



Using Business Processes Management to achieve Process Integrity



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Key Questions:

What is Process Integrity?

What is Business Process Management?

What is the relationship between BPM & Process Integrity?



Process Integrity



End-to-end Processes Are at the Heart of Every Business

Processes Are Increasingly Distributed as Companies Integrate Globally

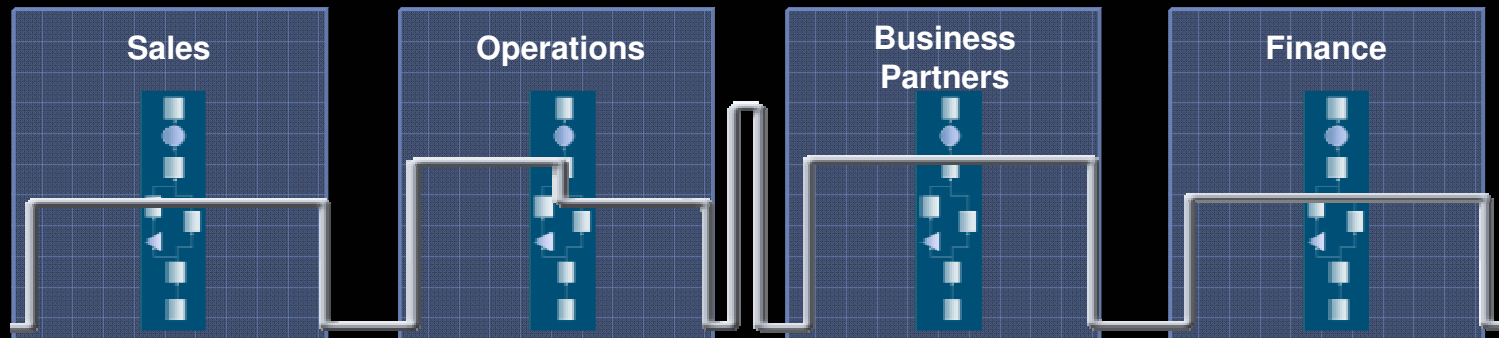
- Business processes in the Globally Integrated Enterprise will often cross multiple geographic, corporate and functional boundaries



Your Business Relies on Consistent Process Execution

What Happens if Critical Business Processes Fail?

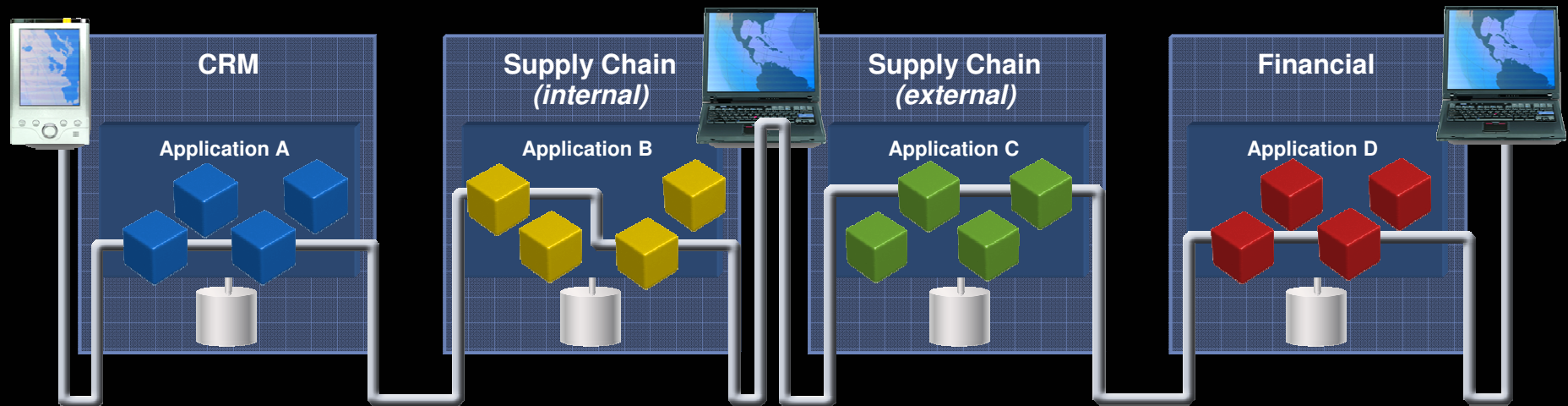
- Failure of critical business processes results in:
 - *Loss of revenue*
 - *Damage to your brand*
 - *Decreased customer satisfaction and loyalty*
 - *Increased risk of competition*
 - *Potential for regulatory fines*



Advanced SOA Requires a More Comprehensive Approach *To Handle More Services, Information, and People*

- As SOA becomes more advanced, the ability to maintain robust end-to-end integration and consistency becomes more challenging
- Capabilities for process integrity must be built in to the middleware

IBM's approach to SOA allows you to use the same tools and same architecture as you move along the SOA continuum



Process Integrity Takes SOA to the Next Level

Supporting Integrity of Transactions, Interactions and Information

Process Integrity is the ability to conduct reliable business activity in a secure, scalable SOA environment with seamless synchronization between:
Services ■ Human Tasks ■ Information

Users Must Be Provided with Up-to-date, Secure Access to Information and Content

Transactions Must Execute Consistently with Ability to Recover as Required

Information Integrity

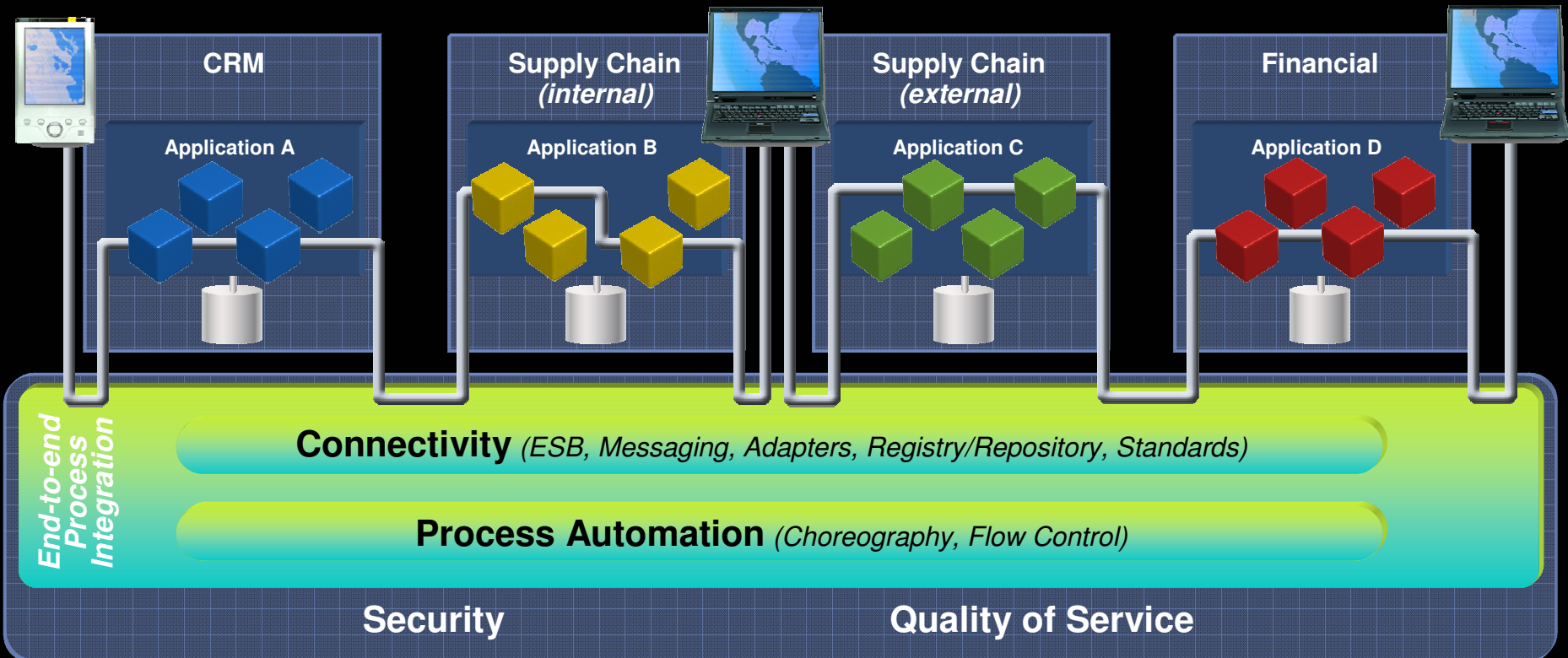
Process Integrity

Information Must be Reliable, Complete and Manageable

Process Integrity is Critical to Advanced SOA Projects

To Achieve Business Agility Without Sacrificing Integrity

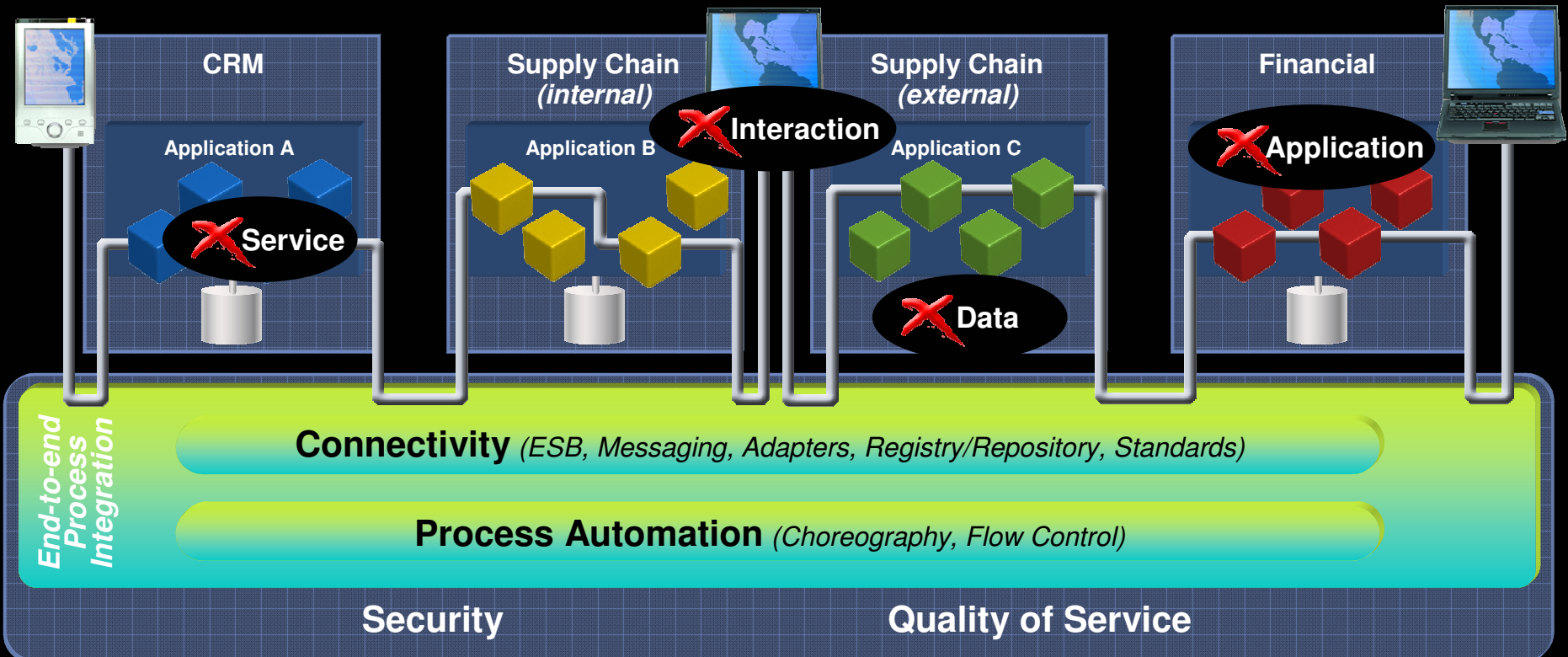
Process Integrity is the degree to which loosely coupled systems deliver the reliability, consistency, scalability and predictability of tightly coupled systems



