

# Business Process Management for z/OS<sup>®</sup> enabled by SOA



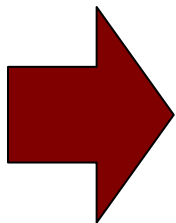
IBM Software Group

# 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**

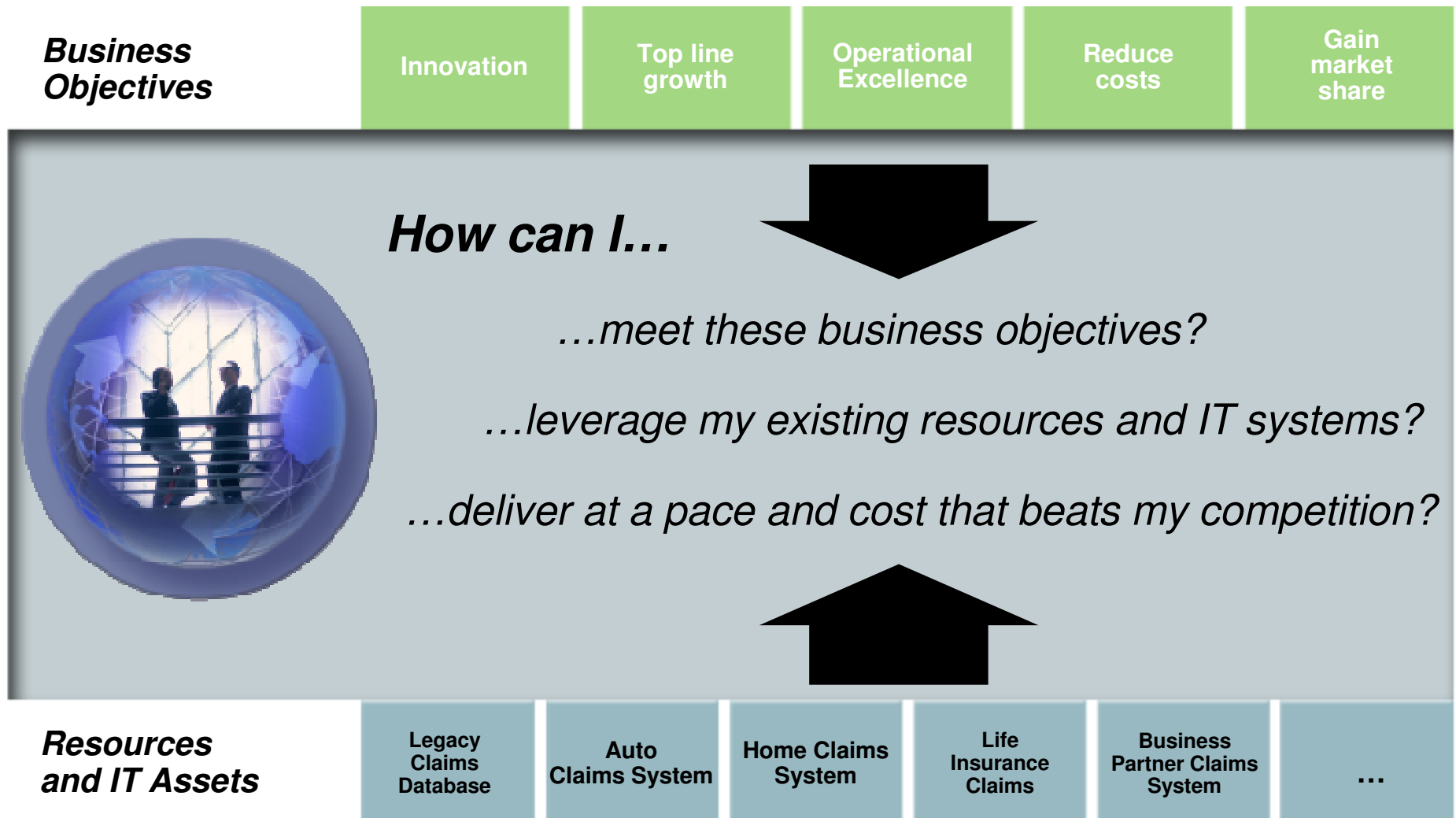
## Business Leaders know what's needed from their Business Processes to achieve their Objectives

- Support **innovative business models** and new **differentiated products and services**
- **Change rapidly** and continuously **optimize operational capabilities**
- Provide a **real-time operational view** with the ability to **intervene fast**

