Building a Community-Owned Resource Sharing Platform

Kristen Wilson, Index Data
Jill Morris, PALCI

NASIG
June 6, 2019

https://projectreshare.org
Today’s Agenda

1. What is ReShare?
2. Project background
3. Why this approach?
4. Timeline
5. Resources & Budget
6. Development Progress
7. Future Plans
8. Q&A
What is ReShare?

ReShare is a Community

Libraries, Consortia, Software Developers, Other orgs

Goal: Develop and support a community-owned and managed, highly scalable, interoperable consortial resource sharing platform that empowers us to innovate on behalf of our users for

- Discovery (Shared Index)
- ILL Request Management
- Unmediated Fulfillment
Why are we presenting about ILL at NASIG?

Blurred boundaries between technical services and resource sharing

Bridging the gaps in workflows

Potential uses for shared metadata include discovery and collection analysis

Putting forward a new model for product development and ownership
PALCI Executive Director and ReShare Steering Committee Chair

70 academic and research libraries in PA, NY, NJ, WV, with 2.5 FTE staff

Diversity of members

Programs include: Resource sharing, eResource licensing, and other collaborative programs/projects, e.g. Affordable Learning PA and PA Digital
Sharing Collections & Resources
Examining our Shared Environment

PALCI Focus Areas

- Prospective: Collective Collection Building/Acquisitions
- Retrospective: Collective Collection Management, Shared Print, Retention
- Resource Sharing is a Bridge for Discovery & Access to Shared Collections

Resource Sharing pathways are critical to PALCI members’ success.

Working Group on the Future of Resource Delivery (R&D) studied this issue.

We believe system interoperability is key and innovation is necessary.
Resource Sharing Today

PALCI’s E-ZBorrow Consortial Borrowing Service

- 53 libraries using the Relais D2D consortial borrowing software
- ~150k transactions per year

RapidILL & RapidR

- \(\frac{2}{3}\) of our members use RapidILL, 4 use RapidR for returnables

Traditional ILL

- A mix of traditional ILL services
Use Cases for Discovery/Delivery/Access

Today’s Challenges

Resource Discovery: Local AND consortial views, Flexibility, Patron-focused

Access via Fulfillment: Consortial sharing of returnables (MVP)
  ● Shared software for borrowing within and between consortia
  ● No-cost borrowing agreements already in place

Looking Ahead: Where we want to be...

● Collection Analysis & Collective Collection Development
● Shared Print, Informed Acquisition Methods
● Data-informed purchasing/borrowing workflows
Minimum Viable Product
Nickname: Inevitable Narwhal

Library directory
● Aggregation of library service profiles, loan rules, etc

Discovery
● Record load and management
  ○ Sync / load from ILS
  ○ Normalization of holdings
  ○ Selection/filtering
● Aggregation into shared index
  ○ Deduplication at Instance level
  ○ Drive location of loanable copy
  ○ Shared discovery layer (VuFind or Blacklight)
  ○ Download/sync with local discovery layers

Fulfillment - *Returnable Items only for MVP
● Requesting
  ○ APIs/endpoints for creating requests
  ○ Routing/load balancing
  ○ Create temporary local record in ILS
  ○ Tracking
  ○ Patron notices
● Supplying
  ○ Place hold in ILS
  ○ Print pickslip
  ○ Tracking
● Shipping
  ○ Print shipping labels
  ○ Integrate with shippers, UPS API, etc
● Reporting

Real-time availability status
Why ReShare?

“The definition of insanity is doing the same thing over and over again, and expecting different results.”

The marketplace for resource sharing systems is failing libraries, and ultimately, our users.

ReShare offers an alternative approach, with:

✓ User-Centered System Design
✓ Transparency
✓ Efficiencies (Cost, Time)
✓ Vendor Neutrality
✓ Ability to Influence and Innovate
✓ Ownership of ... Our Data, Our Systems, Our Community
Mitigating Risk: A Model for Community Ownership

Libraries AND Commercial organizations are equals, with shared vision.

Identifying the *right* partners for:

- Ideas
- Skills
- Financial resources $$
- Services / Capacity
- Sustainable business models
- Shared risk and reward
Ownership of Process

Steering Committee
Vision, resourcing, outreach

Product Managers
Scope, requirements, project management

Subject Matter Experts
Expertise, user experience, feedback

Developers
Architecture, code, packaging
Ownership of Product

- Open Library Foundation
- Apache v2 license
- Individual, institutional, and commercial use
Steering Committee

Consortia & Libraries
Lynn Bailey
Lisa Croucher
*Nora Dethloff
Sebastian Hammer
Ian Ibbotson
David Larsen
Tim McGeary
*Anne McKee
Jill Morris
Kurt Munson
Heidi Nance
James Robinson
Sydney Thompson
Kristen Wilson
Michael Winkler
Stephanie Wright
Joe Zucca
Index Data
Triangle Research Libraries Network
University of Houston
Index Data, ReShare architect
Knowledge Integration
University of Chicago
Duke University
Greater Western Library Alliance
PALCI - ReShare SC Chair
Northwestern University
Ivy Plus Libraries Confederation
PALCI
North Carolina State University
Index Data - ReShare Project Coordinator
Open Library Foundation, OLE
Mozilla Foundation
University of Pennsylvania