Recovery and Compensation are Key to Process Integrity

Recovery Must be Automated and Predictable... Not an Afterthought

- Business and IT operational outages can occur at any point of the process
- Process Integrity requires the ability to specify and automate consistent, predictable compensation at all levels of the SOA environment



Process Integrity and the Globally Integrated Supply Chain

Sample Scenario

WITHOUT Process Integrity

Information does not flow accurately from supplier through to retailer; retailers cannot efficiently place & change orders; unreliable access to inventory & pricing information

Transactions cannot be reliably synchronized end-to-end; unfilled and incorrect orders result in lost revenue & decreased customer loyalty

WITH Process Integrity

Information from suppliers is up-to-date; order placement is flexible and accurate

Ability to synchronize transactions across supply chain results in higher rate of correctly filled orders



What's New in Process Integrity

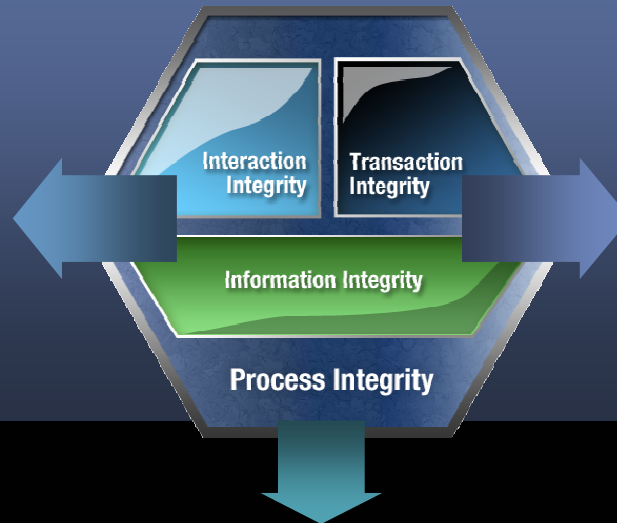
Process Integrity Announcements in the SOA Launch



Interaction Integrity

Lotus Forms

- Rapid development and delivery of security-rich, dynamic electronic forms
- Highly scalable with enterprise class performance



Transaction Integrity

WebSphere Process Server

- New generic JMS business process interfaces
- Greater flexibility in controlling the flow of business processes

WebSphere Message Broker

- Enhanced support for WS-Security and WS-Addressing
- Simplified EIS query for key data structure discovery

WebSphere ESB

- Service Invocation Retry
- XML Validation
- Template-driven ND configuration

Quality of Service

WebSphere XD

- Intelligent workload management
- Caching, partitioning, and automatic replication facilities for high performance computing

Information Integrity

IBM Information Server

- Enhanced search, ad-hoc queries and visual meta-model navigation
- Web-based exploration of information assets

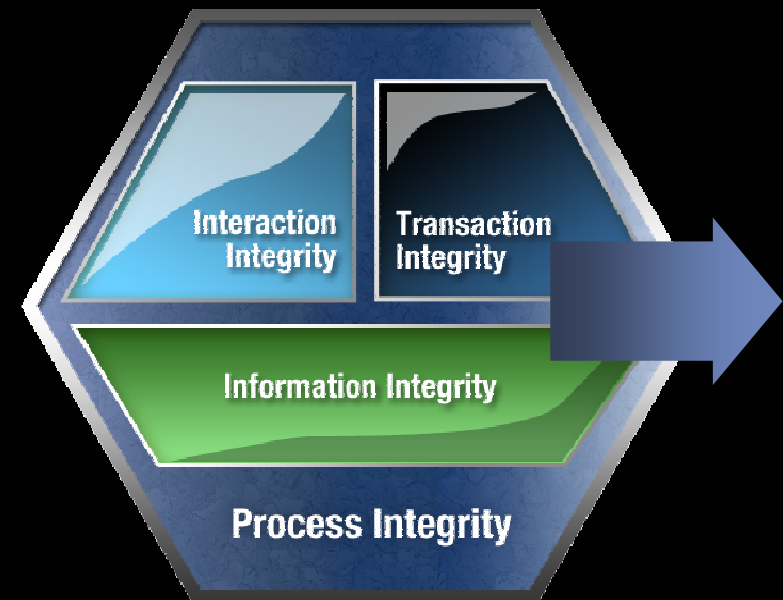
WebSphere DataPower Integration Appliance XI50

- Dynamic Web Services Policy Framework
- WS-I Profile updates
- Simplified configuration & management

Transaction Integrity Assures Consistency of Execution

Enabling Consistent Transaction Processing in an SOA Environment

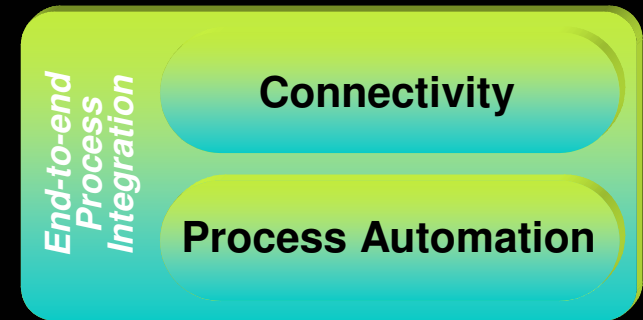
- **Transaction Integrity** ensures that individual updates of IT / business resources are linked together and processed as a single unit of work
 - *Atomic* transactions are short-lived and operate in real-time in a single unit of work
 - *Business* transactions can be long running, lasting seconds or months, and can include multiple atomic transactions
- **Key Transaction Integrity Products:**
 - WebSphere Process Server, WebSphere ESB, WebSphere Application Server
 - WebSphere Message Broker, WebSphere MQ
 - WebSphere DataPower Integration Appliance XI50
 - WebSphere Service Registry and Repository
 - WebSphere Adapters
 - CICS Transaction Server



Process Integrity Demands High Quality of Service

Scalability, Availability and Performance are Fundamental

- Maintaining High QoS in End-to-end Processes
 - Workload management and high availability of transactions
 - SOA appliances to accelerate XML and security processing
 - Virtualization to enable flexible allocation of resources
- Performance Testing and Monitoring
 - Performance testing and problem analysis tools
 - Runtime monitoring to proactively identify performance problems in end-to-end processes
- Key Quality of Service Products:
 - IBM System z Servers
 - WebSphere Process Server
 - Tivoli Composite Application Managers
 - WebSphere XD
 - WebSphere DataPower SOA Appliances
 - Rational Performance Tester Extension for SOA Quality



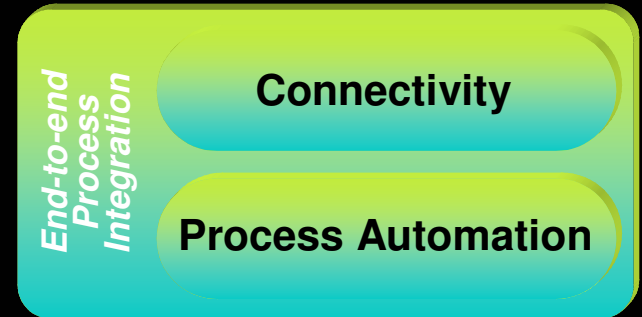
Quality of Service

Process Integrity Demands High Quality of Service

System z is uniquely capable of ensuring QoS

- Up to 99.999% availability in a Parallel Sysplex to avoid planned and unplanned outages
- Change management and rolling maintenance reduces planned outages
- GDPS enables fast recovery of whole systems across vast distances
- Component level recovery for both hardware and software
- Automated recovery response to failures including restart and isolation, as appropriate
- Dynamic workload balancing across systems and logical partitions for 24x7 operations

A large bank running their ESB on System z has seen 99.99% availability since their initial deployment two years ago.



Quality of Service



Standards Are Key for End-to-end Business Processes

Enabling Interoperability Among Disparate Systems

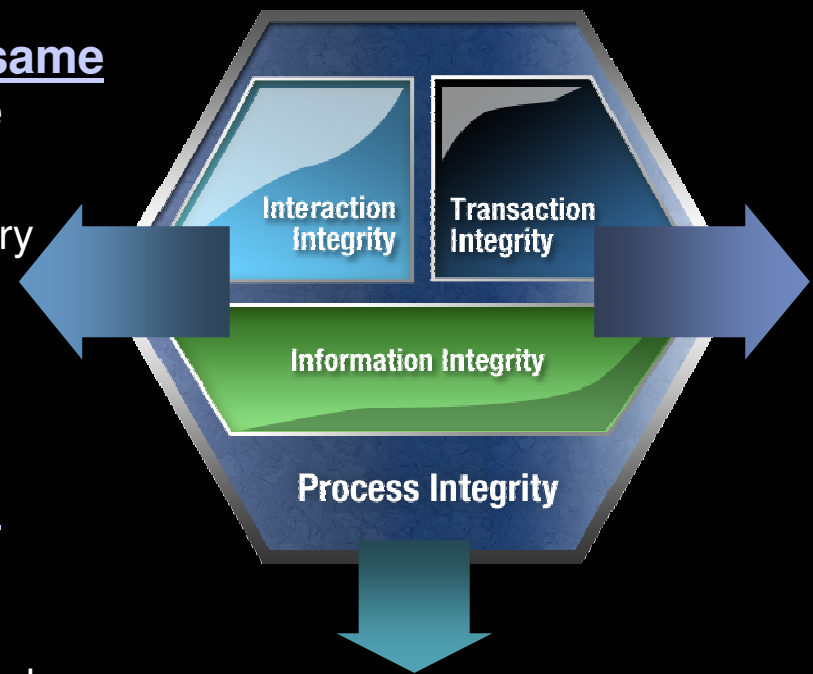
- Transaction Integrity
 - WS-Transactions – Short-lived transactional capabilities with ACID properties; long-running transactional capabilities with compensation
 - WS-Reliable Messaging - Exactly once delivery of messages
 - WS-BPEL – Process choreography incorporating compensation to reverse completed process steps in event of process failure
- Interaction Integrity
 - WS-Remote Portlets – Interoperable integration of portlets from disparate sources
- Information Integrity
 - X/Open (XA Specification) – Transactional support of information updates in a distributed environment
- WS-Security, WS-Federation, WS-Trust, WS-Secure Conversations, SAML
 - Security standards that support confidentiality, integrity, authentication and trusted identity



