

Frontiers in Academic Ebook Delivery

Deploying the Library-Driven Platform

Emma DiPasquale, University of Michigan Library
Rob Cartolano, Columbia University Libraries
James English, LYRASIS

Presentations

- Overview - Rob Cartolano
- UMP EBC on Fulcrum - Emma DiPasquale
- SimplyE for Academic Libraries- James English

Overview: Imagine a Better Academic Ebook

- Provide a better academic ebook experience for students and faculty
- Develop and deliver a *Library-Driven Platform*
- Do it together, at scale, at national level

What are Academic Ebooks?

- **Licensed Ebooks** - University presses, academic publishers (e.g. Columbia University Press, University of Michigan Press, MIT Press, NYU Press), including enhanced academic ebooks
- **Digitized Collections** - Library efforts to preserve and provide access to collections - aggregated at Internet Archive, HathiTrust, etc.
- **Open Access Academic Ebooks** - Knowledge Unlatched, University of Michigan Press, OAPen.org, etc.

Current State of Academic Ebooks

- Total Online Books at CU - 3 million (see tinyurl.com/clio-online-books)
- Inconsistent user experience - multiple vendors, interfaces, technology
- Vendors developed proprietary web interfaces, proprietary mobile apps
- Licensed and open content is not available via one interface
- Content is fragmented across multiple formats, DRM and non-DRM

It's like the pre-web era all over again.

You will need Adobe Digital Editions

You will need Bluefire Reader

- Common data format (HTML)
- Common back-end (web server)
- Common protocol (HTTP)
- Common User Interface (Web browser)



PDFs for all chapters will be downloaded in a .zip file

We need an Open Technology Ecosystem for Academic Ebooks!

Every dollar we spend on multiple, overlapping vendor technology platforms is a dollar not spent on building our collections.

The Shift Towards Open Technology Ecosystem

- June 2015 - \$786K Mellon Grant NYU-NYU Press [Enhanced OA Monographs](#)
- May 2016 - IMLS Grant - Minitex to enhance [SimplyE for Academic](#) (PDF)
- July 2016 - NYPL Releases [SimplyE](#)
- Feb. 2017 - W3C releases [Web Annotation Standard](#)
- October 2017 - UMP releases [Open Access Books](#)
- May 2018 - [Fulcrum integrates Hypothesis](#) Open Annotation
- August 2018 - Publishing@W3C releases [EPUB 3.2](#)
- October 2018 - Sloan Grant - Imagine a Better Academic Ebook Experience
- Nov. 2018 - [OPDS 1.2](#) adds library lending support
- Nov. 2018 - Lyris and U.Mich [Launch Ebook Collection on Fulcrum](#)
- Nov. 2018 - MIT announces [PubPub](#) - open ebooks, journals, research
- Dec. 2018 - EDRLab - improved [Radium LCP](#) - proposed ISO standard
- January 2019 - \$1.5M Sloan grant to move [DPLA Exchange to production](#)
- Feb. 2019 - Internet Archive adds [library-specific OPDS Feeds](#)

Open Technology Ecosystem Must Support Academic Ebook “Essentials”

1. **Common Method of Access** - simple, consistent, one login, **mobile equal**
2. **Local Discoverability** - direct link in catalog with high-quality metadata
3. **Search - Download - Read** - entire book in very few steps
4. **Great Reading Experience** - fast page turns, simple UI, search, TOC, index
5. **Scholar Tools** - citation, portable annotation
6. **Library Branding, Reporting, Administration**
7. **Stop Proprietary Mobile App Proliferation**

“Academic Readers First” Approach



<http://www.readersfirst.org/>

Vision: 1) Search via Local Discovery

The screenshot shows the CLIO search results page for the book "Building the New American Economy: Smart, Fair, and Sustainable" by Jeffrey D. Sachs. The page is from the Columbia University Libraries website. The search results show the book is available online, with "Read on Mobile (Beta)" highlighted in a red circle. The book is also available on Google Books. The page includes a navigation bar, a search bar, and a list of search results.

COLUMBIA UNIVERSITY LIBRARIES Log In to... Feedback / Help

CLIO Catalog All Fields Advanced Search

« Back to Results | « Previous | 3 of 102 | Next » Print Email Send to Phone Add to My Saved List Export Display In Requests Start Over

Building the New American Economy : Smart, Fair, and Sustainable

Author [Sachs, Jeffrey D.](#)

Title Building the New American Economy : Smart, Fair, and Sustainable.

Published La Vergne : Columbia University Press, 2017.

Description 1 online resource (153 pages)

Subjects [United States > Economic conditions.](#)
[United States > Economic policy.](#)

Subjects (Genre) [Electronic books.](#)

Also Listed Under [Sanders, Bernie.](#)

Summary With a nation seemingly more divided than ever, many worry that Americans risk losing ground on solving the complex, interrelated problems the country faces, including rising inequality, the specter of climate change, astronomical health care costs, and economic stagnation. The renowned economist Jeffrey D. Sachs offers a practical approach to move America toward a new consensus: sustainable development. Sustainable development focuses on the economy, society, and the environment when shaping policy. A holistic approach emphasizing economic, social, and environmental objectives is key. In focus.

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Preface

Available from:

- Online
- ✓ [Ebook Central Academic Complete](#)
- ✓ [Read on Mobile \(Beta\)](#)

Google Books
[More info at Google books](#)

Partial View

Search in this book Search

JEFFREY D. SACHS
BUILDING THE NEW AMERICAN ECONOMY
SMART, FAIR, & SUSTAINABLE
FOREWORD BY **BERNIE SANDERS**

Vision: 2) Borrow

Columbia University Libraries [Catalog](#) [Sign In](#)

All Books > [Columbia University Libraries](#)

