IBM SOA

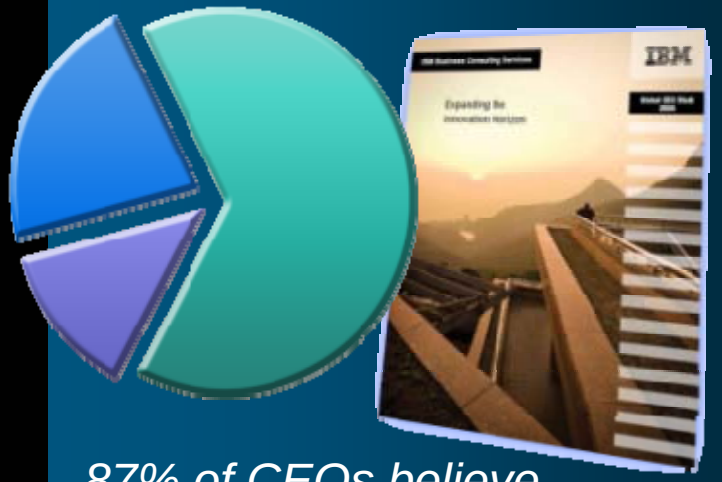
SOA Real for YOU. - The Entry Points to Innovation

Tom Rosamilia
VP WebSphere

Innovation that Matters To CEOs

Top Innovation Priorities:

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



*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.

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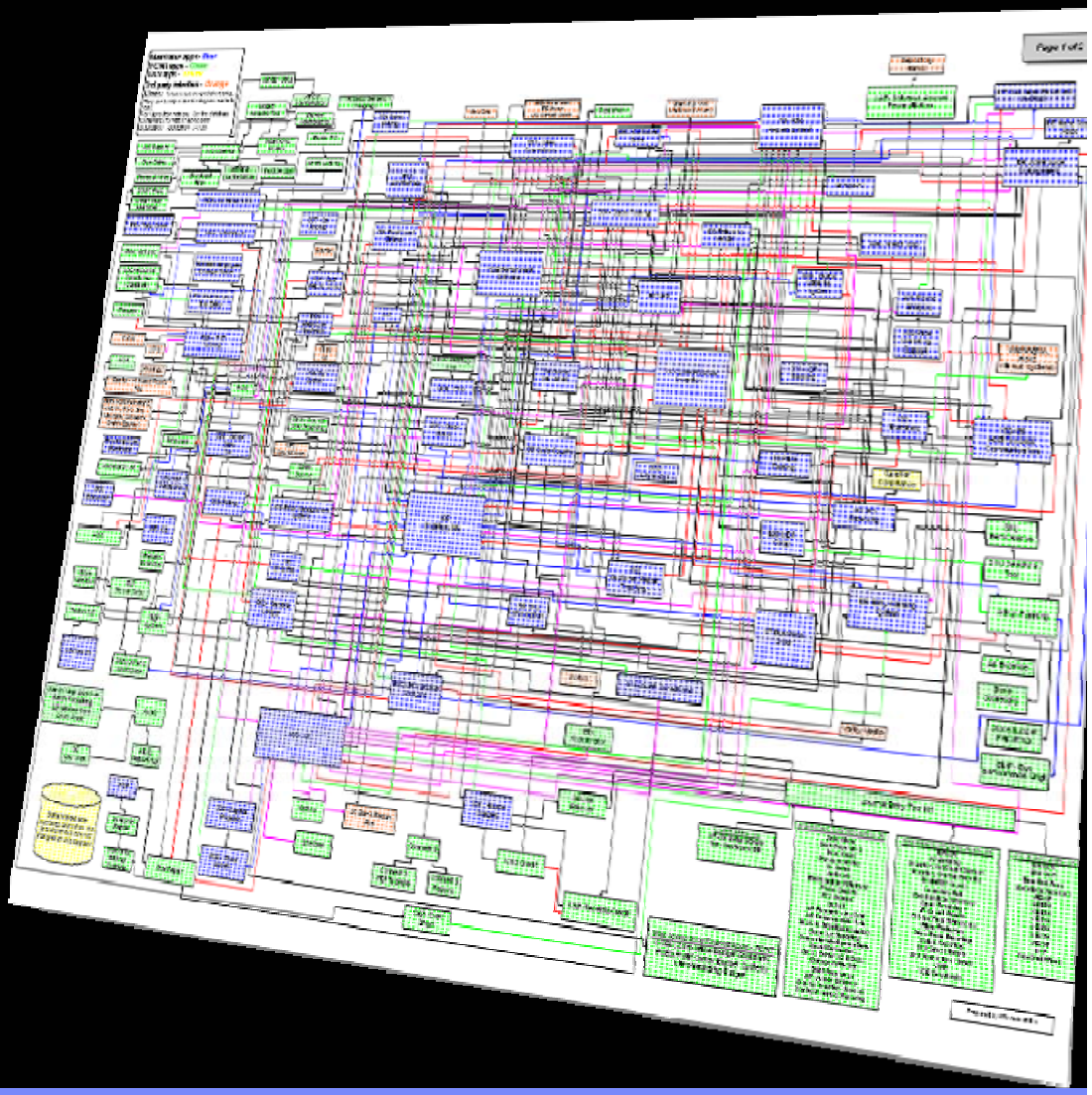
What are the barriers to business flexibility and reuse?