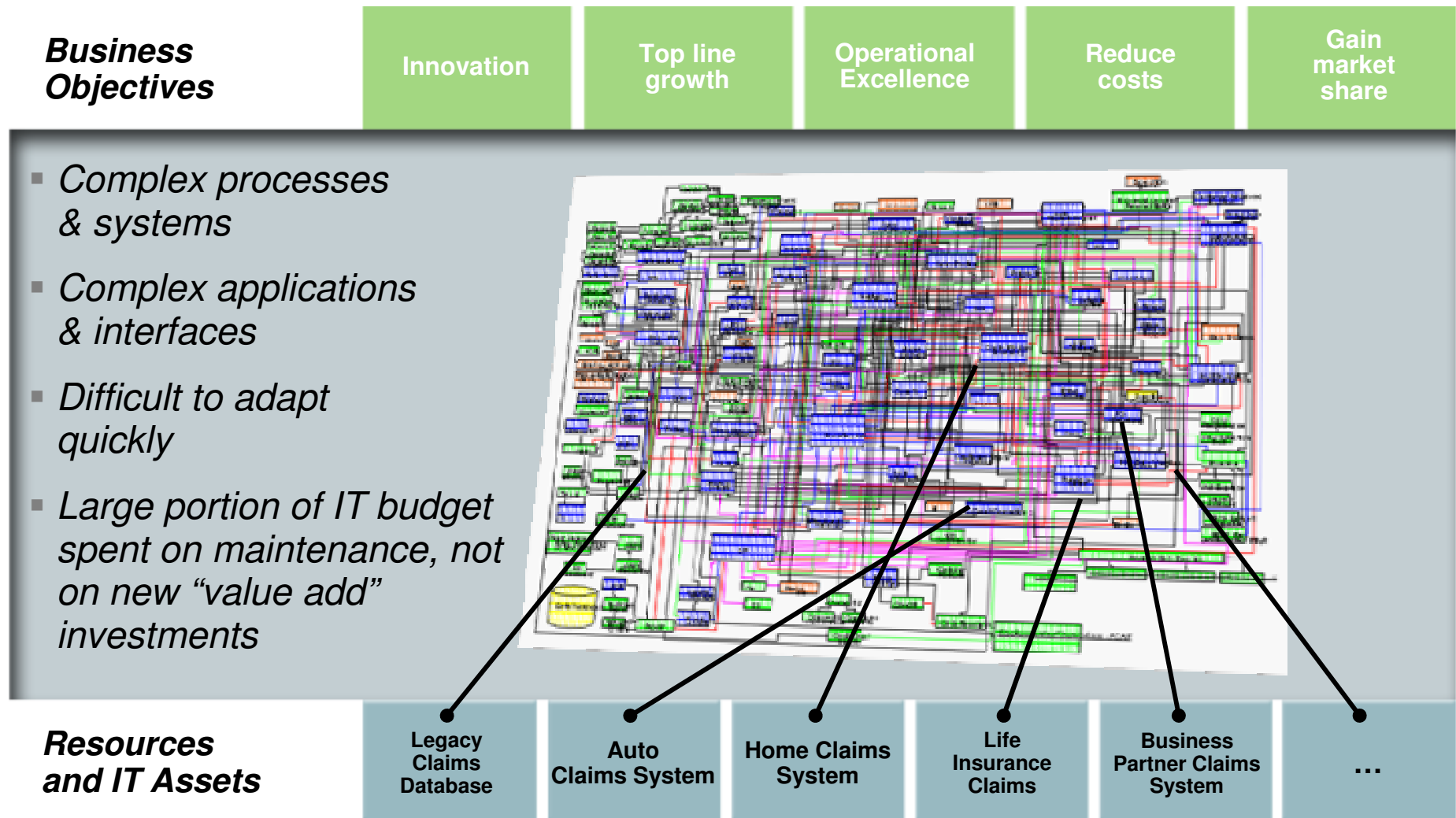


Sources: IBM Global CEO Survey, 2008. CMP Technologies, April 2007. IBM GBS Global CFO Study 2008.

# Customer Business Objectives

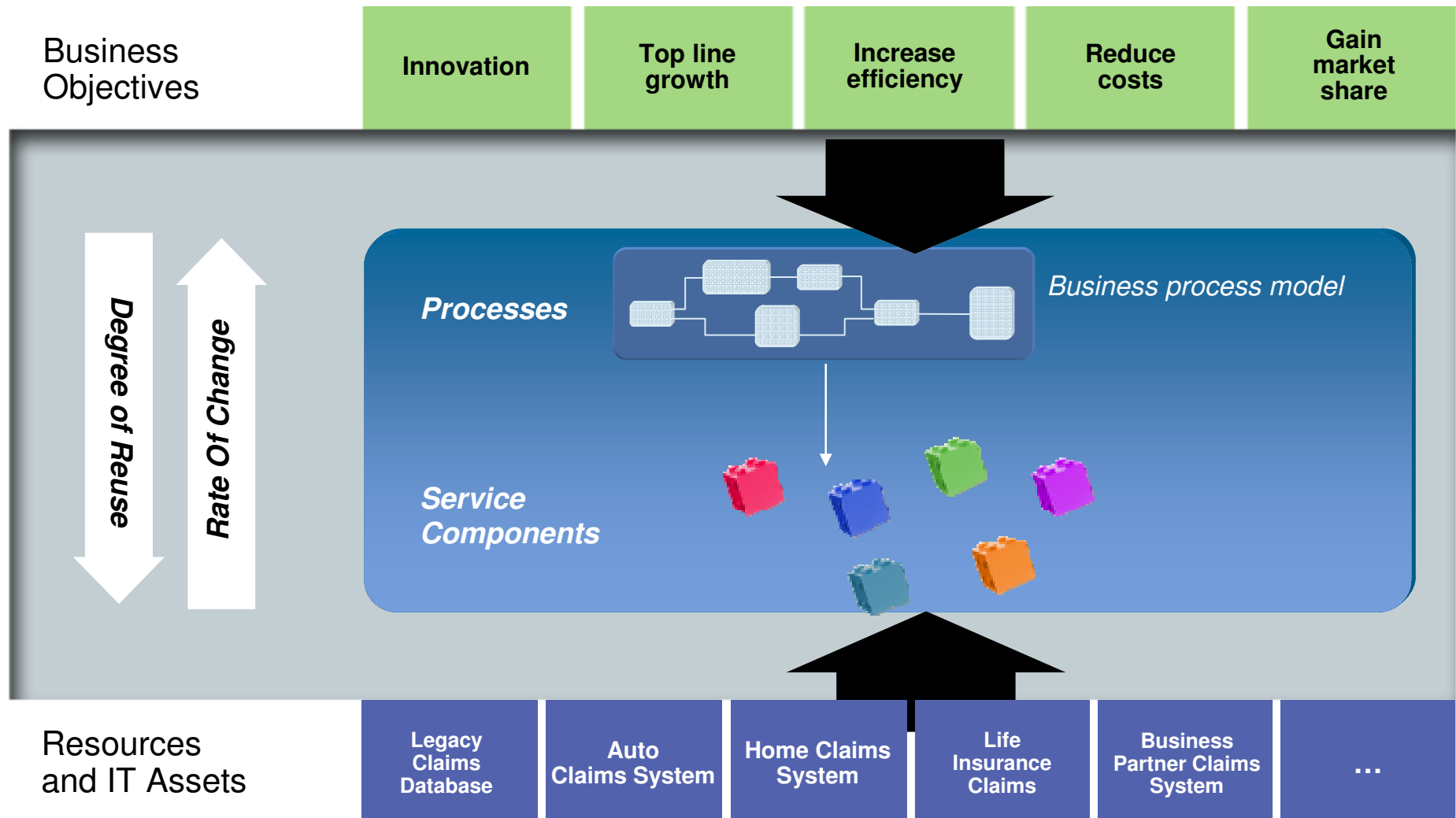


# The Challenge



# Service Oriented Architecture addresses your challenges

*And using System z as the hub of your SOA transformation provides unique value*

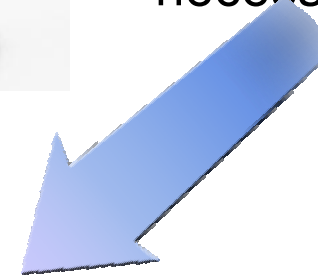
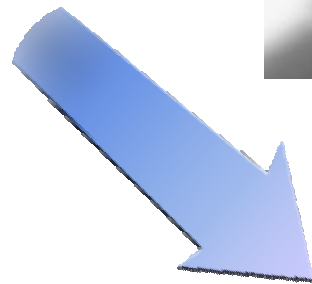


