



IBM SOA

# People, Process, Information for Business Centric SOA



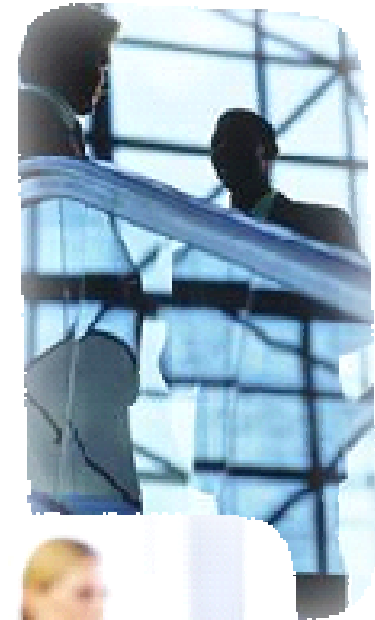
Riyadh, Kingdom of Saudi Arabia

9/17/2007

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# 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***

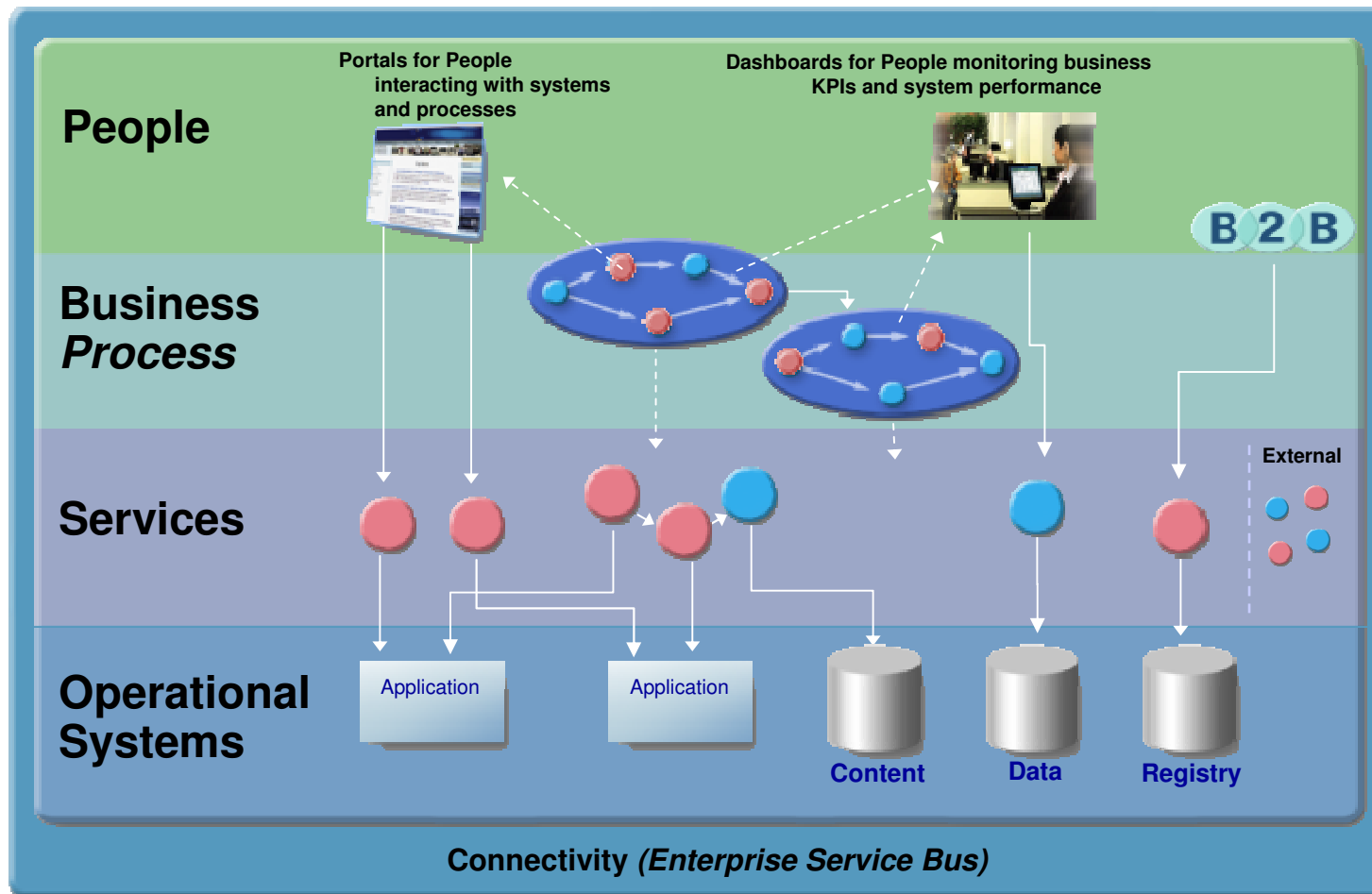
- Increase the speed of the decision making***
- Improve collaboration***
- Reduce administrative time***
- Deploy end-to-end business process***

