

1st June 2009

Networking Library Services: A Glimpse at the Future

Moving library management services to Web-scale

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Executive Director, Networked Library Services

Agenda: please remain seated...



- “Web-scale management services” (1,000 feet)
- Web-scale (10,000 feet)
- Web-scale in the context of libraries (5,000 feet)
- An opportunity for *truly* next-generation library management services (500 feet)
- Descriptions and “timelines” (100 feet)
- Landing

Reduce, Reuse, Recycle: Thank you, colleagues

“Web-scale”



Lorcan Dempsey
Dublin, OH, by way of
a place slightly more
Irish

“Jah, jah, jah.”



Norbert Weinberger
Munich, Germany



“Networked Library Services”

Robin Murray
Sheffield, UK

“A first step...”



News releases

OCLC announces strategy to move library management services to Web scale

DUBLIN, Ohio, USA, 23 April 2009—OCLC is connecting the content, technology and expert capabilities of its member libraries worldwide to create the first [Web-scale](#) cooperative library management service. Member libraries can take the first step to

Web-scale management services

CEO. "In 1967, OCLC Founder Fred Kilgour revealed a strategy to create an online union catalog through shared cataloging in order to reduce individual transaction costs for

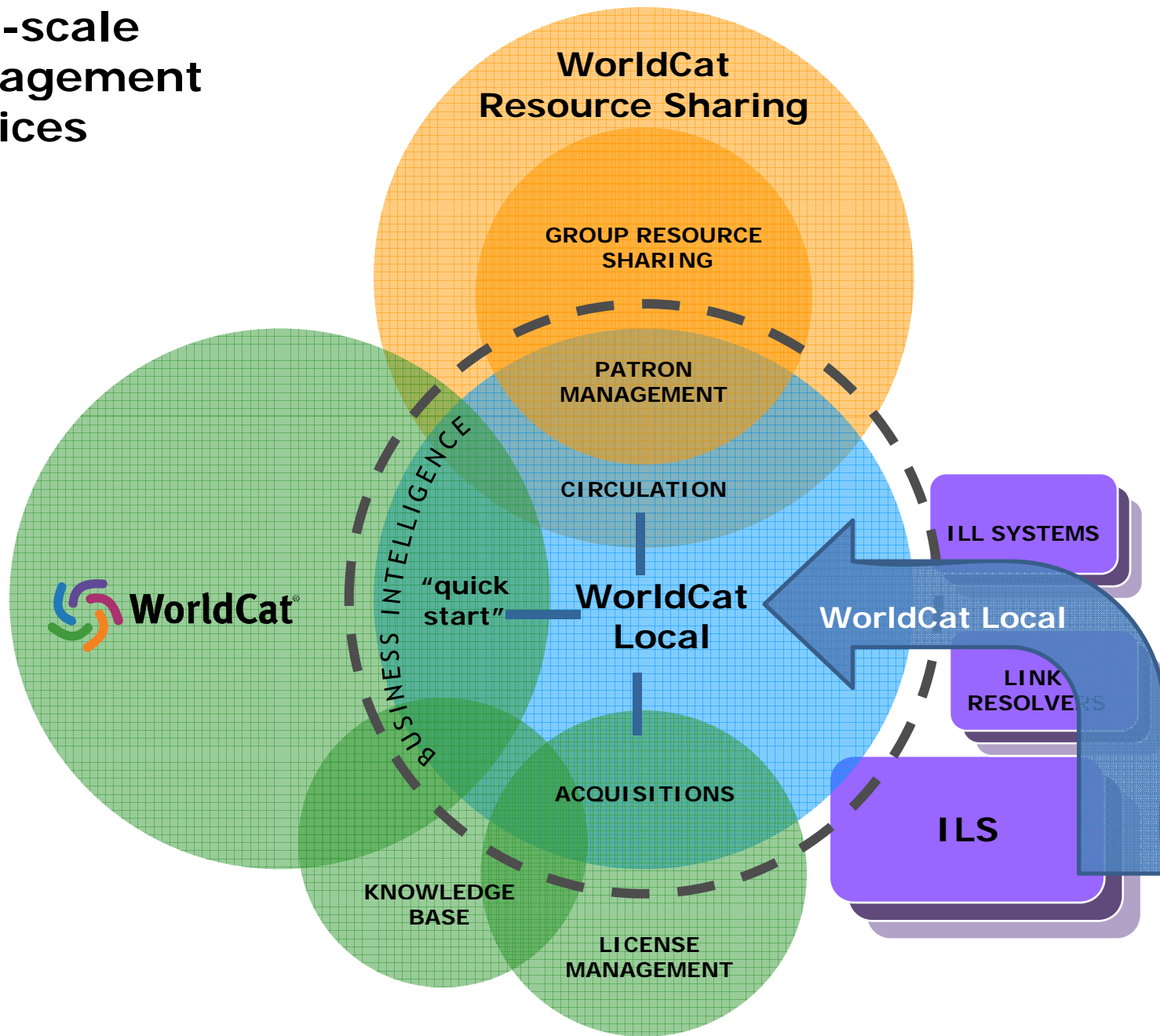
the first cooperative library management service

pilots and those that became early adopters, we now have the opportunity to accelerate the movement of library management services to Web scale through 'quick start' and additional services. OCLC will soon name an advisory council that will provide valuable input and experience as we move forward with our cooperative Web-scale library services," said Mr. Jordan.

