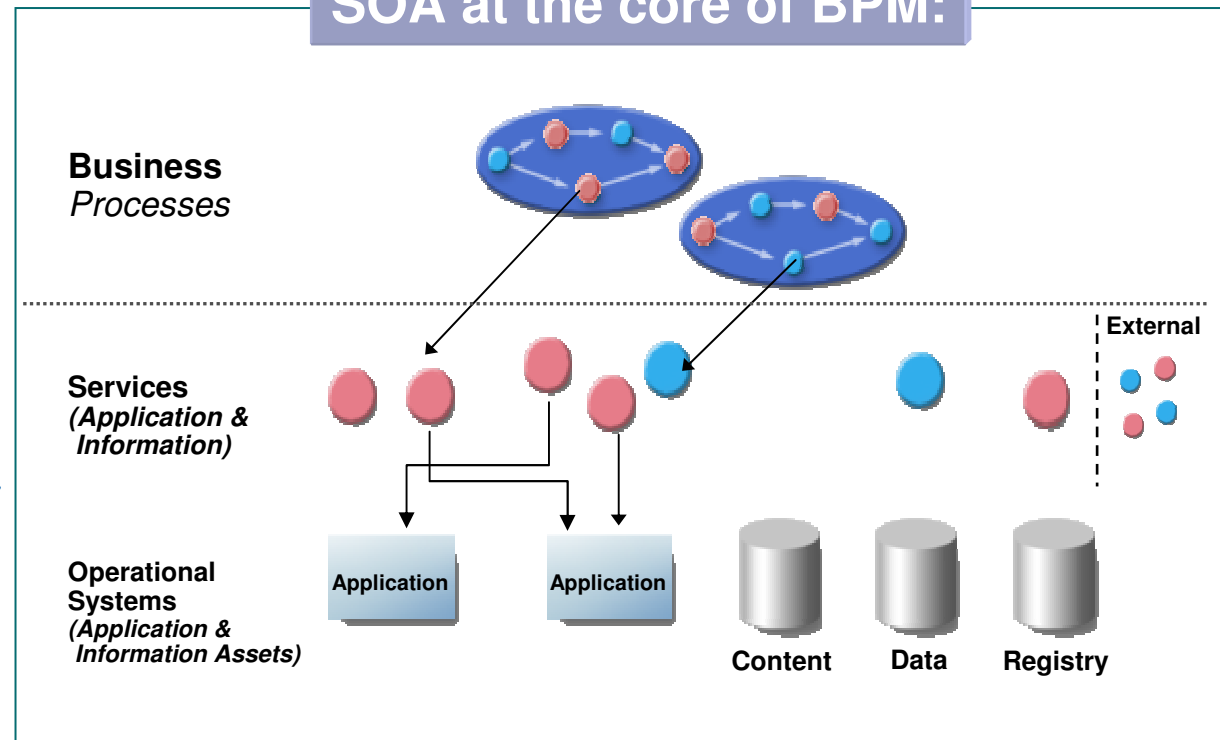


....and here's why

SOA improves how you design, manage, and optimize your business processes by enabling:

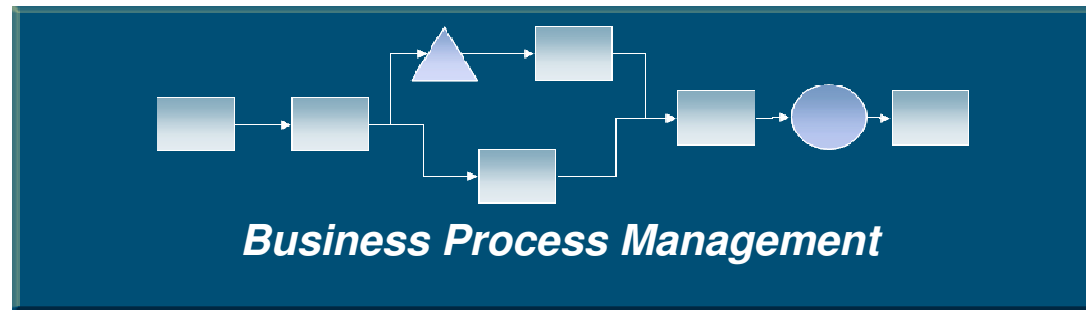
- Solution Building Efficiency
- Reuse of existing assets
- Flexibility in change

