IBM SOA

Business Process Management Enabled by SOA

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CEO's Cite Innovation as Top Priority for Business

Business Model Innovation delivers the greatest returns

Results of 765 CEO interviews worldwide:

Out Performers place 2X emphasis on **Business Model innovation** than under performers

- CEOs are under intense pressure to innovate
- Corporate culture is critical to sustained innovation
- Business model innovation is the new strategic differentiator

Which key business priorities will your IT organization implement or support in 2007?

CMP
United Business Media

Note: Multiple responses allowed.
Data: InformationWeek Research Outlook 2007 study of 300 business technology professionals

Inflexible and Outdated Processes

Are the Root Cause of Many Corporate Disasters

Major Airline strands passengers on runway for 10 hours – no food, overflowing toilets

Market-leading cell-phone provider exits market after small fire

Why? Inability to modify processes on the fly.

BPM Projects are *Disguised* in Various Ways

Financial Management
(SOX Compliance)

Marketing, sales, and services
(Contact Center Optimization)

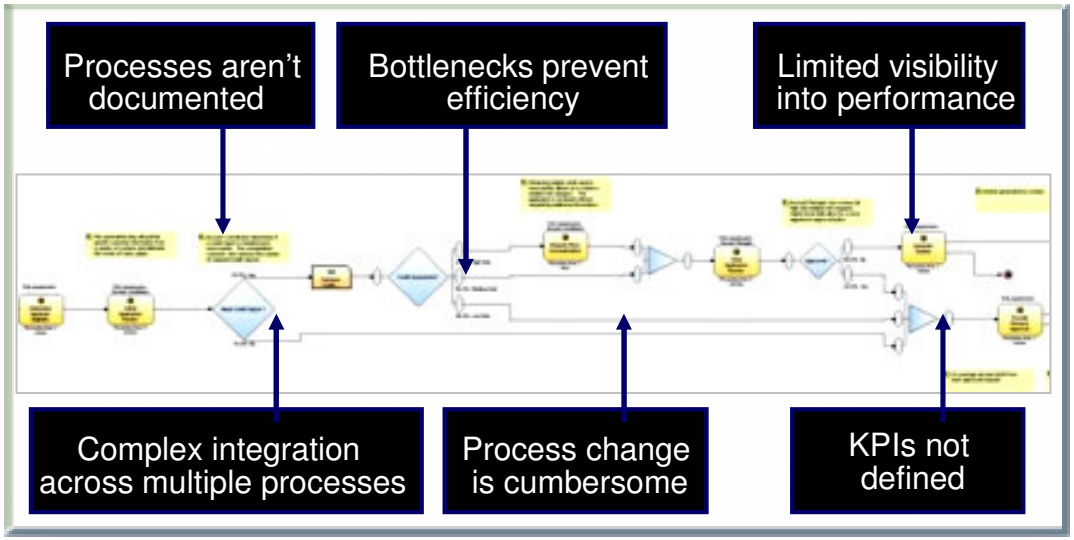
Supply Chain
(Inventory Management)

Product Lifecycle Management
(Category Line Extension)

Human Capital Management
(Employee Self-Service)

Business Process Management is a Discipline…

BPM Solves:



Software that Enables BPM

Integration · Modeling · Monitoring

Forms · Rules Engine · Workflow

Expertise that Delivers BPM

Models · Process Knowledge · Metrics

Policies · Business Logic · Methodology

BPM governs organizational and operational activities

BPM and SOA – Better Together

Gartner Research

Publication Date: 9 February 2007

ID Number: G00145586

SOA and BPM Are Better Together

"…SOA and BPM initiatives…are more successful and the benefits are compounded when they are united"

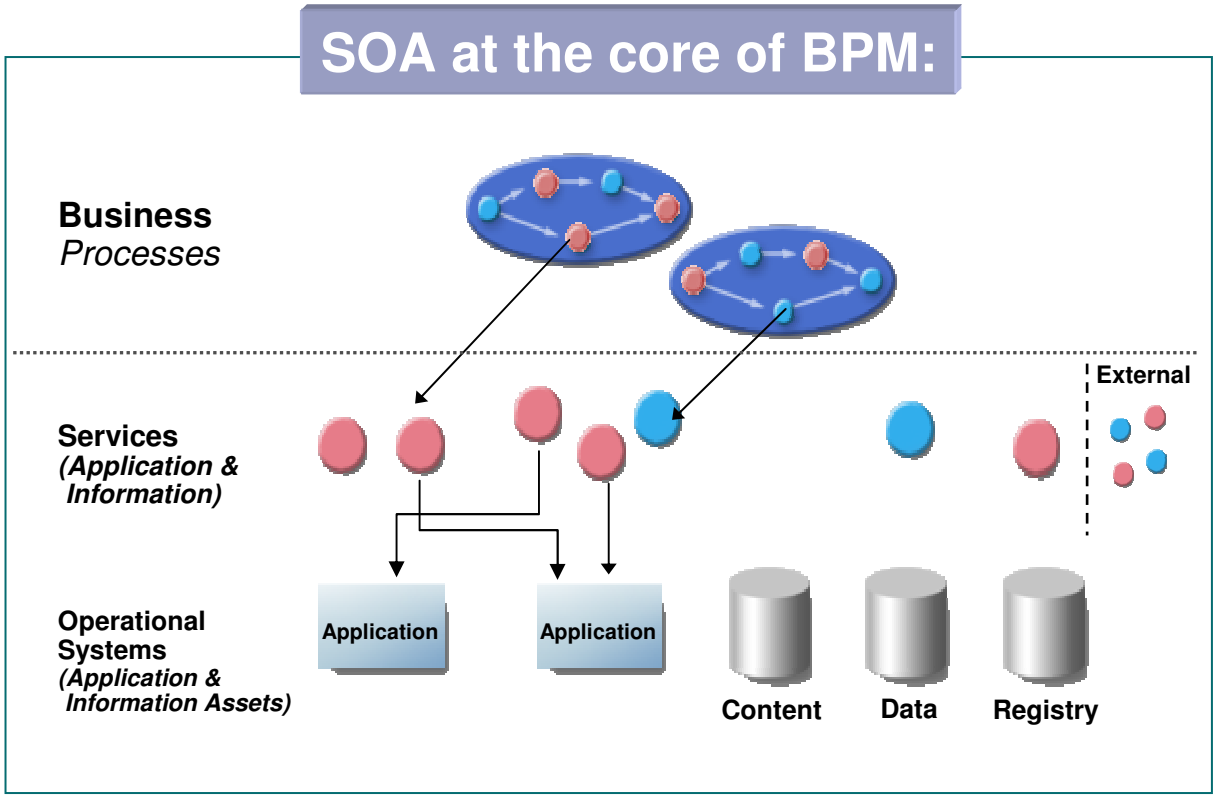
"Organizations that align their BPM and SOA initiatives in 2007 will double their likelihood of becoming an industry leader by 2011"

Source: BPM and SOA, Better Together, Paolo Malinverno, Janelle B. Hill, Gartner, Feb 2007.