Libraries that subscribe to FirstSearch WorldCat will get the WorldCat Local "quick start" service as part of their subscription at no additional charge. WorldCat Local "quick start" offers libraries a locally branded catalog interface and simple search box that presents localized search results for print and electronic content along with the ability to search the entire WorldCat database and other resources via the Web.

OCLC plans to release Web-scale delivery and circulation, print and electronic acquisitions, and license management components to WorldCat Local, continuing the

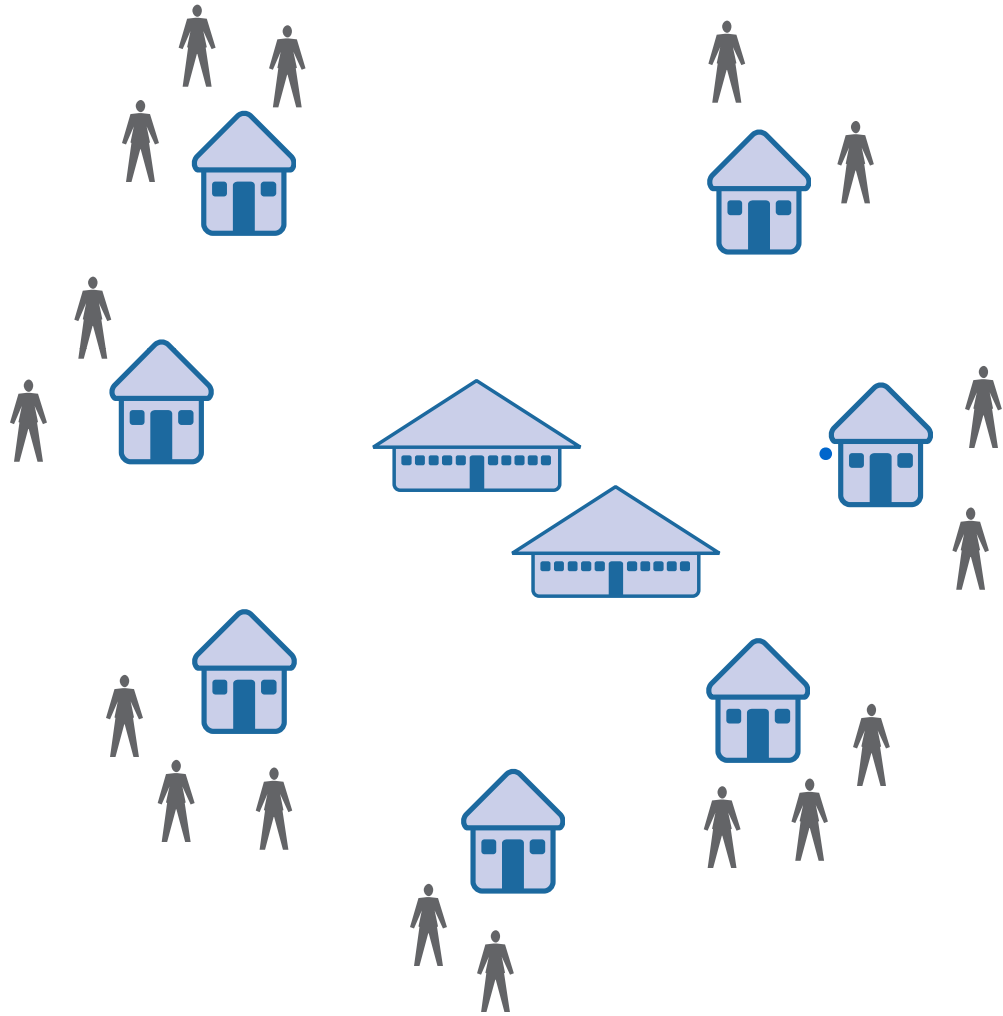
Web-scale management services





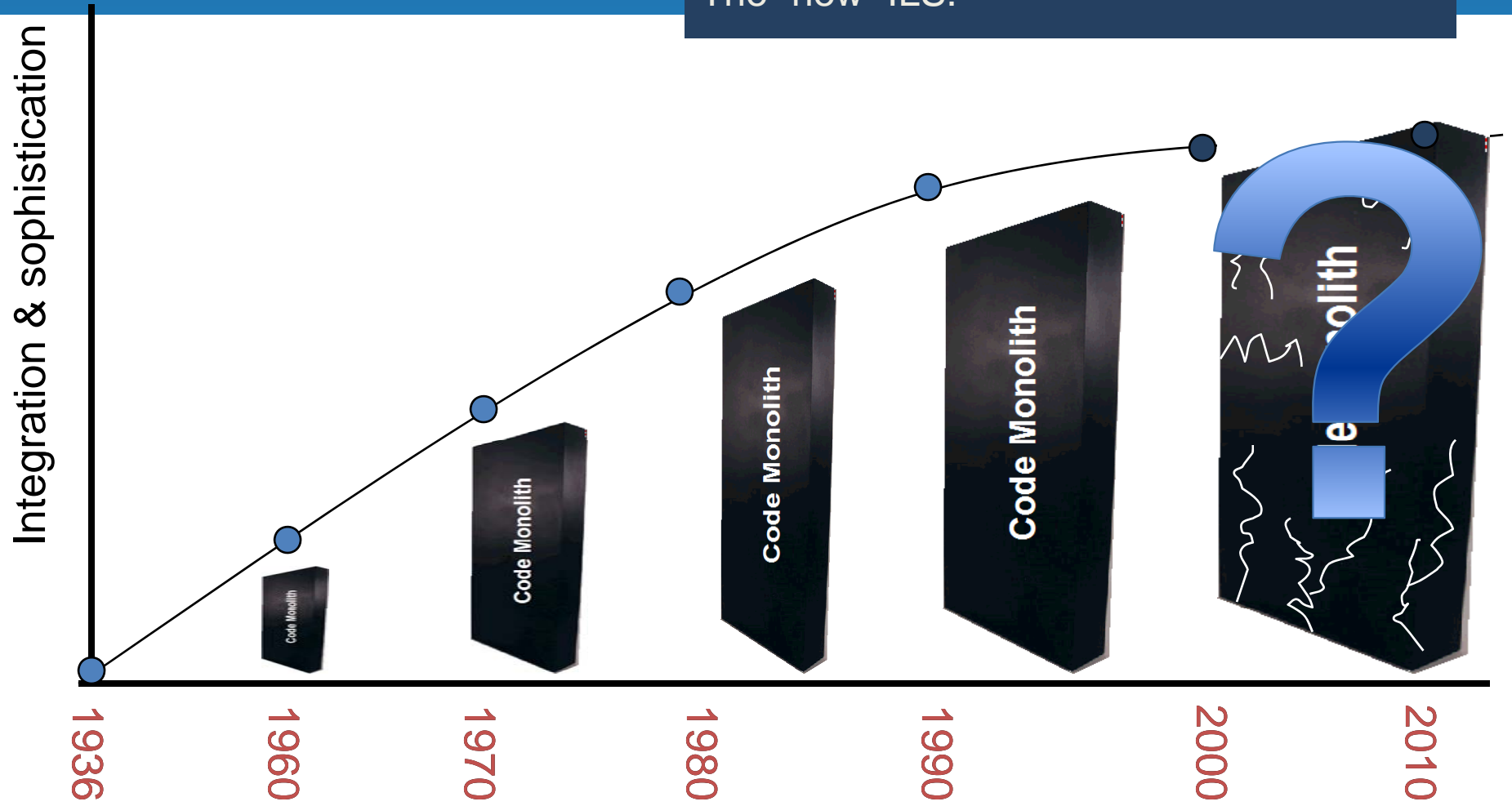
Chris Anderson