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



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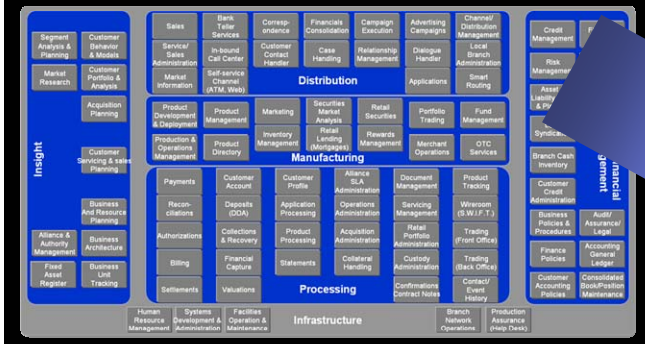
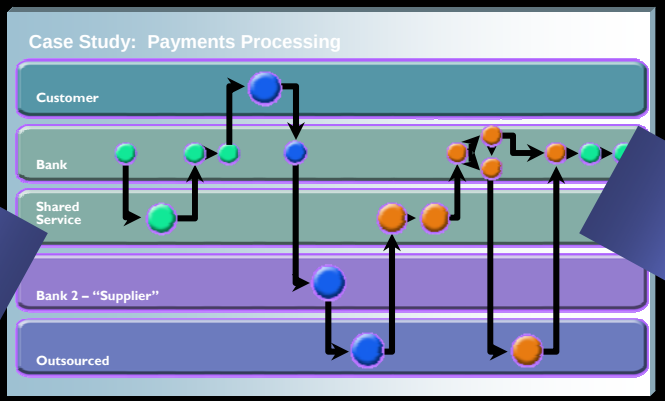
Flexible business requires flexible IT

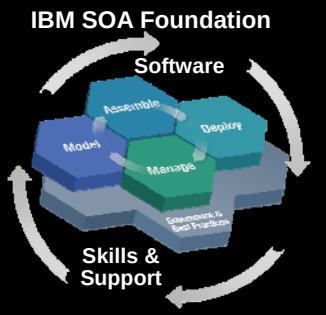
Full Business view



Process to optimize



Creating IT flexibility



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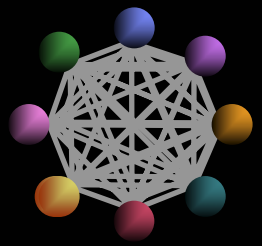
SOA builds flexibility on your current investments

The next stage of integration

Messaging Backbone

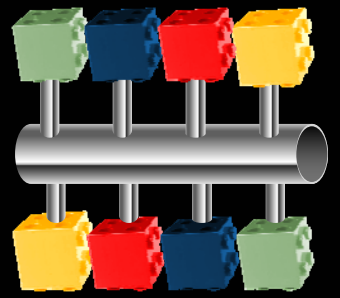


- Point-to-Point connection between applications
- Simple, basic connectivity

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

As Patterns Have Evolved, So Has IBM

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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

"SOA impacts every aspect of IT and business."

Gartner

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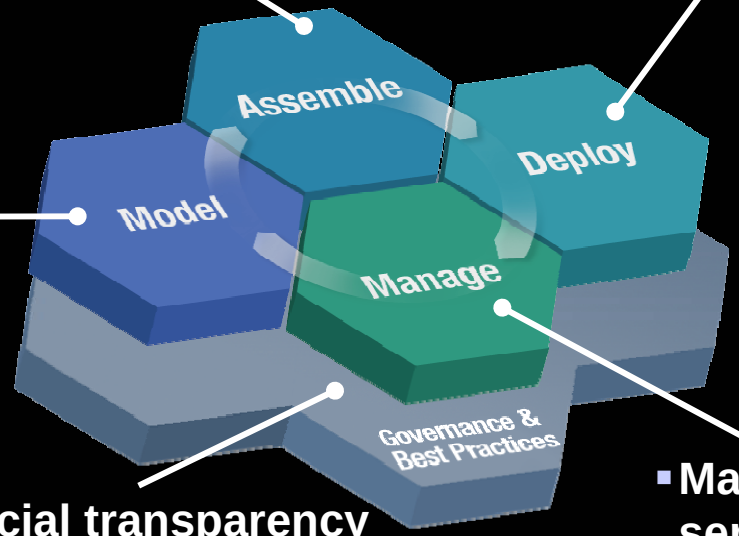
How are customers thinking technically about flexible IT through SOA?

