



IBM Software Group

# SOA\* based Business Process Management

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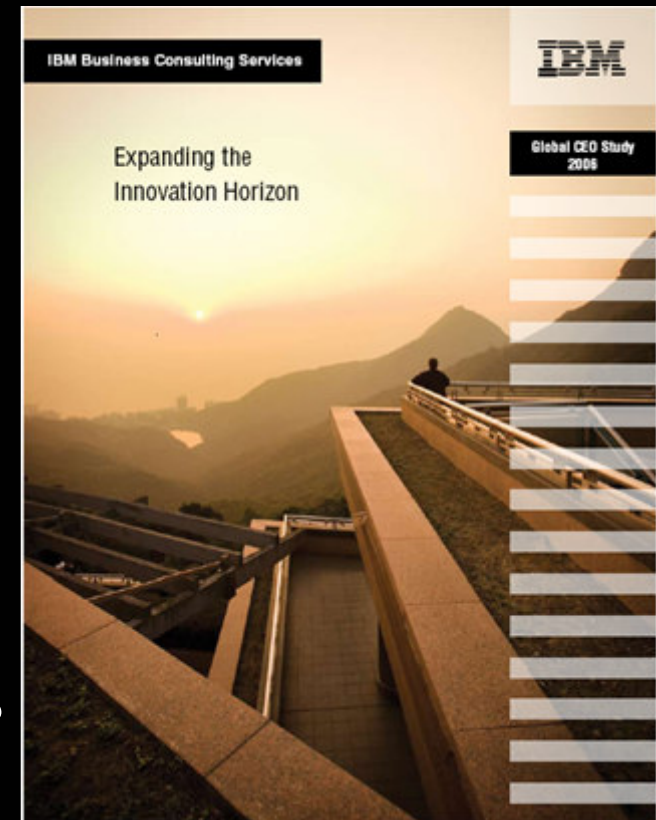


\*SOA = Service Oriented Architecture

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# Agenda

- What is the Top Focus for Business?
- Why SOA? – What SOA can deliver
- Market Opportunity
- Why SOA with IBM WebSphere?
- How to engage with IBM SOA / WebSphere?



## The Top Focus for Business: Innovation & Change

- Due to competitive and market forces, CEOs plan to radically change their companies in the next 2 years.
- > 80% of CEOs stated their organizations have not been very successful at managing change
- The Goal: Strategic Flexibility Through Innovation

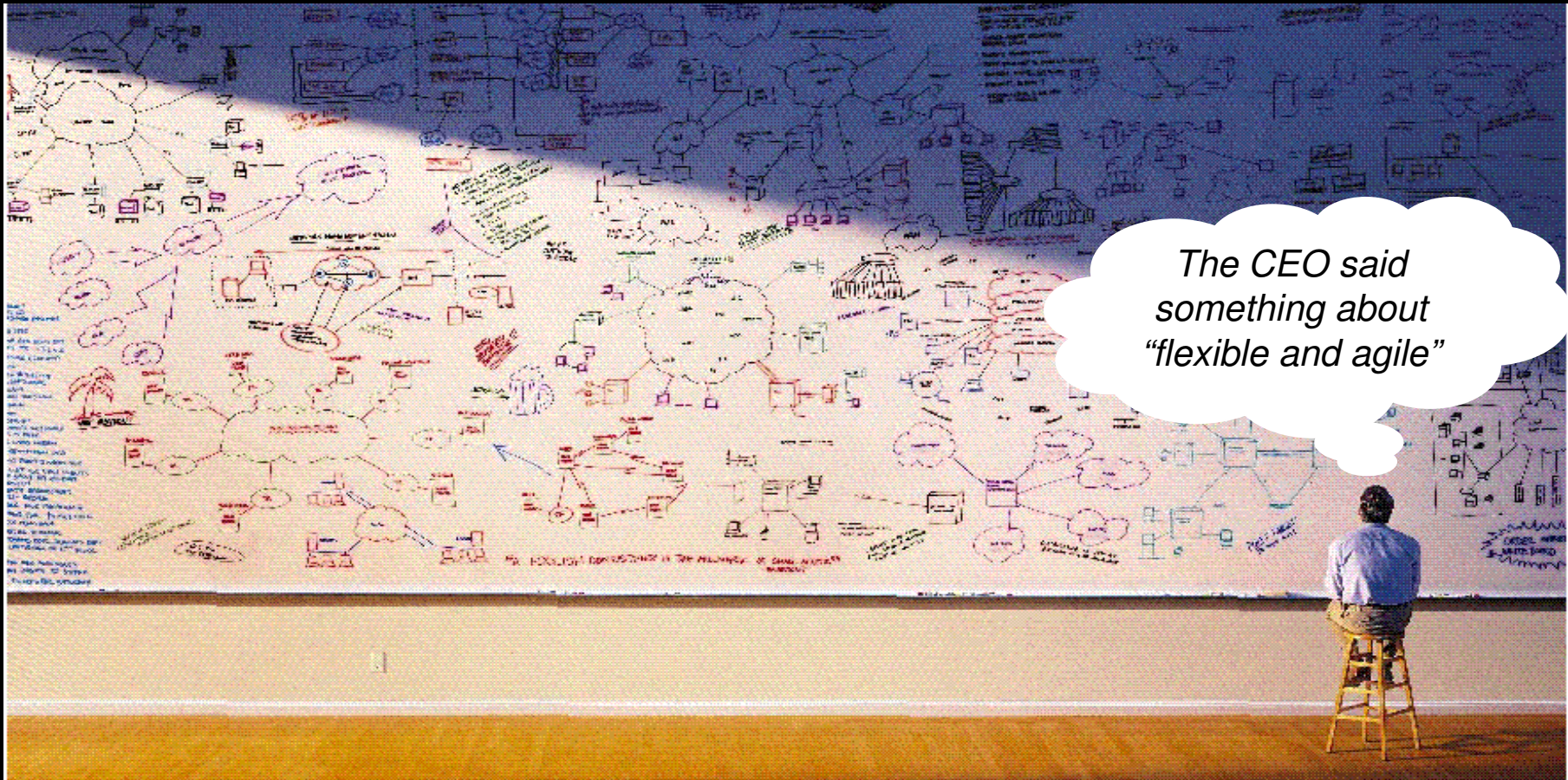


*87% of CEOs believe fundamental **change** is required in next two-years to drive innovation*

*Source: 2006 IBM Global CEO Survey*

*Innovation is all about change. SOA makes it easier to change.*

# The business problem

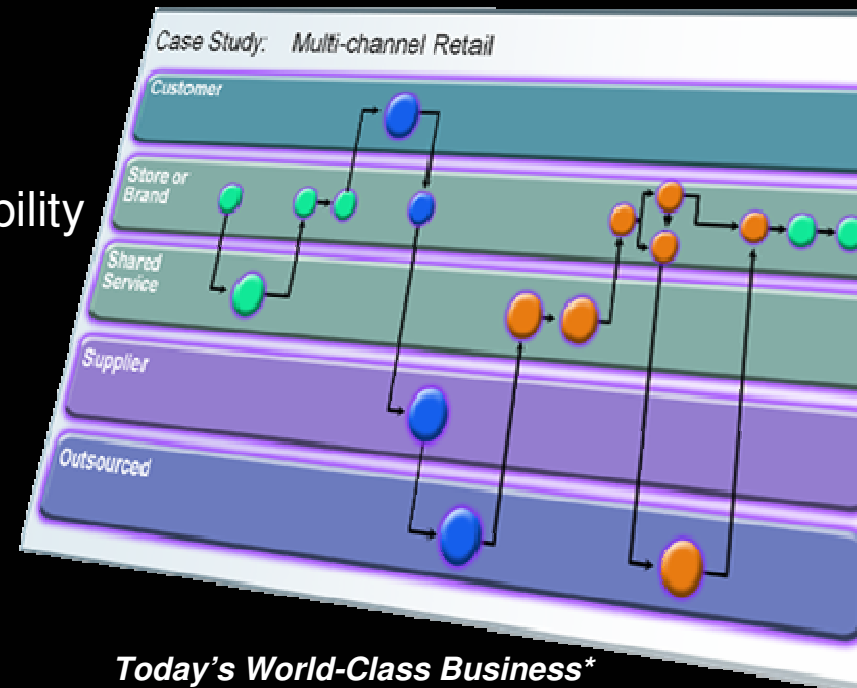


# Services Oriented Architecture (SOA): Strategic Flexibility as Change Agent

1. Today, innovative Change is key for success. Business Models & Business Processes will be a focus area for such change.
  - ❖ Current IT structures are roadblocks and not facilitators for change
  - ❖ Monolithic, inflexible applications or
  - ❖ Non integrated “Islands of Automation”
2. Business Process Management needs Flexibility and Speed
  - ❖ You can't manage what you can't change
3. Reuse of existing assets
4. Gap between Line-of-Business & IT

