Sticking between: mashup in libraries

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Dall'XML all'elaborazione di conoscenza: approcci professionali e uso sociale della rete

Seminario AIDA Roma - 30 marzo 2007

Sticking between: mashups in libraries

You don't have to have your own data to make money off of data access. Right now, there's revenue to be had in acting as a one-stop shop for mashup developers, essentially sticking yourself right between data providers and data consumers.

(Anne Zelenka, GigaOM)

Mashup: the largest developer ecosystem

- A mixture of content or elements. (...) a Web site that combines content and/or scripts from multiple sources.
- Set up as a competition, the first "Mashup Camp" was sponsored by Adobe, AOL, Sun, Microsoft, Google, Yahoo! and others. It was hosted at the Computer History Museum in Mountain View, California in February 2006.
- The winning mashup was PodBop, which combined a concert event locator site with MP3 samples of the upcoming bands. Second place went to Chicago Crime, which showed crime locations in Chicago by mashing up the crime data with Google Maps.

(TechWeb)

Mashup: the do it yourself web

- Web application hybrid (Wikipedia)
- (informal definition) Extracting or creating apps and services out of information others provide
- Web services built upon data exchange
- It starts from (and build upon) valuable data
- There's money to be made in mashups it's not just geeky stuff (see Business Week and Tech Beat entries)

Building a business model

- because we make money in other ways when other people use them. We're not as nimble as we were before, no big company is so it's important that we allow others to use our APIs to make money and build the business in the direction they want it go.(Mashup Camp)
- See also the LibraryThing Mashup Agreement at the end of this page

Mashup in web 2.0

O'Reilly "What is web 2.0?"

- Web as Platform
- Rich user experience
- Data is the next Intel inside
- Support lightweight programming models
- Design for "hackability" and remixability
- Cooperate, don't control
- Trusting users as co-developers

Web 2.0 meme map



Web Services

Sourcing data

- API (application programming interface): functions and procedures for accessing data – must be open!
- RSS
 - An alternative is scraping (with style)

Web protocols

- SOAP
- REST
- SRU(REST-like), SRW (SRU+SOAP), CQL (from Library of Congress)
- JSON/XML-RPC

Underlying Technologies

- Languages and techinques involved in requesting data and formatting results
 - Web services technologies (XML, DOM, RSS, ATOM, Javascript, PHP, Java, Perl, Python, Ruby on Rails, AJAX etc.)
- Abstract model for mashup
 - data[source 1] + data[source 2] +
 data[source n] = more data in new
 valuable ways

Mashup Architecture

- API/ContentProviders
- Mashup site
- Client's browser

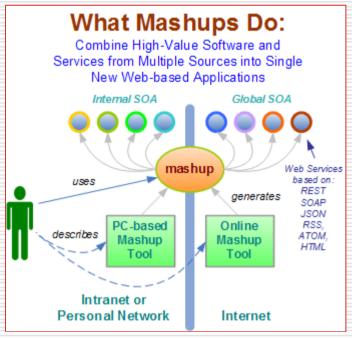


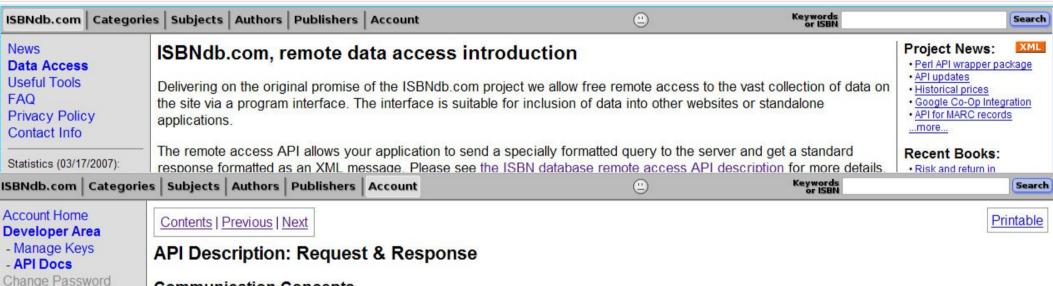
image by Dion Hinchcliffe

Mashup Cycle

```
(data feeding)
 Information (website, wiki, feed
   RSS etc.)
     Programming Interface
      Request
        Processing
```

Result (output format)

Data sourced from <u>one</u> esternal source



Communication Concepts

Log out

Statistics (03/17/2007):

The ISBNdb.com remote access API uses sessionless client-server architecture in much the same way as do most websites.