The SOA Lifecycle

- Discover
- Construct & Test
- Compose

- Integrate
  - People
  - Process
  - Information



- Gather requirements
- Model & Simulate
- Design

- Financial transparency
- Business/IT alignment
- Process control

- Manage applications & services
- Manage identity & compliance
- Monitor business metrics

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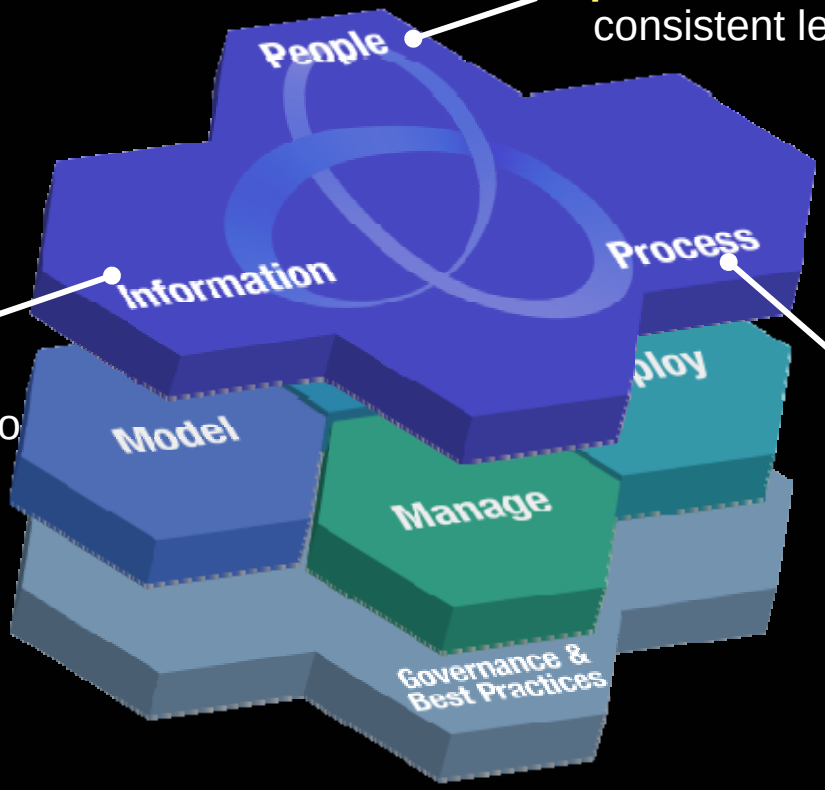
IBM's View of SOA: Business Centric.

Built on SOA Lifecycle

- Enable ***human and process interaction*** with consistent levels of service



- Deliver trusted information in ***business context*** to enable innovation
- Achieve greater efficiency and effectiveness with ***business model innovation***

A recent study of over 500 customers showed SOA starting points of people, process, information or a combination of all three