JEFFREY D. SACHS
BUILDING THE NEW AMERICAN ECONOMY
SMART, FAIR, & SUSTAINABLE
FOREWORD BY BERNIE SANDERS

**Building the New American Economy:
Smart, Fair, and Sustainable**

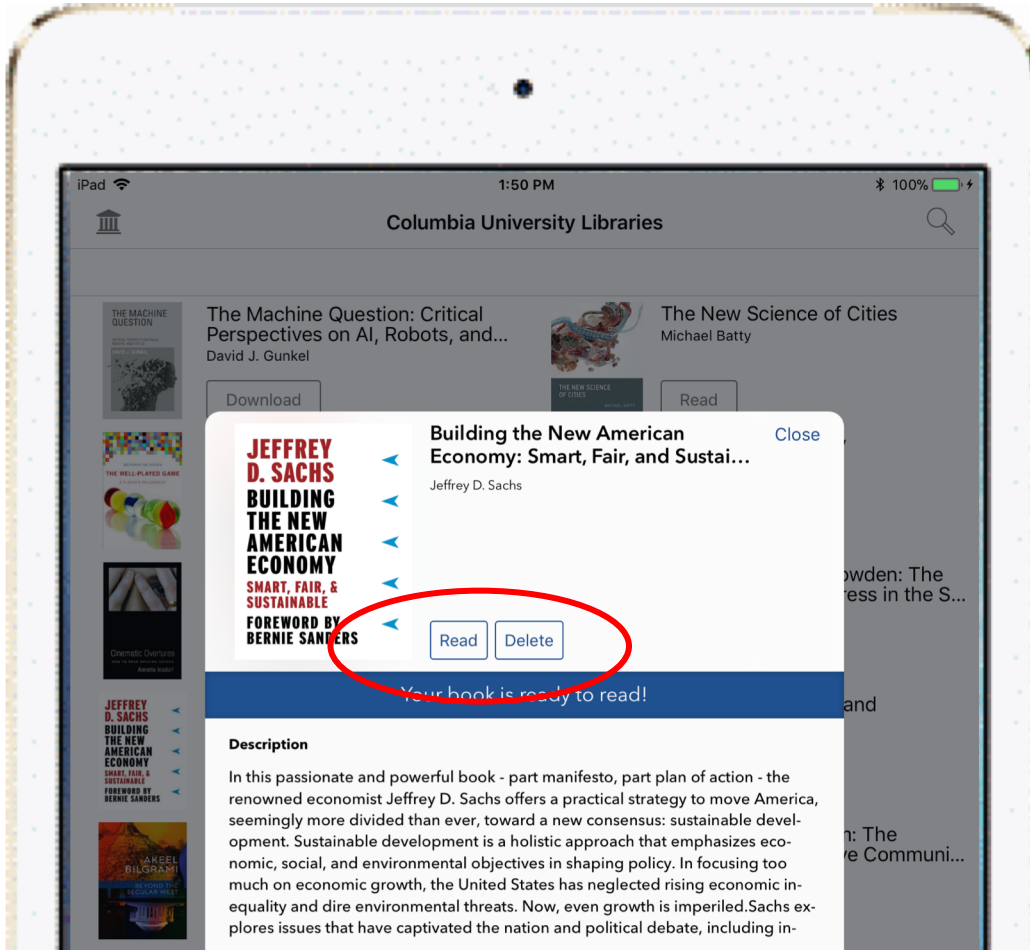
By Jeffrey D. Sachs

Publisher: Columbia University Press
Categories: Nonfiction
Audience: Adult
Distributed By: Columbia University Libraries
eBook

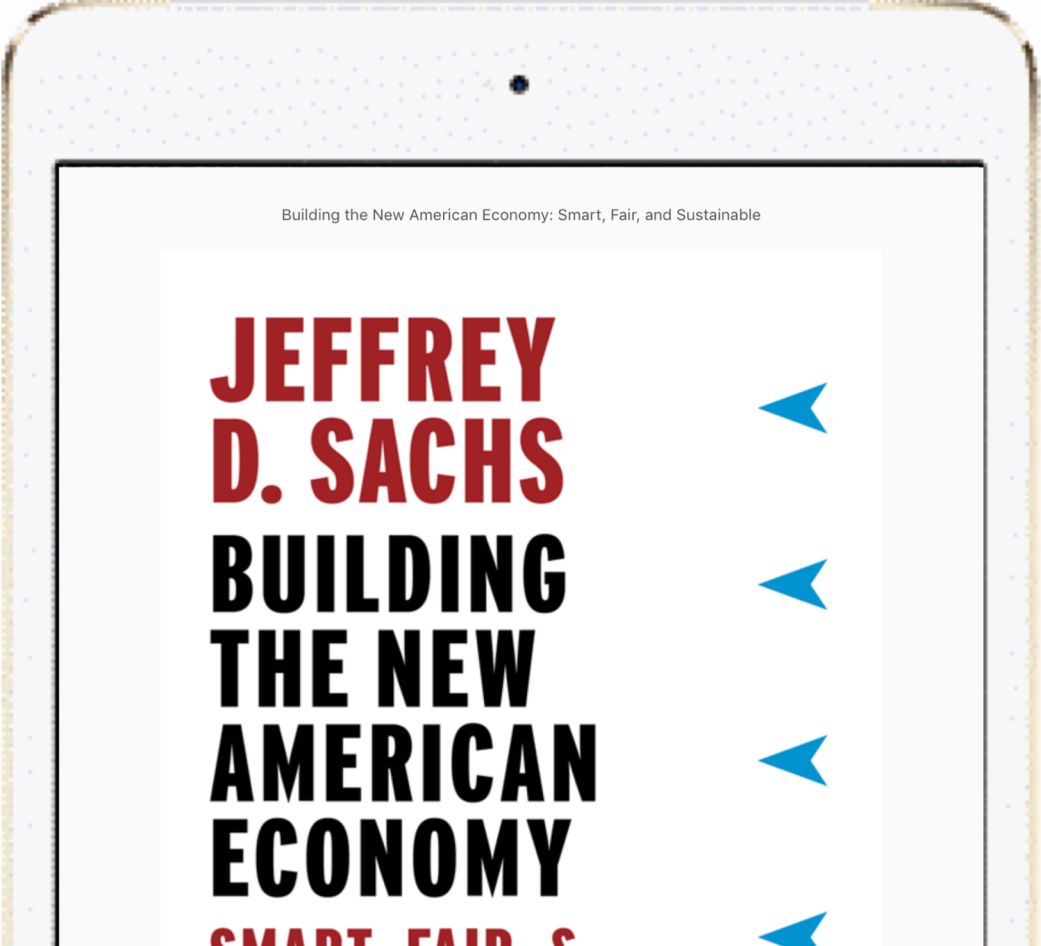
[Report a Problem](#)

This open-access book is available to keep.