**→ SOA can deliver on all of that**

*Traditional Business\**



*Today's World-Class Business\**

## The Basics: What is SOA?

### ... a service?

A **repeatable business task** – e.g.,  
check customer credit;  
open new account



### ... service oriented architecture (SOA)?

An IT **architectural style** that supports  
integrating your  
business as linked  
services

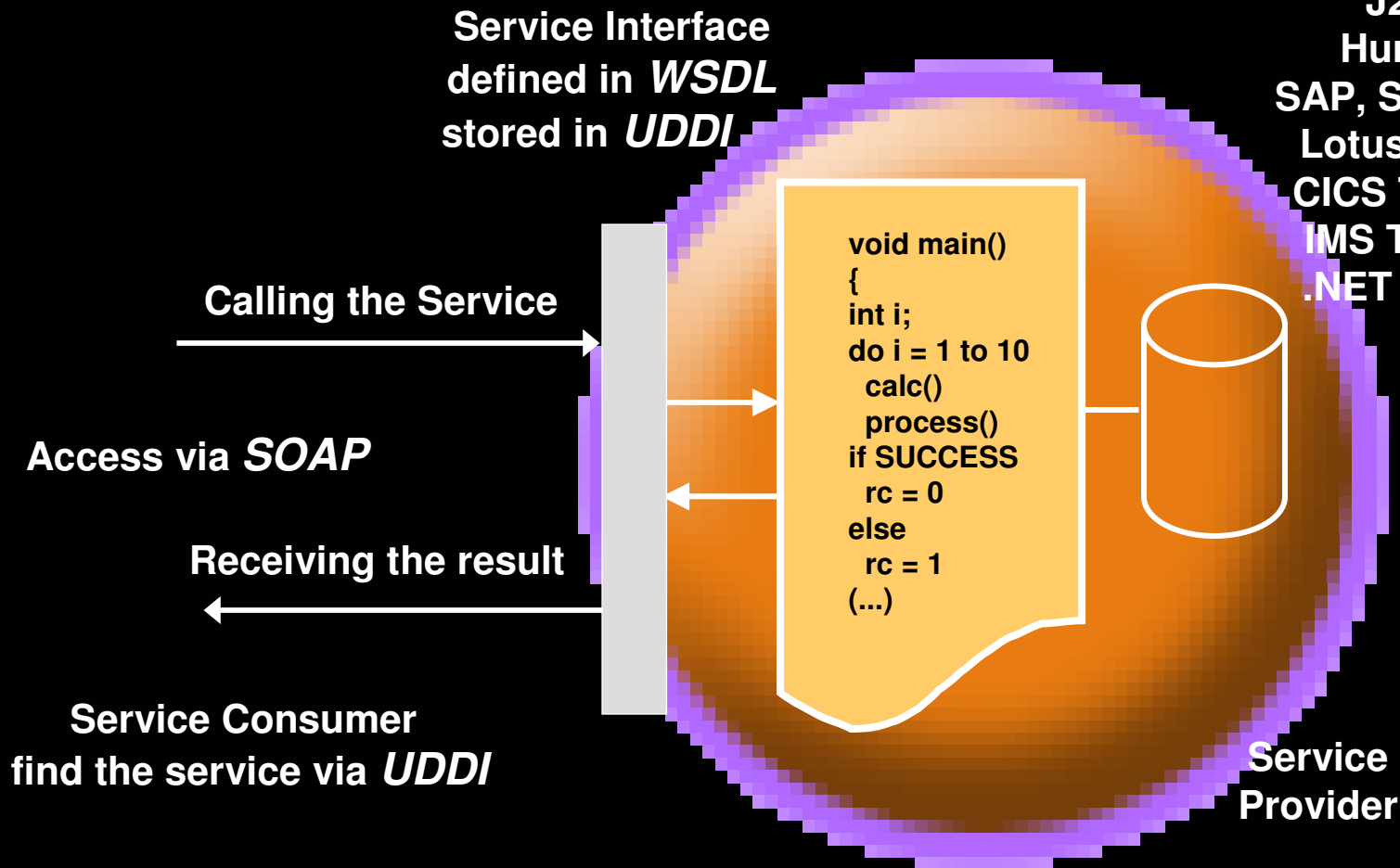
“Anything that changes can do that much better if the system is architected in SOA.”

**Gartner**

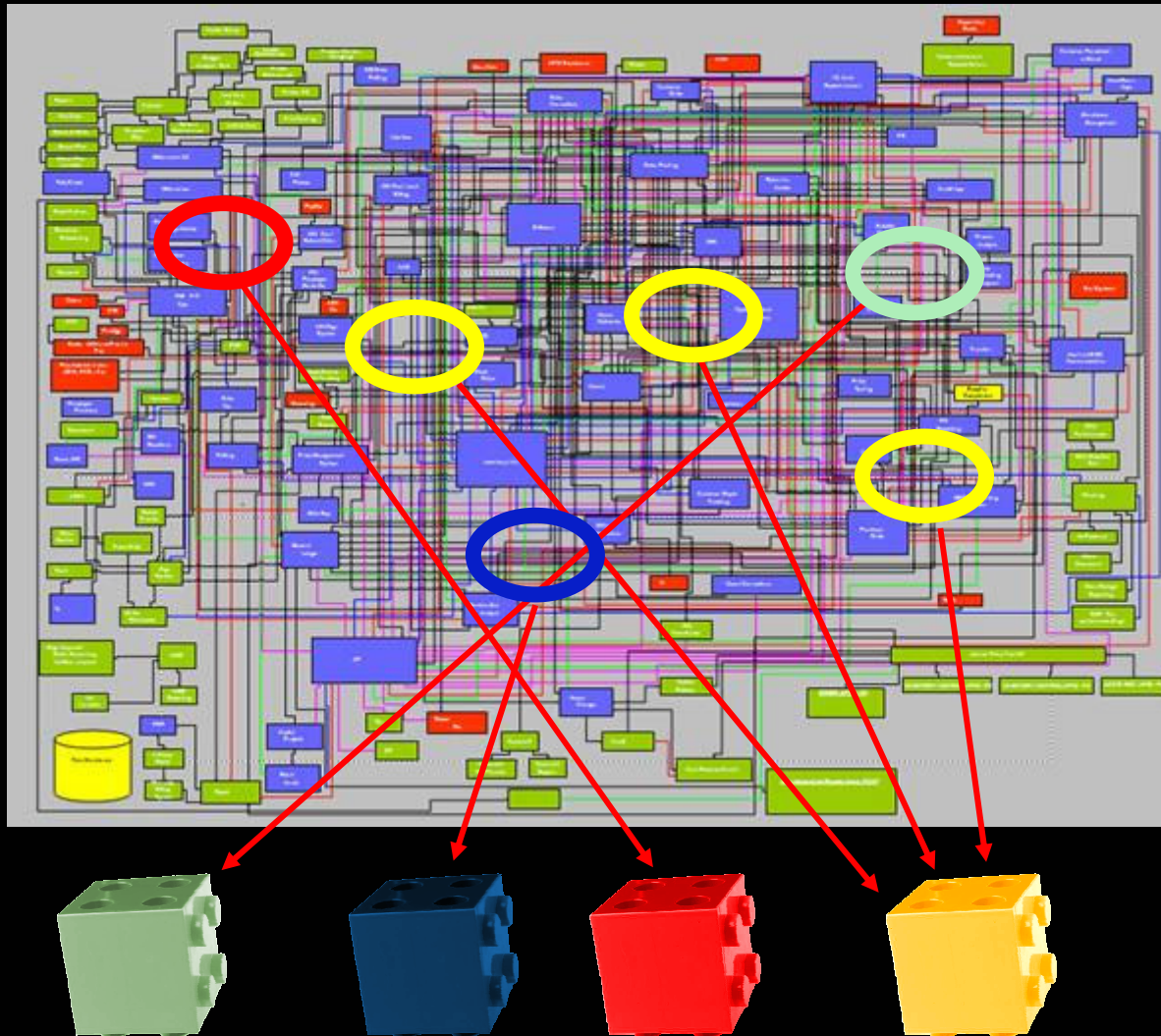
# Package Business Functionality as Service

