



IBM SOA

# People, Process, Information for Business Centric SOA

Craig Hayman  
Vicepresident, Application &  
Integration Middleware

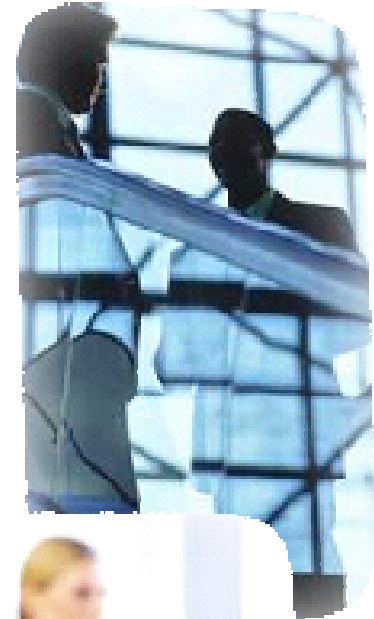


6/6/2007

© 2006 IBM Corporation

# Session Roadmap

- Business and IT meet
- The SOA Entry Points
- Entry points are evolving
  - People and Web 2.0
  - Information Analytic Services
- Combine entry points for a value multiplier effect



# Organizations depend on a flexible IT Infrastructure

*Adopting a business centric approach*

## **Business Challenges**

- Globalization**
- Mergers & Acquisitions**
- Risk & Compliance**
- Eroding Customer Loyalty**
- Supply Chain Complexity**
- Industry Transformations**
- Cost Cutting...**

## **Business Requirements**

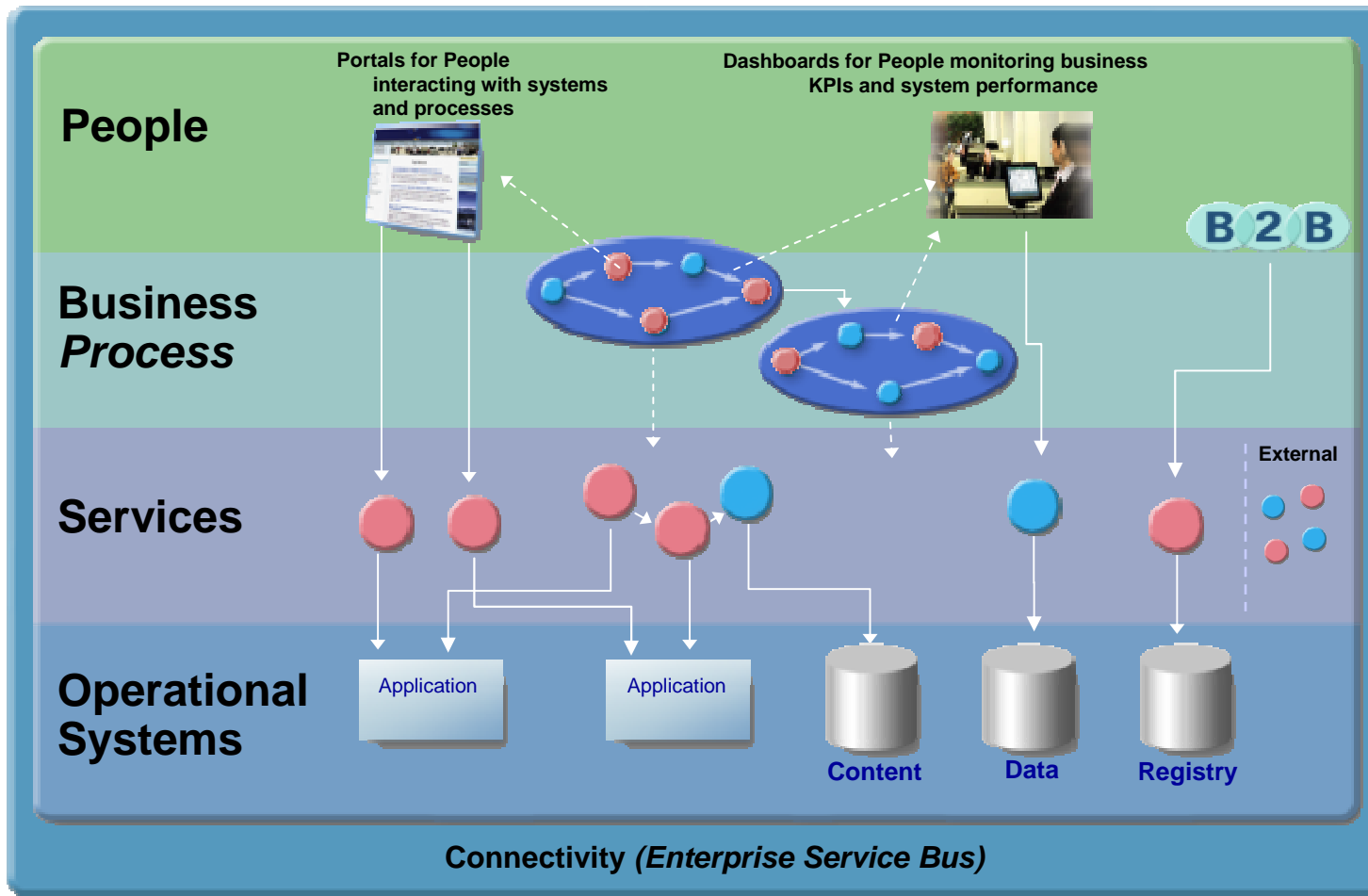
- Increase the speed of the decision making**
- Improve collaboration**
- Reduce administrative time**
- Deploy end-to-end business process**

