

IBM SOA

SOA From A Business Centric Perspective Enabling Innovation that Matters!

Presenter Name Presenter Title





Key Takeaways

- SOA is one of IBM's long term strategies to enable innovation that matters
 - Continuing to deliver SOA centric offerings
- IBM's view of SOA is business centric
- How to get started is crucial
 - People, process and information
 - Reuse & connectivity is critical
- Entry points are accelerated by SOA
 Foundation products and business insight
- SOA Governance is a key to success







Innovation that Matters To CEOs

Top Innovation Priorities:

- Extend the ability to collaborate inside & outside
- Innovate business models & processes
- Leverage information for business optimization





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.

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Customers & Analysts Agree: SOA Enables Rapid & Incremental Change Leading to Innovation



Innovation That Matters *

The IBM and GenXus SOA-based solution has made our product more innovative, expanded our market and made us more competitive. It will let us grow our business significantly in the years to come."

"SOA is the heart of the next wave of innovation. The leaders that do this well are able to rapidly change ..."



"SOA is critical for ... executing the on-demand vision and in preparing ... for the incremental changes ... over time. Companies ... make better decisions."

MADDENCO.



Change Requires a Business Centric View of SOA Drive Innovation Priorities Through People, Process, and Information

People

Extend the ability to collaborate inside & outside

■Enhancing people to people collaboration

Support multi-channel delivery

Information

"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 optimization

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

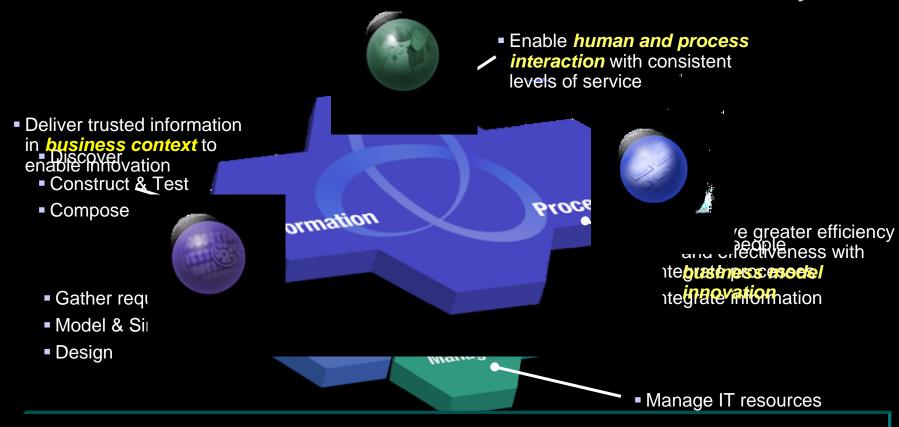
Business model & process innovation

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

Source: IBM Global CEO Survey, 2006



Business Pain and Enables You to Build for Flexibility



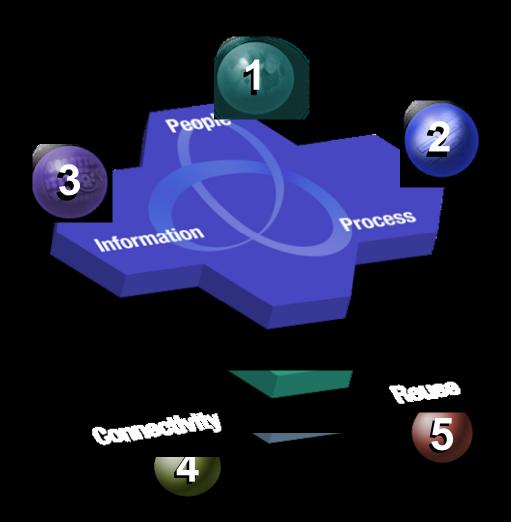
- "Pick business processes with pain points that the business clearly recognizes processes
- for which the business most clearly needs end-to-end visibility, control, insight, and flexibility"

control for SOA oversight





SOA Entry Points Help Customers Get Started Both Business Centric and IT Focused





Entry Points Based on Real Customer Engagement

Pattern	Example	Customer Value	Business Challenge
People 1	DaimlerChryeler	Web Services based Infrastructure reduce nearly 50% application deployment and 30% operations cost	■Post merger standardization of application development & deployment infrastructure
Process 2	Harley Davidson Financial Services	Automated inventory targeted to reduce cost by projected \$400,000	■Poor integration between channels and desire to optimize E2E processing
Information 3	Bell	Rapid payback from reuse – second interface was delivered at 2.5% of initial cost	Competition and regulatory pressuresImprove understanding of customers
Reuse 4	STANDARD LIFE®	Savings of 4M pounds to date, 1M pounds a quarter	 Reduce cost of business with multiple channels Make data in existing systems available to sales portal
Connectivity:	THE DOCUMENT COMPANY XEROX.	Standardize application integration estimate saving \$720,000 annually and 25% less development time	 Applications in silos, can't communicate with each other Routing of requests through multiple data centers

People Centric Approach - Greater Value through SOA Intuitive & Adaptive User Experience



Value

Improve people productivity by aggregating views that deliver information and interaction in the context of a business process

Why SOA?

