Library Resource Management and Discovery Services:

Trends 2019 and Beyond
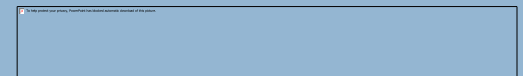
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Abstract

Marshall Breeding, author of the Annual Library Systems Report and the International Library Automation Perceptions Survey, will give an updated view of the some of the major trends developing in the realm of resource management systems and discovery services used by libraries. The session will be of interest to those considering a change in their technology environment as well as those that want to stay current on industry trends.

Through this webinar you will learn about:
-the trends currently in play among the major library technology vendors and products,
-practical information on the perceived effectiveness of systems implemented in libraries, and
-some glimpse at the anticipated migration patterns based on libraries indications of new systems under consideration.

Library Technology Guides

Documents, Databases, News, and Commentary

Library Technology Guides provides comprehensive and objective information surrounding the many different types of technology products and services used by libraries. It covers the organizations that develop and support library-oriented software and systems. The site offers extensive databases and document repositories to assist libraries as they consider new systems and is an essential resource for professionals in the field to stay current with new developments and trends. Relevant news items are posted daily on Twitter:

Google Custom Search

GuidePosts

Perspective and commentary by Marshall Breeding

Blog Archive RSS

Library Systems Report 2018: New technologies enable an expanded vision of library services

The 2017 edition of the annual industry report that I have produced since 2002 has been published by **American Libraries**. The report is available online and in the May 2017 print issue. The 2002 through 2013 editions of this report were published by Library Journal.

Technologies that focus on supporting traditional library services no longer meet the needs of libraries that wish to strengthen their involvement in new service areas.

Industry News

Wednesday May 30, 2018   RSS

Full Automation News Report

20 most recent items:

May 25, 2018. **The University of Bradford selects Talis Aspire for online reading lists.** The University of Bradford have selected Talis Aspire to manage and deliver their online reading lists service. By improving library workflows with Talis Aspire, they hope to provide an improved exper ... **<<more>>**

May 25, 2018. **Yewno named one of Silicon Review Magazine's 50 Most Valuable Brands of the Year 2018.** Yewno has been named as one of The Silicon Review Magazine's "50 Most Valuable Brands of the Year 2018". Companies are selected for this award based on a combination of factors including financial he ... **<<more>>**

May 25, 2018. **Leeds Beckett University selects Talis Aspire to improve library workflows.** Leeds Beckett University are

Library Technology Industry Reports

American Libraries

- 2014: Strategic Competition and Cooperation
- 2015: Operationalizing Innovation
- 2016: Power Plays
- 2017: Competing visions for Technology, openness, workflows
- 2018: New Technologies enable an expended vision of library services
- **2019: Cycles of Innovation**

Library Journal

- 2013: Rush to Innovate
- 2012: Agents of Change
- 2011: New Frontier
- 2010: New Models, Core Systems
- 2009: Investing in the Future
- 2008: Opportunity out of turmoil
- 2007: An industry redefined
- 2006: Reshuffling the deck
- 2005: Gradual evolution
- 2004: Migration down, innovation up
- 2003: The competition heats up
- 2002: Capturing the migrating customer

2017: Competing Visions

- Assembly of companies with involvement in business activities spanning technology and content
- Synergies among business activities which will give insight to inform business strategies without imposing control on their library customers
- Horizontal and Vertical Consolidation
  - Mergers among companies with similar business activates
  - Expansion into new areas of business
  - Library technology increasingly part of the mix

Consolidation: deep and wide

- Horizontal consolidation: M&A among ILS and RFID companies
  - SirsiDynix
  - Innovative
  - Bibliotheca
  - Lucidea
- Vertical Consolidation: Acquisition into top-level companies
  - Content + Technology + Services
  - ProQuest: Acquisition of Ex Libris, Serials Solutions
  - EBSCO: FOLIO, Stacks, etc
  - Follett: Acquisition of Baker & Taylor

Library System Report 2018

"**New Technologies Enable an Expanded vision of Library Services**"