## **Business Centric IT Infrastructure**

- Enable Business Flexibility**
- Easy to enhance reconfigure and maintain**
- Able to be deployed in incremental steps**

# Services – the building blocks for business processes

*Efficiency in creation, reuse for execution...flexibility for change*



**Goal** – Increasing people’s productivity and the overall company performance

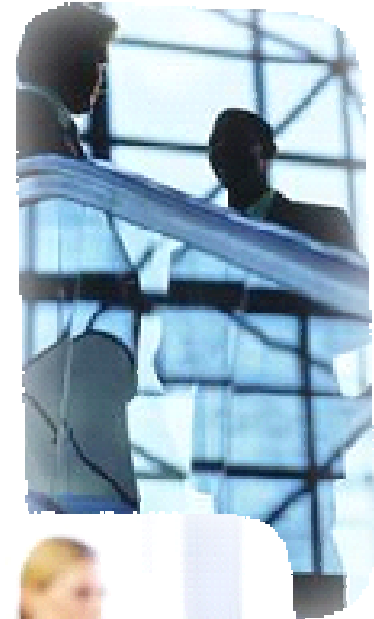
**Goal** – Highly flexible and automated business processes

**Goal** – Reusable services accessible across the enterprise

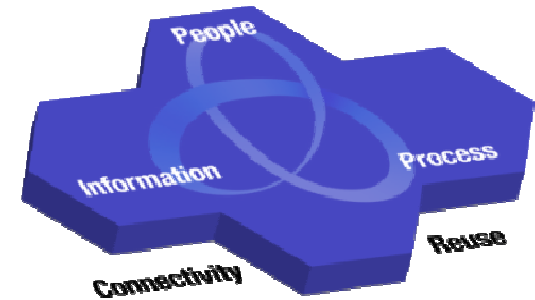
**Goal** – Deliver Information as a Service

# Session Roadmap

- Business and IT meet
- The SOA Entry Points
- Entry points are evolving
  - People and Web 2.0
  - Information Analytic Services
- Combine entry points for a value multiplier effect

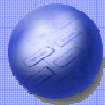


# The SOA Entry Points



People

Greater productivity and flexibility through targeted user interactions for improved operations and collaboration



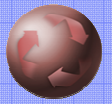
Process

Achieve business process innovation through treating tasks as modular services



Information

Provide trusted information in business context by treating it as a service



Reuse

Service-enable existing assets and fill portfolio gaps with new reusable services

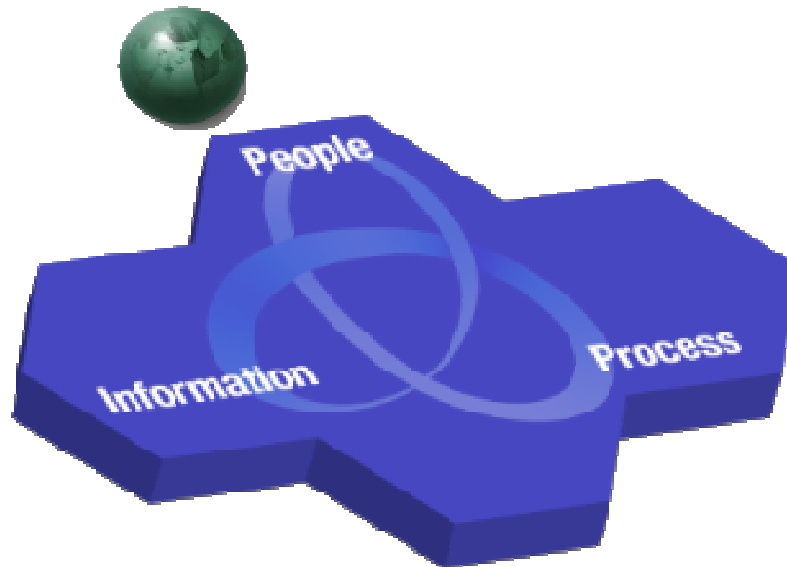


Connectivity

Connect systems, users, and business channels based on open standards

## The People Entry Point

*Efficient, collaborative, real time decision making and execution for business agility and responsiveness*



...a starting point for SOA - enabling people to interact with application and information “services” supporting business processes.

### Why It's Important

People are the drivers of the business – they interact with reusable business services using the right information at the right time!



# Transalta

## Role-Based Emissions Dashboard



### Business Challenge:

- Provide real-time KPIs of plant operations
- Monitor/regulate over capacity generation
- Ensure compliance to stringent environmental requirements (eg: emissions)
- Surface data from SAP, Domino, DBs



### Solution:

- Real-Time Emissions Dashboard
- Role-based views



### Implementation Details:

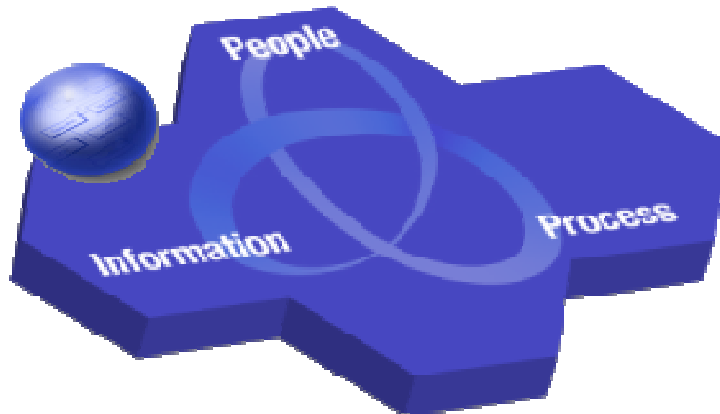
WebSphere Portal, Workplace Dashboard Framework





## The Process Entry Point

*Integrates and synchronizes business systems and choreographs business and system activities into reusable process components*



....the process of supplementing a manual process with an automatically controlled alternative through the orchestration and integration of technology and human assets to form streamlined processes.