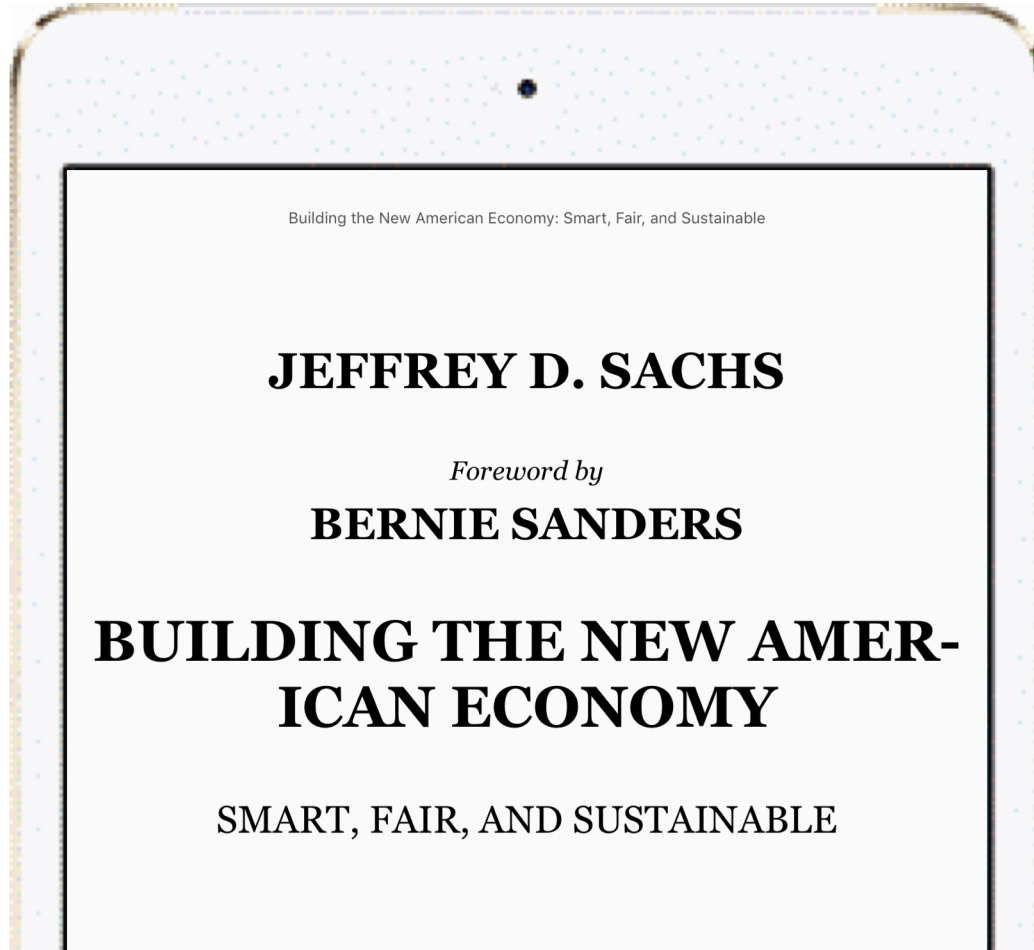
Vision: 3) Read on Web, Tablet & Phone



Provide a Great Reading Experience



Provide Offline Reading Capability

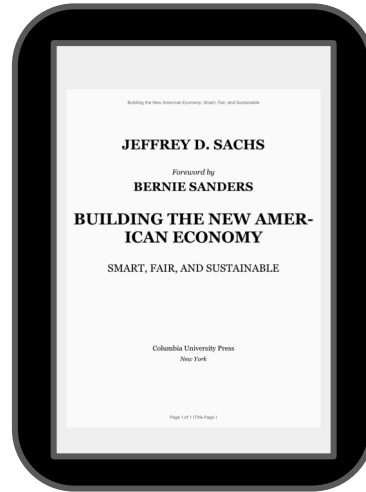


Synchronize Bookmarks & Reading Position --- on All Devices

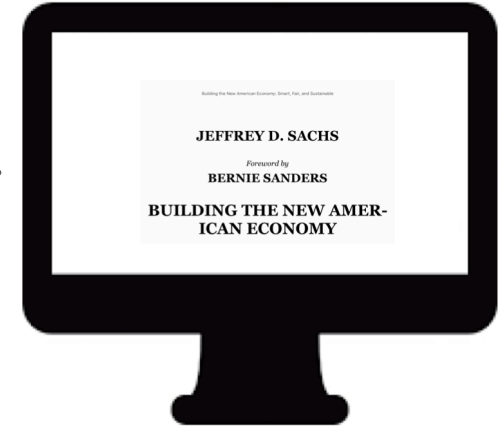
**Smart
Phones**



Tablets



Web Browser



University of Michigan Press Ebook Collection on Fulcrum

Emma DiPasquale
University of Michigan Library



Fulcrum

- Open source, community-developed digital publishing platform
- Web-based reading experience (optimized for phone/tablet)
- Developed by University of Michigan Library and Michigan Publishing with support from the Mellon Foundation
- Committed to publishing scholarship in a flexible, durable, discoverable, and accessible form

University of Michigan Press Ebook Collection (UMP EBC)

- Comprehensive collection of academic ebooks **developed by libraries for libraries**
- Adheres to the Charlotte Initiative Principles:
 - All DRM-free, unlimited multi-user, perpetual access
- Includes open access books without charging
- Backlist includes over 200 titles that have been adopted for courses

Reading Experiences

- Fulcrum catering to swimmers & divers with enhanced, media-rich content
- Fulcrum provides the best possible experience with titles on web-based e-reader

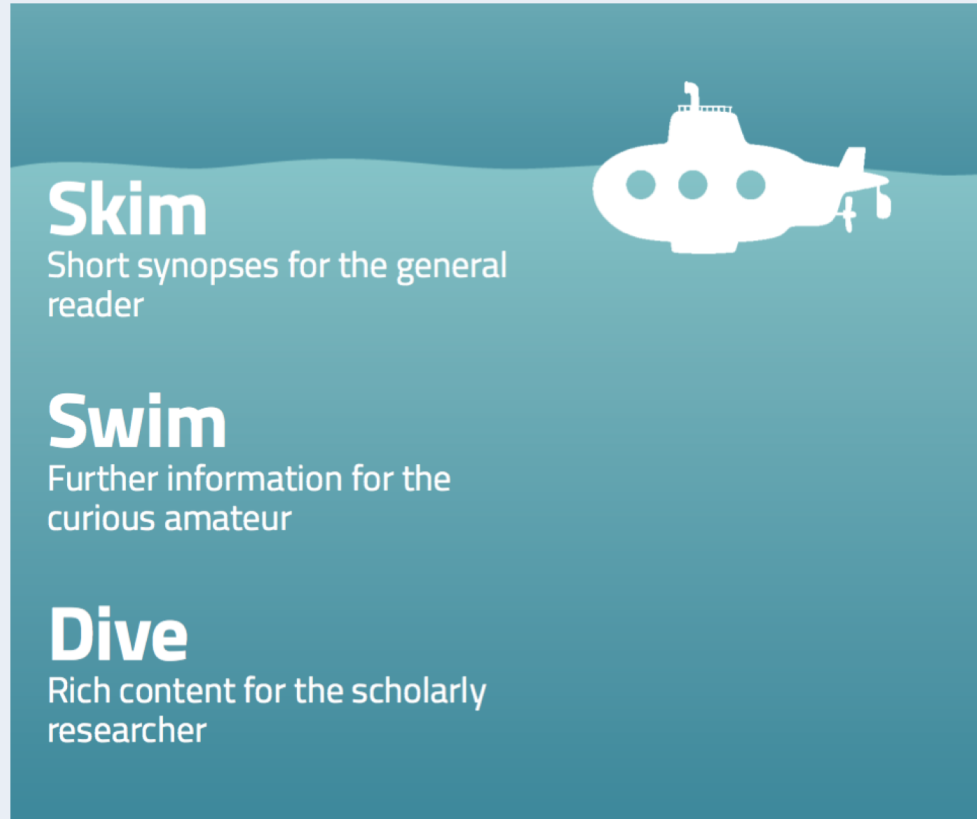
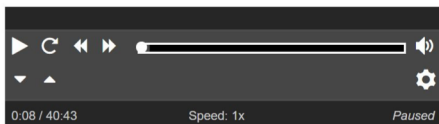


Image from Getty Foundation's Online Scholarly Catalog Initiative



Transcript
Auto scroll:

Tired of the everyday grind?
Ever dream of a life of romantic adventure?
Want to get away from it all?

We offer you
[SOUND]

[MUSIC]Escape designed to free you from the four walls of today
for
a half hour of high adventure.

Written and recorded by Jacob Smith, 2018.

Download WAV (414 MB)

Three Skeleton Key

From *ESC: Sonic Adventure in the Anthropocene* by Jacob Smith

Info Permissions Stats Technical Info

Creator(s)	Smith, Jacob
Contributor(s)	McIntyre, Sally Ann Jliat Lopez, Francisco
Subjects	Media and Communication:New Media Digital Projects
Date	2019
Related Section	Episode One

Forming Species Today

Get Citation Search in this text...



A one time poet, mixed media artist, filmmaker and high school English teacher.

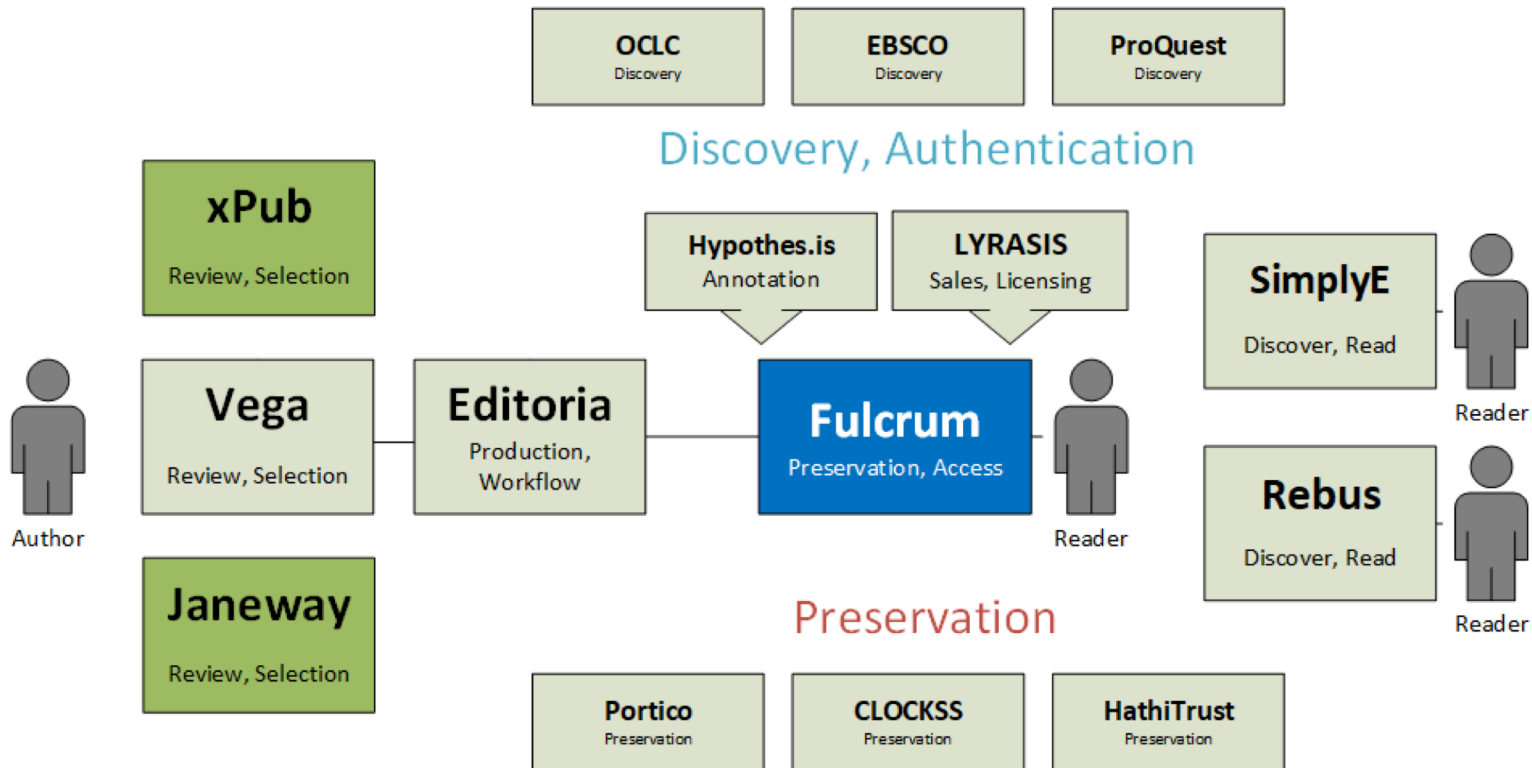
Video excerpt from *Cat Lady*, written, directed, and performed by Joseph Keckler.