….and here's why

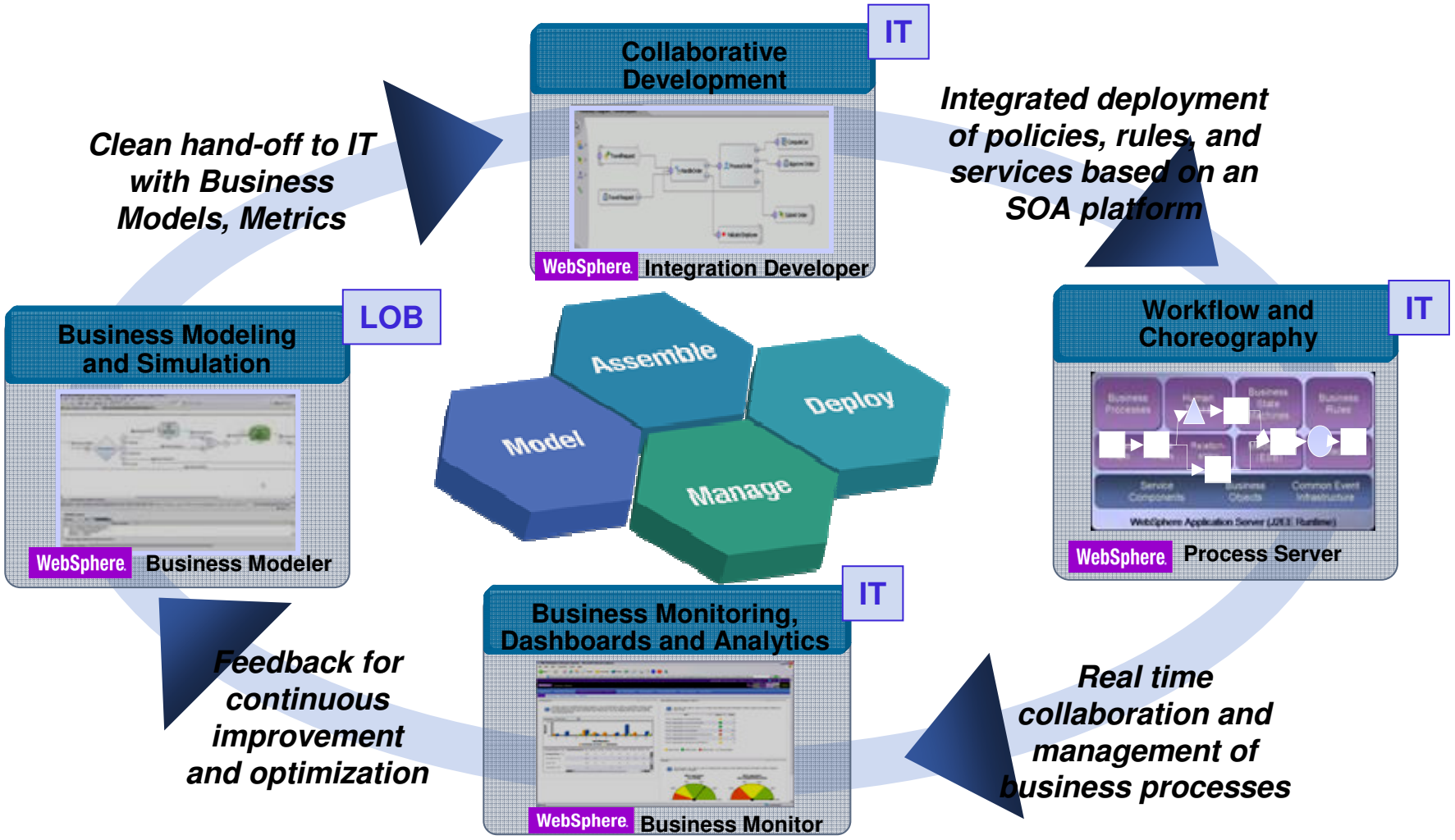
SOA improves how you design, manage, and optimize your business processes by enabling:

- Solution Building Efficiency
- Reuse of existing assets
- Flexibility in change



