

LibX - an Open Source, Community Platform for Delivering Library Services

Access 2008

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Virginia Tech

Where it all began...

- Motivation
 - Users are increasingly bypassing library when doing research
- Idea: a “library tool”
 - Put the library back in the picture!
- A “virtual librarian” that guides users to library resources while they use the Web
 - integrates access to library resources into the users’ “webflow”
 - no matter which page a user visits (\Rightarrow needs client-side presence!)

LibX Features

- Toolbar and right-click context menu
- Adaptive and user-configurable context menus
- OpenURL support
- Magic Button (Google Scholar support)
- Web Localization via Embedded Cues
- Autolinking
- Off-campus access via EZProxy or WAM
- Support for CiteULike
- Support for COinS
- Support for xISBN
- Show/Hide Hotkey

LibX Features

The screenshot shows a Mozilla Firefox browser window with the title "HDPV - Mozilla Firefox". The address bar contains the URL: <http://portal.acm.org/citation.cfm?id=1409720.1409729&coll=Portal&dl=GUIDE&CFID=47698898&CFTOKEN>. The page features the ACM Portal logo and navigation links like "Subscribe (Full Service)", "Register (Limited Service, Free)", and "Login". A search bar is present with the text "Search: The ACM Digital Library The Guide". The main content area displays the title "HDPV: interactive, faithful, in-vivo runtime state visualization for C/C++ and Java" and provides details about the full text (390 KB PDF), source (Software Visualization archive), and authors (Jaishankar Sundararaman and Godmar Back). A table of contents is shown at the bottom, with the first item being "1 Data binding in general".

LibX Timeline

- 2005
 - Released LibX Virginia Tech as a Firefox extension
 - Offered to share LibX with interested libraries

Edition Builder

Motivation

- Librarians responsible for customizing LibX for their institution
 - Customized version of LibX = **LibX edition**
- Manually configuring LibX requires knowledge about:
 - Underlying LibX implementation
 - XML syntax
 - Running scripts
 - Many different OPAC settings (> 140)
- Developers of LibX manually created 150 editions
 - Demand was more than supply!

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LibX Edition Builder

- Interactive Web application that allows the creation and maintenance of LibX editions
 - Provides step-by-step instruction to librarians to customize LibX
 - Outputs ready-made, customized LibX edition
 - Hosting environment for LibX configurations and downloads

EDITION BUILDER DEMO

Demo Backup Slide

LibX Edition Builder

LibX - a brows

All Editions My Editions Announcements

Search or browse public LibX editions.
 Search by name or description:

Build a new LibX edition from scratch.
 You can also go ahead and build your own from scratch.

Id	Version	Date	Edition Description
C7C212BD	1.2.2	2007-11-06	Academie Louvain
appstate	1.2.1	2007-09-27	Appalachian State University Libraries Edition
asu	1.1	2006-07-27	Arizona State University Libraries Edition
4E2651AE	1.2.1	2007-12-12	Arkansas State University Edition
fhrcr.org	1.1	2007-01-16	Arnold Library

All Editions My Editions

Email:
 Password:

Why should I register?

It's okay to contact me for a planned user study.

Select an edition

Id	Description
40D32F4C	KG Copy of Virginia Tech Editon
8ABD4880	KG personal edition

3:41:50 PM Feb 11, 2008 Edition Builder Ready.

All Editions My Editions Description Shortcuts

Enter brief descriptions for your edition:

- Edition Name, such as "LibX VT"
- Short Name, such as "LibX VT"
- Short Name, such as "LibX VT"

This name is displayed in the edition's logo. Pick a short name for your project.

All Editions My Editions Description Shortcuts Catalogs & Databases OpenURL Resolvers Proxy Access Options File Management Announcements

Configure the catalogs and databases that are included in your edition. LibX can try to auto-detect your catalog. It will also cross-check other editions to see if a particular catalog has already been configured. To change the order in which catalogs appear in your edition, drag and drop each catalog's entry in the desired position.

Auto Detection: enter the [host name](#) of the machine that runs your library catalog, or enter a [URL](#) to a page that contains a search form. For instance, try addison.vt.edu, worldcat.org, www.citeulike.org, pubmed.gov, hubmed.org, or complete URLs such as http://en.wikipedia.org/wiki/Main_Page.

Enter URL:

OCCL reports that your OPAC may be located at fiu.catalog.fcla.edu.
 probing fiu.catalog.fcla.edu (1 resource found)
 Found Endeca catalog 'Florida International University (FIU) - Library Catalog' at <http://fiu.catalog.fcla.edu>

Florida International University (FIU) *(Bookmarklet)*
<http://fiu.catalog.fcla.edu/fi.jsp?N=27&Nty=1&Ntt=%term1&Ntk=%SWITCH{%...>

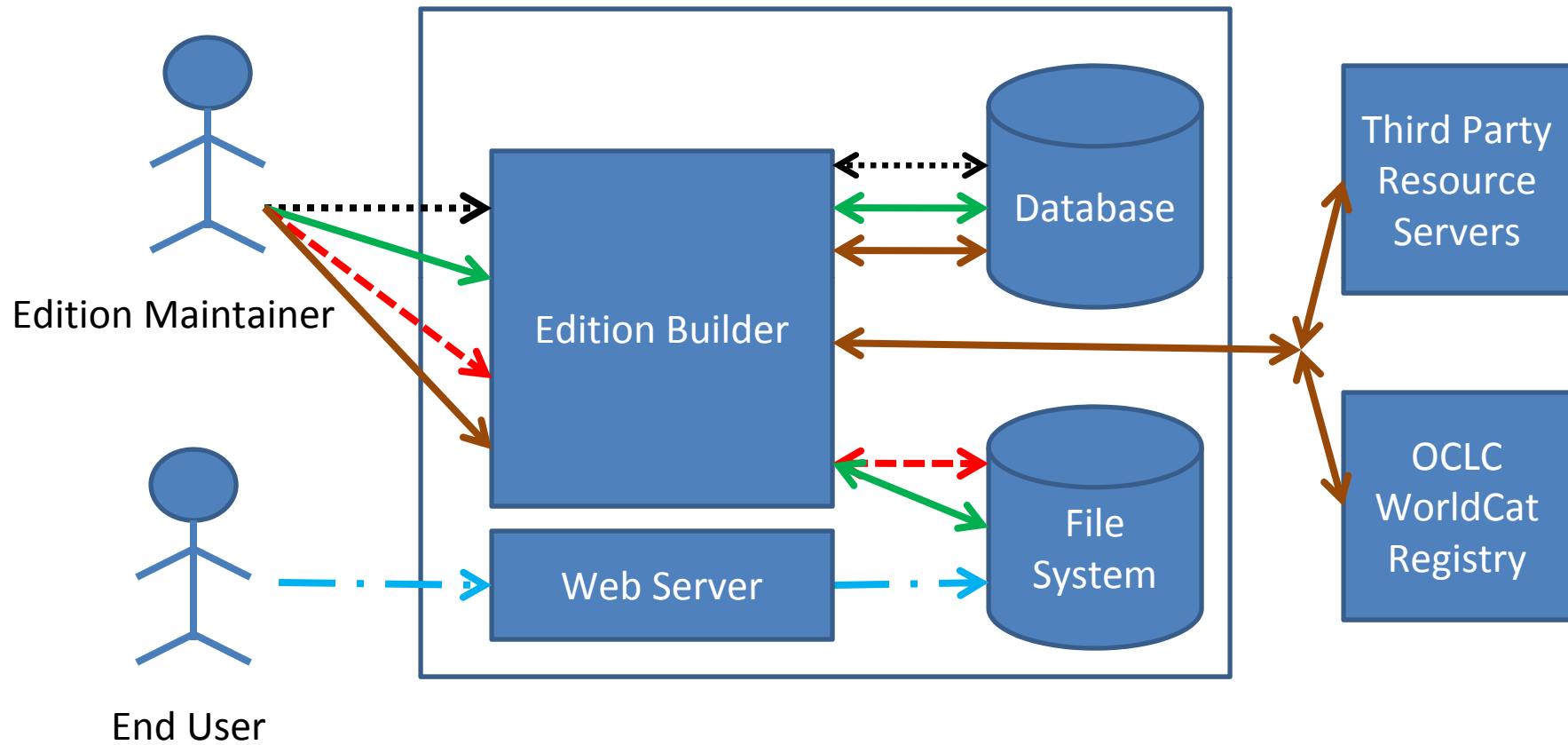
Required Settings Optional Settings Xisbn Settings

Required Settings	Value
<input checked="" type="checkbox"/> Bookmarklet Name	Florida International University (FIU)
<input checked="" type="checkbox"/> Bookmarklet URL Template	http://fiu.catalog.fcla.edu/fi.jsp?N=27&Nty=1&Ntt=%term1&Ntk=%SWITCH{%...
<input checked="" type="checkbox"/> Bookmarklet Search Options	Keyword, Title, Journal Title, Author, Subject, ISBN/ISSN, Call Number <input type="button" value="Change"/>

Edition Builder Internals

- Uses ZK (www.zkoss.org)
 - Server-centric Rich Internet Application (RIA) Framework
 - 100% Java servlet-based environment, minimal use of JavaScript
- Runs on server side, but look and feel is comparable to desktop applications
 - No state kept on client side