2018: New Tech / Expanded Vision

- Resource Management and Discovery products relatively mature
- Increased interest on products supporting services beyond collections
- Extend academic library technologies in support of the research agenda of the university
- Support teaching through learning management integration and copyright management
- Advancing resource sharing strategies
  - Ex Libris: shared resource management infrastructure for multi-campus systems and consortia
  - OCLC: Consolidation of products for centralized and peer-to-peer interlibrary loan (WorldShare ILL, Relais D2D, Tipasa)

ProQuest – EBSCO dynamic

ProQuest

- Content: ProQuest platform
- OASIS acquisitions
- Ex Libris + PQ product suite
  - Alma
  - Primo, Summon
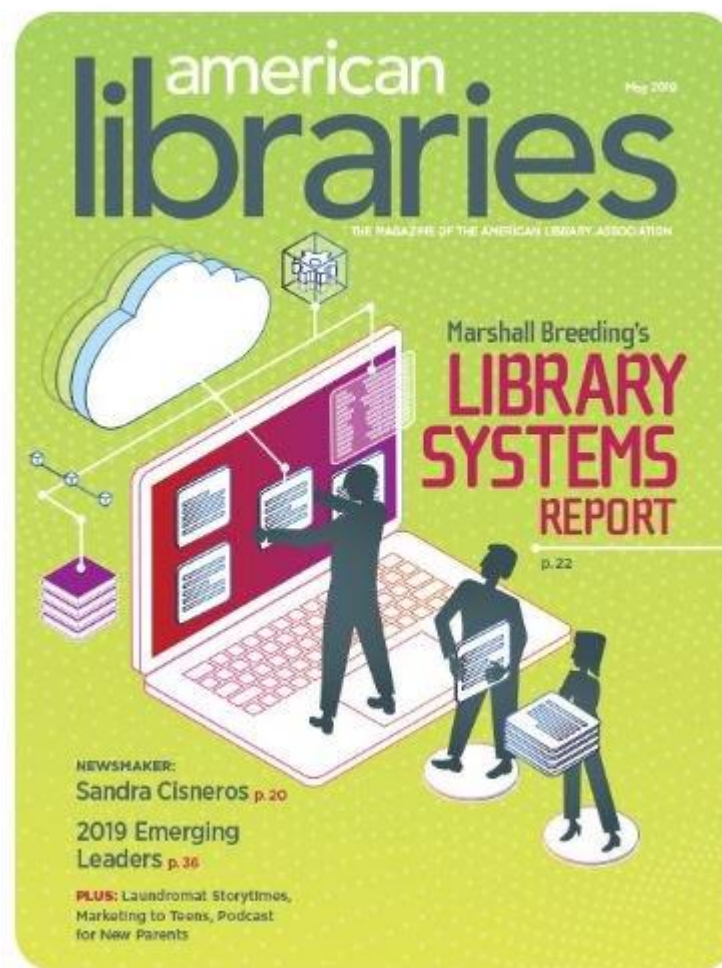- Strategy of platform bundling: Alma + Primo

EBSCO Information Service

- EBSCOhost
- EBSCO Discovery Service
- GOBI acquisitions service
- Strategy of Integrating discovery into all other platforms
- Open Source Strategy:
  - FOLIO
  - Koha

Library System Report 2019

2019 Report Theme

"Cycles of Innovation"

2019: Cycles of Innovation

- Product innovation and development cycles differ for each library sector
  - Academic: mid-way into a 15-year cycle of transition from ILS products to Library Services Platforms
  - Publics: Mired in ongoing evolution of ILS products to add new web interfaces and patron engagement capabilities. Low level of churn of ILS trade-offs
  - Schools: District-oriented ILS products, supplemented by content discovery and delivery services

Ex Libris expands scope

- Well established provider of library technologies
  - **Alma** selected by over 1,000 academic and research libraries
  - Voyager and Aleph continue as viable products
- **Leganto** supports increased library involvement with curriculum
- **Esploro**: new product in development to address academic research management
  - Stakeholders: Library + Office of Research + Researchers
  - Competes with Elsevier Pure, Kuali Research, etc