# These challenges inhibit LOB and IT from quickly driving innovation, managing risk and enabling change

Business people know which business priorities need to change, but cannot effect the IT changes quickly



IT people often don't know which business priorities are changing and which accompanying IT changes are necessary



**BPM bridges the gap between business and IT  
IBM is Best Positioned to Deliver BPM**

## When System z is the SOA Hub

### ■ Integration

- Designed to handle complex transactions and roll back
- Monitor end-to-end transactions in complex configurations
- Allocate resources according to business goals
- Provide single point of control across the enterprise
- Help customers meet security and regulatory requirements

### ■ Business criticality

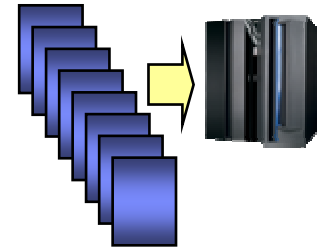
- Business services may be reused by an increasing number of critical applications

### ■ Growth

- Designed to quickly add new services and capacity with practically no disruption to apps or users

### ■ Performance

- ESB performance improvements may be achieved when collocating with z/OS® data





# System z capital waiting to be re-invested. But How?

- **70% <sup>(1)</sup> of corporate data is stored on the mainframes**
- **CICS handles more than 30 billion transactions/day <sup>(3)</sup> valued at over \$1 trillion/week <sup>(3)</sup>**
- **DB2 has delivered 100% availability of customer information for 10 consecutive years, including migrations <sup>(5)</sup>**
- **Scalable & high performing connectivity with WebSphere MQ for z/OS processing over 213M messages per day on z/OS in the banking industry alone**
- **\$5T of core System z applications with estimated replacement costs of \$20T <sup>(3)</sup>**
- **System z has been estimated to contain \$3 Trillion <sup>(2)</sup> (USD) in core assets**
- **Mainframe can handle sustained peak workload utilization of 100% without service level degradation**
- **Mainframe can handle 9,000 transactions per second operating on more than more than 380 million accounts <sup>(4)</sup>**
- **Over 15 Million GBs of Production data managed by IMS with over 50 Billion Trans/day and over 200 Million Users/day**



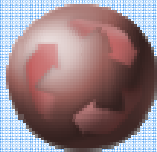
# SOA Entry Points

## *Reuse, Connectivity, Process*

\* New!

### Application Infrastructure Portfolio

- Reuse and extend existing applications
- Build, run, integrate and manage dynamic, On Demand Business™ applications



\* New!

### IBM Connectivity Portfolio

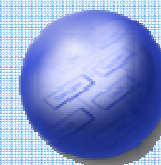
- WESB: Better reuse of existing applications
- DataPower: Improved capabilities to prioritize services
- Message Broker: Include more of your business information and assets
- NEW! MQ V7



\* New!

### Business Process Management

- Simplifies integration of business processes by leveraging existing IT assets as reusable services
- Provides simplified tools to describe, create and manage business processes



# Reuse: Service enabling existing applications



## CICS Transaction Server V3.2

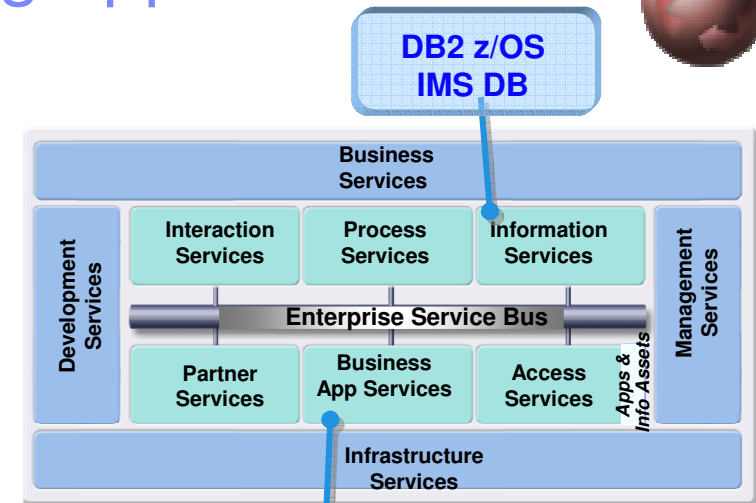
**\* Enhanced!**

- Create components from existing applications which are more flexible & configurable for use in new applications
- Extend existing applications beyond their original designs to support integrated business processes via standard APIs and protocols
- Management of large runtime configurations via modern user interfaces

## IMS 10

**\* New!**

- Reuses your existing and new IT investment for SOA
- Provides business flexibility, eases new application development and management capability
- Lower operating costs through z/OS and zAAP engine exploitation
- New security capabilities for greater control and business flexibility
- Improved auditing and accountability



**CICS Transaction Server  
IMS Transaction Manager**

## DB2 9 optimized for SOA

**\* Enhanced!**

- Business insight and flexibility with pureXML
- WebSphere integration for trusted applications and web serving
- Security & SOA governance capabilities