Standards Must Be Implemented Robustly

To Achieve Appropriate Levels of Process Integrity

- IBM's implementation of standards leverages the robustness built in to our entire SOA portfolio
- WS-Transactions is implemented using the **same enterprise-class capabilities** as IBM's core J2EE transactional environment
 - Transactional high-availability and peer-recovery in a High Availability cluster
 - Supports both WS-Business Activity and WS-Atomic Transaction
- WS-Reliable Messaging is built on the **same robust infrastructure** as IBM's JMS implementation
 - Scales from light-weight in-memory persistence to managed recoverable queue-based persistence



Process Integrity at China Mobile

Challenge

- Independent siloed systems slowed gathering information to assist customers
- Needed process integrity across end-to-end business processes

Solution

- Integrity across interaction, transaction, and information
- Integrated siloed CRM, business analysis and billing systems
- End-to-end connectivity with ESB

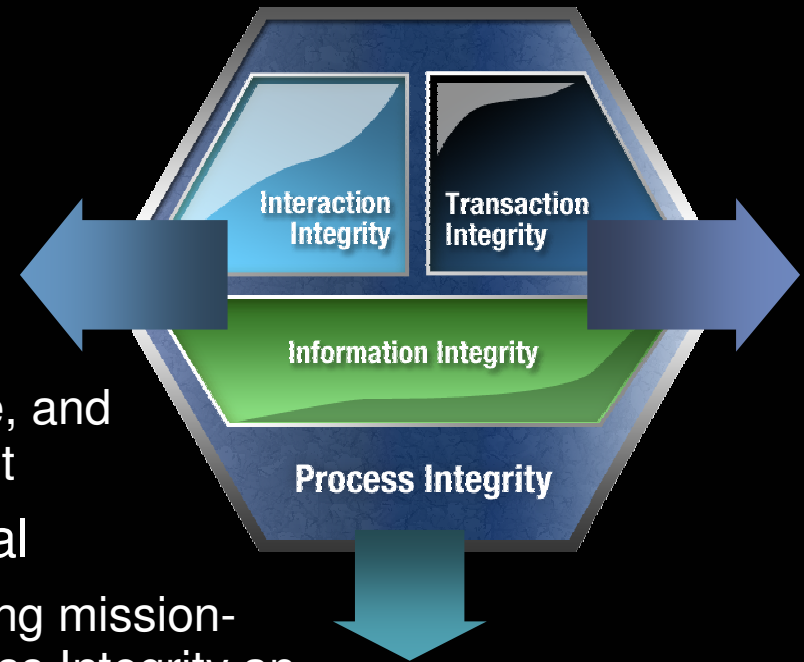


Business Benefits

- Average resolution time reduced from two days to less than one hour
- Improved customer service
- Simplified customer operations and increased employee productivity
- Flexibility for future business requirements

In Summary

- Process Integrity ensures reliable execution of critical business processes in SOA
- Process Integrity is composed of three main areas:
 - Transaction Integrity
 - Interaction Integrity
 - Information Integrity
- Recovery and compensation are critical aspects of Process Integrity
 - Must be highly automated and predictable, and built into all levels of the SOA environment
- Quality of service and security are crucial
 - IBM has leveraged a long history of building mission-critical computing systems to make Process Integrity an integral part of our SOA portfolio





Business Processes Management



The Business Landscape is Changing

Forcing Companies of All Sizes to Respond to a 'Flat World'

Innovation that matters to CEOs:

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



87% expect fundamental change in next 2 years
78% believe innovation requires business and technology