The web is all about scale, finding ways to attract the most users for centralized resources, spreading those costs over larger and larger audiences as the technology gets more and more capable.



Library Automation 1.0: 75 years in the making

Peril or Promise?: XML, Java, cloud computing, open source, web-scale.
The “new” ILS.

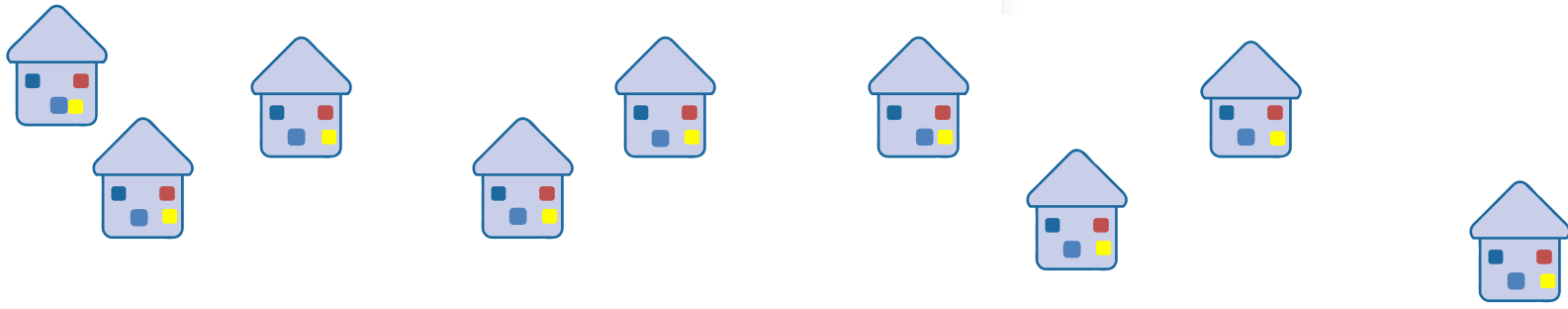


Resource sharing

Cataloging

Licensed journal literature

Consortial



Discover Australia's collections



Libraries Australia
Combined catalogues of Australian libraries

AskNow
Chat with a librarian



Picture Australia
Images of Australia

Music Australia
Australia's Music: Online, In Time



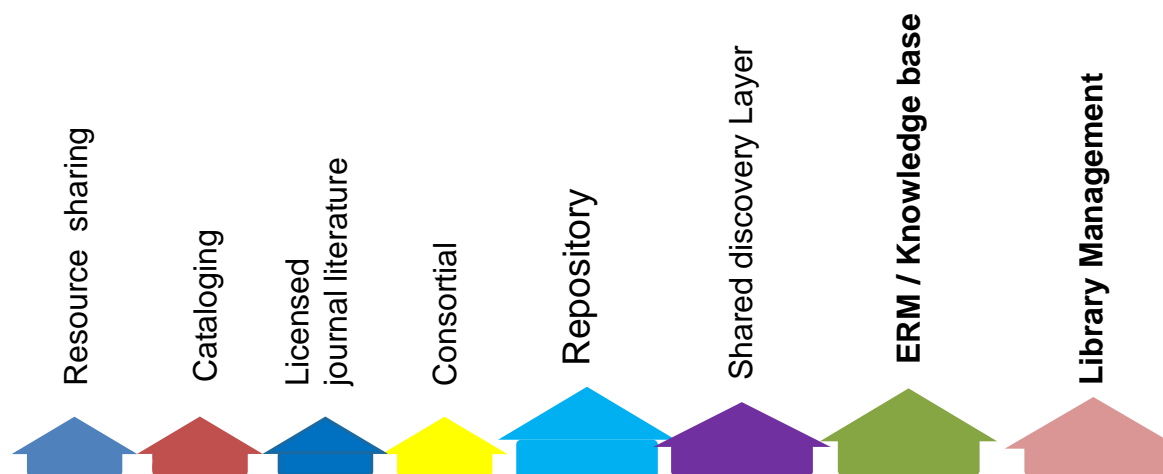
Australia Dancing
Australian dance resources directory

