INFORUM 2011
Brussel / Bruxelles
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Cloud computing for libraries

Formatvorlage des Untertitelmasters durch Klicken bearbeiten

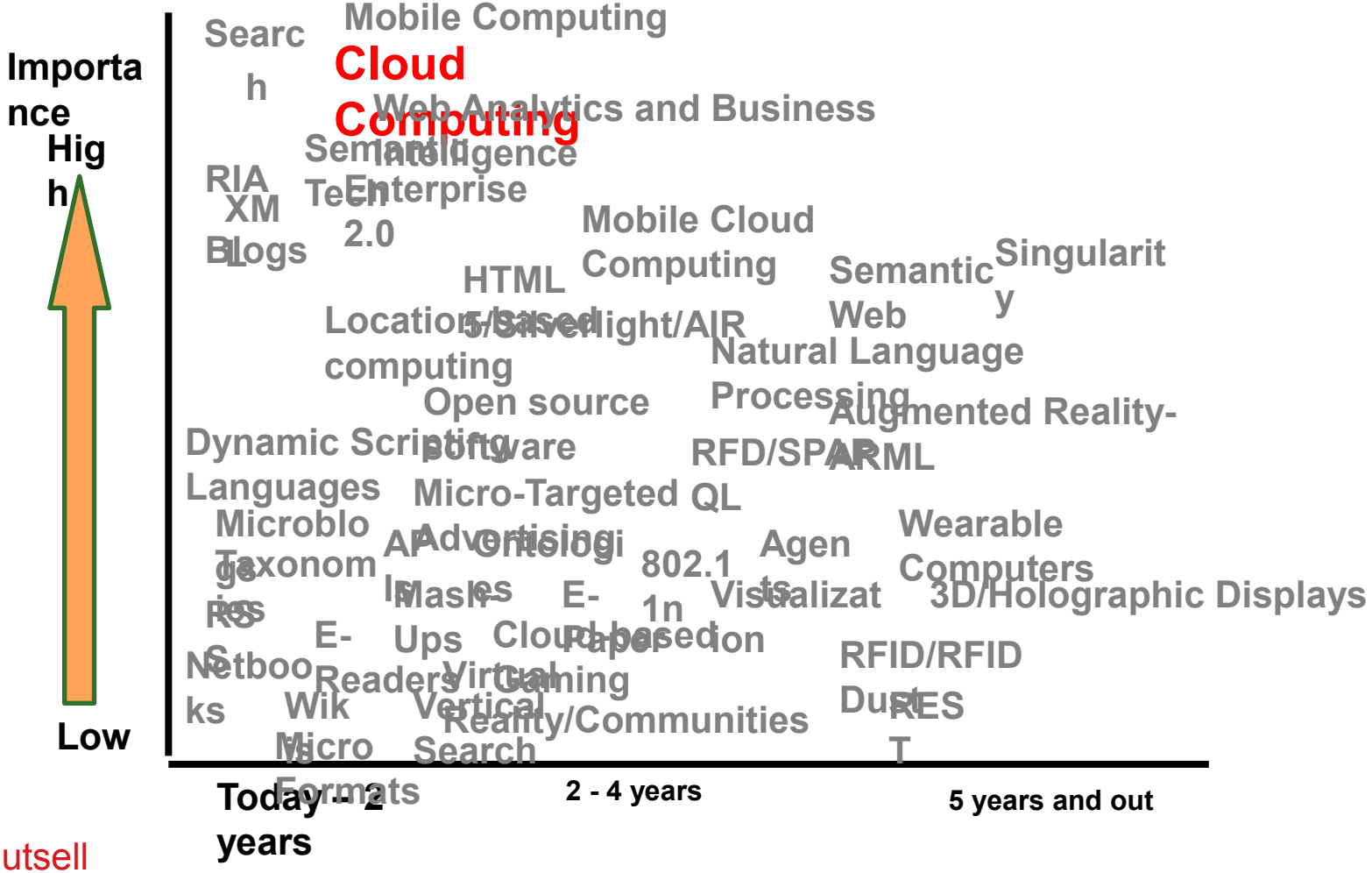
Product Manager EMEA
OCLC

OCLC™ The world's libraries. Connected.

Agenda

- Changing Perceptions of Cloud Computing
- Cloud Computing for Libraries
- Beyond a mere Cloud Concept
  for Library Management Services

Cloud Computing – a major trend



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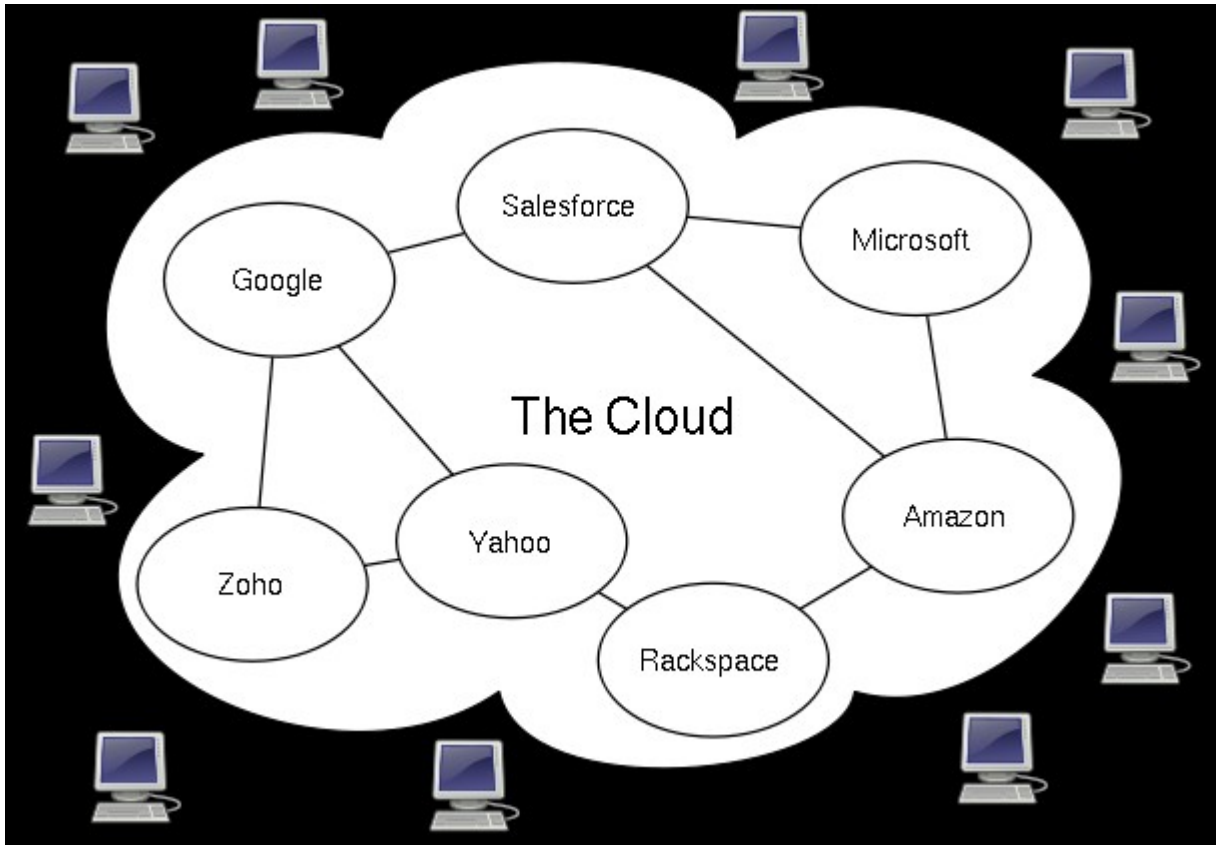
Cloud Computing – What is it?