Service can be:

- J2EE App
- Human Task
- SAP, Siebel, Oracle
- Lotus Notes App
- CICS Transaction
- IMS Transaction
- .NET application
- .....



# Reuse: Create a Service from existing applications



## *Step 1*

**Identify the Business Service – the basic SOA building block**

## *Step 2*

**Locate the service components**

## *Step 3*

**Construct the interface**

## *Step 4*

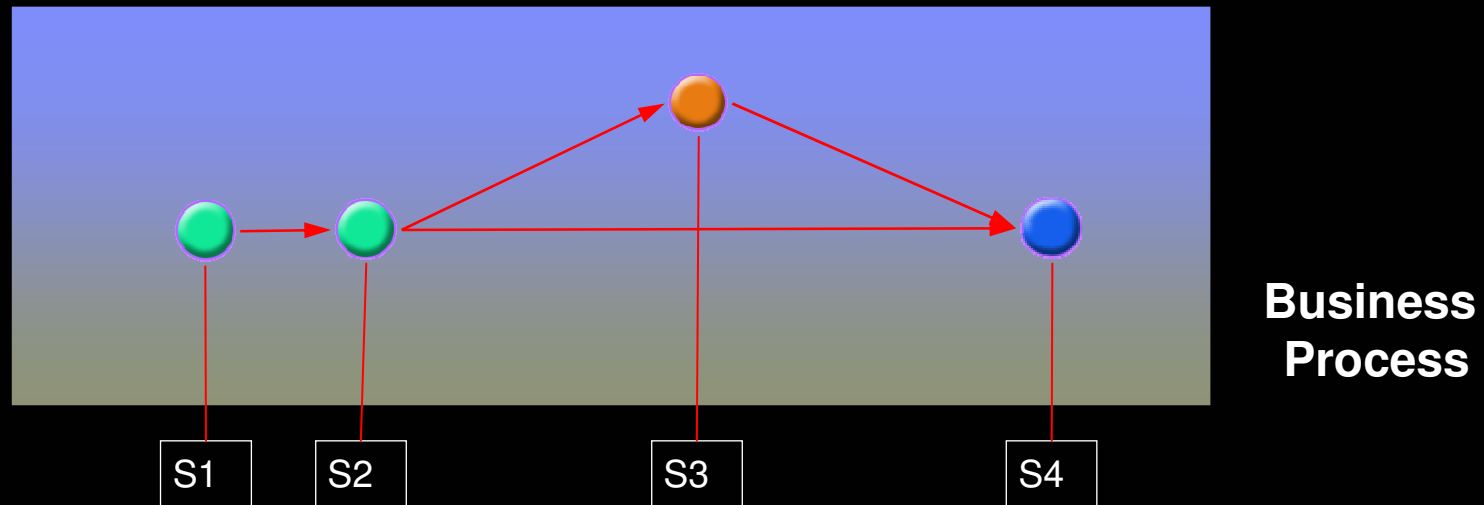
**Repeat**



# Integrate Services into Processes: Process Choreography

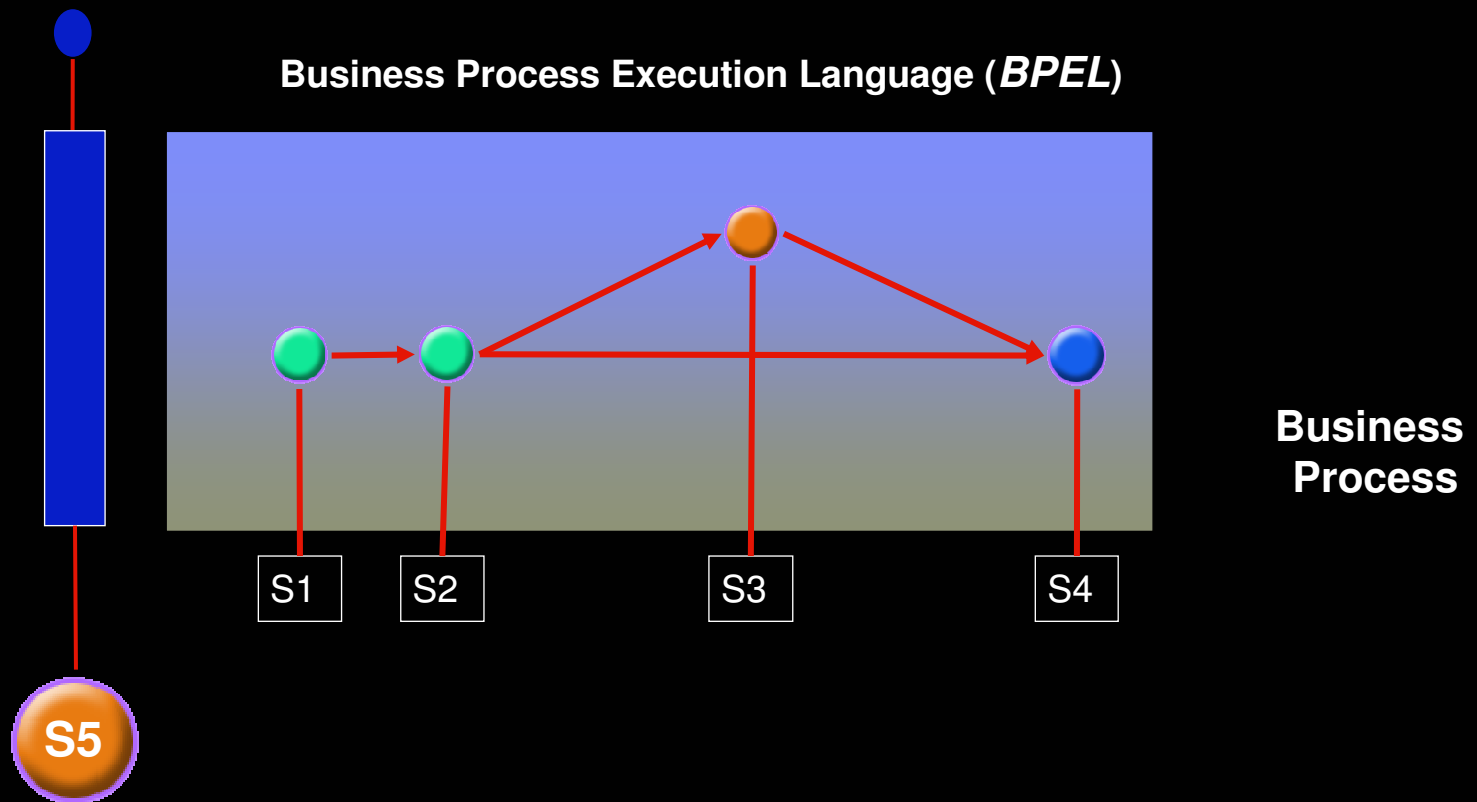
## Process Choreography

Based on Business Process Execution Language (*BPEL*)