PANDORA
Australia's web archive



Australian Research Online
Search for research papers and theses

Libraries in a Web-scale landscape



Web-scale value proposition



On average, businesses spend **70%** of their time building and maintaining and worrying about infrastructure, and **30%** of their time focused on the ideas that propel their business forward.

Web-scale computing is helping to invert the **70/30** ratio, enabling you to spend your energy creating the difference that will make your business successful.

Amazon

Why OCLC and Web-scale management services?



- **Inability of current systems** to deal with changing environments
 - Libraries are required to add more and more local systems to enhance services and deal with the changing nature of library collections
- **Few alternatives** on the market
 - Many “new” solutions preserve legacy workflows and the network-free nature of stand-alone systems
 - Few opportunities to reduce the Total Cost of Ownership (TCO) of running local systems
- **OCLC remains uniquely positioned** to create real change
 - Leverage the power of the cooperative; starting with WorldCat
 - Provide a Web-scale solution with enough functionality and newly integrated workflows to allow libraries to work at the network level

“Library Web-scale ??”

If only circulation were like eBay...



What eBay set out to do (in a nutshell)

1. Simplify the features of a commercial transaction
2. Provide a platform that allows buyers and sellers to industrializes their workflows
3. Reap the benefits of new network effects created by highly concentrated focus of activity, i.e., lots of buyers and sellers

“Library Web-Scale”