# BPM empowers business to innovate and deliver rapid and transformative change while reusing assets

*BPM solves common business challenges . . .*

Empowers Business Users

Detects Business Situations and Takes Action

Provides Clear Visibility into Business Processes

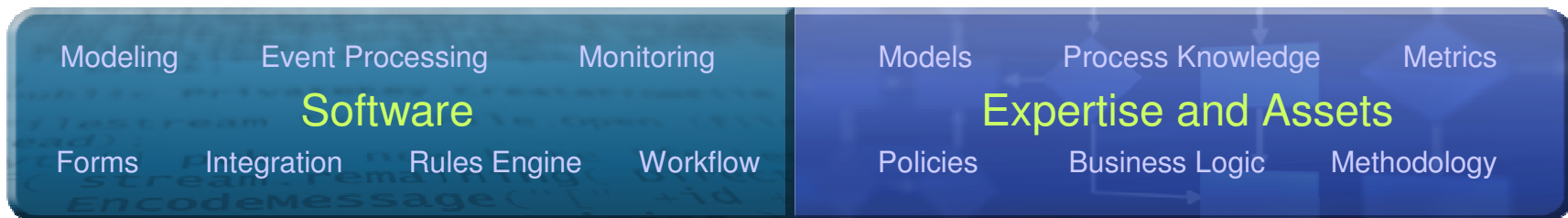


Streamlines Complex Integration Across Multiple Processes

Enables Process Change

Simulates / Predicts Outcomes

*BPM includes...*



*BPM from IBM enables and governs processes involving content, transactions and collaboration*

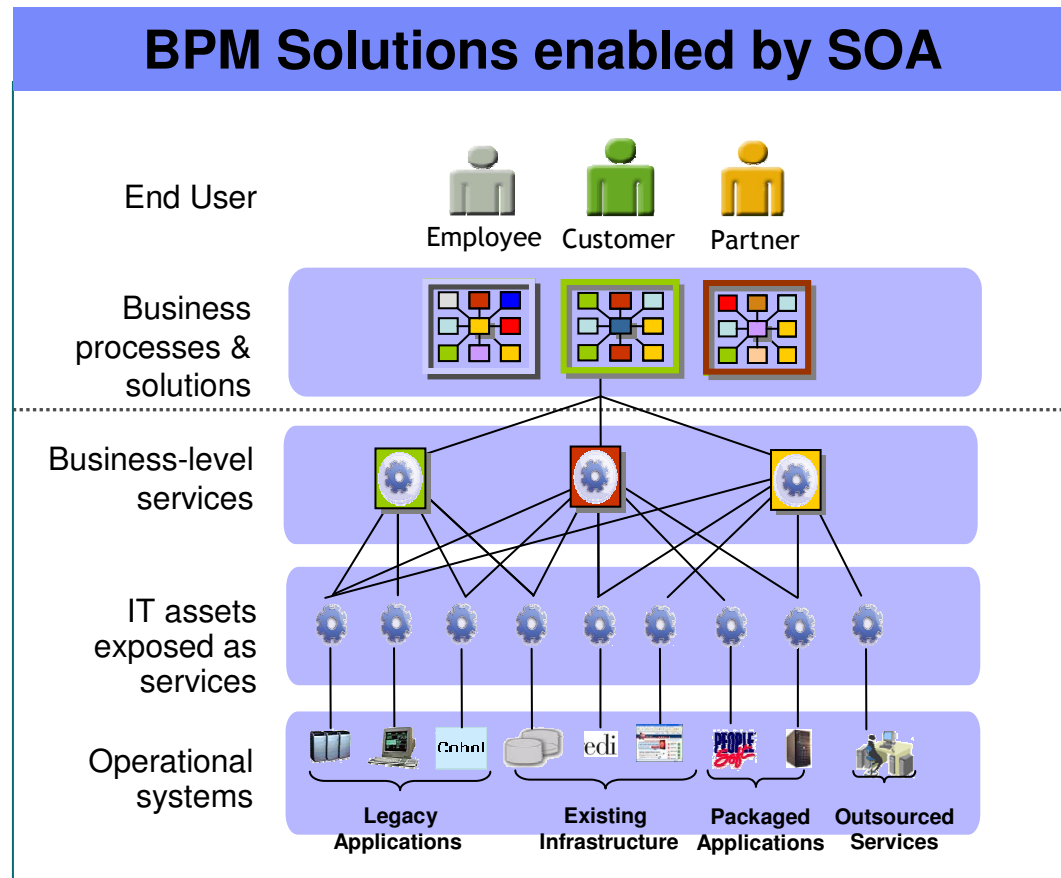
# BPM enabled by SOA

*Flexible Infrastructure, Composite Business Solutions*

## Three Levels of Maturity and Value

- ✓ Design
- ✓ Automate
- ✓ Optimize

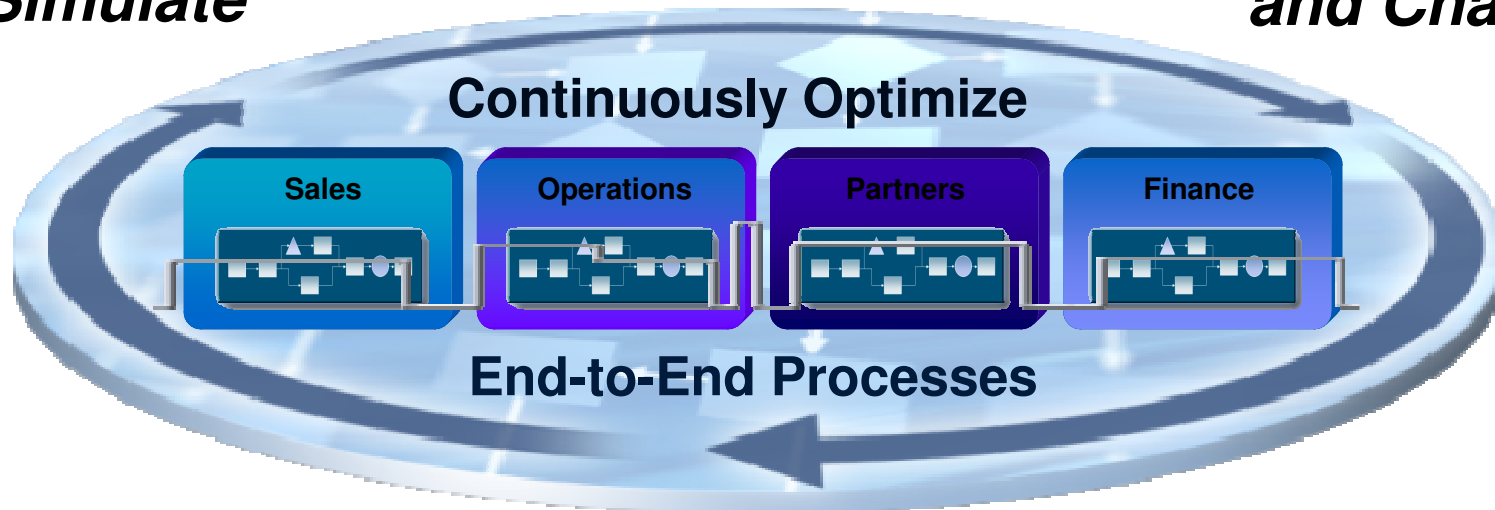
Efficient solution building  
 Reuse of existing assets  
 Flexibility in change



