



| SOA: The Key to Business Flexibility

# ***SOA Productivity through Automating Business Processes***

Robert LeBlanc  
GM IBM SOA & WebSphere



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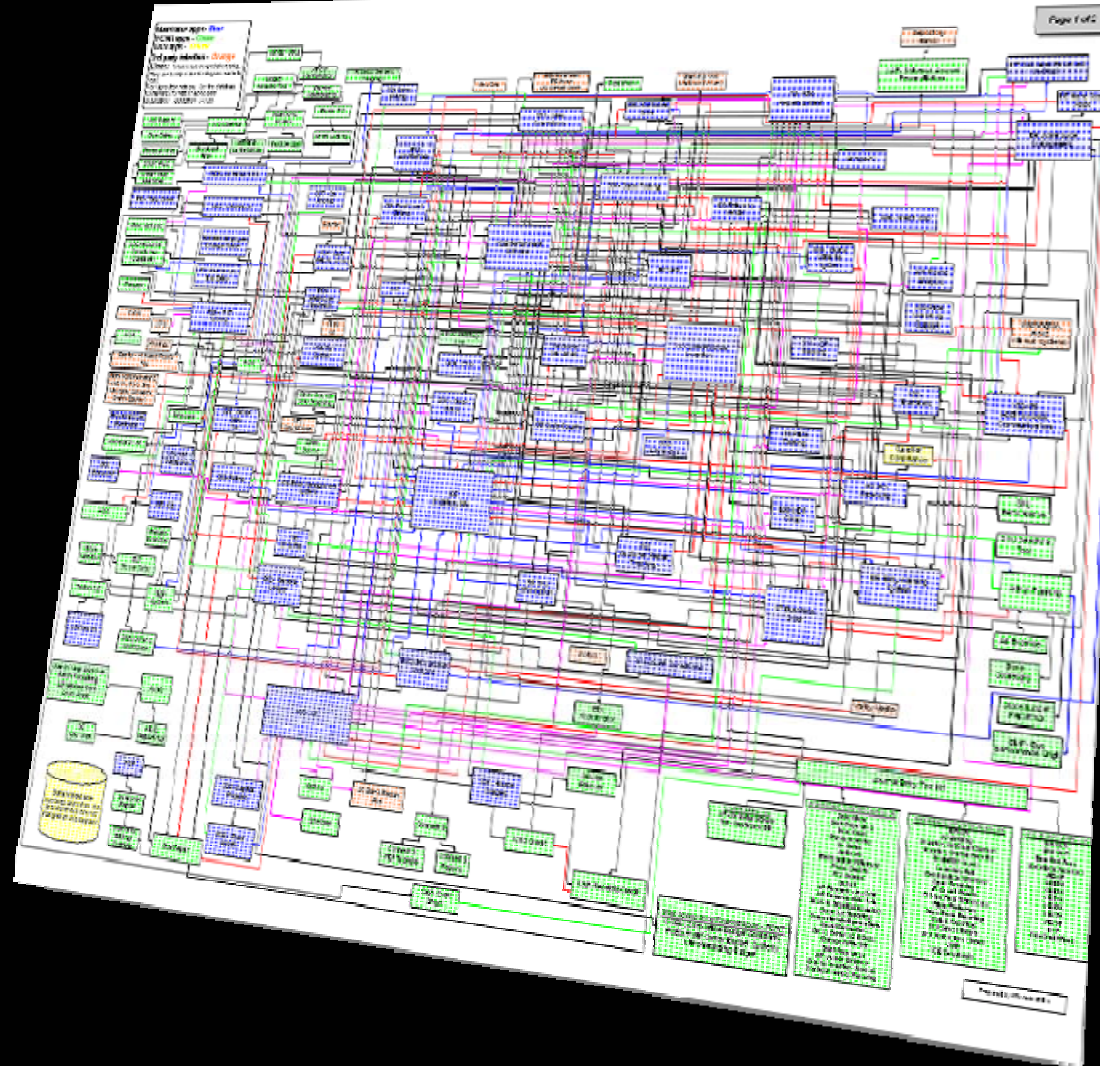
# SOA Productivity through Automating Business Processes

- The Challenge
- What is BPM?
- Four Keys to Success
- Reuse and Connectivity are key
- Getting Started



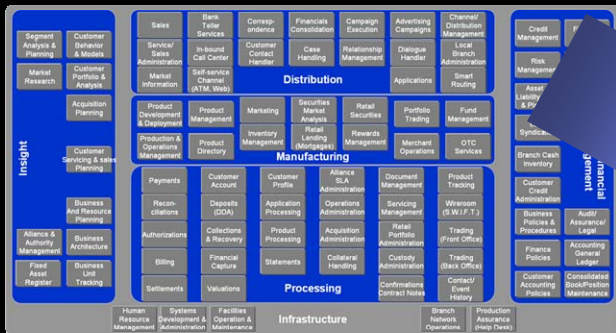
# What are the barriers to business flexibility and reuse?

- **Lack of business process and integration standards**
- **Architectural policy limited**
- **Point application buys to support redundant LOB needs**
- **Infrastructure built with no roadmap**

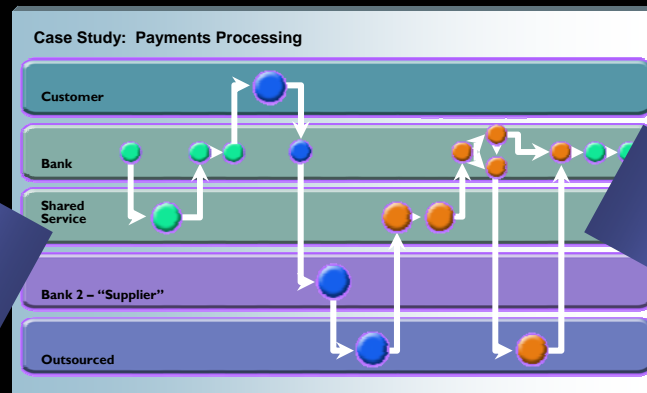


# Flexible business requires flexible IT

## Full Business view



## Process to optimize



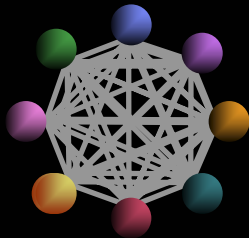
## Creating IT flexibility



# SOA builds flexibility on your current investments

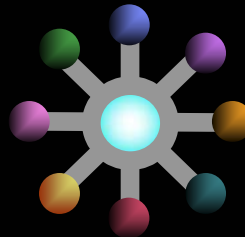
*The next stage of integration*

## Messaging Backbone



- Point-to-Point connection between applications
- Simple, basic connectivity

## Enterprise Application Integration (EAI)



- EAI connects applications via a centralized hub
- Easier to manage larger number of connections