Worldwide libraries and worldwide library transactions

Libraries Worldwide

1,212,383

Books: physical processing

15,517,196,010

Back-office transactions

61,879,349

Possible with a handful of commodity servers

OPAC searches

105,607,800,600

Data

0

Circulation

3

+ Adds/c



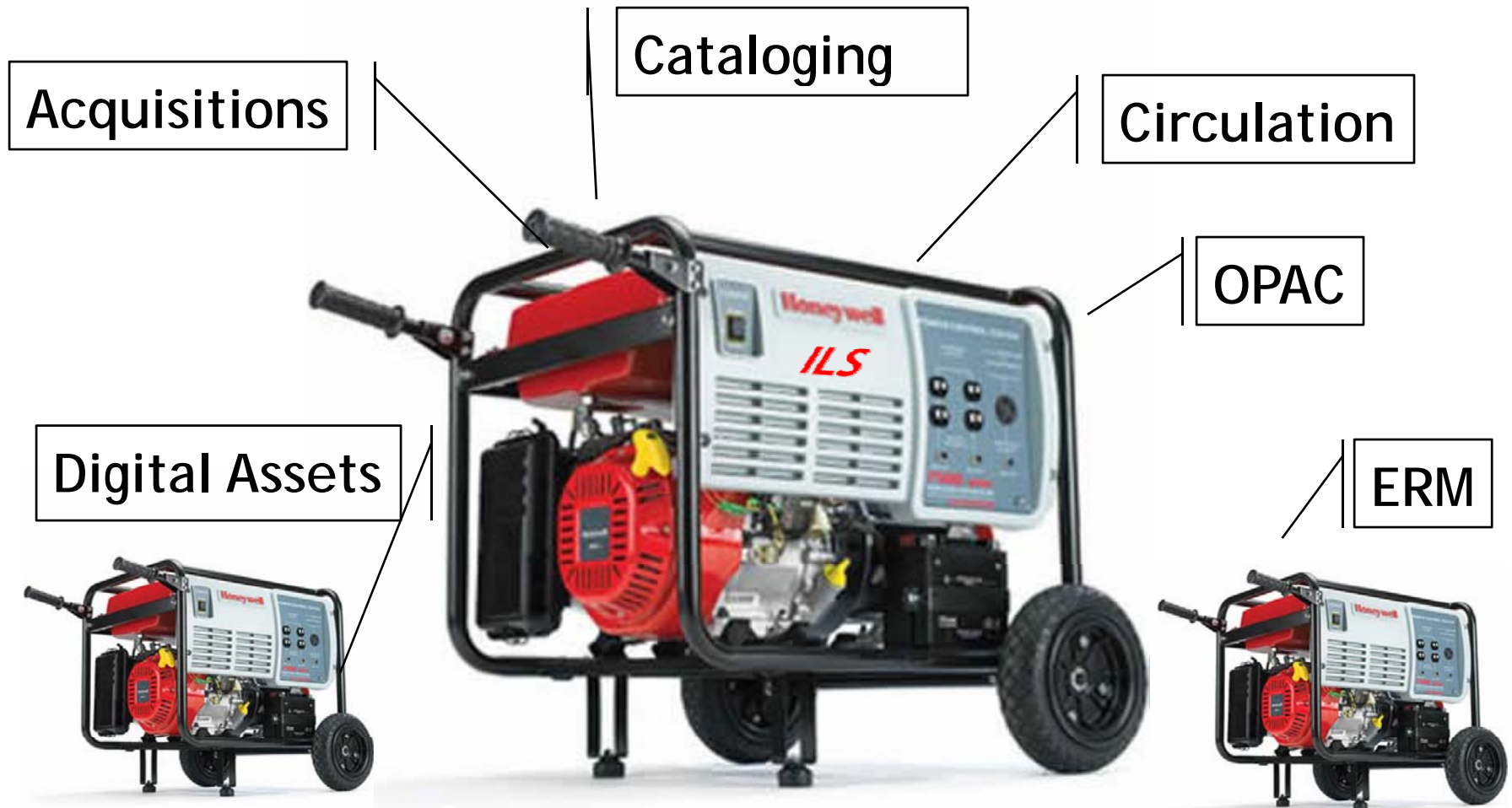
Annual Transactions

166,041,975,140

18,954,563 transactions / day

5,265 transactions / second

Powering 5000 transactions per second ??



More power

E-Journals

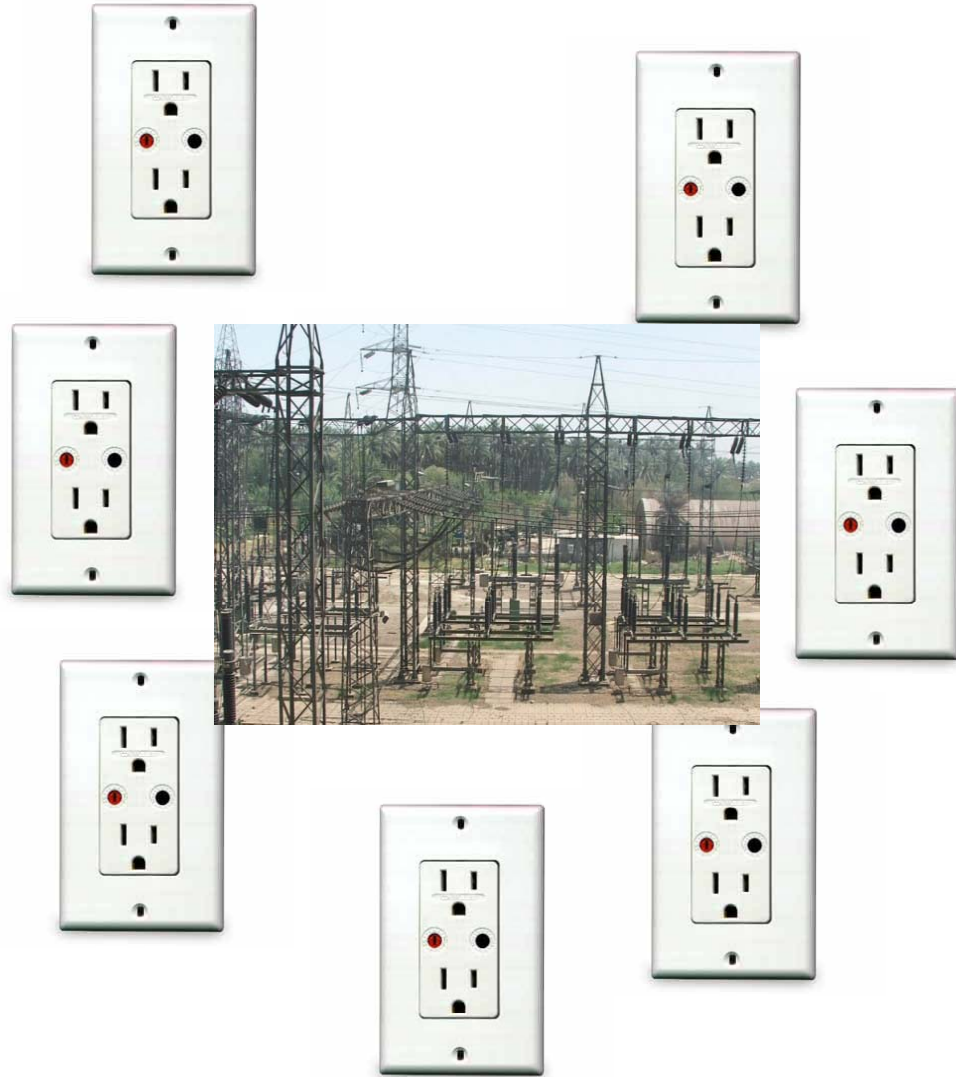
Databases

Google / Web

Social Networks

Metadata





- Create a compelling user environment
- Make WorldCat Grid Services a valued part of library operations
- Increase OCLC's global relevance and position of trust
- Create system-wide efficiencies in library management



Build Web-scale for libraries

Looking for efficiency in Management Workflows



Libraries have added more systems to support online public access catalogs, ERM Acquisitions, digital asset management, and access to licensed resources.

Libraries have made significant investments in computer resources and infrastructure.

Libraries have a fragmented presence on the Web, where they must compete with search engines and other information resources in meeting the information needs of people.



