IBM SOA

"You're not going to break it, you're going to enhance it" Removing the apprehension of touching your existing business processes to prepare for the future with BPM

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Key Questions:

What is Business Process Management and why do I need it?

What IBM tooling is available to support BPM?

Will I break anything?

Why deploy on System z?

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**

Customer Business Objectives

Innovation	Top line growth	Operational Excellence	Reduce costs	Gain market share

How can I…

…meet these business objectives?

…leverage my existing resources and IT systems?

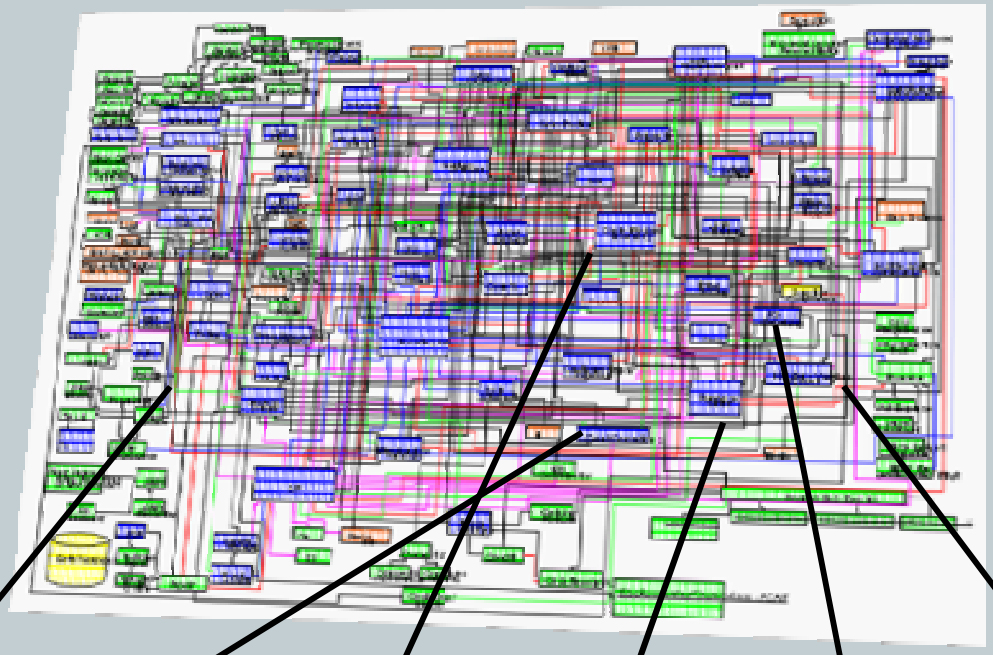
…deliver at a pace and cost that beats my competition?

Legacy Claims Database	Auto Claims System	Home Claims System	Life Insurance Claims	Business Partner Claims System	…

The Challenge

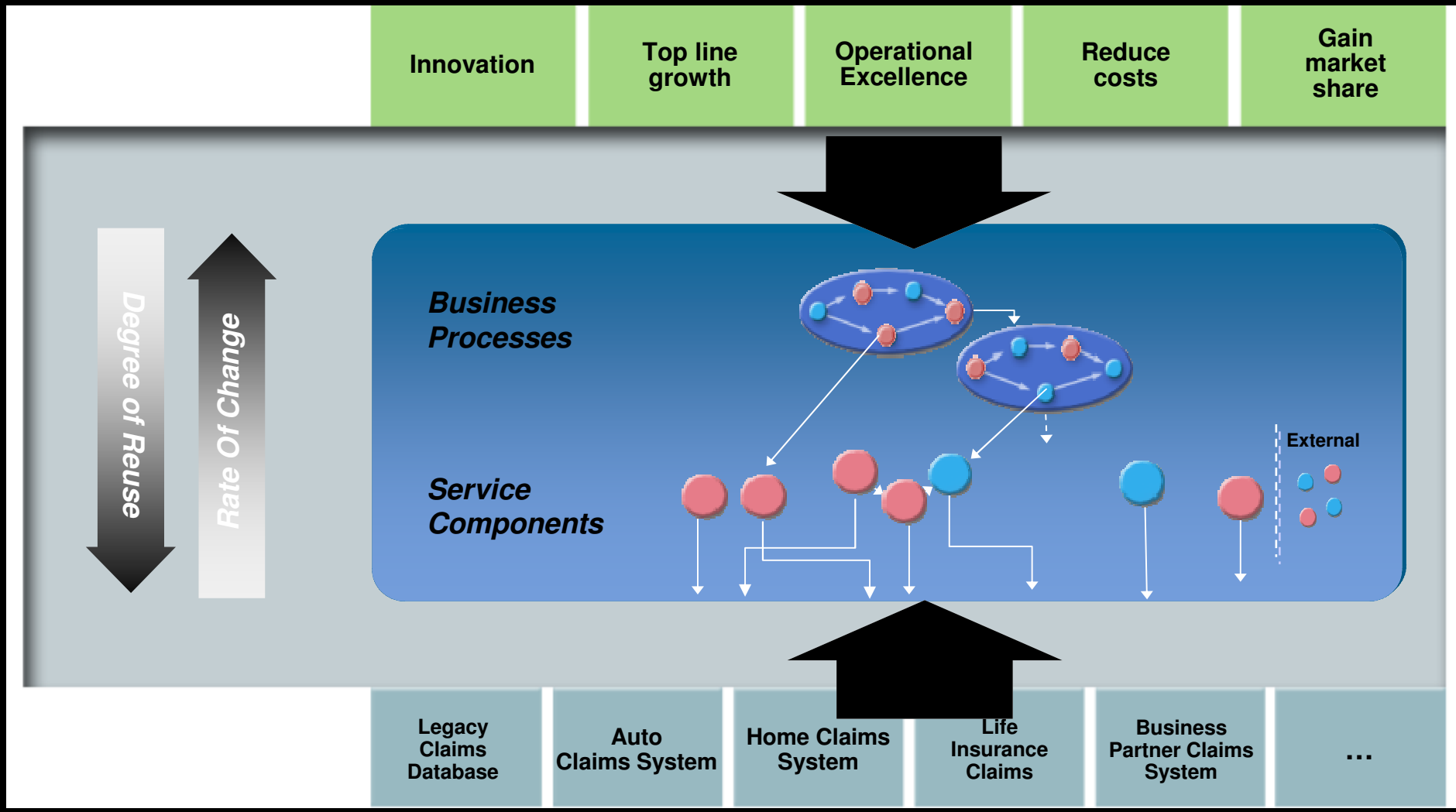
Innovation	Top line growth	Operational Excellence	Reduce costs	Gain market share

- *Complex processes & systems*
- *Complex applications & interfaces*
- *Difficult to adapt quickly*
- *Large portion of IT budget spent on maintenance, not on new "value add" investments*



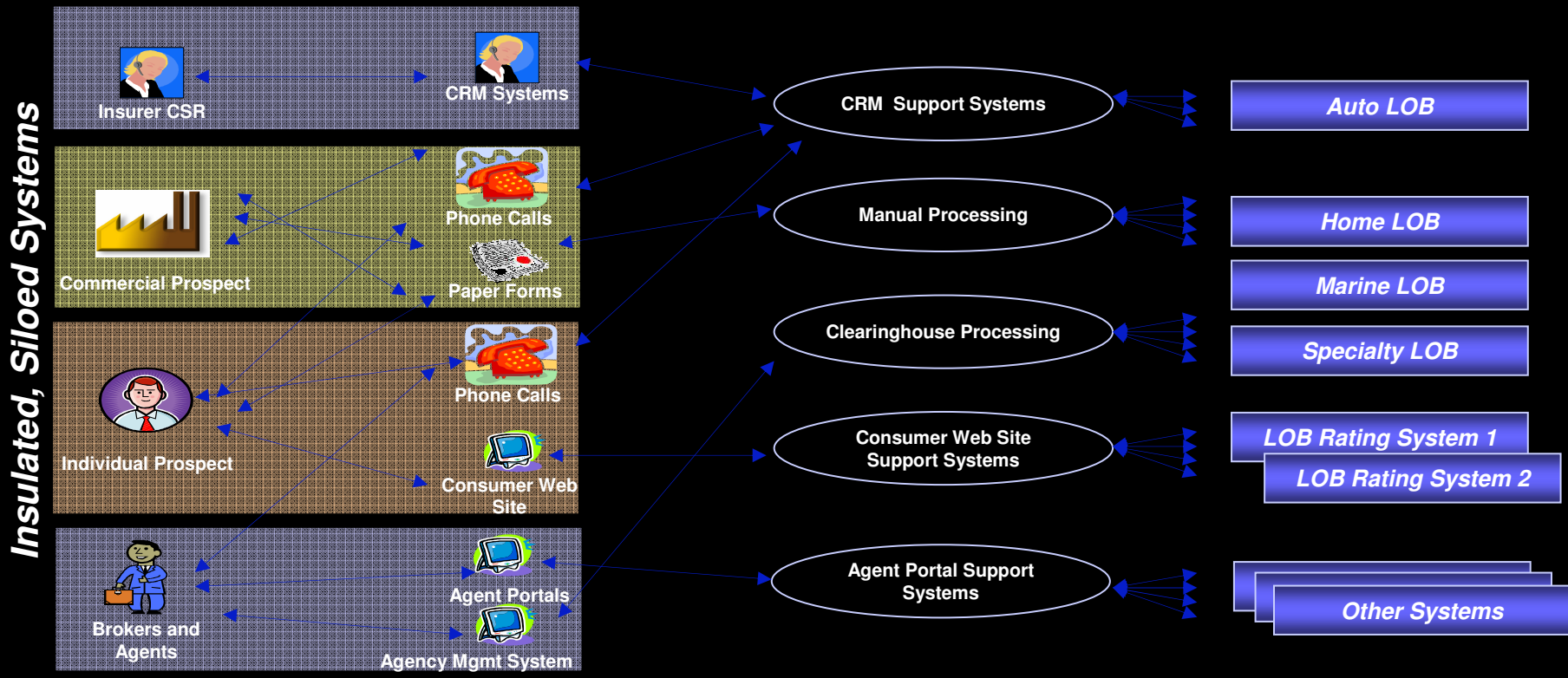
Legacy Claims Database	Auto Claims System	Home Claims System	Life Insurance Claims	Business Partner Claims System	…