A style of computing in which scalable and elastic IT-enabled capabilities are delivered as a service to external customers using Internet technologies.

-Gartner Group

Simple: Web-based applications with shared data and services.

Was ist Cloud Computing?



Why cloud computing is different

"Unlike most innovations … which started in the enterprise and went to the consumer, this innovation started in consumer and is now coming back into the enterprise."

-Geoffrey Moore
"Core Content and the Cloud"
http://www.youtube.com/watch?v=0swJCYLH2Ck

Why Cloud Computing for enterprises?

Subscribe to high quality services when / as long as needed

Choose best value, not pieces of technology

Save costs on IT infrastructure & management

Improve service quality (performance, availability, …)

Improve visibility and accessibility of the service

Focus on core business, grow, innovate

Collaborate, Aggregate & Share

Data & Services

Challenges connected with Cloud Computing

- Data security & privacy, data ownership & exit options
- Scalability, Reliability and Performance of the Service
- Interoperability with external Services
- Compliance with legal standards (national, EU & international), lack of appropriate standards
- …

http://blog.marinetelecom.net/2009/10/

Why cloud computing is different

"If you think that you know better than 'the cloud', you don't."

-Geoffrey Moore
"Core Content and the Cloud"
http://www.youtube.com/watch?v=0swJCYLH2Ck

German Government & Cloud Computing

IT strategy cloud computing (Sept 2010)

- Remove technical, structural, organisational and legal barriers
  - data integrity and security
  - service availability
  - service interoperability
  - legal issues / contract templates
- Increase public acceptance of cloud based solutions
- Leverage economic potential, especially for the public sector and smaller and medium-sized businesses

German Government & Cloud Computing

Framework Paper on Information Security, issued by the *Bundesamt für Sicherheit in der Informationtechnik* (BSI) / Federal Office for Information Security (Sept 2010) for review

Minimum security requirements for cloud solution service providers, including :

- ID and rights management, Emergency management, Interoperability, Data protection and compliance, Cloud certification

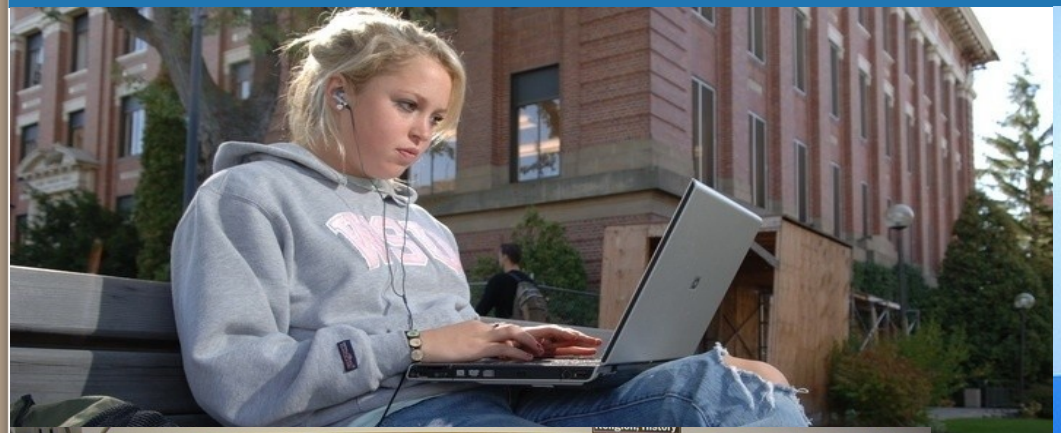
BSI Paper Cloud Computing: http://bit.ly/cywMMH, summary in en: http://bit.ly/cUNjSD

Same Old Stuff
New Stuff
What Is Your Vision???
Gartner

Libraries and Cloud Computing

The world's libraries.
Connected.

Changing demand



Changing Collections

Libraries and Cloud Computing

- Libraries are doing more than ever
- Libraries are changing rapidly
- Cost & time requirements are exploding
- Cloud computing has helped other industries

Libraries and Cloud Computing

Libraries have been building “cloud” services for 40 years (cataloging, resource sharing, online reference…)

Libraries and Cloud Computing

Cloud based library services could

bring the power of library cooperation
to core library management

Libraries will be freed to focus on innovation

Why Cloud Computing for ~~enterprises~~ libraries?