2018 Product Sales Statistics

Product Name	CompanyName	Product Type	Year	Contracts	Libraries	Installed
Aleph	Ex Libris	Integrated Library System	2018	3	3	2363
Alma	Ex Libris	Integrated Library System	2018	115	448	1543
bicatWise	OCLC	Integrated Library System	2018	3	317	120
CARL.X	The Library Corporation	Integrated Library System	2018	1	1	114
Evergreen - Equinox	Equinox	Integrated Library System	2018	11	10	1503
Evolve	InfoVision Software, Inc.	Integrated Library System	2018	16	16	147
Horizon	SirsiDynix	Integrated Library System	2018	17		879
Koha -- ByWater Solutions	ByWater Solutions	Integrated Library System	2018	43	225	1221
Koha -- Equinox	Equinox	Integrated Library System	2018	7	7	40
Library.Solution	The Library Corporation	Integrated Library System	2018	14	173	766
Symphony	SirsiDynix	Integrated Library System	2018	107		2498
TIND ILS	TIND	Integrated Library System	2018	3	3	14
VERSO	Auto-Graphics, Inc.	Integrated Library System	2018	4	4	529
Voyager	Ex Libris	Integrated Library System	2018	0		750
WorldShare Management Services	OCLC	Integrated Library System	2018	53	56	565

Vendor Personnel Statistics (2018)

| Company | 2018 | | | | | | 2017 | 2016 | 2015 | 2014 | 2013 |
	Dev	Suprt	Sales	Admn	Other	Total					
EBSCO Information Services						**3305**	3393	3674	3028	2982	2807
Follett	156	199	335	14	1054	**1758**	1482	1407	1394	1359	361
OCLC	518	358	130	156	89	**1251**	1237	1204	1195	1315	
Ex Libris	268	446	140	75		**930**	835	830	615	565	536
Civica	18	440	11	15		484	484	486	403	454	438
SirsiDynix	129	152	51	34	25	**391**	398	410	416	421	385
Axiell	85	116	43	20	40	**285**	305	296	274	263	219
PRIMA Informática	32	61	24	14	3	**134**	133	125			
The Library Corporation	43	38	18	10	17	**126**	175	169		199	199

Recent Business Transactions

- Ex Libris:
  - Acquired Research Research, Ltd: UK firm with services and expertise in the academic research sector
  - Began direct operations in Latin America, taking over from long-time partner Grupo Sistemas Lógicos.
- EBSCO acquired Stacks, a company it had sponsored to develop a website portal product
- Axiell acquired Bibliotekenes IT-senter (Bibits), provider of MikroMarc ILS and SAGA portal
- Sage acquired Talis and Lean Library

Non-Profit Mergers

- NFAIS merged into NISO
  - Trade association becomes part of standards organization
- DuraSpace merged into Lyrasis
  - Expands Lyrasis involvement with Open Source
  - Lyrasis: ArchivesSpace, CollectionSpace
  - DuraSpace: DSpace, Fedora, VIVO

Competitive Dynamics

- Dominance, but no monopolies
- Academic: ProQuest / Ex Libris
  - Competitors: OCLC, enduring ILS implementations, Open Source, future interest in FOLIO
- PreK-12 School: Follett
  - Competitors: Book Systems, OPALS, Alexandria
- Special: Lucidea
  - Competitors: Soutron
- Public: no single dominant product or company

Migration trends

- Academic: Ex Libris winning most academic library procurements.
    - Wins come at the expense of the academic customers of the ILS companies
    - Gradual migration of Aleph and Voyager sites to Alma, with some defections
- Public
    - Lack of new-generation products.
    - Some exchange of customers
    - Possible future disruption by new types of products:
        - OCLC Wise: focused on patron engagement
        - Axiell Quria: Digital-first library services platform for public libraries

Perspective

- Increasing divergence among library types regarding requirements for supporting technical infrastructure: Academic, Public, National, School, Special

- Approaches to library service vary according to international region

- Broad range of economic capacity or support across countries and regions and even within some countries. (especially United States)

Public Library Perspective

Public Library Trends

- Operational strategies distinct from academics
- Vigorous lending services of physical materials
- Emphasis on customer engagement
- Lending of downloadable e-books and audiobooks; streaming of digital content
- Requirements for organically integrated environments which promote the brand and services of the library
- Comprehensive and seamless digital presence

Key Issues for Public Libraries

- Ongoing reliance on print collections
  - Majority of collection budgets allocated for print
  - Minority on electronic materials
- Circulation of physical materials continues at vigorous levels
- Steady if not rising circulation statistics
- New services for e-book lending