Architecture



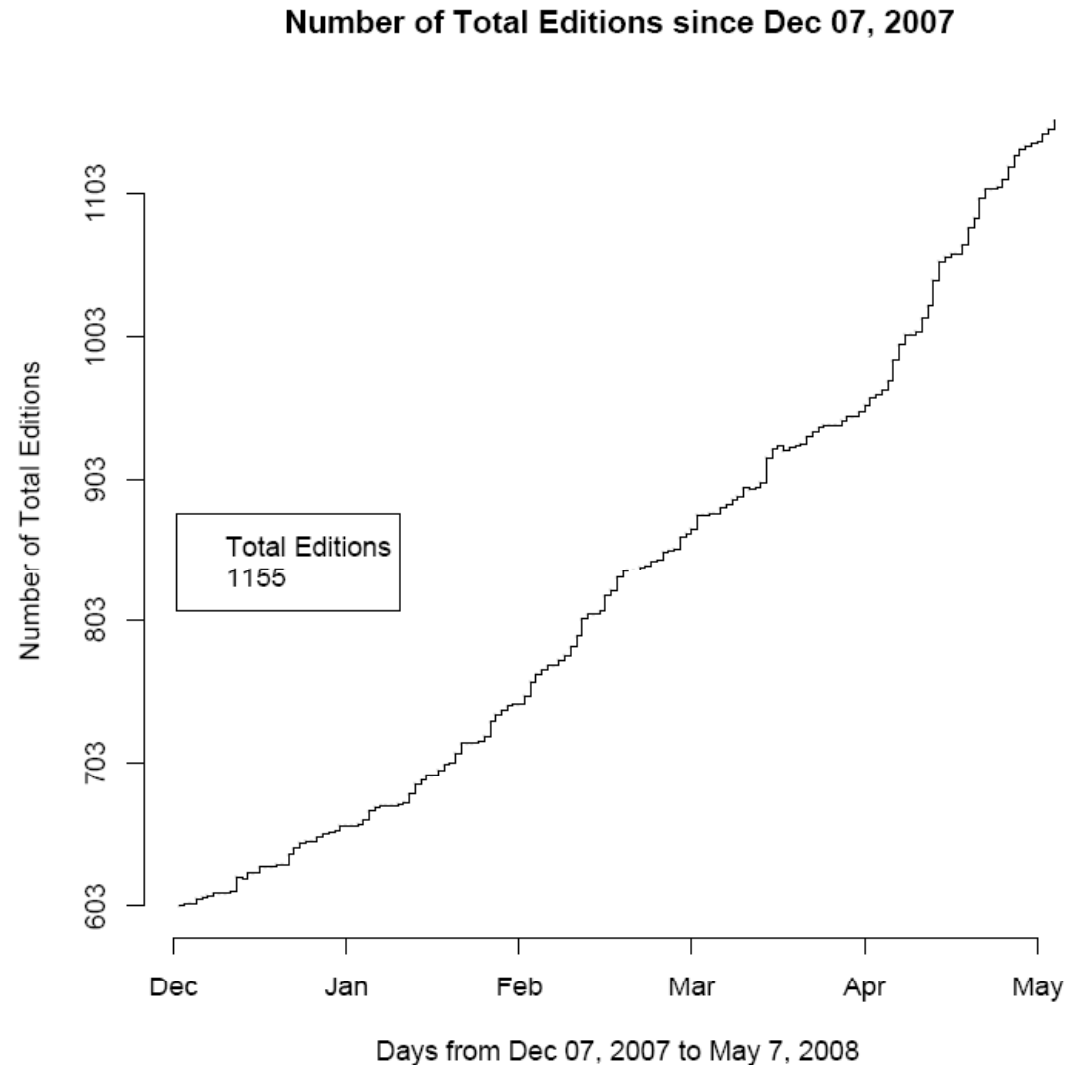
Login	Edition and Revision Management	Changes to Configuration	Auto-discovery	Download customized LibX

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- 2007
 - Released Edition Builder

Log Data – Adoption of Edition Builder

- 1155 total editions present by May 2008
- As of Oct 2008, 1600 total editions
 - 460 were made public
- New editions are being made public at a rate of ~20/month



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 - Released Edition Builder
- 2008
 - Edition Builder Study

EDITION BUILDER STUDY

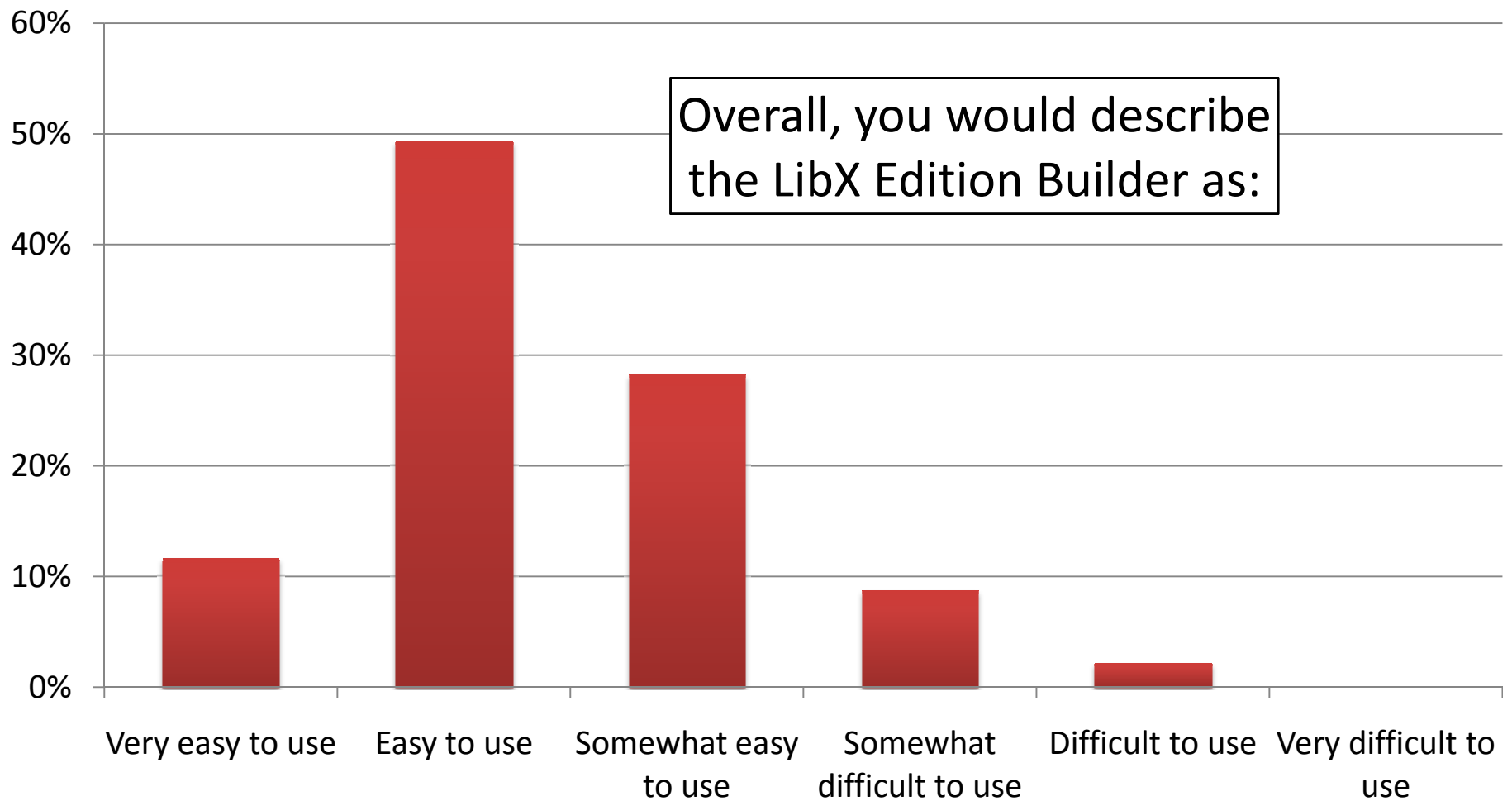
LibX Edition Builder Study Facts

- Log-based usability evaluation
 - Interactions with Edition Builder logged
- User Survey
 - Contacted edition maintainers by email
 - 139 participants
 - June 20, 2008 – July 14, 2008
 - 33 questions