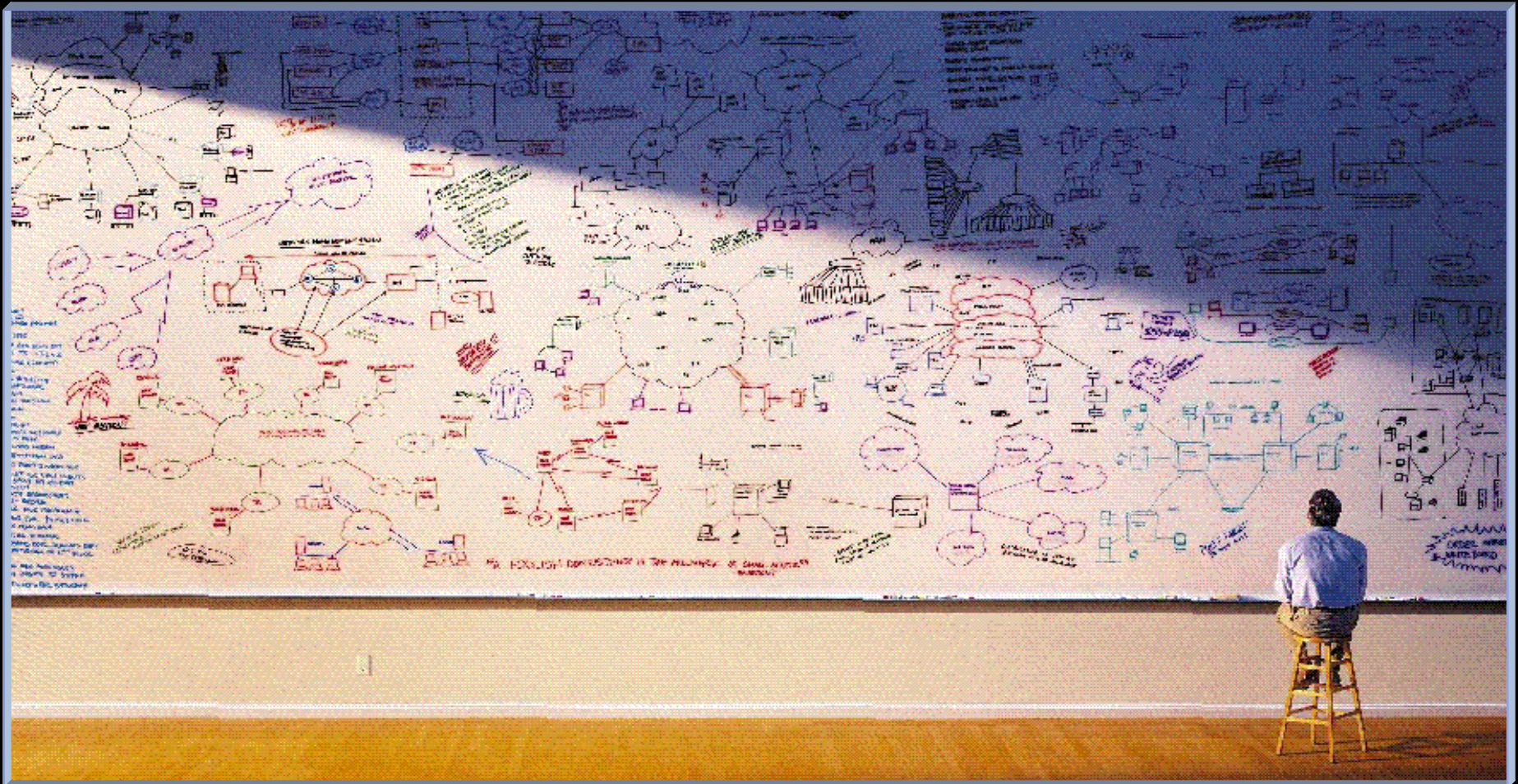
## Service Oriented Integration



- Integration and choreography of services through an Enterprise Service Bus
- Flexible connections with well defined, standards-based interfaces

**Flexibility**

# Where to Start?



# Business knows what it wants...and what's preventing progress

What businesses want:

What's preventing them:

A way to **change** their operational processes quickly...



...processes are inflexible or unclear

To deploy automated processes **fast**...



...integration challenges prevent timely implementation

A real time view of operations and be able to **intervene**...



...long lag-times and inadequate alerting mechanisms prevent insight or action

To see results and **value** fast...



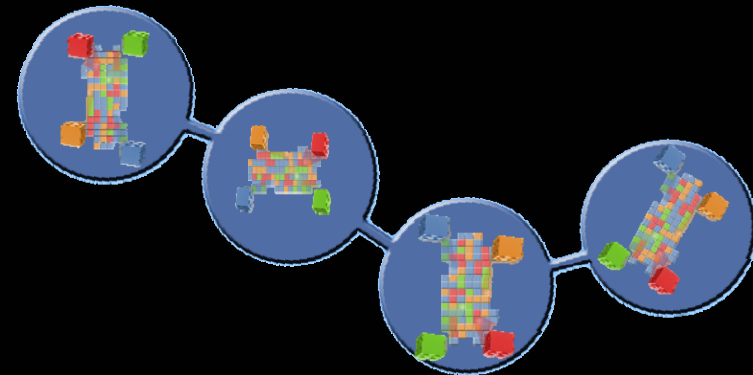
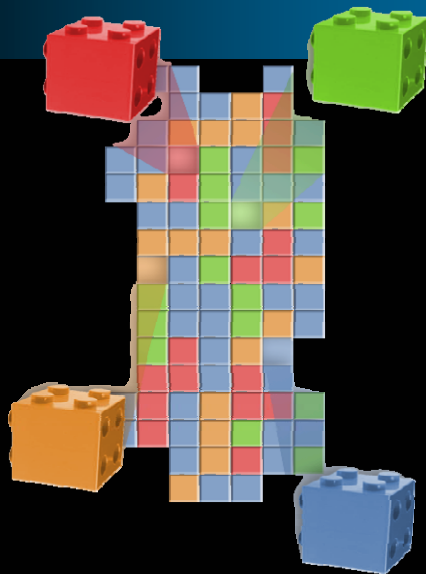
...changes had been expensive with long payback periods