The response is an XML formatted message similar in essense to this example:

Unless otherwise mentioned, examples and descriptions below are using this access protocol as the only one publically available at the moment.

Smart ways to make <u>valuable</u> mashups (i.e. mashups from <u>multiple</u> sources)

Big players:

- Google (AJAX Search API, Froogle, Google Maps!)
- Amazon web services: Historical pricing (fee)
 Amazon Product Feed (free)
- eBay
- Yahoo
- Flickr
- Del.icio.us
- YouTube
- ...

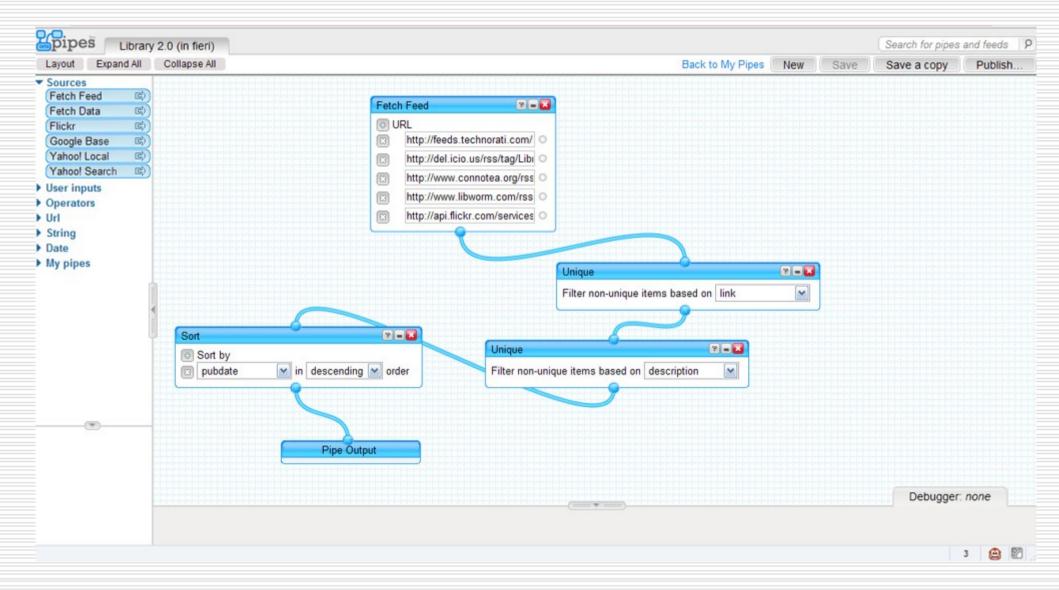
References

- Programmable Web: 1,683 mashups and 4.57 per day; tags, APIs, descriptions, ratings, guides
- WebMashup directory for APIs and mashups
- MashupFeed feeds for most popular mashups, API and tag clouds from ProgrammableWeb
- Mashup Camp unconference for mashup developers
- Strike Iron: where you can sell or buy applications

Development tools

- Pipes drag&drop modules for building mashups (try Library 2.0)
- OpenKapow create, deploy, share and re-use web services
- QEDWiki the IBM wiki-based mashup-maker
- Proto desktop application for creating mashups within a visual building environment
- CogHead web-based business applications
- Dabble making database for creating, managing adn exploring data on the web
- DataMashups.com personalized portals, integration of SOA, web services, web widgets, and web applications
- RSSBus dynamic RSS feeds from databases, spreadsheets, and directories

Pipes - How is made



Pipes - Front-end

you're logged in as bonaria.biancu (logout)



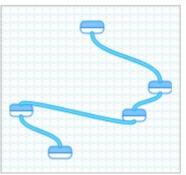
my pipes browse pipes create pipe discuss documentation

Search for Pipes...