MERCER

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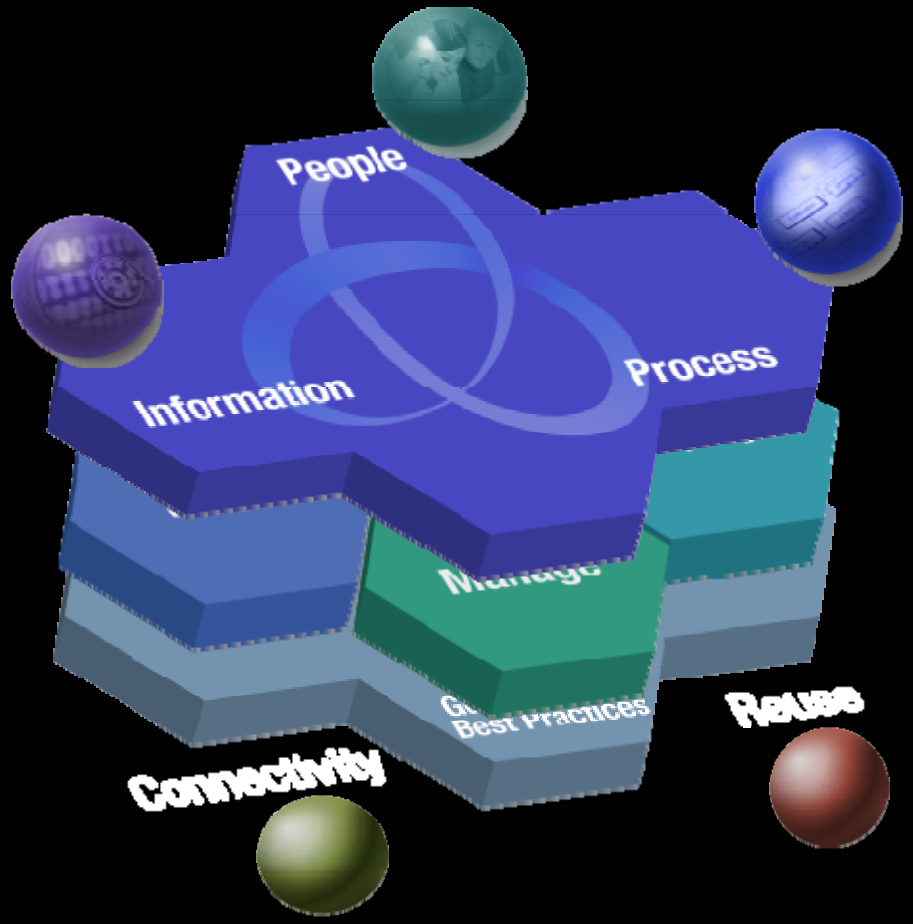
SOA Entry Points Help Customers Get Started

Both Business Centric and IT Focused



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People Centric Approach - Greater Value through SOA

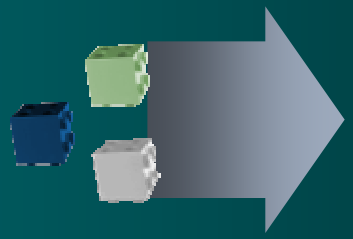
Intuitive & Adaptive User Experience

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

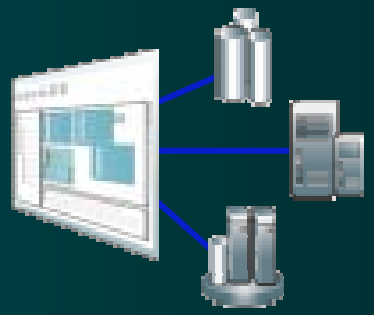


Start with

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



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Information Centric Approach – Greater Value through SOA

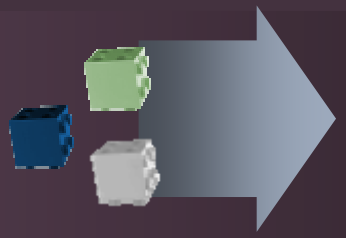
Delivering Information as a Service to People and Processes

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

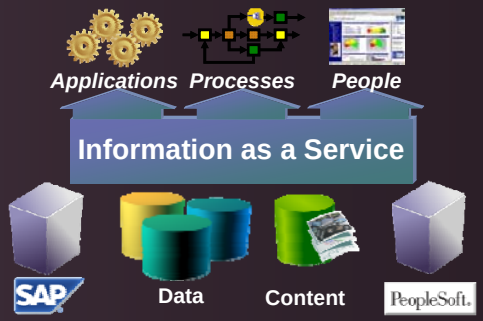


Start with

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



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Process Centric Approach - Greater Value through SOA

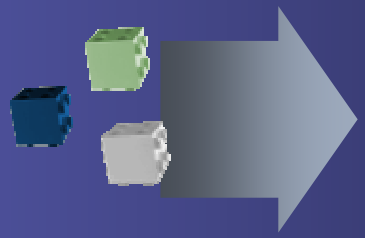
Business Process Management for Continuous Innovation

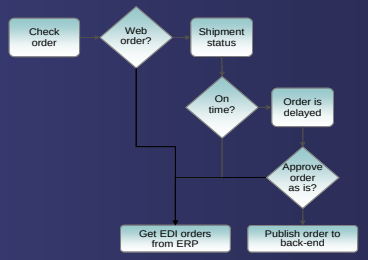
Value

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.