## ***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

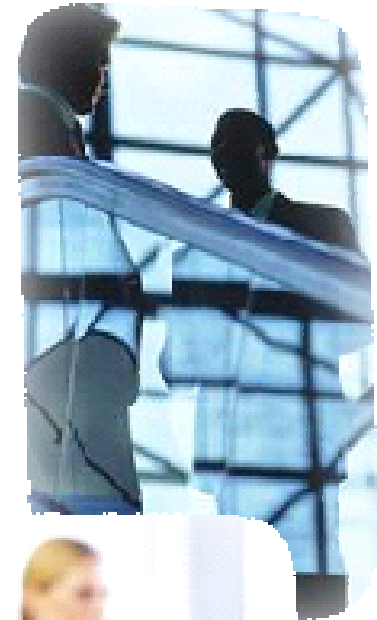
**Goal** – Highly flexible and automated business processes

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

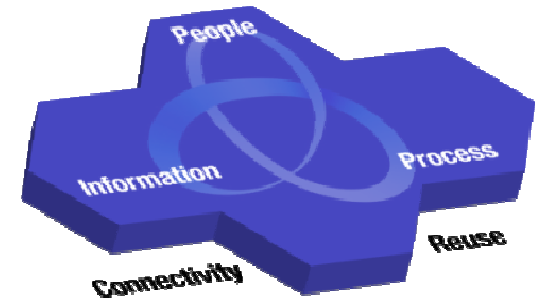
**Goal** – Deliver Information as a Service

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# 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

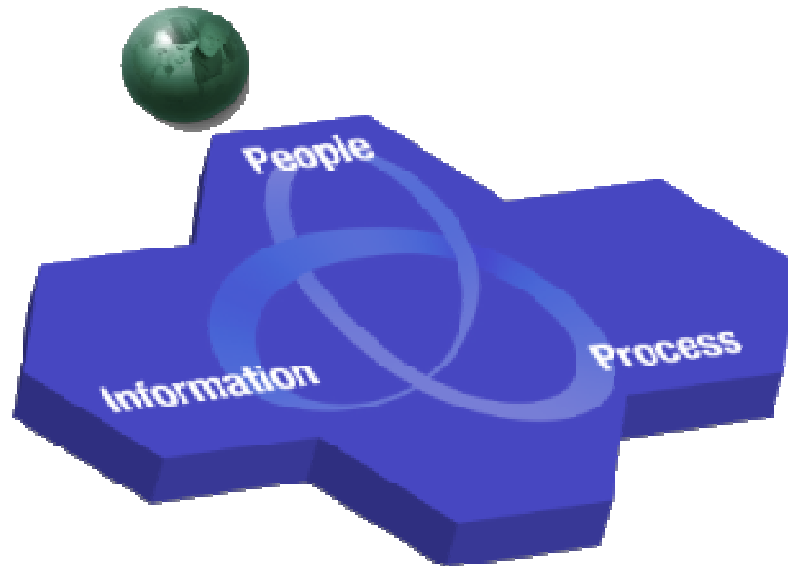


Connectivity

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:

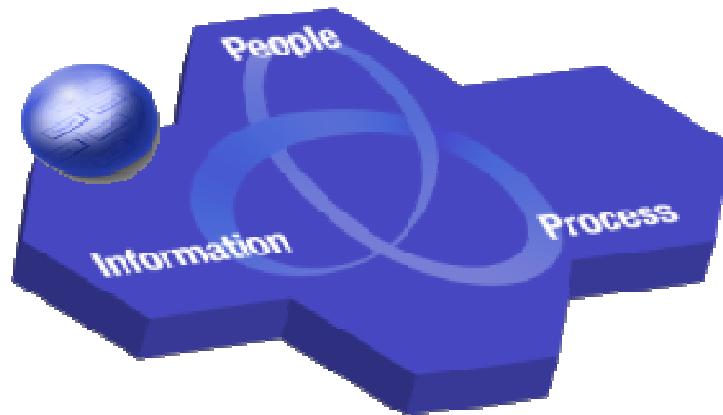
WebSphere Portal, Workplace Dashboard Framework





## 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.

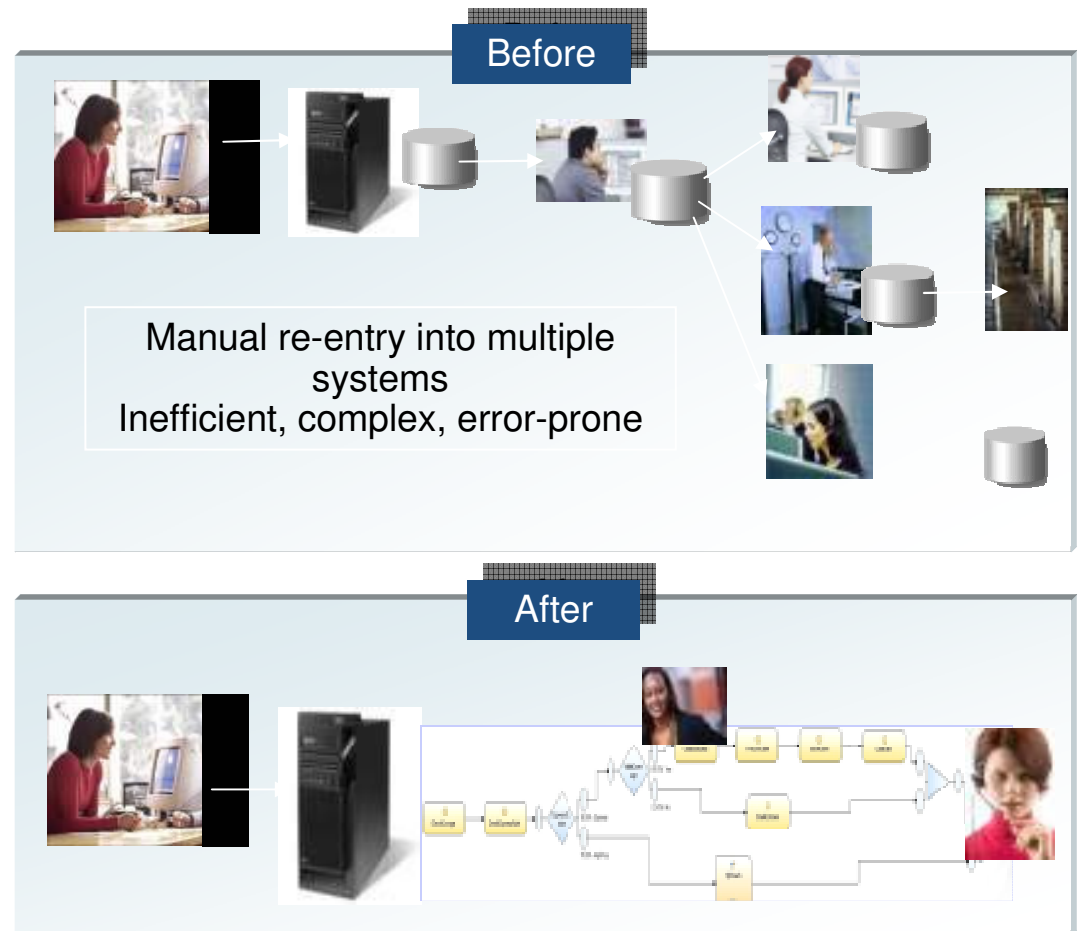
### **Why It's Important**

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:



# Simplifying access to government services

## Ministry of State for Administrative Development — Egypt

### ▪ *Business challenge:*

- Improve the services offered by the government to the citizens while improving the efficiency and utilization of the human and IT resources involved in the delivery of these services.

### ▪ *Objectives:*

- Make it easier for citizens to access government services
- Improve efficiency and let the staff focus on the most critical tasks
- Remove Internal bureaucracy and improve customer facing processes
- Base government services on standard technologies that eliminate vendor-lock

### ▪ *Actions:*

- MSAD employed a service-oriented approach, built on standard technologies, that simplified and standardized their web-enabled government services.
- The approach was piloted in an employee insurance registration business process that involves 3 agencies.



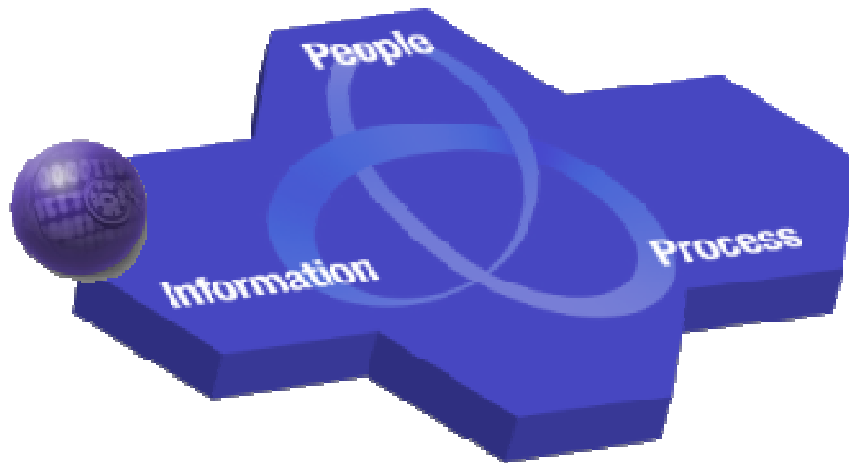
### ▪ *Outcome*

#### ▪ *Business value:*

- Integrated solution leads to improvement of citizen satisfaction
- Government agencies can quickly exchange data and maintain consistency
- Citizens can easily access services and save time
- Standards-based solution that opens up vendor lock

## 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 enable 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*

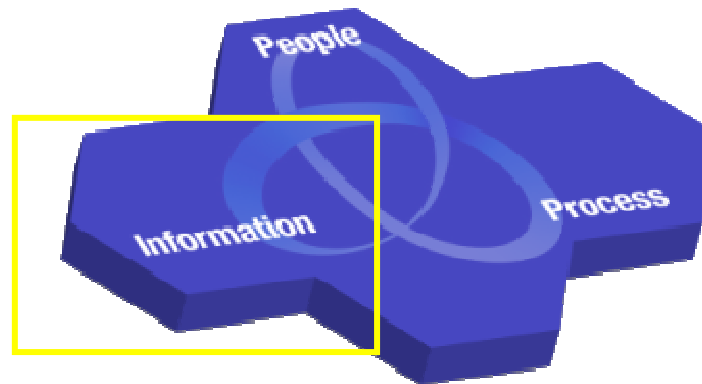


**Deliver trusted information as a service**

*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

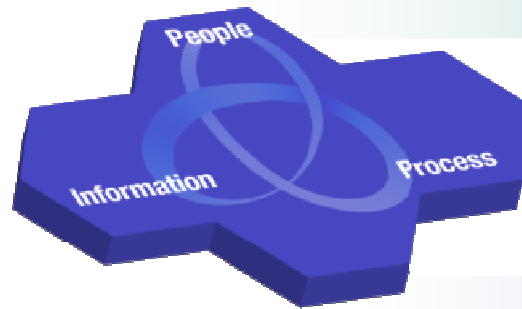
## People, Process, and Information Primary Products