***Companies Want Change At The Speed Of Business***

# Services Oriented Architecture changes the game

**SOA allows you**

**To create a set of related and integrated services that support a business process**



**SOA is at the core of BPM**

**SOA improves how you Design, Manage, and Optimize your business processes by enabling:**

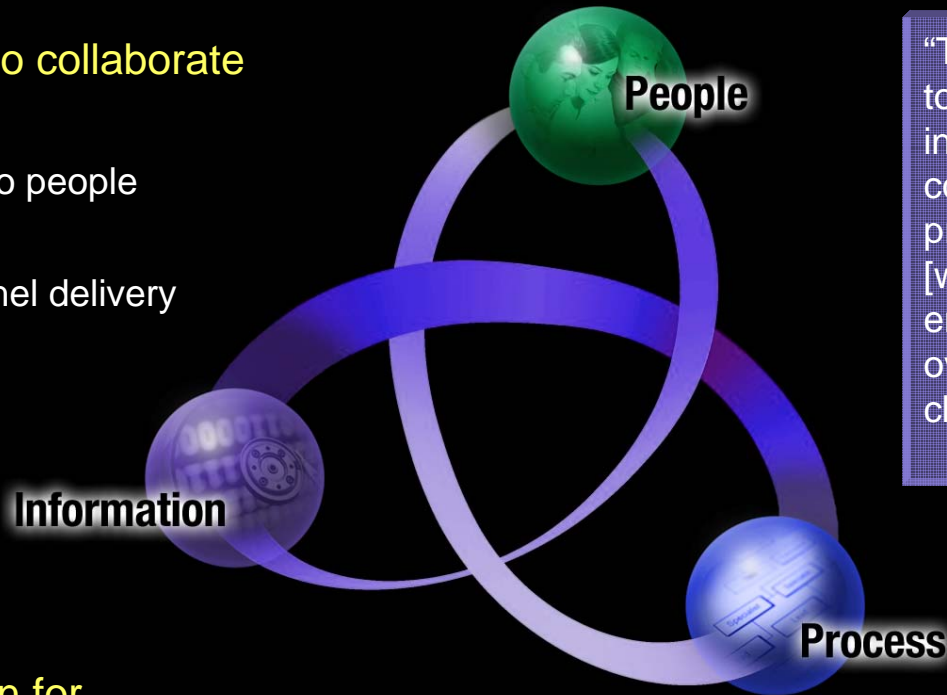
- **Solution Building Efficiency**
- **Reuse of existing assets**
- **Flexibility in change**



# Change Requires a Business Centric View of SOA

## Extend the ability to collaborate inside & outside

- Enhancing people to people collaboration
- Support multi-channel delivery



"Technology is certainly key to a successful SOA integration, [but] it is the coalescence of the people, process and information [with] business insight and emerging best practices for overall organizational change through SOA."



## Leverage information for business insight

- Deliver trusted information real time and in context
- Reduce risk and improve visibility into business operations

## Business model & process innovation

- Seamless coordination between automated and people/information driven business processes
- Increase organizational effectiveness

# SOA Entry Points Help Customers Get Started

*Both Business Centric and IT Focused*






# Deconstruct & Conquer: *The Component Business Model*

**Example: Consumer Packaged Goods**

- Seek external provider / external utility**
- Consolidate and/or create internal utility**
- Integrate and redesign**
- No action**

	Product Management	Customer Relationship	Manufacturing	Supply Chain & Distribution	Business Administration
<b>Strategy</b>	Category/Brand Strategy	Customer Relationship Strategy	Manufacturing Strategy	Supply Chain Strategy	Corporate Strategy
	Category/Brand Planning	Customer Relationship Planning	Supplier Relationship Management	Supply Chain Planning	Corporate Planning
<b>Tactics</b>	Brand P&L Management	Assessing Customer Satisfaction	Production and Materials Planning	Distribution Oversight	Business Performance Management
	Matching Supply and Demand	Customer Insights	Manufacturing Oversight		Inbound Logistics    Outbound Logistics
	Marketing Development & Effectiveness	Account Management	Supplier Control	Distribution Center Operations	
	Product Ideation	Value-Added Services	Make Products		Transportation Resources
<b>Execution</b>	Concept/Product Testing	Customer Account Servicing	Assemble/Pkg. Products	En Route Inventory Management	
	Product Development	Retail Marketing Execution	Plant Inventory Management		Accounting and GL
	Product Management	In-store Inventory Mgmt	Manufacturing Procurement	Indirect Procurement	
	Marketing Execution	Customer Directory		Facilities and Equipment Management	
	Consumer Service			HR Administration	
	Product Directory			IT Systems and Operations	

## Business Process Management with SOA allows companies to address and improve key business processes

BPM Type	Example*
<ul style="list-style-type: none"> <li>■ <b>People intensive</b> business processes, decisions and work flows</li> </ul>	<ul style="list-style-type: none"> <li>■ Employee on boarding</li> <li>■ Order to Cash</li> <li>■ Claims Processing</li> </ul> 
<ul style="list-style-type: none"> <li>■ <b>Document intensive</b> business processes, decisions and flows</li> </ul>	<ul style="list-style-type: none"> <li>■ Account payable</li> <li>■ Contract Management</li> </ul> 
<ul style="list-style-type: none"> <li>■ <b>System, Application, and Integration intensive</b> business processes, decisions and flows</li> </ul>	<ul style="list-style-type: none"> <li>■ Order fulfillment</li> <li>■ Straight-Through Processing</li> </ul> 

\*Source: Forrester

# Business Process Management with SOA allows companies to address and improve key business processes

## BPM Type

## Example\*

- **People intensive** business processes, decisions and work flows

- Employee on boarding
- Order to Cash



*“Pick business processes with pain points that the business clearly recognizes — processes for which the business most clearly needs end-to-end visibility, control, insight, and flexibility”*

- **System, Application, and Integration intensive** business processes, decisions and flows