BPM Enabled by SOA Addresses this Challenge



BEFORE Composite Business Applications

Insurance Company's "as-is" Quote Process



Insurance Quote Sources (multiple users with different needs)

Communication Channels (different formats and standards)

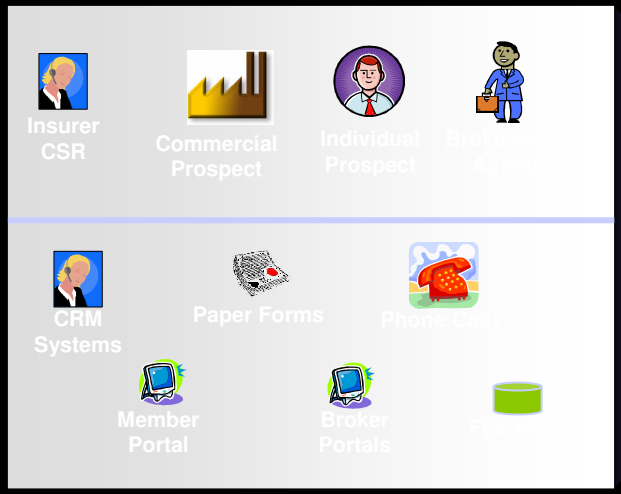
Independent Systems (siloed legacy systems that support each channel)

Back End Processing Systems (legacy systems dedicated for each Line of Business)

AFTER Composite Business Services

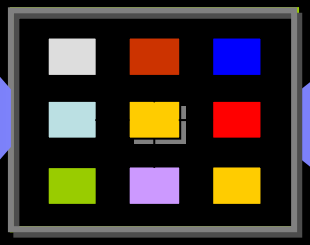
Insurance Company's enhanced Quote Process

Customization Based on User



Multi-Channel Service Delivery

Insurance "Quick Quote" Composite Business Application



Policy-Based, Dynamic Customization of Business Functionality

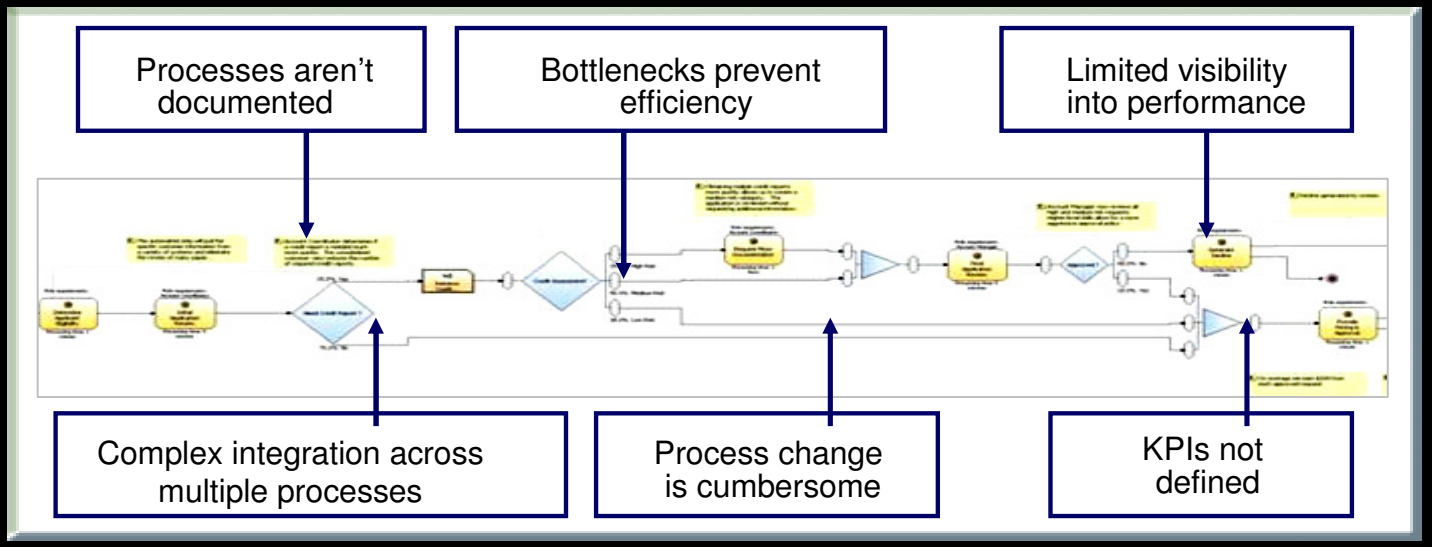
Dynamic Service Selection

- *Auto LOB*
- *Home LOB*
- *Specialty LOB*
- *LOB Rating System 1*
- *LOB Rating System 2*
- *Other Systems*
- *Re-Insurer*

Real-time Access to Back-end Operational Capabilities

Business Process Management is a Discipline…

BPM solves common business challenges . . .



BPM Includes

Software

Integration | Modeling | Monitoring

Forms | Rules Engine | Workflow

Expertise and Assets

Models | Process Knowledge | Metrics

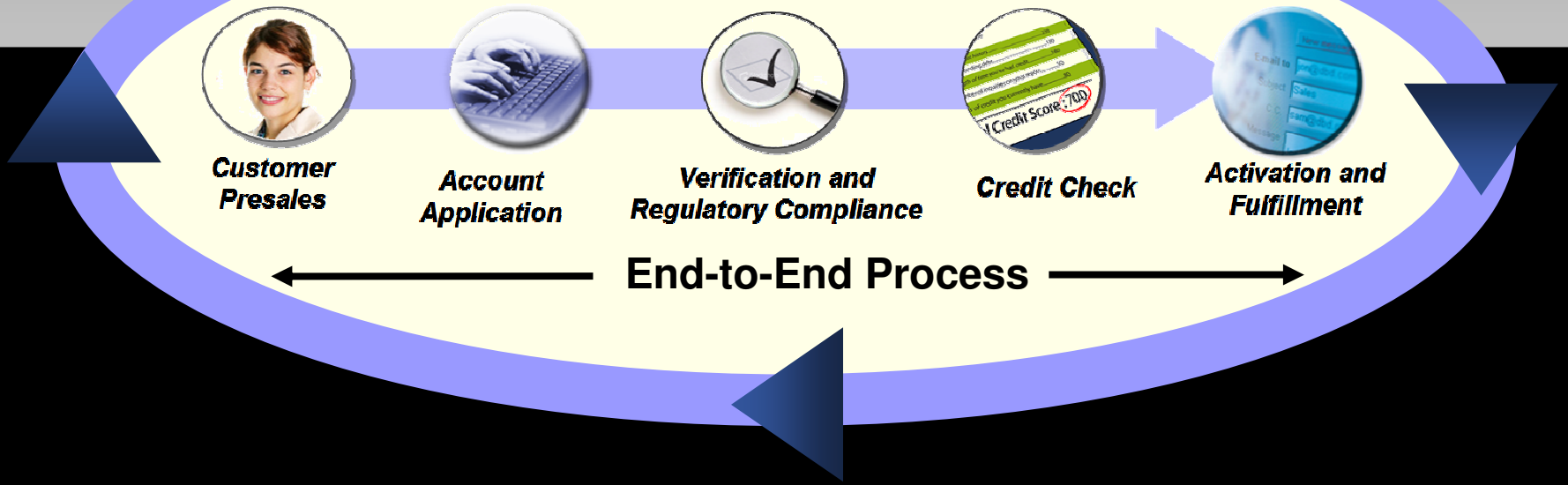
Policies | Business Logic | Methodology

BPM governs organizational and operational activities

BPM covers the entire lifecycle of your business processes

1. Design, Model and Simulate

2. Automate and Change Rapidly



3. Monitor, Analyze and Optimize

Common Business Problems Identified Across Industries

1. Duplication of data entry
   - From separate, unconnected legacy applications
   - Introduces human error
   - Results in loss of employee productivity and additional time to process info
2. Using paper-based, sequential manual processes
   - Requires additional time to process
3. Human interaction required
   - Sometimes necessary
   - Requires an escalation process
4. Use of phone, fax or email
   - Again requires human interaction
5. Having to access unconnected multiple legacy applications for data
   - Sequential process, requires additional time when data from one application is needed for the next

Common I/T Problems Identified Across Industries

1. Unconnected legacy applications
   - May result in duplication of data or inconsistent data
     - May require synchronization
     - May require human intervention
   - Slows down business processes
2. Maintenance
   - Numerous multiplatform servers
   - Increased I/T expenses for:
     - OS or application upgrades
     - new application installations
     - licensing fees or purchasing expenditures
     - system down time, application availability & customer satisfaction

What are the solutions?