SOA at the core of BPM:



# Five Flexible Starting Points for BPM

*Customers can start BPM in different ways*



**Modeling & Simulation**

*Design and simulate business processes*

**Business Activity Monitoring**

*Track performance, gain insight, and take action*

**Process Automation**

*Choreograph processes across applications and systems*

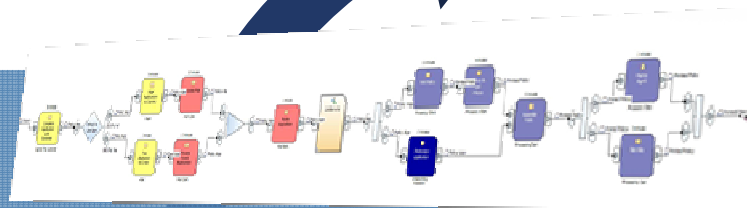
**Rules and Pre-built Frameworks**

*Manage process rules and accelerate design and implementation time*

**Content Centric Processing**

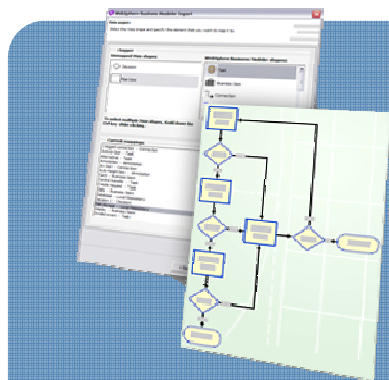
*Manage processes where content is used as input for a decision or produced as the output*

# Business Level Modeling and Simulation



- Use **ROI** reports to compare and analyze Results

- Model “what if” scenarios
- Use simulation capabilities to:
  - Assess risk mitigation
  - Make investment decisions
  - Calculate value of improvements



- Import Visio Models

**WebSphere Business Modeler**

*Iterative and continuous improvement*

## Unigroup Inc.

**UniGroup, Inc.**



### **Business Challenge:**

Leverage emerging wireless communications technology to maximize the effectiveness of their Transportation Processes, leading to continuous cost and time optimization of their shipping resources.

- ▶ **Solution:** Use business process modeling to document and analyze their critical business processes, yielding more effective communications, cost savings, and improved tracking of both their equipment and customer assets.
- ▶ **Results:** 70% reduction in communications cost for van operators. Realtime visibility into shipping resources and location information, and increased customer satisfaction given the ability of letting them know the exact status of their shipments in route.
- ▶ **Implementation Details:** WebSphere Business Modeler