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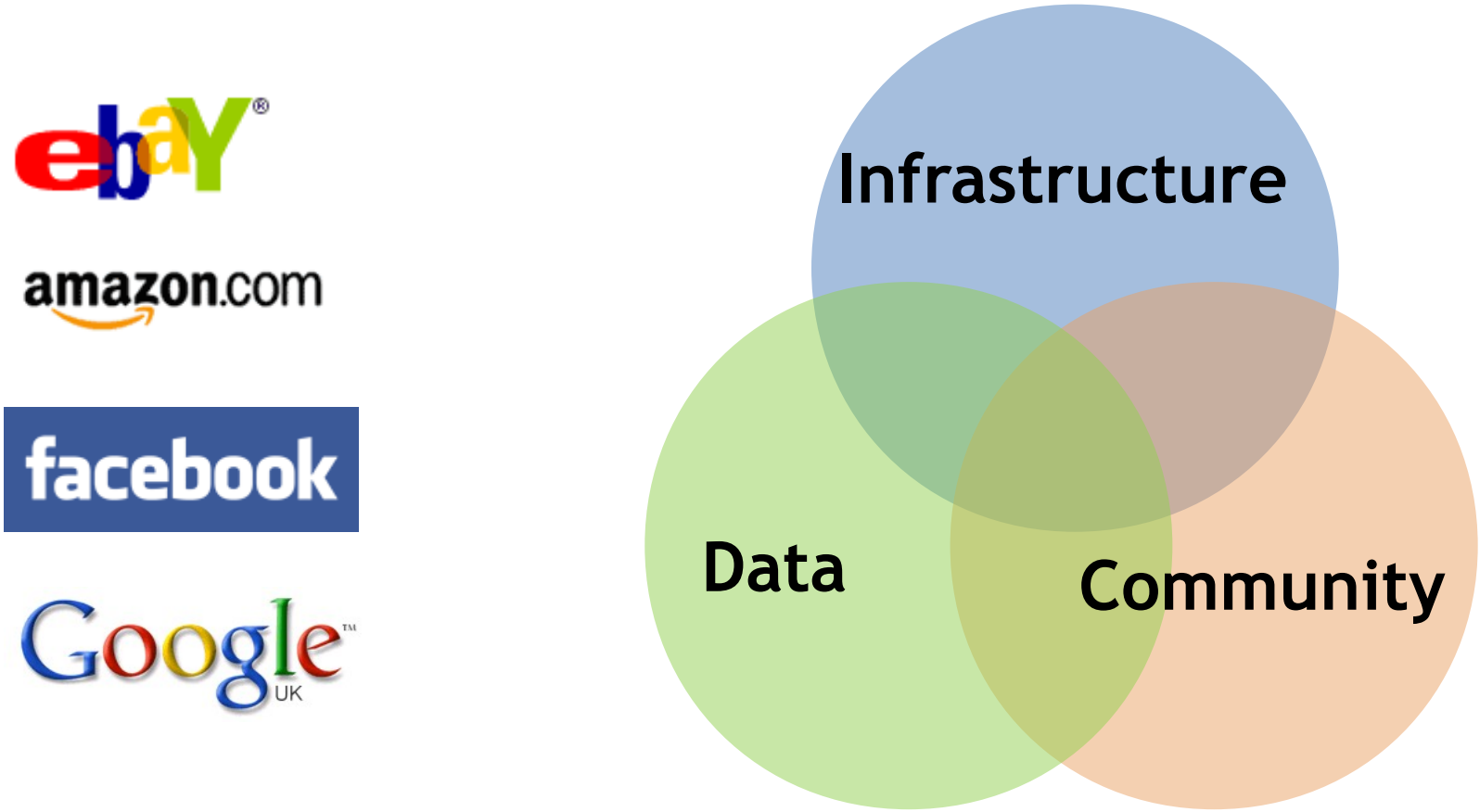
Data & Services

Cloud Computing for Libraries

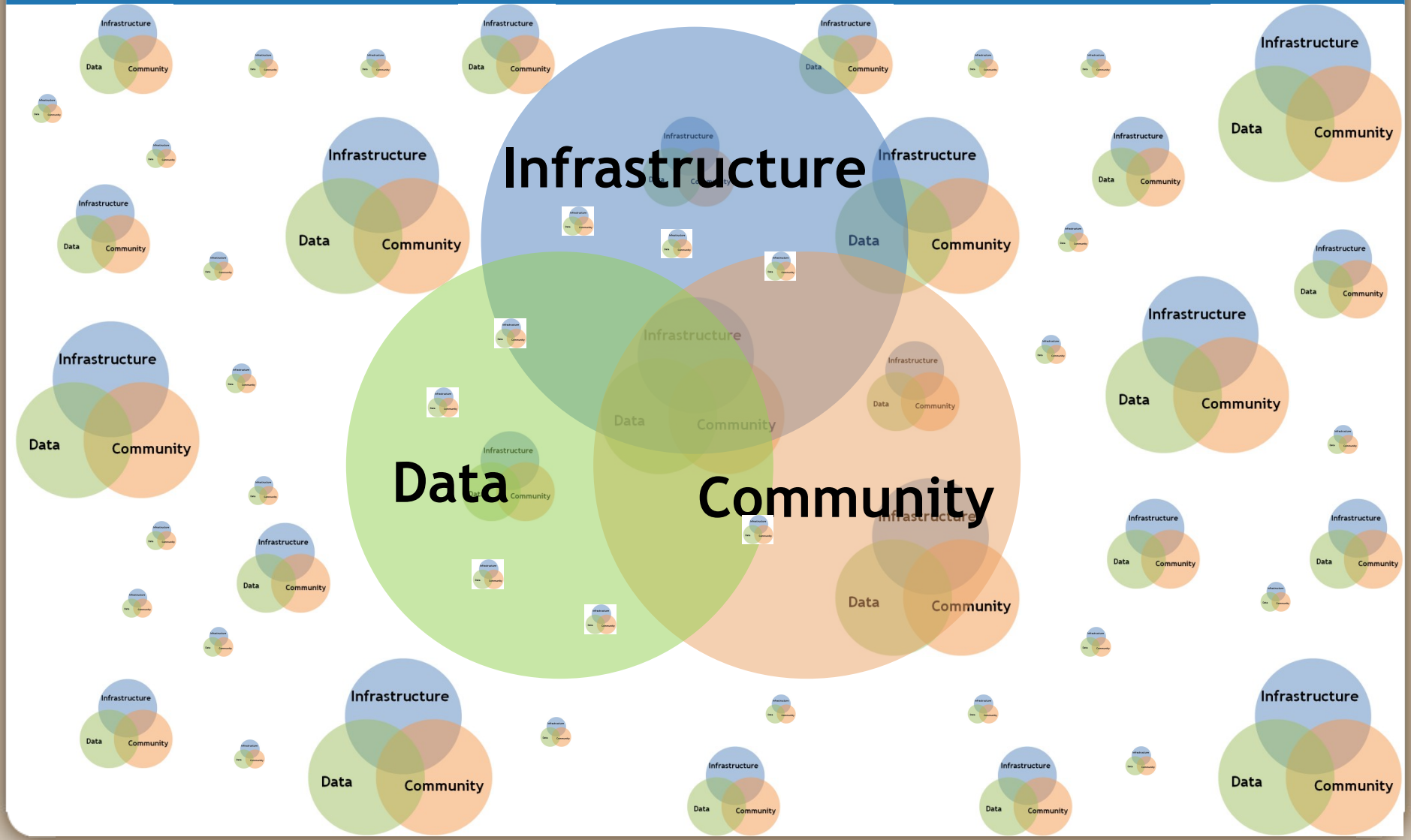
Some Ideas on Architecture

The world's libraries.
Connected.

