IMS and Web 2.0

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Agenda

- Business Values of Web 2.0
- SOA and Web 2.0
- Mashups 101
  - Feed and Widget
- IBM Mashup Center (Info 2.0)
- IMS Web 2.0 Support
- Business Mashup Scenarios
- Demo: Building a Mashup
- Questions & Answers
What is Web 2.0 all about?

Achieve Growth, Efficiency, and Collaboration with Web 2.0

- Being more responsive to customers, with knowledge from subject experts you may or may not know
- Harnessing the knowledge of the wise, before they retire
- Enabling employees to be more productive, more knowledgeable, faster
- From a technology perspective Web 2.0 uses AJAX, Mashups, and Feeds predominantly
- Mashups rated by Gartner as Top 10 Strategic Technology for 2008

Personalization becomes collaborative!

Reference: http://www.gartner.com/it/page.jsp?id=530109
Web 2.0 Business Benefits

- **Improved Growth Through Innovation**
  - Faster response to customer facing issues
  - Improved effectiveness of intra- and inter-company communications and collaboration
  - Greater hit rate / faster time to value on innovations

- **Faster Task Execution**
  - Faster access to critical information and experts
  - Faster response to customer facing issues
  - Real time collaboration on tasks

- **Improved Efficiency**
  - Faster ways to find experts and information
  - Reduced recruiting costs for expertise already available in the company
  - Reduced rework on overlapping projects
  - Common collaboration platform and tools saves infrastructure costs; enables metrics by task and by person for better decisions

- **Increased Empowerment of Key Resources**
  - Greater leverage of key experts across an organization
  - Improved retention of younger employees
  - Faster development of high performing resources
  - Easier to build “reputation capital”
Extending SOA with Web 2.0

Personalizing SOA for efficiency and innovation

Simple to use, quick to develop and deploy

- Rapidly assemble mashups
- Simply create widgets, feeds
- Reuse information and services
- Unlock enterprise and web contents
- Increase effectiveness with rich interface

Simple to access

- Access resources with simple RESTful interface
- Reduce development time and skills needed
- Quickly transform and mix information
- Wider access from a variety of consumers
  (web apps, outside partners, etc.)

Enterprise Content

- IMS Inventory Application
- DB2 Finance Application
- SAP Product data
- ...

Web-based Content

- Stock Market data
- Competitor customer references
- Competitor product information
What is a Mashup?

- A “mashup” is a lightweight web application created by combining information or capabilities from more than one existing source to deliver new functions and insights.

  - What typically characterizes a mashup?
    - “Widgets” and “feeds” that are mashed together often come from independent sources and do not change when mashed
      - New applications deliver new insights and capabilities (1+1 = 4)
    - Built on a web-oriented architecture (REST, HTTP) and leveraging lightweight, simple integration techniques (AJAX, RSS, JSON)
      - The result is fast creation of rich, desktop-like web applications

  - What’s new about mashups?
    - Using the application includes creating and configuring the application
Mashable Content Can Come From Diverse Feeds
Mashup Example: Global Telco Provider

- **Customer Motivation:** Combine network-based services with existing data to offer a new category of communication-aware applications.

- **Scenario:** Trouble Ticket Tracking Mashup
  - Monitor problems associated with sales and installation situations including who is handling the problem:
    - Sales order tracking
    - Inventory tracking
    - Ticket resolution statistics
    - Filtered ticket list
    - Ticket details
    - Third-party call
    - Send Email
    - Send SMS
A **web feed** is a data format in XML used for providing users with frequently updated content. Content distributors *syndicate* a web feed, thereby allowing users to *subscribe* to it. Making a collection of web feeds accessible in one spot is known as *aggregation*, which is performed by an Internet aggregator.

A web feed is also sometimes referred to as a *syndicated feed*.

RSS, XML, and ATOM feed format
Widget

- A **widget** is a small program or piece of dynamic content that can be easily placed into a web site.

- Widgets are called different names by different vendors: gadgets, blocks, flakes.