Each of these business (B) and I/T (I/T) problems can be resolved. Reviewing customer activities, we observe the following:

Problem	Solution
(B, I/T) Sequential data processing & human input, using phone, fax or email (B) Takes a long time to process a customer application	Use a business rules engine to make decision instead of requiring human intervention . Create a portal application eliminating the need for companies to retrieve information over the phone or through the mail
(B) Paper-based processing	Use web-based forms processing for electronic data processing
(B, I/T) Accessing multiple applications to obtain all the necessary data	Use a front-end web or portal application to obtain data from integrated back–end systems
(I/T) Duplicate business logic	New solution design implementing reusable components
(I/T) Numerous legacy servers & applications from acquisitions & mergers	New front-end application which obtains all necessary data from legacy systems
(I/T) Servers at regional offices – maintenance issue	Use a front-end web or portal application at the regional office which connects to the company mainframe
(B) Inefficient use of company employees	Automate and reduce human intervention with applications and computer systems
(B, I/T) Inflexibility of current system	Using IBM WebSphere middleware, a new application which allows the customer to continuously update and add to its services and offerings quickly and efficiently.

Banca Carige (Italy)

Challenge: Outdated IT foundation (OS/2, TCP/IP) needed to be transformed into a multi-channel, internet-enabled and services-ready integration technology platform.

- **Solution:** Introducing BPM and SOA handling all incoming requests from various channels, integrating and managing IBM CICS and DB2 to perform full business processes.
- **Company benefit:** Implementing a flexible and secure IT infrastructure to support the bank's branch transformation initiative.
- **Employee benefit:** Same infrastructure for bank employees as well as customers. Now, every user has a clear view depending on his role and profile, to better perform all appropriate business transactions quicker.
- **IT benefit:** Reuse of components, reducing time for enlargements and more integration by better design.

Impol (European based enterprise)

- **Manufacturing Industry (aluminium)**
- **Transformed existing applications into reusable services**
- **Deployed WebSphere Process Server as the runtime engine**
- **Used WebSphere Business Modeler to create KPIs, alerts and business rules**

Business led BPM helps property and casualty insurer grow revenues

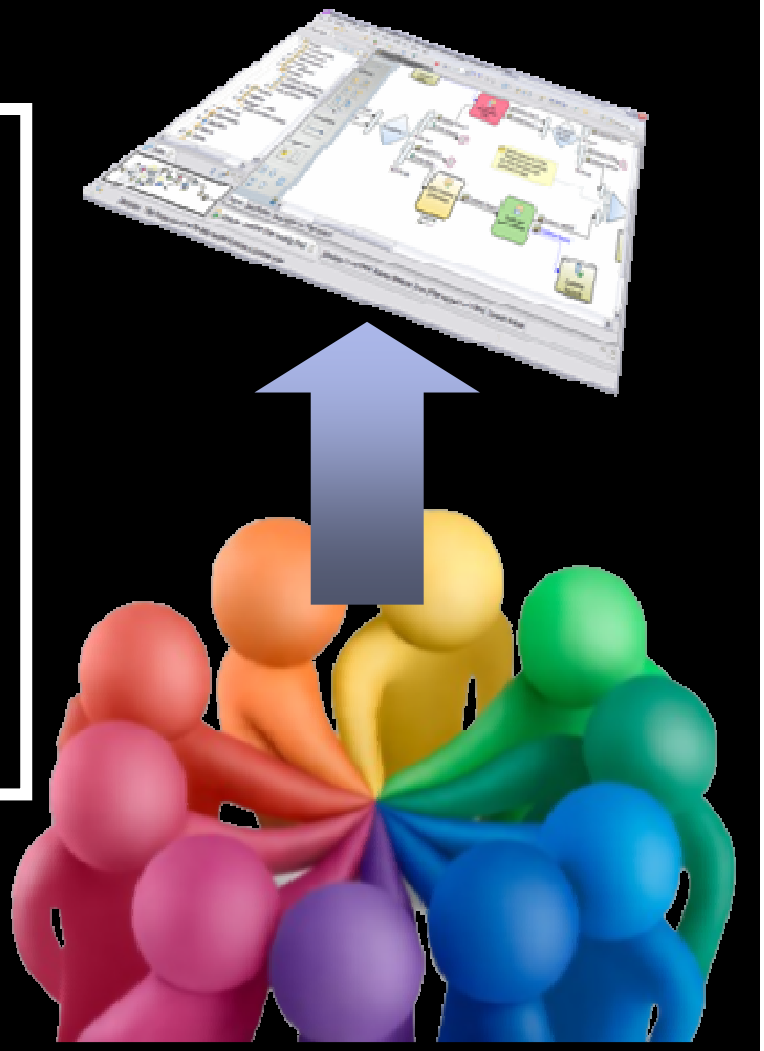
Policies used to customize support services for a diverse independent agent community

With IBM BPM

- New quote system launched in 7 mo. to 32 states
- Delivered 100X quotes per month target
- Expected revenue (GPW) increase from 3 to 4%
- New billing solution launched in 3 months
- 40% reduction in call center volume

Getting Started: The Collaborative Change Imperative

- Collaborate with Subject Matter Experts
- Support diverse design tools
- Predict and optimize outcomes
- Leverage best practices, metrics and real-time process performance data
- Maintain consistency of process models



Business process modeling, simulation, analysis
Industry business process models, KPIs, KAIs

IBM's BPM Features and Associated Toolset

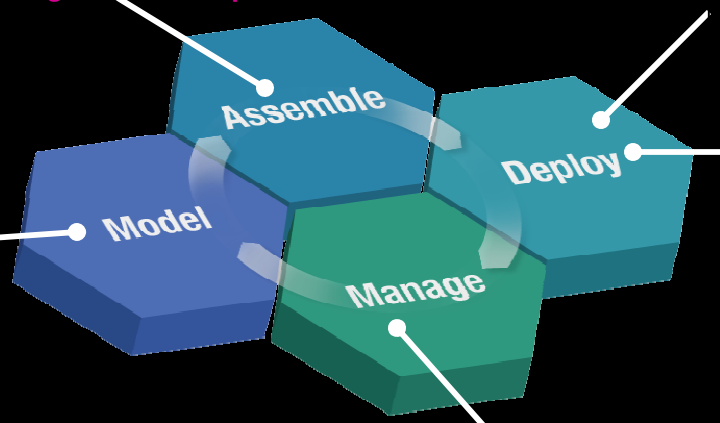
Collaborative Development
Standards-based development environment

Policy and Rules
Business logic to govern process behavior

Workflow and Choreography
Integrated deployment of policies and workflow

WebSphere Integration Developer + Rules Partners

WebSphere Process Server



Abstract
(WebSphere Business Services Fabric)
Extends the BPM platform by providing policy-driven dynamic assembly of processes at runtime

Modeling and Simulation
Capture and optimize business models

WebSphere Business Modeler

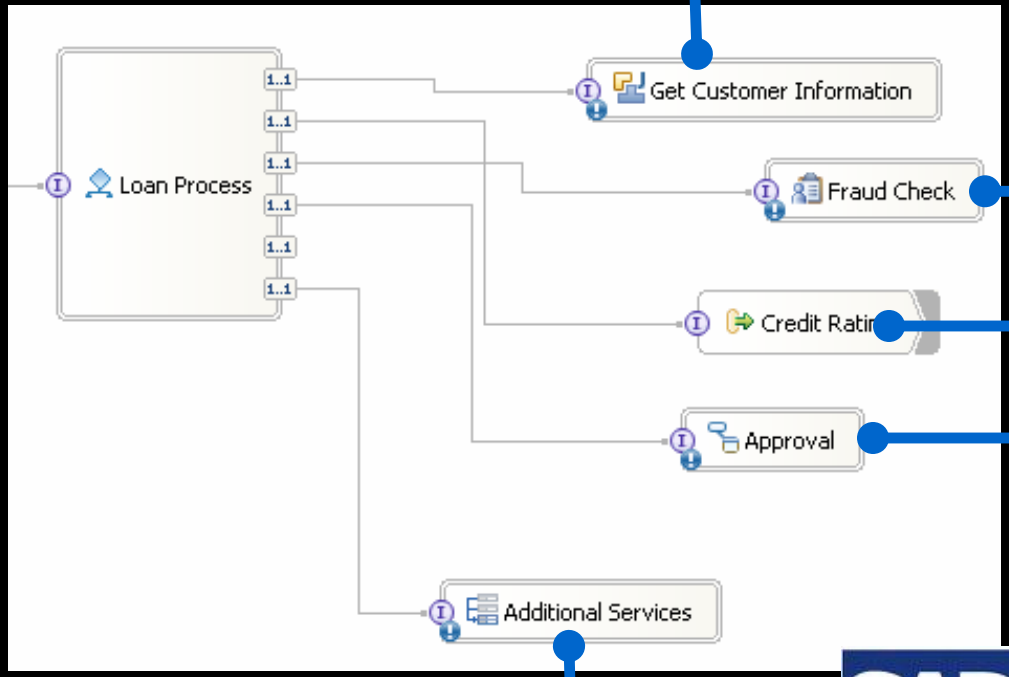
Business Monitoring
Real-time visibility for coordinated action