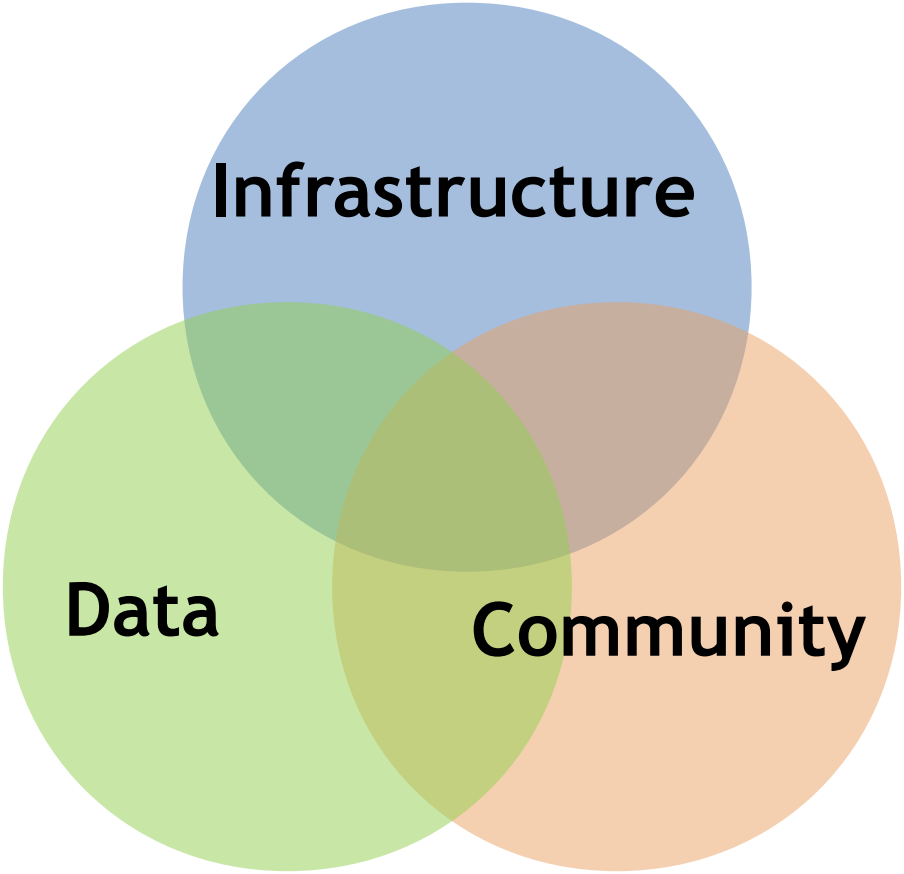
Successful on the web (web-scale)



Libraries and Web-Scale?



Building Web-Scale for / with Libraries

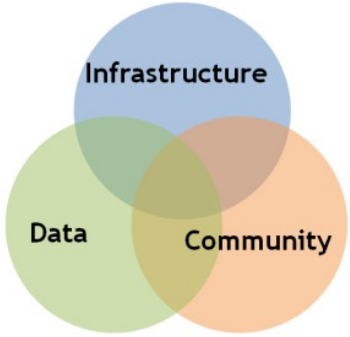


Key principles of a cooperative platform

Data richness: Offer data pools and integrated workflows for all purchased, licensed and digital content

Collaboration: Share data and services with other libraries & partners in a controlled way

Designed for the cloud: Responsive, massive scalable, highly fault tolerant, suitable for public consumption

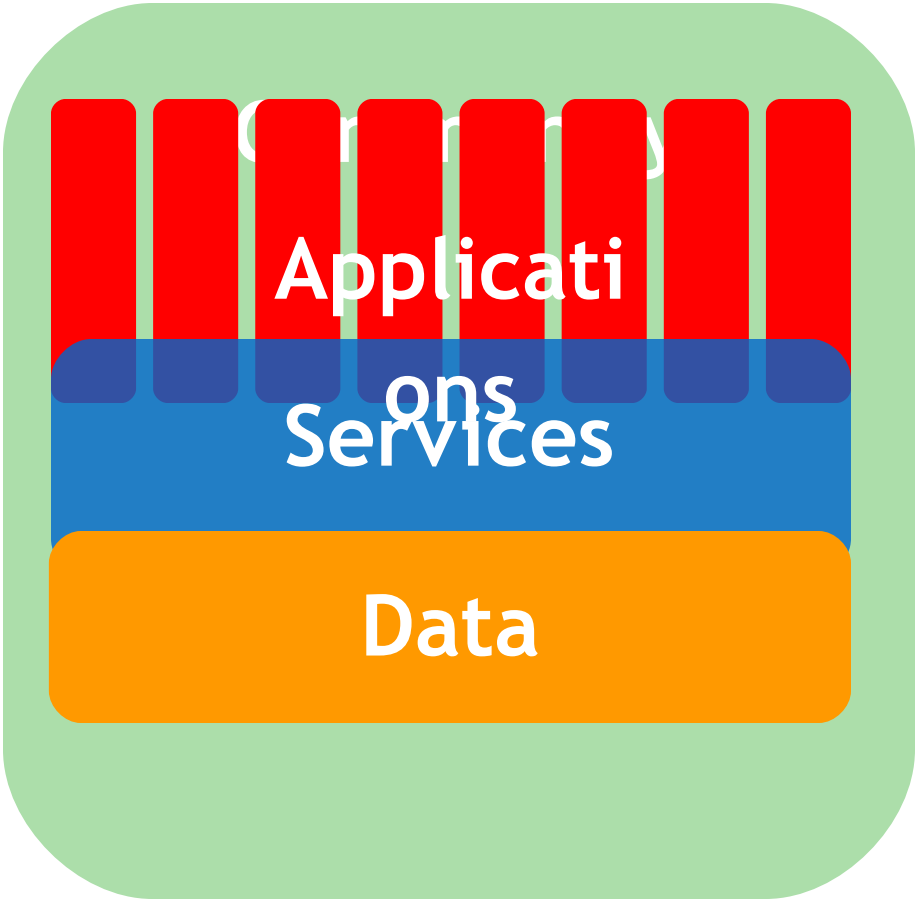


Key principles of a cooperative platform

Openness: Support **interoperability** between cloud based solutions, with library-developed or 3rd party applications / services through APIs, incl. exit options

Extensibility: **Platform** can be extended by **applications**, provided by supplier, libraries or partners

Architecture



OCLC Apps, Library apps, 3rd party apps

Services - powering apps

Data Services

A Service Platform

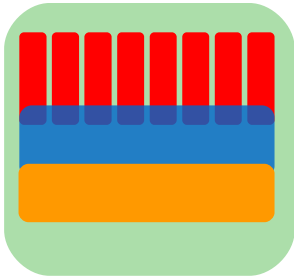
With such an architecture -

libraries can develop their own custom applications for library management activities.

In addition, they can

expose and share those applications as Web services on the platform for others to find and reuse.

They can innovate collectively.



What *Is* the Platform?

From a practical standpoint, the Platform offers an infrastructure for developing and sharing applications.

- For libraries: An "App Gallery", through which libraries can easily share apps created by the community
- For developers: A "toolbox" that allows building and sharing of apps, based on data and services exposed on the platform, including documentation and community support
- Extensibility and Interoperability with external data, services and applications

“I want to…”

I want to create an app
that combines
my library's activity
with info about titles
on the NY Times
bestseller list.