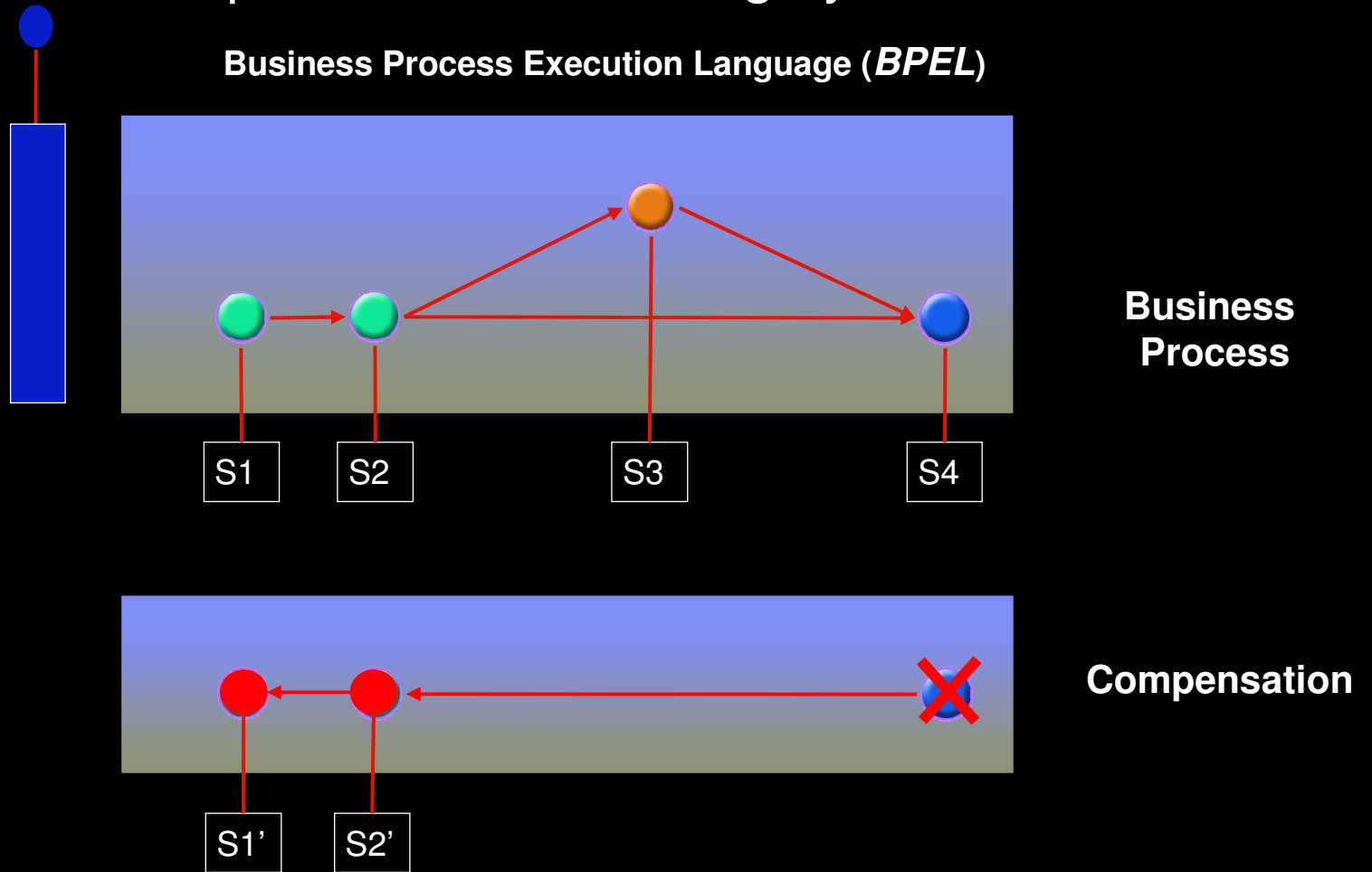


**BPEL is meaningful to line-of-business people !**



# Processes can (again) be packaged as higher level Service

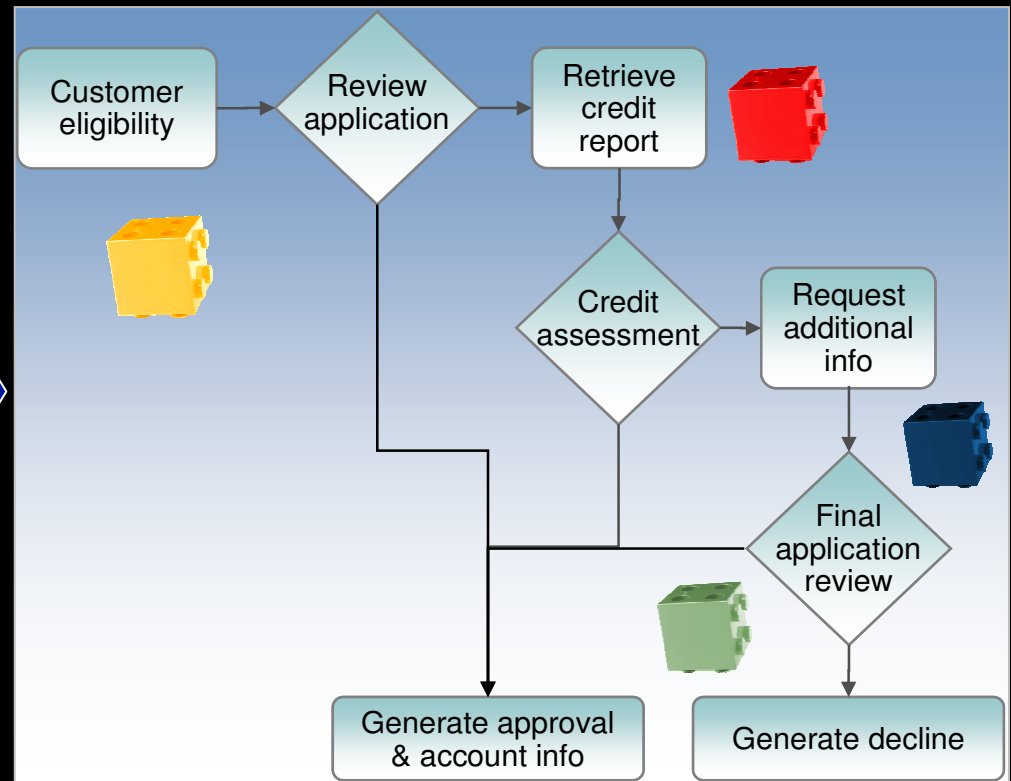
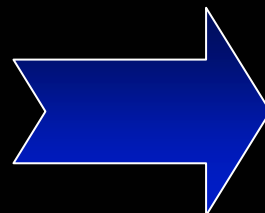