Two vectors of Technology

- Enhance experience within physical facilities
  - Self-service kiosks
  - Featured print materials
  - Enhance face-to-face service
  - Promote programs and events
- Deliver library services and collections virtually
- Common goals of customer delight and engagement

Maximize use of Physical Collections

- Provide efficient support for lending materials
- Technology support through:
  - Advanced self-service stations
  - Automated material handling (returns, sorting, etc)
  - Security and control
- Find the right balance of high-tech versus personal service
- Balance depends on cultural and economic context

Building and Managing Collections

- Tools for acquiring and deploying collection materials
- Reports and analytics to support collection development and management decisions
- Identify weak segments of the collection
- Balance content among branches
- Anticipate demand of new collection materials

Support for Service Delivery

- Better tools for all aspects of public service
  - Circulation, Reference, Interlibrary Loan, etc
- Follow a customer relationship management approach
- Ability to measure, assess, and improve service quality
- Tailored to the profile of the patron

Public Library Discovery Strategies

- Emphasis on engagement and user experience
- Beyond search and retrieval
- Help library users discovery what to read next
- Highlight featured resources
- Personalized experience

Emphasis on Digital Lending Services

- Most public libraries offer some type of e-book lending service
- Ongoing reliance on content provided by OverDrive, Recorded Books, Bibliotheca, Odilo and others
- Interest in library centered e-book lending solutions
  - NYPL: SimplyE App (created as part of the Library Simplified initative)

OCLC Wise

- April 2018: OCLC launches Wise as new automation system for public libraries positioned as a patron-centered library management system
- Based on the bicatWise product developed by the Dutch company HKA which OCLC acquired in 2013
- bicatWise initially introduced in the 1980's but has been continually enhanced and re-engineered
- Product used by majority of public libraries in The Netherlands; recent selection by consortium in Belgium;
- Allen County Public Library in Indiana first library to select OCLC Wise in the US

Axiell Quria

- Open source library services platform for public libraries
- Fresh start for development of technology infrastructure for public libraries
- Digital first design
- Program and event management
- Customer service module
- Built-in analytics
- Pilot libraries now in production:
  - Drammen Public Library (Norway)
  - Mediathek Lahr (Germany)

See: Breeding, Marshall. (2016). Axiell Launches Quria: New Library Services Platform for Public Libraries. Smart Libraries Newsletter 36 (7), 3-6.

Academic Library Perspective

Trends in Academic Libraries

- Collections: More electronic than print
  - Spending on Electronic Resources dominates budgets
  - Generally flat budgets + 4% annual inflation = budget stress
  - Transition from print to electronic journals complete, shift to e-books underway.
  - Decreasing spending on print monographs
  - Emphasis on special collections able to differentiate libraries and strengthen engagement with students and researchers
  - Demand-driven acquisitions
  - Multi-layered discovery and discoverability strategies

Academic library trends

- Services
  - Involvement in a broader range of scholarly communications activities
  - Support for teaching: integration of library resources in learning management platforms, copyright management, etc.
  - Research:
    - data management plans
    - Research data repositories
    - Research services management

Library Services Platforms

- Well accepted by academic and research libraries
- Sweeping pattern of migration from ILS to LSP
- Almost no defections from Alma
- No longer considered cutting-edge, but a well established product genre
  - Alma and WorldShare Management services used in production since 2012
- Initial products have seen 7 years of ongoing enhancement

Shared Infrastructure

- Participating institutions share a single instance of a Library Services Platform or Integrated Library System
- Consolidated bibliographic database

Academic Shared Infrastructure Projects selecting Alma

- Orbis Cascade Alliance (37 libraries)
- State University of New York (61 campuses)
- WHELF: Academic libraries in Wales
- BIBSYS: 205 National, Academic, Special libraries in Norway
- California State University (23 campuses)
- University of Georgia system: all public universities
- Detroit Area Library Network
- Österreichische Bibliothekenverbund und Service Gesellschaft in Austria