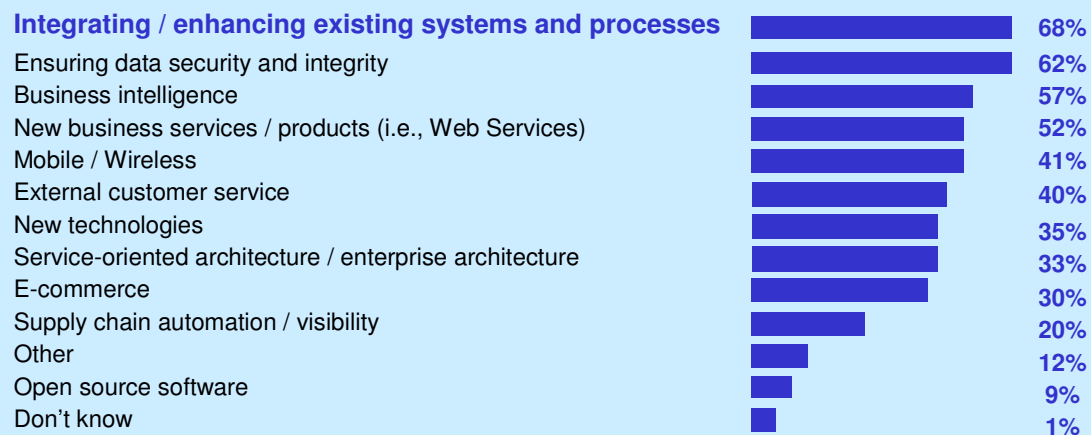
Aligning IT and Business Goals

Top IT Management and Technology Priorities

Top IT Management Priorities for the year ahead

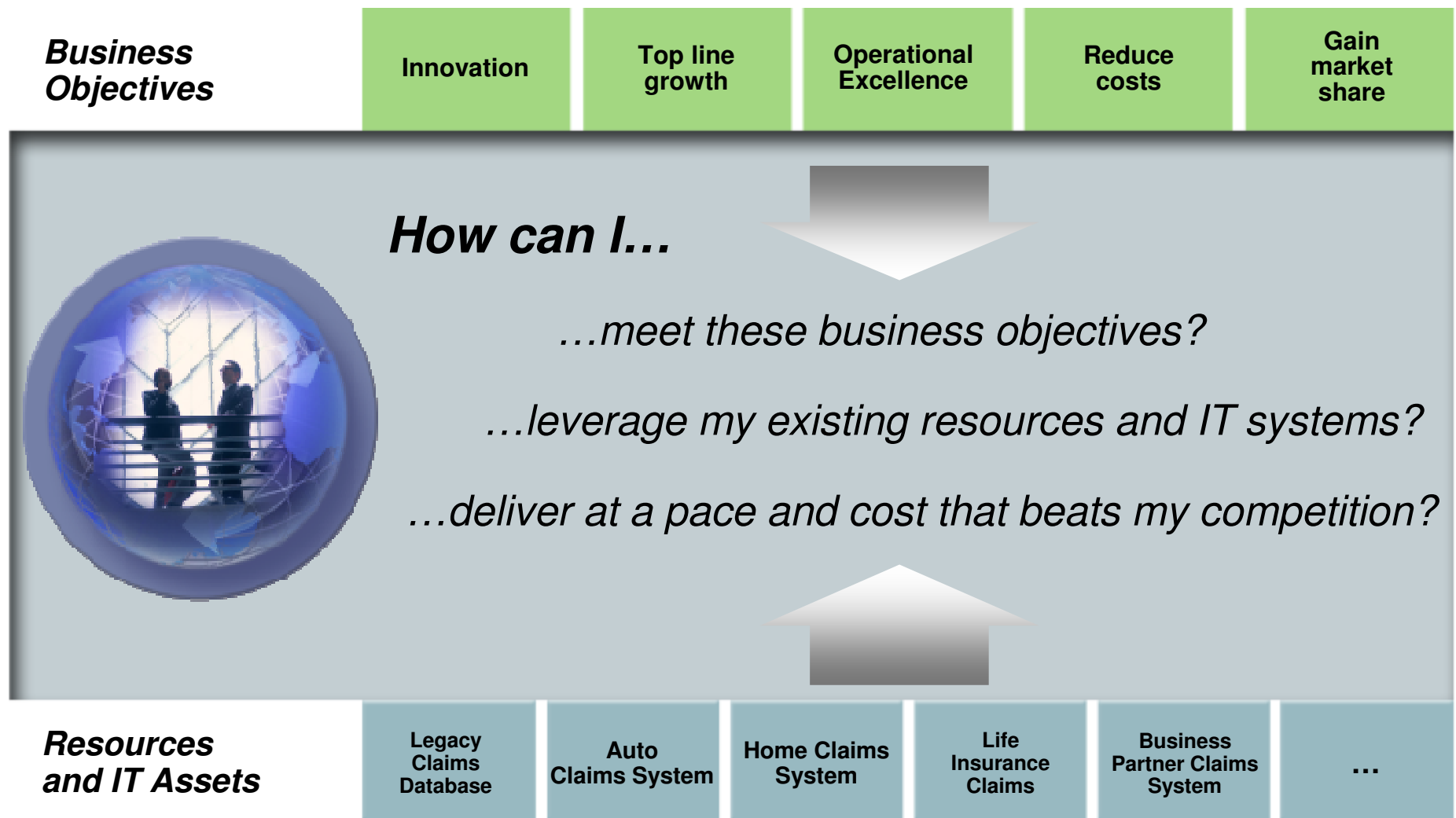


Top IT Technology Priorities for the year ahead

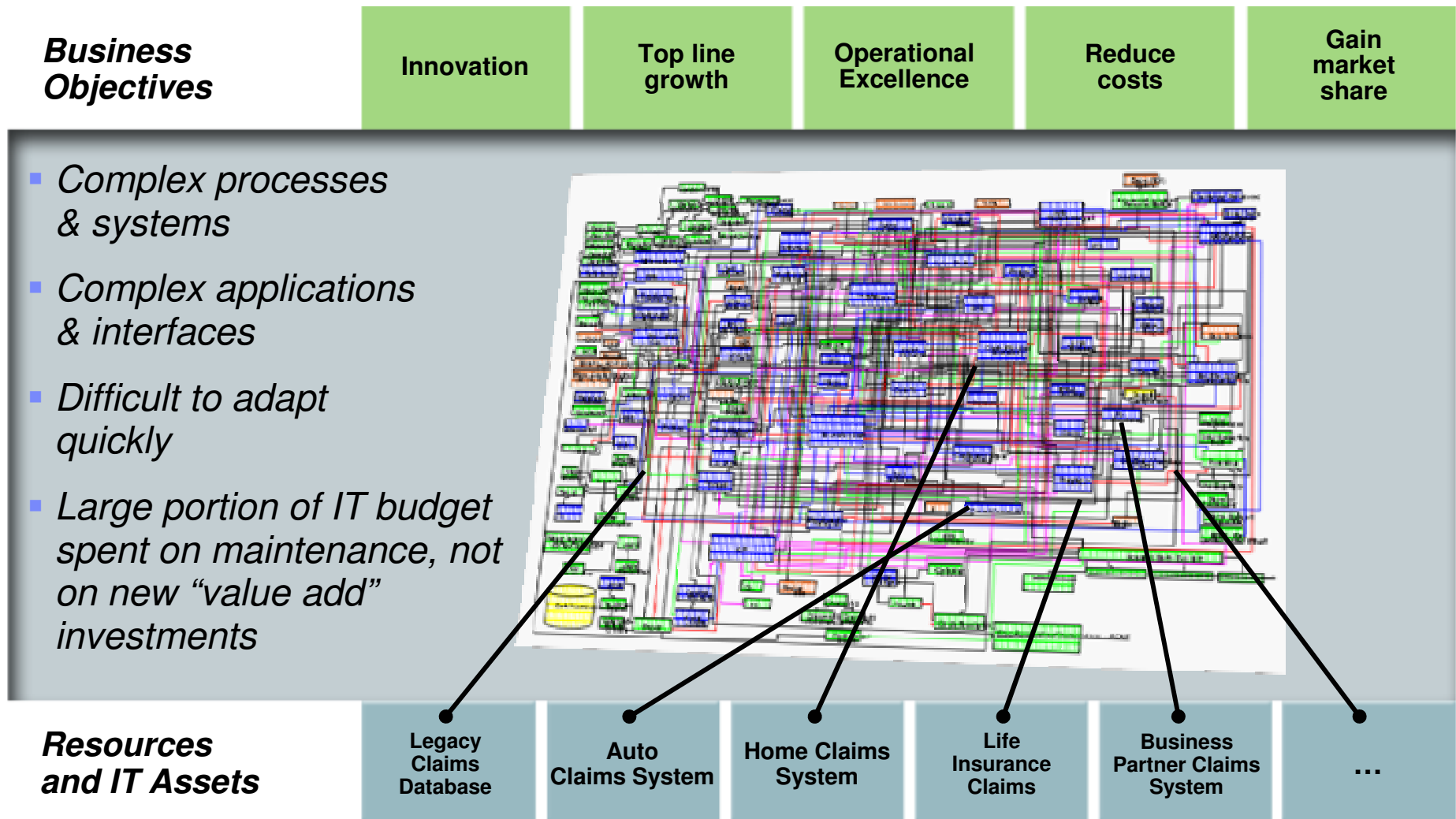


Source: CIO Magazine's "State of the CIO Survey". CXO Media Inc., 2007.

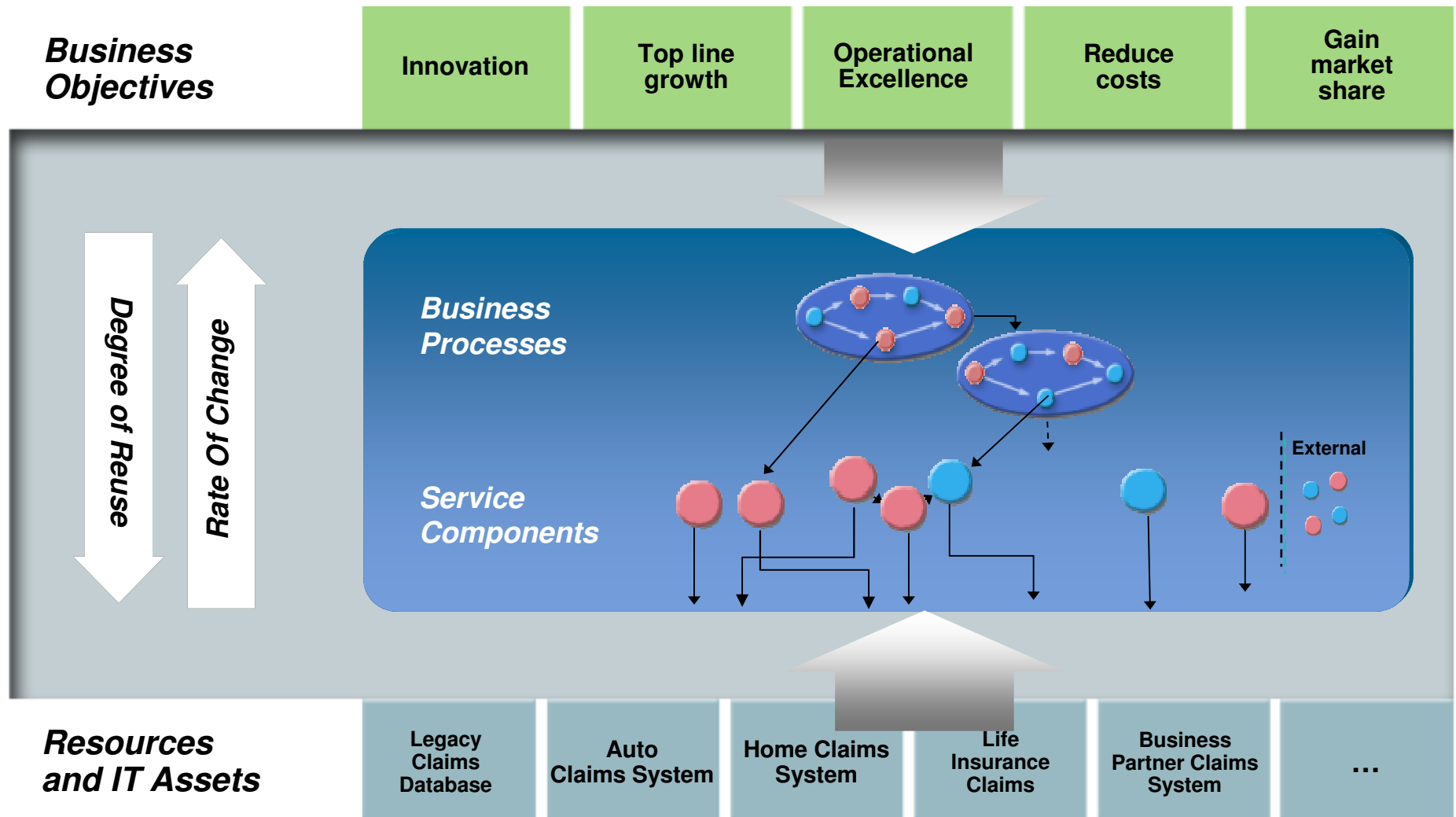
Customer Business Objectives



The Challenge



BPM Enabled by SOA Addresses this Challenge

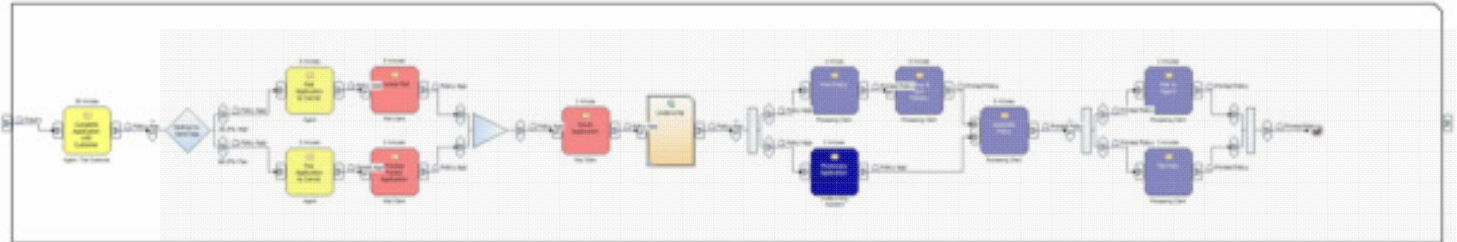


Business Process Management Enabled by SOA

A discipline enhanced by flexible architecture

What is Business Process Management?

*A discipline combining
business expertise and technology capabilities
to accelerate process improvement and
facilitate business innovation*



Expertise that Delivers BPM

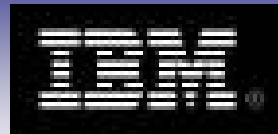
- Process Knowledge
- Industry Methods and Models
- Business consulting expertise

Technology that Enables BPM

- Business Services
- Tools, Rules, Servers, Repositories
- Business Dashboards, Forms

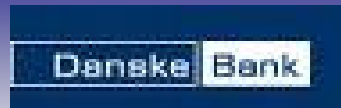
BPM Delivers Real Customer Value Today

Manage Change
by modeling and
analyzing existing or
new processes.



*Reduced time and cost
of new process releases
by 25%*

Respond Quickly
with processes based
on a flexible
infrastructure.



*Realized \$2M savings in
the first year and
increase in productivity*

Enhance Efficiency
by analyzing activity to
ensure processes meet
objectives.



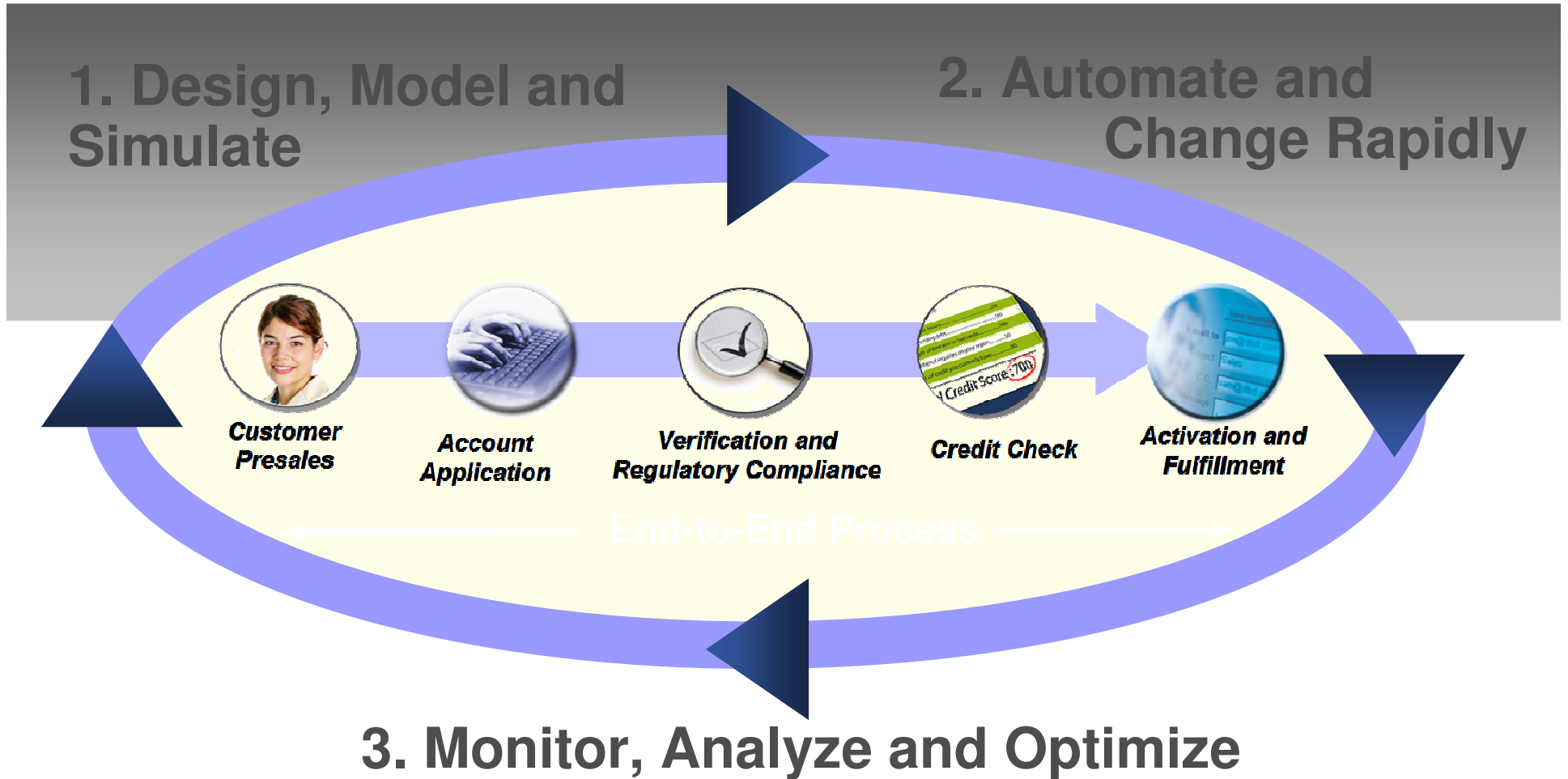
*Reduced mortgage process time
by 53%*
Achieved 34% gains in efficiency
Estimated annual savings of \$4M