“I want to build an app…”

THE NEW YORK TIMES BOOK REVIEW

Best Sellers

FICTION

1 MINDSTRETCH, by Pamela McLaughlin. (Warner, $24.95.) Trang Martinez suspects her Pilates instructor may also be a vicious serial killer. 1

2 SAGEKNIGHTS OF DARKHORN, by Gerry Banion. (Morrow, $26.95.) Astrid Soulblighter attempts to reclaim the throne from the wicked Scarkrig clan. The fifteenth volume of the "Bloodrealms" series. 1 3

3 THE BALTHAZAR TABLET, by Tim Drew. (Doubleday, $24.95.) The murder of a cardinal leads a Yale professor and an underwear model to the Middle East, where they uncover clues to a conspiracy kept hidden by the Shriners. 3 58

4 GREAT FISH, by Liz Martin. (Simon & Schuster, $23.95.) The Biblical story of Jonah, retold from the point of view of the whale. 5 18

5 NICK BOYLE'S SHOCK BLADE: LYNCHPIN, by Simon Moskowitz. (Broadman & Holman, $24.99.) After a coup by Admiral Chao threatens to destroy the Internet, the ShockBlade team is forced to ally with their Chinese rivals. 1

NONFICTION

1 CRACKED LIKE TEETH, by Dexter Eagan. (Morrow, $25.95.) A memoir of petty crime, drunken brawls, and recovery, by a winter who was addicted to paint thinner by age nine. 1

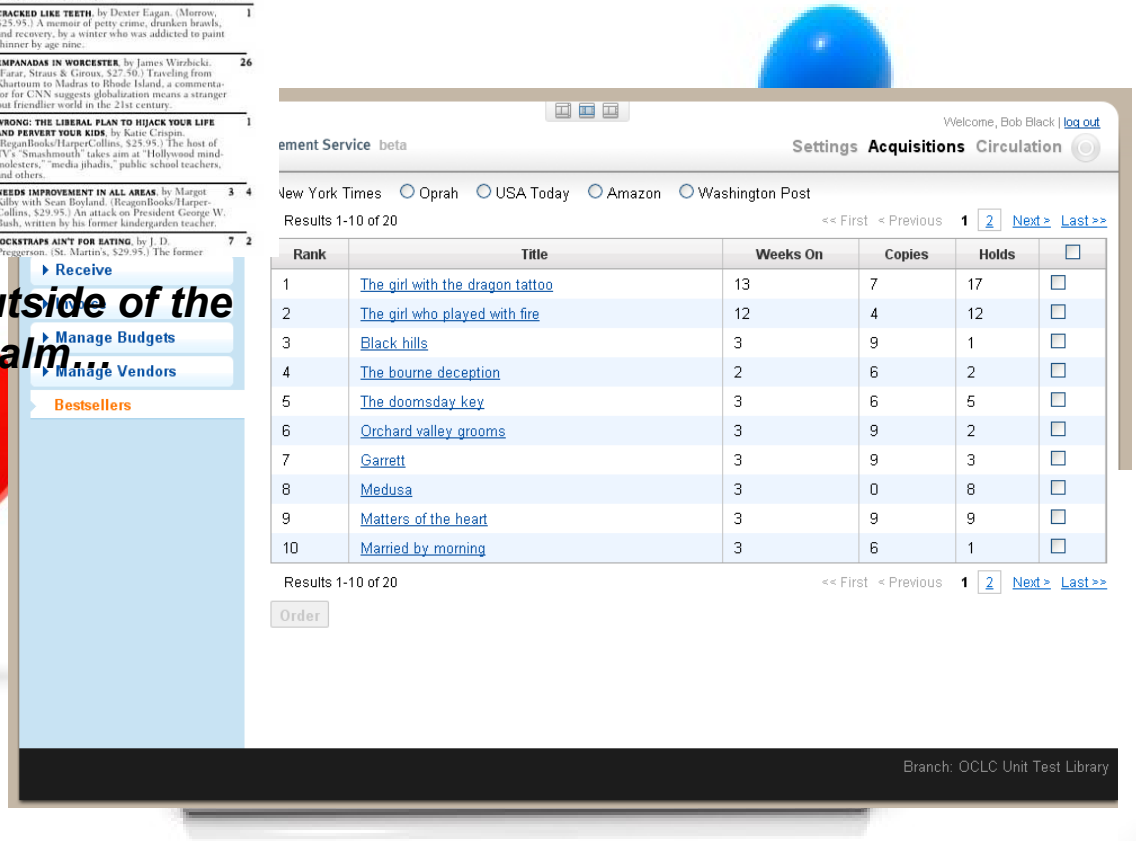
2 EMPANADAS IN WORCESTER, by James Wirzbicki. (Farar, Straus & Giroux, $27.50.) Traveling from Khartoum to Madras to Rhode Island, a commentator for CNN suggests globalization means a stranger but friendlier world in the 21st century. 26

3 WRONG: THE LIBERAL PLAN TO HIJACK YOUR LIFE AND PERVERT YOUR KIDS, by Katie Crispin. (ReganBooks/HarperCollins, $25.95.) The host of TV's "Smashmouth" takes aim at "Hollywood mind-molesters," "media jihadis," public school teachers, and others. 1

4 NEEDS IMPROVEMENT IN ALL AREAS, by Margot Kilby with Sean Boyland. (ReagonBooks/Harper-Collins, $29.95.) An attack on President George W. Bush, written by his former kindergarden teacher. 3 4

5 JOCKSTRAPS AIN'T FOR EATING, by J. D. Preggerson. (St. Martin's, $29.95.) The former

Trends from outside of the library realm…



Feed into selection and acquisition decision-making

Trends within the library

“I begin by…”

Searching for documentation and other information necessary to begin writing my app.

API Documentation

- Developer Network Handbook (PDF)
- Classify
- Dewey Web Services
- LCNAF
- Metadata Crosswalk
- Open URL Gateway
- Questionpoint Knowledge Base
- Terminology Services
- VIAF
- WorldCat Basic

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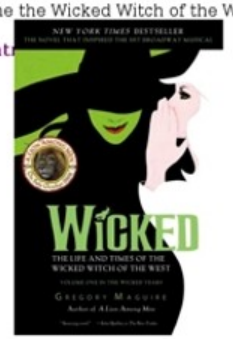