Evolving from local library systems

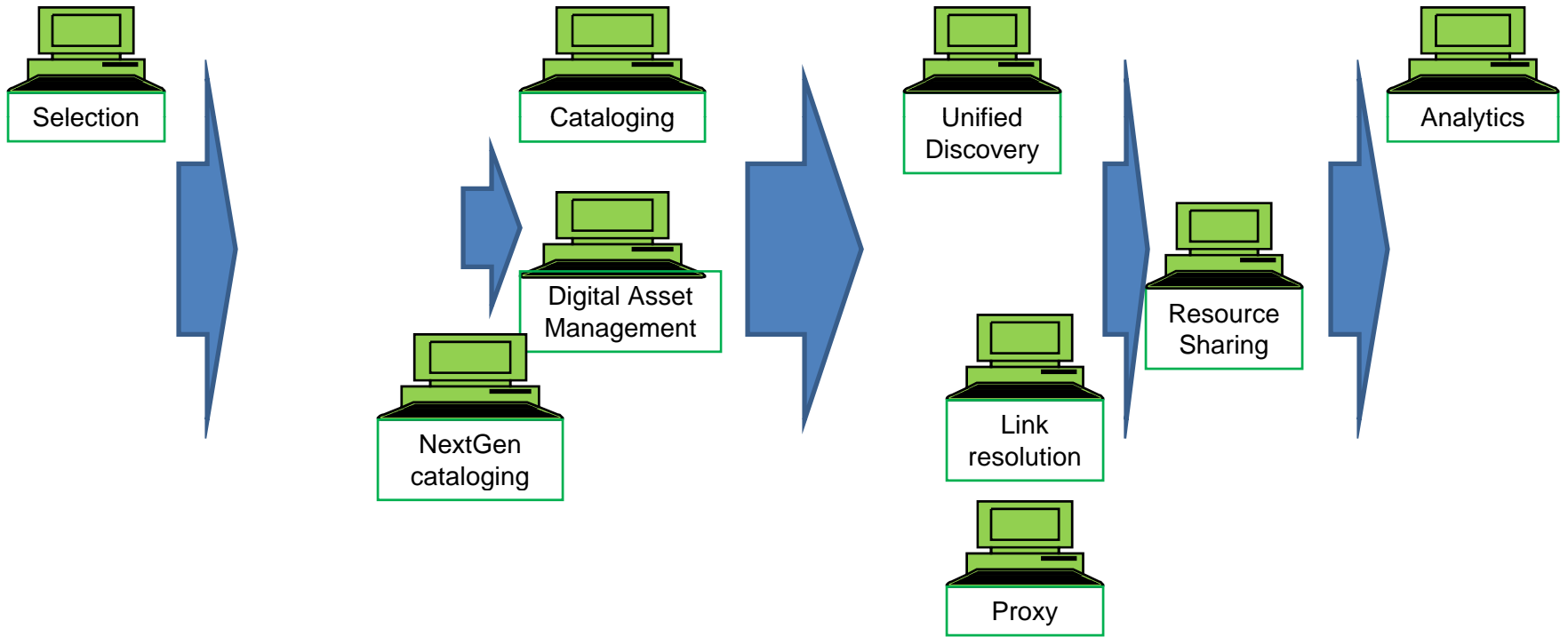
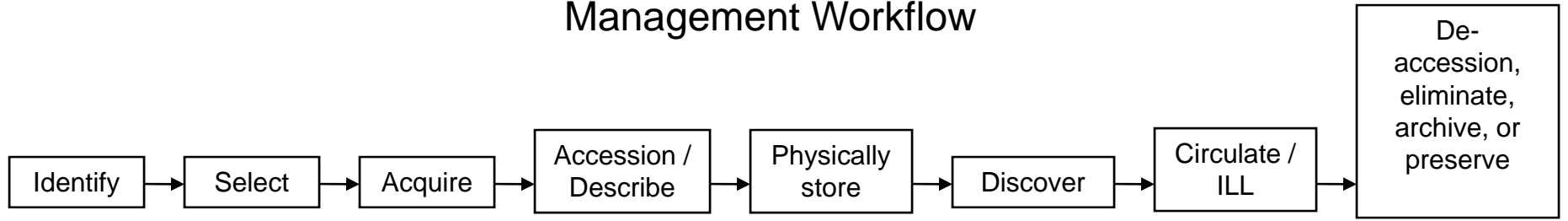


A web-scale strategy would provide libraries with computer hardware and software infrastructure on the Web, where they could use the workflow applications they need.