What Can BPM Do For You?

- **Business Process Management can help you to:**
 - get control of your environment
 - create new business value and increase operational efficiency
 - design, improve, manage, and optimize business processes
 - understand and change operational processes quickly
 - increase the agility and flexibility of your business
 - achieve Process Integrity



BPM covers the entire lifecycle of your business processes



Three Critical Success Factors

Manage Change
by modeling and
analyzing existing or
new processes.

Design

**e.g. Reduce the
inherent time and
cost of processes**

Respond Quickly
with processes based
on a flexible
infrastructure.

Automate

**e.g. Move compliant
processes into
production fast**

Enhance Efficiency
by analyzing activity to
ensure processes meet
objectives.

Optimize

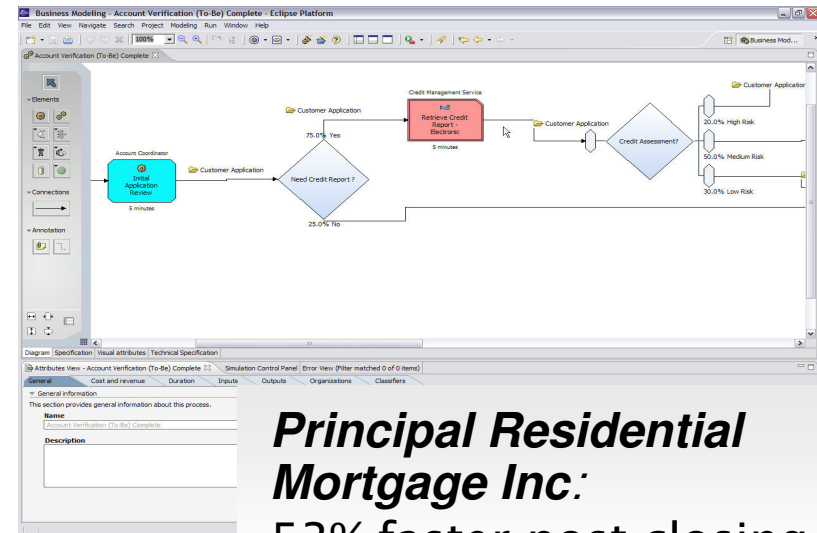
**e.g. View and
understand real time
business facts for
rapid decision making**

Business Reasons for Modeling and Analysis

- **Modeling For Documentation & Compliance**
 - Document processes to better understand your business
 - Understand and capture complex behaviors and domain expertise in processes
 - Use output for training, collaboration, and documentation
- **Modeling For Redesign & Optimization**
 - Discover potential areas for process improvement and latent value in processes
 - Document both the current state and future state business process and the comparison to validate enhancements and ROI before committing resources
 - Establish and track measurable process metrics for performance
- **Modeling For Execution**
 - Ability to change the business process to respond to changes in market
 - Future state business process is ready to be passed to application, workflow and business process development tools to be executed as a new running process
 - Linked real-time monitoring provides feedback on process improvements and reporting for compliance on running processes

Best In Class Business Modeling And Simulation

- Graphically Model Processes
 - A business tool for business users
 - Model everything you need to design and "sand-box" your business process – Costs, Times, Resources
- Simulate And Analyze
 - Simulated execution of the business process with detailed statistical analysis tools
- Collaborate and Web Publish
 - Tools to allow multiple people to work as a team on business process work
 - Tools to publish business process work across the business
- Hand Off To IT
 - Export business and data models for use in IT deployment
- Interoperability with:
 - Visio Diagrams
 - Lotus Forms
 - FileNet P8 BPM
 - MS-Word
 - Rational Data Architect



Principal Residential Mortgage Inc.:

53% faster post closing mortgage processing time
 34% increase in efficiency,
 estimated annual savings
 \$4M

WebSphere Business Modeler

Three Critical Success Factors

Manage Change by modeling and analyzing existing or new processes.	Design	Business level modeling and simulation
Respond Quickly with processes based on a flexible infrastructure.	<i>Automate</i>	Robust, high performance, assured execution for the full spectrum of BPM
Enhance Efficiency by analyzing activity to ensure processes meet objectives.	Optimize	Business process monitoring and optimization

Automate: Process Automation Lowers Operating Costs

Crowley Maritime

Challenge

- Reposition its business operations to meet the challenges of its second century of operations
- Reduce operating costs; Increase profits and ROI of existing routes/platforms; and address legacy application modernization

Solution

- Automate critical business processes
- Integrate and modernize existing legacy systems



Business Benefits

- \$15,000 savings per integration interface
- 50% reduction in application delivery time and costs
- Significant improvement in efficiency, productivity, business flexibility
- Errors and omissions reduced

Simplified Integration – Easy To Learn And Use

- Simplified hand-offs between business and IT that let developers get started quickly
- Easy to use tools that minimize skill requirements
 - Role-based tooling on Eclipse standard
 - Integrated tooling for all aspects of process design leveraging BPEL, human workflow, business rules, etc.
- Streamlined development with the reuse of existing resources
- Dynamic process assembly



“Our development cost data proves that on each successive project the cost per interface dropped. It was because of the reuse”
– Lead Architect
Dow Chemical

**WebSphere Integration
Developer**

Integrating Applications using SOA Standards

Web Services connectivity and JMS messaging powers SOA

- Improve flexibility through the adoption of service oriented interfaces

Easy to use

- Tools: minimal programming skills required
- Simple to install, configure, build and manage

Improved time to value

- Cost effective solution for services integration
- Support for hundreds of ISV solutions

Common Runtime

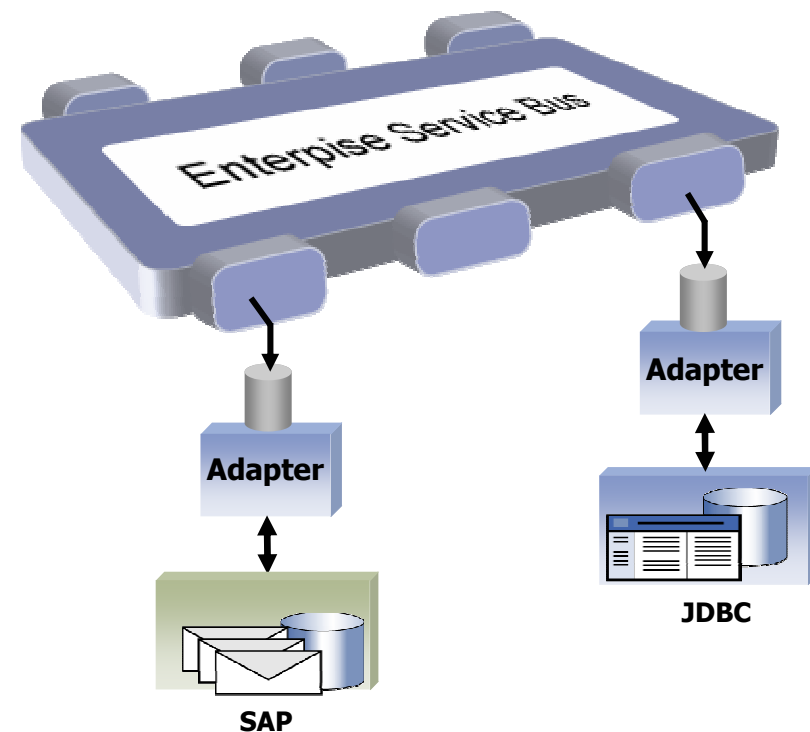
- Leverages WebSphere qualities of service: clustering, fail-over, systems management, security



WebSphere ESB

Service “On Ramp” for Existing Applications

- Accelerated Time To Value
 - Configure and deploy without coding
 - Leverage existing metadata
 - Connectivity through standardized technologies
 - Leverage existing legacy capabilities
- Enterprise Ready
 - Mission-critical quality of service
 - Full portfolio of integration products available through a single vendor
- Best Practices
 - First-class support for top ISVs
 - Based on first-hand experience gained from integration services
 - Established relationships with top-tier ISVs