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



Start with

Build a view of a key business process by integrating information in front of people to improve decision making

Next steps

Manage performance more tightly with alert-driven dashboards tied to processes

"Through 2007, an emerphise portal will be the first major application of SOA concepts for more than 50 percent of enterprises (0.6 probability)."

Gene Phifer, Gartner Research; Management Update: A Portal May Be Your First Step to Leverage SOA -Publication Date: 10/12/05

DaimlerChrysler: People Entry Point to SOA

Business Challenge: Respond to Consumer & Logistical Change



Actions & Benefits:



Created new application framework employing a SOA approach to improve flexibility



Enabled collaboration with service-based WebSphere Portal





Create reusable software services to improve efficiency and reduce cost

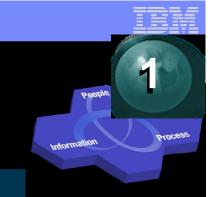


Daimler Chrysler

Web Services based infrastructure reduce nearly 50% application deployment and 30% operations cost

Capabilities used: WebSphere Portal, WebSphere Application Server, MQ Workflow, DB2, IGS

New! SOA Announcements for People Empowering Teams to Innovate and Improve Responsiveness



People Centric Collaboration



WebSphere Portal

- Revolutionized user experience leveraging AJAX
- Application templates allow quick deployment and modification of SOA applications
- Integrated and orchestrated workflow
- Integration with WebSphere Process Server



Front End Tooling Innovation

- Support for AJAX programming pattern
 - AJAX improves web responsiveness;
 - Reduces latency and server bandwidth
- Contribution to Eclipse for AJAX Toolkit Framework (ATF)
- WebSphere Portlet Factory to rapidly create and deploy services through portlets

NEW!

SOA Dashboard Offerings

- Workplace Dashboards and Dashboard Framework
 - Out-of-the-box portlets
 - Reusable Design Components
- SOA Business Dashboard offering from BCS
 - Assessment & prototypes
 - Design and implement
 - Management & support services





Process Centric Approach - Greater Value through SOA Business Process Management for Continuous Innovation



Value

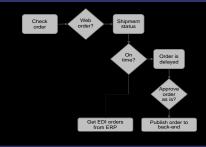
Innovative business models deployed quickly with flexible and optimized processes.

Measure performance to drive improvement.

Why SOA?

Modeled processes, converted into services, are re-used, connected and re-deployed more flexibly and quickly with SOA





Start with

A single process – Model an underperforming process. Optimize and deploy as enhanced process.

Next steps

Flexibly link multiple processes across the enterprise & to suppliers / partners. Monitor the process to measure & track performance.





Harley Davidson Financial Services: Process Entry Point to SOA

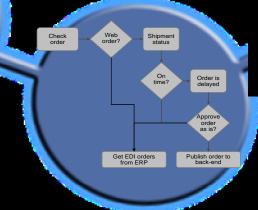
People Process

Business Challenge: Creating Financial Programs quickly in support of Marketing directions

Actions & Benefits:

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

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





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



Enhanced! SOA Announcements for Process SOA Processes with Built-in Flexibility



Business Process Management

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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

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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

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WebSphere Business Monitor

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

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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



Information Centric Approach – Greater Value through SOA Delivering Information as a Service to People and Processes

Value

Improve business operations and reduce risk 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



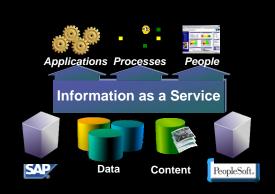


Start with

Discover and understand information sources, relationships & business context— Choose reusable high value data for first services

Next steps

Expand number and scope of services across internal and external processes





Bell Canada: Information Entry Point to SOA Business Challenge: Achieving Customer-Centricity



Actions & Benefits:



Reused processing and rules from data warehouse to integrate customer data across operational systems

Created a customer Master to provide service agents with a complete view of the customer



as a service to provide master customer data to channel applications for improved marketing