Num

aries

ıitted identifier and OCLC Symbol

ber and citation format

“Next I …“

```
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'http://api.nytimes.com/svc/books/v2/lists/' .
$listname . '.xml';
	$listURL = $listURL . '?api-key=' . $NYT_API ;
// go get the XML
	$xml = simplexml_load_file($listURL);
	$bookCount = count($xml-
>xpath('//results/book'));
	if ($bookCount > 0) {
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>list_name;
		$list_date = $xml->results->book[0]-
>published_date;
```
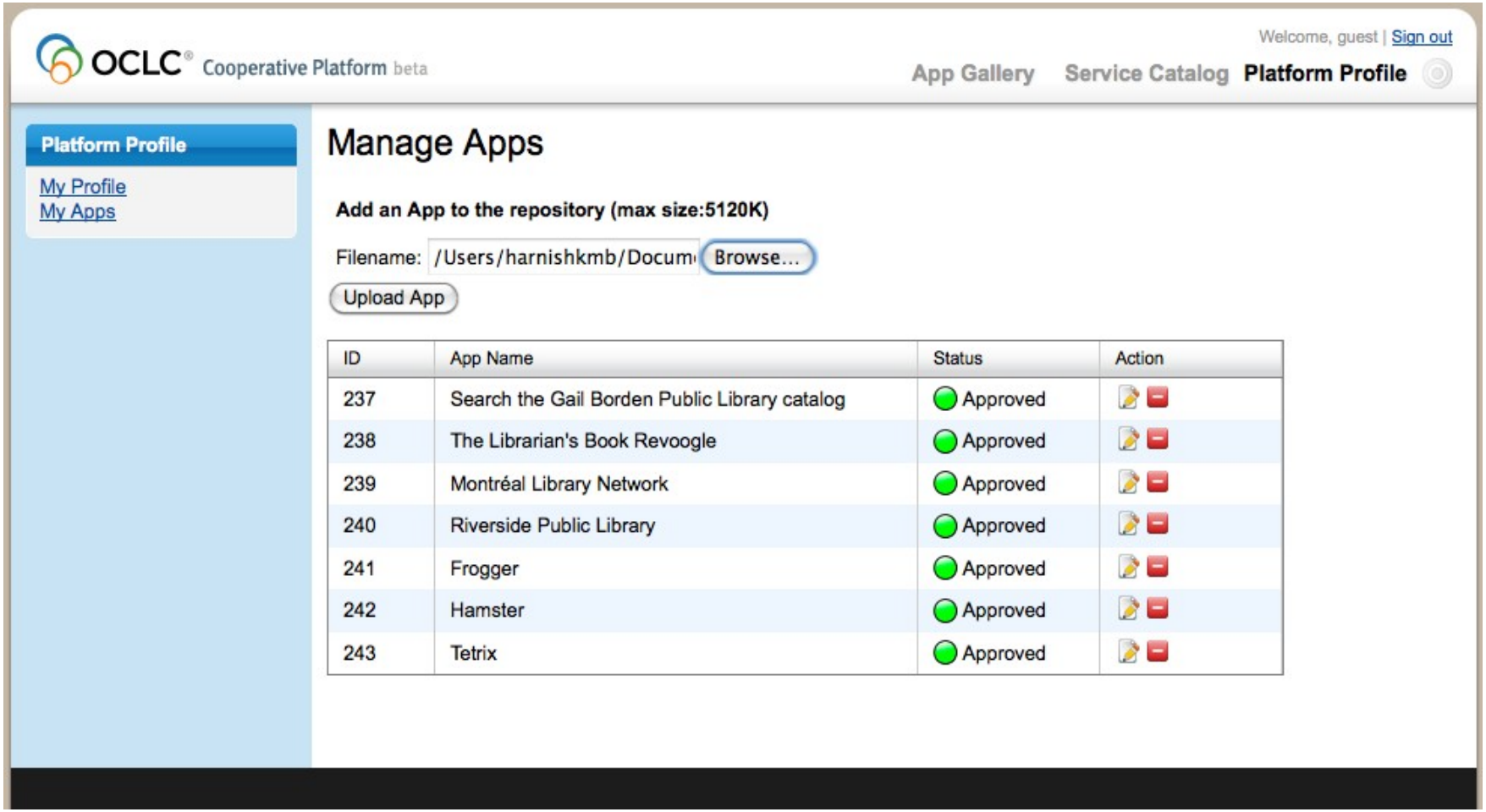
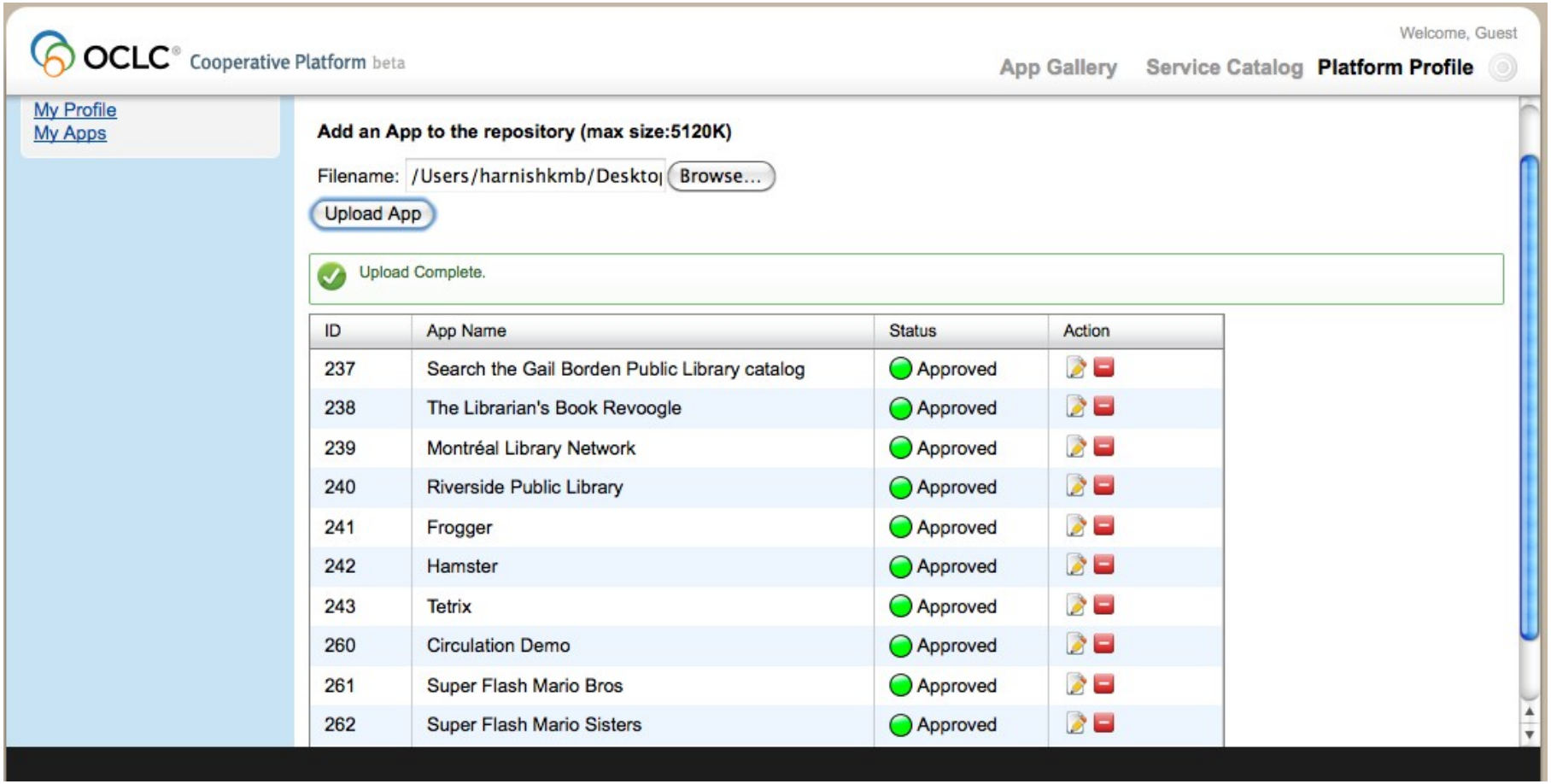