# Process gets interrupted? Compensation keeps transactional integrity



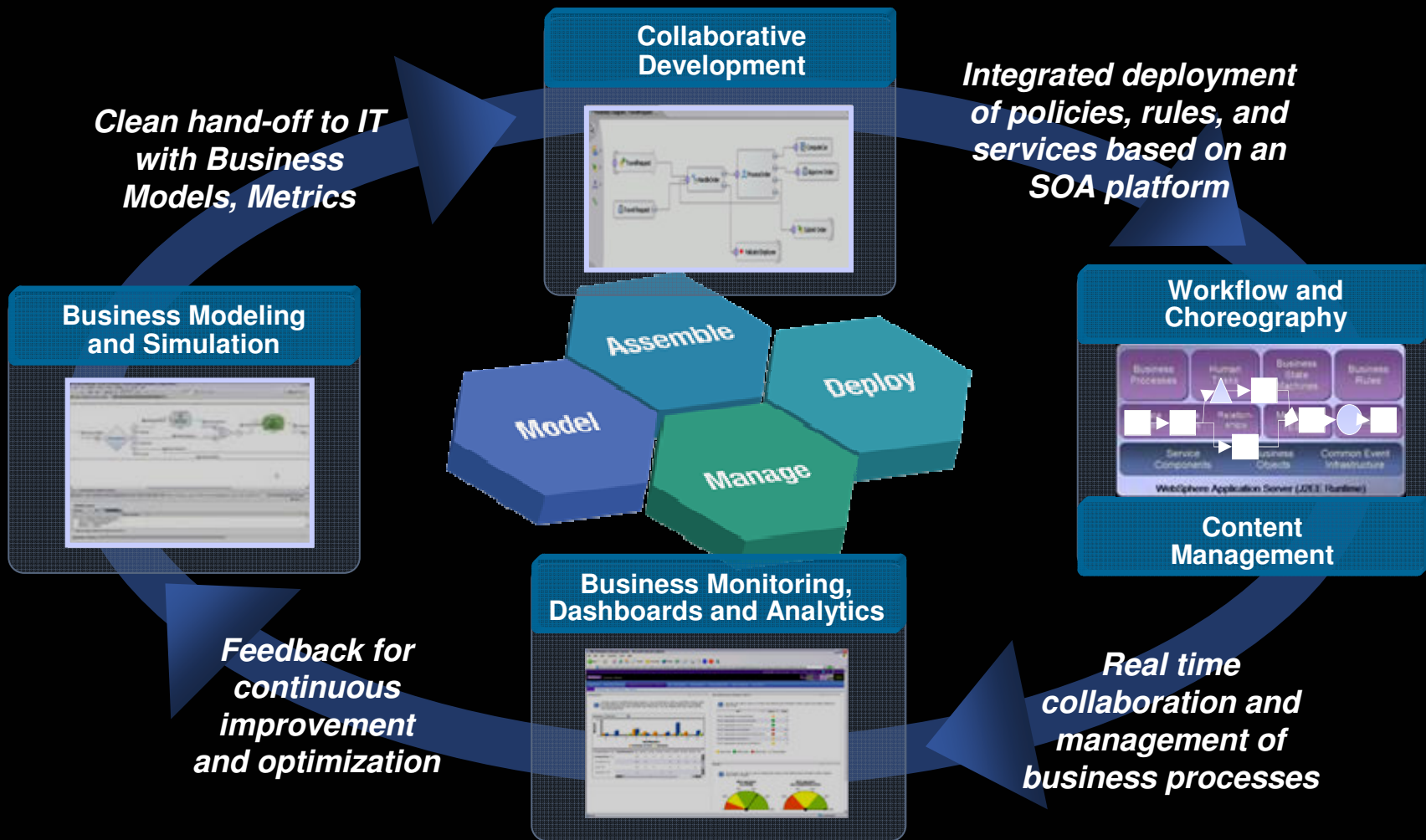
# Now that applications are rendered as services.... ...the Business Process is implemented by integrating services

-  Determine Customer Eligibility
-  Retrieve Credit Report
-  Request additional info
-  Generate decline
- Etc....



# Flexible Business Process Management enabled by SOA

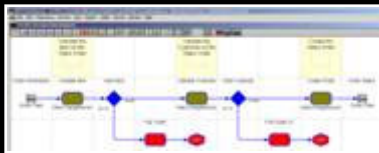
## Full support of BPM life cycle



# Business Process Management by IBM WebSphere

**Flexibility**

Line of Business



Business Process Model

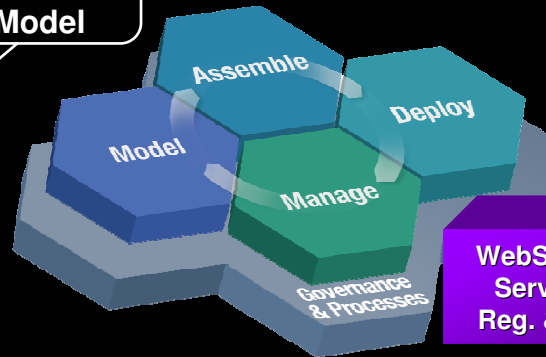
WebSphere Integration Developer

IT Department



**Speed**

Web Services BPEL



WebSphere Business Modeler

WebSphere Services Reg. & Rep

WebSphere Process Server

Key Performance Indicators

Real time Process data

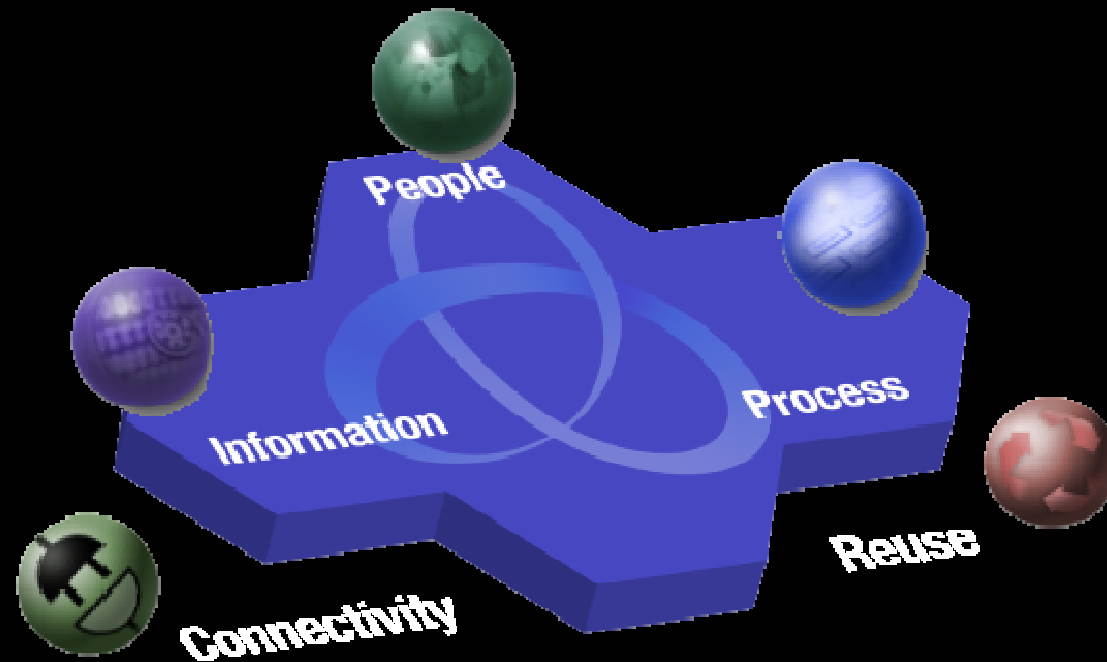
WebSphere Business Monitor

**Close the IT-LOB Gap**

**Investment Protection  
Reuse**

\* = WebSphere Services Registry & Repository

SOA seems to be such a Big Thing.....  
How Do Companies Get Started?  
With the SOA Entry Points!  
*Both IT Focused and Business Centric*



## SOA Entry Point: People

*Stays on top of global logistics market with IBM SOA solution*



**WORLDWIDE NETWORK FOR YOUR NON-FERROUS METAL BUSINESS**

### Value of People

- Improve people productivity & collaboration

### Why SOA?

Composite applications created, deployed, and updated faster with SOA portlets

## PACORINIGROUP

### Business Challenge:

- ✓ Provide user-friendly tools for employees and better solutions for customers and partners
- ✓ Position company for future growth

### Actions:

- ✓ Enhanced user interactions with portal providing simplified, SOA-enabled access to order and warehouse applications

### Business Value:

- ✓ More consistent customer services
- ✓ More efficient order management
- ✓ Faster response to customer and employee needs



Enhanced!