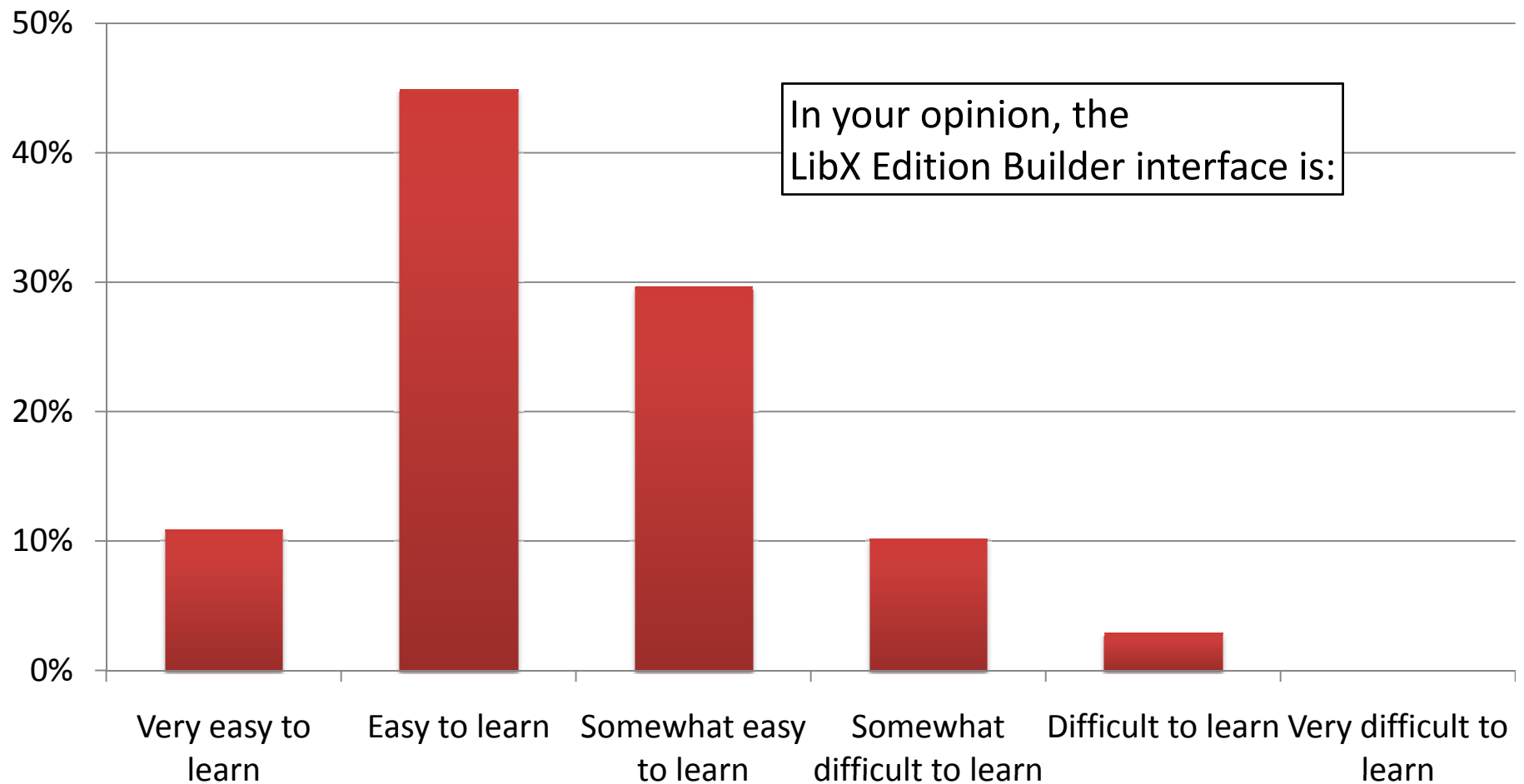
Key Study Goals

- Is the interface easy to learn and use?
- How successful are edition maintainers in creating LibX editions?
- Is the auto-discovery effective?