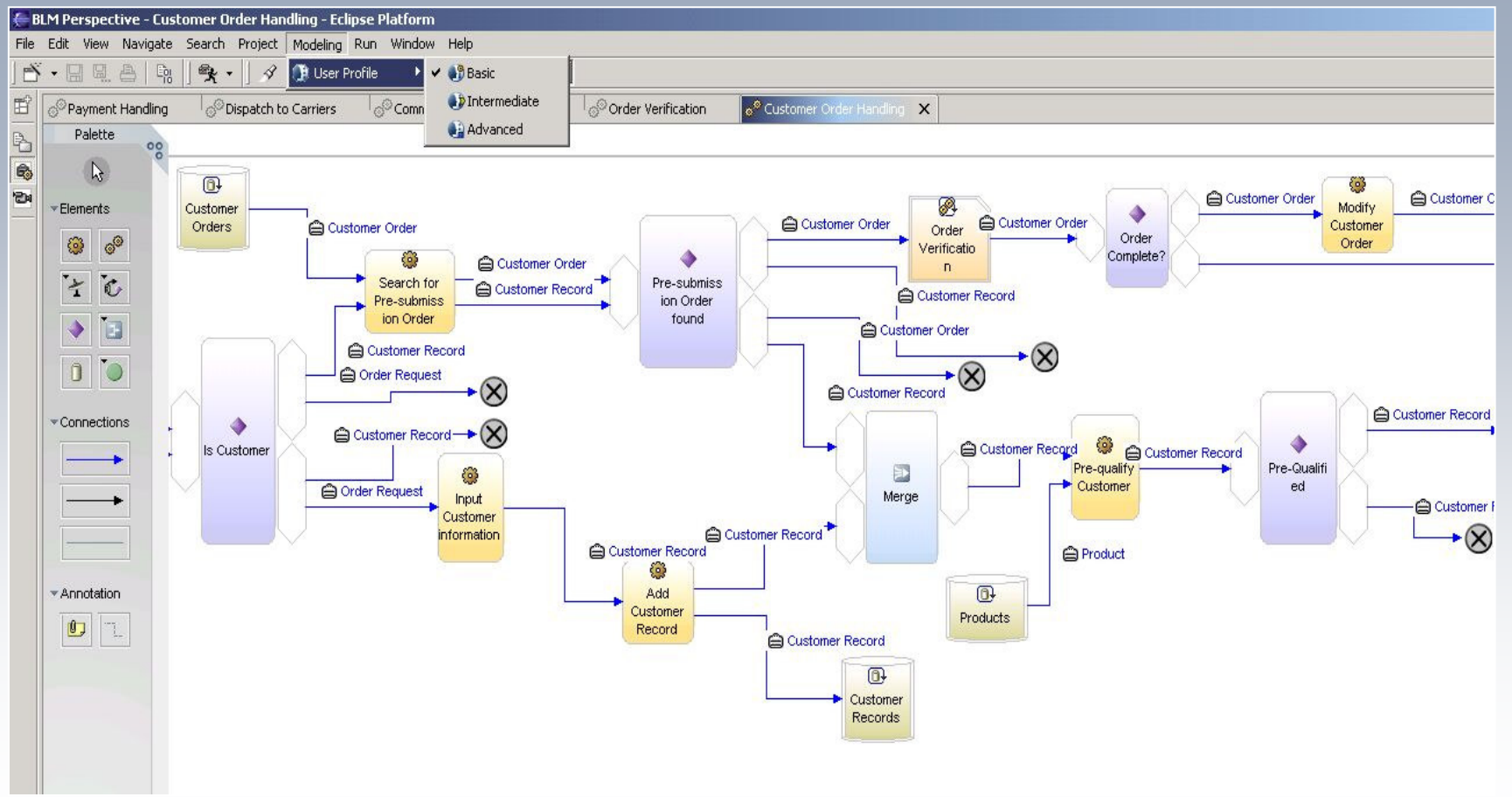
Flexible BPM enabled by SOA

Full support for the BPM life cycle



Process Design & Modeling: WebSphere Business Modeler

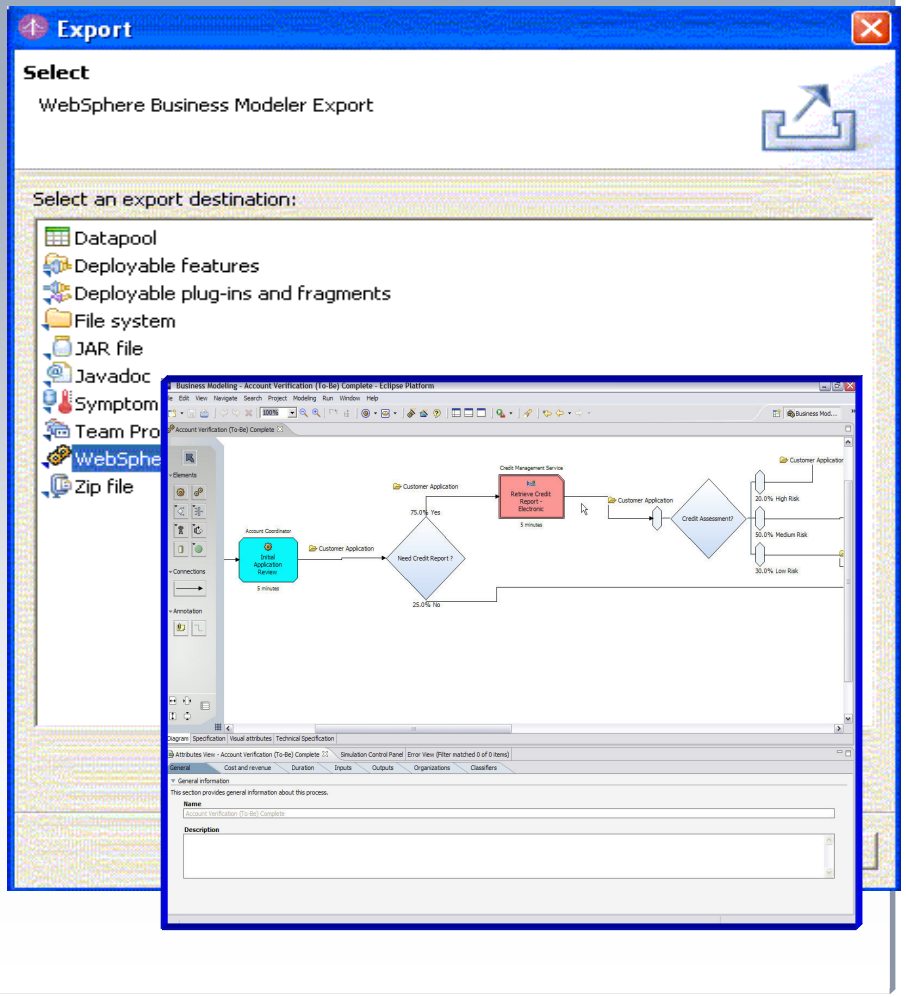
A Tool for Business People……



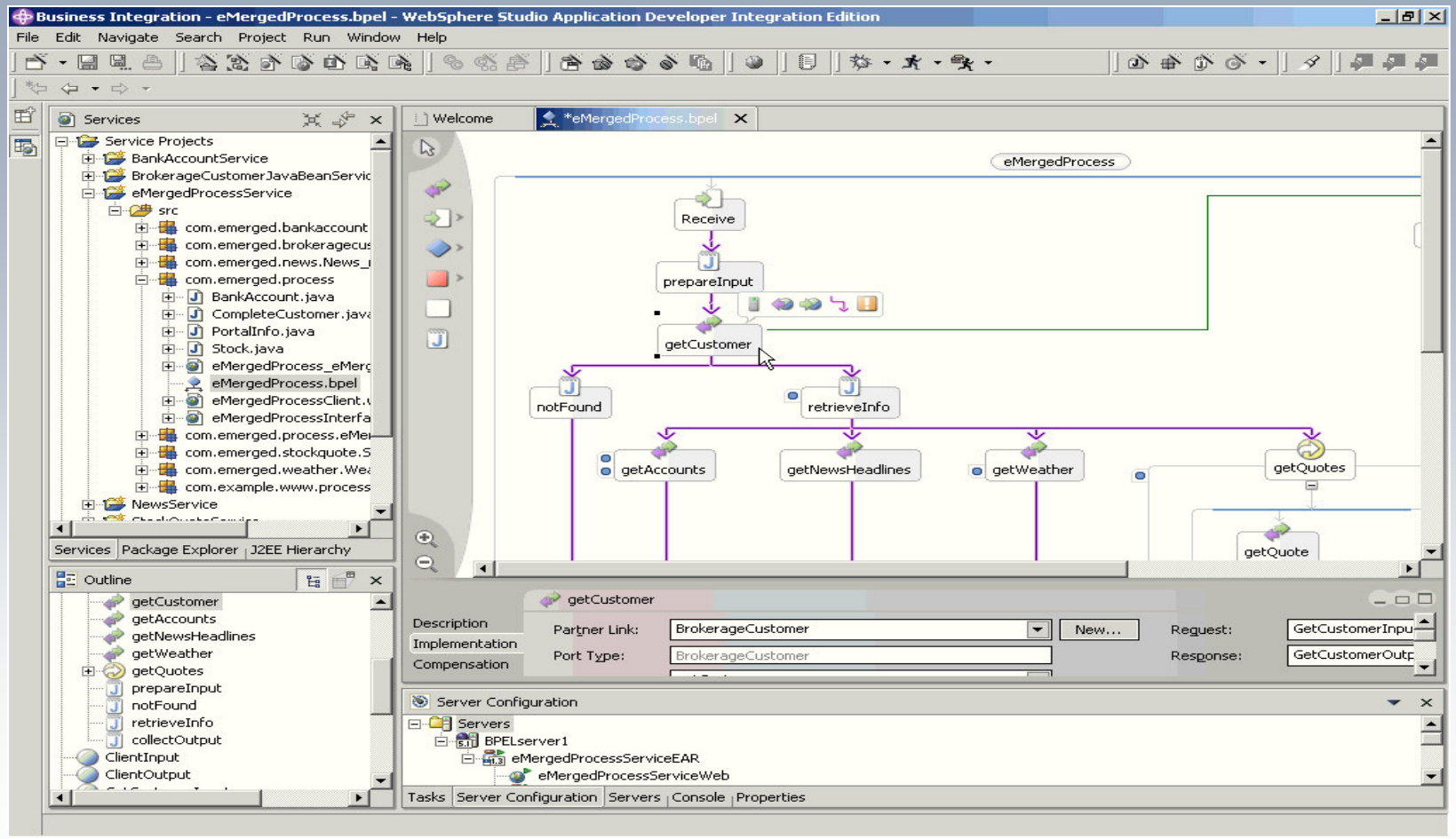
Analysis **Simulation** **Documentation**

Hand-Off To IT – Precise Business Requirements

- Direct export of models to IT
  - BPEL for execution
  - XSD for data definitions
  - WSDL for services interfacing
  - UML for Rational Software Architect
- Precise business requirements
  - For Assemble
  - For Deploy
  - For Manage