Vendors & Developers

Related Organizations
# Product Management Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nora Dethloff</td>
<td>University of Houston</td>
</tr>
<tr>
<td>Ian Ibbotson</td>
<td>Knowledge Integration</td>
</tr>
<tr>
<td>Allen Jones</td>
<td>The New School</td>
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<tr>
<td>David Larsen</td>
<td>University of Chicago</td>
</tr>
<tr>
<td>Kurt Munson, Convener of PM Team</td>
<td>Northwestern University</td>
</tr>
<tr>
<td>Kristina Rose</td>
<td>New York University</td>
</tr>
<tr>
<td>Sydney Thompson</td>
<td>NC State University</td>
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<tr>
<td>Kristen Wilson, Project Coordinator</td>
<td>Index Data</td>
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# Subject Matter Experts

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tr>
<td>Emily Batista</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Jessica Bower</td>
<td>Yale University</td>
</tr>
<tr>
<td>Peter Collins</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Melissa Eighmy Brown</td>
<td>University of Minnesota</td>
</tr>
<tr>
<td>*Hilary Fredette</td>
<td>West Virginia University</td>
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<tr>
<td>Geneva Holliday</td>
<td>UNC Chapel Hill</td>
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<tr>
<td>Lashanda Howard-Curry</td>
<td>University of Chicago</td>
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<tr>
<td>Demian Katz</td>
<td>Villanova University</td>
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<tr>
<td>Andrea Loigman</td>
<td>Duke University</td>
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<td>Kurt Munson</td>
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<tr>
<td>Mia Partlow</td>
<td>NC State University</td>
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<tr>
<td>Mike Paxton</td>
<td>IUPUI</td>
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<tr>
<td>Ruth Tillman</td>
<td>Penn State University</td>
</tr>
<tr>
<td>*Kristin Walker</td>
<td>UT Austin</td>
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<tr>
<td>Kristen Wilson</td>
<td>Index Data, Project Coordinator</td>
</tr>
<tr>
<td>*Lan Yang</td>
<td>Texas A&amp;M</td>
</tr>
</tbody>
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* Indicates key contributors or experts.
Timeline

Spring 2019
Mockups & Library Directory
Working Prototypes

Fall 2019
Minimum Viable Product (MVP)
Reporting Tools & Functionality

Spring 2020
Software Testing & Pilots

Summer 2020
Community Development & Sustainability: Business Models, Preferred Service Providers, & Partnerships
Project Resourcing & Commitments

- Index Data
- PALCI
- TRLN
- Possible grant funding
- Seeking partnerships
- Exploring new models
- [https://projectreshare.org/get-involved](https://projectreshare.org/get-involved)
- info@productreshare.org

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>Person Months Required</th>
<th>Estimated Cost</th>
<th>Amount Contributed To-Date</th>
<th>Balance Needed</th>
<th>Contributor(s)</th>
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<tr>
<td>Project Kickstart: Index Data &amp; Knowledge Integration Development Process</td>
<td>16</td>
<td>$205,000</td>
<td>$205,000</td>
<td>$0</td>
<td>Initial project investments were made by Index Data with contributions by Knowledge Integration to kickstart the project.</td>
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<td>$100,000</td>
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<td>$635,000</td>
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Development of ReShare
MVP Progress Report
& Next Steps
FOLIO as a starting point

Gives ReShare a head start

Supports a modular approach

Community-owned software at work!
UX-first approach

Define purpose

User research

Develop concepts

Create prototypes

Provide UX guidelines

samhae.ng/1006
Apps
Rough, long-term design

Supply  Request  Shipments  Box  Unbox

Send  Receive  Shared Index  Directory  Consortia
Shared Index
Shared Index: Learning from colleagues
## Edit Transformation Pipeline

### General information:
- **ID:** 9131
- **Name:** OAI-PMH MARC21 to Instance JSON
- **Description:** OAI-PMH MARC21 to FOLIO Instance JSON
- **Enabled:**
- **Parallel (run each step in own thread):**