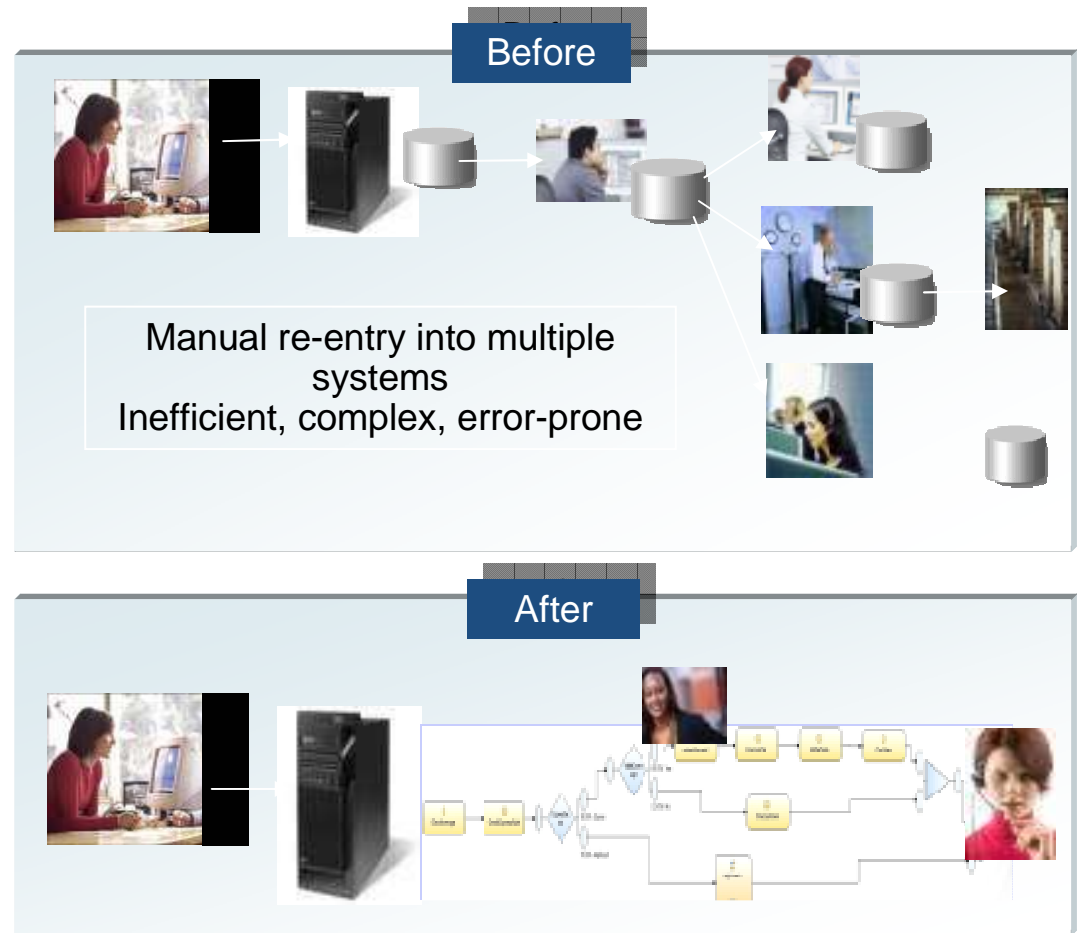
### **Why It's Important**

Automated processes reduce administrative time and adaptable and reusable processes to enable faster reaction to business indicators.

# Respond Quickly with Automation using SOA

- Process Automation

- Integrate and Synchronize Business Systems
- Choreograph Process Activities Across the Organization
- More responsive IT organization
- Pre-built, reusable services reduce:
  - execution time
  - complexity/ maintenance costs
- Higher productivity through automated process execution:



## Automating the mail delivery process

*Wüstenrot & Württembergische AG create a high tech pipeline*



### Business Challenge:

Wüstenrot & Württembergische  
www.wuestenrot-wuerttembergische.de

- *Needed an automated, paperless mail distribution solution to reduce mail delivery time and save money.*



**Solution:** A back-end document repository, automated workflows, a mail processing application and an easy-to-use interface:

- automatically stores and distributes incoming mail
- enables back-office employees to access a list of duties and responsibilities



### Results:

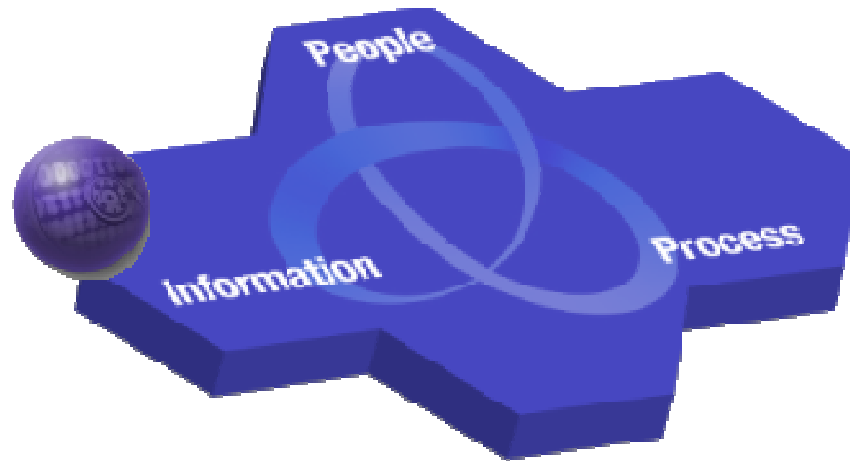
- Improved efficiency and customer service: mail is now processed and delivered within 2 hours
- Increased productivity: outlines tasks, priorities and makes workload balancing and management easier



**Implementation Details:** WebSphere Business Modeler, WebSphere Process Server, WebSphere Integration Developer, WebSphere Information Integrator Content Edition

## The Information Entry Point

*Delivering actionable information to people and processes*



Connect, enhance and deliver in-context information across diverse operating systems, applications and legacy systems through reusable services.