- Order fulfillment
- Straight-Through Processing



\*Source: Forrester

# Harley Davidson Financial Services: Business Process Management with SOA

## Business Challenge:

*Creating financing programs quickly in support of marketing directions*

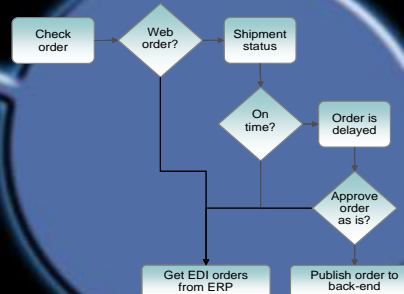
### Actions & Benefits:



Improve loan processing and flexibility by **uncoupling hard-wired integrations as services** using WebSphere Process Server



**Enable existing systems to integrate** and exchange data to increase financing options to dealers and customer



Financial Programs that map to Marketing Promotions can be done **faster and cheaper**

Capabilities used: WebSphere Process Server, WebSphere Information Server, WebSphere Integration Developer, and Adapters

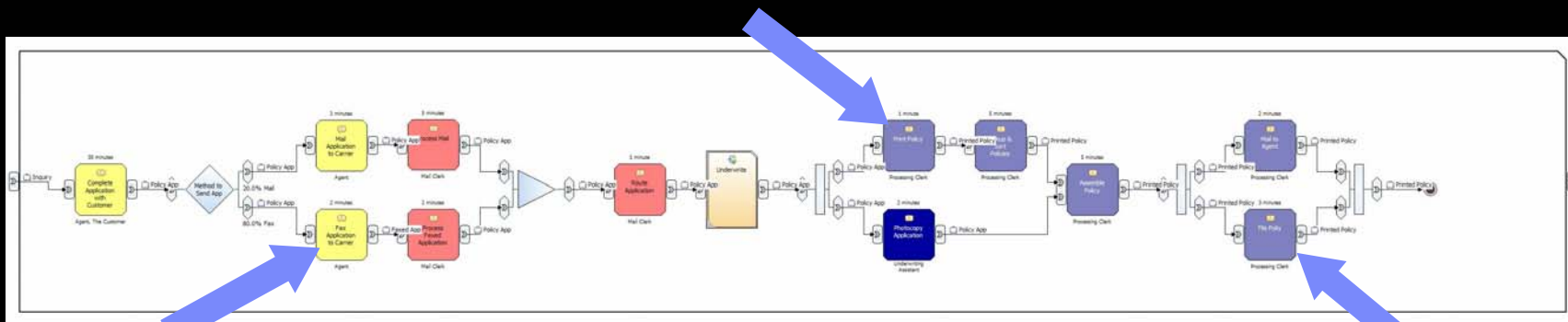
## Best Practices for a successful BPM with SOA implementation

1. Capture and modify your business processes to drive improvement
2. Bridge the gap between the business and IT
3. Build an IT Deployment Infrastructure using SOA
4. Use executive dashboards and scorecards to manage your business

## Best Practice #1

### Capture and modify your business processes to drive improvement

- Identify the core processes that differentiate your business
  - Import your existing process documentation, or
  - Create a new process model
- Identify the tasks that impact your process performance the most
- Modify your process model to create “To-be” scenarios



**67% of processes fail because their impact was not known prior to execution**

–Omar Sawy, *Redesigning Enterprise Processes For e-business*



# Best Practice #1 cont.

- Run simulation to calculate value of improvements
  - Compare and analyze Results

## Current State – Times & Costs

Case Analysis with Unlimited Resources

Probability	Average Process Time (min:sec)	Average Cost
32.91%	10:11	\$5.40
32.10%	3:11	\$1.67
15.01%	14:11	\$7.56
15.20%	3:21	\$1.77
4.78%	11:11	\$5.93

- 1 Direct mail, Complex
- 2 Direct Mail, Simple
- 3 Telemarketing
- 4 Email, Complex
- 5 Email, Simple

## Future State – Times & Costs

Case Analysis with Unlimited Resources

Probability	Average Process Time (min:sec)	Average Cost
35.57%	8:16	\$4.38
33.03%	1:51	\$0.96
13.51%	7:51	\$4.16
14.50%	1:54	\$0.96
2.39%	8:16	\$4.38

Lower processing time and costs



- Publish model for collaboration with the process team
  - Enable participation in reviews and modifications

## Best Practice #2

### Bridge the gap between the business and IT

- Create a process design team:
  - include both business and IT
  - assign owners and roles for processes design and management
- Tighter alignment assures a seamless handoff from business to IT for assembly and deployment



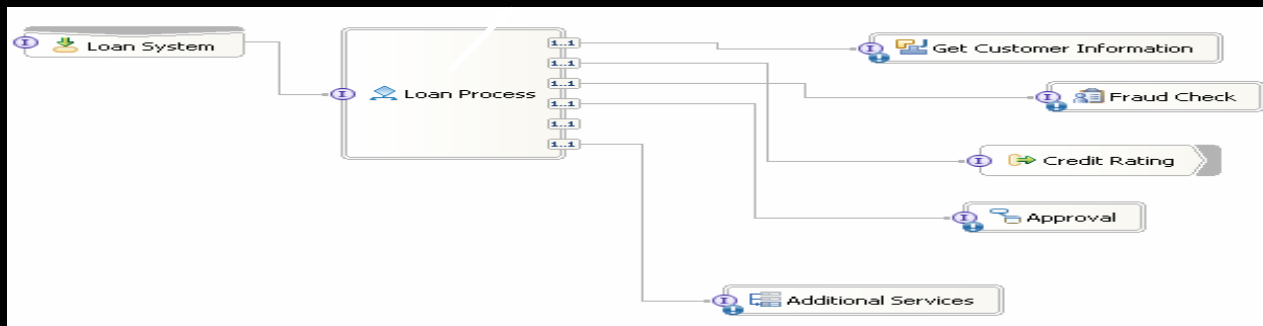
***“It is impossible to separate IT and business strategy. IT doesn’t support the business, it is the business.”***

*—Asiff Hirjim,  
CIO, Ameritrade*

## Best Practice #3

### Build an IT Deployment Infrastructure using SOA

- Simplified hand-offs between business and IT that let developers get started quickly
- Easy to use tools that minimize skill requirements to build composite applications
- Streamlined development with the reuse of existing resources
- Dynamic process assembly
- Utilize a single process server for human workflow, process choreography, and information sharing