# BPM from IBM Empowers You To Embrace Change and Continuously Optimize Your Business

***Model and Simulate***

***Rapidly Deploy and Change***



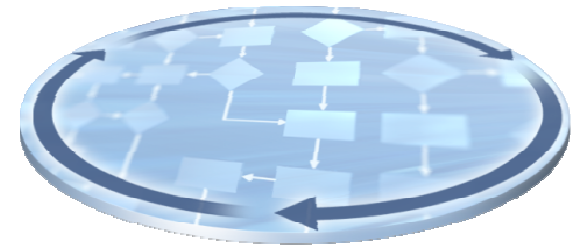
***Monitor, Predict and Act***



# What can BPM do for my Organization?

*WebSphere BPM helps to unlock IT's Value across the Organization*

- Accelerate time-to-market for new solutions, and rapidly change and reconfigure existing IT assets without redeployment
- Increase the value of your organizational assets and reduce their operating costs
- Drive collaboration and stakeholder commitment around process optimization goals across both business and IT
- Reliably meet SLA, audit, and regulatory objectives with Process Integrity
- Leverage open products that accommodate disparate systems across departmental boundaries





Announcing!

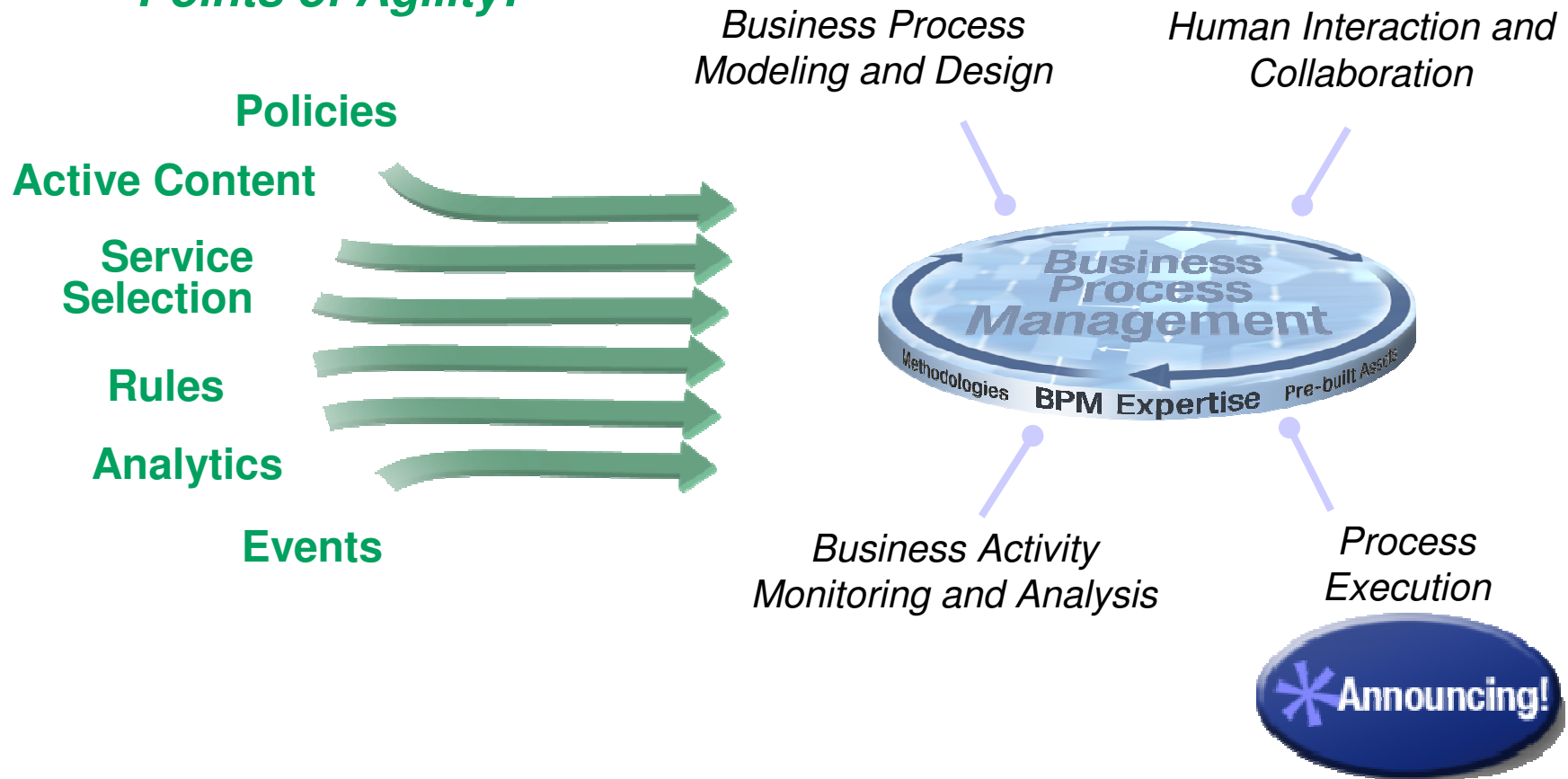
# IBM's BPM Suite



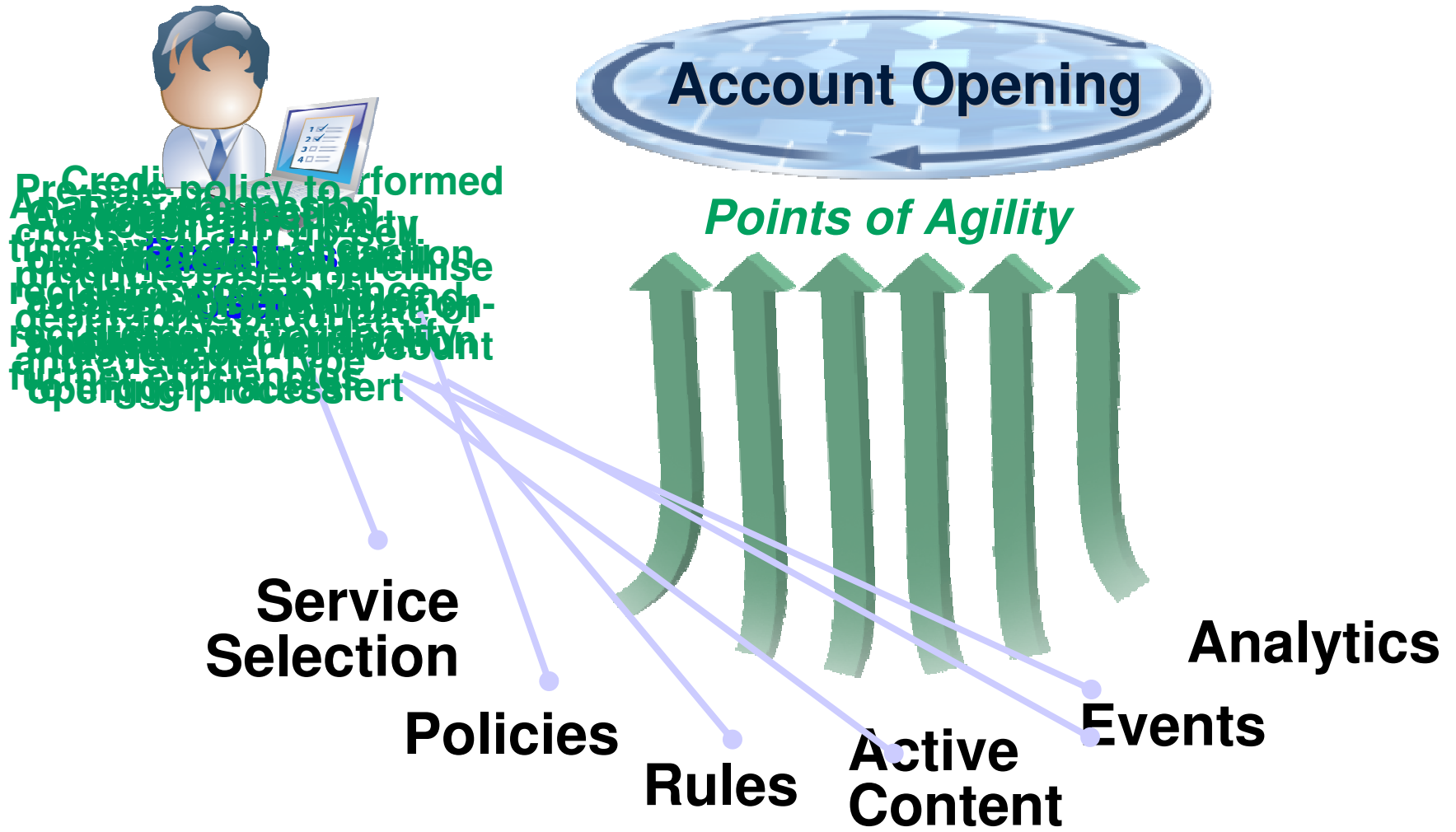


# IBM's BPM Suite Provides a Comprehensive Set of Role-Based Capabilities for Continuous Process Optimization

## Points of Agility:

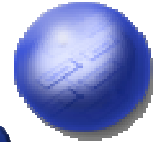


# Scenario: Bank Account Opening Dynamic Process

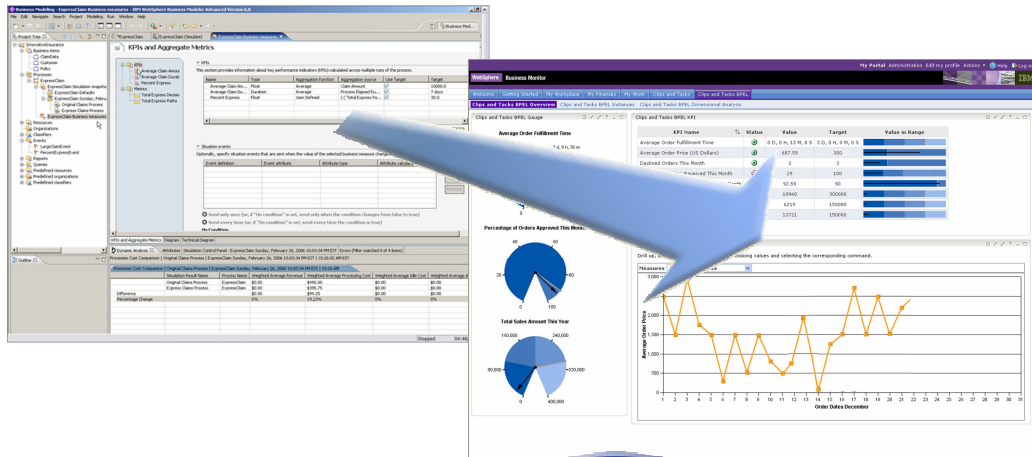


# Business Process Management

## *A discipline enhanced by flexible architecture - SOA*



**\* Enhanced!**



### WebSphere Integration Developer V6.1

- Eclipse-based tool for building SOA-based BPM and integration solutions
- Enables rapid assembly of business solutions by wiring reusable service components
- Enables integration developers to assemble complex business solutions
- Enables construction of process and integration solutions using drag-and-drop technology

**\* Enhanced!**

### WebSphere Business Modeler V6.1

- Visualize, understand, and document your business processes
- Document processes to better understand your business
- Discover potential areas for process improvement and latent value in processes
- Ability to change the business process to respond to changes in market

**\* Enhanced!**

### WebSphere Process Server for z/OS V6.1

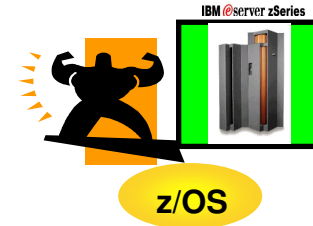
- Accelerate time to value, and simplify the integration of applications in a SOA
- Improve connectivity for application reuse with new Adapter Nodes for WebSphere Message Broker V6.1
- WebSphere Adapters now available for WebSphere Application Server zOS 6.1