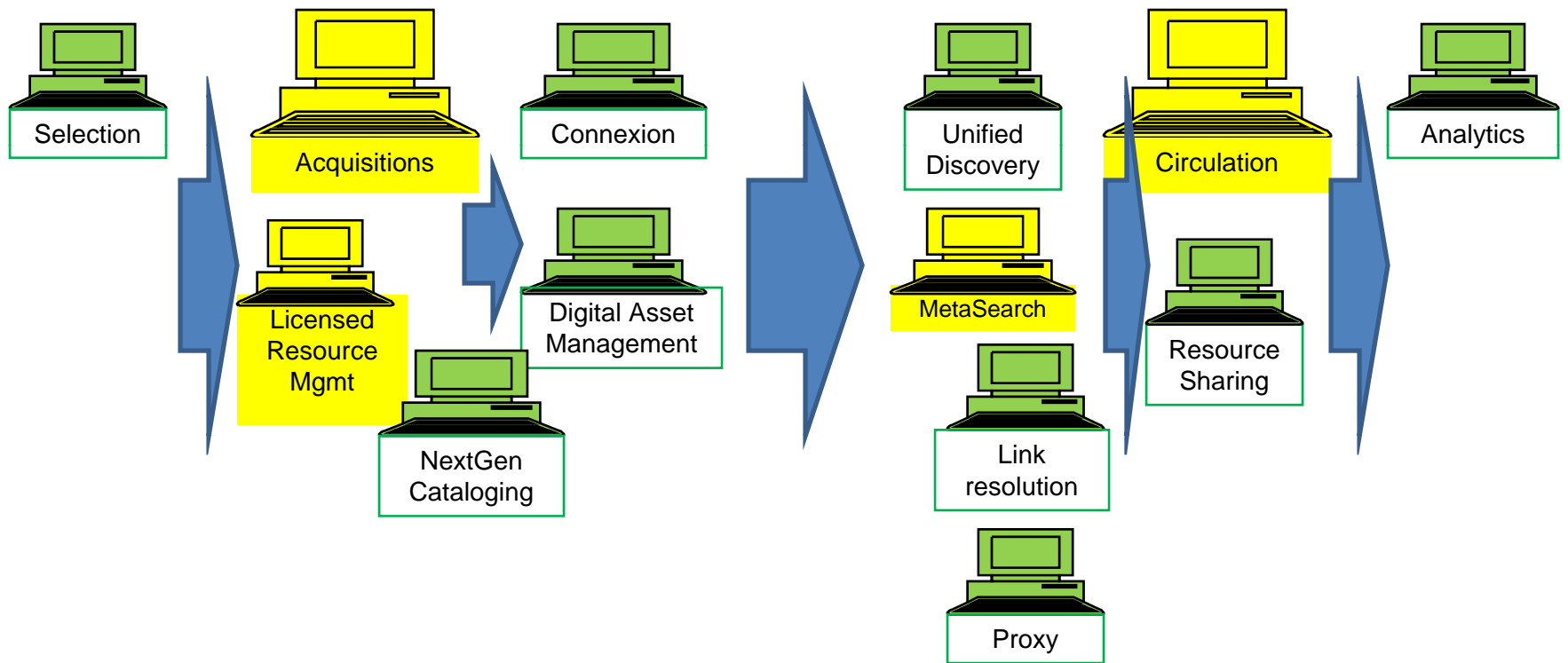
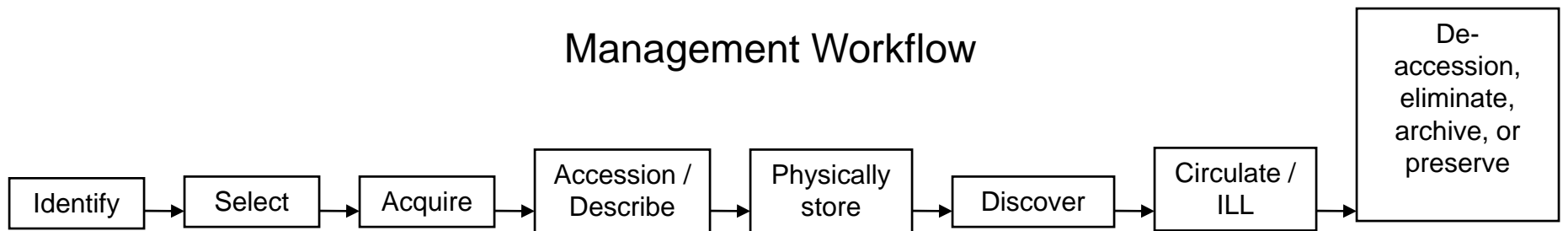
Rather than buying, implementing and maintaining software themselves, libraries could use an application without having to worry about the technology that supports the application, freeing libraries to focus on running their organizations and serving their users.