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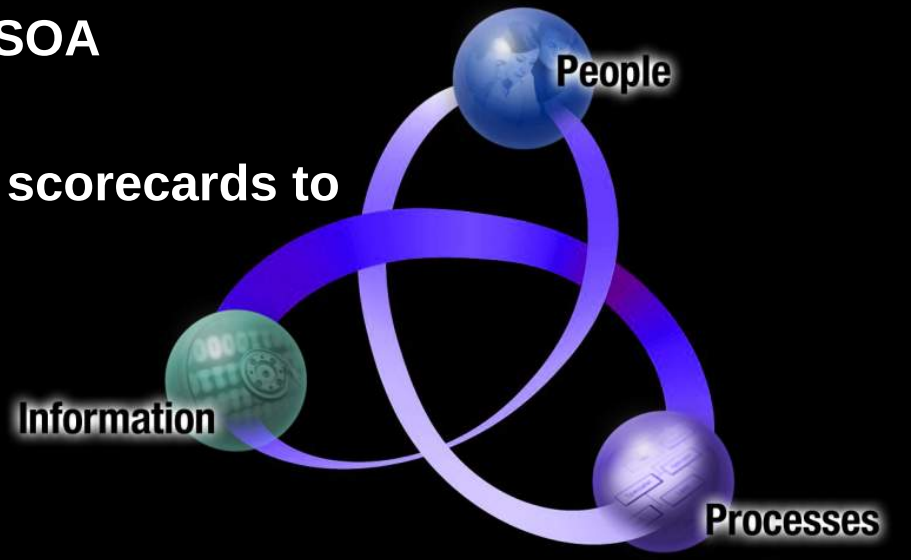
Best Practices for a successful BPM with SOA implementation

1. **Capture and modify your business processes to drive improvement**
2. **Bridge the gap between the business and IT**
3. **Build a BPM Framework using SOA**
4. **Use executive dashboards and scorecards to manage your business**



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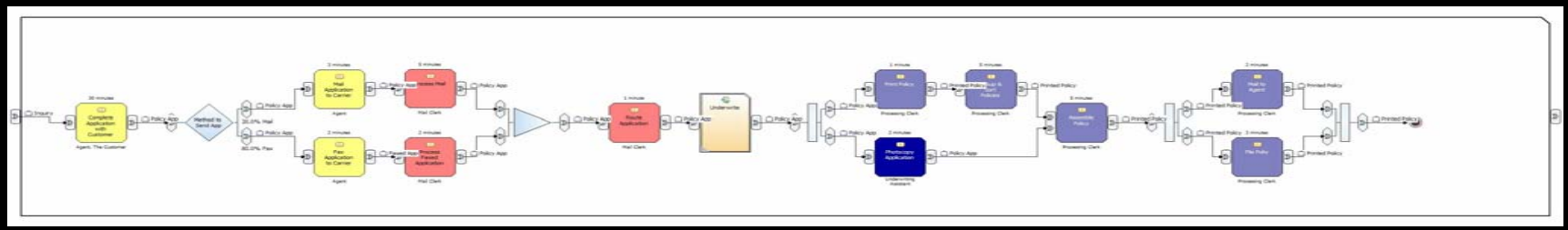
Best Practice #1

Capture and modify your business processes to drive improvement

67% of reengineering projects produced marginal or failed results. because their impact was not known prior to execution --Omar Sawy, ***Redesigning Enterprise Processes For e-business***

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



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Best Practice #1 cont.

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

- **Run simulation again 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	1	Direct mail, Complex
32.10%	3:11	$1.67	2	Direct Mail, Simple
15.01%	14:11	$7.56	3	Telemarketing
15.20%	3:21	$1.77	4	Email, Complex
4.78%	11:11	$5.93	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

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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."**

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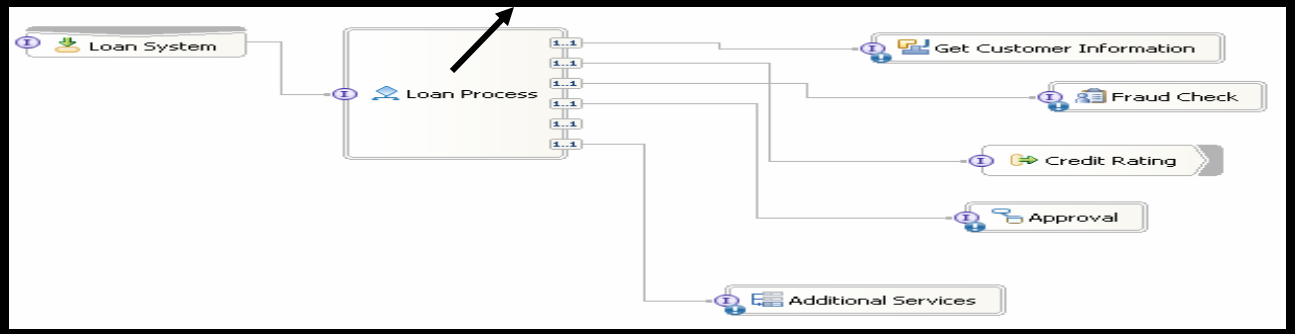
Best Practice #3