### Why It's Important

The Information Services enables consistent views and maintenance of data and content, providing a “single view of the truth” to people and processes

# Classifying Information Services patterns

*Identifying usage patterns to focus the business case*

*Data Complexity, & Accessibility*

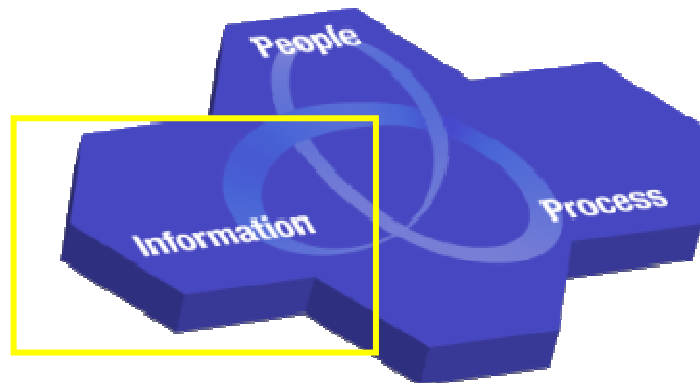


**Deliver trusted information as a service**

*Multiple Versions of the Truth*



**Build master data services for product and customer info**



*Enterprise Content Management*



**Build services to integrate content into processes**

*Real time access to analytical information*



**Deliver analytical services for structured and unstructured data**

*New and Enhanced!*

*An enterprise-wide information management strategy increases the chance of success for service oriented architecture efforts by at least 70%...*  
*Gartner, February 2006*



## Co-operators Insurance

*Master Data Services to maintain customer info across lines of business*



### ▶ **Business Challenge:**

Create a source for complete and accurate customer information to drive sales across lines of business and save costs

- ▶ **Solution:** Core customer information hub built on service oriented architecture for maximum flexibility, with cross-references to policy, claims and billing systems
- ▶ **Results:**
  - Can up-sell and cross-sell more effectively, growing revenues and customer loyalty
  - Efficiency due to “once and done” processing helps to avoid manual data fixes, and reduces IT maintenance support
  - Service oriented architecture provides flexibility, ease of maintenance and reduced development time
  - Enhanced customer service and business development opportunities
- ▶ **Implementation Details:** DB2, WebSphere Application Server, IBM WebSphere Business Integration Server, WebSphere Customer Center, WebSphere MQ

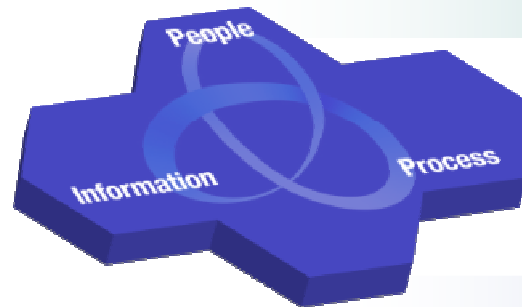
## People, Process, and Information Primary Products

### People

- WebSphere Portal
- WebSphere Portlet Factory
- Workplace Forms
- Workplace Dashboard Framework
- Lotus Expeditor
- Lotus Sametime

### Information

- IBM Information Server
- IBM Master Data Management
  - WebSphere Customer Center
  - WebSphere Product Center
- DB2 9 pureXML



### Process

- WebSphere Process Server
- WebSphere Integration Developer
- WebSphere Adapters



## Announcement Highlights



### Information

#### FileNet P8 Content Manager

- *Integrated event services to SOA-enable content-centric processes*

#### DB2 9 for zOS

- *Scalability and performance for both relational and XML data.*

#### IBM Metadata Workbench

- *Showing where information comes from and what happens to it along the way*

#### Dynamic Warehouse

- *Embedded Analytics insight capabilities with integrated tooling*



### People

#### WebSphere Portal

- *Composite application / business mashup framework features Web 2.0. capabilities*

#### Lotus ActiveInsight

- *Performance Dashboard to link corporate objectives with relevant business information*

#### WebSphere Portlet Factory

- *Rapid portlet creation environment*

#### Lotus Component Designer

- *Easy to use scripting tool lowers barriers to development of Java or web based apps*

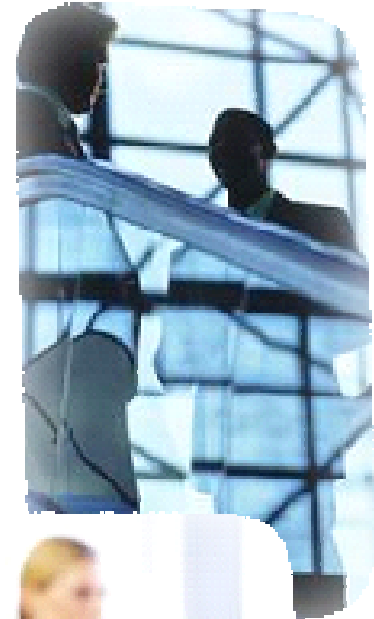
#### Application Infrastructure Services