### 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*

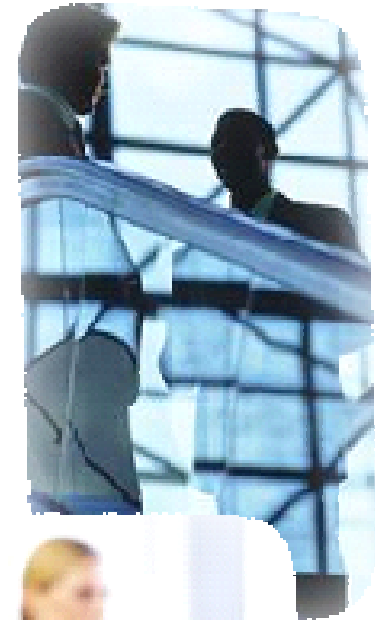
#### Application Infrastructure Services

- *Portal Infrastructure Services to help implement your platform*



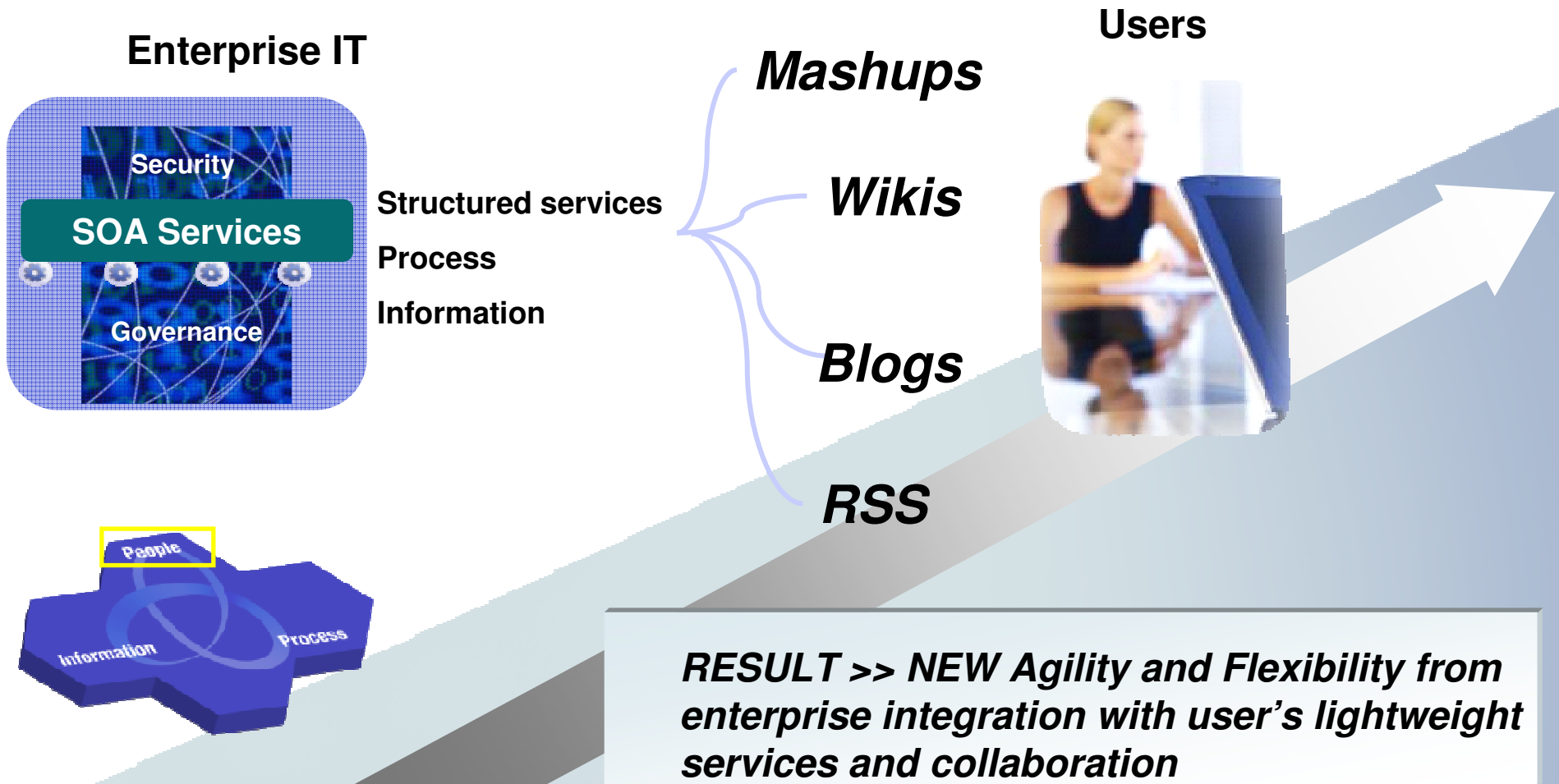
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# Web 2.0 SOA takes the People Entry Point to the next level