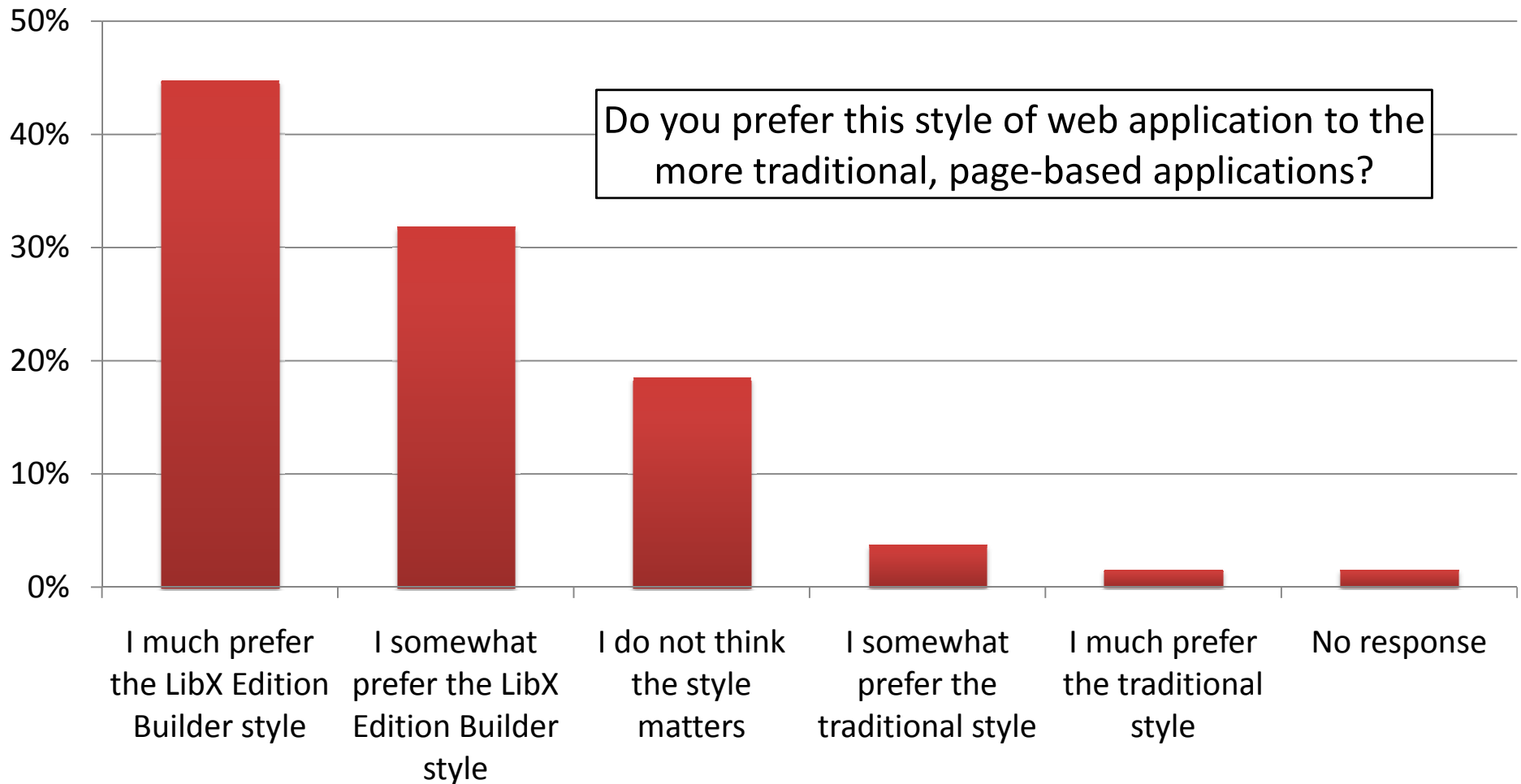
Overall Perceived Ease of Use



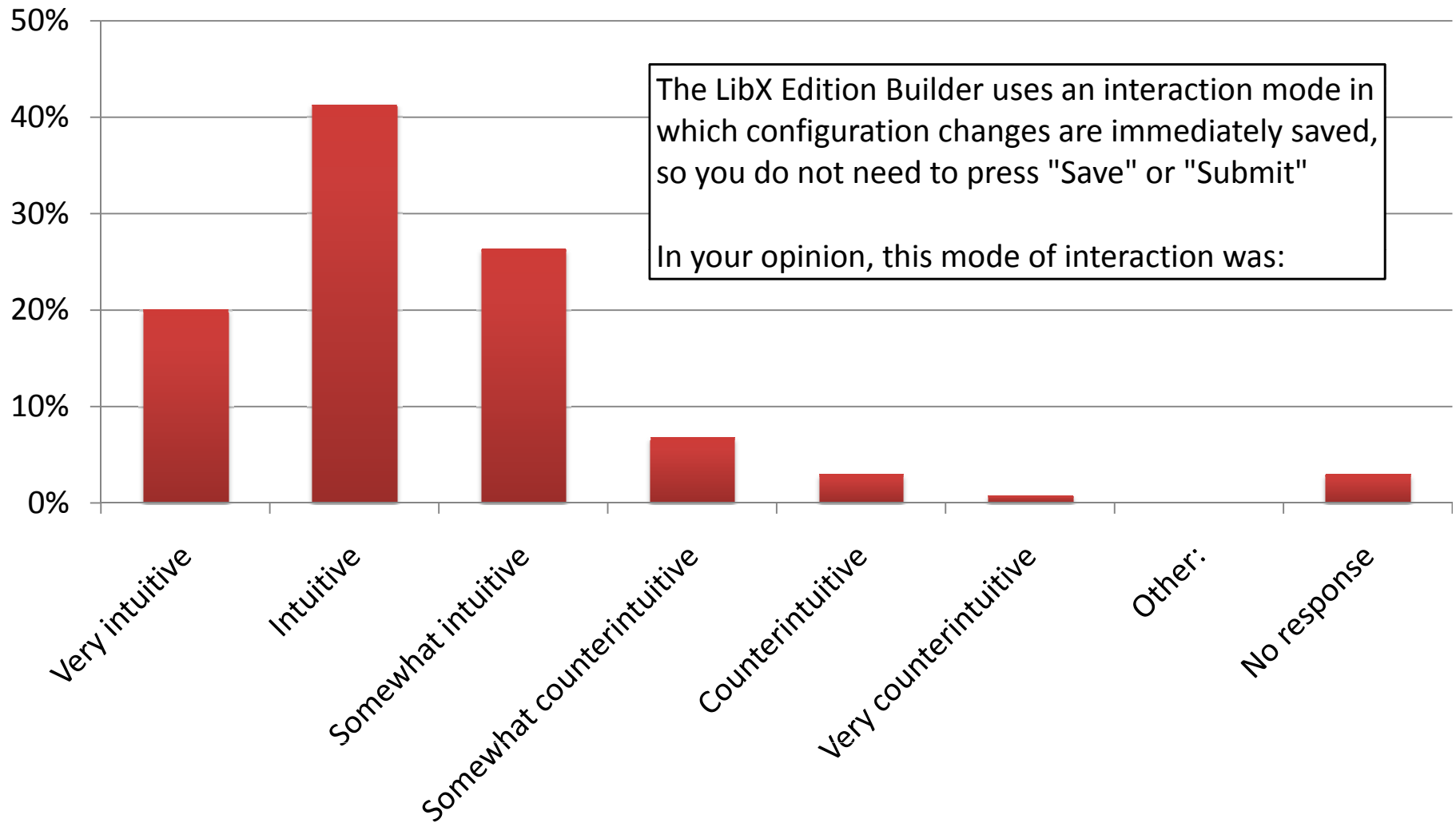
Perceived Learning Curve



Style of Application

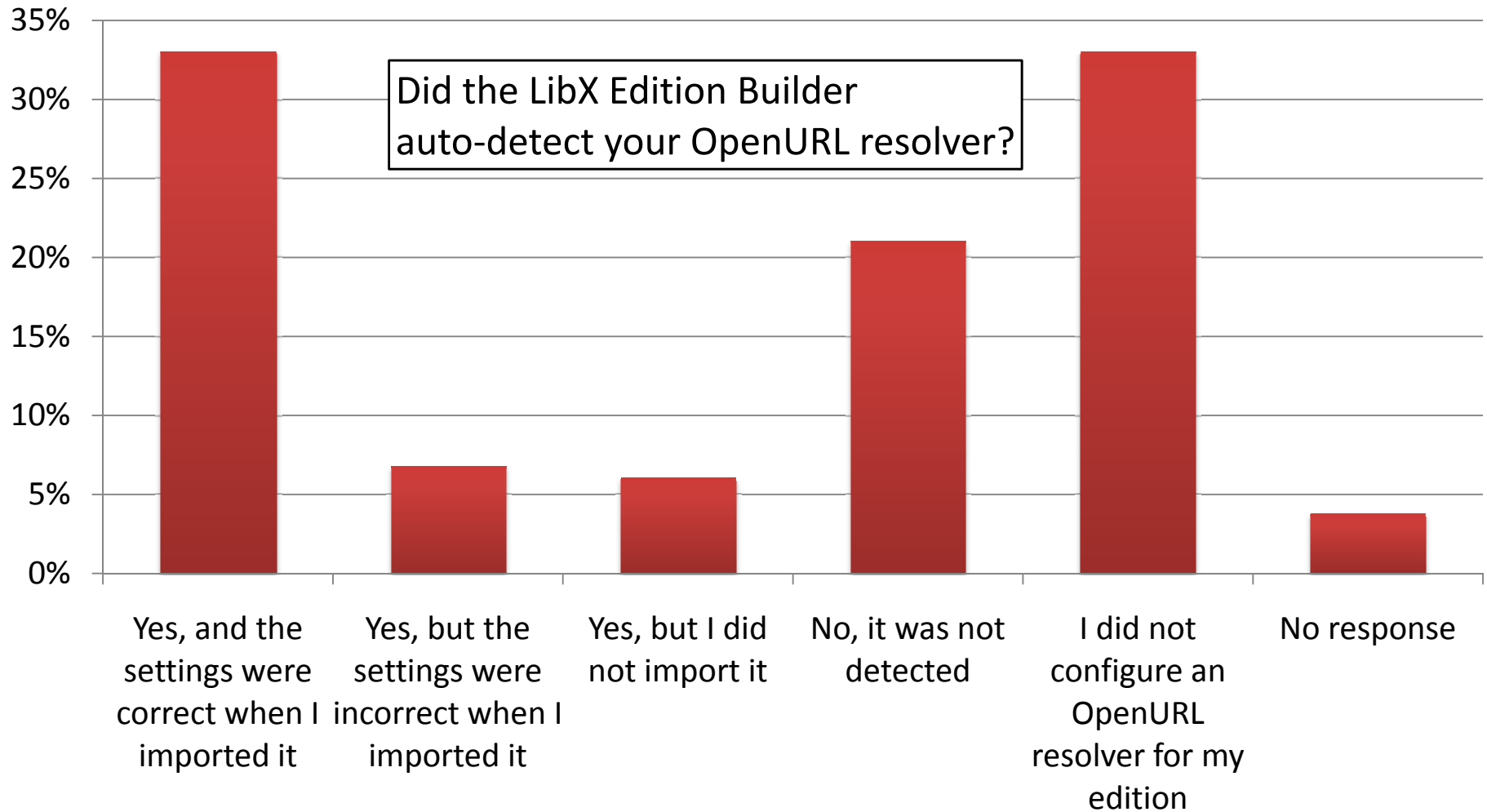


Saving of Changes



AUTODETECTION

Autodetection of OpenURL Resolver



Catalog Auto-Detection

Auto-detection based on

Direct scraping of HTML forms

OpenSearch descriptions
(where advertised)

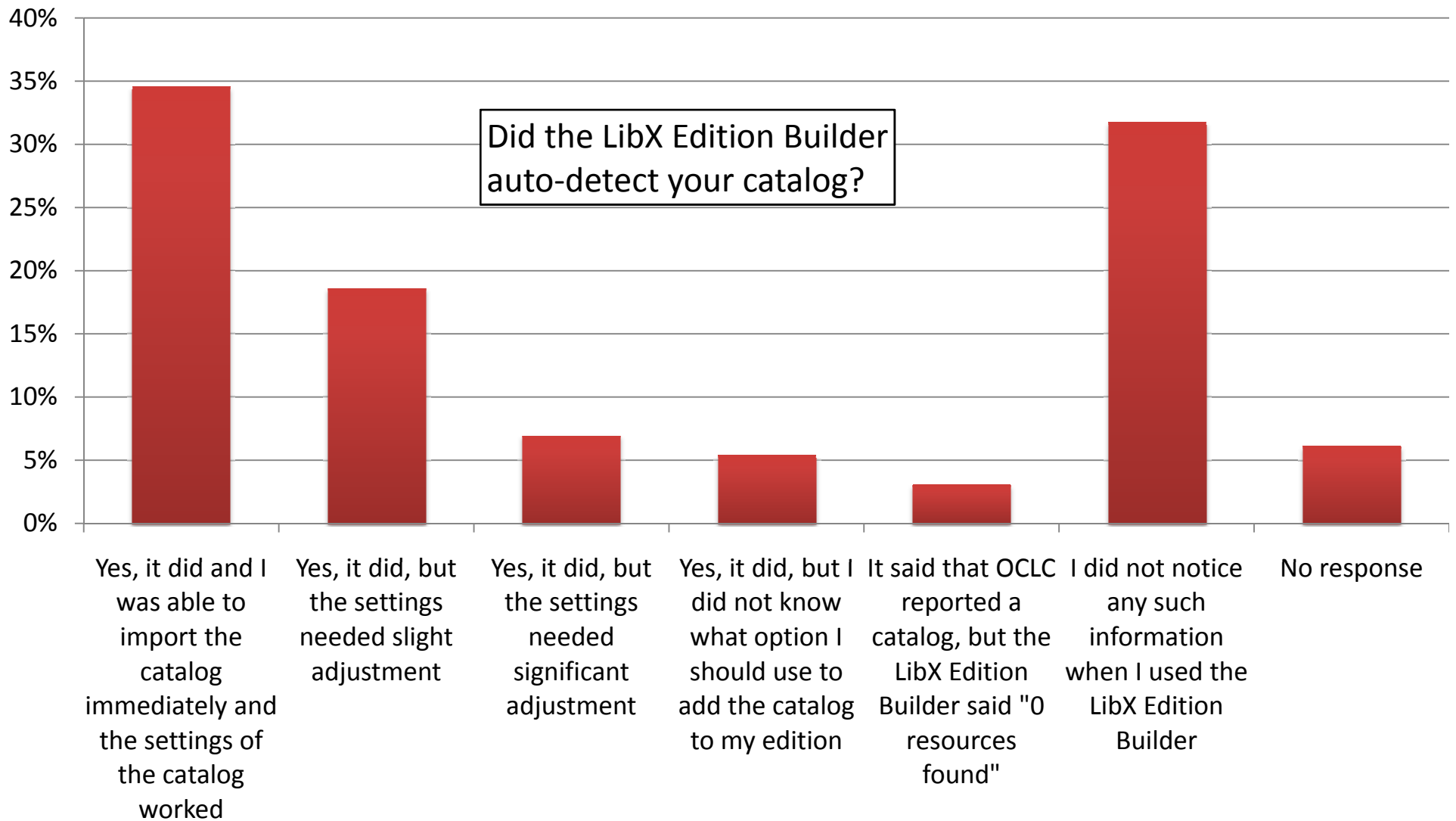
Auto Detection: enter the [host name](#) of the machine that runs your library catalog, or enter a [URL](#) to a page that contains a search form. For instance, try [addison.vt.edu](#), [worldcat.org](#), [www.citeulike.org](#), [pubmed.gov](#), [hubmed.org](#), or complete URLs such as [http://en.wikipedia.org/wiki/Main_Page](#).