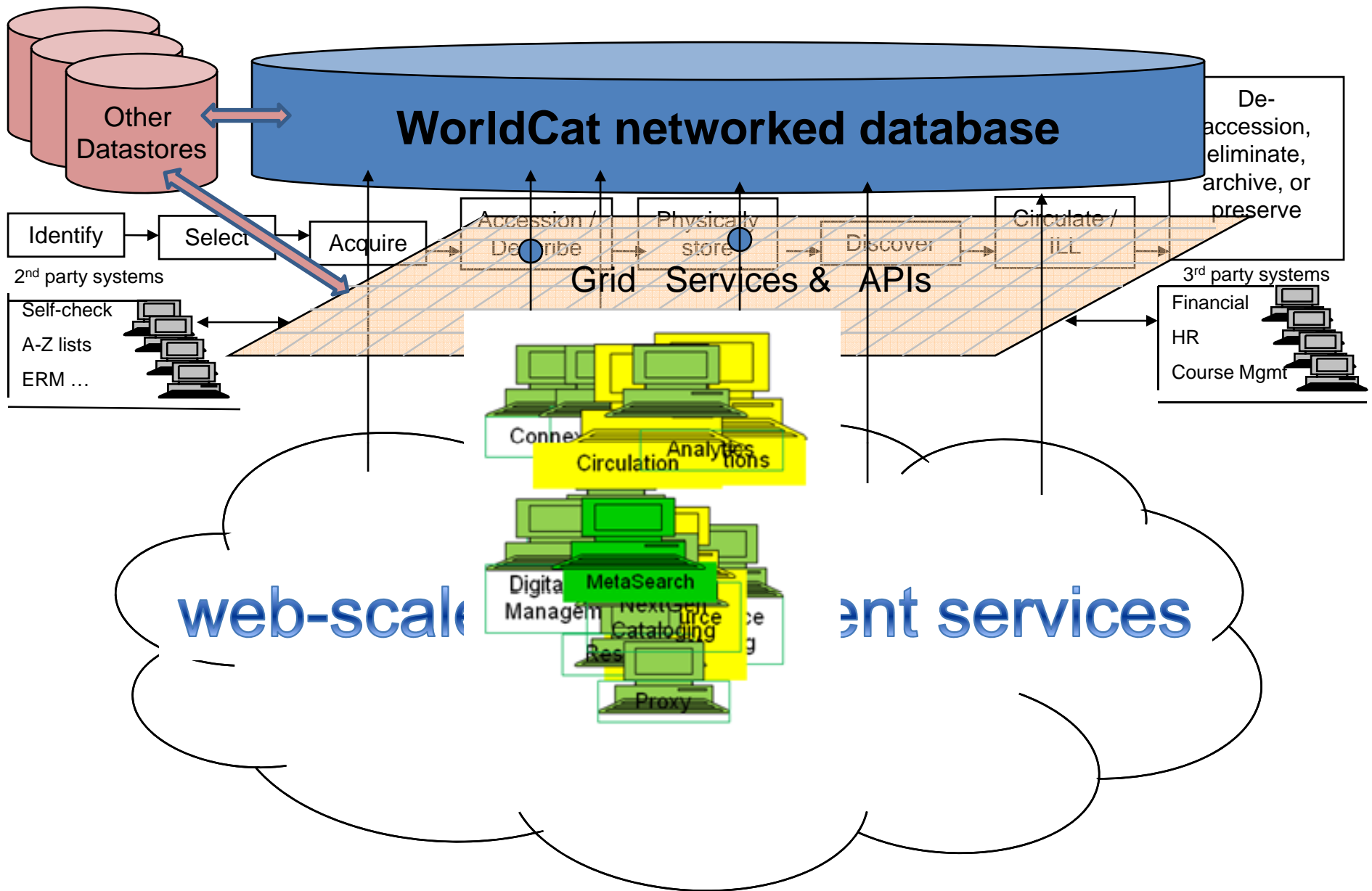


Management Workflow



Management Workflow





Building Web-scale Management Services



A truly “next-generation” of Library Management Services

- A Web-based platform for all basic library management functionality
- Reduced Total Cost of Ownership (TCO) and increased efficiency through a unified management platform for all types of materials, regardless of format or method of acquisition
- A flexible and customizable workflow platform
- Network effects by sharing applications and data between libraries
- Concentrated data registries and repositories
- A Service-Oriented Architecture (SOA) for interoperability with local environments and 3rd party business process systems (e.g., financial management, HR systems, and course management)

Circulation

- Patron Management
- Checkout / Renewal
- Checkin
- Holds
- Notification
- Billing
- Self-checkout
- Patron self-service
- Configuration / Administration
- Reports

Acquisitions

- Resource Discovery
- Vendor management
- Purchase Order, Invoice, and Subscription Management
- Budget / Fund Management
- Serials Management and Claims
- Inventory Management / De-accession
- Reports
- Licensed Resource Management
- Configuration / Administration
- Evaluation and negotiation workflows

Components (sea-change in blue)



License Management

- License Storage
- ILL Fulfilment services
- License Workflow & Negotiation
- SERU / ONIX-PL Support
- License Term Management
- COUNTER / Sushi Reporting

Workflow

- Workflow engine
- Task assignment
- Task management
- Configuration
- Standard Activities and Processes
- Graphical view and editor for library workflows

Service-Configuration

A Configuration User Interface and Database Framework that will enable library staff to configure OCLC products and services in one place and avoid duplication of the same data for different OCLC products.

Cooperative Intelligence

New and compelling collection management tools for libraries:

- Consortial fund management
- Collection management
- Coordinated collection development
- Usage statistics and Cost Per Use
- Real-time circulation data
- Collection shifting / offsite storage
- Recommender services (staff & patron)
- Order list comparisons
- Knowledgebase change tracking
- Collection profile sharing
- Enhanced resource information

More details: building from existing web-scale



- Built as a logical extension to the WorldCat Local public interface—putting the pieces back together again
- Connexion is the cataloging client for web-scale management services, but....
- Item-level metatdata maintenance, a new multi-format acquisitions service with increasing integration of Next Generation Cataloging and WorldCat Selection begins the process of creating a truly next generation metadata management component

Next steps: Strategy and Tactics



- **Test/pilot sites to be named soon**
 - Academic (2) and public (2+) to start
- **Library Advisory Council (“Strategy”)**
 - Strategic direction, reality checks, and moral support
- **Library Steering Committees (“Tactics”)**
 - Access Services, Technical Services, and Management Workflow experts

Next steps: Brass Tacks



- **Agile methodology**
 - develop, test, pilot...develop, test, pilot...develop, test, pilot
- **Site Testing, Pilot, and Roll-out**
 - Service Configuration already available for WorldCat Local and WorldCat Local "quick start"
 - Circulation component testing begins in the U.S. this month (!!); pilot release in the fall; continued test/pilot through mid-year 2010
 - Print and licensed acquisitions, Workflow, and License Manager development well underway; test and pilot in functional phases beginning in 2010
- **Internationalisation and Localisation**
 - Region, country, and sector analysis is ongoing

Questions/comments about Web-scale management services

- Hectic Pace blog
<http://community.oclc.org/hecticpace/>

OCLC Product Works

- <http://www.oclc.org/productworks/>

WorldCat Local “quick start” Web site

- <http://www.oclc.org/worldcatlocal/quickstart>

Register for ongoing email updates about WorldCat services

- <https://www.oclc.org/email/subscribe.htm>

Thank you!
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