# IBM WebSphere Portal Version 6.0

*Meeting the New Requirements for the Front-End of SOA*



- Rapidly Respond to Change
- Easy-To-Use Composite Application Templates
  - Samples
  - Flexibility to easily customize interfaces
  - Leverage new workflow builder
  - Portlet Palette & Enhanced Portlets
- Increase Productivity and Operational Efficiency
  - Enhanced IBM Workplace Web Content Management



*“Through 2007, an enterprise portal will be the first major application of SOA concepts for more than 50 percent of enterprises (0.6 probability).”  
Gene Phifer, Gartner*

# SOA Entry Point: Information Improves agility *with IBM SOA*



*Chao Yang District*

## **Business Challenge:**

- ✓ Lack of trusted information
- ✓ Technology could not meet business needs

## **Actions:**

- ✓ Deployed a Grid City Management Solution based on service orientation approach

## **Business Value:**

- ✓ Solve information silo
- ✓ Flexible & scalable framework
- ✓ Improve efficiency



## Value of Information

- Improve operations with trusted information services delivered in-line and in-context

## Why SOA?

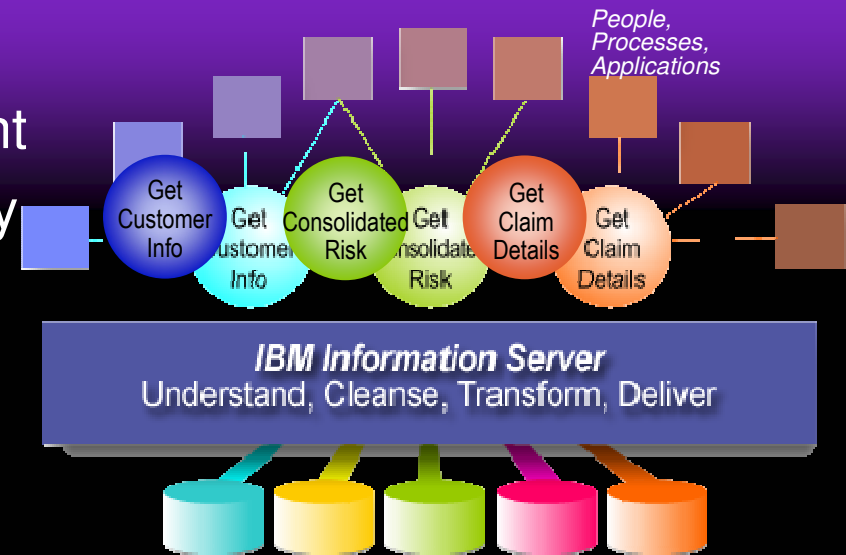
Trusted information packaged as services are embedded inline within processes or delivered to people

# IBM Information Server

## *A Complete Information Infrastructure*



- Rapid information service deployment
- Auditable data quality and traceability
  - Foundation for trusted information
- Metadata-driven integration
  - Breakthrough productivity and flexibility
- Consistent, reusable information services
- Accelerated time to value
  - Proven, industry-aligned solutions and expertise



*“Effective SOAs include robust data services within an enterprise information management enabling infrastructure.” Gartner Inc, 2006*

# SOA Entry Point: Process

## *Creating Financial Programs with IBM SOA*



### Value of Process

- Optimize business process quickly with flexibility
- Create, reuse, assemble and orchestrate services, connected and re-deployed more flexibly and quickly

### *Harley Davidson Financial Services*

#### **Business Challenge:**

- ✓ Improve loan processing
- ✓ Support frequent changes in financing promotions

#### **Actions:**

- ✓ Service-enabled existing systems allowing for rapid re-assembly
- ✓ Created loosely-coupled process as services for flexibility

#### **Business Value:**

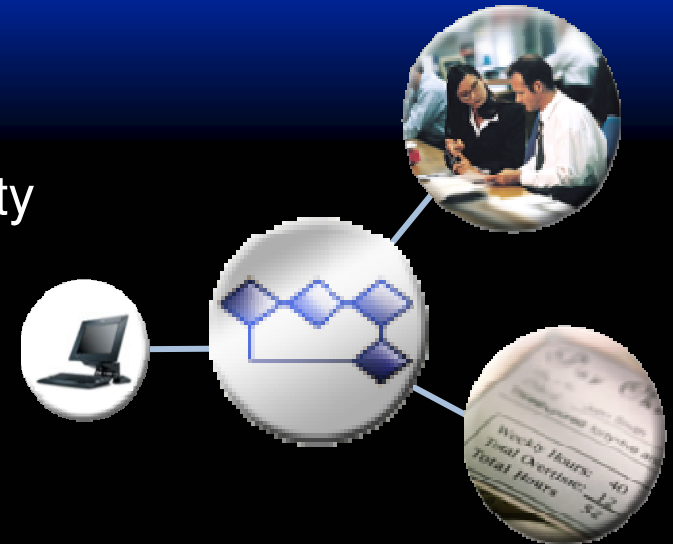
- ✓ Alignment of IT systems with business initiatives
- ✓ Faster and cheaper process changes

Enhanced!

# WebSphere Process Server

## *The Engine Room of Business Process Management*

- Robust execution of business processes
- Supports all aspects of process integration
- Rapid process change ensuring business agility
  - Reuse existing services
  - Business rules can change dynamically
- What's New
  - Enhanced human-centric BPM capabilities
  - New dynamicity features
  - Cross-product integration
  - Enhancements to relationships, state machines, business rules and mappings



# SOA Entry Point: Reuse

*Delivering a faster, flexible and easier to use solution*



## Business Challenge:

- ✓ Integrate heterogeneous systems from mergers to enhance productivity

## Actions:

- ✓ Service oriented middleware layer to exchange data with existing legacy systems including mySAP

## Business Value:

- ✓ Improved to 100% consistency of order data across applications
- ✓ Improved month-end closing times from 13 days to 2
- ✓ Shortened shipping time: from 7 weeks to 4
- ✓ Reduced component development time from 26 to 17 days

## Value of Reuse

- Protect existing business logic
- 5X less expensive than to write new
- Significantly lower risks and faster time to market

# SOA Entry Point: Connectivity

## *Improve Customer Service with IBM SOA*



### Value of Connectivity

- Deliver services through new business channels
- Flexible connections with trading partners
- Minimize complexity

### Business Challenge:

- ✓ Custom coding for integrating new and existing applications reducing productivity and increasing costs

### Actions:

- ✓ Standardized application integration using Web services and ESB

### Business Value:

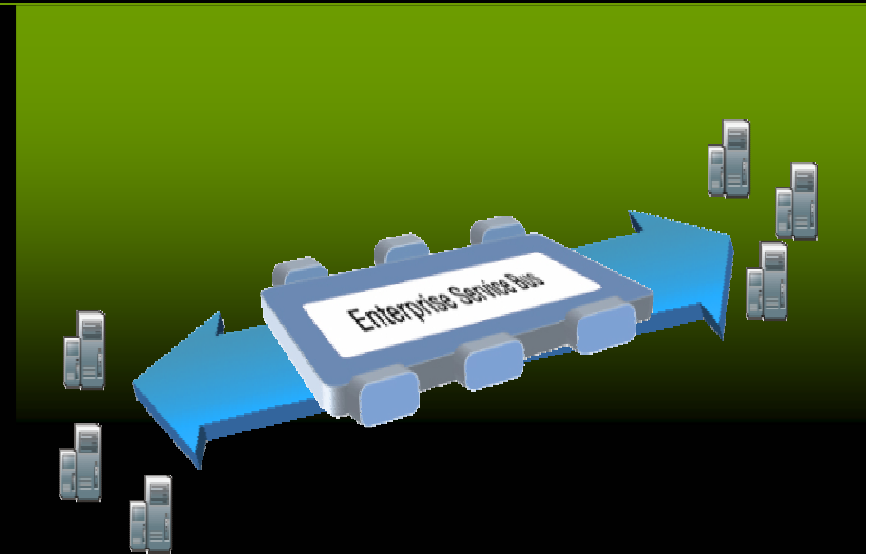
- ✓ 100% payback of investment in 24 months
- ✓ Savings of \$720,000 annually in deployment costs
- ✓ 25% less development time