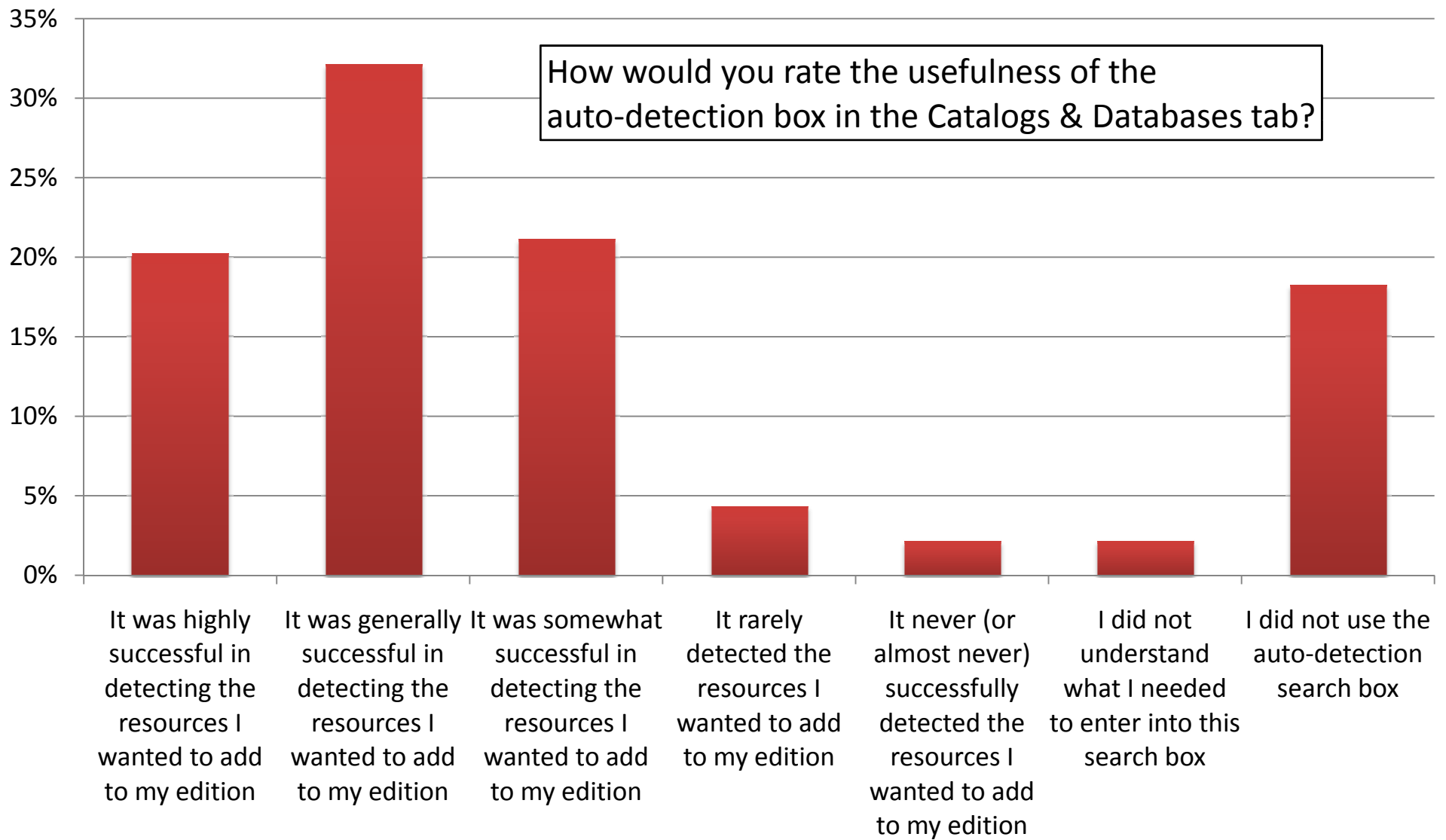
Enter URL:

OCLC reports that your OPAC may be located at
addison.vt.edu.

probing addison.vt.edu (7 resources found)

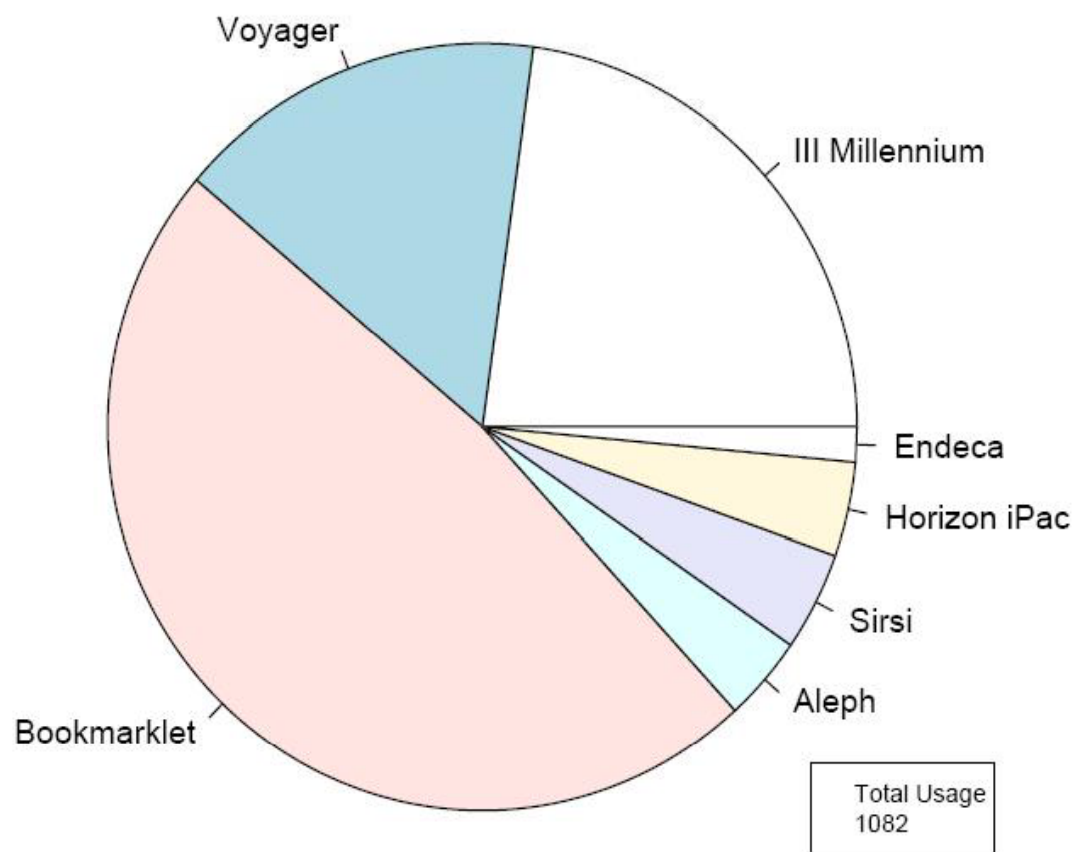
- | | |
|--|---------------------|
| Found catalog 'Addison' in database (from edition 'Virginia Tech Edition'/vt) | Add |
| Found III Millennium catalog 'Addison: Search' at http://addison.vt.edu | Add |
| Found Bookmarklet catalog 'search.serialssolutions.com with Search' at http://addison.vt.edu | Add |
| Found OpenSearchDescription ' Keyword Search Addison ' (Click to test) | Add |
| Found OpenSearchDescription ' Author Search Addison ' (Click to test) | Add |
| Found OpenSearchDescription ' Title Search Addison ' (Click to test) | Add |
| Found OpenSearchDescription ' Journal Title Search Addison ' (Click to test) | Add |





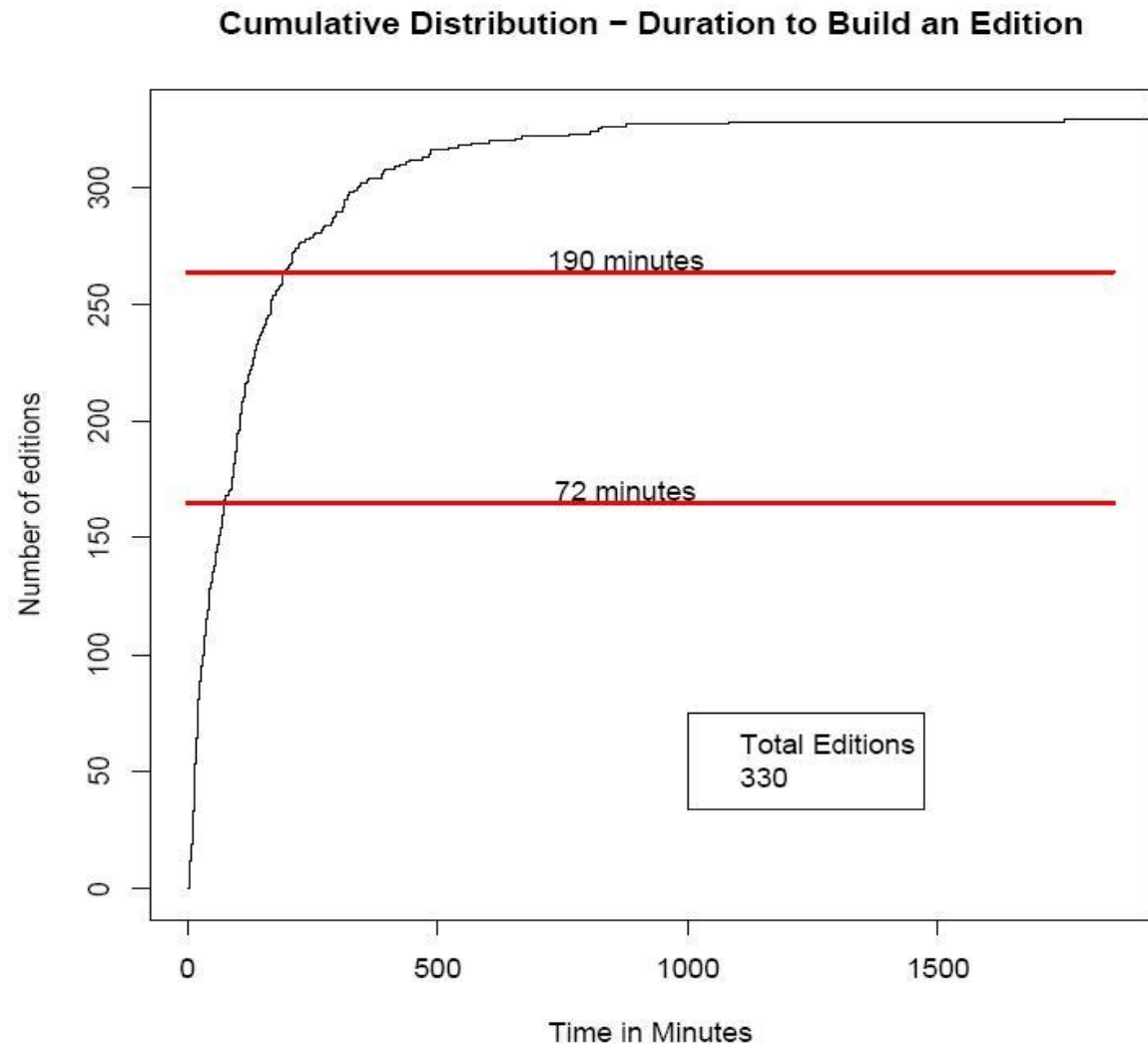
Log Data Results

Distribution of OPACS detected by Auto Detection



Log Data Results (cont'd)