Managing Apps on the Platform



Uploading an App to the Platform



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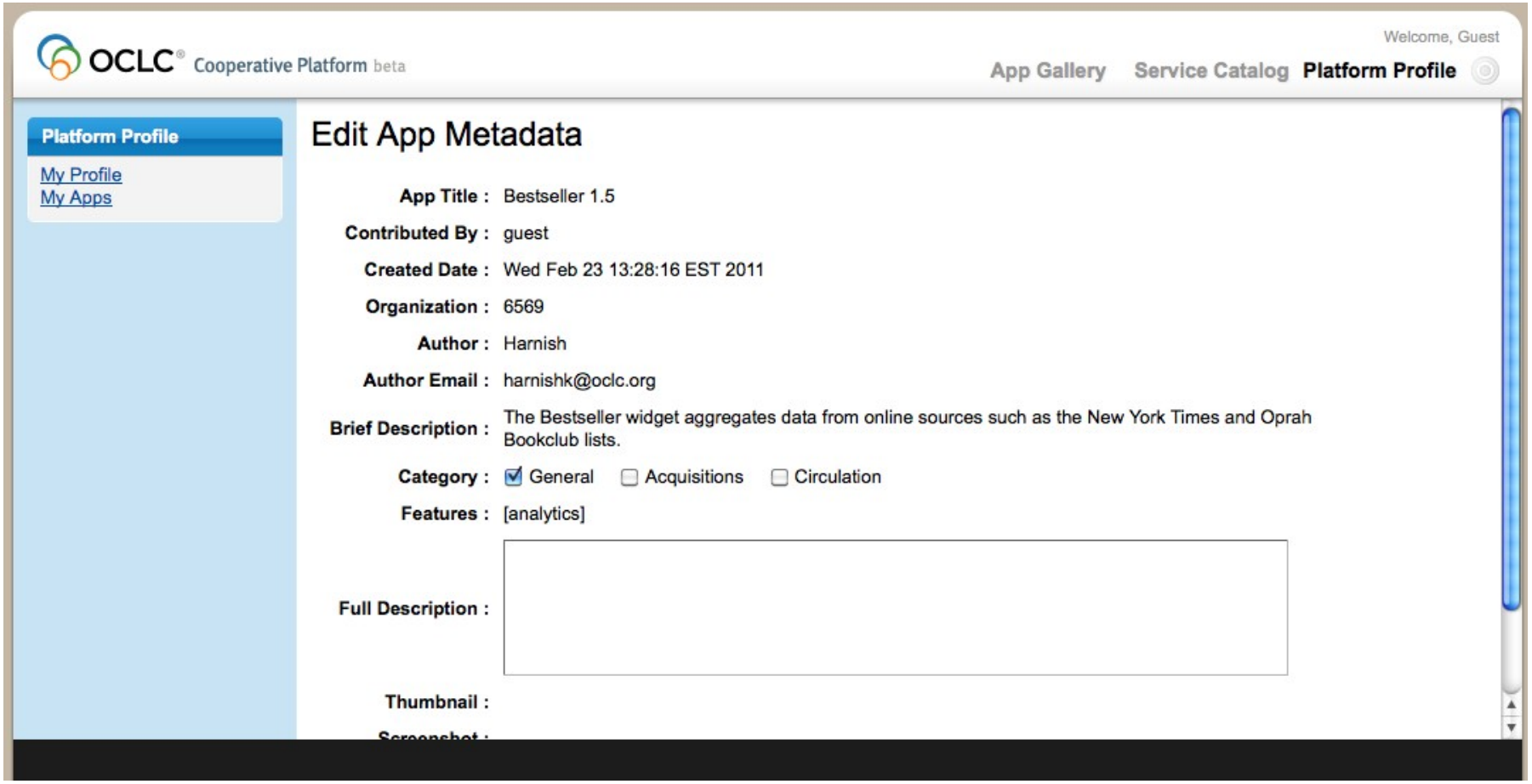
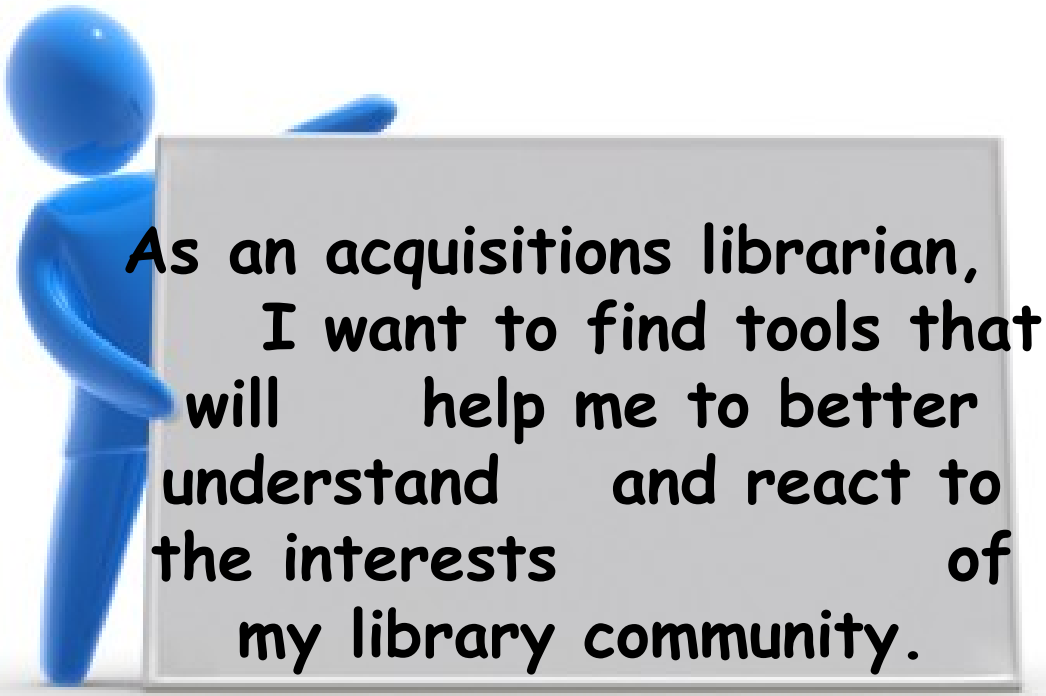


“And then I share the app…”

“I want to…”