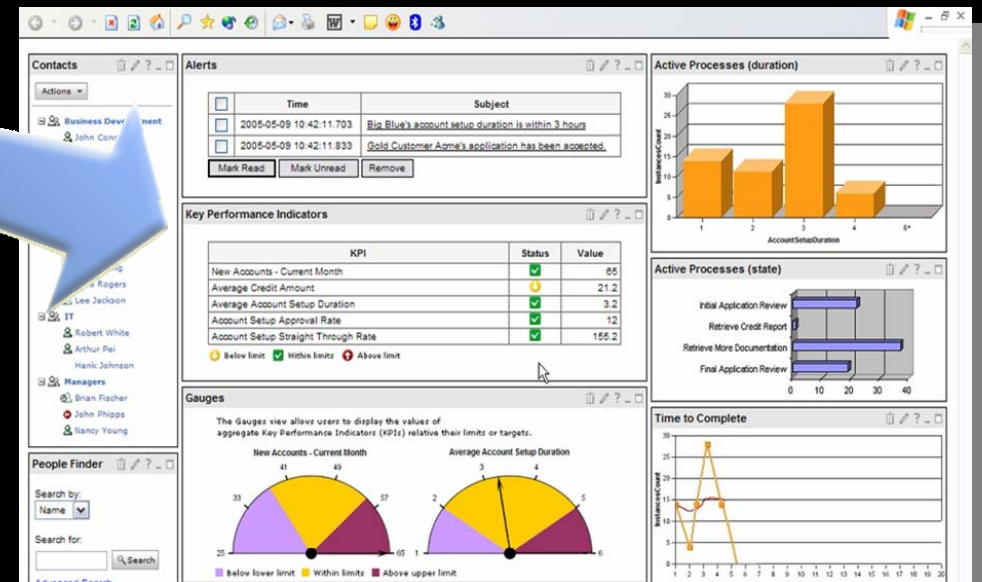
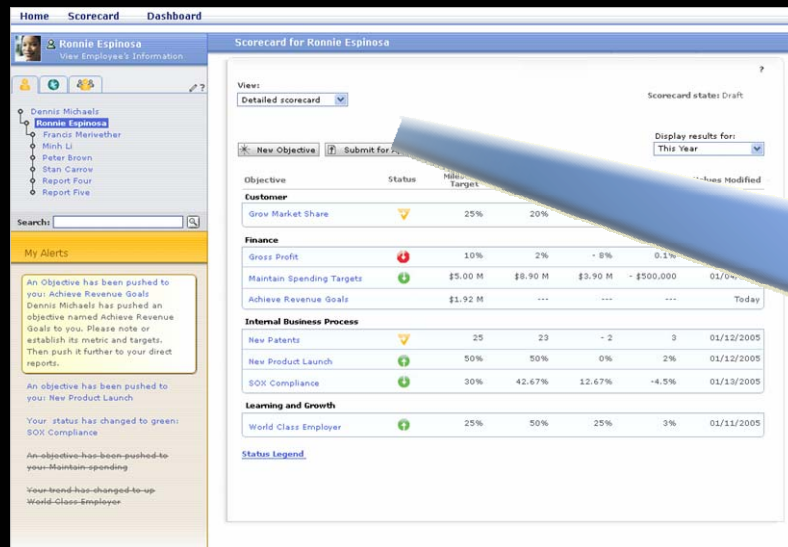


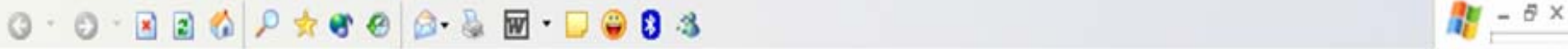
Example: Loan Process

## Best Practice #4

### Use executive dashboards and scorecards to manage your business

- View performance of processes through Key Performance Indicators
  - Track cost, time and resources
- Intervene in the process to ensure business is running in compliance
- Use data collected for continuous Process Improvement





### Contacts

Actions ▾

- Business Development
  - John Conrad
  - Jim Davis
  - Gloria Moor
  - Rob Fox
  - Olga Schmidt
- CSRs
  - Henry Lee
  - Gerald Brett
  - Anna Wang
  - Jane Rogers
  - Lee Jackson
- IT
  - Robert White
  - Arthur Pei
  - Hank Johnson
- Managers
  - Brian Fischer
  - John Phipps
  - Nancy Young

### People Finder

Search by: Name ▾

Search for:

Advanced Search

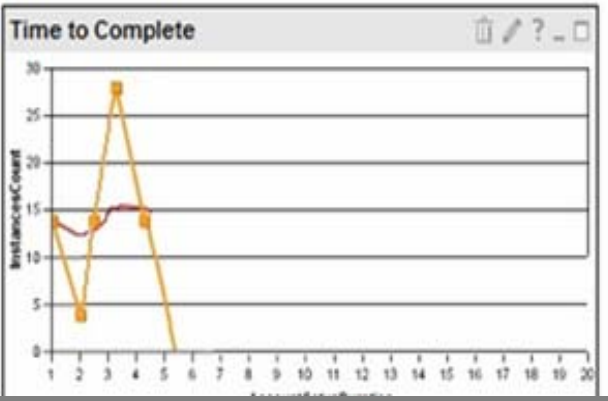
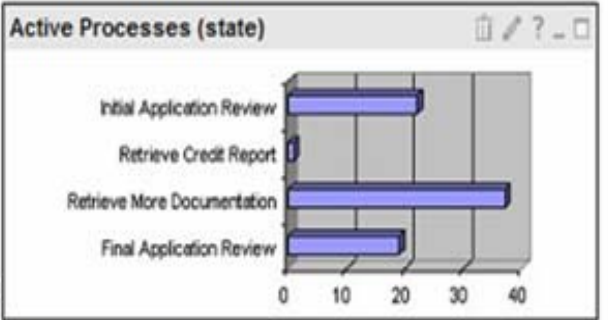
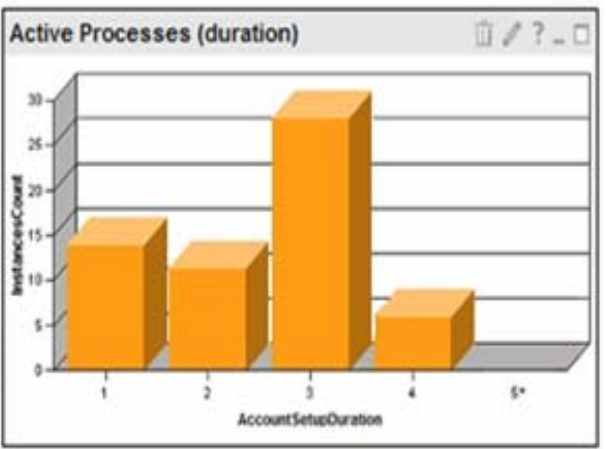
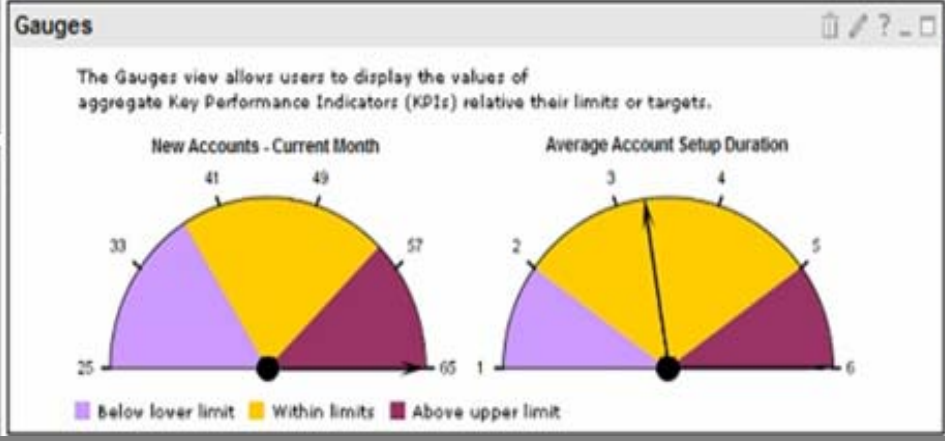
### Alerts

<input type="checkbox"/>	Time	Subject
<input type="checkbox"/>	2005-05-09 10:42:11.703	Big Blue's account setup duration is within 3 hours
<input type="checkbox"/>	2005-05-09 10:42:11.833	Gold Customer Acme's application has been accepted.

### Key Performance Indicators

KPI	Status	Value
New Accounts - Current Month	✓	65
Average Credit Amount	⚠	21.2
Average Account Setup Duration	✓	3.2
Account Setup Approval Rate	✓	12
Account Setup Straight Through Rate	✓	155.2

⚠ Below limit
✓ Within limits
⚠ Above limit



# New! Reuse for BPM: SOA Business Central

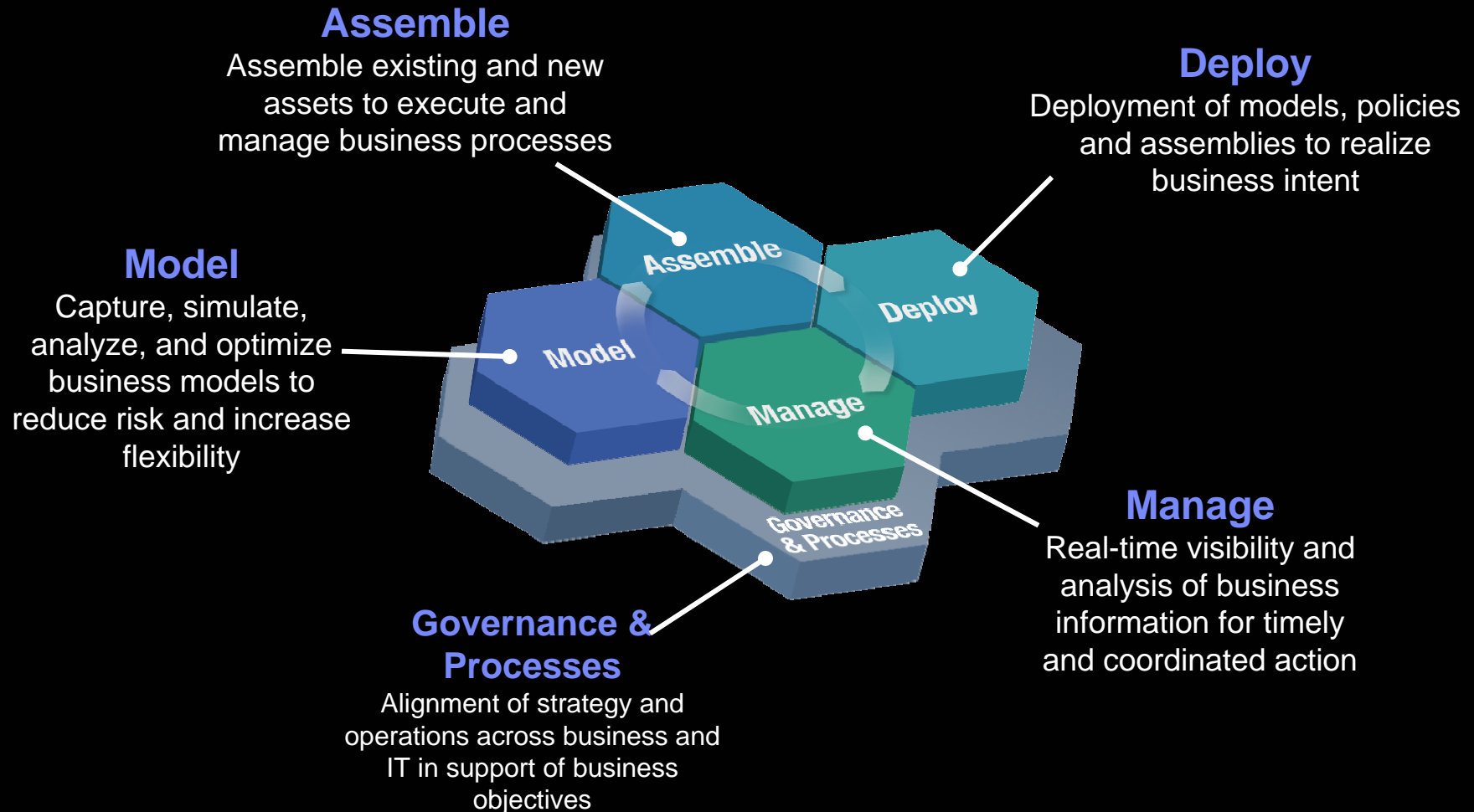
*Access point for Industry-Specific SOA offerings to speed deployment of Business Process Management solutions*