Build a BPM Framework 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



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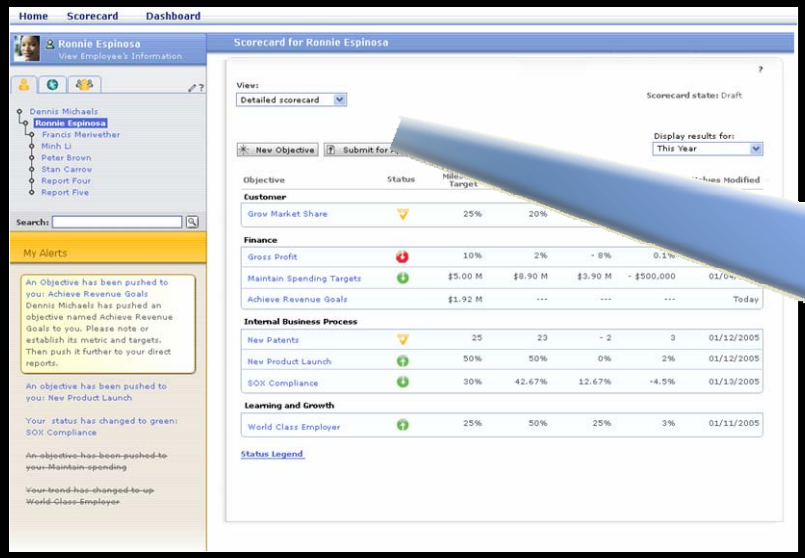
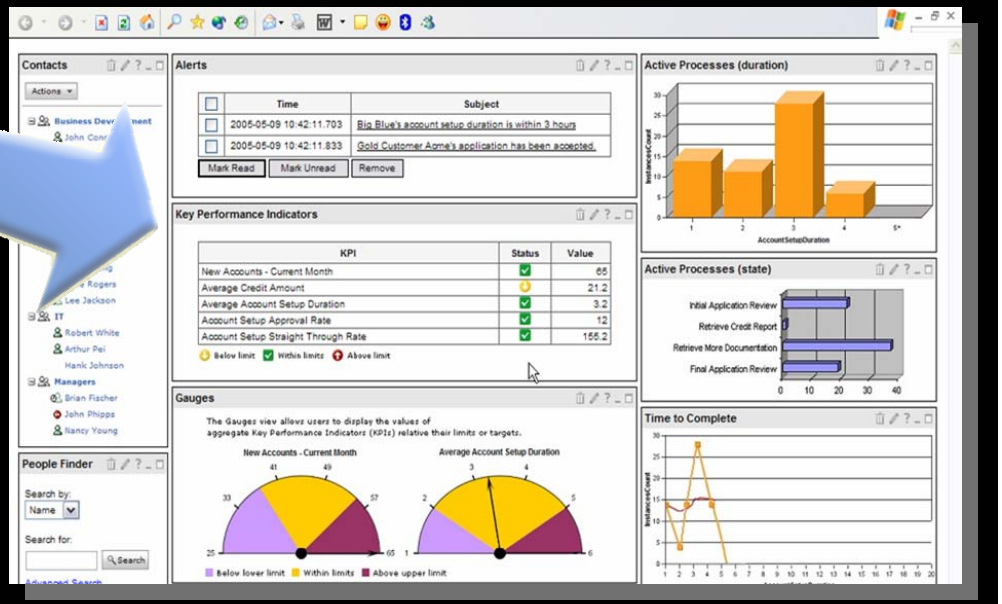
Best Practice #4

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**





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Enhanced! SOA Announcements for Process

SOA Processes with Built-in Flexibility

ENHANCED!