2018 Alma sales

- Dominant product for academic libraries moving from ILS products (115 contracts spanning 448 libraries)
- Major contracts in 2018:
  - California Community Colleges
  - University of Hawaii System
  - Consortium of Academic and Research Libraries in Illinois (91 libraries migrating from Voyager)
  - PASCAL consortium of all academic libraries in South Carolina
  - Ontario Council of University Libraries
  - National Library of Poland;
  - The State University of New York (64 campuses)
  - Michigan Shared System Alliance
  - National Taiwan University

Discovery Trends

- Bundled or *ala carte*?
- Selection of resource management systems currently drives discovery
- Almost all Alma and WorldShare sales included bundled discovery
  - Some exceptions, especially for incumbent open source interface implementations (Blacklight, VuFind)
- Weakened market power of discovery services:
  - Perceived as not strongly differentiated
  - Small portions of researchers rely on these services

Beyond library management

- Starting point: Management, discovery, and access to collections
- Leverage platforms to address new areas of library service
  - Curriculum support: Leganto (including SIPX)
  - Research Services Platform: Esploro
    - Increase visibility, efficiency, and impact of institutional research
- **Academic Libraries seek opportunities for greater impact and involvement in other services of strategic value to the institution**
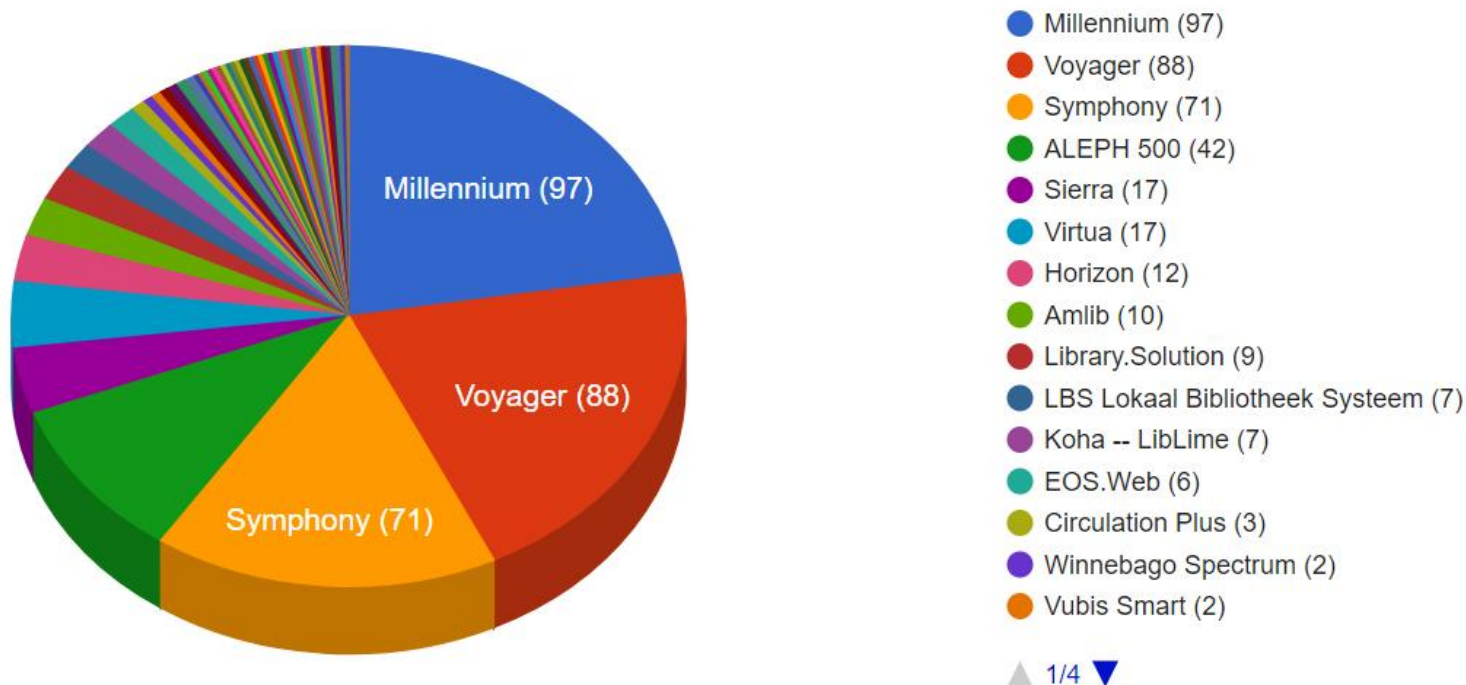
Ex Libris moving beyond Alma