# WebSphere ESB & WebSphere Message Broker

*Enable Every Kind of Application and Data to Participate in SOA*



- Routing messages between services
- Converting transport protocols
- Transforming message formats
- Handling business events from disparate sources



**WebSphere ESB:** The ESB for standards and web services integration

**WebSphere Message Broker:** The advanced ESB for web services and non web services assets



# IBM SOA Business Catalog

*The place to find your SOA assets*

**3665+ IBM & Partner Assets**  
**(Over 67% Partner Assets)**



## Banking & Financial Markets

- 500+ Reusable Assets



## Insurance

- 400+ Reusable Assets

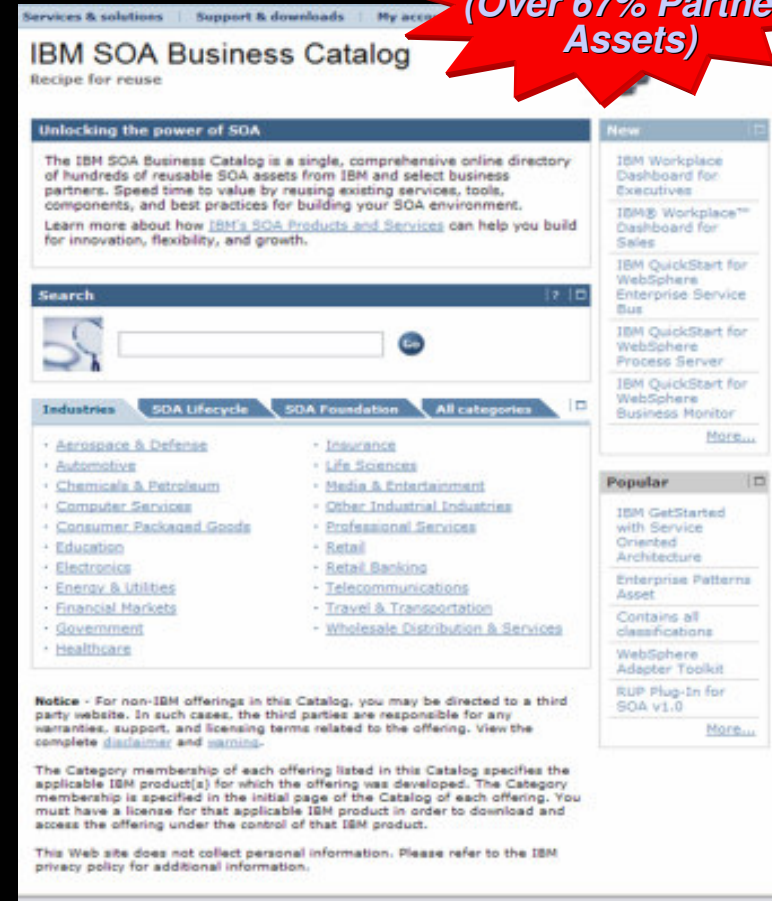


## Government

- 200+ Reusable Assets

## Cross Industry

- 200+ Adapters
- 250+ Portlets
- Rational Patterns and Plug-ins
- SWG, GTS and GBS SOA Services



[ibm.com/soa/soabusinesscatalog](http://ibm.com/soa/soabusinesscatalog)

## What is IT governance?

Establishing decision making rights associated with IT

Establishing mechanisms and policies used to measure and control the way IT decisions are made and carried out



## What is SOA governance?

Extension of IT governance focused on the **lifecycle of services** to ensure the business value of SOA

**SOA  
Governance is  
a catalyst  
for improving  
overall IT  
governance**

# WebSphere Service Registry and Repository

## Enabled SOA Governance

**New!**

### WebSphere Service Registry and Repository



**Service Development  
and Delivery  
Management**

*Enforce Process  
and Policies*

- Discover services and metadata from other registries
- Publish newly developed services and artifacts

- Notify clients of changes
- Organize service metadata with classification and lifecycle support

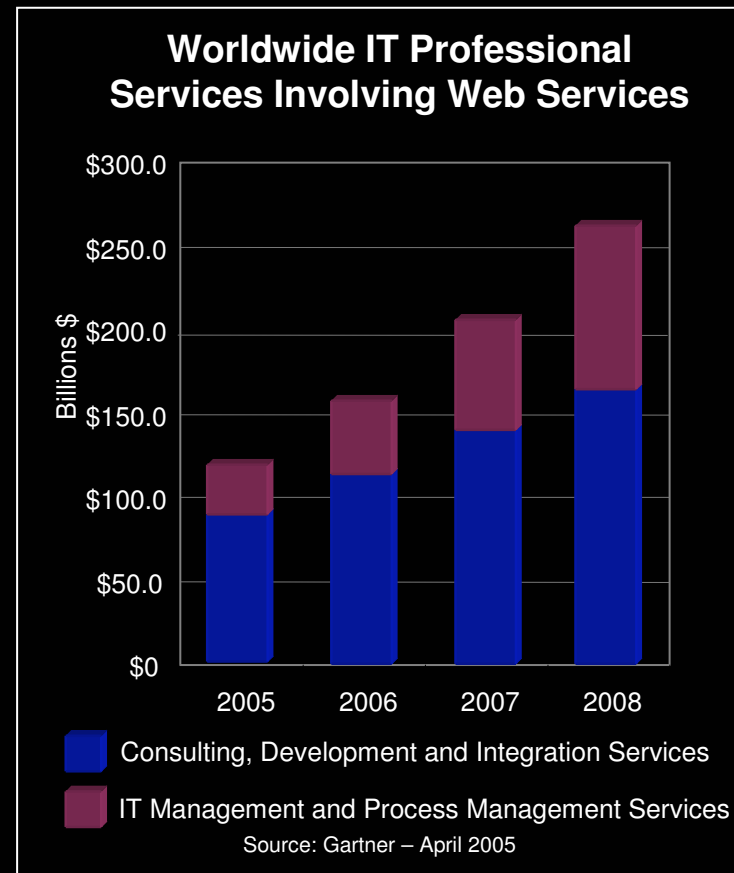
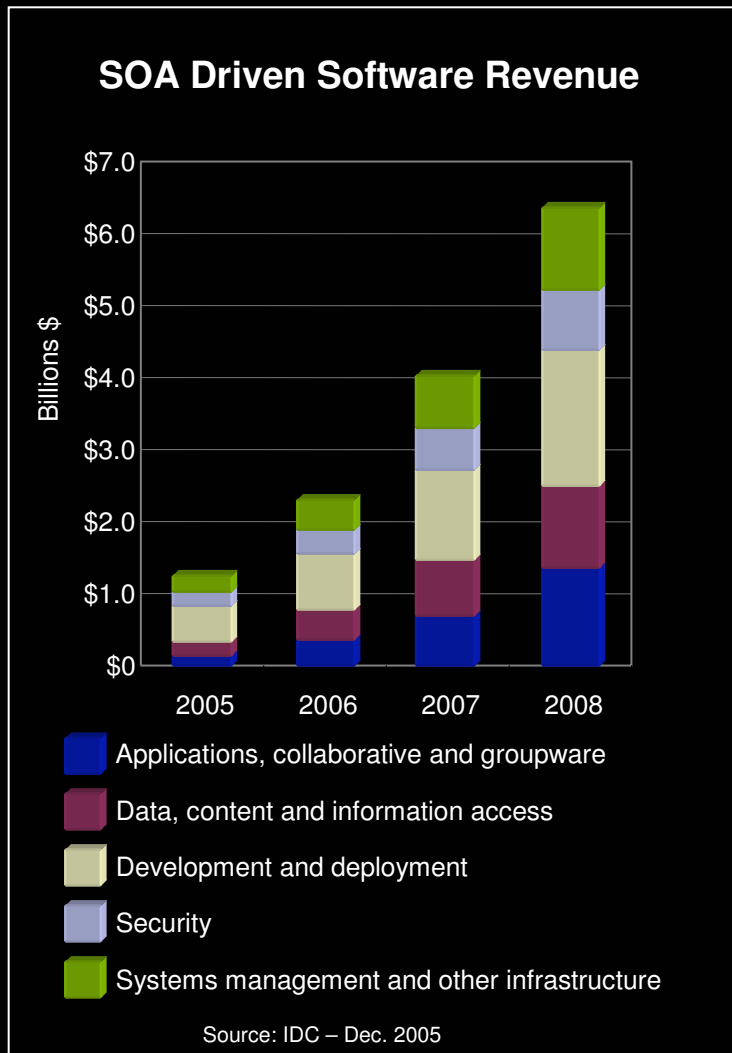
**Infrastructure and  
Management  
In Support of SOA**