Analytics and Optimization
Insight to optimize the process model

WebSphere Business Monitor

Simple integration of processes without coding

With SOA, leverage existing assets and achieve greater flexibility



Legacy Systems

Human Tasks

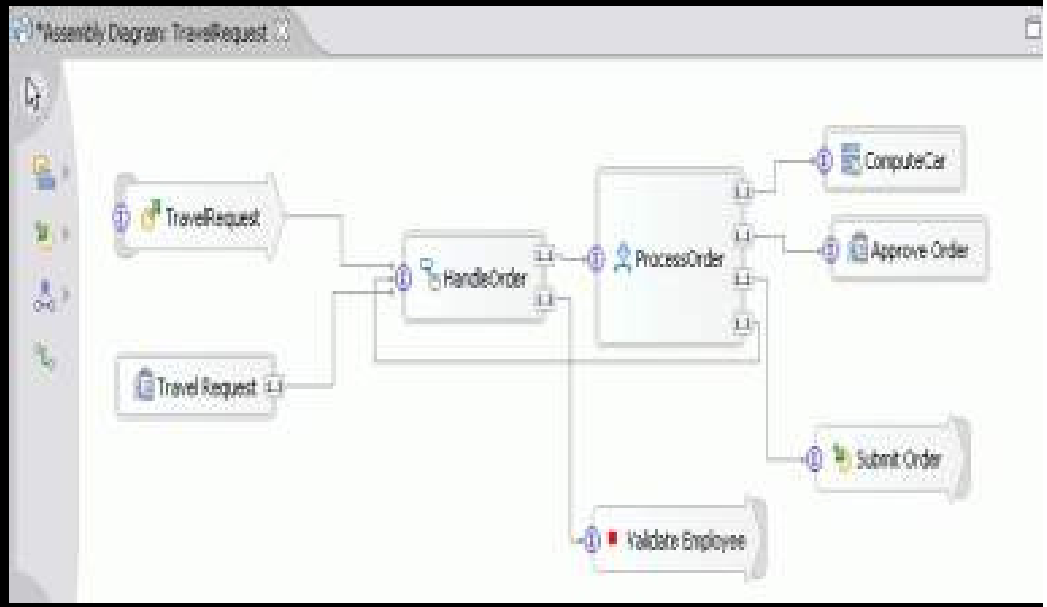
Java App

State Machines

Packaged Apps

Integrate: WebSphere Integration Developer
Accelerated Solution Assembly

- The complete toolbox for building composite applications
  - An Assembly Editor for wiring solutions together
  - All the tools you need for building solution components (Editors for BPEL, Business Rules….)
  - One, easy to learn user interface based on Eclipse
- Architected for reuse and flexibility
  - Simplified component interfaces
  - Plug-and-play solution components



***One** Tool, **One** set of skills, **Many** uses*

Integrating services across the enterprise: Processes, Mediations, Adapters, Components

Deploy: WebSphere Process Server

The Engine Room of Business Process Management

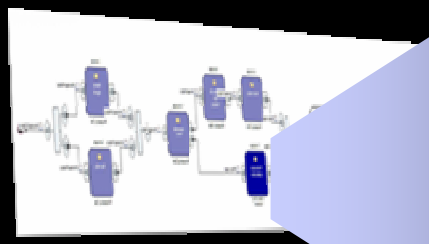
- **Robust execution of business processes**
  - Reliable, scalable, secure, open standards
  - Single integrated runtime for all SOA based process automation

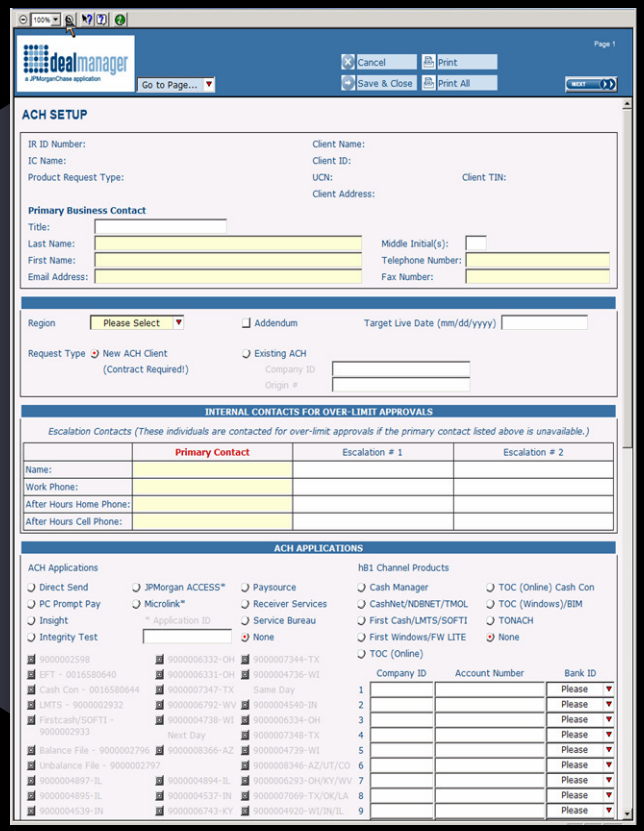
- **Supports all aspects of process integration**
  - Process flows
  - Business rules
  - Human steps
  - Forms
  - State machines

- **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

Human Tasks as Service Components

Rapidly define interfaces for human tasks as you model, interact with them during process execution





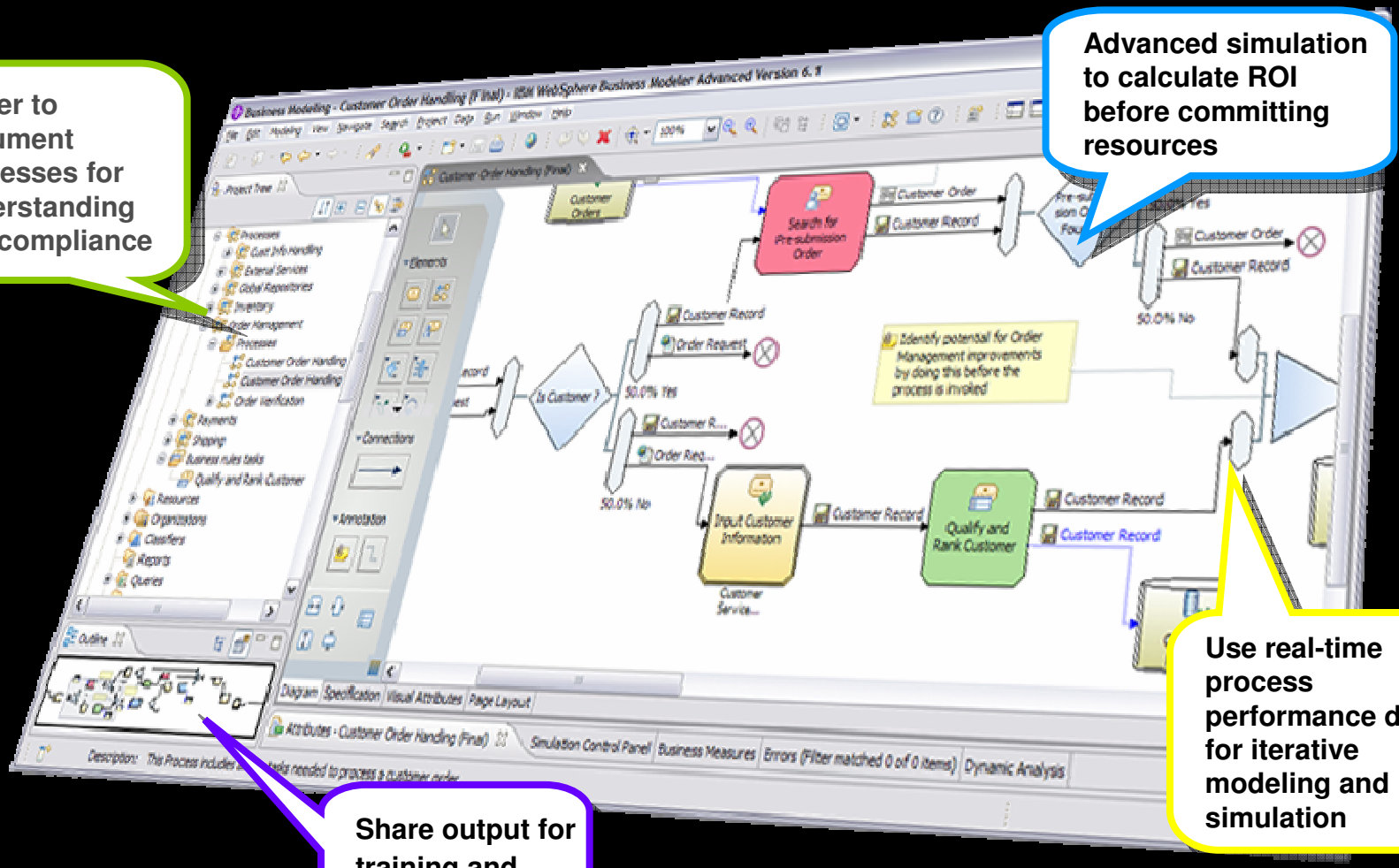
IBM is positioned in the leaders quadrant: *Gartner, Inc., "Magic Quadrant for Forms"*