"I am *not* a cat lady," my mother declares, a bag of Whiskas under her arm and a Maine coon at her feet. She marches through the laundry room to answer the lament of a portly calico who is kept locked in the pantry. "No, you stay out here, Don Diego," she cautions the Maine coon. "Mrs. Gummidge has yet to reconcile herself to other cats. Thus she remains in self-imposed exile here in the pantry." My mother manages to slip into Gummidge's chamber without Don Diego. "Well, Gummidge. You didn't finish your white albacore. Why didn't Gummidge finish her white albacore, pray tell?" She directs the question to the calico, while referring to her in the third person—the way, in *Batman*, that Alfred speaks to Bruce Wayne. *Master W* *gone wishes not to entertain any guests this evening*." Gummidge desires that I take this tiresome tuna away and present her, in

authors are hereby warned that *Cat Lady* by Joseph Keckler is fully protected under the copyright laws of the United States of America and the rest of the British Commonwealth) and of all the United States has reciprocal copyright relations. All rights, including professional, amateur, motion picture, recitation, lecturing, public reading, radio broadcasting, television, and the rights of translation into foreign languages, are strictly reserved. All inquiries concerning rights for readings, productions, etc., should be addressed to hooking@josephkeckler.com.

24% • Location 85 of 368

Larger Ecosystem



Collaboration with SimplyE

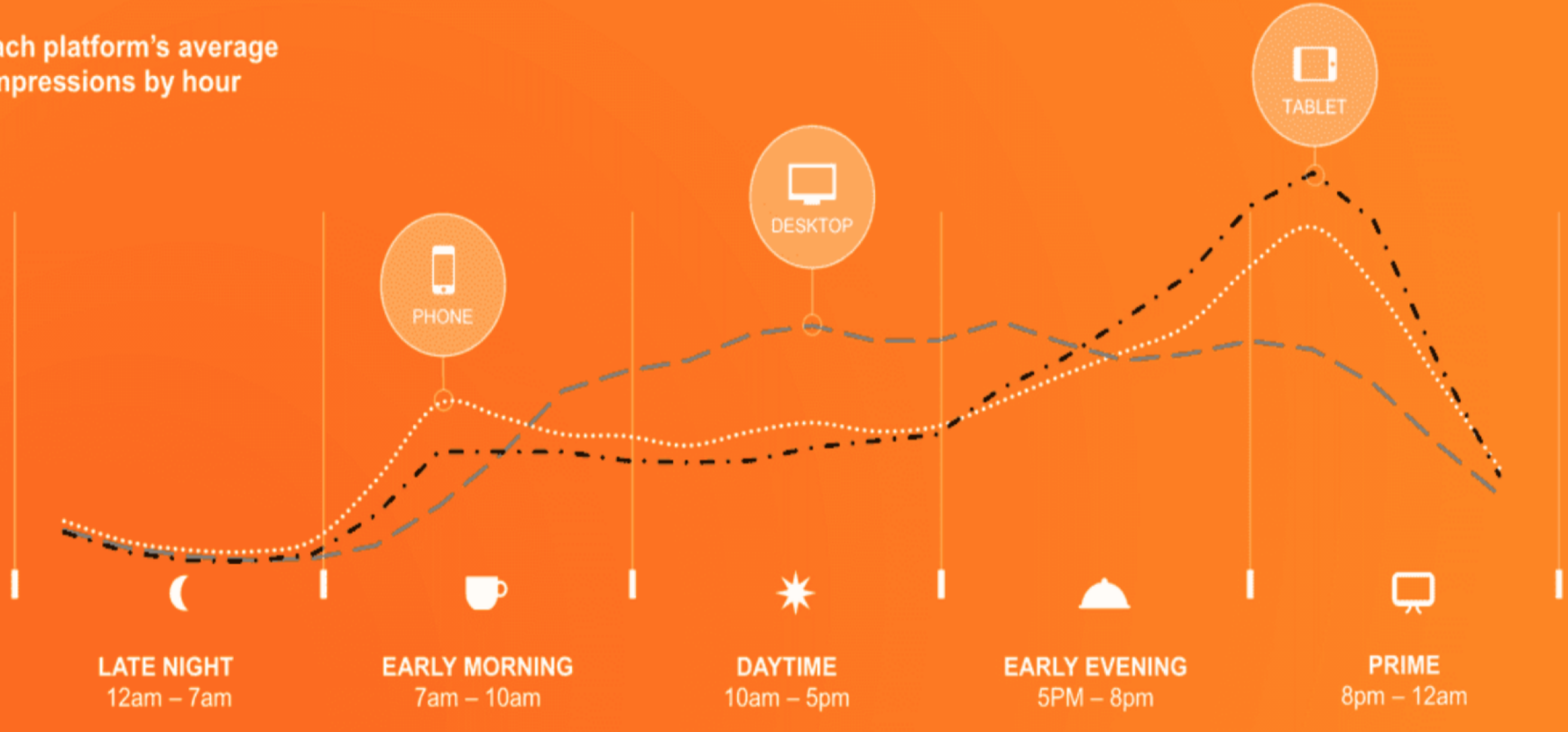
- Platform provider **and** publisher supplying content
- Interoperability between platforms
- Solving different things around same problem
- Functionality varies, content not compromised