*Users pull SOA services*



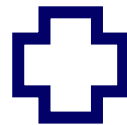
# Web 2.0 Goes to Work *with SOA*

## Social Software

- Lotus Connections
- Blogs
- Wikis
- Collaboration

## Infrastructure

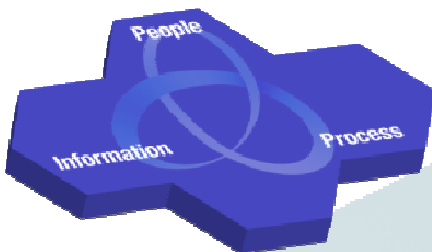
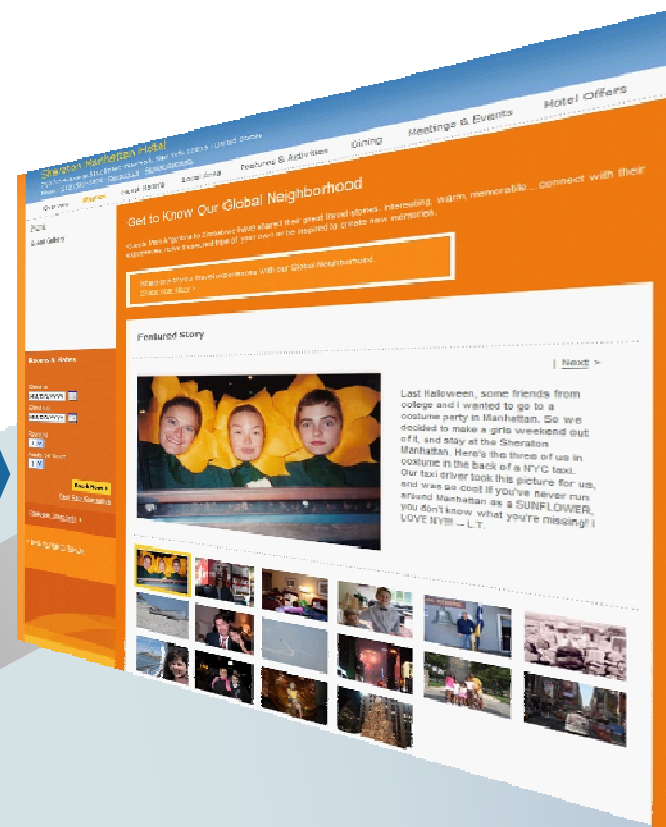
- RSS
- ATOM
- AJAX
- REST
- SOA



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 key components:

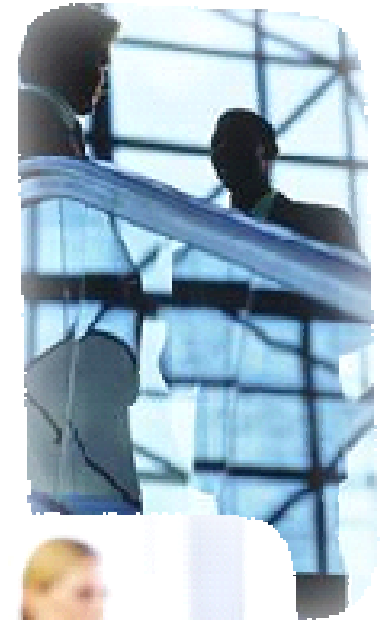
- Alerts:** A table showing priority status alerts, including 'World Wide Co. - New opportunity'.
- News:** A list of news items such as 'Mega Corp just acquired Globe Networks'.
- Top Opportunities:** A table listing the top 10 opportunities by amount, including 'Nike Corp.', 'American Research', and 'Indtech, Inc.'.
- EBITDA:** A bar chart titled 'EBITDA in Millions of Dollars' comparing actual, forecast, and variance.
- Key Performance Indicators:** A table comparing 2004 and 2005 YTD performance against targets for metrics like Operating Profit, Gross Margin, and Revenue.
- Sales Activity:** Three pie charts showing 'Inactive Total', 'Active Total', and 'Total' sales activity, categorized by Sales Qualification, Technical Qualification, Proof, Negotiation, and Close.

Annotations point to various underlying technologies:

- SAP:** Points to the EBITDA chart.
- Oracle:** Points to the Key Performance Indicators table.
- Web Service:** Points to the Alerts section.
- 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

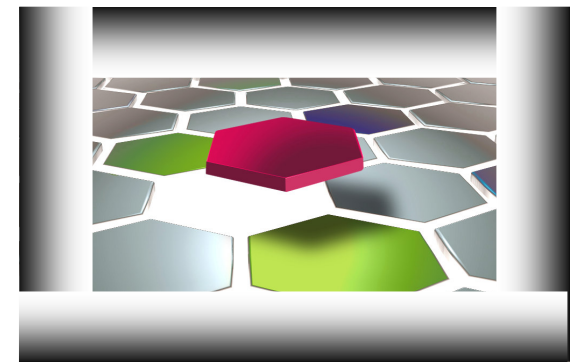
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## Combine Entry Points for a value multiplier

*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



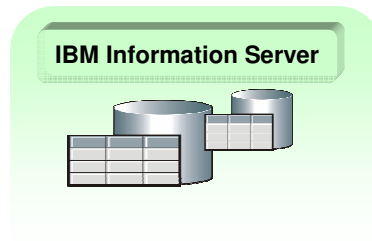
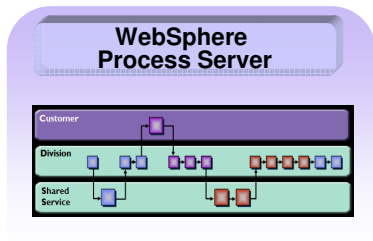
# Combining Services for a People-centric approach

## *A Personalized approach to Task Management*

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

**WebSphere Portal**

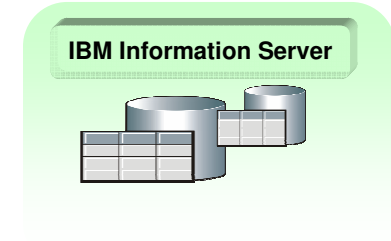
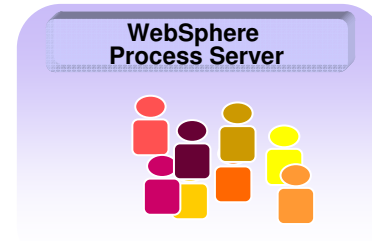
Name	Current Task	Assigned To	Status	Last Date Modified
Mike Motler	<a href="#">Allocate Office Space</a>	Rita Ferrar	In Progress	Sept 10, 2005
Billy Bob Johnson	<a href="#">Purchase Equipment</a>	Amadou Alain	In Progress	Sept 8, 2005
Jane Smith	<a href="#">Approve Large Purchase</a>	Lucille Suarez	In Progress	Sept 12, 2005