Pipes is Hiring!

9

how this pipe was made



view/edit pipe

Library 2.0 (in fieri)

Run this Pipe Clone Edit Delete Re-publish



Pipe Preview

Dave Pattern 3

Richard Wallis posted a photo:

Andy Latham, Talis 4

Richard Wallis posted a photo:

Anthony Brewerton 2

Richard Wallis posted a photo:

Tim Hodson 3

Richard Wallis posted a photo:

Tim Hodson 2

Richard Wallis posted a photo:

Les Watson 1

Richard Wallis posted a photo:

Anthony Brewerton 4

Richard Wallis posted a photo:

Anthony Brewerton 1

Richard Wallis posted a photo:



Mashups for...

- Mapping
- Video and photo
- Search and shopping
- News
- and libraries/librarians?

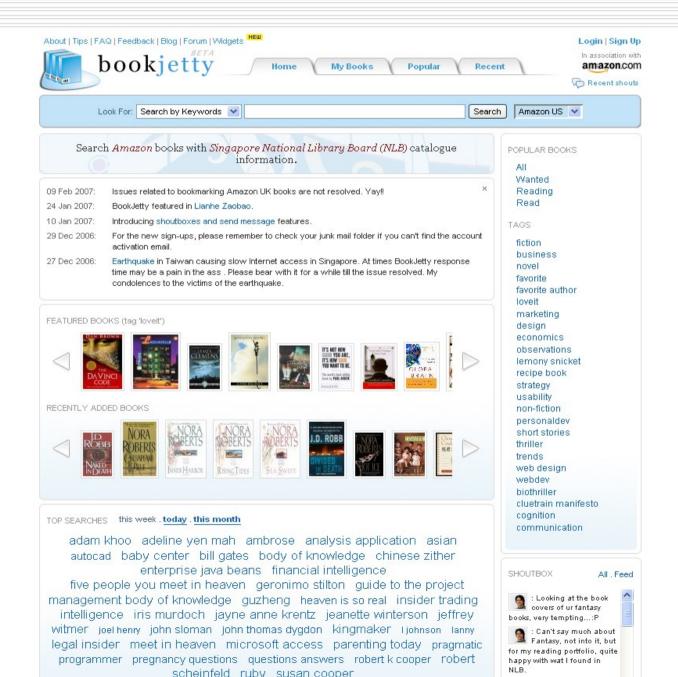
LIS Mashups - 1

- Talis Competition: information from libraries to life outside the walled gardens
- Froogle, BooksPrice, BookBurro and Book Finder 4 You: books (and) prices finders
- Books(Amazon)-related mashups
 - LibraryThing
 - MAB
- TOCROSS journals T.o.C. into library catalogue via RSS+ONIX