WebSphere Adapters

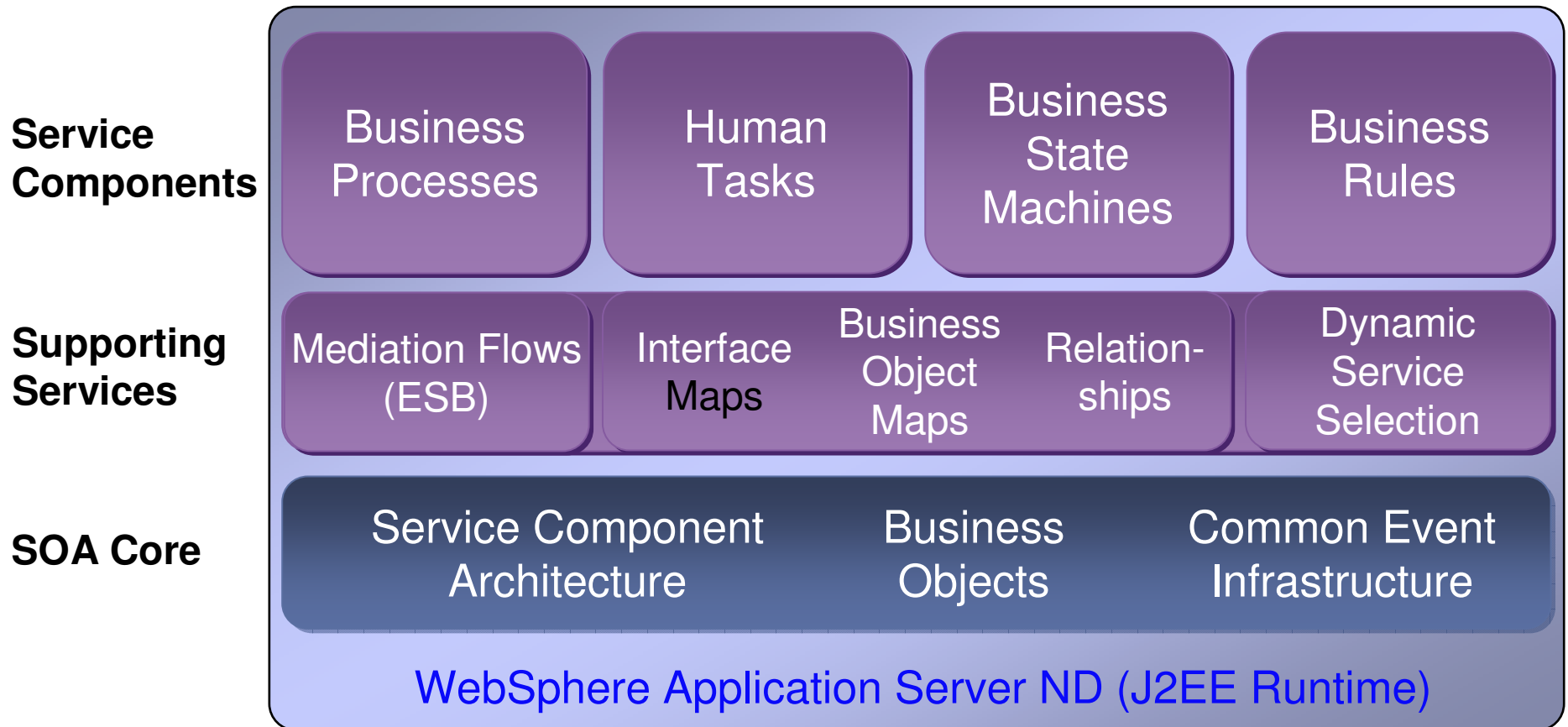
WebSphere Process Server

The Engine Room of Business Process Management

- **Robust execution of business processes**
 - Reliable, scalable, secure, open standards
 - Single integrated runtime for all SOA based process automation
- **Supports all aspects of process integration**
 - Process flows
 - Business rules
 - Human steps
 - State machines
- **Rapid process change ensuring business agility**
 - Reuse existing services that you already have and create new services for future use.
 - Build process flows without knowing where the information is coming from (late binding of services)
 - Business rules control the execution sequence of the process and can change dynamically

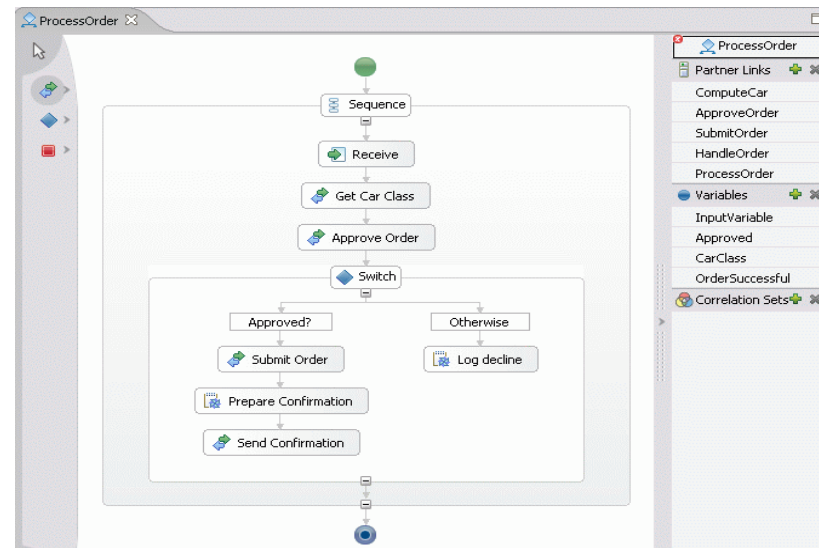
WebSphere Process Server

Component Architecture



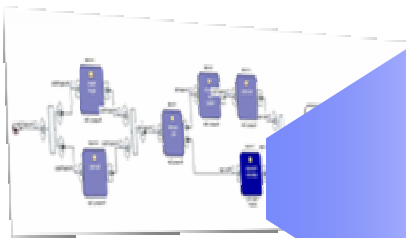
Business Process Definitions based on Open Standards

- **BPEL compliant business process engine**
 - Based on V2.0 specification
- **Simple drag-n-drop Process Editor**
 - Operations / Parameters
 - Service implementation details stay hidden
- **Transactions / Compensation**
- **Event handling**



Human Tasks as Service Components

Rapidly define interfaces for human tasks as you model



dealmanager
JPMorganChase application

Go to Page: ...

Cancel Print
Save & Close Print All

ACH SETUP

IR ID Number: _____ Client Name: _____
 IC Name: _____ Client ID: _____
 Product Request Type: _____ UCN: _____ Client TIN: _____
 Client Address: _____

Primary Business Contact

Title: _____
 Last Name: _____ Middle Initial(s): _____
 First Name: _____ Telephone Number: _____
 Email Address: _____ Fax Number: _____

Region: Addendum Target Live Date (mm/dd/yyyy) _____

Request Type: New ACH Client (Contract Required!) Existing ACH
 Company ID: _____ Origin #: _____

INTERNAL CONTACTS FOR OVER-LIMIT APPROVALS
 Escalation Contacts (These individuals are contacted for over-limit approvals if the primary contact listed above is unavailable.)

	Primary Contact	Escalation # 1	Escalation # 2
Name:			
Work Phone:			
After Hours Home Phone:			
After Hours Cell Phone:			

ACH APPLICATIONS

ACH Applications: Direct Send JPMorgan ACCESS* Paysource Cash Manager TOC (Online) Cash Con
 PC Prompt Pay Microlink* Receiver Services CashNet/NOBNET/TMOL TOC (Windows)/BIM
 Insight Service Bureau First Cash/LMTS/SOFTI TONACH
 Integrity Test None First Windows/FW LITE None
 TOC (Online)

Application ID	Company ID	Account Number	Bank ID
9000002598	9000006332-OH	9000007344-TX	Please
EFT - 0016580640	9000006331-OH	9000004736-WI	Please
Cash Con - 0016580644	9000007347-TX	Same Day	Please
LMTS - 9000002932	9000006792-WV	9000004540-IN	Please
FirstCash/SOFTI - 9000002933	9000004738-WI	9000006334-OH	Please
	Next Day	9000007348-TX	Please
Balance File - 9000002796	9000006366-AZ	9000004739-WI	Please
Unbalance File - 9000002797	9000006346-AZ/UT/CO		Please
9000004897-IL	9000004894-IL	9000006293-OH/KY/WV	Please
9000004895-IL	9000004537-IN	9000007069-TX/OK/LA	Please
9000004839-IN	9000006743-KY	9000004920-WI/IN/IL	Please



IBM is positioned in the leaders quadrant: *Gartner, Inc.*, "Magic Quadrant for Forms"

Lotus Forms embedded in WebSphere Business Modeler

Business Rules as Service Components

■ Rule Set

- Consists of a set of if/then rule statements
- The developer defines
 - The rules (conditions and actions)
 - Which aspects can be modified at runtime
 - The user interface to modify rules
- Multiple actions can be triggered

▼ Rules

Name	Rule2
Template	Template 1
Presentation	If the assets are greater than <input type="text" value="2000000"/> and the liabilities are less than <input type="text" value="500000"/> , then the rating is <input type="text" value="A"/> .
Name	Rule1
Template	Template 1
Presentation	If the assets are greater than <input type="text" value="2000000"/> and the liabilities are less than <input type="text" value="1000000"/> , then the rating is <input type="text" value="B"/> .

▼ Templates

Name	Template 1			
Presentation	If the assets are greater than <input type="text" value="{0}"/> and the liabilities are less than <input type="text" value="{1}"/> , then the rating is <input type="text" value="{2}"/> .			
Parameters	Index	Name	Type	Constraint
	{0}	var1	double	None
	{1}	var2	double	None
If	all of the following are true			
	<ul style="list-style-type: none"> ● info.assets > var1 ● info.liabilities < var2 			
Then	rating = var3			

■ Decision Table

- Rule Set in a table format
- One and only one action is triggered

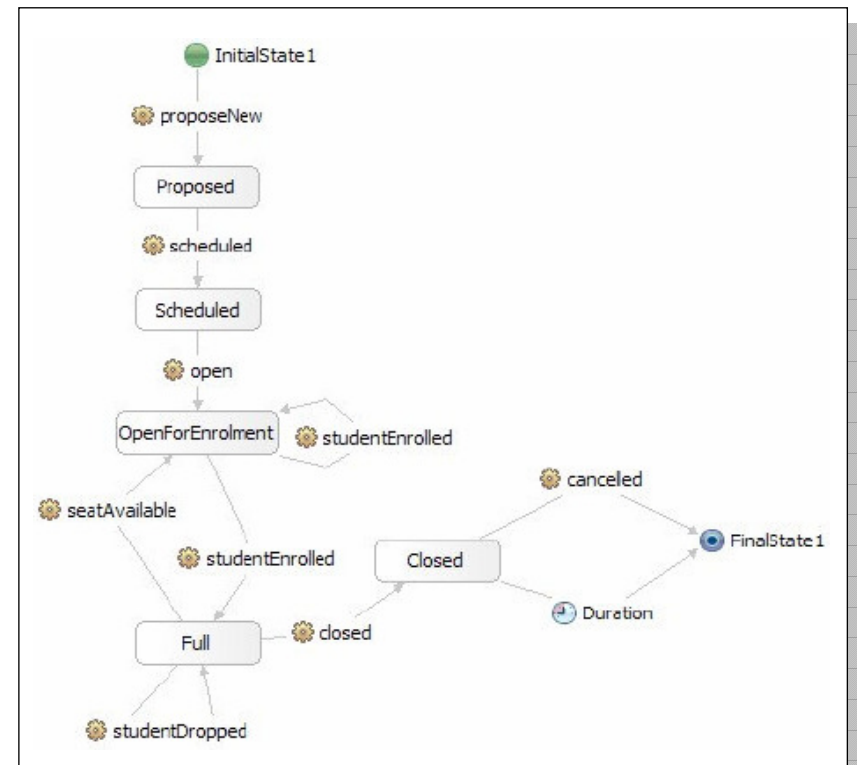
▼ Decision Table

info.assets	> 500000	<= 500000		
info.liabilities	< 10000	>= 10000	< 10000	>= 10000
rating	"A"	"B"	"C"	"D"