SimplyE for Academics

Rob Cartolano, James English
April 17, 2019

First: Let's back-up for context

% of each platform's average daily impressions by hour

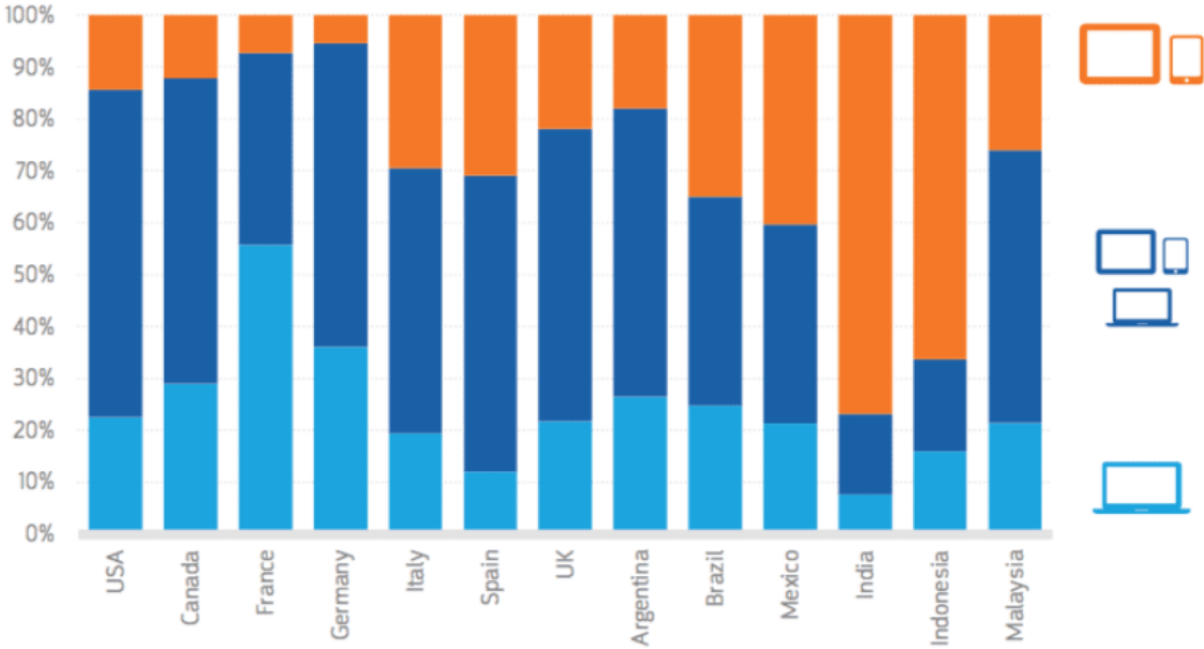


Source: Comscore

First: Let's back-up for context

Multi-platformers remain a majority in most markets

% of Total Digital Audience by Platform (Desktop only, Multi-platform, Mobile only)

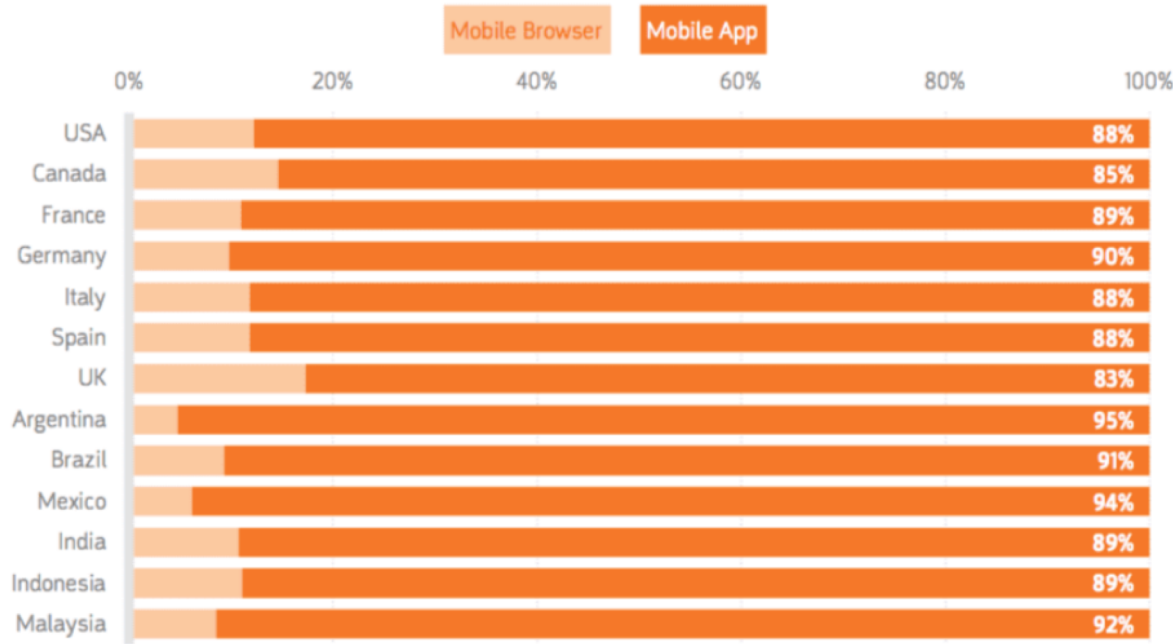


Multi-platform users (those who access online content via desktop and smartphone / tablet in a month) remain the majority overall, with an average across markets of 46% of the total population.

Mobile only usage now averages just above desktop only consumption with a cross-market average of 30%, driven heavily by large share in APAC markets, versus 24% for desktop only.

First: Let's back-up for context

Apps Account for Over 80% of Mobile Time Share of Total Mobile Minutes by Browser / App



When considering mobile (smartphone and tablet) minutes in isolation, they are overwhelmingly dominated by app consumption – over 80% of all mobile time in the markets considered for this report.

Levels appear marginally higher in Latin America, with Argentina, Brazil and Mexico all falling within the top 5 of the markets shown here.

Sloan-Funded Feasibility Study

- **Steering Group:** LYRASIS, Columbia, NYU, NYPL, DPLA, MIT Press, Minitex
- **Tasks:**
 - **Survey:** Winter 2019 - collected survey data from 150+ libraries
 - **Research needs:** of faculty, students, libraries, publishers, aggregators
 - Conducting extensive conversations with academic community stakeholders
 - Identify use cases, stories, product and market scope
 - Meet with community participants to test and refine concepts
 - **Develop Proof of Concept:** as technology demonstrator, collect feedback
 - **Develop technology & Community roadmap:** for SimplyE platform to meet academic use cases
 - **Develop Report & Plan:** Present recommendations, pilot plan, business plan, governance model

Survey Results - Type of Institutions

Table 1. What type of institution do you represent?

Type of institution	Frequency
Large private university	16
Small private Liberal Arts college	13
Small or Medium state/Community College	72
Large State University	39
Consortium	11
Total	151

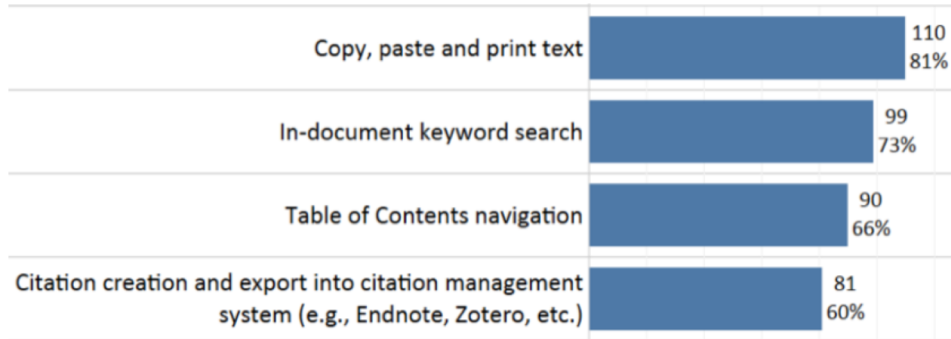
Survey Results - Media Type & Access Support

Question: Ranked Very Important or Most Important

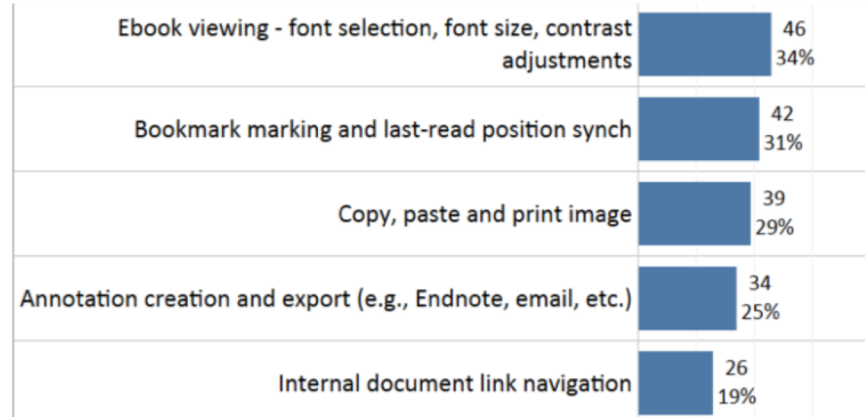
- 78% (101/131) - **View Offline Entire Book PDF**
- 73% (95/131) - **View Offline Chapter-by-Chapter PDF**
- 27% (34/131) - **View Offline Entire Book EPUB**
- 19% (24/131) - **View Offline Chapter-by-Chapter EPUB**
- 8% (9/131) - Listen (download/stream/sideload) Audio Books
- 2% (2/131) - View Offline Other

Survey Results - User Experience - Top Features

Question: Select five most frequently used features by your academic ebook readers:



Most important features that represent **USE** of ebook as a source of information.