# Business Activity Monitoring



Business Activity Monitoring

## Scorecards

Key Performance Indicators for business units

## Collaboration

Work with teams to resolve situations

## Business Alerts

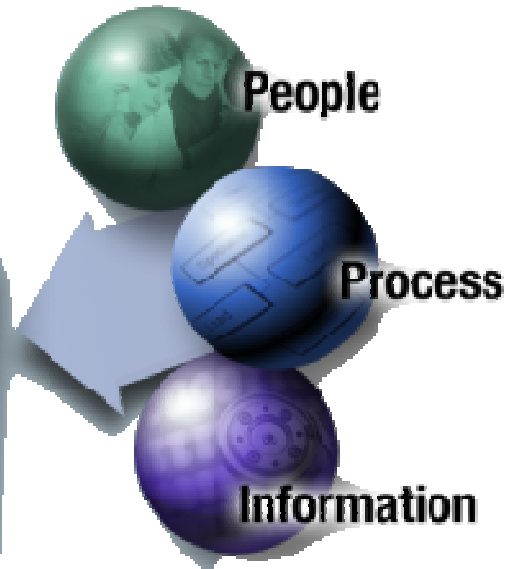
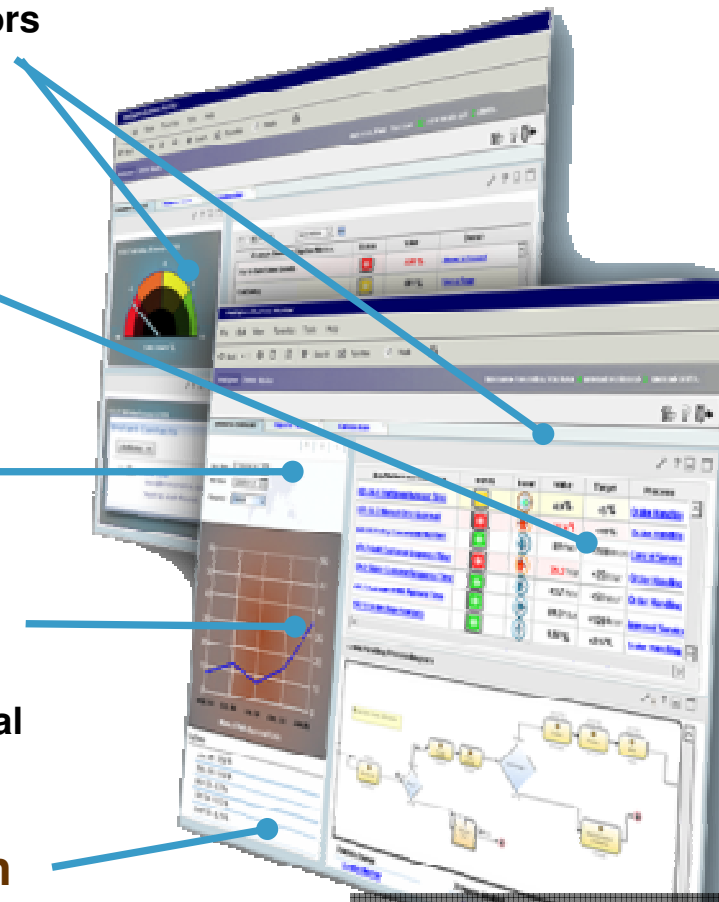
Notification of situations that require response

## Reports & Analyses

Understanding trends by combining real-time performance and historical information

## External Information

Information affecting performance



**WebSphere Business Monitor**

## NYS Dept of Taxation and Finance

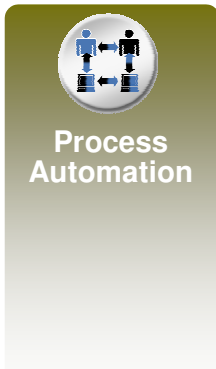
New York State



**Business Challenge:** NY State Dept of Taxation and Finance (NYS DTF) processes 11 million personal and 2 million corporate returns annually using aging technology that can't keep up with the demands of citizens and users. NYS DTF needs systems and tools that are flexible, permit faster change and reduce overall costs.

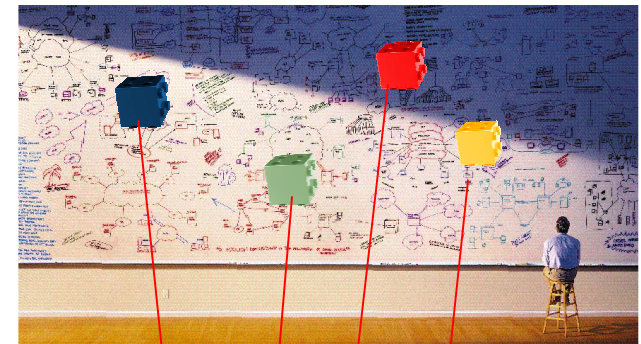
- ▶ **Solution:** Leveraging SOA and BPM, NYS DTF is rapidly transforming their systems, data, people, and business processes to be more functional, flexible and responsive to citizens, users and legislation. Traditional mainframe batch processing is shifting to transactional. Manual processes are transforming to automated business processes. Real-time business activity monitoring is replacing daily printed run reports.
- ▶ **Results:** Rapid modernization of legacy batch systems to transactional. More channels to enhance voluntary compliance. Web services and XML linkage to IRS for corporate taxes. High component reuse, lowered costs. Reduced errors and business exceptions. Higher value business metrics.
- ▶ **Implementation Details:** WebSphere Business Modeler, Business Monitor, Process Server, Integration Developer, Application Server, Flat File Adapter, Commerce, DB2 V9 pureXML, DataStage, Workplace Forms, CICS Transaction Gateway, Rational Suite, Tivoli Composite Application Monitor.