- Widgets can be written in any language (Java™, .NET, PHP, etc.) and can be as simple as an HTML fragment.

- Widgets can be non-visual.

- Widgets often encapsulate an API.

- “Mashable” widgets pass events, so that they can be wired together to create something new.
Web Mashups - Architecture

Assemble Mashups
- Discover
- Wire & mash
- Utilize recommendations & filtering
- Transform

Create Widgets
- Mash visualizations w/ feeds
- Import HTML
- Use IDE of choice

Generate Feeds
- Connect
- Transform and filter on server (Info 2.0.)

Vast Array of Information Sources

Discover & Share
Find, rate, tag, comment, share widgets, mashups, and feeds

IT professionals
Information / Business Analyst
Business Users

IT professionals
Information / Business Analyst
Business Users
IBM Mashup Offerings and Roles

Lotus Mashups (Assembly-centric)
- Assemble widgets into dynamic mashups.
- Explore different combinations to uncover new insights.
- Create interactive, Java-based widgets without coding

Infosphere MashupHub (Information-centric)
- Unlock Enterprise, Web, Personal, and Departmental Information
- Transform and mix information into new feeds.

WebSphere sMash
- Create REST-style components (widgets) using agile, dynamic scripting languages (Groovy and PHP)
- Create components, using visual tooling and dynamic scripting, to quickly encapsulate business logic or compose a series of service calls.
IBM InfoSphere MashupHub

A visual tool for creating, storing, transforming, and remixing feeds to be utilized in mashup, and a central catalog for users to tag, rate, and share mashable assets.

Create Feed from:
- Domino
- IBM Information Server
- IMS Transaction
- LDAP
- pureXML Document
- SAP
- Relational
- TDI
- Web Service
- Excel or CSV
- Feed Registration
- MS Access
- Document
- XML Document

Transform and Mix:
- Importing Feeds
- Filtering Feeds
- Annotate Feeds
- Merge Feed
- Publish Feeds
- Transform Feeds
- Group / Sort / Union Feeds

Catalog
Sharing & discovery of mashable assets.

Webcast: “Harnessing the power of Web 2.0 and enterprise mashups”
IBM Lotus Mashups

Quickly Assemble and Share New Mashups

*Browser-based tool supports quickly and easily on-the-glass assembly of situational applications by non-technical users.*

- Easily Mix and Mash content without coding!
- Rapidly creation to address an immediate need of an individual or community
- Just-in-time solution
- Intuitive, on-the-glass wiring of widgets & feeds
- Increase agility by fostering reuse and rapid remix of content into new, compelling Web applications
- Support innovation and new business opportunities

- Share —public or by user/group.
- Automatic wiring
- Embed
- Save new assemblies as widgets
- Edit Source

IMS Web 2.0 Solution
IMS and Web 2.0: Unleash and Reshape IMS

"I want my IMS Assets to be mashable...

Enterprises will be exposing more services to the web, transforming the web into a platform...

...and consuming more services and feeds from the web

...what should I keep in mind?"

Mashup Scenarios:

* Compose services (data or function) into a composite service
* Compose widgets / HTML segments into a composite UI or an application template
* Binding service (data or function) to the composite UI
IMS info 2.0: Web 2.0 Goes to Work

IMS PL/I source

Rational Developer for System z

Service Developer

WebSphere Application Server

IMS Info 2.0 demo video on YouTube: http://www.youtube.com/watch?v=BWJGSC-RyXQ
Prerequisites and Restrictions

- **Software requirements**
  - IMS V10+, IMS Connect V10+
  - Rational Developer for System z V7.1.1+
  - InfoSphere Mashup Center V1.0
    - bundles InfoSphere MashupHub Enterprise Edition
    - bundles Lotus Mashups
    - bundles WebSphere Application Server V6.1.0.13
  - Windows 2003 Server
  - Internet Explorer V6, Internet Explorer V7, Firefox V2, and Safari V3

- **Restrictions**
  - Single Segment message support only
  - No conversation support
  - No callout support
  - Commit Mode 1 and Sync Level None support only
How IMS Web 2.0 Solution Fit in with IMS On Demand?