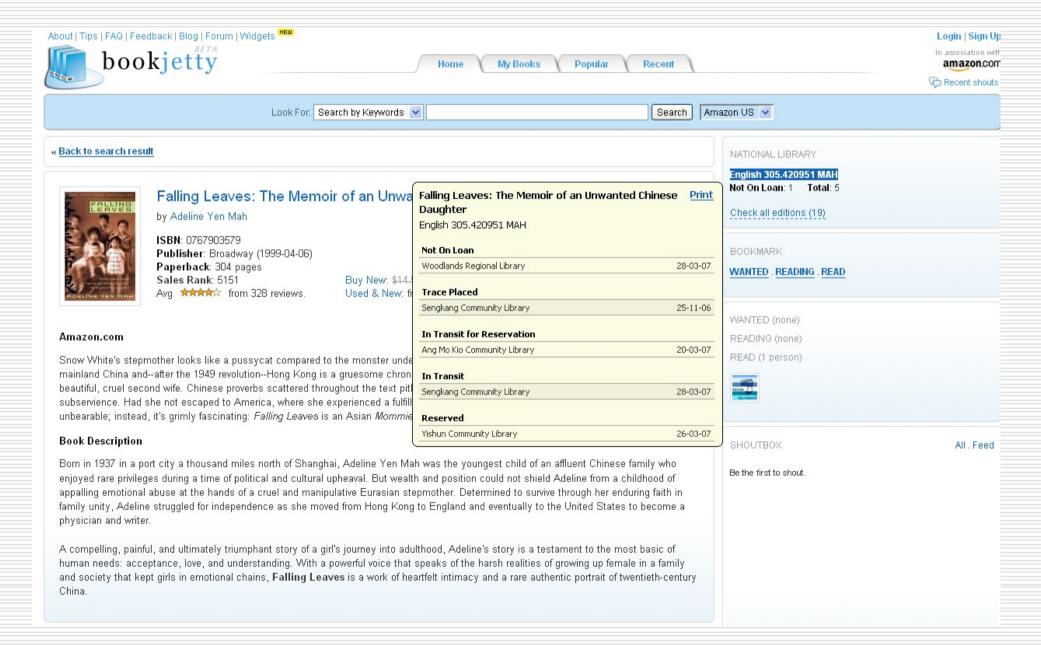
LIS Mashups - 2

- Authoratory contact information, professional interests and social connections of scientists via Pubmed
- Journal Junkie abstract summaries from the highest impact medical journals available as downloadable audio
- LibWorm librarians RSS engine with over 1500 RSS feeds tagged and categorized
- ECS and Connotea tag and related items from Connotea to annotate records
- xISBN database frbrized made by OCLC where ISBN are grouped (for any ISBN you get a group of related ISBN)
- BookJetty Search Amazon books with Singapore National Library Board (NLB) + bookmark "wanted"-"reading"-"read", feeds, popular books, tags, social networking etc.

BookJetty – Home Page



BookJetty – Falling Leaves



LIS Mashups - OPAC

- Summa meta-opac searches MARC records from library catalogs, reviews and book covers from Amazon, titles&authors informations from database, CD covers, Googlezon-like features etc. with modular design that lets build&replace
- WPOPAC permalinks, comments to records, feeds, abstracts and reviews from Amazon, related items, record tags for del.icio.us., search refinements, alternate search, Technorati tags, results from Wikipedia...
- NCSU Catalog Availability Service API, SRU and AJAX for searching xISBN and providing items availability

Don't force the user

What if, instead of only being in a catalog, (...) data were split into smaller components and embedded in the user's browser and email programs? By disaggregating the information within its system the library can deliver just what is needed to a user, provide connection into mashups, and can live in the space of the user instead of forcing the user to come to the space of the library (Participatory Networks)

Go go Google

News

I'm Feeling Lucky

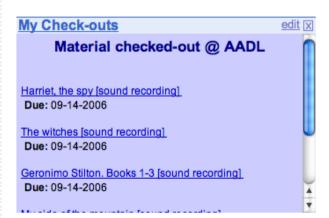
Maps more »

Images Video New!

Google Search



Google

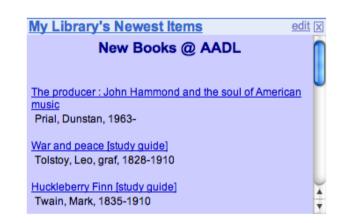


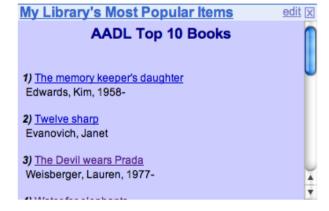
Slashdot

The FBI Software Upgrade That Wasn't

Dell to use AMD Chips in Desktop PCs

Fedora Proiect Leader Max Spevack Responds





Dictionary.com Word of the Day

adumbrate: to outline; also, to foreshadow; also, to suggest; also, to shade.

fortuitous: happening by chance.