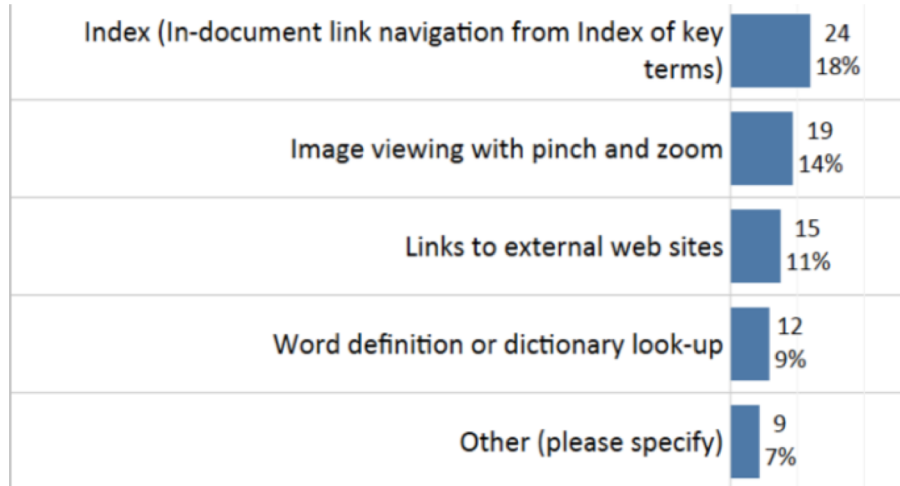


Next, features that are common to ebook platforms that readers expect from an EPUB.

And, features that expected of a digital platform such as exportability.

Survey Results - User Experience - Features

Question: Select five most frequently used features by your academic ebook readers:

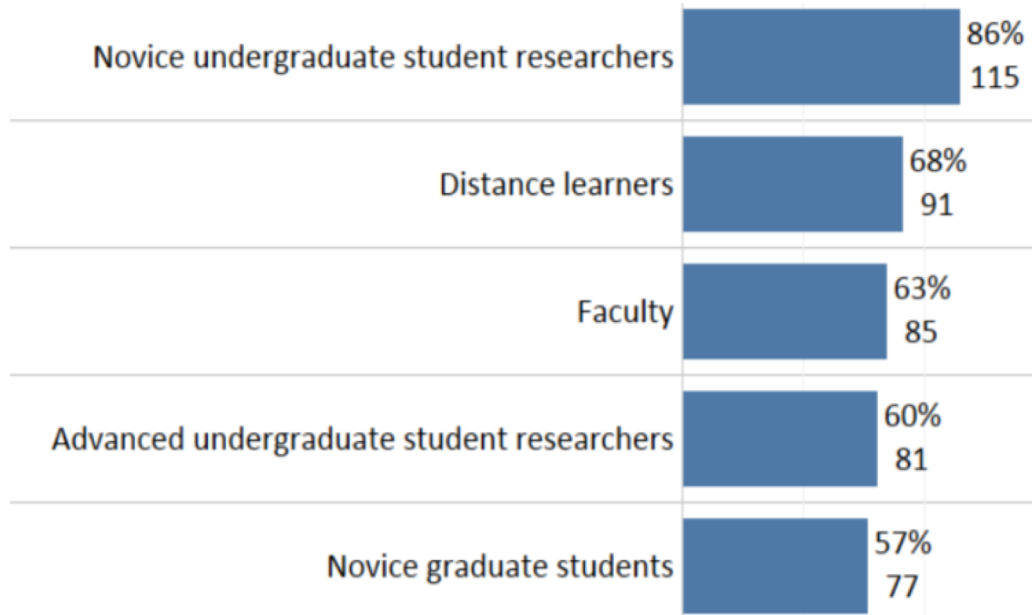


Lastly, features that are least used that are more research focused in nature but seem. However, the results may suggest they are least used because they are not typically available or supported by existing solutions.

Survey Results - Demographic Needs

Question: Select which groups most need simplified ebooks access.

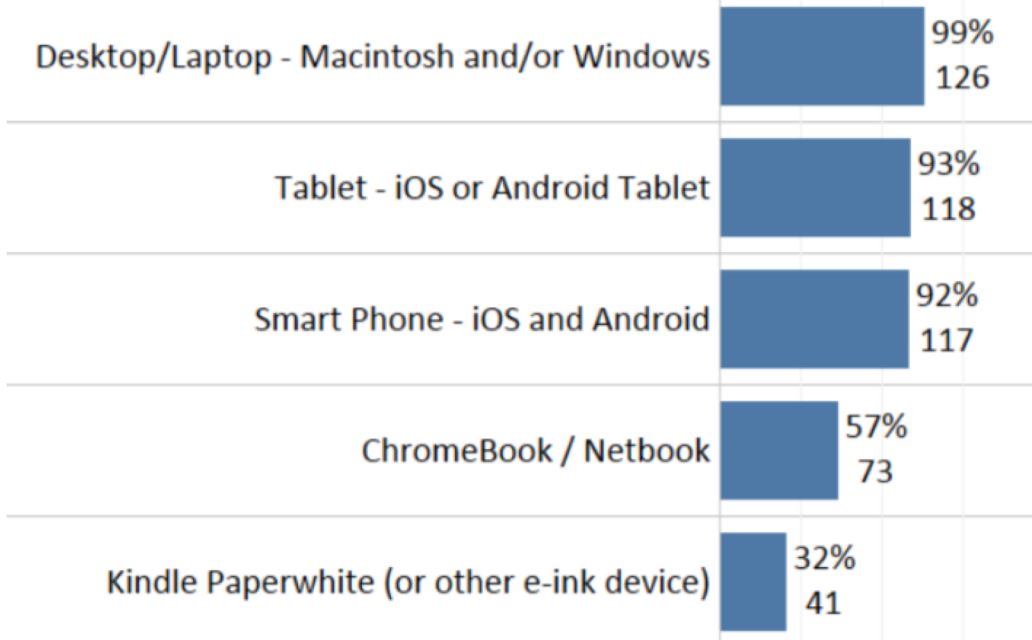
Check all that apply.



Opportunity: These results suggest that while digital natives are familiar with computers, the “tools of research” are not native to their digital upbringing where their digital literacy was more likely informed by “consumer” technology.

Survey Results - Device/Platform Requirements

Question: Indicated devices used for academic ebooks. Check all that apply.



Opportunity: Clearly, the traditional computer now shares its importance in academia in the new age of **tablets** and **smartphones**.

Survey Results - ILS (Catalog) & Discovery Systems Integrations

Question: Identify your Integrated Library System (ILS).

- 24% (29/122) - Alma
- 20% (25/122) - OCLC WMS
- 20% (25/122) - Innovative Interfaces - Sierra/Millennium
- 9% (11/122) - SirsiDynix
- 8% (10/122) - Voyager
- 8% (10/122) - Aleph
- 2% (3/122) - Koha
- 5% (6/122) - Other

Question: Identify your Discovery Layer Integration.