Lotus Forms embedded in WebSphere Business Modeler and deployable in WebSphere Process Server flows.

Collaborative design and simulation for strong execution

Easier to document processes for understanding and compliance

Advanced simulation to calculate ROI before committing resources



Use real-time process performance data for iterative modeling and simulation

Share output for training and collaboration

Model: WebSphere Business Modeler

Business Level Modeling And Simulation

Designed for business users

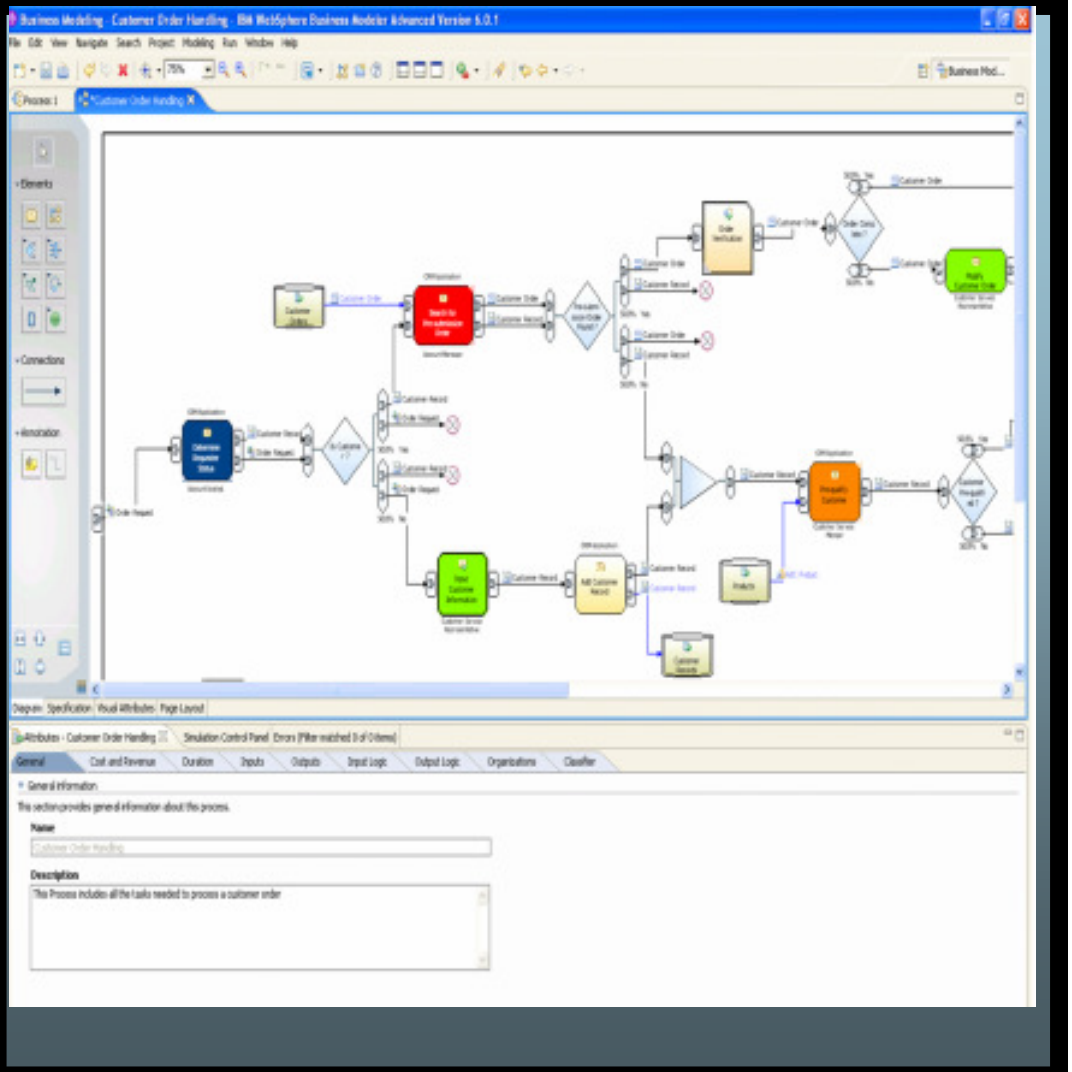
- Import models directly from Visio, MS Word, FileNet P8
- Hundreds of process templates available (IFW, IAA)
- Optimize all aspects of your business – set KPI's and metrics
- Collaborate with subject matter experts through the Publishing Server

Model, simulate, and analyze

- Enhanced analysis and simulation capabilities. Fully understand impacts before deploying.

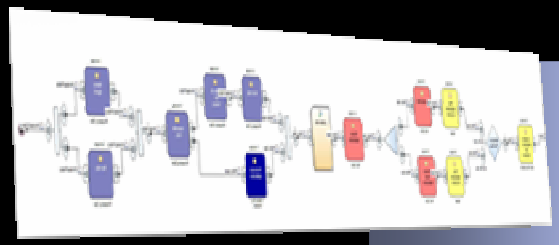
Clean hand-off to I/T

- Rapid and accurate deployment of your solutions
- Business modeling is the starting point for IT deployment (WID)

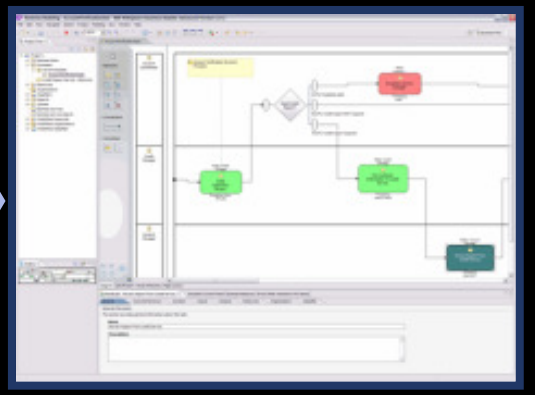


Model, analyze and simulate business processes

A better way to understand how your business operates



Model for innovation



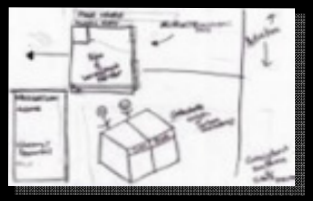
Predict results before deployment

- Advanced Simulation Capabilities
- New Interoperability – FileNet P8, MS-Word
- Traceability to easily maintain model consistency

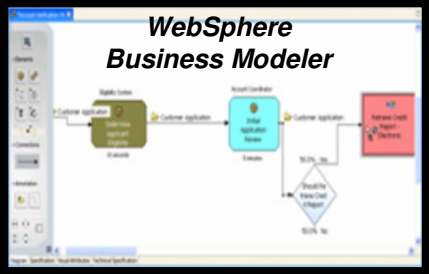
IBM is positioned in the leaders quadrant: *Gartner, Inc., "Magic Quadrant for Business Process Analysis Tools, 2H07-1H08"*

WebSphere Business Modeler 6.1

Use Simulation to Identify High Impact Process Changes



Existing Processes



Run simulation to estimate savings and support the business case for the process change

- Define and optimize processes thru simulation
- Justify process changes through ROI calculations
- Understand impact of process changes to the business

- Example: Simulation results showing areas of greatest opportunity

Current State – Times & Costs

Case Analysis with Unlimited Resources

Probability	Average Process Time (min:sec)	Average Cost	Case	Case Description
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