- *Portal Infrastructure Services to help implement your platform*



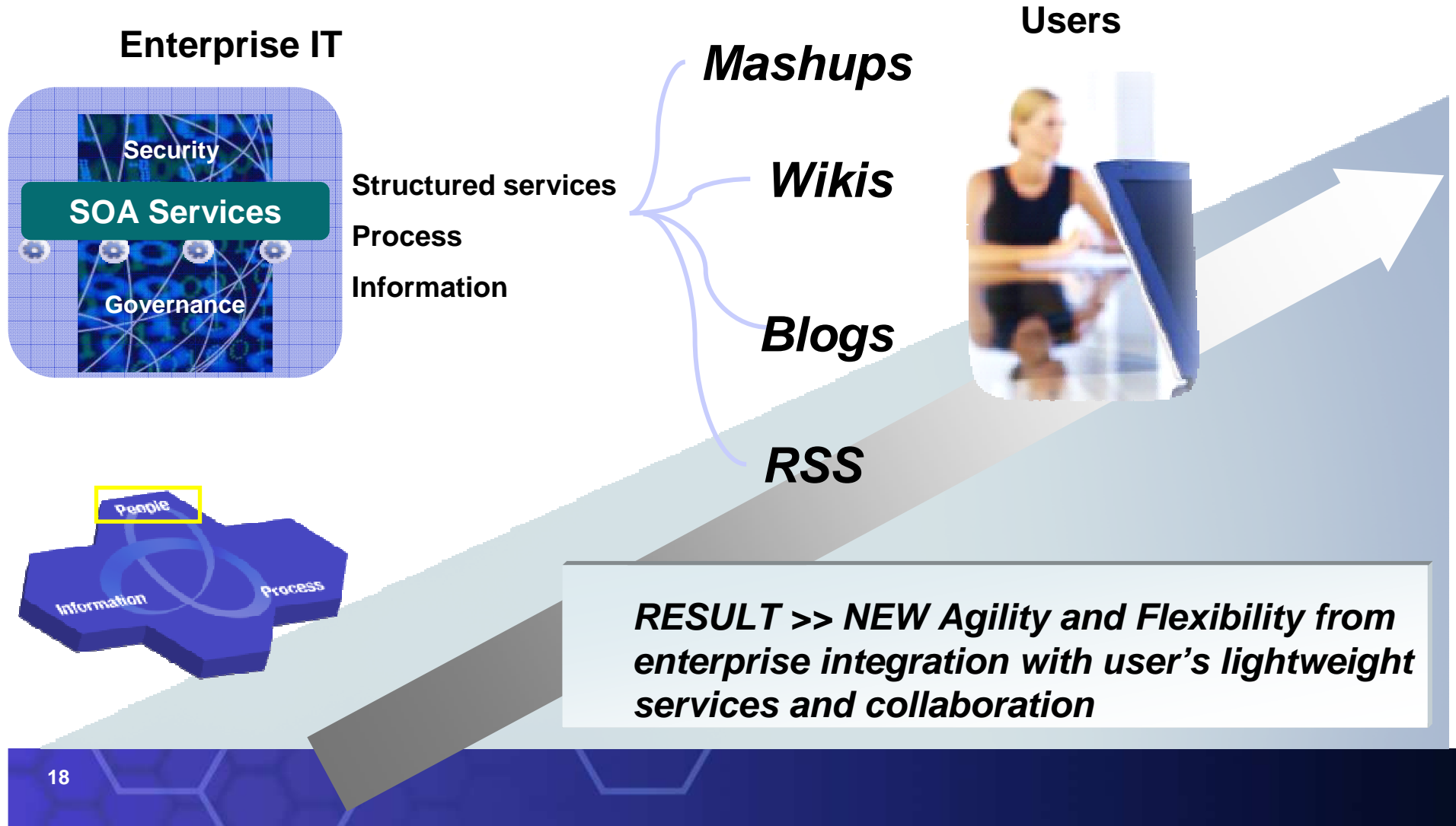
# Session Roadmap

- Business and IT meet
- The SOA Entry Points
- Entry points are evolving
  - People and Web 2.0
  - Information Analytic Services
- Combine entry points for a value multiplier effect



# Web 2.0 SOA takes the People Entry Point to the next level

*Users pull SOA services*





## Increase brand awareness for customers and drive revenue Starwood – Sheraton.com



**STARWOOD**  
HOTELS & RESORTS WORLDWIDE, INC.



**Sheraton**  
HOTELS & RESORTS

- ▶ **Business Challenge:**
  - Communicate the brand
  - Create online community while enhancing brand loyalty
  - Enable consumers to connect with other consumers
  - Improve guest satisfaction
  - Improve conversion rates for greater revenue

- ▶ **Solution:** Use SOA-based services to add value to brand initiative and web site redesign – enabling greater community and collaboration features for web 2.0 capabilities
- ▶ **Results:** Increased guest satisfaction, Increase in page views and visitors, Increased conversions → revenue
- ▶ **Implementation Details:** WebSphere Application Server, WebSphere Process Server

