

IBM SOA

# The SOA Agenda Building on SOA Entry Point Successes

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#### 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."

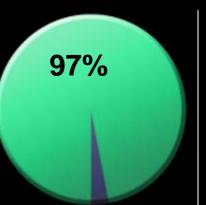




#### SOA Delivers Business Value ... Today A Recent Study from IBM SOA Engagements

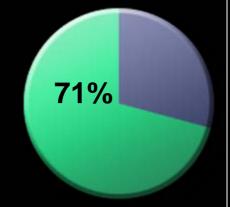
#### The IBV studied a subset of engagements and found:

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



100% realized improved flexibility





51% experienced increased revenue



100%

51%

#### Customers Realize IBM SOA Value Across Large Enterprises & SMB

Half of the world's 30 biggest electronics companies

10 of the world's 10 biggest auto manufacturers

52% of all federal Governments

10 of the world's 10 biggest banks

9 of the world's 10 biggest telcos

SUPERIOR - GREENSTONE DISTRICT SCHOOL BOARD

ALOS PROMEROR - GREENSTONE DISTRICT SCHOOL BOARD

A

4 of the world's 10 biggest retailers

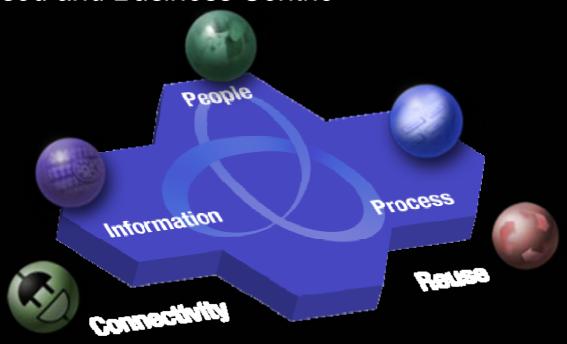
80% of the biggest US health plans

90 SMB references

8 of the world's 10 biggest insurers



#### How Do They Get Started? SOA Entry Points Both IT Focused and Business Centric



"IBM has a strong vision for SOA, with a broad set of enabling technologies and solution entry points. IBM has the most-comprehensive sets of SOA capabilities on the market. Its internal SOA center of excellence is anchored in BCS but stretches to encompass software and services." *Gartner Evaluates IBM, David Cearley October 10,2006*Gartner



#### **SOA 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, SOAenabled 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 Information: Improves agility with IBM SOA



#### 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





#### **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



#### **IBM Information Server**

## New!

#### 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



IBM Information Server
Understand, Cleanse, Transform, Deliver



"Effective SOAs include robust data services within an enterprise information management enabling infrastructure." Gartner Inc. 2006



#### SOA 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



# 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

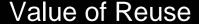




#### **SOA** Reuse:

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





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



#### **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



#### SOA Connectivity: Improve Customer Service with IBM SOA





- 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:**

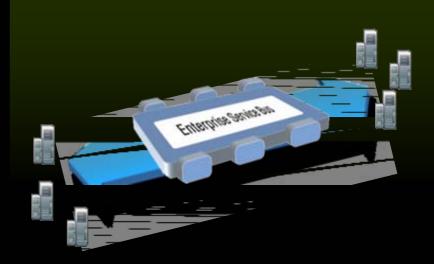
- √ 100% payback of investment in 24 months
- √ Savings of \$720,000 annually in deployment costs
- √ 25% less development time



#### 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

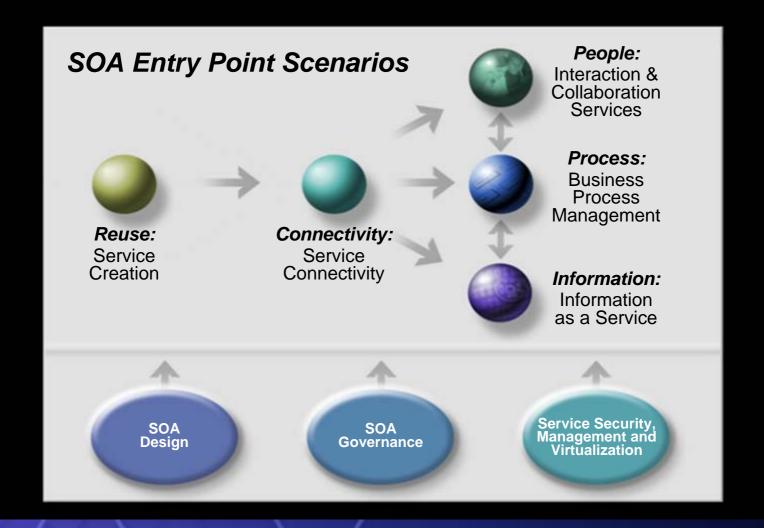
**WebSphere Message Broker**: The advanced ESB for web services and non web services assets



Enhanced!