Monitor: WebSphere Business Monitor

Achieve Real-time Visibility into Processes through customized dashboards

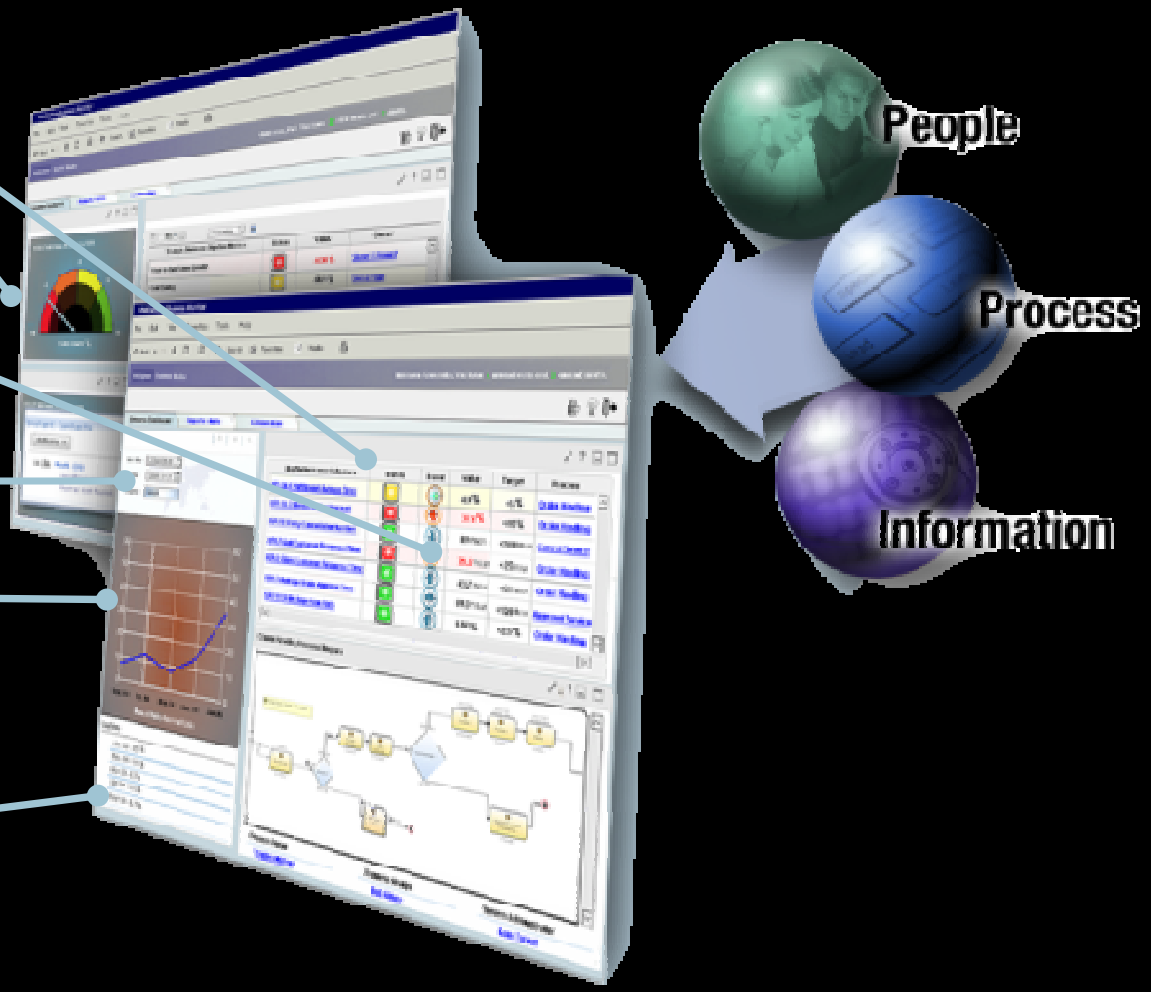
Scorecards
Key Performance Indicators for business units

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

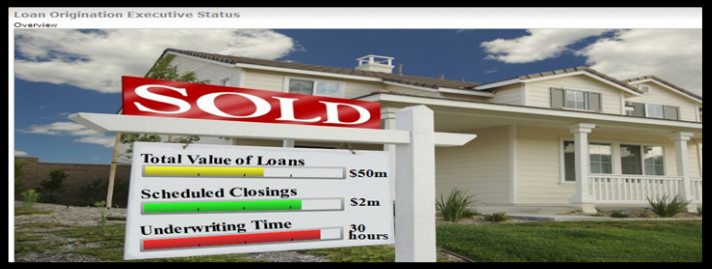
External Information
Information affecting performance



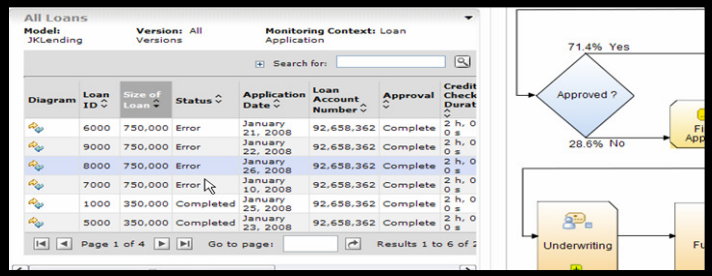
Role-driven Dashboards

Monitor the Information that's important to you

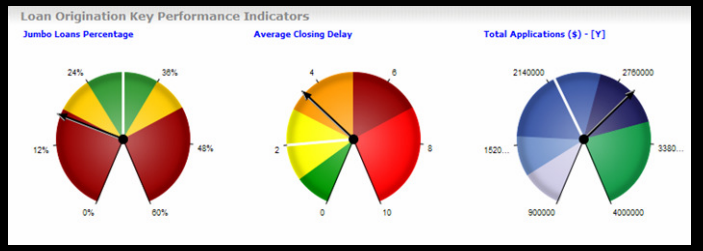
- Personalized to show desired mix of:
  - KPIs
  - Alerts
  - Human Tasks
  - Reports
  - Dimensions
  - Instances
  - Diagrams
  - Organizations



Business Leader



IT Leader



Business Professional

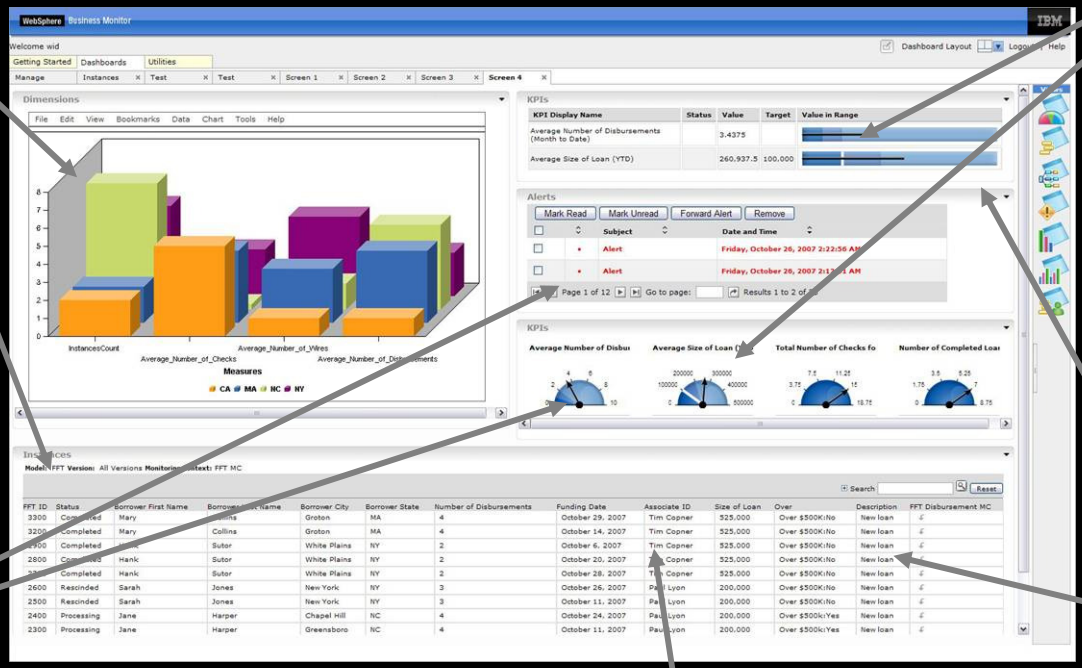
Receive Business Activity Information from multiple Sources