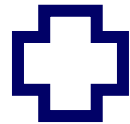
# Web 2.0 Goes to Work *with SOA*

## Social Software

- Lotus Connections
- Blogs
- Wikkis
- Collaboration

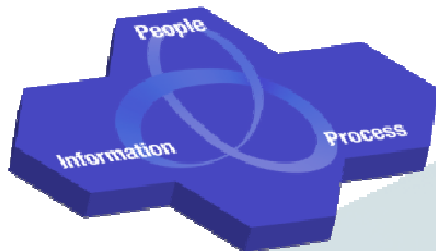
## Infrastructure

- RSS
- ATOM
- AJAX
- REST
- SOA

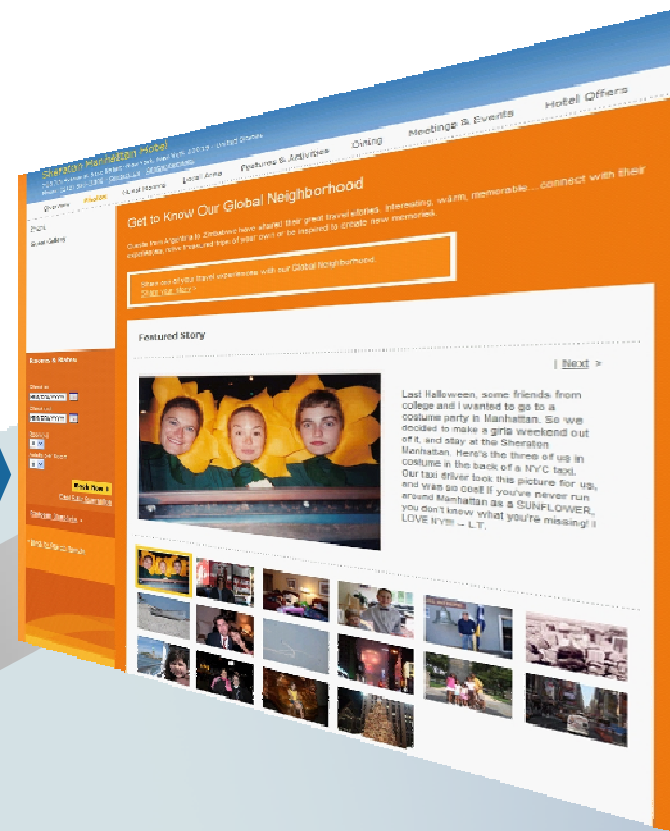


Mashups

Innovative Applications



## Sheraton.com: Guest Gallery



# Implement Web 2.0 with Mash-ups

*Enable effective insights, decision and actions*

The screenshot shows the 'Executive Insight' dashboard with several data components:

- Alerts:** A table showing priority status alerts.
 

Priority	Status	Amount
High	New	1,000,000
High	New	World Wide Co. - new opportunity - 1,000,000
- EBITDA:** A bar chart titled 'EBITDA in Millions of Dollars' comparing Actual, Forecast, and Variance. The Y-axis ranges from 0 to 50.
- Key Performance Indicators:** A table comparing 2004 and 2005 YTD performance against targets.
 

Objectives	2004	2005 YTD	Target	Change
Operating Profit	\$4,152,000	\$4,652,000	10.0%	11.95%
Gross Margin	\$2,100,000	\$2,809,000	12.0%	27.43%
Return on Equity	1.03%	1.07%	1.0%	0.64%
- Sales Activity:** Three pie charts showing 'Total Dollar Amounts' for 'Predictive Total', 'Active Total', and 'Total'. The legend includes Sales Qualification, Technical Qualification, Proof, Registration, and Close.
- Top Opportunities:** A table listing the top 10 opportunities by amount.
 

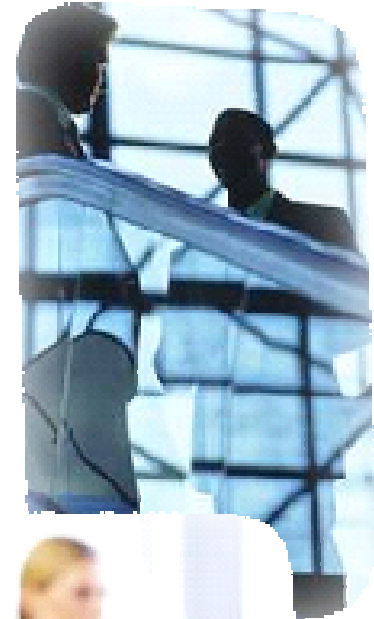
#	Account	Rep.	Amount	Stage	Product
1	Nike Corp.	Nick Fredrickson	63,300.00	4	Network Monitor
2	American Research	Jose Perez	58,434.00	4	Server Manager
3	Intech, Inc.	Jane Louis	48,434.00	3	Server Manager
4	American Research	Jose Perez	48,434.00	3	Network Monitor
5	The River Corporation	Nick Fredrickson	43,000.00	3	Network Monitor
6	Williams and COMPANY	Jane Louis	38,434.00	3	Server Manager

Annotations with callout boxes point to various parts of the dashboard:

- SAP:** Points to the EBITDA chart.
- Oracle:** Points to the Key Performance Indicators table.
- Web Service:** Points to the Alerts table.
- Domino:** Points to the Top Opportunities table.
- Siebel:** Points to the Sales Activity pie charts.
- DB2:** Points to the Sales Activity pie charts.

# Session Roadmap

- Business and IT meet
  - The SOA Entry Points
    - Entry points are evolving
    - People and Web 2.0
    - Information Analytic Services
- Combine entry points for a multiplier effect



## Combine Entry Points for a value multiplier

*Individual Entry Point projects deliver value on their own  
..... and even greater value when combined*