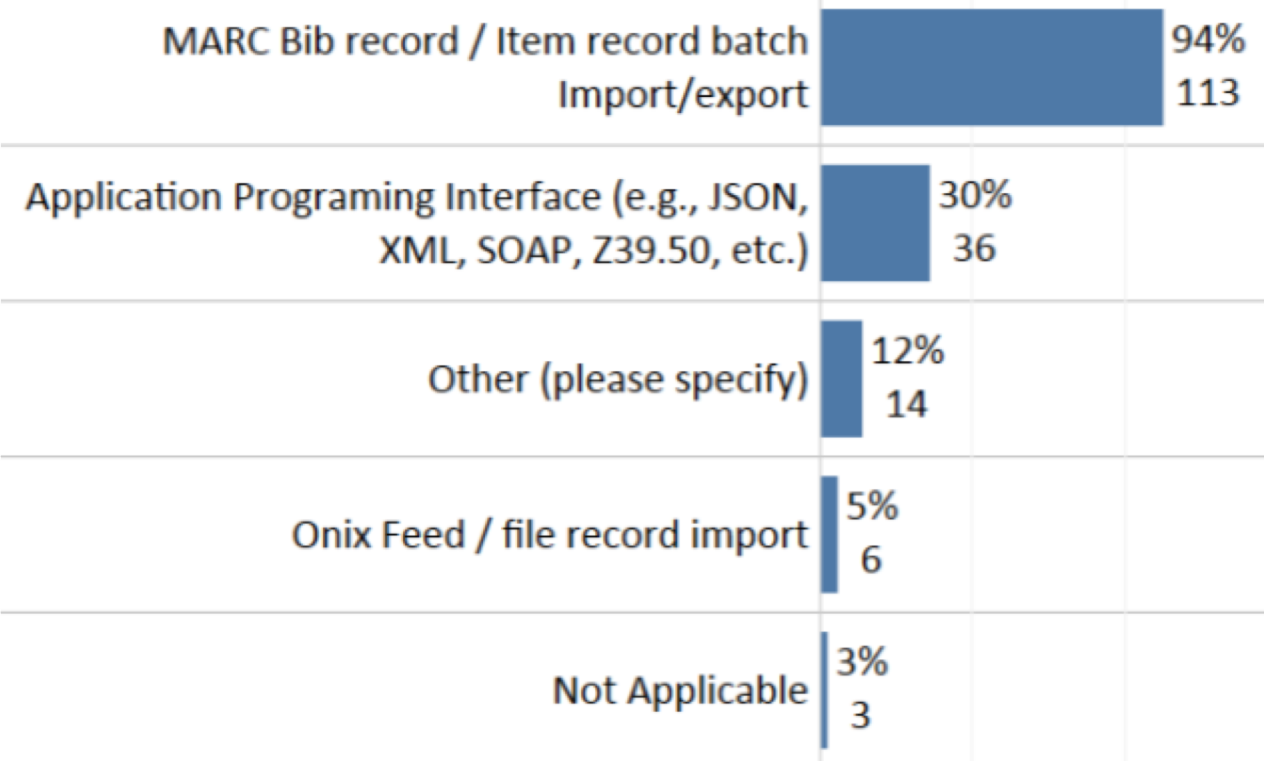
- 34% (33/97) - Primo
- 30% (29/97) - EBSCO EDS
- 14% (14/97) - OCLC WorldCat
- 6% (6/97) - Summon
- 6% (6/97) - Blacklight
- 6% (6/97) - Other
- 1% (1/97) - Multiple products

Question: Identify your web discovery platform.

- 32% (33/104) - OCLC Worldcat
- 28% (29/104) - EBSCO EDS
- 21% (22/104) - Summon
- 13% (13/104) - Primo
- 1% (1/104) - Encore Duet
- 1% (3/104) - Other
- 3% (3/104) - Multiple products

Survey Results - Metadata

Question: Identify your catalog or discovery layer metadata integration requirements.



Survey Results - Access Control

Question: Identify your ebook access control system integration needs.

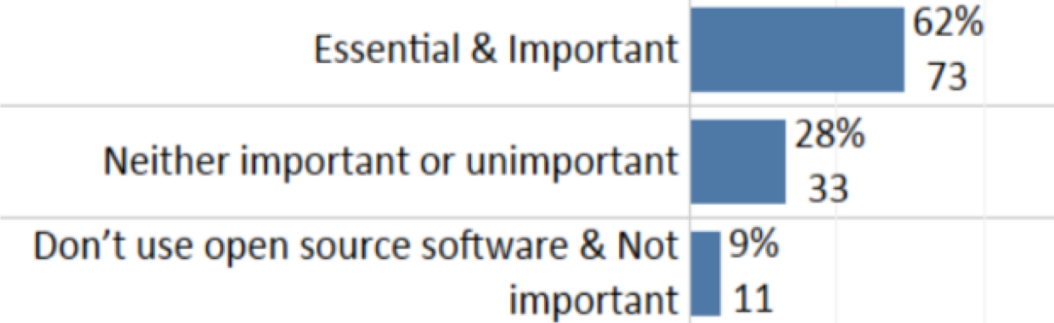
- 29% (31/107) - Shibboleth
- 12% (13/107) - SAML/SAML 2
- 9% (10/107) - ILS
- 7% (8/107) - LDAP
- 7% (7/107) - CAS
- 4% (4/107) - EZProxy
- 3% (3/107) - OpenAthens
- 1% (1/107) - Ebscohost
- 12% (13/107) - Other
- 15% (16/97) - Multiple products

Question: Identify your ebook access control system integration needs, content hosting, license control

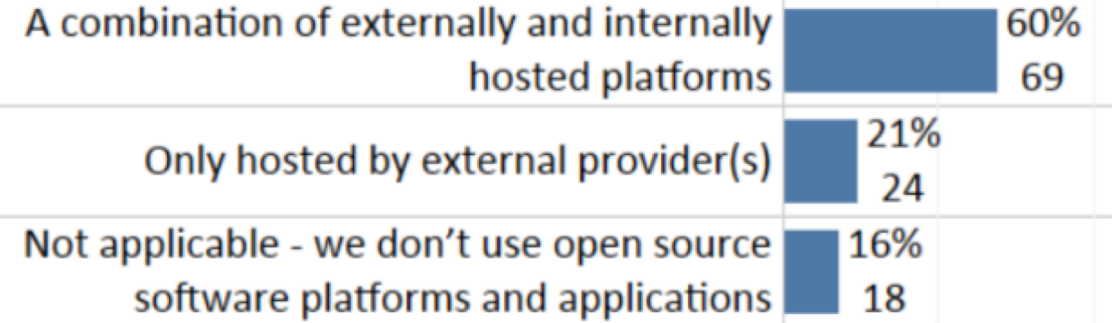
- 86% (86/100) - EZProxy
- 4% (4/100) - Adobe DRM & EZPROxy
- 2% (2/100) - Multiple Systems
- 2% (2/100) - WAM
- 1% (7/100) - EBSCO Ebooks
- 4% (4/100) - NA/Don't Know
- 1% (1/107) - Publisher platforms

Survey Results - Community Support Governance

Question: Importance of open source applications as part of your technology/service infrastructure.