- Federated search across solution catalogs for SOA offerings
- Speed up SOA solution creation
- IBM & Partner SOA offerings

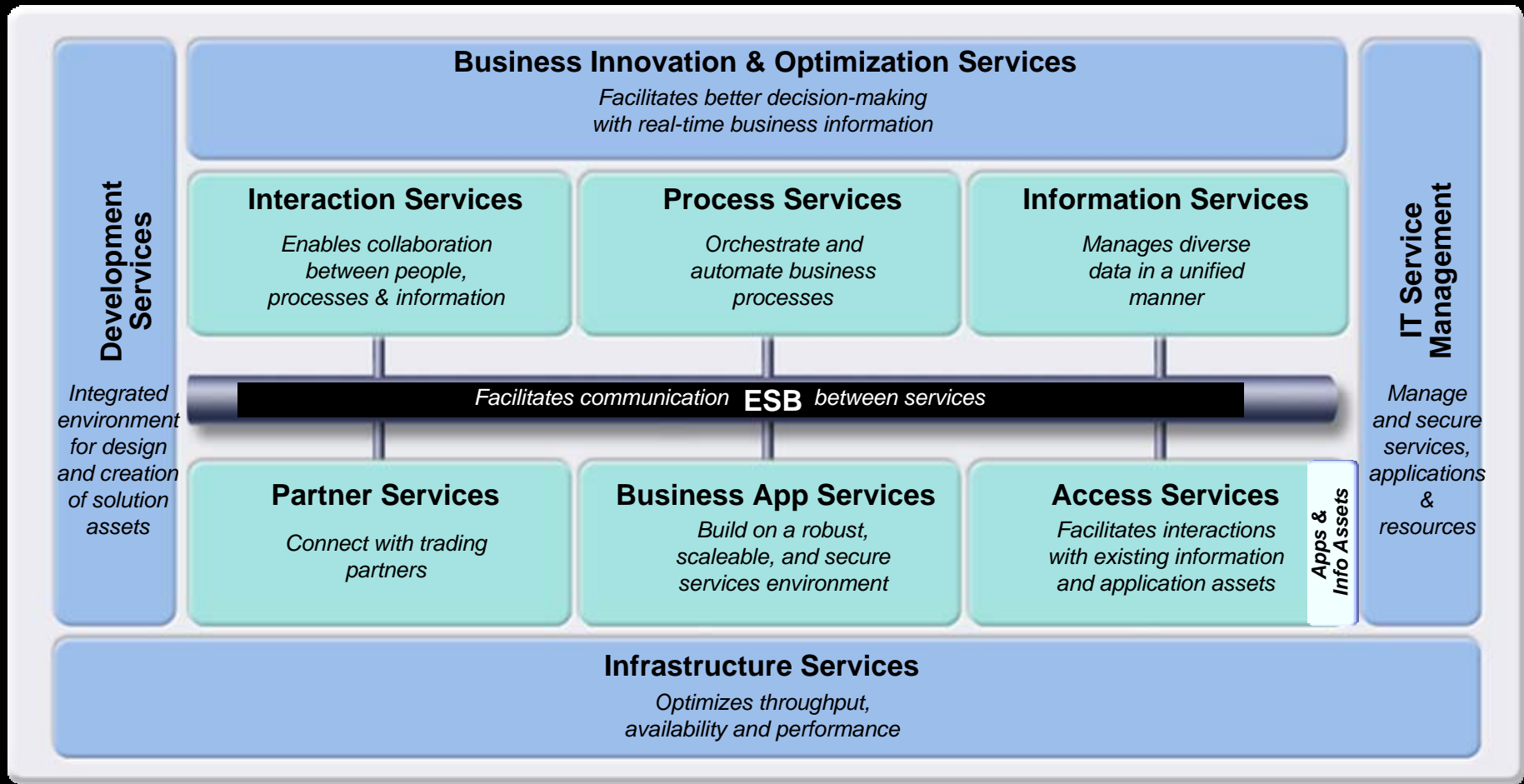


Industry-Specific assets  
Auto, Banking, Electronics and more  
Partners' SOA Assets

# The Goals of BPM are Achieved with the SOA Lifecycle



# Business process management leverages capabilities from across the SOA Reference Architecture





## Enhanced! SOA Announcements for Process



## Business Process Management

ENHANCED!

### WebSphere Business Modeler

- Hundreds of Process templates
- Enhanced analysis and simulation capabilities
- Process metric definition for Key Performance Indicators
- Interoperability with other modeling tools
- National language support

ENHANCED!

### WebSphere Process Server and Integration Developer

- Multiple platforms including System z availability
- National language support for BPM
- Complete toolbox for building composite SOA applications
- Real-time process enhancements; architected for reuse and flexibility

ENHANCED!

### WebSphere Business Monitor

- Real-time process visibility and modification
- Monitor process metrics and Key Performance Indicators
- Event triggers and alerts
- National language support

ENHANCED!

### DB2 Content Manager

- Formal, consistent, repeatable document processes
- Integration with WebSphere Process Server
  - Quick Start Toolkit - SCA components and objects to implement common interaction patterns
- Repository services for Workplace Forms
- Supports XML APIs



# Enhanced! SOA Announcements for Connectivity

## *Underlying Connectivity to Support Business Centric SOA*



## SOA Connectivity

**ENHANCED!**

### WebSphere ESB and Message Broker

- Support for System z and WAS ND
- Expose non-services applications as services
- DataStage TX plugin for Advanced ESB
- Advanced ESB availability on 64 bit platforms

**ENHANCED!**

### WebSphere DataPower Appliances

- Simplifies SOA with drop-in purpose-built devices
- Helps secure SOA and Web services
- Accelerates & scales SOA with high-performance XML processing



**ENHANCED!**

### WebSphere MQ & MQ Extended Security Edition

- Enhanced security for your SOA messaging backbone
- Message-based connectivity between applications or files
- Improved developer productivity with XMS