# Process Choreography and Automation

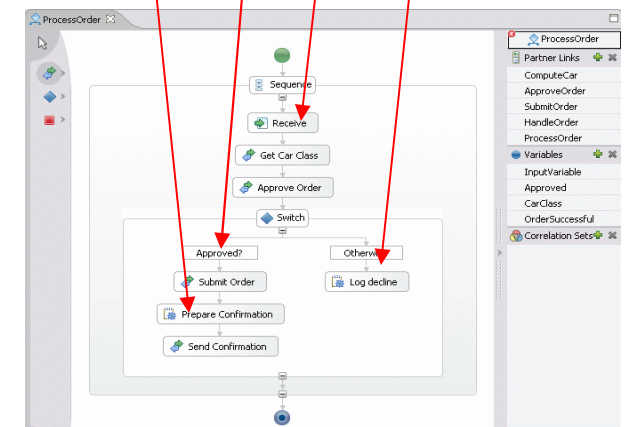


- Runtime for end-to-end **SOA-based** process automation
  - *Flexible, reliable, scalable, secure*
- Integrated **ESB** for Range and Reach
  - *Seamless access to all available services*
- Robust **Human and System-centric** BPM Capabilities:
  - *Human to Human; Human to System; System to System*

*Transform your business from this...*



*...to this*