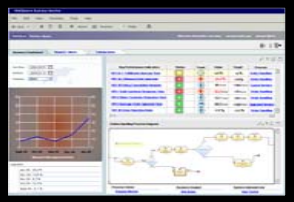
WebSphere Business Modeler

- 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

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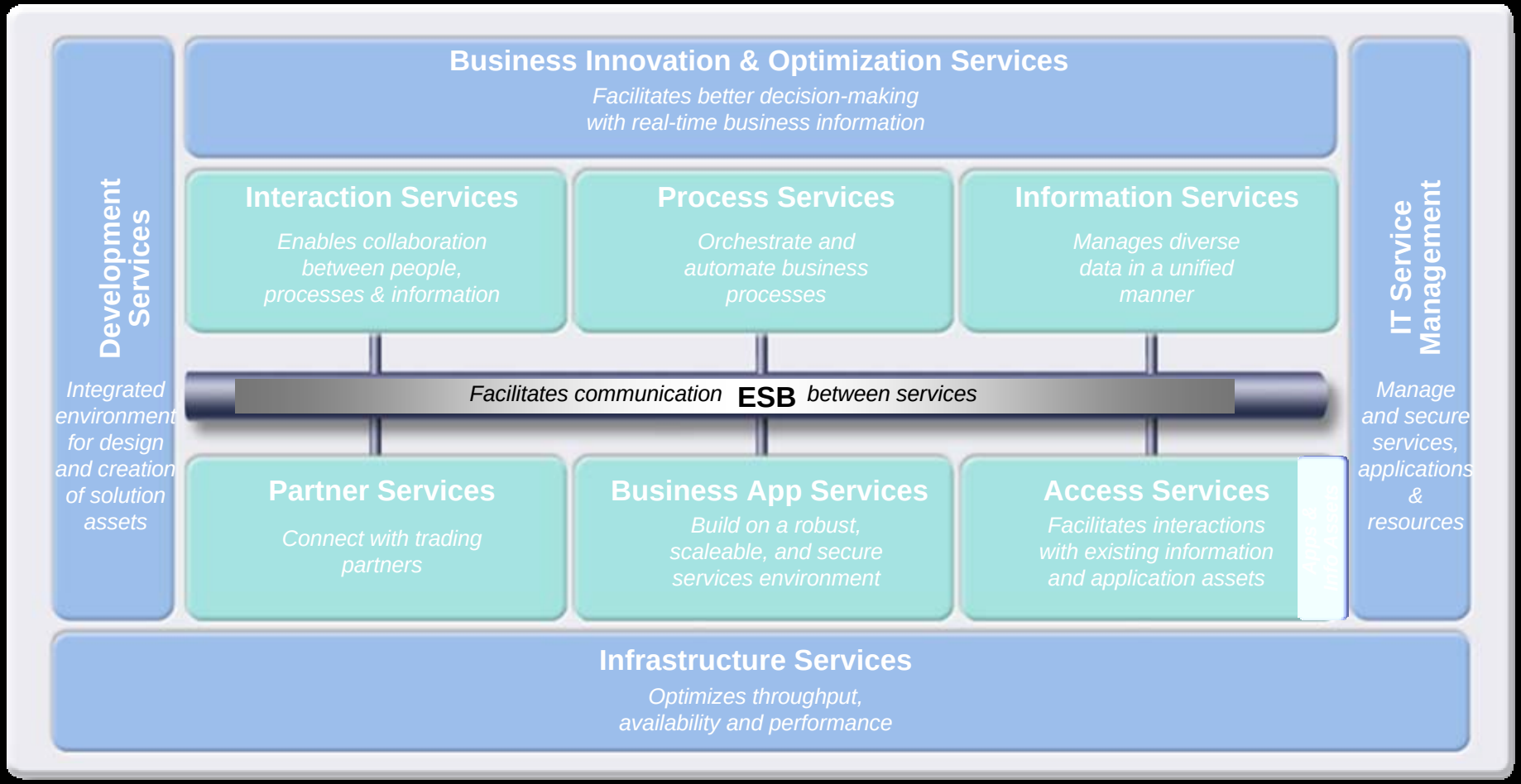
Business process management leverages capabilities from across the SOA Reference Architecture