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

**WebSphere Portal Workflow Builder**

Objective	Status	Next Review Target	Actual	Variance	Change	Values Modified
Customer						
Grow Market Share	▼	25%	23%	-2%	1.2%	01/07/2005
Finance						
Grow Profit	▲	10%	2%	-8%	0.1%	01/03/2005
Maintain Spending Targets	▲	\$5.00 M	\$1.10 M	-\$3.90 M	-\$500,000	01/04/2005
Advance Revenue Goals	▲	\$1.52 M	---	---	---	Today
Internal Business Process						
New Patients	▼	25	23	-2	3	01/13/2005
New Product Launch	▲	50%	55%	0%	2%	01/13/2005
SOX Compliance	▲	50%	42.67%	12.67%	-4.5%	01/13/2005



# Business integration

## *Dubai Municipality — UAE*



### ▪ *Business challenge:*

- Dubai municipality was challenged with internal bureaucracies and single channel customer service processes

### ▪ *Objectives:*

- Be the best e-government program in Dubai
- Remove Internal bureaucracies, improve customer facing processes, and be more responsive
- Demonstrate savings internally and externally to customers
- Increase public image of the Municipality

### ▪ *Actions:*

- Dubai Municipality employed a service-oriented approach which provided a low-cost, responsive and convenient online service that reduced time in processing paperwork and

### ▪ Outcome

#### ▪ *Business value:*

- Provided multi-channel access integrating people, processes and information
- Reduced cost in terms of paperwork
- Reduction in time (i.e. customer service, transaction processing)
- Reduction in the number of visits to government offices



# Combining Entry Points for 360° customer views

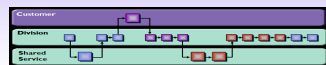
*Solutions for fast and accurate decision making*

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

WebSphere Portal

The screenshot shows the 'WebSphere Customer Center' interface. It features a 'Data Stewardship' section with tabs for 'Party Suspect Processing', 'Hierarchy', and 'Groupings'. Below this, there are sections for 'Duplicate Party Collapse Preview' and 'Income Sources'. The main area displays 'Party Details' for a customer named Simpson, with columns for 'Source Party', 'Suspect Party', and 'New Party'. Each column contains a table of attributes such as Industry Type, Organization Type, Buy/Sell Agreement, Established Date, Preferred Language, Profit Indicator, Statement Frequency, Last Statement Date, Alert Indicator, Referred by Party Id, Client Status, Client Potential, Client Importance, Solicitation Indicator, Confidential, Computer Access, Created Date, and Inactivated Date.

WebSphere Process Server



WebSphere Customer Center



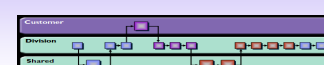
## Combine ActiveInsight and Dynamic Data Warehouse for more accurate decision making with real-time analytics

Active Insight

The screenshot displays the 'Executive Insight' dashboard. It includes several key sections:
 

- Alerts:** A table showing priority, status, and alert messages such as 'Globe travel - New opportunity > 1,000,000' and 'Meas Corp just acquired Globe Networks'.
- EBITDA:** A bar chart showing EBITDA in Millions of Dollars for 'Actual', 'Forecast', and 'Variance'.
- Key Performance Indicators:** A table comparing 2004 and 2005 YTD performance against targets for metrics like Operating Profit, Gross Margin, Return on Equity, Revenue, Number of New Customers, and Average Deal Size.
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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



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 SOA

شكرا لحضوركم  
و مشاركتكم فى هذه الندوة

Thank You



9/17/2007

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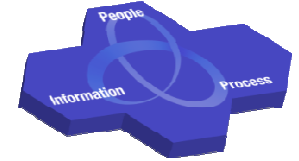
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## Automating the mail delivery process

*Wüstenrot & Württembergische AG create a high tech pipeline*



Wüstenrot & Württembergische  
AG

### Business Challenge:

- *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



## 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 with corresponding input fields. Below the fields is a blue 'Log In' button. At the bottom, there are two links: 'Forgot Password?' and 'New User? Register Here'.



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



HOTELS & RESORTS WORLDWIDE, INC.



### 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