#### SOA Entry Point Scenarios Help You Get Started

Based on over 3000 SOA engagements





### Factory in a Box: Innovation enabled by SOA



Factory in a Box Video



## IBM SOA Business Catalog The place to find your SOA assets



#### **Banking & Financial Markets**

500+ Reusable Assets



#### Insurance

400+ Reusable Assets

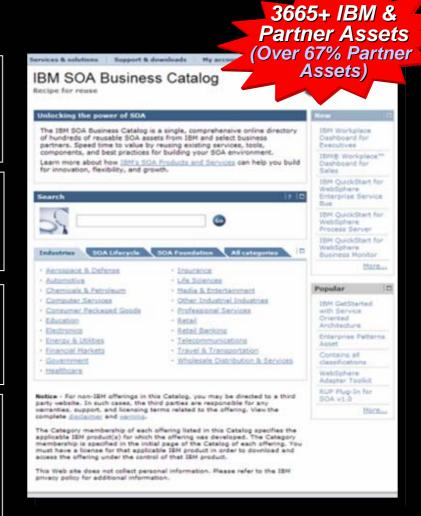
#### Government



200+ Reusable Assets

#### **Cross Industry**

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



ibm.com/soa/soabusinesscatalog



#### 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?

ensure the business value of SOA

SOA Governance is a catalyst for improving overall IT governance



#### WebSphere Service Registry and Repository Enabled SOA Governance



#### **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."



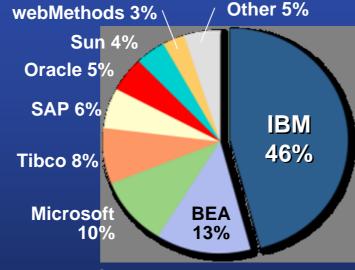
#### **SOA Skills Available**

#### Leverage your existing assets to maximize value

#### Governance Governance & Center of Excellence (COE) Business/IT Dashboards Strategy Design **Implementation** Management Component Business Composite Business Composite Business Business Performance Services Assembly **Business** Modeling™ (CBM) Management Services Design **Services** Services Management of Assessment & SOA-enabled Design Implementation Services Planning for SOA Legacy Transformation **Application** Services Outsourcing **Application & IT Services** Performance Design Portfolio Assessment Performance & Testing for SOA COE for SOA Quality of Service Security Component Business Infrastructure **Middleware** Infrastructure Modeling™ (CBM) for Architecture & Design Implementation for SOA Services the Business of IT Managed Infrastructure for SOA Product Maintenance Service Management Service Management IT and Middleware & Support Infrastructure Implementation Design for SOA Readiness for SOA **Services**

#### WinterGreen Shows IBM is the Market Leader Up 12% in Market Share Over 18 Months!

#### 2005 SOA Market Share



Source: WinterGreen Research, 2006











#### IBM Has the Intellectual Capital, Tools, Products & Expertise To Guide Clients in the Definition of Business Value



Early adopters demonstrate some ideal guiding principles for other clients to follow in their first implementations

- Focus on a real business problem, not SOA
- If possible, start with revenue-generating applications
- Start small
- Start building capabilities
- Think long term



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

# Thank You



## Business-led approach to SOA Focus on enterprise-wide transformation through S

- Driving force behind SOA Adoption
  - Survival Company needed drastic cost reduction to stay in business
  - Heavy redundancy within 500 applications (i.e. 13 policy admin systems, 9 billing systems, 1000's of undocumented databases)
- Approach taken by IBM
  - Top-down, enterprise-wide SOA with rigorous SOA Governance
  - Component Business Modeling (CBM) and Service Oriented Modeling and Architecture (SOMA) to establish "game plan"
  - Implementation of service model including extensive application outsourcing, training, and change management
- Why an SOA approach made sense vs. traditional approach
  - Crucial offshoring strategy for non-core functions was needed; SOA seen as best approach to abstract business function from underlying technology
  - Non-cyclical growth opportunities require flexible business model based on extensive componentization and service orientated business processes
- Value achieved through project
  - 10% to 40% cost savings; 25% to 50% time savings
  - Made fixed costs more variable
  - IT skills aligned with business's core rather than non-core functions







## Process-led approach to SOA Focused improvement in business process flexibility

Fan Guly Faymeth Processing

- Driving force behind SOA Adoption
  - Business hampered by monolithic application solutions and the ability to provide creative business solutions
  - Overhaul loan processing to keep pace with frequent changes in financing promotions
- Approach taken by IBM
  - Focus on business processes through sequence of Process,
     Information, and People Entry Points
  - Service-enabled existing systems allowing for rapid re-assembly through loose-coupling among services
- Why an SOA approach made sense vs. traditional approach
  - Through past experience, SOA was the only way IT systems could be re-configured quickly enough to keep pace with process changes
- Value achieved through project
  - Revenue growth through faster response to production and market conditions
  - Lower Cost of Operations, Development, and Deployment

Large U.S.
Manufacturing
Company





## Technology-led approach to SOA Bottoms-up IT optimization

中远集装箱运输有限公司

COSCO CONTAINER LINES

- Driving force behind SOA Adoption
  - Timely compliance with changing port customs mandates
  - Inflexibility and maintenance costs of redundant, aging, disparate infrastructure
- Approach taken by IBM
  - Consolidate infrastructure, reduce complexity
  - Phased service enablement of existing systems and logic
- Why an SOA approach made sense vs. traditional approach
  - SOA was the only way to effectively reuse existing assets to provide necessary IT flexibility
- Value achieved through project
  - Improved system rollout of new port from 3 months to 3 weeks
  - Reduced change requests from 3 weeks to 3 days
  - COSCON IT became industry consultant and IBM reseller