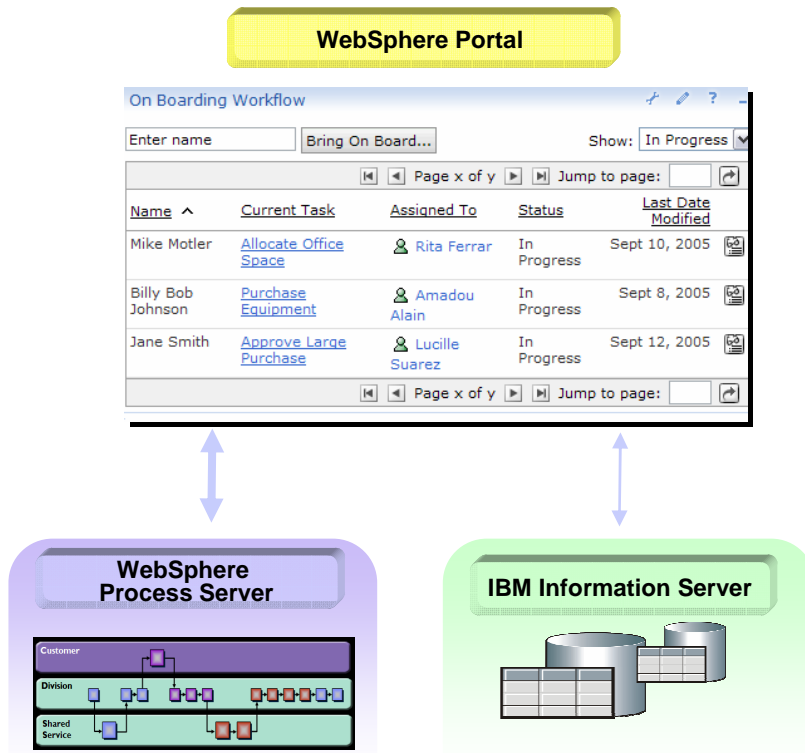
1. Each project should create value
  - Do not build for the sake of creating services
  - Create services that will be used for the project
2. Remember that MOST projects have a People, Process and Information dimension
  - Look to those dimensions for alternate solutions
  - Find the most effective alternative – and one that can be reused
  - Effectively mix and match services
    - eg: Information Services for federated corporate data, mashups for accessing public information services
3. Build incrementally
4. Look to reuse



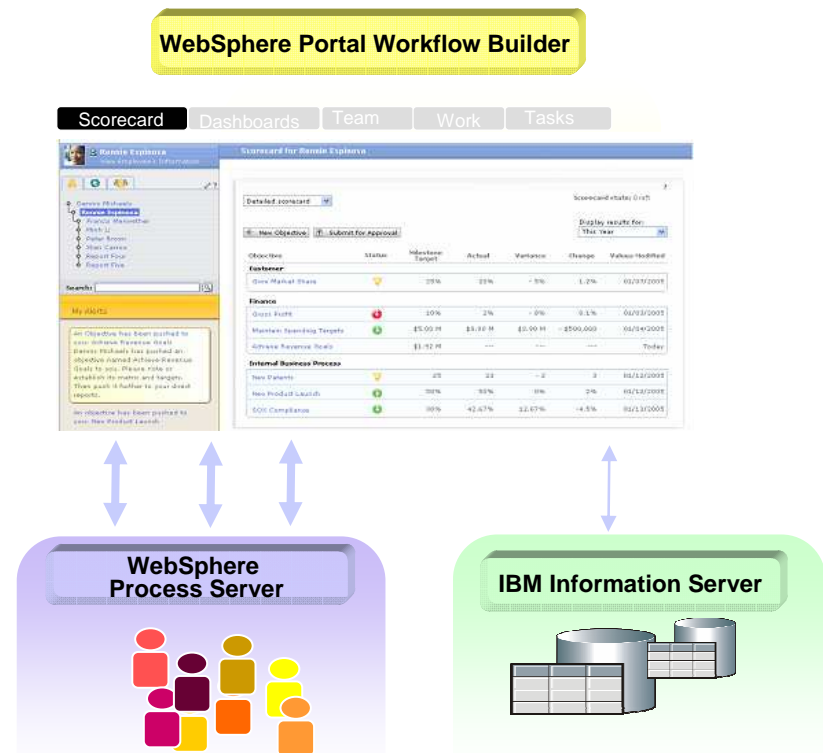
# Combining Services for a People-centric approach

## *A Personalized approach to Task Management*

**Tasklists with automated back end integration "under the cover"**



**Task Pages and processing portlets combined with ad-hoc Person-2-Person capabilities e.g. for exception handling and problem resolution**







## Combining Portal and Process

### Austin Energy's Portal



#### Business Challenge:

Serve vocal but underserved community of multi-family property owners to provide more accurate and timely access to usage, billing, and repair systems

- ▶ **Solution:** Secure, simplified web-based access to multiple, complex legacy systems.
- ▶ **Results:** Improved customer satisfaction  
Reduced cost burden on AE to administer access to the legacy systems
- ▶ **Implementation Details:** Portal Extend, WebSphere Process Server, Workplace Web Content Management, Tivoli Access Manager, Rational Performance Tester

*My.austinenergy.com*  
Customer Portal

A screenshot of a web browser window titled 'Login Portlet'. The page content includes the heading 'Log In to Your Austin Energy Secure Accounts', followed by 'Username:' and 'Password:' labels next to input fields. Below the fields is a 'Log In' button, a 'Forgot Password?' link, and a 'New User? Register Here' link.