Provide a more complete View of Business Performance

Process Activity

SAP or Other ERP

Business Leader



IT Leader

Business Professional

Legacy Systems

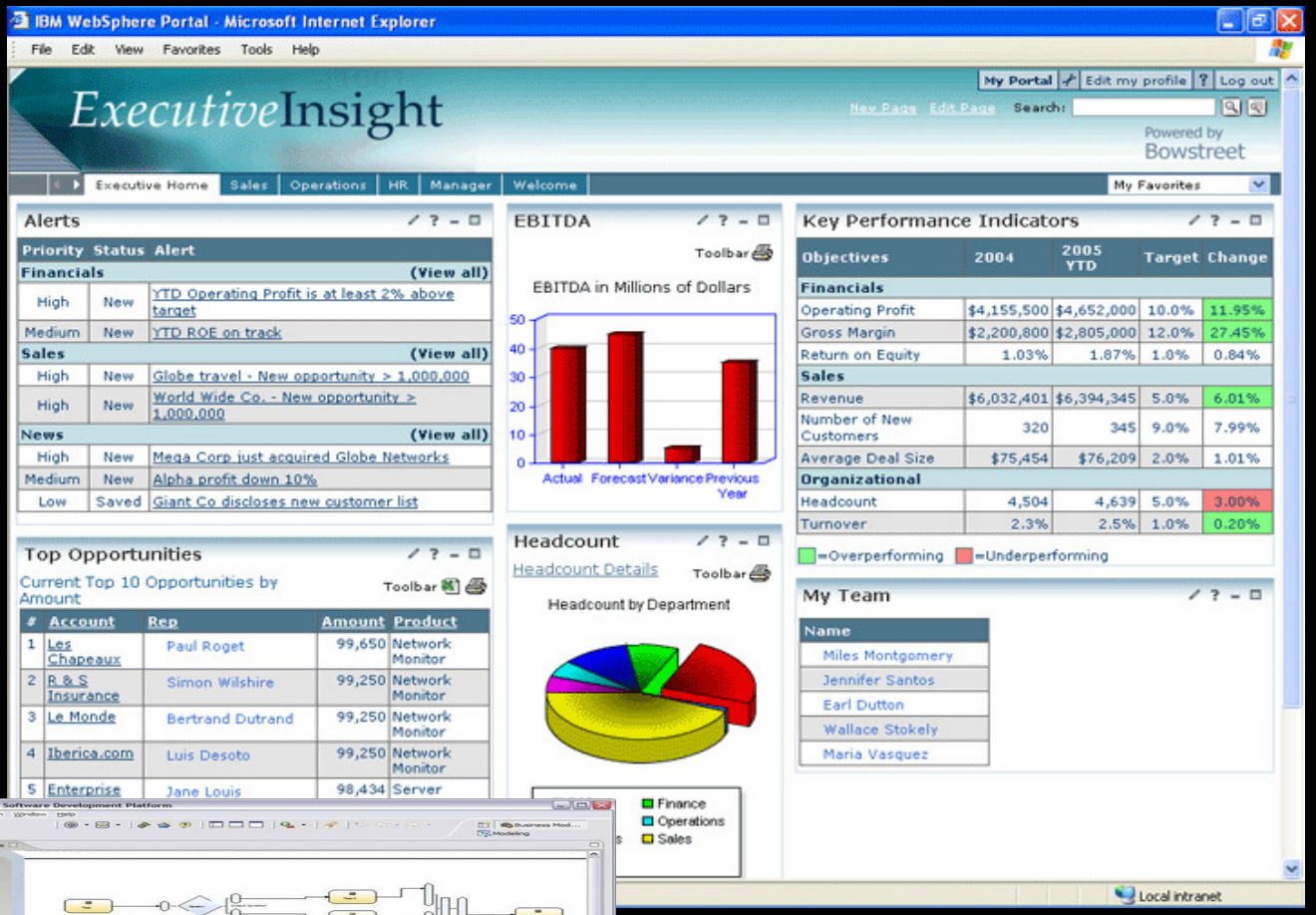
Databases

External Systems

Learn From Your Data

Modeler and Monitor Together:

- Feed your real data back into your modeling tool for real life simulations
- Using real business facts as the basis for analysis



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!

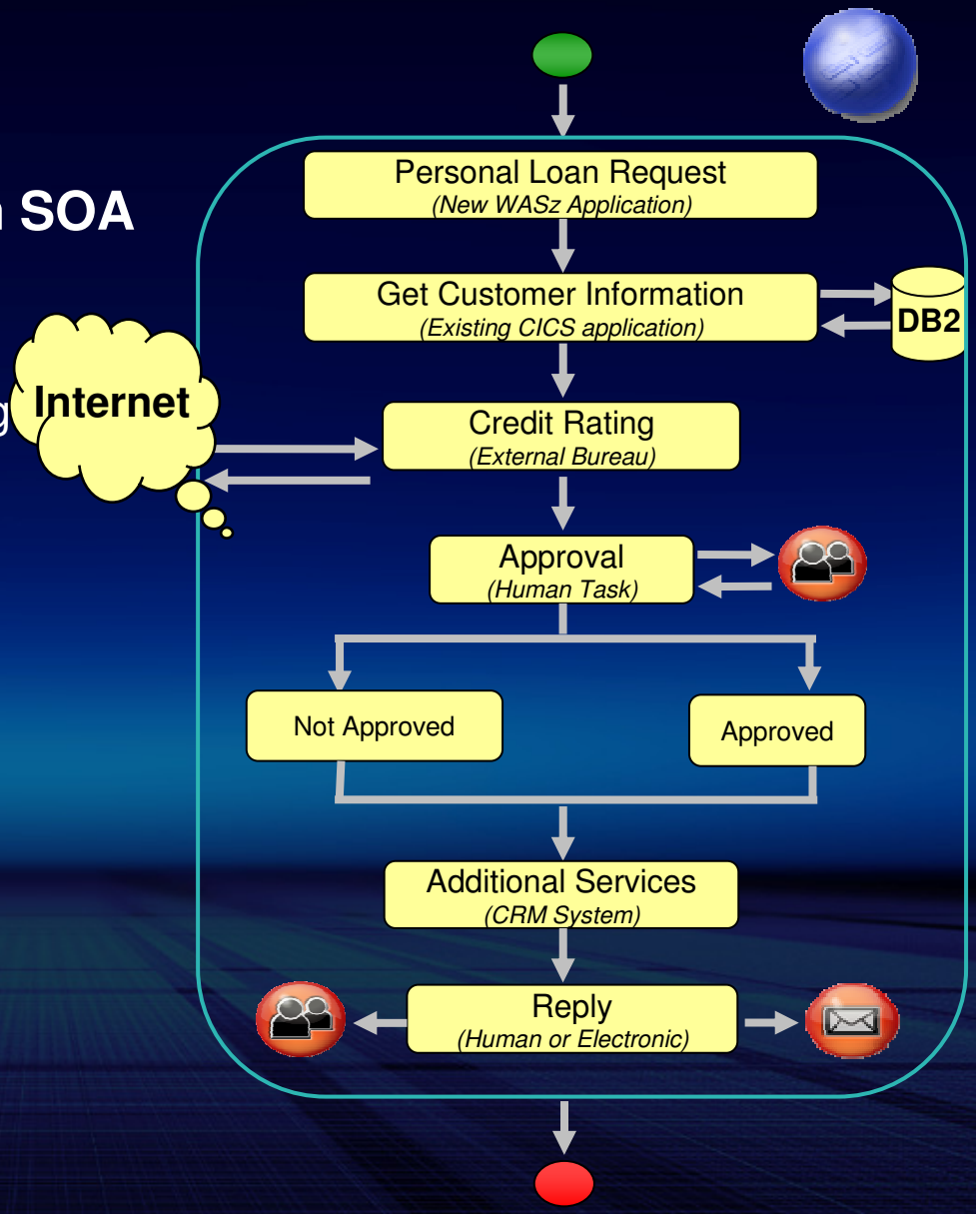
Mainframe utilization rates often exceed 80%, and are designed to handle sustained peak workload utilization of 100% without service level degradation.