Simplified Design for Long-lived Event-centric Processes

- **State machines simplify design when you can't predict the order or sequence of events in your process**

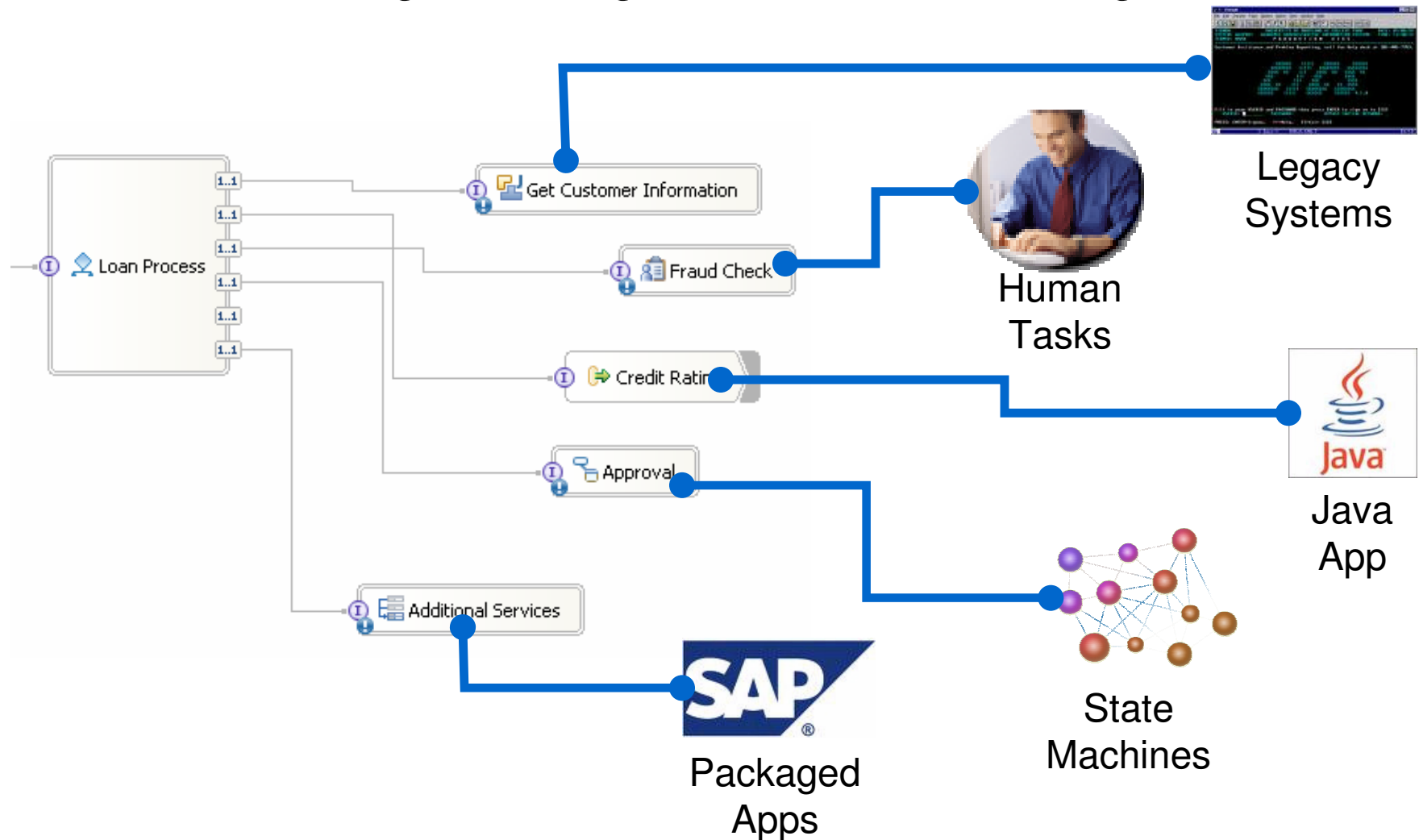
- If events are handled differently depending on the current “state” of a process
 - e.g.- A “*studentEnrolled*” event is treated differently if the class is “*OpenforEnrollment*” vs. “*Full*”
- If processes may need to revert to earlier states at any time
 - e.g.- A “*studentDropped*” event changes the state from “*Full*” back to “*OpenforEnrollment*”
- If a timeout can change the process state without requiring an event
 - e.g.- A timer signals the class is “*Closed*” whether or not it is “*Full*”



Still represented through standard BPEL!

Simple deployment of processes without coding

With SOA, leverage existing assets and achieve greater flexibility



Three Critical Success Factors

Manage Change by modeling and analyzing existing or new processes.	Design	Business level modeling and simulation
Respond Quickly with processes based on a flexible infrastructure.	Automate	Robust, high performance, assured execution for the full spectrum of BPM
Enhance Efficiency by analyzing activity to ensure processes meet objectives.	<i>Optimize</i>	Business process monitoring and optimization

Monitor: WebSphere Business Monitor

Achieve Real-time Visibility into Processes

Scorecards

Key Performance Indicators for business units

Collaboration

Work with teams to resolve situations

Business Alerts

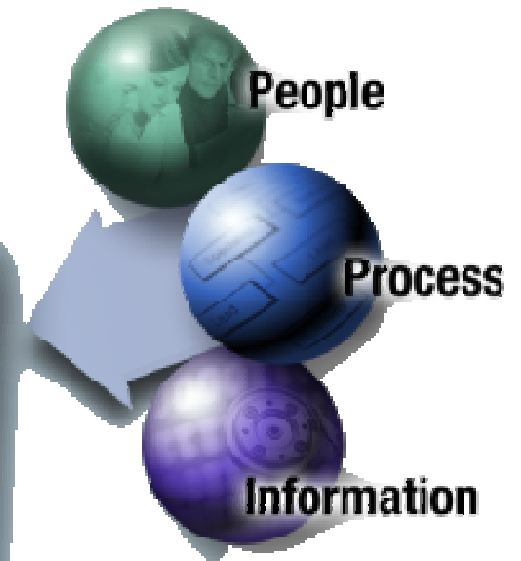
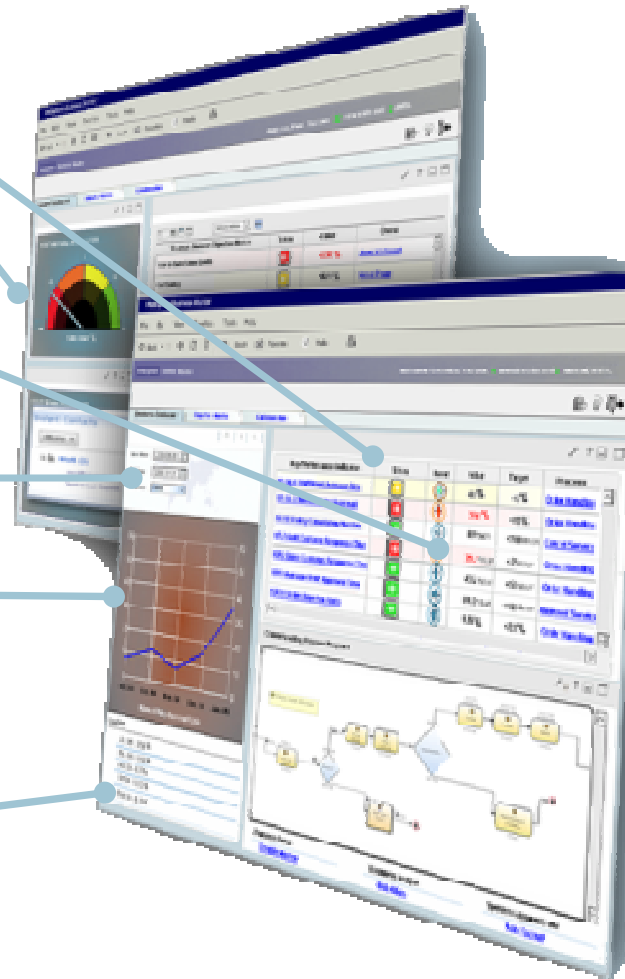
Notification of situations that require response

Reports & Analyses

Understanding trends by combining real-time performance and historical information

External Information

Information affecting performance



Customers turn to IBM for an unmatched breadth of BPM Software and deep BPM and Industry Expertise

#1 in BPMS market share*

Over 2850 BPMS customers in over 30 countries and growing...

Depth of BPM Expertise

- World-class BPM methodologies, process templates, industry best practices, and benchmarks
- BPM Competency Centers
- BPM value assessments and workshops
- 1000+ BPM consultant specialists
- 1,770+ systems integrator and reseller partners
- 4000+ ISV partners
- 10,750+ GBS/GTS practitioners
- 20+ BPM training and education courses

Breadth of BPM Software

- Collaborative business process modeling and simulation
- Best-in-class integration tools, technologies, and adaptors
- Comprehensive asset repositories for BPM-related reuse
- Dynamic, policy-based process customization using composite business application
- High performance, scalable process orchestration and execution engine
- Real-time activity monitoring and response
- Pre-built industry solution accelerators and industry models



“The IBM [BPM] software that we now use has encouraged better business practices throughout our organization, making our company as well as our customers more profitable.”



How you can get started with BPM

Steps to help you prepare for success

ASSESSMENT to identify and score specific BPM opportunities within your organization.



■ Learn

- Attend a **local industry or technology event** with IBM's BPM team (contact your WebSphere sales representative for the latest event calendar)
- Download additional information from the **IBM BPM web site** including demos and whitepapers:



ibm.com/software/innovate



System z



Deploying on System z provides differentiated value

Enabling intelligent IT that works for your business



The IBM Mainframe.
Building on the past, defining the future.

Server Leadership: 40+ years in the making!