**\* Enhanced!**

### WebSphere Business Monitor V6.1

- Offers comprehensive business activity monitoring of your business performance
- End-to-end visibility of business performance through customizable dashboards
- Early detection and alerts to emerging business situations
- Advanced analytics for decision making based on historical and trending data

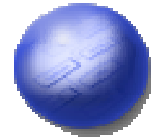
## Why deploy WPS on z/OS? *versus any other platform*



- **Reuse CICS and IMS services**
- **Streamline existing processes**
  - Extend and enrich CICS, IMS, DB2, SAP, WAS z/OS
  - Optimized Transaction Coordination for composite applications on z/OS
- **Proximity: Single platform, less complex infrastructure**
  - Leverage co-location with z/OS subsystems and business data
    - Put Process Control next to the assets reused.
    - Mixed workload on a single platform (hardware box and operating system)
    - Cross-memory connections, less overhead, maximum efficiency
  - Standard platform for core business processes, applications, and data
- **z/OS Class of Service for mission-critical solutions**
  - Exceptional Availability and Security
  - High-end throughput and (almost linear) scalability
  - Centralized Operation: Fewer IT staff
  - Built-in cluster: Simpler install & config
  - **Green** Enterprise Computing: Energy and floor space savings (fewer machines)

# Business Process Management

*A discipline enhanced by flexible architecture - SOA*



*WebSphere Business Services Fabric and  
WebSphere Business Events extend the  
BPM portfolio*

## **WebSphere Business Service Fabric V6.1**

- End-to-end SOA platform for composite business services
- Provides modelling, assembly, deployment, management, and governance of business services
- Includes optional industry content packs with industry reference
- Includes WebSphere Process Server and WebSphere Integration Developer
- Provides access to 2,000+ business partner SOA assets through IBM SOA Business Catalog

## **WebSphere Business Events**

- Allows business users detect, evaluate and react to business events in real time
- Accepts events from many sources
- Sends actions to WebSphere Business Monitor
  - Interested users can receive information immediately
- Sense meaningful patterns
  - Allows users to define filters and conditions
  - Manages event flows and long running correlations
- Plug & Play to extend your existing SOA and BPM infrastructures

# Extending BPM with Policies

## *Business-Level Policies...*

For “Open Account” transactions across all product lines, accessed via Portal by Agents...

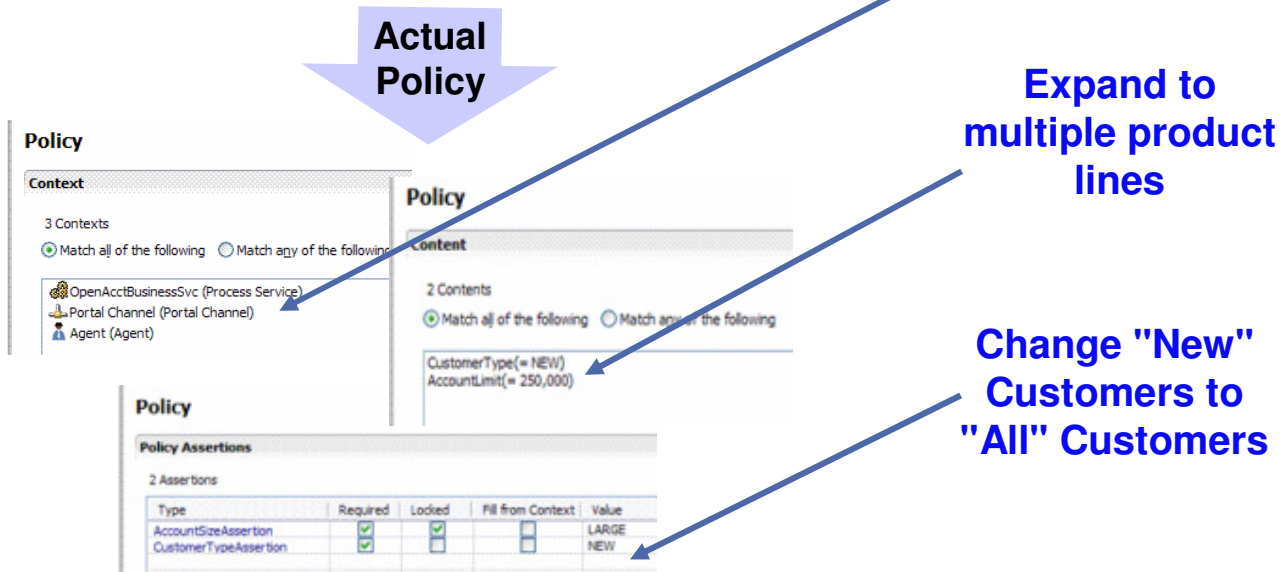
where customer is NEW, account is LARGE, and transaction is under \$250,000...

select Straight-Through- Processing service.

*...made Easy for Business*

- **View**
- **Change**
- **Simulate**

**"Hot Deploy" and done**



**Actual Policy**

**Add a new "Call Center" channel**

**Expand to multiple product lines**

**Change "New" Customers to "All" Customers**

Type	Required	Locked	Fill from Context	Value
AccountSizeAssertion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LARGE
CustomerTypeAssertion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NEW