- 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

When to Use System z for Process Serving

System z–The choreographer for an SOA

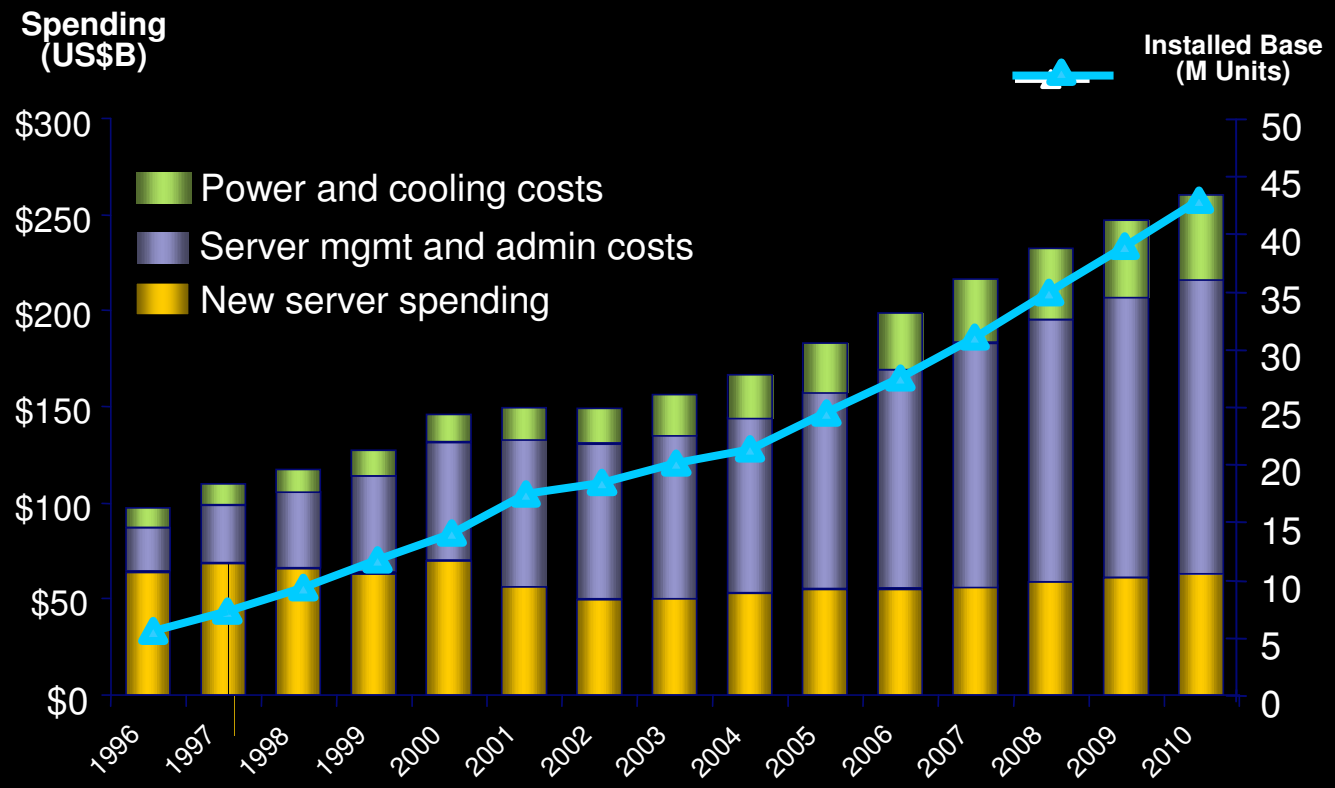
- ***Efficiency:*** Control processes where they run
- ***Integration:*** Improve the flow of an existing process
- ***Automation:*** Remove the human enter keys
- ***Reliability:*** Guaranteed connections deliver automated processes
- ***Workload Management:*** Integration with workload manager / intelligence resource director
- ***Security:*** built into all system layers
- Availability: (zero downtime)/OS brand promise
- ***Performance:*** Full utilization of system capacity with same class of service



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%

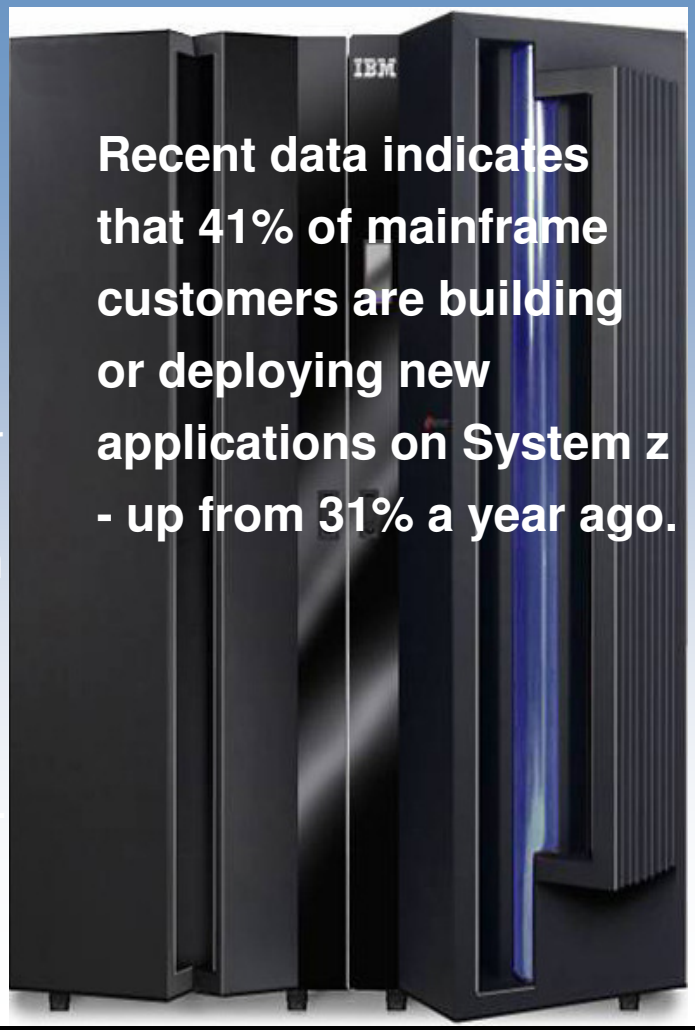
IT budget trends…

2004

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

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

- Designed for integration
  Designed for 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 xfer
- Reuse is 5x less expensive that 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 & performance
- Highest Qualities of Service
  Availability, reliability, security, scalability, WLM



Recent data indicates that 41% of mainframe customers are building or deploying new applications on System z - up from 31% a year ago.

The Value of System z for SOA and BPM

- 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 needed to configure, monitor and adjust workload
    - Best Total Cost of Computing
    - System z Application Assist Processors (zAAPs) to execute z/OS java workloads

IBM System z™

z/OS

Why Select BPM Enabled by SOA from IBM?

- "IBM has a leading position in key vertical markets including its traditional markets for financial services, insurance, banking and government"
  - Magic Quadrant for Enterprise Content Management (Sept 2007)
- ***Only*** Vendor listed as a Leader by Forrester in ***both*** Integration-Centric BPMS and Human-Centric BPMS Waves
  - Integration-Centric BPM Suites Wave (4Q 2006), Human-Centric BPM Suites for Insurance (3Q 2006)
- Process Knowledge leader through BPM Methodology
- Most expertise to deliver BPM with more than 400 customers using IBM Industry Models to accelerate the deployment of strategic business initiatives
- BPM Software that spans every BPM capability
- Over 5 years of continuous market share growth
- Runs natively on z/OS or z/Linux

Customers Turn to IBM

Unmatched Breadth of BPM Capabilities and Expertise

#1 in BPMS market share*

Over 2850 BPMS customers in over 30 countries and growing…

Depth of BPM Expertise

- 10,750+ IBM GBS/GTS practitioners
- 1,770+ systems integrator and reseller partners
- World-class BPM methodologies, process templates, industry best practices, and benchmarks
- BPM Competency Centers
- BPM value assessments and workshops
- 1000+ BPM consultant specialists
- 4000+ ISV partners
- 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 personalization with composite business application
- High performance, scalable process 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." ACI GLOBAL

* Gartner, Inc., "Market Share: Portal, Process and Middleware Software, Worldwide, 2004-2006" by Michele Cantara et al, June 27, 2007

Why IBM?

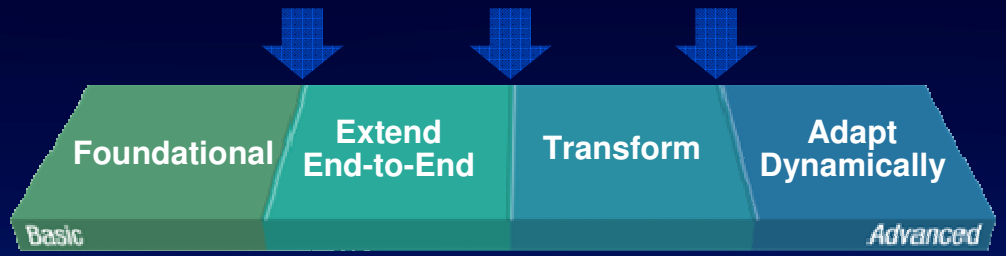
Trusted, experienced guidance based on 5700 customers*

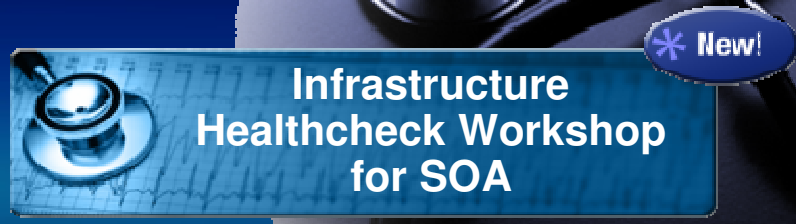
# of Customers using our SOA offerings

Helping Customers Access Their SOA Health

Are you IT fit enough to handle your SOA needs?

Whether you are here or here or here





Treatment Areas

- Application Reuse
- Service Use
- Service Security

Treatment Areas

- Infrastructure Flexibility
- Service Management
- Middleware Support

Critical for maximizing SOA success and value on the path toward becoming a Globally Integrated Enterprise

How You Can Get Started with BPM

Steps to Help You Prepare for Success

Explore

- Work with your local WebSphere sales representative to arrange a **Business Process Management Workshop** at your facility
- Conduct a detailed **BPM Business Value 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

TALKING

PUTS YOU IN A CONFERENCE ROOM.

DOING

PUTS YOU AT THE SMART SOA CONFERENCE IN VEGAS.

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