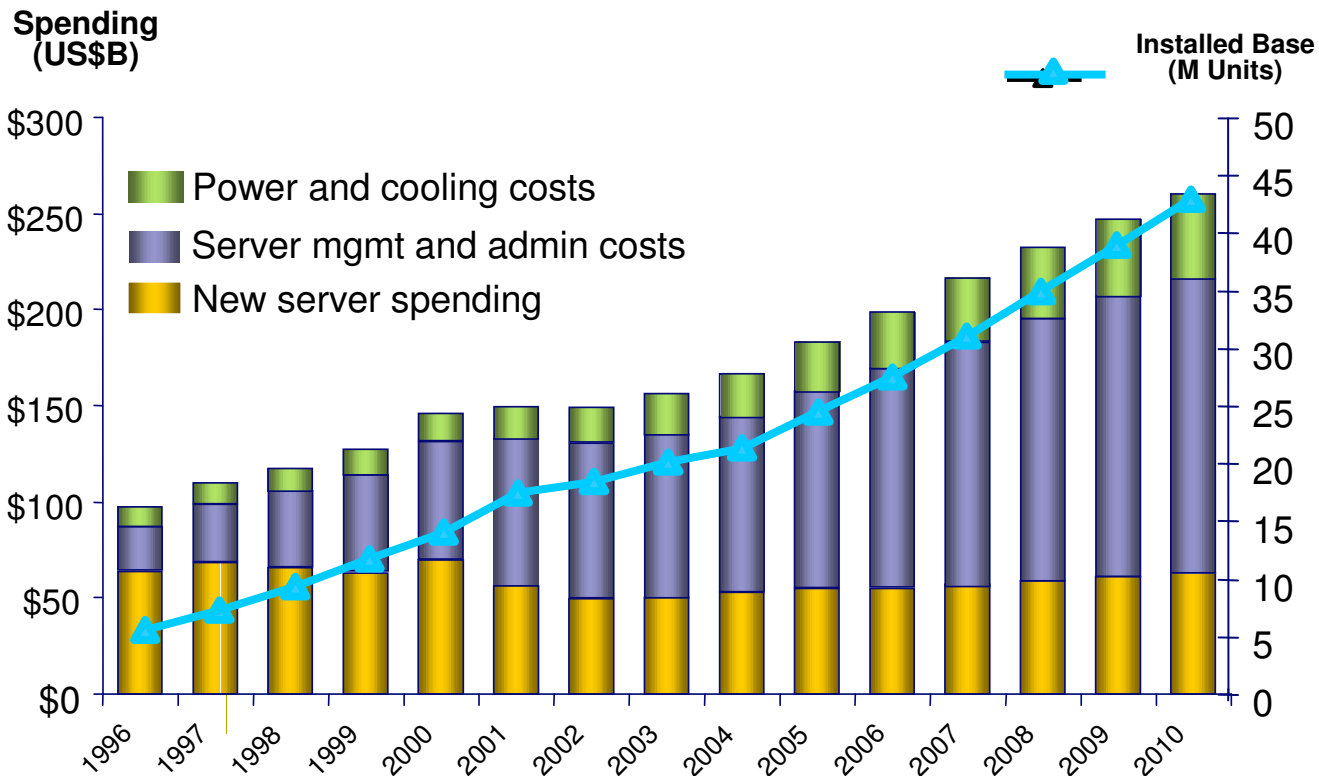
Mainframe utilization rates often exceed 80%, and are designed to handle sustained peak workload utilization of 100% without service level degradation.

- Application and data availability for business resiliency
- Rock solid security and privacy
- Massive scalability for non-disruptive growth
- Higher utilization and balanced system design
- Advanced virtualization
- Responsive, autonomic and intelligent workload management
- Open and industry standards
- Modernization of legacy applications
- Specialty engines lower cost of ownership
- World-class support

Management of a complex server infrastructure

The cost equation is changing

- Server proliferation continues, and costs rise along with the numbers
- The greatest cost item for servers is people management



Source: IDC, Virtualization 2.0:
The Next Phase in Customer Adoption,
Doc #204904, Dec 2006

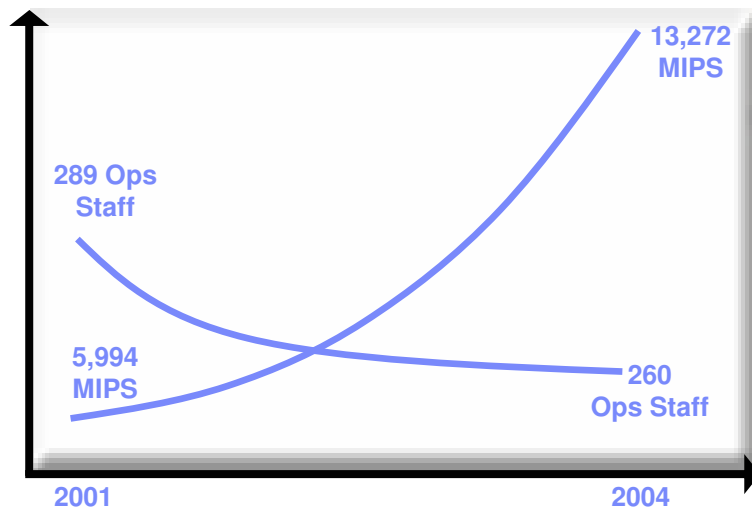
1995	
HW	= 65%
SW	= 14%
People	= 14%
Other	= 7%

IT budget trends...

2004	
HW	= 18%
SW	= 28%
People	= 45%
Other	= 9%

System z management cost decline as capacity grows

Volumes of workload processed have never been larger



Gartner

“Since we published our last high-level perspective of the ratio between MIPS and head count in 2001, the largest z/OS installations have more than doubled their ‘MIPS to head count’ ratio.”

L. Mieritz, M. Willis-Fleming – Gartner, 2004

Mainframe data center staffing levels have not significantly changed despite large increases in workload volumes.

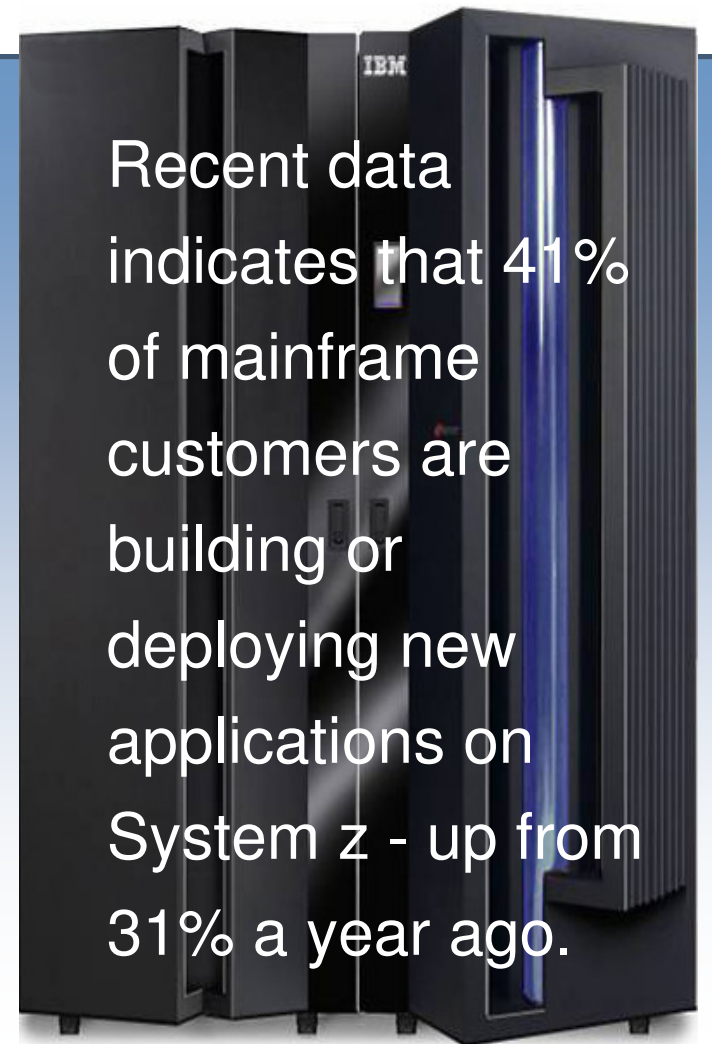
First National Bank of Omaha

Their disparate computing environment was becoming extremely expensive, requiring FNBO to hire more people as more boxes were brought online. “I looked at our infrastructure in 2002 and saw we were growing servers at a rate of 30 percent per year. For every application I had, I needed another one to five servers behind that, for things like development and application and Web serving. And every 20 servers translates to another body to administer them.”

Ken Kucera, senior vice president and division head of FNBO Enterprise Technology Services

SOA and System z: creating value from your z assets while taking advantage of the platform strengths.

- **Designed for integration**
Designed for the consolidation of multiple diverse applications that must interact with one another against a common data source.
- **Flexibility**
SOA is designed for change and System z is a great platform for BPM with robust queue management and high I/O bandwidth for data movement
- **Reuse is 5x less expensive than re-write**
Bulk of enterprise transactions and data reside on System z today as candidates for reuse.
- **Co-location of workloads**
Co-location of applications and data for better response time, integrated security, high performance.
- **Highest Qualities of Service**
Availability, reliability, security, scalability, WLM, systems management, disaster recovery.



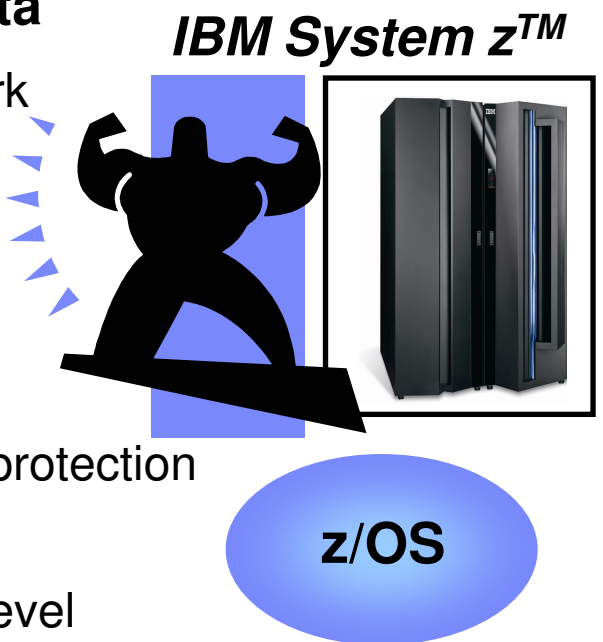
The Value of System z for SOA, BPM & Process Integrity

- **Strategic platform for mission-critical business processes, core business applications and data**

- **Proximity:** Fewer physical components and network connections result in less complex infrastructure
- **Integrity:** System-managed resource recovery and transaction coordination

- **Highest possible Qualities of Service**

- **Security:** Most stringent access control and asset protection
- **Availability:** z(ero downtime) /OS brand promise
 - 99.999% availability at the application and data level
 - Managed workload sharing toward achievement of business goals
 - Dynamic application of software changes
- **Efficiency:** Full utilization of system capacity with same class of service
 - Less people to configure, monitor and adjust workload
 - Best Total Cost of Computing
 - System z Application Assist Processors (zAAPs) to execute java workloads under z/OS



Why IBM?

Trusted, experienced guidance based on 5700 customers*



of Customers using our SOA offerings

TALKING

PUTS YOU IN A
CONFERENCE ROOM.

DOING

PUTS YOU AT THE SMART SOA
CONFERENCE IN VEGAS.



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Get these days covered: April 6 – 11, 2008.

Join IBM and industry leaders at the MGM Grand in Las Vegas. Impact 2008 brings together real customer success stories, industry expertise and WebSphere technical training. Whether your business needs are simple or advanced, it's all the know-how you need to stop talking about enabling business flexibility and start doing it with Smart SOA. This five-day educational conference brings together the most cutting-edge information that you can put to work right away.

Customize your event experience by choosing tracks, technical labs, detailed discussion groups and seriously Vegas-worthy rock performances.

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and save \$150. >**

Register online at

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IBM®

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