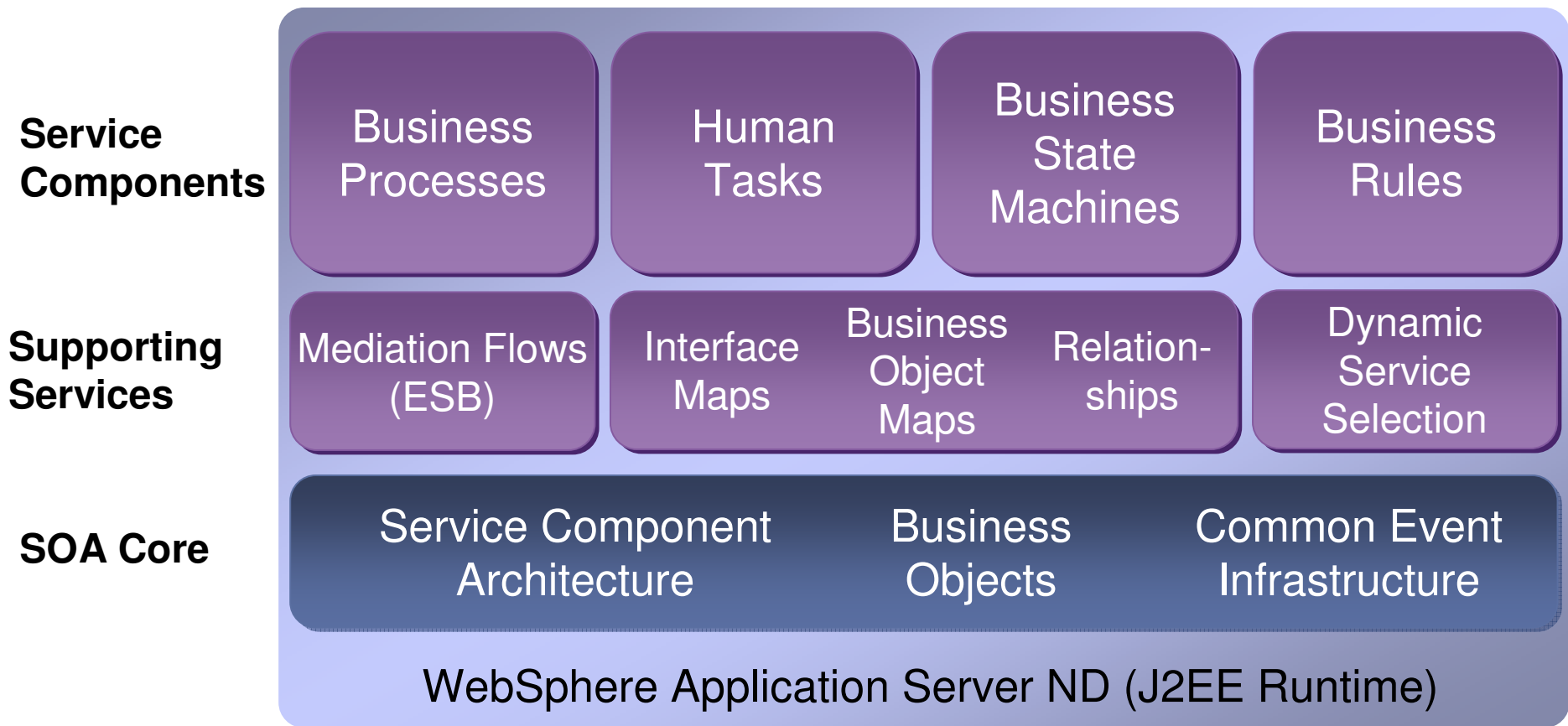


## BPM for the Mainframe



# WebSphere Process Server 6.0.2

## Component Architecture



\*1Q 2007



▶ **Business Challenge:**

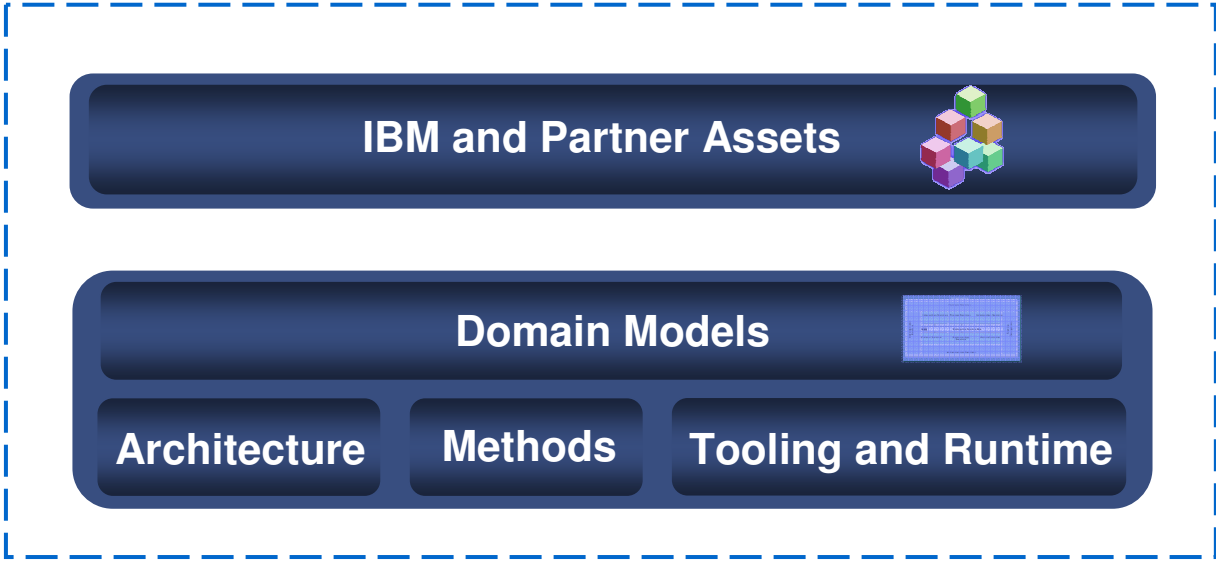
The market for home loans in Ireland has been transformed by a new breed of independent mortgage brokers who now account for 40 percent of the market. To respond to this marketplace change, EBS needed a channel to reach these brokers.