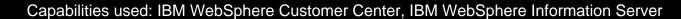


Leverage information



Bell

Reuse benefits already being seen - second interface delivered in 10 weeks at 2.5% of the cost of the first interface





New! SOA Announcements for Information Empowering the Business with Accurate, Consistent and Comprehensive Information



Information as a Service

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Master Data Management

- Enhanced IBM
 Banking Information
 FrameWork and IBM
 Insurance Application
 Architecture supports
 WebSphere Customer
 Center
- Models provide business-oriented "SOA blueprint", methodologies and services; deliver single view of customer information

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WebSphere RFID Premises Server / Device Infrastructure

- Services to integrate and provide information on physical assets
- Interpretation and correlation of RFID events
- Analysis of event data to drive decision-making

NEW!

WebSphere Information Server

- Reusable information services spanning disparate sources, enabling effective use of information within business processes
- WebSphere Metadata Server provides unified metadata analysis, management, and interchange, linking business & technical metadata to service metadata

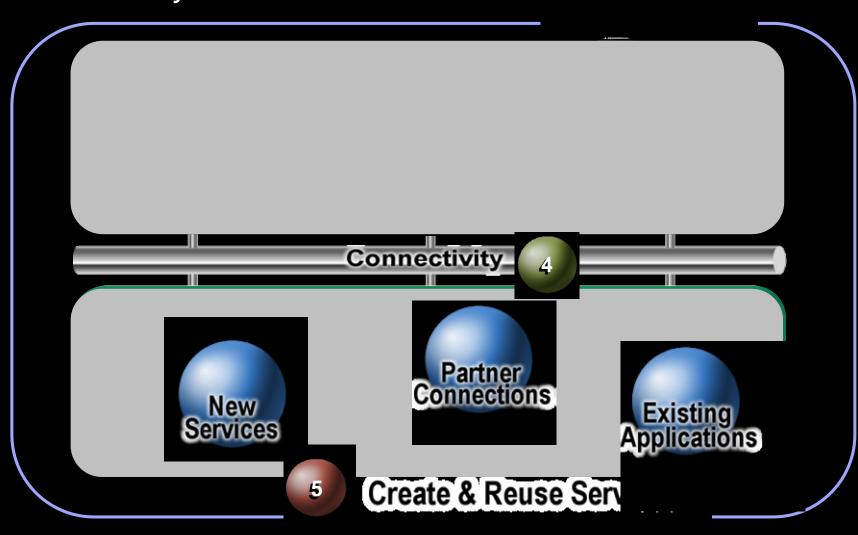
NEW

DB2 Viper

- First hybrid data server includes native XML and relational data services for greater business insight
- Fast development of high performance SOA solutions on Linux®, UNIX®, Windows® & z/OS



Business Centric SOA leverages your existing environment IT focused Entry Points Are Foundation





Connectivity - Greater Value through SOA Underlying Connectivity to Support Business Centric SOA

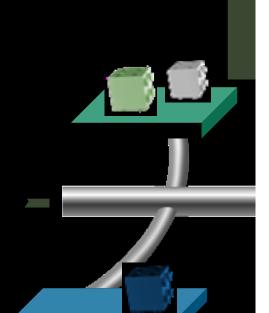


Value

- Deliver services through new business channels for a secure, consistent user experience
- Service-based connections with trading partners
- Potential savings of 2X-4X over custom-built integration or FTP*

Start with

- Messaging backbone leveraging messaging and web services protocols as the foundation for SOA connectivity
- Enable mediated exchange between services, by leveraging an ESB
- SOA appliances for ESB functions in a hardware form factor



*Software Strategies

"Enterprise Integration Challenge" 2005



Xerox: Connectivity Entry Point to S^^ Business Challenge: Increase Application





Actions & Benefits:









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and 25%
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development time

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Process

Enhanced! SOA Announcements for Connectivity Underlying Connectivity to Support Business Centric SO

SOA Connectivity



WebSphere ESB and Message Broker

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



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





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



WebSphere
Adapters

People

Information

- 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

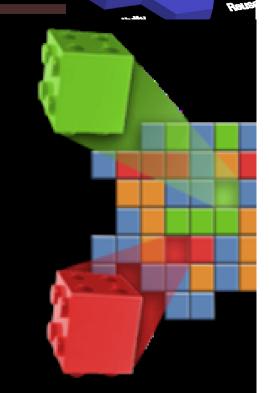
Creating & Reusing Services - Greater Value through SOA Create Flexible, Service-based Business Applications

Value

- Flexibility and elimination of duplication for reduced cycle times
- Expanded access to core applications
- Consultant studies have found it 5X less expensive to re-use existing applications than to write new applications*

Start with

- •What services are needed to run your business?
- Identify high-value existing IT assets and serviceenable them for reuse
- Fill in gaps by creating new services for today's business needs and future reuse
- Registry/repository to facilitate centralized access and control of reusable services



People

Information

" With busin more quickly and efficiently."