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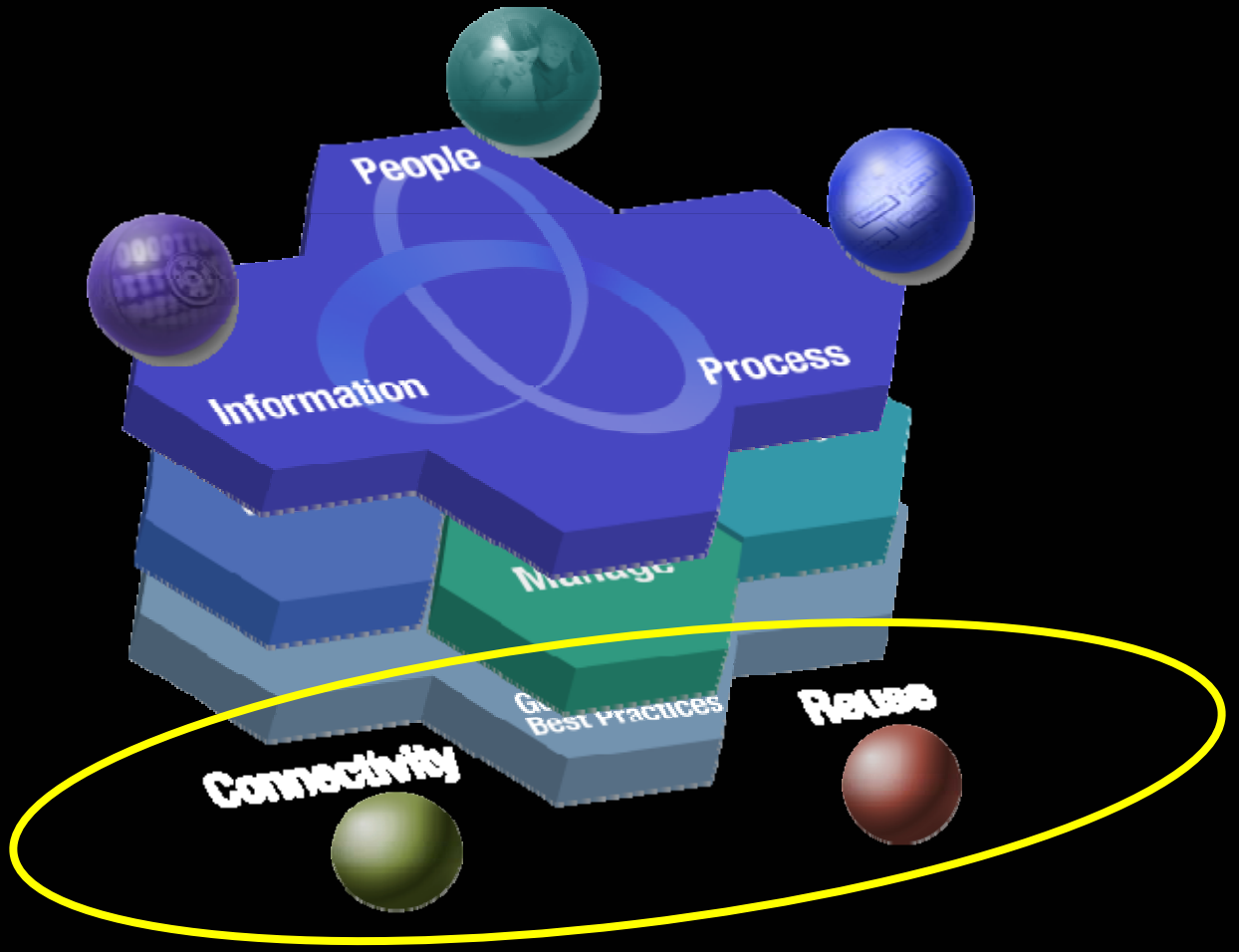
SOA Entry Points Help Customers Get Started

Both Business Centric and IT Focused



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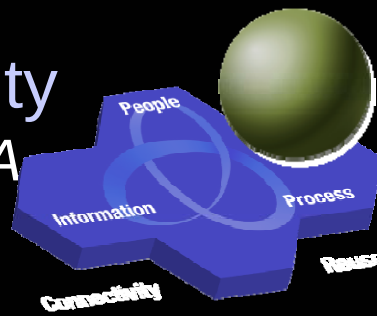
Enhanced! SOA Announcements for Connectivity

Underlying Connectivity to Support Business Centric SOA



SOA Connectivity

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

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

- 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

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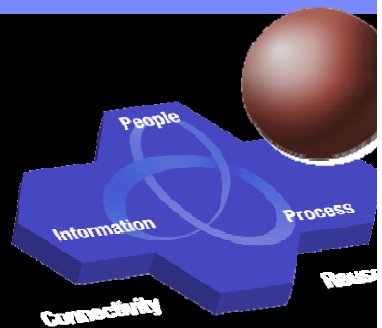
New! Creating & Reusing Services for SOA

Create Flexible, Service-based Business Applications

SOA Sharing & Reuse



NEW!

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

ENHANCED!

WebSphere Application Server

- 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

ENHANCED!

Reuse of System z Assets

- 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

ENHANCED!

WebSphere Commerce

- Consistent cross-channel 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

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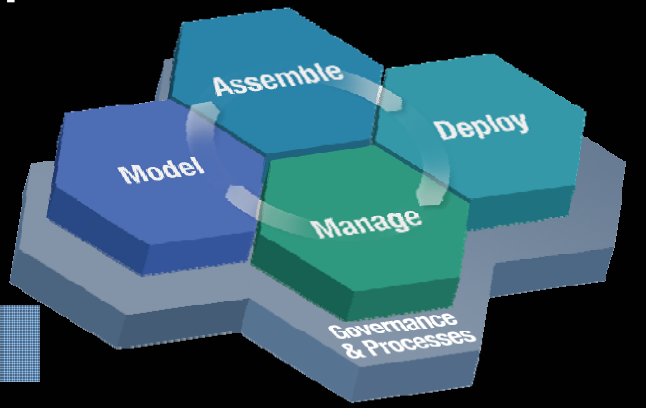
Why IBM WebSphere software for BPM for SOA?

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

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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

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

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