- ▶ **Solution:** EBS rewrote some of the back-end aspects of our mortgage origination environment using WebSphere Process Server to improve the reuse and efficiency of our IT service components to deliver the new channel to reach the independent mortgage broker market with a compelling offering.
- ▶ **Results:** Mortgage application processed in just hours compared with 2-3 days taken by competitors; independent mortgage broker channel now accounts for substantial portion of EBS's business after only 6 months, far exceeding expectations; new channel added without significantly increasing staff levels
- ▶ **Implementation Details:** Software: CICS® Transaction Server, Rational Application Developer, Rational Unified Process®, WebSphere Process Server, WebSphere Business Integration Server Foundation Server: IBM System z™ 890

# IBM Industry Frameworks accelerate your ability to leverage SOA

Rules and Pre-built Frameworks

**The Blueprint**  
IBM Industry Studies



**SOA Industry Roadmap**



### ▶ Business Challenges:

- Make it easy for Independent Agents to do business with FFIC in a highly competitive landscape
- Improve Agent experience with ease of use and effective business processes to enhance brand loyalty

▶ **Solution:** Service-oriented Business Solution enabled Straight-through-processing of personal property quotes and billing inquiries via web and Agency Management systems with self-service tools for Agents to deliver real-time quote functionality.

▶ **Results:** Personal Property Quote (PPQ) achieved a multi-fold increase in quote volumes. PPQ rolled out to 32 states in 7 months with a 52% reuse of business services between inquiry and quote.

▶ **Implementation Details:** WebSphere Business Services Fabric was implemented as the SOA solution platform during the initial Billing Inquiry project.

# Content Centric Processing

**Content Centric Processing**

**Content Imaging/Capture  
Doc Mgmt  
Web Content Mgt.**



**Process Dev Framework  
Doc Routing  
Workflow**

**Compliance Records Mgt.  
Email Mgt.  
Discovery**

**Case Management - Microsoft Internet Explorer**

Attach Document | Add Document | Queue Depth | Save

**FILENET eForm Audit**

Account Number: [input]  
Company Name: [input]  
Received Date: [input]  
Case ID: [input]  
Inbaskets: Index (2), My Work (2), Review (1), Matching (0)

**Non-Conformance Report**  
Report No.: 1-10077

Component Number	Description	Order No.	Contract No.	Nonconformance No.	Nonconformance Description
1002	Capacitor	1000-02	02	00	000
12	Inspector 1	585-4272	001400	Invent	12 2 78 C-088

**Discrepancy**

10 Purchased	10 Investigation Summary
11 Composed	11 Cause
12 Vendor Code	12 Packaging
13 Vendor Name	13 Corrective Action
14 Vendor 2	14 Review packaging with vendor.
15 Date	15 Implementation Plan
16 Price	16 All parts must have new packaging in place by 30 Jan 2001.
17 Approved By	17 Verification
01/05/01	17 Reviewed on January 21, implemented on Jan 25

**Corrective Action Block**  
Preliminary Investigation  
Appears to have been damaged in transit

Completed By: [input] Date: 01/05/01  
Corrective Action To Be Taken By: [input] Date: 01/05/01