**\* Enhanced!**

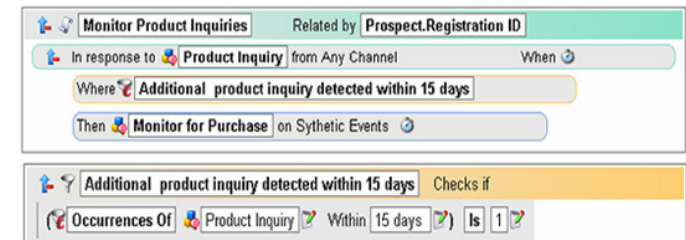
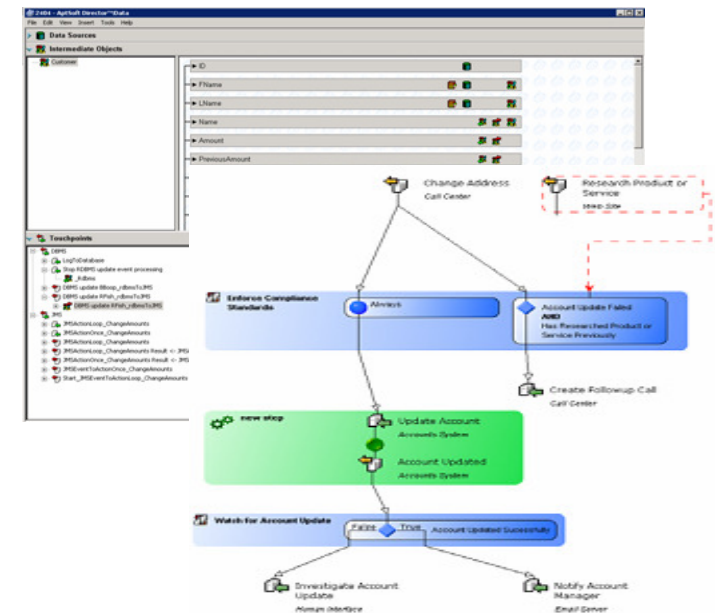
**WebSphere Business Services Fabric**

# Extending BPM with Business Event Processing

## *Sense when to act, know what to do*



- Allows business users detect, evaluate and react to business events in real time
- Designed for process analysts
  - Understands business language and vernacular
  - Enables straightforward expression of business logic
  - Codeless, Graphical Authoring tools
- Accepts events from many sources
  - “Derived” events
  - Plug & Play to extend your existing SOA and BPM infrastructures
- Sense meaningful patterns
  - Simple and complex rules patterns
  - Define filters and conditions
  - Event flows and long running correlations
- Initiate the appropriate response
  - Take action when those patterns form
  - Drive existing services (WPS business process, ESB, etc.)
  - Automated Tasks (Update DB, write to file, etc.)
  - Notifications (Email, pager, etc.)



**Real-Time** Pattern Detection  
**Real-Time** Decision Triggers

## Ensure Process Integrity with BPM Enabled by SOA



- Deliver seamless long-running processes that span disparate systems in an SOA
- Enables loosely coupled “open” systems to deliver the consistency, scalability, and reliability of tightly coupled systems
- Meet SLA, audit, and regulatory objectives with confidence



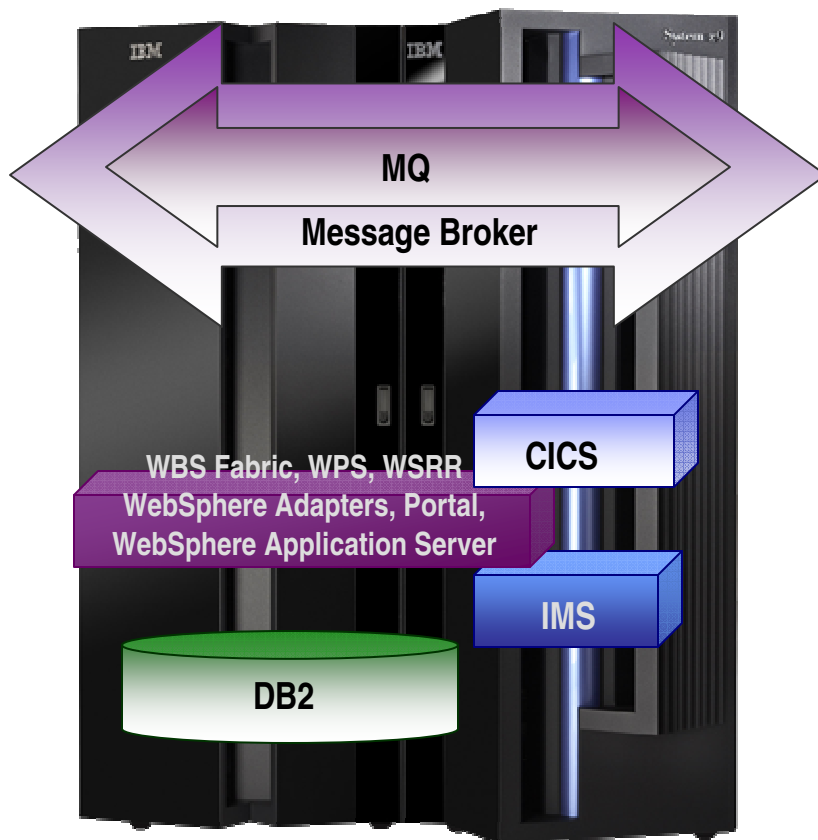
# System z – For BPM When The Stakes Are Highest

## *Enterprise data access in an integrated environment*

System z is an integration platform with system level awareness across the SW stack, enabling you to work smarter

Benefits include:

- **Easier Management**
  - ✓ Fewer components to administer
  - ✓ Vertical dynamic scalability
- **Stringent Security**
  - ✓ Reduced interception opportunity
  - ✓ Integration of RACF via SAF
- **Highly Available Infrastructure**
  - ✓ Parallel Sysplex enabled
- **Higher Performance**
  - ✓ No network time
  - ✓ No product specific network protocol construction / deconstruction



# Deploying on System z provides differentiated value

## *Enabling intelligent IT that works for your business*

### *The New IBM System z10 Enterprise Class*

The power of many . . .



. . . the simplicity  
of ONE

***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.**

- Processors, CPU speed, memory, network I/O
  - Growth of traditional workloads
  - Consolidation of hundreds of applications
  - Granularity of WebSphere deployments
  - Access to corporate data
  - Messaging speeds to support SOA
- Price / performance improvement of specialty engines
- Just in Time capacity and management
  - Adapt faster to workload variations such as dynamic SOA
  - Respond automatically to demand from CICS, IMS, DB2, WebSphere, ...
  - Deploy new WebSphere workloads in minutes

## 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.”



## Why IBM?

**Trusted, experienced guidance based on 6550 customers\***



# of Customers using our SOA offerings

धन्यवाद  
Hindi

多謝  
Traditional Chinese

*Grazie*  
Italian

ขอบพระคุณ  
Thai

Gracias  
Spanish

Thank You

多谢  
Simplified Chinese

Спасибо  
Russian

Obrigado  
Brazilian Portuguese

شكراً  
Arabic

Danke  
German

Merci  
French

நன்றி  
Tamil

ありがとうございました  
Japanese

감사합니다