- 50% editions built in 72 minutes or less
- 80% editions built in 190 minutes or less



Study Findings

- The LibX Edition Builder
 - is easy to use and learn
 - auto-detection is effective at configuring resources
- Created a community
- Open source spirit
 - Anybody can create, share, publish, copy and adapt editions

LIBX 2.0

Motivation

- Libraries are creating new, digital services and content
- Technology
 - Service-oriented architectures, web services interfaces
 - Support mashups; provide HTML widgets
- Librarians, educators, and users create
 - Online tutorials, subject guides, visualizations
 - Social OPACs: tagging, reviews, recommender services
- How can we provide those services at the point of need?

LIBX 1.5 DEMOS

Demonstrations

- Enhanced COinS service
 - Link 360 XML interface
- Catalog searches from Google
- Holdings + availability in Amazon
- OCLC Identities

Demo 1: Enhanced COinS Handling

- [On-line estimation of hidden Markov model parameters based on the Kullback-Leibler information measure](#)

Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on], Vol. 41, No. 8. (1993), pp. 2557-2573.

by V [Krishnamurthy](#), JB [Moore](#)

posted to [p-fb hmm](#) by [jford](#) on 2008-10-02 02:10:31 as ★★ [along with 3 people and 2 groups](#)



LibX Standard COinS Processing

-  [On-line estimation of hidden Markov model parameters based on the Kullback-Leibler information measure](#)

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LibX + Link/360 Integration

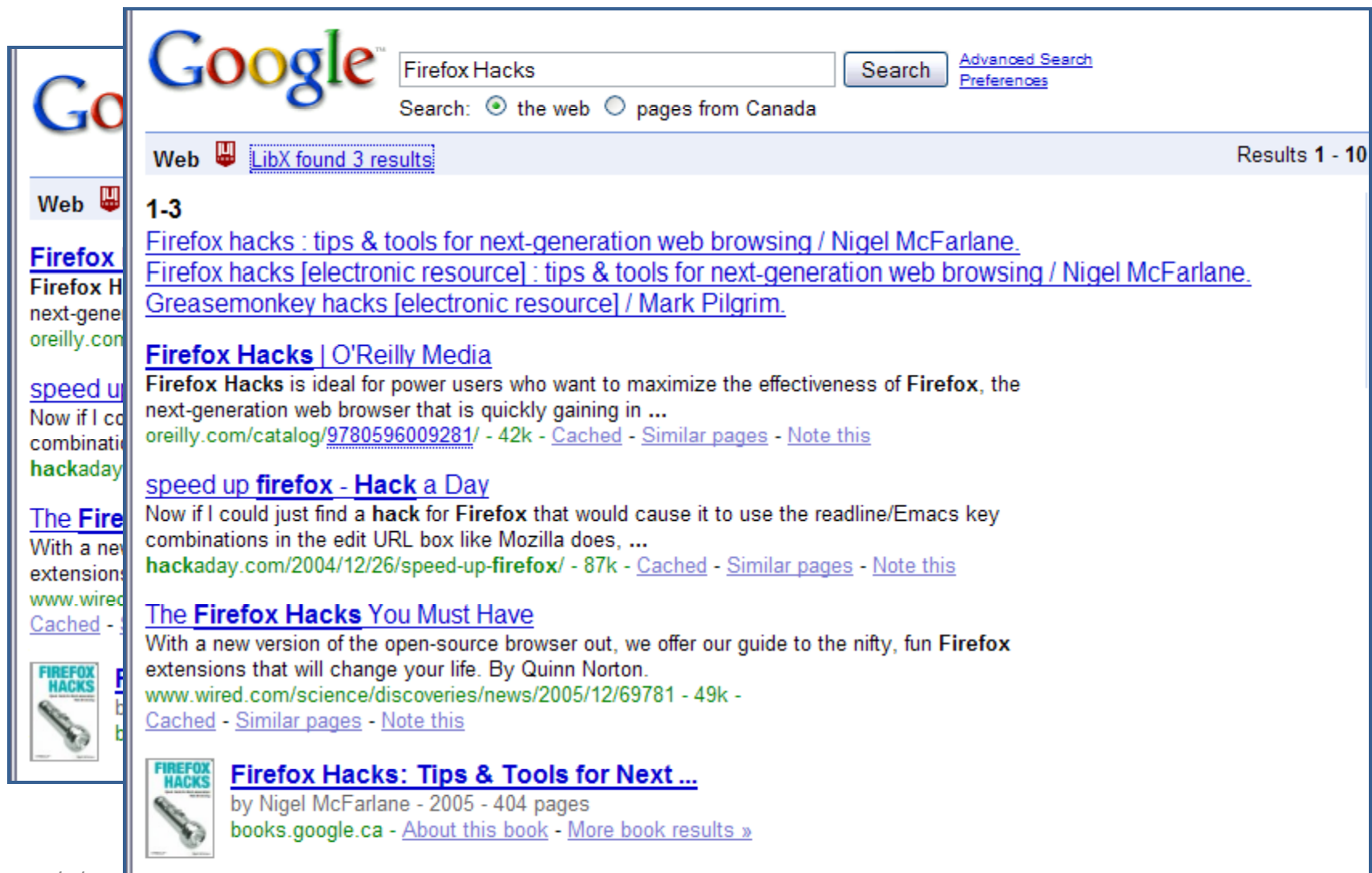
-  [\(VT Subscription via IEEE/IET Electronic Library \(IEL\)\) On-line estimation of hidden Markov model parameters based on the Kullback-Leibler information measure](#)

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Demo 2: Addison in Google



The screenshot shows a Google search interface. The search bar contains the text "Firefox Hacks". To the right of the search bar are links for "Advanced Search" and "Preferences". Below the search bar, there are radio buttons for "the web" (selected) and "pages from Canada".

The search results are displayed under the heading "Web" and "LibX found 3 results". The results are numbered "1-3".

1-3
[Firefox hacks : tips & tools for next-generation web browsing / Nigel McFarlane.](#)
[Firefox hacks \[electronic resource\] : tips & tools for next-generation web browsing / Nigel McFarlane.](#)
[Greasemonkey hacks \[electronic resource\] / Mark Pilgrim.](#)

Firefox Hacks | O'Reilly Media
Firefox Hacks is ideal for power users who want to maximize the effectiveness of Firefox, the next-generation web browser that is quickly gaining in ...
[oreilly.com/catalog/9780596009281/](#) - 42k - [Cached](#) - [Similar pages](#) - [Note this](#)

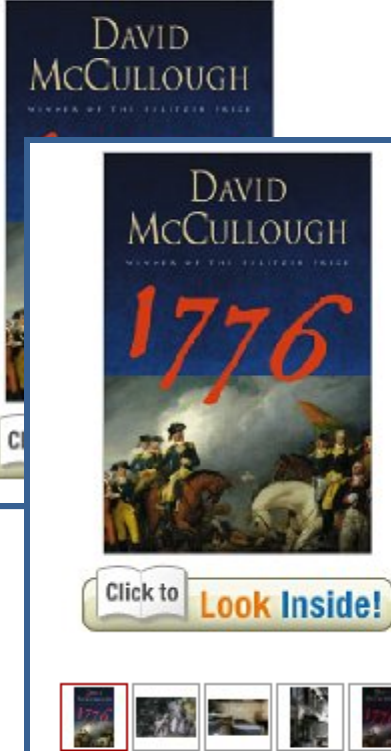
speed up firefox - Hack a Day
Now if I could just find a **hack** for Firefox that would cause it to use the readline/Emacs key combinations in the edit URL box like Mozilla does, ...
[hackaday.com/2004/12/26/speed-up-firefox/](#) - 87k - [Cached](#) - [Similar pages](#) - [Note this](#)

The Firefox Hacks You Must Have
With a new version of the open-source browser out, we offer our guide to the nifty, fun Firefox extensions that will change your life. By Quinn Norton.
[www.wired.com/science/discoveries/news/2005/12/69781](#) - 49k - [Cached](#) - [Similar pages](#) - [Note this](#)

Firefox Hacks: Tips & Tools for Next ...
by Nigel McFarlane - 2005 - 404 pages
[books.google.ca](#) - [About this book](#) - [More book results »](#)


The sidebar on the left contains a "Web" section with a "LibX" icon. It lists several links related to Firefox hacks, including "Firefox Hacks", "speed up firefox", "The Firefox Hacks You Must Have", and "Firefox Hacks: Tips & Tools for Next ...". Each link is accompanied by a small thumbnail image of a book cover.