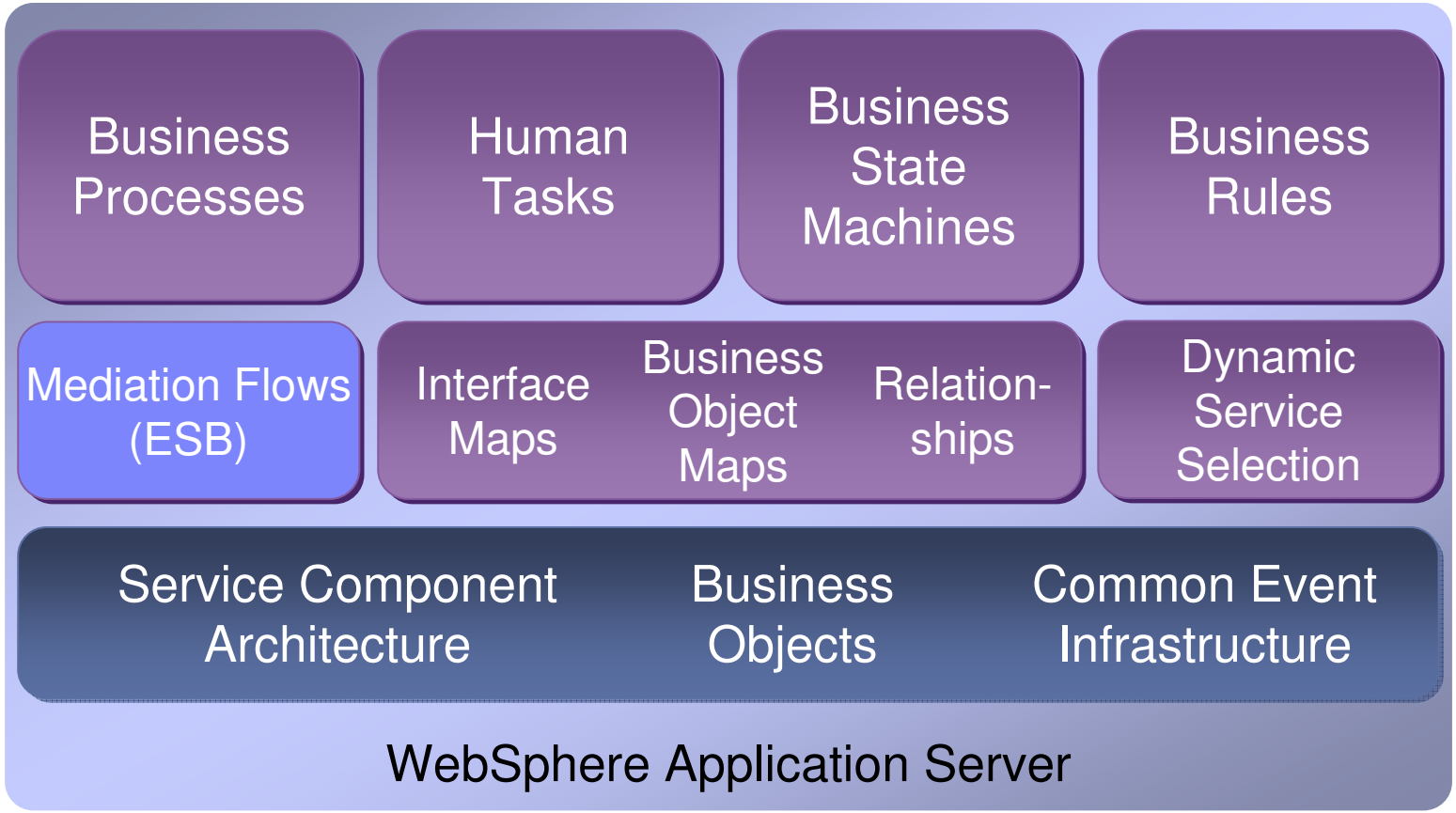


Process Choreography: WebSphere Integration Developer

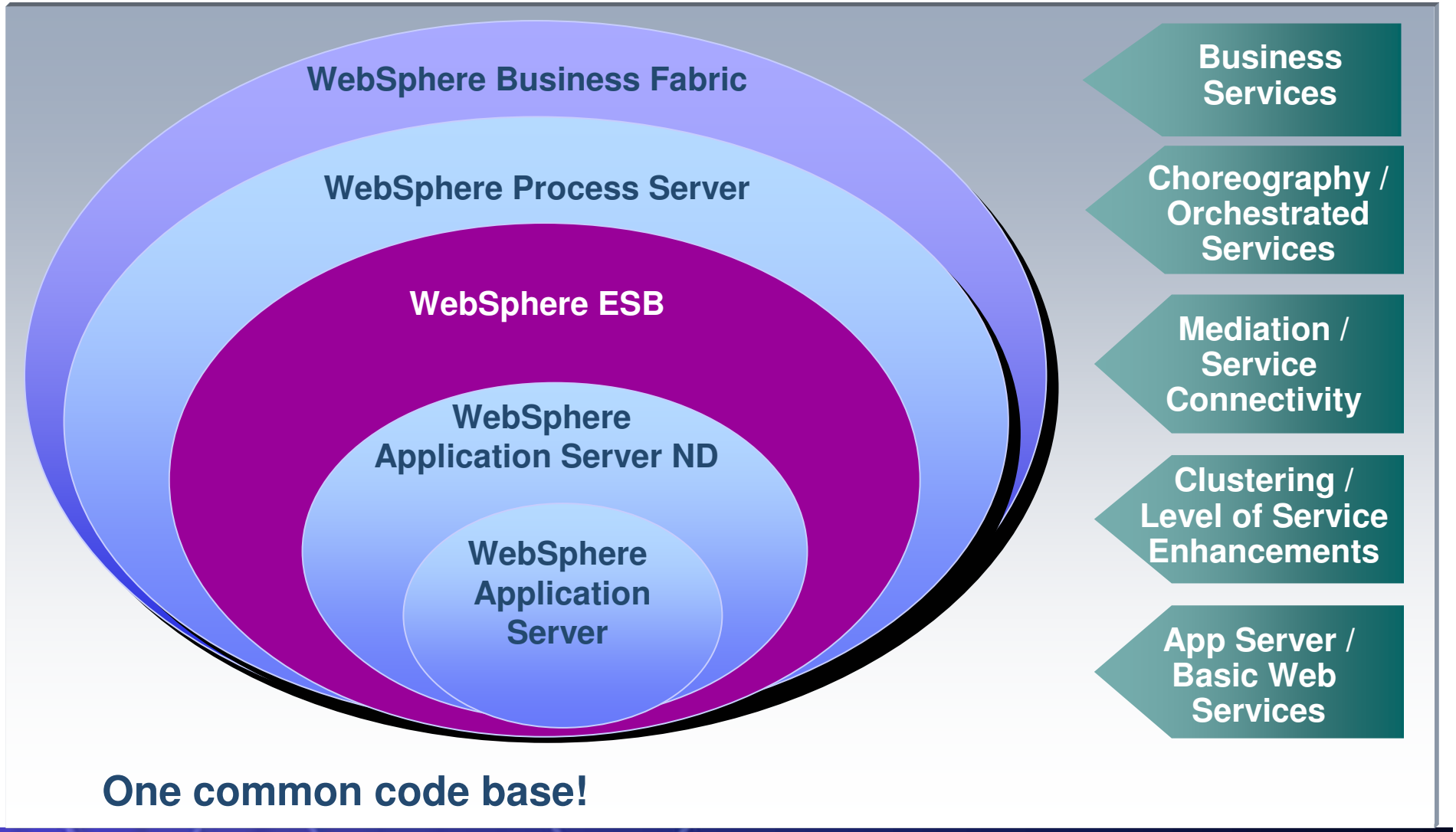


Technical Enrichment **Service Integration** **Test**

WebSphere Process Server - Components



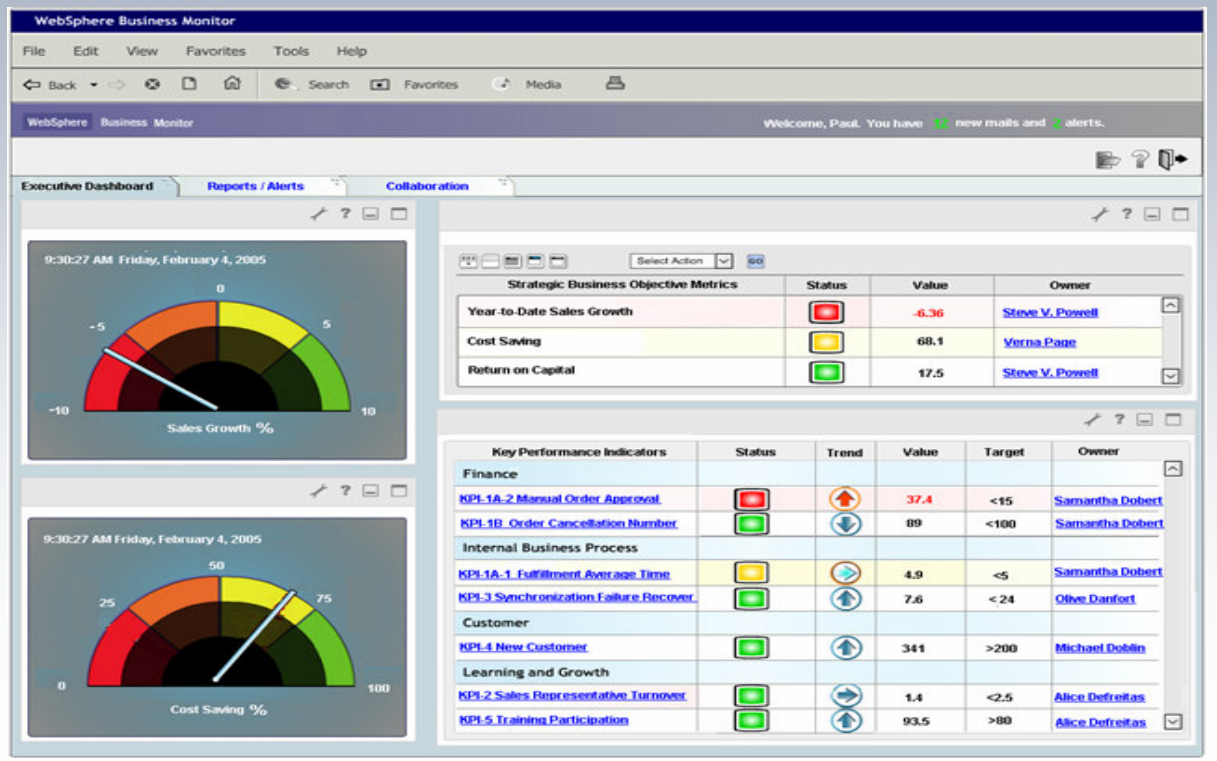
The WebSphere Stack: From Application Server to a full Business Services Environment



One common code base!

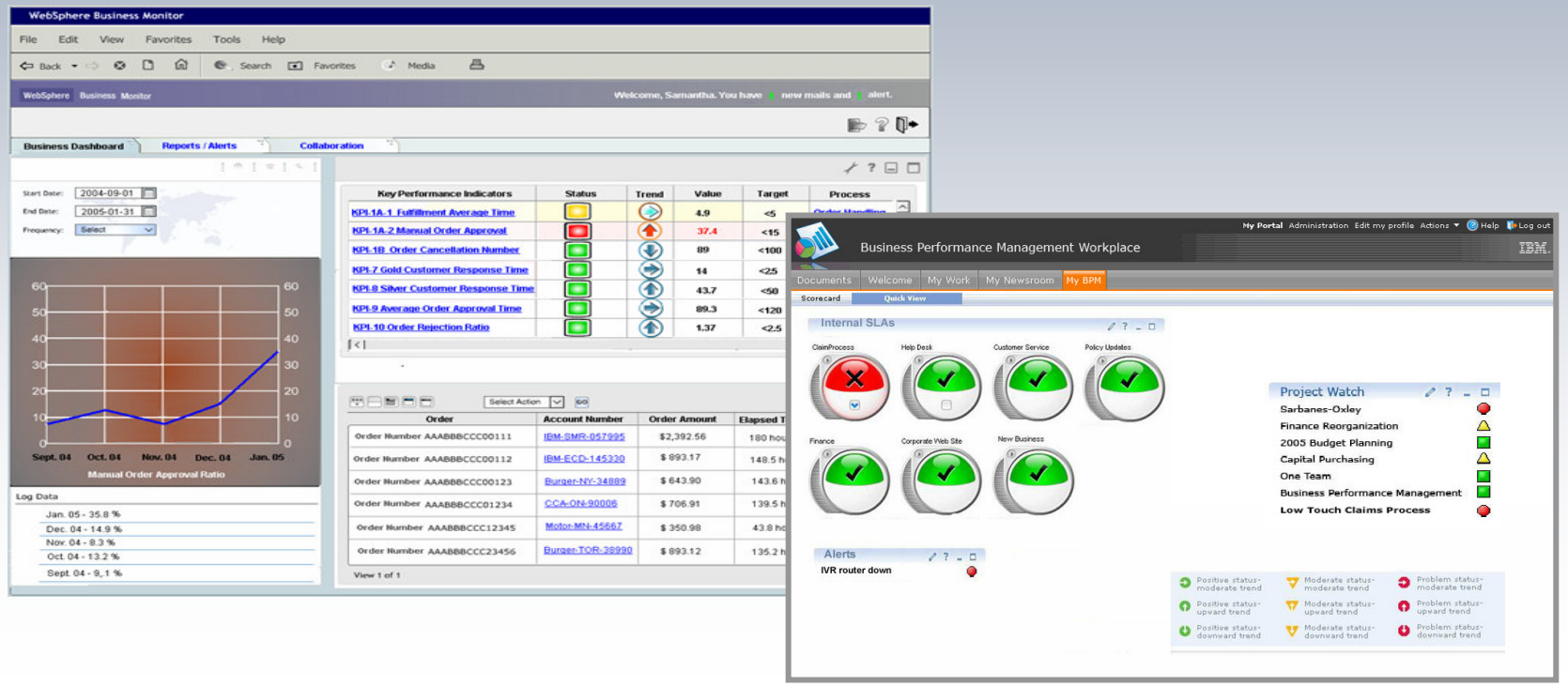
Bus. Process Control & Monitoring: WebSphere Business Monitor

- **Controlling of (automated) Business Processes**
- **Execute tactical decision, e.g. shift or suspend work items, reassign resources**
- **Alerts and Escalations**



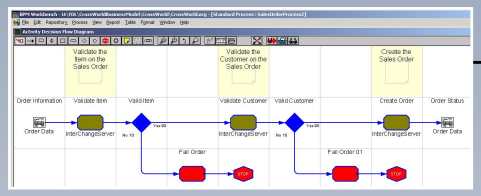
Business Dashboards: WebSphere Business Monitor

- Strategic (“1,000 foot view”) or “Executive Dashboard” of your Processes
- Trends from a real-time and historical perspective
- Measurement Points & Units defined by WebSphere Business Modeler
- Feedback of actual Process Performance into Modeler