**ENHANCED!**

### WebSphere Adapters

- Rapid connection for hundreds of endpoints into your SOA
  - First class support for SAP and Oracle apps
- Enhanced support for data, messaging, Web services, Linux on System z

# Selecting a solution depends upon your requirements


	WebSphere Application Server or MQ	WebSphere ESB	WebSphere Message Broker	WebSphere Process Server *
		ESB	Advanced	Management
Web Services Support	*	*	*	*
Message Transport & Protocol Switching	*	*	*	*
Intelligent Routing & Message Logging		*	*	*
Event Driven Processing		*	*	*
Transformation of XML Data Formats		*	*	*
Transformation of non-XML Data Formats			*	
Complex Event Processing			*	
Sensor & Device Integration			*	
Native Integration with CICS & VSAM			*	
Third party JMS integration			*	
Process Modeling & Simulation				*
Process Choreography				*
Process Integration & Synchronization				*
Business Rules				*
Business State Machines				*
Human Workflow				*
Partner Management				*
Process Monitoring				*

# New! Creating & Reusing Services for SOA

*Create Flexible, Service-based Business Applications*

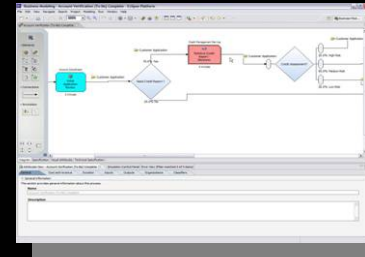
## SOA Sharing & Reuse



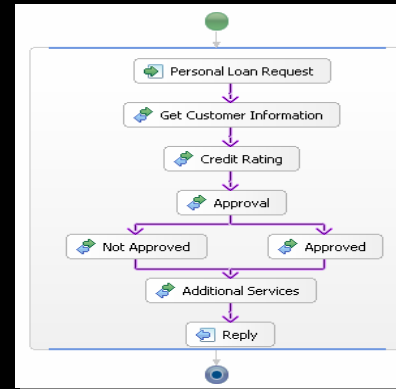
<p><b>NEW!</b></p> <p><b>WebSphere Service Registry and Repository</b></p> <ul style="list-style-type: none"> <li>▪ Repository for service metadata</li> <li>▪ Publish &amp; locate services</li> <li>▪ Capture service dependencies</li> <li>▪ Policy management</li> <li>▪ Interoperability across other registries and repositories</li> </ul>	<p><b>NEW!</b></p> <p><b>SOA Business Central</b></p> <ul style="list-style-type: none"> <li>▪ Comprehensive set of IBM and validated Business Partner developed SOA offerings for BPM</li> <li>▪ Industry- specific SOA assets and best practices for BPM</li> </ul> <p><i>Example: IFW (banking), IAA (insurance) and other industry models</i></p> 	<p><b>ENHANCED!</b></p> <p><b>WebSphere Application Server</b></p> <ul style="list-style-type: none"> <li>▪ Tooling and JDK 5 innovations for creating and deploying re-usable services</li> <li>▪ New &amp; Enhanced Web Services Standards                         <ul style="list-style-type: none"> <li>▪ Web Services Interoperability Basic Security Profile</li> <li>▪ Web Services Notification</li> <li>▪ Web Services Business Activity</li> </ul> </li> <li>▪ Integrated support for real-time multimedia elements</li> </ul>	<p><b>ENHANCED!</b></p> <p><b>Reuse of System z Assets</b></p> <ul style="list-style-type: none"> <li>▪ CICS Transaction Server                         <ul style="list-style-type: none"> <li>▪ Enhanced web services for better access to trusted, high quality applications</li> </ul> </li> <li>▪ WebSphere Developer for zSeries, Studio Asset Analyzer                         <ul style="list-style-type: none"> <li>▪ Visually compose services into process flows</li> <li>▪ Analyze applications for re-use</li> </ul> </li> </ul>	<p><b>ENHANCED!</b></p> <p><b>WebSphere Commerce</b></p> <ul style="list-style-type: none"> <li>▪ Consistent cross-channel experience through reuse of processes and data</li> <li>▪ Web, Contact Center, Store Kiosks, Gift Registry, Partner Sites and more...</li> <li>▪ Cross channel order processing through web services</li> </ul>
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# Business achieves its goals using BPM with SOA

- **Customers Understand their processes**
  - Document and validate current business processes, simulate “what-if” scenarios
  
- **Quickly assemble and deploy solutions**
  - Offers clear understanding of the businesses needs to construct processes on-demand
  - Allows new and changes to business processes quickly, flexible business
  
- **Monitor Processes to ensure optimization**
  - Improve business operations through process improvements



- **Optimize business**



- **Solution Building Efficiency**
- **Reuse existing assets**
- **Flexibility**

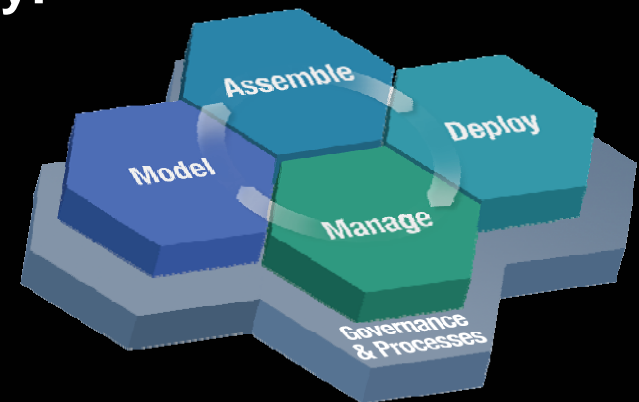


- **Responsiveness**
- **Monitor and manage critical business events**

## Why IBM WebSphere software for BPM with SOA?

### Nobody has the breadth or depth

- **IBM offers end-to-end BPM based on an SOA infrastructure**
- **IBM's BPM portfolio delivers rich functionality:**
  - Sophisticated Modeling/Simulation
  - Closed loop feedback
  - Extensive tooling
  - Best integration engine in the market



### Nobody can get you started faster

- **Extensive history and leadership in legacy and application integration—critical aspects of BPM**
- **Leading best practices**
- **Unmatched industry expertise**
- **SOA Business Central**
  - Hundreds of pre-existing process models to speed time to value

***“BPM from IBM leads in Market share”***



THANK  
YOU