Demo 3: Addison in Amazon



1776 (Hardcover)
by [David McCullough](#) (Author) "On the afternoon of Thursday, October 26, 1775, His Royal Majesty George III, King of England, rode in royal splendor from St. James's Palace to..." ([more](#))
Key Phrases: [glorious cause](#), [New York](#), [Nathanael Greene](#), [New Jersey](#) ([more...](#))
★★★★★ (650 customer reviews)

1776 (Hardcover)
by [David McCullough](#) (Author) "On the afternoon of Thursday, October 26, 1775, His Royal Majesty George III, King of England, rode in royal splendor from St. James's Palace to..." ([more](#))
Key Phrases: [glorious cause](#), [New York](#), [Nathanael Greene](#), [New Jersey](#) ([more...](#))
★★★★★ (650 customer reviews)

 [LibX found 2 holdings \(1 available \)](#)

Newman 2nd Floor / E208 .M396 2005 / not available
Newman 2nd Floor / E208 .M396 2005 / Available

List Price: ~~\$32.00~~
Price: **\$21.12** & eligible for **FREE Super Saver Shipping** on orders over \$25.
[Details](#)

You Save: **\$10.88 (34%)**
[Special Offers Available](#)

In Stock.
Ships from and sold by **Amazon.com**. Gift-wrap available.

Want it delivered Friday, October 3? Order it in the next 20 hours and 15 minutes, and choose **One-Day Shipping** at checkout. [See details](#)

[See all 6 customer images](#)
[Share your own customer images](#)

WorldCat Identities : Smith, Liz 1923- - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://orlabs.odc.org/identities/lccn-n78-2522

WorldCat® Identities Beta

Search Identities
Name: Go

Jump To: Overview | Publication Timeline | Works About | Works By | Audience Level | Related
Names | Useful Links | Fast Headings

Smith, Liz 1923-

Overview

Works:	20 works in 27 publications in 1 language and 5,713 library holdings
Subject Headings:	Gossip columnists--United States
Roles:	Reporter, Interviewer, Host, Speaker
Classifications:	pn4874.s563, 070.92

Publication Timeline

1970 | 2010

Key

- Publications about Liz Smith
- Publications by Liz Smith

Alternative Names

Smith, Mary Elizabeth 1923-

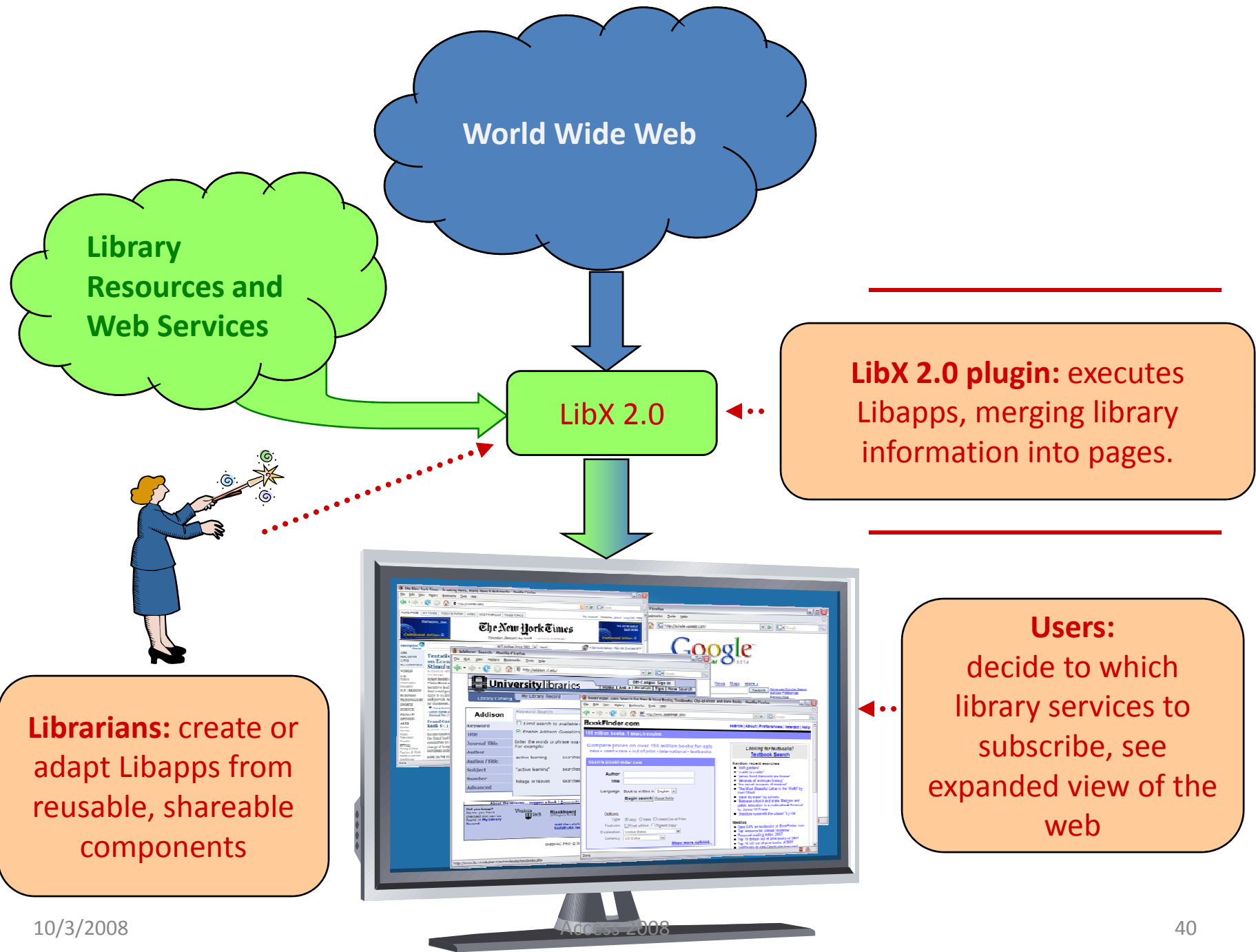
Languages

English (35)