*Monitor Operational  
Policies*

“We are witnessing the ‘industrialization of software’ with the introduction of products, new as well as enhanced versions, and new services under IBM’s new Service Oriented Architecture package... This is very much a best practices-driven approach to technology ... The fact they are bringing the registry and repository together is a good move, is a good approach. That is new.”

Judith Hurwitz, for eChannelLine, October 3, 2006

# Double Digit Growth for SOA Opportunity 2006-2007



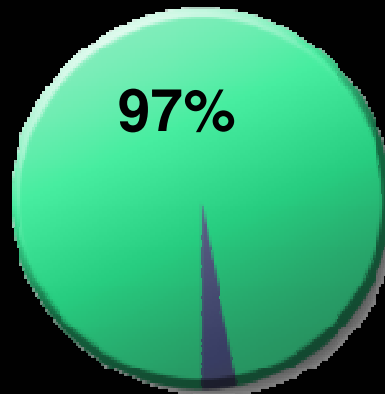
**A Huge Opportunity for our Partners !**

# Why? SOA Delivers Business Value ... Today

## *A Recent Study from IBM SOA Engagements*

**The IBV studied a subset of engagements and found:**

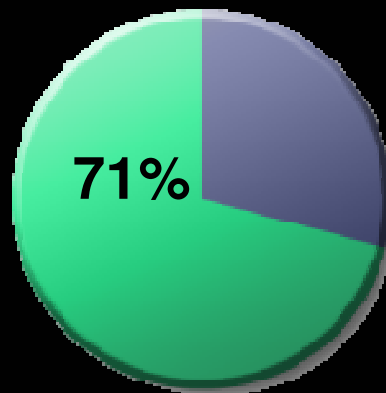
97% justified SOA projects based on cost savings & impact to profitability



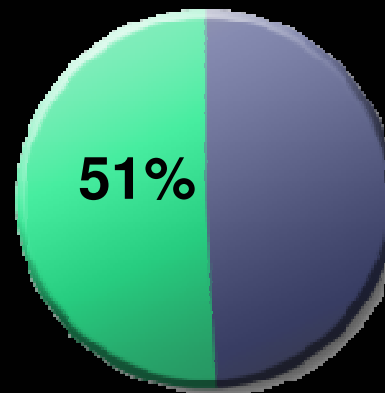
100% realized improved flexibility



71% reduced risk



51% experienced increased revenue

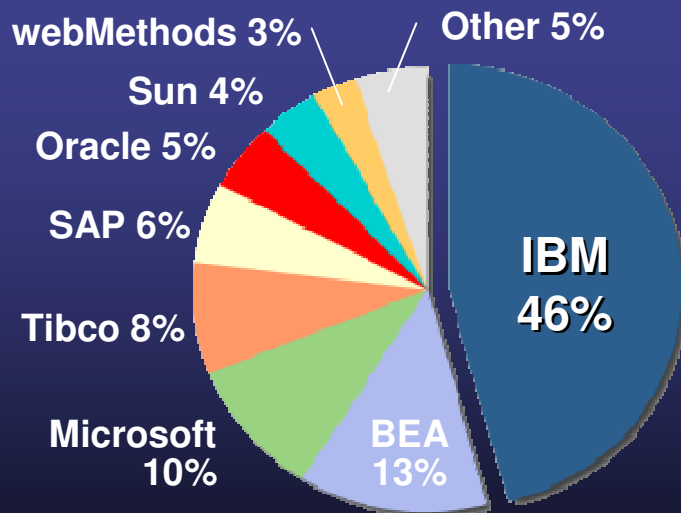


Source: IBM Institute for Business Value "The Business Value of Service-Oriented Architecture" 2006

# IBM is the Market Leader Today!

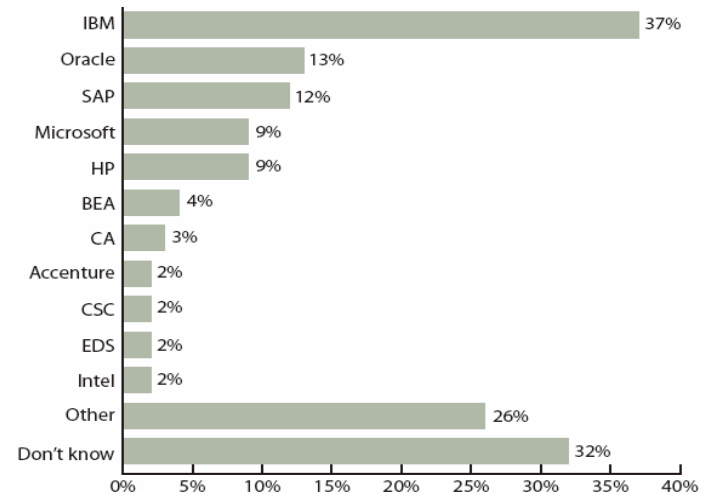
## Up 12% in market share over 18 months!

### 2005 SOA Market Share



Source: WinterGreen Research, 2006

Figure 18: Vendors most often mentioned as leaders in SOA



Base: Companies that are either using or planning to use SOA, n=99

Source: AMR Research, 2005

Gartner

IBM Placed in the Leaders Quadrant



# 1 in SOA

FORRESTER

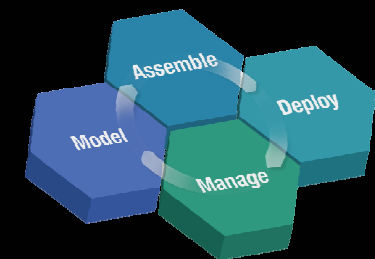
Lead in Wave



# 1 in Capabilities

## In Summary.....

- **SOA is “a team sport”**
  - Business Partner Community is strategic to our SOA Initiative
  - Business Partners and Customers IT Teams work hand-in-hand
  
- **The Time Is Now!**
  - Over 900 BP Consultants Trained on Modeler
  - Positioned to take advantage of the SOA momentum
  - Build on IBM’s SOA leadership
  - Leveraging IBM’s Marketing, Programs & Resources for success
  
- **Incorporate IBM’s SOA Foundation in your Approach**
  - Establish an enterprise architecture & infrastructure, based upon SOA
  - Demonstrate “rapid” value in proving Customer’s SOA decisions
  - Reinforce Governance as a must for success
  
- **Engage using the SOA foundation programs & resources**





The end.