THE NEW YORK TIMES BOOK REVIEW

Best Sellers

This Week	FICTION	Last Week	Weeks On List
1	**MINDSTRETCH**, by Pamela McLaughlin. (Warner, $24.95.) Trang Martinez suspects her Pilates instructor may also be a vicious serial killer.		1
2	**SAGEKNIGHTS OF DARKHORN**, by Gerry Banion. (Morrow, $26.95.) Astrid Soulblighter attempts to reclaim the throne from the wicked Scarkrig clan. The fifteenth volume of the "Bloodrealms" series.	1	3
3	**THE BALTHAZAR TABLET**, by Tim Drew. (Doubleday, $24.95.) The murder of a cardinal leads a Yale professor and an underwear model to the Middle East, where they uncover clues to a conspiracy kept hidden by the Shriners.	3	58
4	**GREAT FISH**, by Liz Martin. (Simon & Schuster, $23.95.) The Biblical story of Jonah, retold from the point of view of the whale.	5	18
5	**NICK BOYLE'S SHOCK BLADE: LYNCHPIN**, by Simon Moskowitz. (Broadman & Holman, $24.99.) After a coup by Admiral Chao threatens to destroy the Internet, the ShockBlade team is forced to ally with their Chinese rivals.		1

This Week	NONFICTION	Last Week	Weeks On List
1	**CRACKED LIKE TEETH**, by Dexter Eagan. (Morrow,		1

Finding an App on the Platform

OCLC

OCLC® Cooperative Platform beta

Sign in

App Gallery | Service Catalog | Platform Profile

Super Flash Mario Sisters
Web Service: General
Developer: Wielee
This is a nice flash remake of the classic Super Mario Bros, with an option to play as Mario or Luigi!

Hamster 2
Web Service: General
Developer: Adam Bowman
This lively pet hamster will keep you company throughout the day.

Bestseller 1.5
Web Service: General
Developer: Harnish
The Bestseller widget aggregates data from online sources such as the New York Times and Oprah Bookclub lists.

A Sample Platform App

OCLC

OCLC Cooperative Platform beta

Sign in

App Gallery | Service Catalog | Platform Profile

App Gallery

Browse

Install

Bestseller 1.5

Description : The Bestseller widget aggregates data from online sources such as the New York Times and Oprah Bookclub lists.

Organization : 6569

Create Date : Wed Feb 23 13:28:16 EST 2011

Author : Harnish

Author Email : harnishk@oclc.org

Locales :

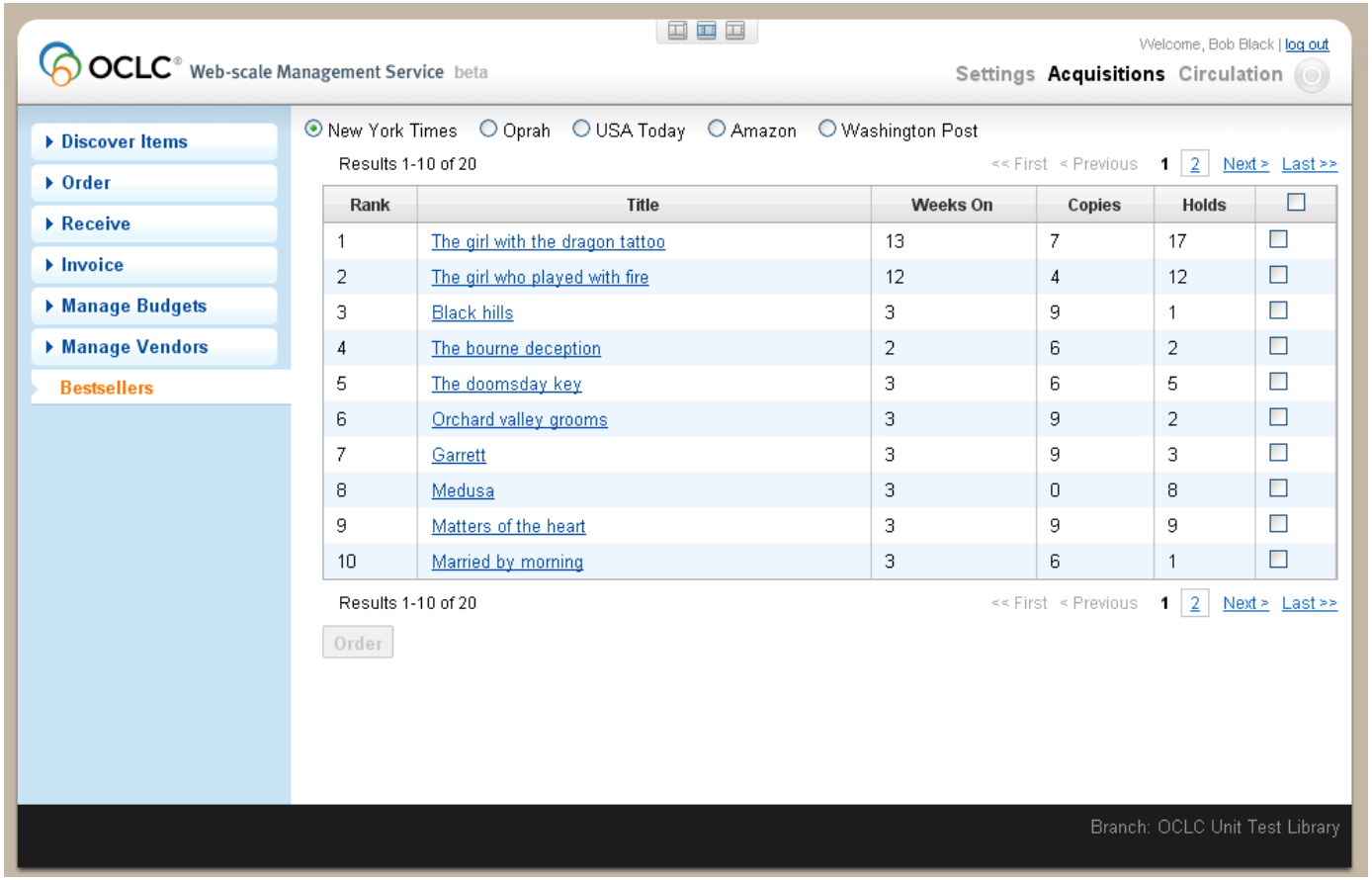
Categories : [General]

Features : [analytics]

Screenshot :

Exactly what I want!

Using a Shared App in WMS



Building on the Developer Network

OCLC Mashathon
November 2011, Cologne

The cloud concept leads to a platform and apps concept for library management services and to collective innovation.

Where are we today?
(OCLC Web-Scale Management Services)

- Discovery to Delivery : WorldCat Local
- Circulation & Acquisitions
  - General Release US. First production sites LIVE.
- Knowledge Base / License Management (+ API)
  - Available for pilots. General Availability Q2 2011
- Open Extensible Platform
  - DevNet now; General Availability Q3 2011

A Sea Change

"For 25 years of library automation, we've had a choice of *brand*, and now we have a choice of *kind*."

all Breeding

Thank You!

Comments? Questions?

Just let me know, now or later.

annette.dortmund@oclc.org

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