- Amy Wohl

* Software Productivity Research (SPR)

Entry Points to Reusing Services

Business Challenge: Leverage existing assets to improve business agility







service based function to integrate with Amazon.de sales portal

Online in 3 weeks. *ROI in <* 3 months.

WebSphere Business Integration Express, Partner Gateway





existing backeria applications with reusable service data

Real-time views of critical cost and profit information for better decisions

IBM BCS, WebSphere MQ and Message Broker





with IBM Business Partner Mainsoft Solutions

5x faster than rewriting the code from scratch

Mainsoft Visual MainWin, WebSphere Application Server

New! Creating & Reusing Services for SOA Create Flexible, Service-based Business Applications

SOA Sharing & Reuse



WebSphere Service Registry and Repository

- Repository for service metadata
- Publish & locate services
- Capture service dependencies
- Policy management
- Interoperability across other registries and repositories

NEW!

SOA Business Central

- **Comprehensive set** of IBM and validated Business Partner developed **SOA** offerings for **BPM**
- **Industry- specific** SOA assets and best practices for **BPM**

Example: IFW (banking), IAA (insurance) and other industry models



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WebSphere Application Server System z Assets

- Tooling and JDK 5 innovations for creating and deploying re-usable services
- New & Enhanced **Web Services Standards**
 - Web Services Interoperability Basic Security Profile
 - Web Services Notification
 - Web Services **Business Activity**
- **Integrated support** for real-time multimedia elements



Reuse of

- **CICS** Transaction Server
 - Enhanced web services for better access to trusted. high quality applications
- WebSphere **Developer for** zSeries, Studio **Asset Analyzer**
 - Visually compose services into process flows
 - Analyze applications for re-use



Information

WebSphere Commerce

Process

- Consistent crosschannel experience through reuse of processes and data
- Web. Contact Center, Store Kiosks, Gift Registry, Partner Sites and more...
- Cross channel order processing through web services



SOA Openness Enables Customer Reuse A Portable and Interoperable Services Model

- Building on IBM's Strengths In Standards
 - New & Enhanced Web Services Support
 - Reliable Messaging
 - Security Extensions (Trust, SecureConversation)
 - Transactions (AtomicTransaction, Business Activity)
 - WS-Distributed Management ratified standard
 - Management Reconciliation Roadmap published
 - RAMP Profile
- Supporting and shaping Industry-based XML Standards
- Contributing to work around SOA Maturity Model
- Investing to support our SOA Standards Road Map

News! Enhancements along SOA Standards Road Map

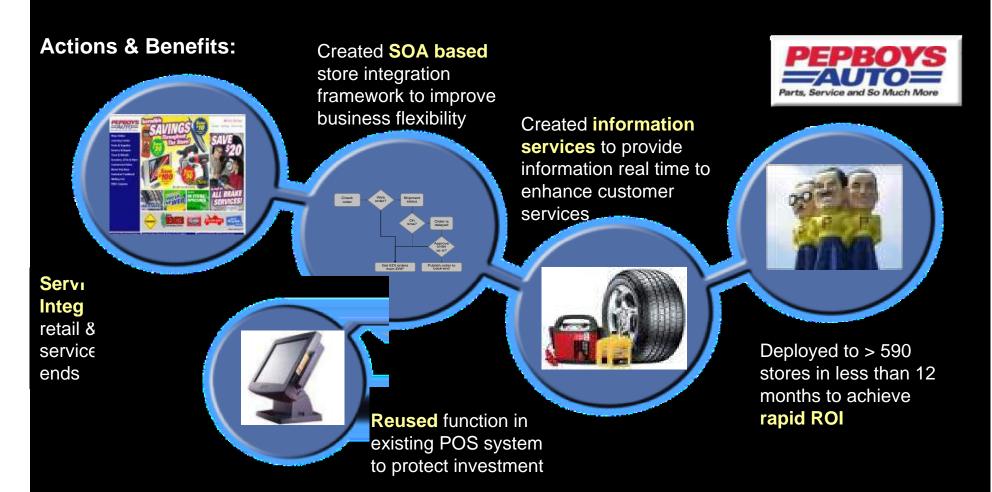
- Interoperability in Heterogeneous Environments
 - Web Services Profiles
 - Open Document and XForms
- Simplified Implementation
 - SCA/SDO
 - Open Ajax
- Business Process Management
 - UML/Business Modeling Notations
 - BPEL Extensions for People and Sub Processes
- SOA Management and Governance
 - WSDM