- Alma continues to evolve in functionality, but now considered by Ex Libris a stable and robust system
- Leverage the platform to address other pressing needs of academic institutions, even beyond the library
- **Leganto**: integration of library resources into learning management systems
    - SIPX: Management of course materials and copyright management
- **Esploro**: Research Information Management System
- **campusM** platform: mobile-friendly content management platform for academic institutions

OCLC WorldShare Management Services

- Strategic resource management platform developed by OCLC
- Other apps built on the WorldShare Platform:
  - WorldShare License Manager
  - WorldShare Interlibrary Loan
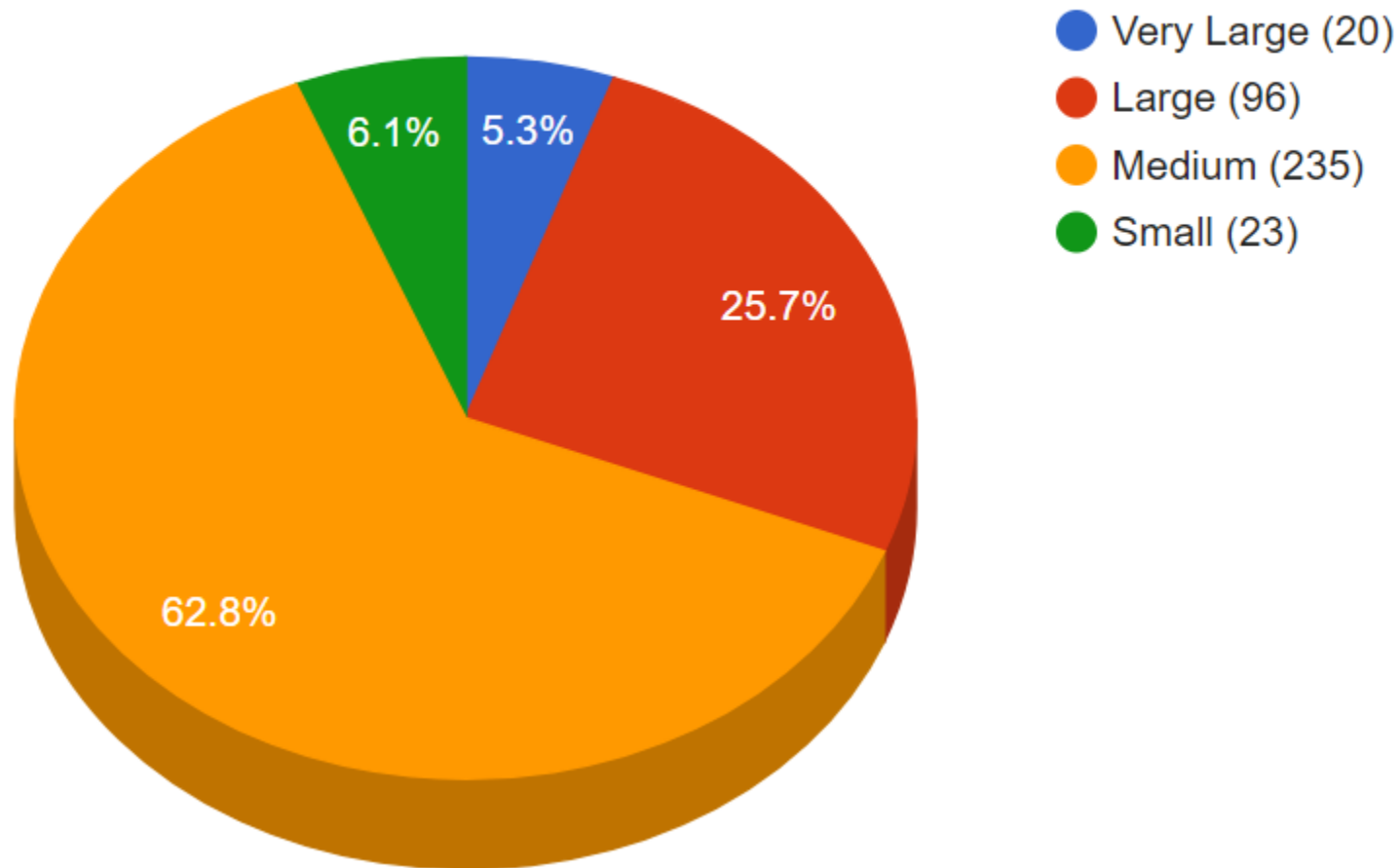 - Tipasa ILL management system (replaces ILLiad)