Web Application

SOAP Application

IMS Connect

Adapter Task Manager

XML Adapter

WAS

InfoSphere MashupHub

IMS SOAP Gateway

IMS Connect RYO Application

Driver

Inbound Converter

Outbound Converter

COBOL XML Converter

Driver

From RDz

bytes

IMS Transactions

bytes
Business Scenario 1: Rapidly Extend Business Logic

Customers can extend their IMS investment by converting an IMS asset into an IMS RESTful service, which has the ability to consume and be consumed by other Web 2.0 services.

IMS customer can then remix and mashup their data rapidly with IBM Info 2.0 tools to extend their business logic without the need to write a single line of code.
Business Scenario 2: Extending Business Value

By publishing an IMS RESTful Service to the Web 2.0 community, this opens up the possibility of 3rd parties to generate creative mashups which can benefit both 3rd party developers as well as the original IMS service provider. The 3rd party developer will now have IMS assets available to them. While, the IMS service provider can benefit from new business opportunities and increased partnership on the web.
Mashup Example: Customer Quick View

1. Select a customer
2. View stock price. Bad news/results informs the rep that he might be better off focusing elsewhere for the quarter.
3. Dogears allow the rep to keep track of news and blogs about the customer that he might have missed.
4. View sales by date for selected customer.
5. Critical situations is a good indicator for customer receptivity to spending. The more critical situations, the less likely the customer will buy more.
Mashup Example: Healthcare Record System

Featured Client

Challenge:
Attract referring physicians with the more leading edge, easy to use technology.

Solution:
A user-driven web 2.0 electronic health record system and a patient scheduling system.

Benefit:
Provided accurate and time sensitive information to those who needed it, while also providing a more efficient & user-friendly patient care management system that integrates multiple information sources.

7 Mashups Starters

1. Customer Service: Mashup your call center application with package tracking

2. Client Prospecting: Mashup your sales prospects with external news, stock and company information.

3. Human Resources: Mashup your internal job postings with external resume services


5. Community: Mashup your product defect tracking with code management, time-tracking systems and blog commentary.

6. Research Information: Mashup relevant Medical, scientific and Law research with your own internal data.

7. Decision Dashboards: Mashup your product specifications, revenue planning, and product information with other products in the market.

Reference: http://www.jackbe.com/mashups/7mashups.php
Demo
Create Feeds from:

- Domino
- IBM Information Server
- IMS Transaction
- LDAP
- pureXML Document
- SAP
- Relational
- TDI
- Web Service
- Excel Spreadsheet
- Feed Registration
- MS Access Document
- XML Document
- IMS Database (Future)

...
Choose a model and year below to begin your search.

**Model**
Select a Model

**Year**
Select a Year

Submit
Choose a model and year below to begin your search.

**Model**
- Riposte

**Year**
- 2007

Submit
2007 Riposte Settlement Report

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Map of 2007 Riposte Brake Accidents

Recall Analysis for Brakes

Cost of settlement vs recall (brakes)

- Brakes in popular 2007 Riposte car lock up from ice
  AP - Sub-zero temperatures in Minnesota cause brakes to lock up in the popular 2007 Riposte car model from JK Motors....

- Student driver veers into lake upon brake failure
  AP - A Denver teen ended up in Sloan Lake when the car brakes failed during his daily driving lesson. The father and owner of the 2007 Riposte car said they....

- JK Motors sees increase in Riposte brake complaints
  AP - JK Motors reported an increase in the number of Riposte brake complaints received over the past month. Tom Steely, spokesperson for the company, address...
How to Get Started

- Watch the IMS Web 2.0 Demo on youtube
  - http://www.youtube.com/watch?v=nbognkeU_sl

- IMS Web 2.0 Solution website

- IBM Mashup Center website

- IBM Rational Developer for System z website
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Thank You
Mashup Example: IBM Travel Maps

IBM Approved Hotels
IBM locations service
Yahoo map
Hertz locations
Local information