Closing the Loop…… and the Gap between IT & LOB

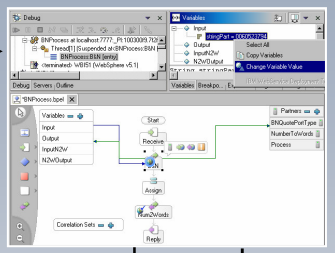
Line of Business



BPEL/UML

Business Process Model

IT Department



Rational Developer

WebSphere Integration Developer

WebSphere Business Modeler

Information Server

WebSphere Portal

Web Services

BPEL

WebSphere Business Monitor

WebSphere Process Server

WS ESB

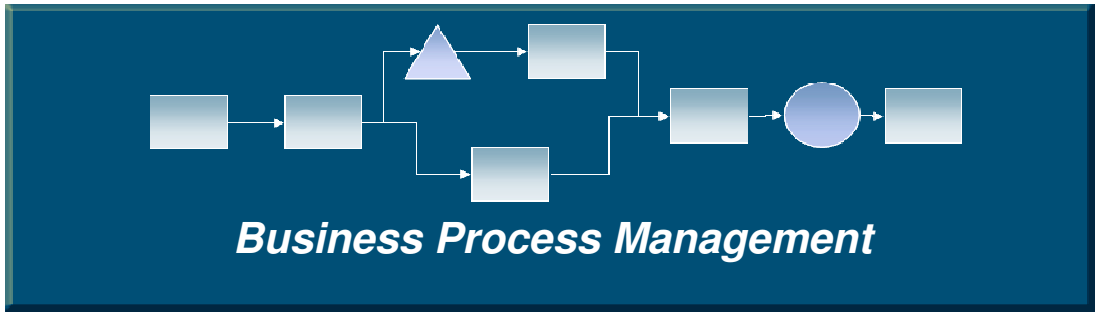
WS App Srv

WebSphere Service Registry & Repository

Tivoli Composite Application Monitor
Tivoli Identity & Access Manager

Five Flexible Starting Points for BPM

Customers can start BPM in different ways



Modeling & Simulation

Design and simulate business processes

Business Activity Monitoring

Track performance, gain insight, and take action

Process Automation

Choreograph processes across applications and systems

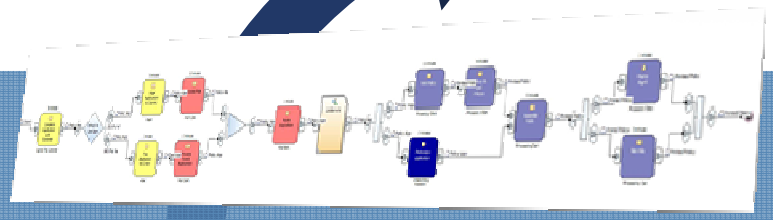
Rules and Pre-built Frameworks

Manage process rules and accelerate design and implementation time

Content Centric Processing

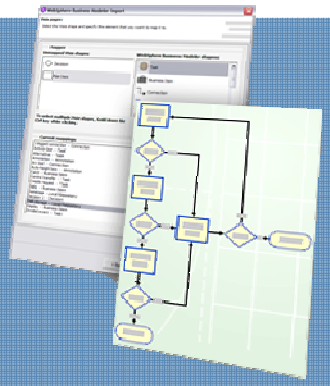
Manage processes where content is used as input for a decision or produced as the output

Business Level Modeling and Simulation



- Model “what if” scenarios
- Use simulation capabilities to:
  - Assess risk mitigation
  - Make investment decisions
  - Calculate value of improvements

- Use **ROI** reports to compare and analyze Results



- **Import Visio Models**

WebSphere Business Modeler

Iterative and continuous improvement

Unigroup Inc.

Business Challenge:
Leverage emerging wireless communications technology to maximize the effectiveness of their Transportation Processes, leading to continuous cost and time optimization of their shipping resources.

- **Solution:** Use business process modeling to document and analyze their critical business processes, yielding more effective communications, cost savings, and improved tracking of both their equipment and customer assets.
- **Results:** 70% reduction in communications cost for van operators. Realtime visibility into shipping resources and location information, and increased customer satisfaction given the ability of letting them know the exact status of their shipments in route.
- **Implementation Details:** WebSphere Business Modeler

Business Activity Monitoring

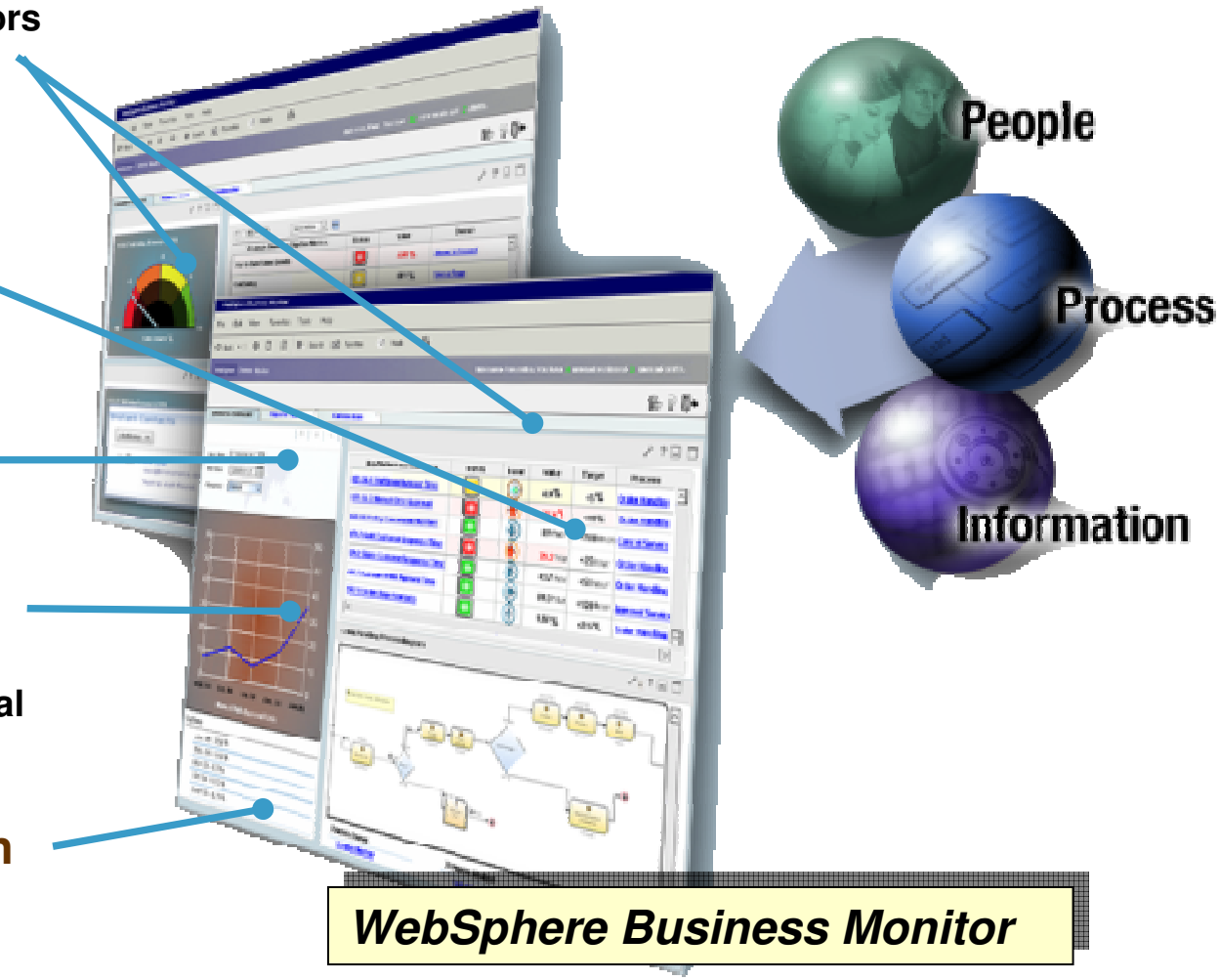
Scorecards
Key Performance Indicators for business units

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



Identify activities and areas for improvement

BPM Disguised as:

Product Lifecycle Management
(Plant Operations)

Supply Chain
(Inventory Management)

- Driving force behind BPM Adoption
  - Synchronize SAP ERP system with various production plant software systems
  - Manual processes requiring data gathering, was time consuming and error prone

SELEX Sistemi Integrati

Modeled processes for visibility
Aligned business and technology priorities
Used adaptors to integrate custom apps with SAP
Deployed improved processes on an SOA

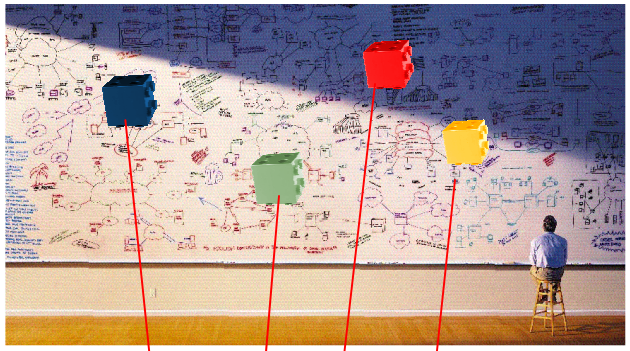
Rapid Solution Deployment - 4 Months from Concept to Implementation
Reduced potential human error with process-controlled automation

Process Choreography and Automation

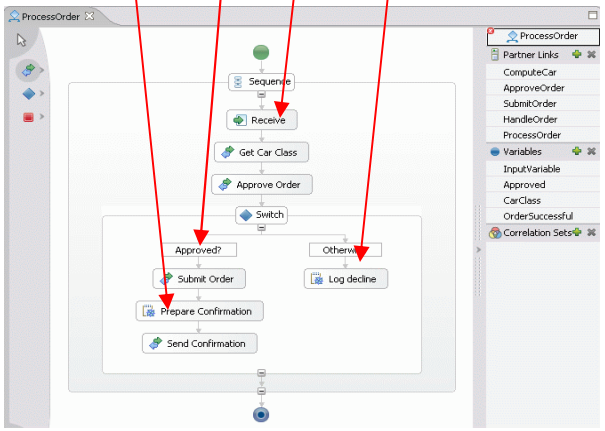
Process Automation

- Runtime for end-to-end **SOA-based** process automation
  - *Flexible, reliable, scaleable, secure*
- Integrated **ESB** for Range and Reach
  - *Seamless access to all available services*
- Robust **Human and System-centric** BPM Capabilities:
  - *Human to Human; Human to System; System to System*

Transform your business from this…



…to this



Enhanced!

BPM for the Mainframe

IBM Industry Frameworks accelerate your ability to leverage SOA

Rules and Pre-built Frameworks

The Blueprint
IBM Industry Studies

IBM and Partner Assets

Domain Models

Architecture | **Methods** | **Tooling and Runtime**

SOA Industry Roadmap

Rules and Pre-built Frameworks

Industry Frameworks

- Service-Oriented Business Solutions Frameworks
- Based on Industry Standards
- Combination of IBM and Business Partner Assets

Industry Content Packs

- Business Service Templates to accelerate deployments
- Expanded industry coverage for Banking and Telecommunications

WebSphere Business Services Fabric

- National Language Support
- Alignment with IBM SOA Foundation
- Additional Standard Operation Environments

Business Challenges:

- **Make it easy for Independent Agents to do business with FFIC in a highly competitive landscape**
- **Improve Agent experience with ease of use and effective business processes to enhance brand loyalty**

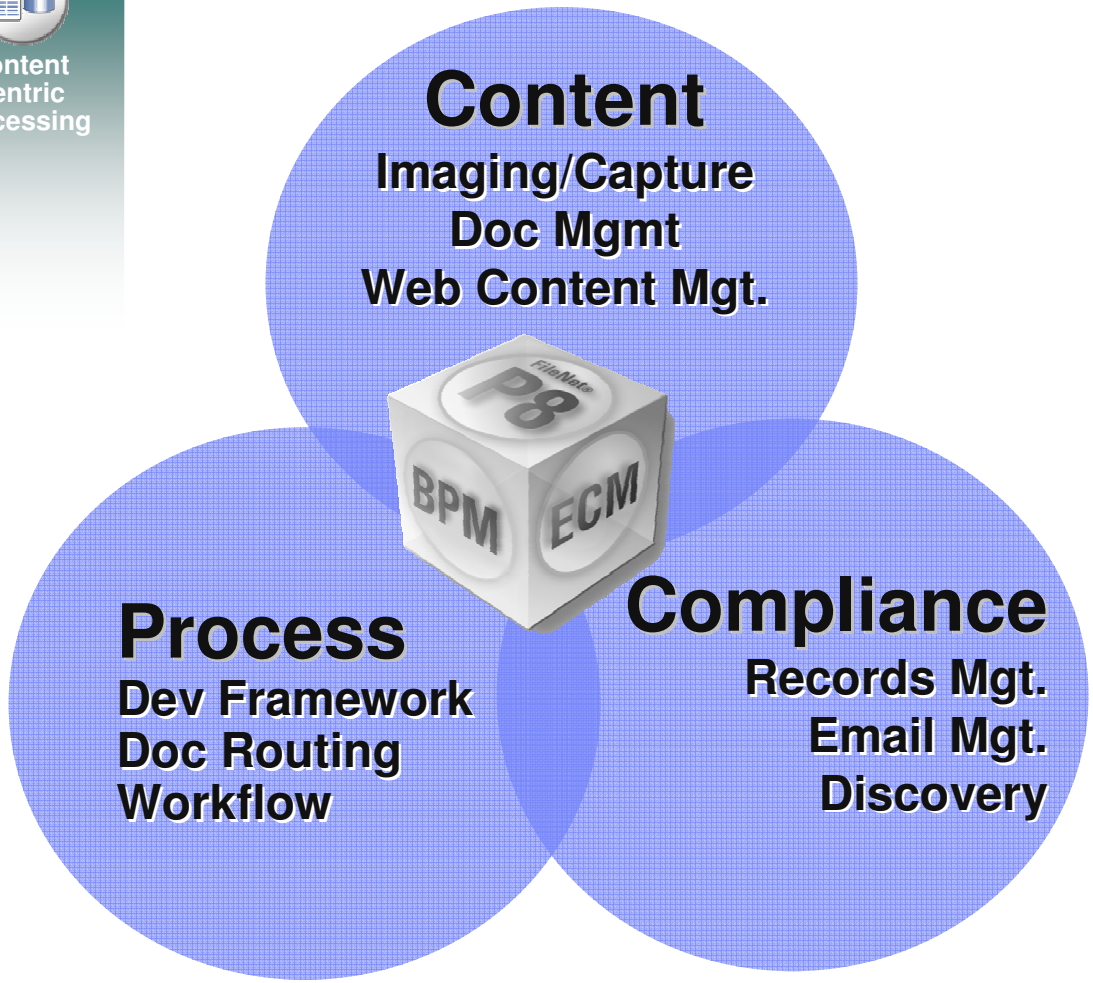
Solution: Service-oriented Business Solution enabled Straight-through-processing of personal property quotes and billing inquiries via web and Agency Management systems with self-service tools for Agents to deliver real-time quote functionality.