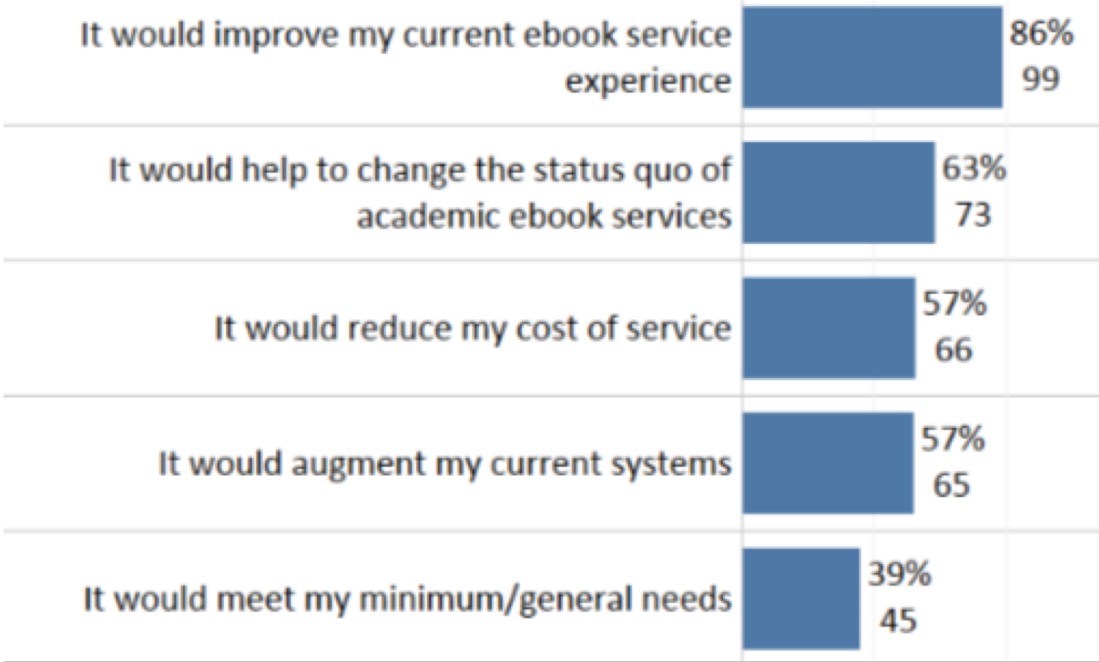
Question: How your institution implements open source solutions.



Survey Results - Open Source Ebook Delivery

Question: Under what conditions would you use open source ebook delivery platform.

Check all that apply



Survey Results - Ebook Collection

Question: Size of Ebook Collection (e.g. ebooks indexed into discover and catalog)

	Total (n=111)
less than 10,000 titles	6%
	7
10,000 to 50,000 titles	12%
	13
50,000 to 100,000 titles	12%
	13
100,000 to 500,000 titles	45%
	50
More than 500,000 titles	25%
	28

Survey Results - Decision Makers vs Administrators

Question: Who chooses/selects ebook technology platform or service?

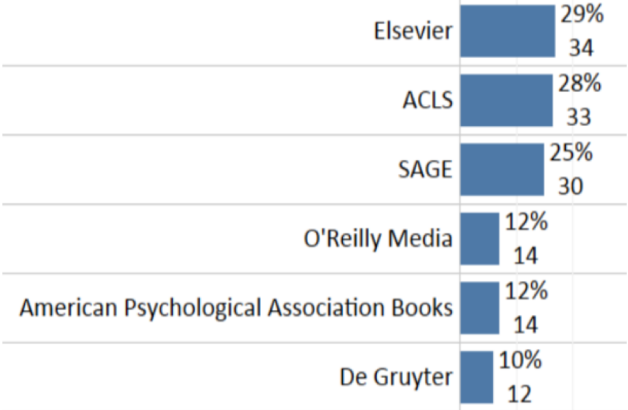
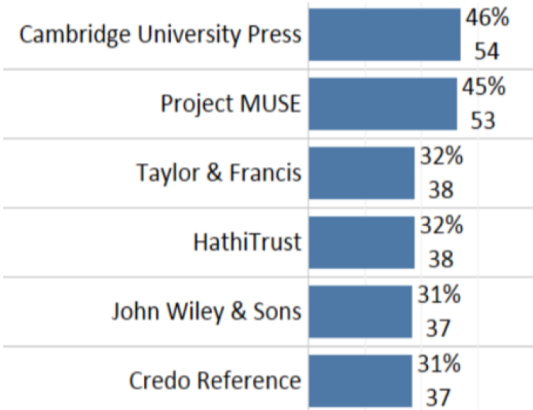
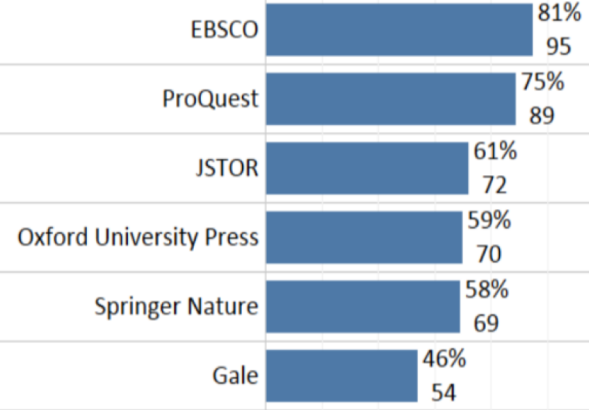
- 61% (70/115) - **Collections Development**
- 13% (15/115) - Administration
- 10% (11/115) - Library IT
- 7 (8/115) - Ebook Working Group
- 6% (7/115) - Consortium/external provider
- 1% (1/115) - Central IT
- 6% (7/115) - Other

Question: Who administers ebook discovery and reading platforms?

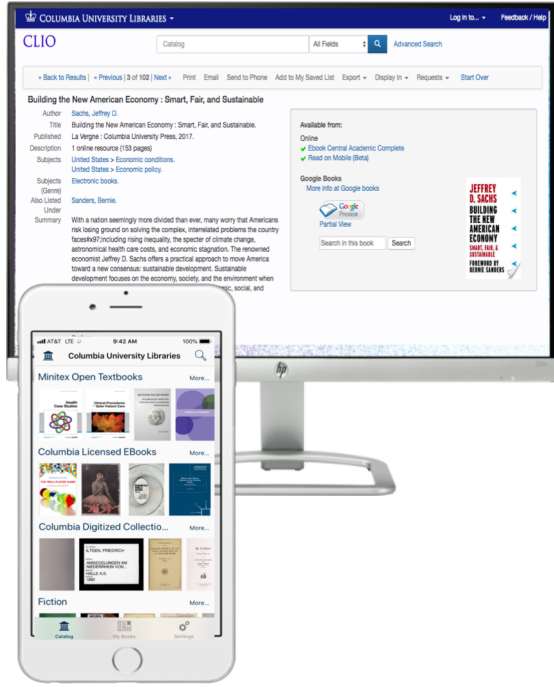
- 58% (67/116) - **Collections Development**
- 22% (25/116) - Library IT
- 8% (9/116) - Consortium/external provider
- 7 (8/116) - Third-party vendor
- 3% (3/116) - Group Effort
- 1% (1/116) - Central IT
- 5% (6/116) - Other

Survey Results - Ebook Providers

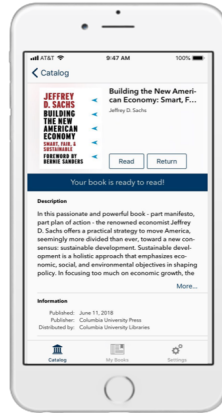
Question: Top Ten Providers of Ebooks



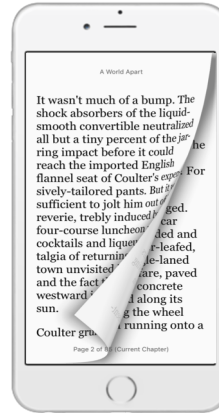
Proof of Concept - What works, what didn't what's missing?



Discover & Borrow



Download & Read



What Worked

- Relative simplicity of integration through Middleware (OPDS) & MARC 856
- Simplified UX
- Removes vendor disintermediation
- Promotes the library brand
- Respects privacy & Anonymity
- Advances Accessibility

Minitex
DEDICATION, COLLABORATION, INNOVATION.

PDF Proof of Concept App by Minitex⁴¹

Proof of Concept - What works, what didn't what's missing?

What didn't work

Core use case features - APP

- Copy text or print
- In document search
- Annotation, Citation, Highlighting

Backend

- Curation of content on the backend

What's missing

- PDF on Android
- Chapter- by-chapter
- Core use cases mentioned
- OPDS 2.0 (JSON-LD)
- DRM (non-Adobe)
- Integrations with core providers
- OPDS 2.0, RWPM
- LCP DRM

Next Steps: Develop Academic E-Reader