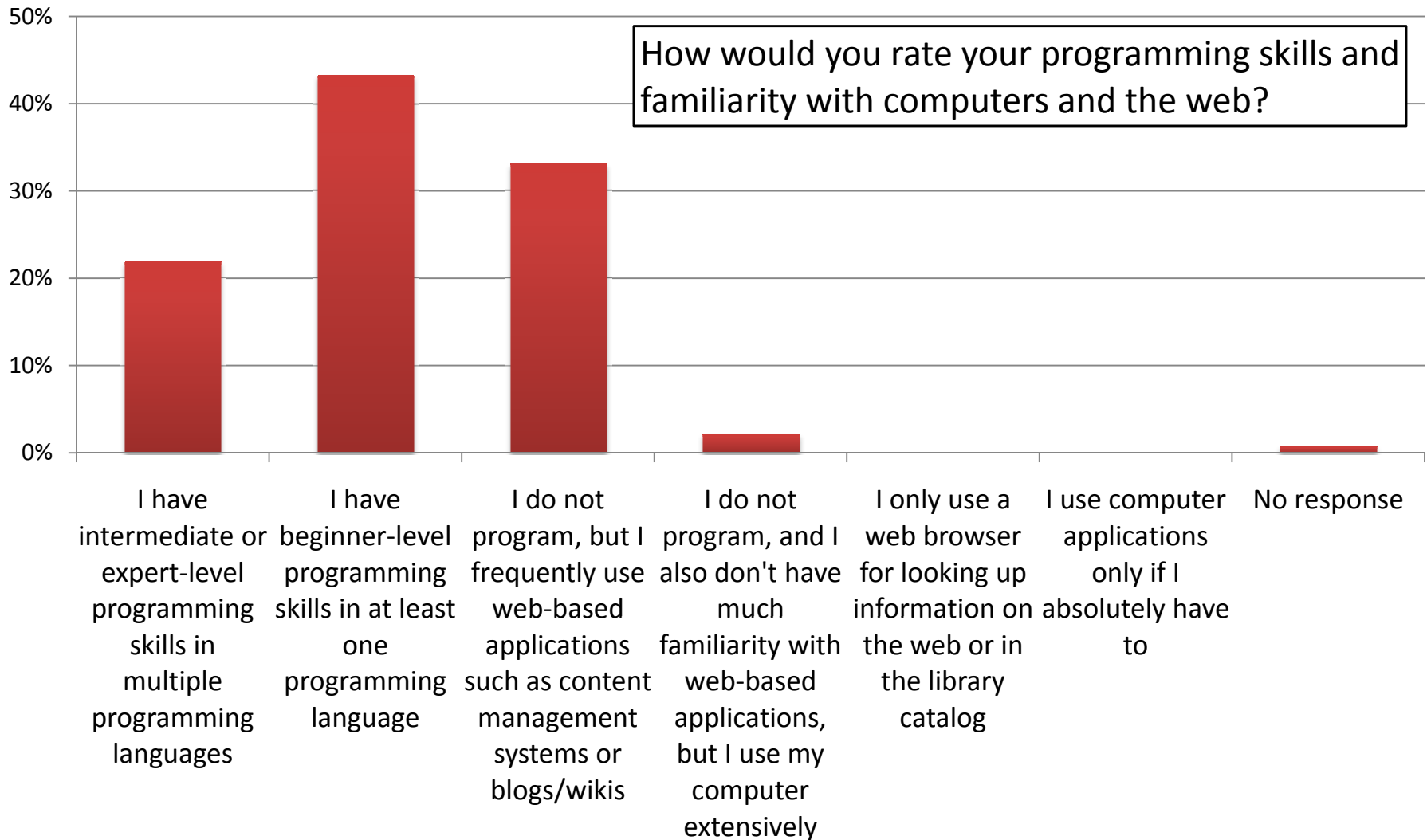
Covers

LibX Timeline

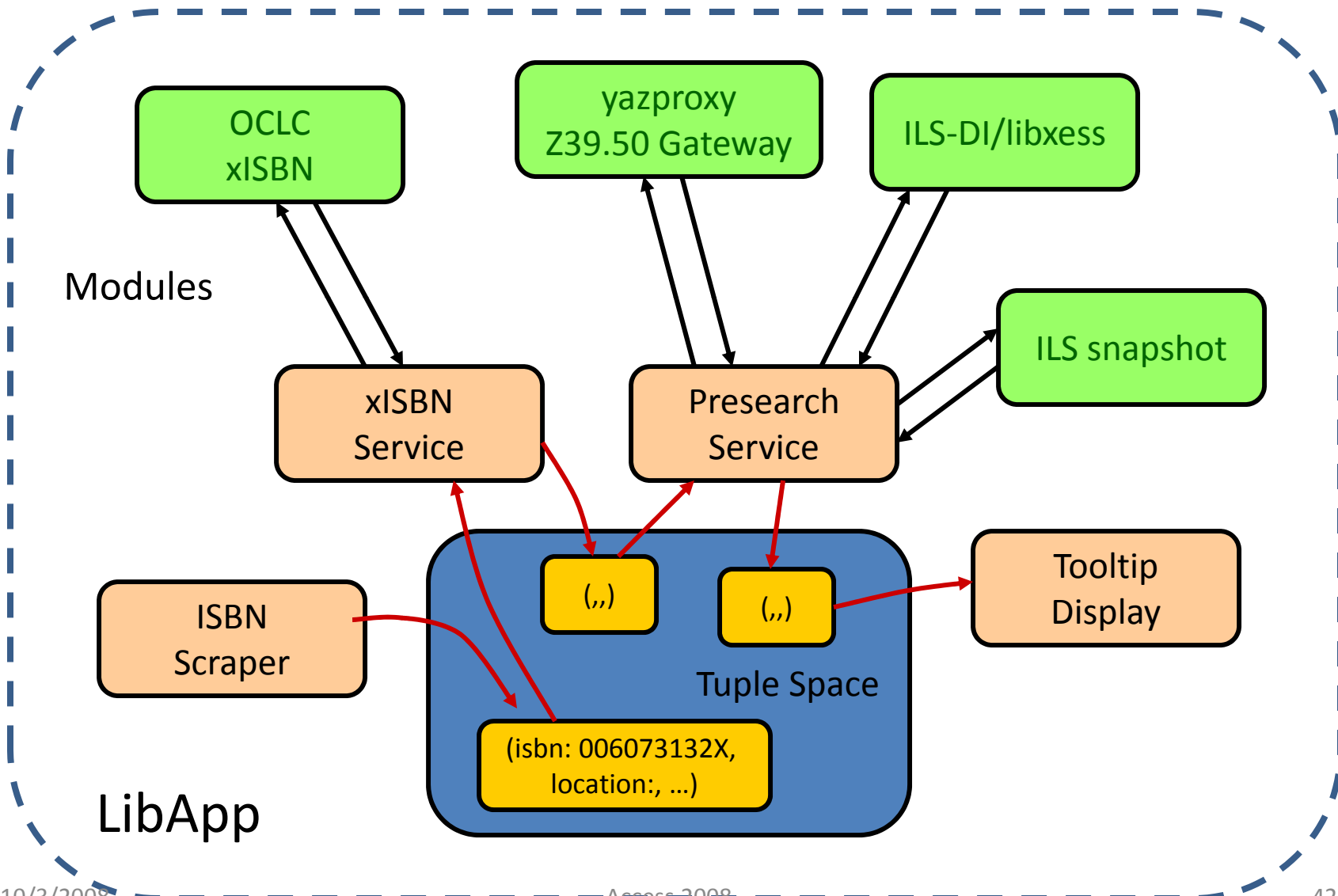
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- 2008
 - Edition Builder Study
 - **NLG grant for LibX 2.0 community platform**



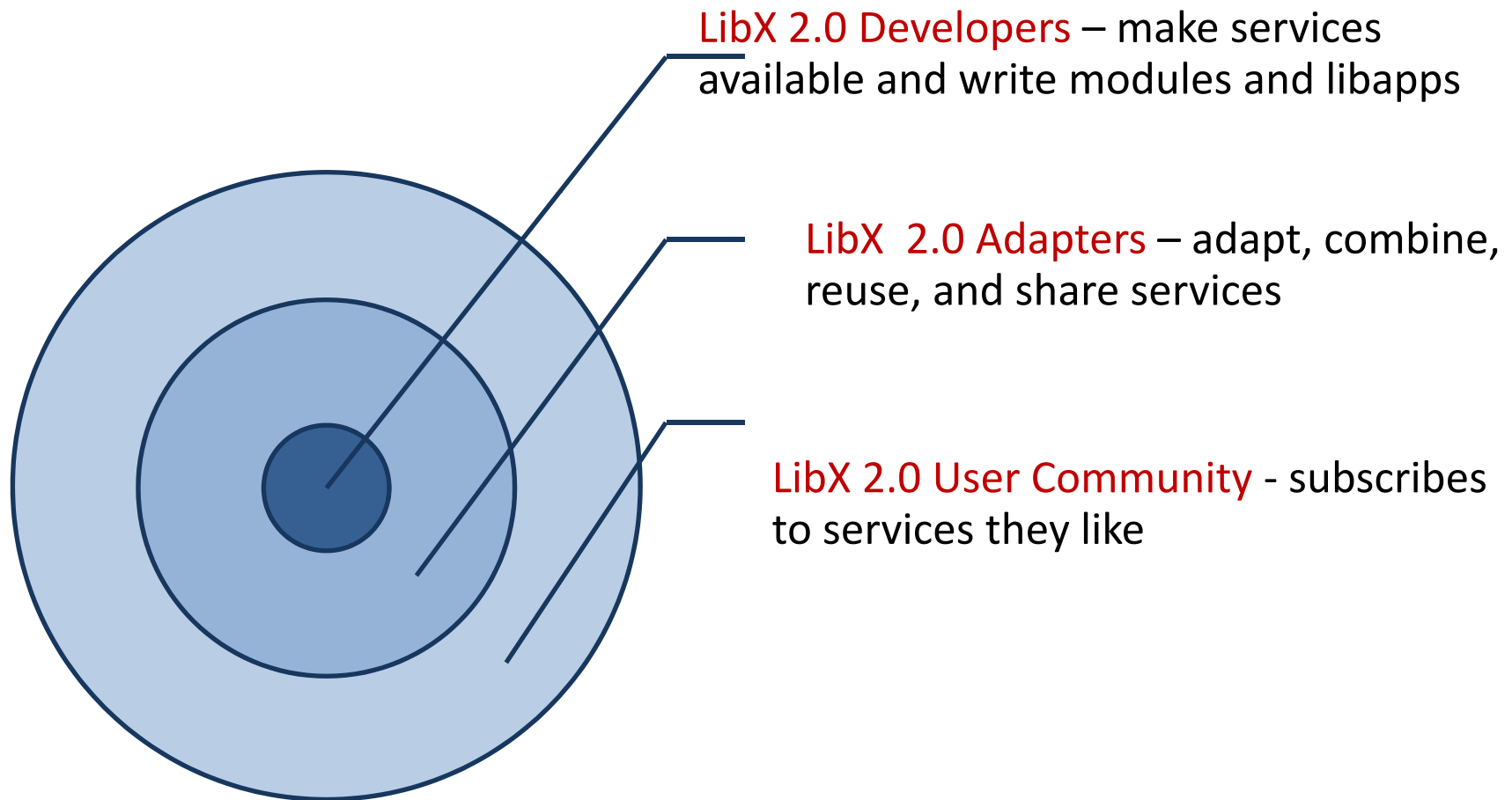
Edition Builder Survey: Programming Skills



LibApp Example



LibX 2.0 - Target Audiences



LibX 2.0 Developers

- Write “modules” – small pieces of code that
 - Scrape a page
 - Interact with services
 - Process and combine results
- Modules have access to all LibX configuration information via API
- Can use JavaScript libraries (e.g., jQuery)
- Browser-independent platform: Firefox and IE
- Fully decentralized infrastructure

LibX 2.0 Adapters

- Web-savvy librarians
 - *Not programmers*
- Edition Builder will become a repository to manage LibX modules and libapps
 - Adapters can add, combine, share, adapt, customize libapps
- Create localized services for their users
- Provide feedback to developers

LibX 2.0 Users

- Subscribe to services recommended by their edition maintainers using local settings
 - Stay connected to their libraries
- Decide which services they like
 - Fine-grained control and preferences
- Marketing
 - Will help adapters by providing marketing kit
 - Users must see benefits

LibX Team

- Annette Bailey
- Godmar Back
- Kyrille Goldbeck
- Arif Khokar
- Mike Doyle
- Alumni
 - Nathan Baker
 - Tilottama Gaat
 - Tobias Wieschnowsky