WS-Business Activity
WS-Secure Conversation
WS-Security
WS-Metadata Exchange
WS-Reliable Messaging
WS-RF Resource Properties
WS-DM MOWS
WS-Coordination
WS-RF Service Groups
WS-RF Resource
WS-Addressing
WS-RF Resource
WS-Agreements
WS-Notification
WS-Atomic Transactions

WS-Policy Attachments
WS-DM MOWS
WS-DM MOWS
WS-Federation
WS-DM MUWS
WS-Federation
Base Notification



Pep Boys: Value of People, Process, and Information Business Challenge: Improve Customer Loyalty



Capabilities used: WebSphere Business Integration, WebSphere MQ, DB2 Express, SurePOS 300 systems and IBM Services.



Pep Boys: Business Centric SOA In Action

Achieving SOA Multiplier Effect With Retail POS Project

4. Extended user interactions for upsell/cross-sell

3. Extended SOA, choreographing retail processes consisting of 15-20 services

5. Created single customer view for work activities; Piloted within 4 months

People



Information







2. Developed service integration layer

1. Created 200+ functional services, both new and from existing assets on IMS/CICS/Java



SOA security and governance are key to the success of projects that integrate people, process and information

Next Projects Leveraging SOA:

- Work order systems
- •Wholesale/distribution systems



New! SOA Management and Security Products Integrating People, Process & Information for IT Service Management

SOA Security & Management



Tivoli CCMDB

- Fully automated application and discovery for a unified view of configurations
- Enable open sharing of all configuration items, independent of location
- Manage the change process for problem solving, audit and compliance

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Tivoli Composite Application Management

- Web Services automated mediation and monitoring
- Proactively recognize and quickly isolate Web service performance problems
- Visualize, Report, Alert and Verify that Web services are available and performing to specification

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Tivoli Access & Federated Identity Management

- Automate sign-on
- Enhance security with password management
- Role-based access control for new Web Service
- Integrate and improve security and audit control
- End-to-end auditing and reporting

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WebSphere DataPower XML Security Gateway

- XML firewall mitigates threats, denial of service
- Hardware-assist security & performance
- Integrated with ITCAM for SOA to improve SOA management
- Centralized appliance enhances access enforcement, Web service proxy processing, content based routing



SOA New and Enhanced Products

WebSphere
Portal Server

People

Information

Comechin

Process



- WebSphere Product Center
- DB2 Viper
 - WebSphere Enterprise Service Bus and Message Broker
 - WebSphere DataPower Appliances

- WebSphere Business Monitor
- WebSphere Process Server

- WebSphere Service Registry & Repository
- WebSphere Application Server

Supported by IBM New Services Offerings:

Infrastructure Services Readiness Engagement for SOA, IGS Design and Implementation Services for SOA, IT Service Management Design for SOA, IBM Performance Management Testing for SOA, IGS SOA Business Dashboard



Why IBM for SOA Entry Point-2

People

- •Gartner leadersquadrant Horizontal Portals
- •100's of pre-built portlets ready for SOA dashboards
- •2,500+ Channel Partners & Solutions

Process

"BPM from IBM leads in Market share"



- •Over 3000 SOA assets for BPM
- •500 pre-built industryspecific data and process models

Information

- •Best Enterprise
 Information Integration
 (Intelligent Enterprise Reader's Choice Awards)
- •\$1B increase in investment next 3 years
- •15K practitioners, expected to grow by 65% next three years

SOA

Over \$1B/yr invested in SOA
SOA consultants, architects and IT specialists
Leadership in open standards
300+ SOA-related patents



- Potential savings of 2x-4x vs. custom built or FTP
- The market leaders in extending asset value for customers; 87K+ customers for connectivity & reuse offerings
- •1.1M+ Registered developers on IBM SOA platform



Let's Go! Encourage Innovation with a Focused SOA Project

- 1. Understand the value of SOA
 - Not just doing the same thing a different way
 - SOA is not just about technology, but technology's integration with business insight and thought leadership
- 2. Select your entry point (People, Process, Information, Reuse, Connectivity)
- 3. Get Assessed! SOA Self Assessment
- 4. Conduct an SOA workshop to develop your plan with ROI tied to it
- 5. Apply governance to your project



maximizing of the people, process and information elements that are truly core to the SOA process."

Judith Hurwitz President, Hurwitz & Assoc.

Contact your IBM representatives or Business Partner to help prove your ROI!







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