WMS Migration Report

Previous systems used by the 462 libraries migrating to WorldShare Management Services (counting number of institutions)

- Millennium (97)
- Voyager (88)
- Symphony (71)
- ALEPH 500 (42)
- Sierra (17)
- Virtua (17)
- Horizon (12)
- Amlib (10)
- Library.Solution (9)
- LBS Lokaal Bibliotheek Systeem (7)
- Koha -- LibLime (7)
- EOS.Web (6)
- Circulation Plus (3)
- Winnebago Spectrum (2)
- Vubis Smart (2)

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WMS Implementations by Size

Distribution of WorldShare Management Services implementations by Size

Legend:
- Very Large (20)
- Large (96)
- Medium (235)
- Small (23)

Pie chart values: 5.3%, 25.7%, 62.8%, 6.1%

Open Source Software

Expanding access to technology

Open Source vs Proprietary Software

- Library software available under both models
- Proprietary software tends to be adopted in libraries with more robust budgets
  - …but many libraries in wealthy countries also use open source ILS products
- Open source software widely implemented in developing nations
- Commercial support of open source represents a growing portion of ILS implementations in the US

Open Source Software

- The source code to the software must be made available
- Can be modified and shared
- No fees can be charged for the software itself
- Fees can be charged for services for open source software products:
  - Support
  - Hosting
  - Migration
  - Customizations
- OSS licenses specify different terms for sharing, re-use, commercial use, etc. (GPL, Apache)

Open Source

- Considered a routine part of the library technology industry
  - 14 percent of ILS installations in US Public Libraries
  - 6 percent of ILS installations of US Academic Libraries
- ByWater Solutions dominant provider of Koha services in the US
  - 2018: 43 new contracts spanning 225 libraries
- Evergreen: Open Source ILS for public library consortia
- Equinox Open Software Initiative: services for Evergreen and Koha

General observations

- Wealthy regions primarily use proprietary products
  - Sophisticated systems, but with substantial costs for libraries
- Proprietary products not affordable by most libraries in developing world
- Open source ILS products have comparable capabilities and can be implemented at lower costs
- Gaps in functionality between open source and proprietary ILS products continue to narrow
- Open source options for electronic resource management are available, but have less capabilities
  - Lack of open access knowledgebase and discovery index

Trends in Open Source

- Open source now a routine segment of strategic library automation
- Implementation models:
  - Commercial support
  - Independent with community support
  - Support through governmental organizations
- Development models
  - Distributed community
  - Mostly centralized within a commercial community (Example Kuali suite of applications for universities)

Koha Worldwide

FOLIO

- Open source library services platform
- Designed for multitenancy
- Based on Microservices architecture
- Designed for multiple deployments
- In development phase: expect first libraries to go into production in 2018

FOLIO

- Initially sponsored by EBSCO in partnership with other commercial and library partners
  - Index Data: open source software development firm
  - OLE (Open Library Environment). Coalition of libraries initially involved with Kuali OLE software now engaged with FOLIO.
  - Other software development firms in other global regions
- Initial version expected to be implemented this year
- Multiple Support Providers: EBSCO, Index Data, ByWater Solutions,

FOLIO background

- Initially oriented to academic libraries
- Academic libraries interested in Library Services Platform
- Narrow options (Ex Libris Alma, OCLC WorldShare Management Services)
- Unbundle Discovery from Resource Management
  - Choice for patron-facing services
- Alternative functional approach based on apps and modules

Timeline

- Aug 2016: Release of base platform to developers
- 2018 - 2019: Initial versions available for early adopters
- Implementable tools and modules will be available prior to a comprehensive system

Questions and discussion