Completed By: [input] Date: 01/05/01  
Accepted By: [input] Date: 01/05/01

Administrator Role: Supervisor



### ▶ Business Challenges:

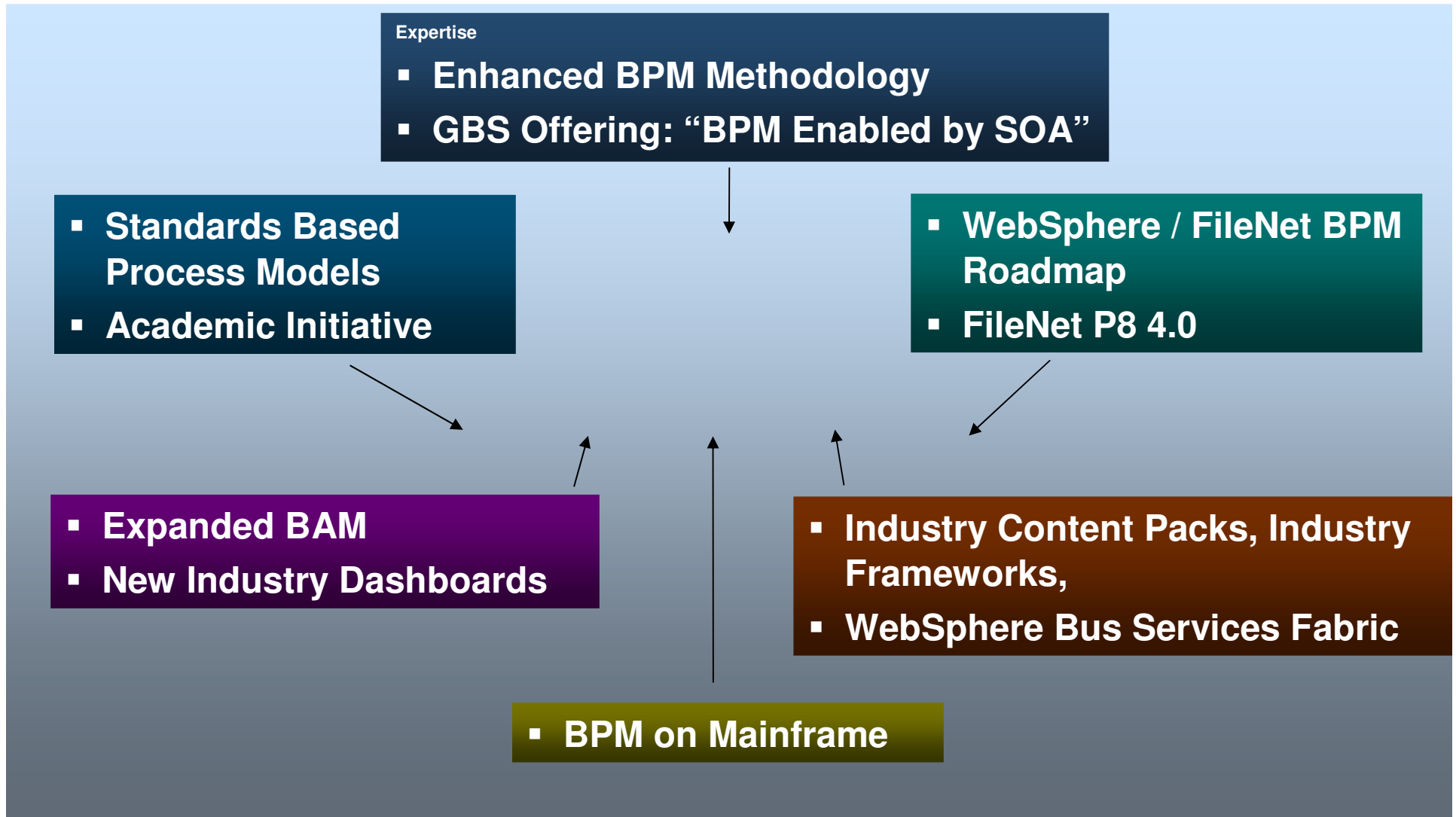
- Improve quality and speed of service at reduced cost
- Decrease employee time spent on tedious back-end processes
- Eliminate the manual review of forms

▶ **Solution:** Implemented an IBM FileNet BPM solution for dynamic design, monitoring and automating of business processes

▶ **Results:** Reduced loan processing cycle times from 7 days to 3 days. Realized an ROI of \$18 million from process optimization and headcount reduction. Provided quicker turnaround times that boost business by \$23 million. Increased time spent on customer facing activities from 30% to 70%.

▶ **Implementation Details:** IBM FileNet BPM

# Summary of BPM Announcements





## IBM has a complete BPMS

*“IBM is the first and so far the only infrastructure software supplier to offer a **complete BPMS** supporting the end-to-end lifecycle from analytical modeling to performance management and optimization – **based entirely on service oriented architecture.**”*

*Bruce Silver, Bruce Silver Associates – The 2006 BPMS Report*

## IBM Leads in BPM Enabled by SOA

### ■ Business Expertise:

- *BPM Enabled by SOA Readiness Assessment*
- *1000+ consultants trained in BPM Methodology and BPM Enabled by SOA Engagement*
- *20 BPM Training and Education classes available*



### ■ Technical Leadership:

- *Breadth of Offerings from Tooling to Runtime; From Dashboards to BAM; Modeling, Simulation, Choreography, Frameworks, and ECM*
- *All supported by SOA*

### ■ Market Recognition:

- *Leader in Gartner BPA MQ*
- *Leader in Forrester Integration, Human, and Content centric BPM WAVES*

### ■ Vibrant Ecosystem:

- *300+ BPM Business Partners*
- *4000+ pre-built assets in the SOA Business Catalog*

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