### Transformation Steps:

<table>
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<tr>
<th>ID</th>
<th>Name</th>
<th>In</th>
<th>Out</th>
<th>Actions</th>
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<tr>
<td>10002</td>
<td>MARC21 to Instance XML</td>
<td>XML</td>
<td>XML</td>
<td>▲▼x</td>
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<tr>
<td>9131</td>
<td>Instance XML to JSON</td>
<td>XML</td>
<td>JSON</td>
<td>▲▼x</td>
</tr>
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### Actions:
- Save
- Cancel
- Delete Transformation...
FOLIO Inventory → ReShare Shared Index
FOLIO Inventory → ReShare Shared Index
Inventory prototype
Business cars: a survey of current practice in 446 companies
by Murlis, Helen.
Published 1976
Subjects: "...Company cars Provision Great Britain. Reports, surveys..."
Call Number: T939.8968
Located: Multiple Locations
Directory
<table>
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<tr>
<th>Library name</th>
<th>Branch name</th>
<th>OCLC code</th>
<th>Location</th>
<th>Type</th>
<th>Consortium</th>
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<tr>
<td>New School</td>
<td>Main branch</td>
<td>ABCDE</td>
<td>New York, NY</td>
<td>Academic library</td>
<td>PALCI;</td>
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<td>New School</td>
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<td>ABCDE</td>
<td>New York, NY</td>
<td>Academic library</td>
<td>PALCI;</td>
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</tbody>
</table>

**New School**

- **Law library**
  - Location: New York, NY, USA
  - OCLC code: ABCDE

**Consortial memberships**
- PALCI
- Consortium B
- Consortium C

**Basic branch info**
- Branch address
- Link to Discovery layer
- Link to Library Home Page
- Link to OpenURL resolver
- ILS (e.g. Sierra, Alma, Aleph)

**Billing**
- Billing information?
- Billing contact person
- Currency
- Accepts Replacement copies? Y/N

**Document delivery**
Supply

Request
### Unfilled requests list

**Item:** Things Fall Apart · Chinua Achebe · 1958  
*Request type, e.g. Book*  
Requested by: John Doe (Graduate student)  
Submitted March 1, 2020 · Needed by: March 25, 2020

**Details:**  
Request no. 1284923841

**Workflow instance (#9034831):**

1. Receive request from patron
2. Automated routing
3. Staff review
4. Item
   - **Things Fall apart**  
     - Chinua Achebe  
     - ISBN: 4548965151  
     - 1958
5. User
   - John Doe  
   - Graduate student
6. **Shipping**
   - Shipment #8394872394823  
   - UPS  
   - Sent March 21  
   - UPS status: At facility

**Fulfillment**

- Action A
- Action B
- Action C
### Search & filter

- **Search shipments, requests or items...**
- **Direction**
  - [ ] Outgoing
  - [ ] Incoming
- **Shipping provider**
  - [ ] ILDS (3)
  - [ ] UPS (34)
  - [ ] FedEx (15)
  - [ ] US Mail (4)
  - [ ] DHL (15)
  - [ ] Inter campus Delivery (51)
- **Status**
  - [ ] Completed
  - [ ] Successful
  - [ ] Return to sender
  - [ ] In Process
  - [ ] In transit
  - [ ] Out for delivery
  - [ ] Completed
- **Shipping library**
  - Northwestern - Law Library
  - New York University - Main branch
  - University of Chicago - Main branch
- **Receiving library**
  - Northwestern - Law Library
  - New York University - Main branch

### Shipments

<table>
<thead>
<tr>
<th>Shipping library</th>
<th>Receiving library</th>
<th>Shipment ID</th>
<th>Method</th>
<th>Tracking number</th>
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<tbody>
<tr>
<td>UT Austin</td>
<td>New School</td>
<td>12948124124124</td>
<td>ILDS</td>
<td>4561d546531213</td>
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### Shipment Details

- **Shipment ID**: 1902781209471
- **Tracking number**: 1Z6347598752
- **Tracking status**: Item in transit — At sort facility
  - 02/22/2019 - Jersey City, NJ
  - View tracking history
- **Ship date**: 22/01/2019, 2:05PM
- **Expected on**: April 4
- **Shipping library**
  - UT Austin - Main branch
  - 66 West 12th street
  - Room 409
  - New York, NY, 10011
  - USA
- **Receiving library**
  - New School - Law Library
  - 66 West 12th street
  - Room 409
  - New York, NY, 10011
  - USA

### Requests in shipment

- [Request 12948124124124](#) (1 item)
  - [Item 12948124124124](#)
- [Request 12948124124124](#) (3 items)
  - [Item 12948124124124](#)
  - [Item 12948124124124](#)
  - [Item 12948124124124](#)
- [Request 12948124124124](#) (1 item)
  - [Item 12948124124124](#)
UPS tracking number
A129471T295190123

Scan item to check it off the list

Title
The Metamorphosis

Author
Kafka, Franz

Year of publication
1915

Barcode
1902481307549325

Scanned?
Yes

Library
U Chicago • Main Library (This library)

Next step: Send to circulation, discard book band (returned item)
Beyond MVP

- Cross-network support
- Electronic delivery
- Local workflow support
- Shared print
- Collection analysis
How can I get involved?

First, be an advocate!


We’re looking for developers, domain experts, funding, and pilot sites.

ReShare Town Hall Event at ALA 2019 - Sunday, June 23, 9-11am
Registration Coming Soon!
THANK YOU!

Questions?

Email:

info@projectreshare.org

Twitter:

@projectreshare

Web:

https://projectreshare.org