# Combining Entry Points for 360° customer views

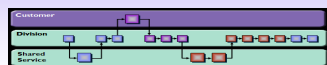
*Solutions for fast and accurate decision making*

**Combine Portals and Master Data Management for effective customer relationship management solutions**

WebSphere Portal

	Source Party Party Id 22222 Organization Name Simpson	Suspect Party Party Id 22222 Organization Name Simpson	New Party Organization Name Simpson
Industry Type	<input checked="" type="checkbox"/> Trade	<input checked="" type="checkbox"/> Trade	Trade
Organization Type	<input checked="" type="checkbox"/> Corporation	<input checked="" type="checkbox"/> Corporation	Corporation
Buy-Sell Agreement	<input checked="" type="checkbox"/> Cross Purchase Agreement	<input checked="" type="checkbox"/> Cross Purchase Agreement	Cross Purchase Agreement
Established Date	January 1, 1977	January 1, 1977	January 1, 1977
Preferred Language	<input checked="" type="checkbox"/> English	<input checked="" type="checkbox"/> English	English
Profit Indicator	Yes	Yes	<input type="radio"/> Yes <input type="radio"/> No
Statement Frequency			
Last Statement Date			
Alert Indicator	Yes	Yes	Yes
Referred by Party Id			
Client Status			
Client Potential	<input checked="" type="checkbox"/> Qualified Suspect	<input checked="" type="checkbox"/> Qualified Suspect	Qualified Suspect
Client Importance	<input checked="" type="checkbox"/> Low	<input checked="" type="checkbox"/> Low	Low
Solicitation Indicator	No	No	<input type="radio"/> Yes <input checked="" type="radio"/> No
Confidential	No	No	<input type="radio"/> Yes <input checked="" type="radio"/> No
Computer Access	<input checked="" type="checkbox"/> 14.4K Baud	<input checked="" type="checkbox"/> 14.4K Baud	14.4K Baud
Created Date	February 15, 2005	February 15, 2005	February 15, 2005
Inactivated Date			

WebSphere Process Server



WebSphere Customer Center



**Combine ActiveInsight and Dynamic Data Warehouse for more accurate decision making with real-time analytics**

Active Insight

**Alerts**

Priority	Status	Alert
High	New	Globe travel - New opportunity > 1,000,000
High	New	World Wide Co. - New opportunity > 1,000,000
High	New	Mega Corp just acquired Globe Networks
Medium	New	Alpha profit down 10%
Low	New	Giant Co. discloses new customer list

**EBITDA**

EBITDA in Millions of Dollars

Actual Forecast Variance Previous

**Key Performance Indicators**

Objectives	2004	2005	YTD	Target	Change
Operating Profit	\$4,155,500	\$4,652,000	10.0%	\$1.95%	
Gross Margin	\$2,200,800	\$2,895,000	12.0%	27.45%	
Return on Equity	1.03%	1.87%	1.0%	0.84%	

**Top Opportunities**

#	Account	Rep	Amount	Stage	Product
1	Nike Corp.	Nick Fredrickson	63,300.00	4	Network Monitor
2	American Research	Jose Perez	58,434.00	4	Server Manager
3	Inteltek, Inc.	Jane Louis	48,434.00	3	Server Manager
4	American Research	Jose Perez	48,434.00	3	Network Monitor
5	The River Corporation	Nick Fredrickson	43,000.00	3	Network Monitor
6	Williams and Company	Jane Louis	38,434.00	3	Server Manager

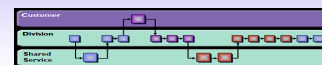
**Sales Activity**

Total Dollar Amounts

Inactive Total Active Total Total

Sales Qualification Negotiation Technical Qualification Profit Close

WebSphere Process Server



IBM Information Server



# Combining Web 2.0 and SOA for effective decision making

*Increasing the value of corporate applications*

3

Combine Entry Points

Web 2.0

**Mashups**  
 ➤ increasing the consumability of the web experience



The screenshot shows a web browser window displaying a mashup. On the left is a map of the Portsmouth, New Hampshire area, with various locations like Eliot, Kittery Point, and Rye marked. On the right is a panel titled 'Customers by Region' which lists several states with links: California, Iowa, Indiana, Massachusetts, New Hampshire, New Mexico, New Jersey, Ohio, and Pennsylvania. Below this list is a table of customer records.

NAME	ADDRESS	CITY	STATE	ZIP	PHONE	CONTACT
Joes Enterprises	1 Bow St	Portsmouth	NH	03801	373-693-7299	<a href="#">Kristen Barrera</a>
Contemporary Construction	86 Washington Road	Rye	NH	03870	963-271-2698	<a href="#">Cecil Rivers</a>

**SOA**  
 ➤ delivering secure process services and information to people



SOA

© IBM Corporation 2007. All Rights Reserved.

The workshops, sessions and materials have been prepared by IBM or the session speakers and reflect their own views. They are provided for informational purposes only, and are neither intended to, nor shall have the effect of being, legal or other guidance or advice to any participant. While efforts were made to verify the completeness and accuracy of the information contained in this presentation, it is provided AS IS without warranty of any kind, express or implied. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, this presentation or any other materials. Nothing contained in this presentation is intended to, nor shall have the effect of, creating any warranties or representations from IBM or its suppliers or licensors, or altering the terms and conditions of the applicable license agreement governing the use of IBM software.

References in this presentation to IBM products, programs, or services do not imply that they will be available in all countries in which IBM operates. Product release dates and/or capabilities referenced in this presentation may change at any time at IBM's sole discretion based on market opportunities or other factors, and are not intended to be a commitment to future product or feature availability in any way. Nothing contained in these materials is intended to, nor shall have the effect of, stating or implying that any activities undertaken by you will result in any specific sales, revenue growth or other results.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.

All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics may vary by customer.

The following are trademarks of the International Business Machines Corporation in the United States and/or other countries. For a complete list of IBM trademarks, see

AIX, CICS, CICSplex, DB2, DB2 Universal Database, i5/OS, IBM, the IBM logo, IMS, iSeries, Lotus, OMEGAMON, OS/390, Parallel Sysplex, pureXML, Rational, RCAF, Redbooks, Sametime, System i, System i5, System z, Tivoli, WebSphere, and z/OS.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Intel and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.