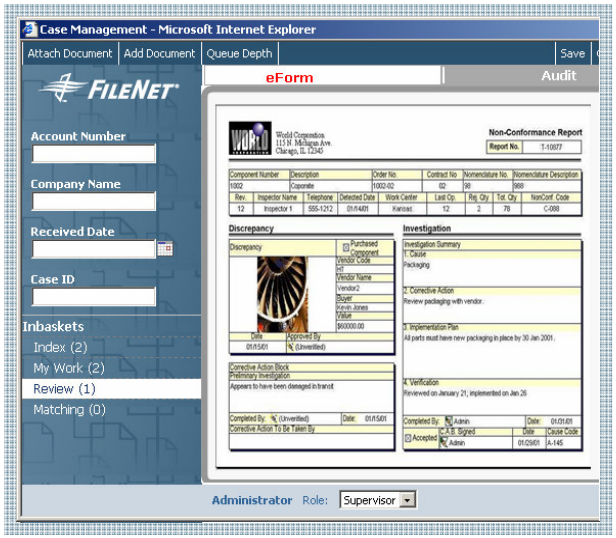
Results: Personal Property Quote (PPQ) achieved a multi-fold increase in quote volumes. PPQ rolled out to 32 states in 7 months with a 52% reuse of business services between inquiry and quote.

Implementation Details: WebSphere Business Services Fabric was implemented as the SOA solution platform during the initial Billing Inquiry project.

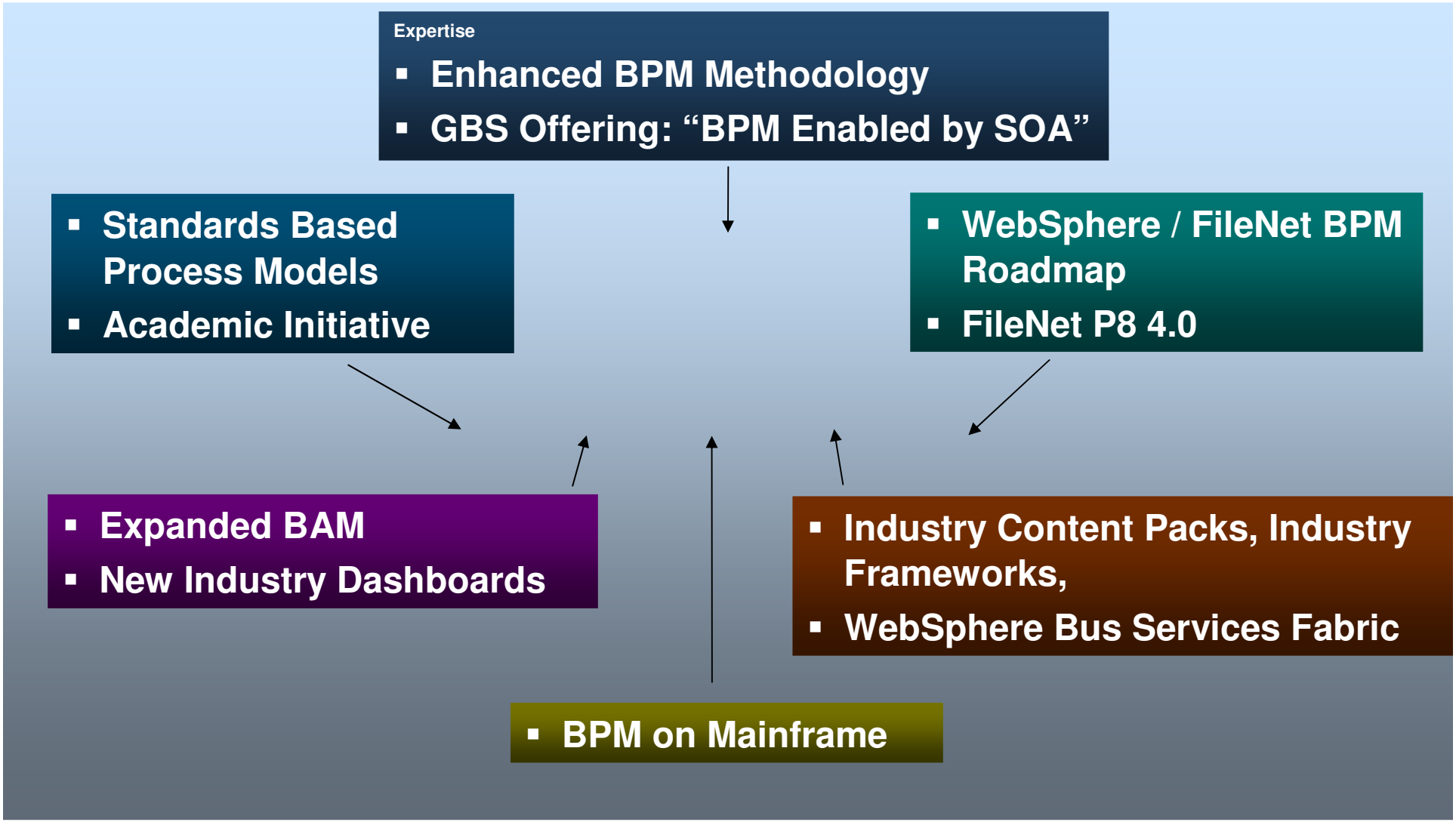
Content Centric Processing

Content Centric Processing





Summary of BPM Announcements



IBM has a complete BPMS

*"IBM is the first and so far the only infrastructure software supplier to offer a **complete BPMS** supporting the end-to-end lifecycle from analytical modeling to performance management and optimization – **based entirely on service oriented architecture.**"*

Bruce Silver, Bruce Silver Associates – The 2006 BPMS Report

IBM Leads in BPM Enabled by SOA

- **Business Expertise:**
  - *BPM Enabled by SOA Readiness Assessment*
  - *1000+ consultants trained in BPM Methodology and BPM Enabled by SOA Engagement*
  - *20 BPM Training and Education classes available*

- **Technical Leadership**
  - *Breadth of Offerings from Tooling to Runtime; From Dashboards to BAM; Modeling, Simulation, Choreography, Frameworks, and ECM*
  - *All supported by SOA*
- **Market Recognition:**
  - *Leader in Gartner BPA MQ*
  - *Leader in Forrester Integration, Human, and Content centric BPM WAVES*
- **Vibrant Ecosystem**
  - *300+ BPM Business Partners*
  - *4000+ pre-builts assets in the SOA Business Catalog*

Summary: BPM enabled by SOA

Software, services, and expertise

Business-focused	Supports industry and semantic standards to increase the business value of SOA
Fast and flexible	Provides the ability to more quickly create and change SOA applications using pre-built, customizable assets
Promotes reuse	Makes it easier to reuse existing assets in SOA composite business services
Innovative	Enables creation of new and innovative applications and business models from existing IT investments

IBM delivers industry-focused SOA solutions with products and services for better and faster business results

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NYS Dept of Taxation and Finance

Business Challenge: NY State Dept of Taxation and Finance (NYS DTF) processes 11 million personal and 2 million corporate returns annually using aging technology that can't keep up with the demands of citizens and users. NYS DTF needs systems and tools that are flexible, permit faster change and reduce overall costs.

- **Solution:** Leveraging SOA and BPM, NYS DTF is rapidly transforming their systems, data, people, and business processes to be more functional, flexible and responsive to citizens, users and legislation. Traditional mainframe batch processing is shifting to transactional. Manual processes are transforming to automated business processes. Real-time business activity monitoring is replacing daily printed run reports.
- **Results:** Rapid modernization of legacy batch systems to transactional. More channels to enhance voluntary compliance. Web services and XML linkage to IRS for corporate taxes. High component reuse, lowered costs. Reduced errors and business exceptions. Higher value business metrics.
- **Implementation Details:** WebSphere Business Modeler, Business Monitor, Process Server, Integration Developer, Application Server, Flat File Adapter, Commerce, DB2 V9 pureXML, DataStage, Workplace Forms, CICS Transaction Gateway, Rational Suite, Tivoli Composite Application Monitor.