Weather

Ann Arbor, MI

71°F

Advanced Search Preferences Language Tools

> Overcast Wind: N at 0 mph Humidity: 78%

Today

Sat



82° | 63°

78° | 62° 78° | 56°

Top Stories

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edit x

Ramsey family says arrest brings long-sought relief Marshalltown Times Republican - all 4586 related »

NSA ordered to stop wiretap programme MSN Money - all 1081 related »

Southern Lebanese greet national forces
CNN International - all 2445 related »

Movies

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Showtimes for 48103 »

Snakes on a Plane 1hr 46min - Rated R ☆☆☆☆ 2 reviews

Talladega Nights: The Ballad of Ricky Bobby 1hr 50min - Rated PG-13

★★★★ 22 reviews

Accepted 1hr 30min - Rated PG-13

★★☆☆☆ 4 reviews

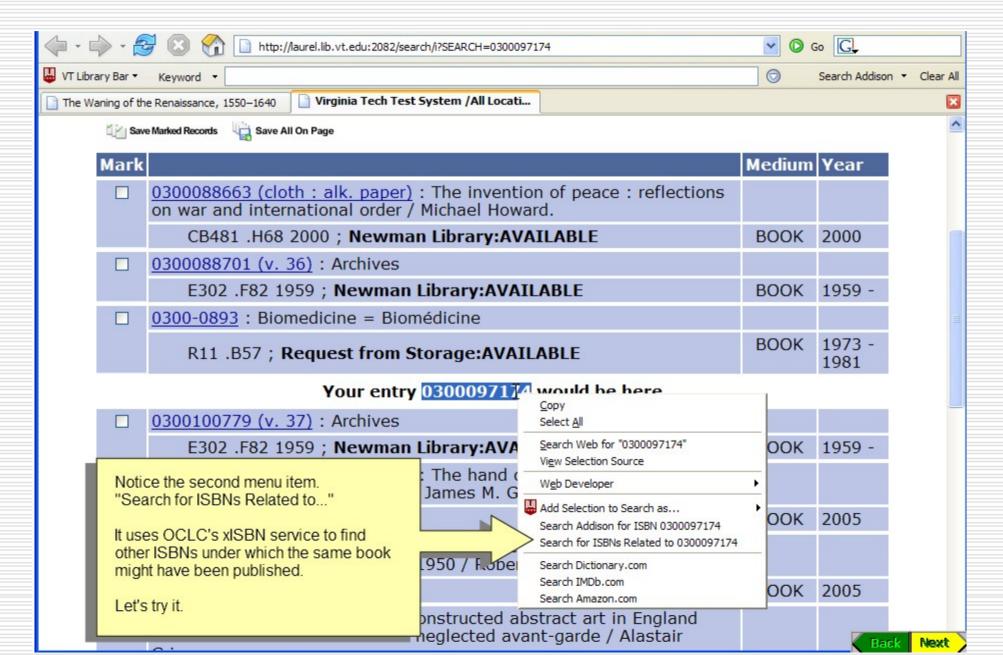
edit 🛛

LIS Mashups - Future

Beyond OpenUrl

- Umlaut and LibX: client-side bridging bibliographic data and identifiers with web information and library resources (OpenUrl)
- Microformats: CoinS, unAPI... It's up to the user choose information sources, services, providers
- Something like... a (really semantic)
 Blue Organizer for libraries

LibX at Virginia Tech Systems



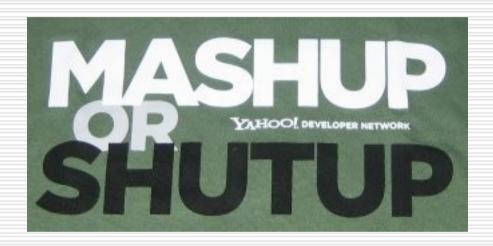
... what about YOU?

- Mashups from OPAC (APIs from outside for building services out of the data), databases, e-journals
- OPAC: Amazon Google Maps Connotea Feeds Openurl whatever?
- Geolocation of libraries, services, books, users etc. (G. Maps, Flickr, Frappr)
- Integration in VLEs
- Library's website: chat with Meebo, feeds from Feedraider, videos from YouTube, photos from Flickr or BubbleShare, podcasting from LibSyn, results from Customised Search Engines, tag clouds for subjects
- Do a PatREST for your OPAC!
- Try! (RSS is the key)

NING



Questions?



http://del.icio.us/bonaria/mashup

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