References, Resources, and Appendixes

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Appendix 1. Sample Library Survey

Current Discovery Product: Year Implemented: Vendor: Previous Discovery Product: Previous Vendor: Year Implemented:

	0	1	2	3	4	5	6	7	8	9
How do you rate the library's satisfaction with the overall performance of the Discovery Product? 0 = Not Satisfied 9 = Very Satisfied	0	0	О	0	0	О	0	0	О	0
Please give any general comments about the discovery product:										
How effective is the discovery product for undergraduate students ? 0 = Not Effective 9 = Very Effective	0	0	0	0	0	0	0	0	0	0
How effective is the discovery product for graduate students ? 0 = Not Effective 9 = Very Effective	0	0	0	0	0	0	0	0	0	О
How effective is the discovery product for faculty members ? 0 = Not Effective 9 = Very Effective	0	0	0	0	0	0	0	0	0	О
How effective is the discovery product for the general public ? 0 = Not Effective 9 = Very Effective	0	0	0	0	0	0	0	0	0	О
How comprehensive is the discovery product relative to the collections of the library? 0 = Not Comprehensive 9 = Very Comprehensive	0	0	0	0	0	0	0	0	0	О

Describe any major resources that are not addressed by the discovery product				_		_		_	_		
How do you rate the effectiveness of the user interface of the discovery product? $0 = Not$ Effective $9 = Very$ Effective	0	0	0	0	0	0	0	0	0	0	
How do you rate the effectiveness in ordering search results by relevancy ? 0 = Not Effective 9 = Very Effective	0	0	0	0	0	0	0	0	0	0	
Does the discovery product provide objective access to library resources or do you observe any bias? 0 = Biased results 9 = Objective results	0	0	0	0	0	0	0	0	0	0	
Comments regarding the objectiveness or bias of the discovery service:				_		_		_			
How do you rate the effectiveness of the integration between the discovery product and your automation system? 0 = Not Effective 9 = Very Effective	О	0	0	0	0	0	0	0	0	О	
How do you rate the tools offered for the library to configure and administer the discovery product? $0 = Not$ Effective $9 = Very$ Effective	О	0	0	0	0	0	0	0	0	О	
Is this library currently considering migrating to a new Discovery Product ?	[O yes] [O no]										
If yes, please list the products under consideration:											
Approximate number of e-journals held by the library:											
What was the approximate initial cost of the discovery product, including up-front license fees, installation, setup (US Dollars)?											
What is the approximate annual maintenance or subscription fee for the discovery product (US Dollars)											

If your library has previously changed discovery products, please comment on the change:

Appendix 2. Vendor Narrative Responses

BiblioCommons (BiblioCore)

One of the most important elements is that all UGC (user-generated-content) is shared across all partner libraries—giving all public libraries using BiblioCore a robust data set inherent to the search and discovery experience. BiblioCommons is also leading the industry in creating an interoperable, library-centered ebook reading experience that allows the library to provide access to all ebooks in one discovery, lending and reading experience—integrated fully with the ILS account and regardless of who the ebooks were purchased from.

Ex Libris (Primo)

With Primo, libraries provide users with a superior one-stop discovery and delivery solution—combining the richness of library collections, the unique value added by library cataloging services, and an Internetage user experience.

- 1. Primo is flexible and customizable, enabling the library to offer a solution that optimally serves its users:
 - a. User interface customization: libraries maintain their own branding, adhering to institutional design paradigms. Furthermore, libraries can customize the user interface to make it optimally fit specific needs of their users.
 - b. Library defined normalization rules: libraries

define how their data is converted to Primo, preserving their cataloging practices. Furthermore, libraries can harvest any type of material and index it in Primo.

- c. Search engine configuration: libraries have control over the discoverability of local material and can tune the Primo relevance ranking algorithm.
- d. Course reserves: libraries can include course reserves from the ILS in their Primo implementation and enable these materials for discovery in a separate scope or view. Users may search such materials by course name, course ID, instructor name, etc. These fields are also used as facets.
- 2. User experience:
 - a. OPAC via Primo: OPAC functionality offered in Primo enables users to access all library services through one interface.
 - b. Concise display of information: to decrease information overload and expose as many relevant results, Primo groups identical materials (dedup) and similar materials (FRBR).
- 3. Ranking:
 - a. Personalized ranking: Primo can rank results based on the user's discipline and academic degree.
- 4. Functionality:
 - a. bX Recommender: the bX usage-based recommender service is integrated in Primo

and suggests items related to a search result, based on previous selections by the academic community.

- b. Hot articles: the Hot Article service displays the articles that are in the focus of the academic discourse in recent weeks, per research area.
- c. E-shelf: users can create personal libraries (user's e-Shelf) in Primo and organize items of interest in sub-folders.
- d. Consortia support:
 - i. For librarians:
 - a) Collection activation in Primo Central is inherited by consortia members.
 - b) Libraries can blend or effectively exclude material from other institutions.
 - ii. For users: users search the whole consortia; however, results from the user's institution are displayed at the top of the list.
- 5. Content:
 - a. Content neutrality: Ex Libris does not sell content and therefore has no bias toward content from specific content providers.
 - b. Open access:
 - i. Primo enhances the discoverability of openaccess material by indexing institutional repositories.
 - ii. Primo supports various open-access business models, including open-access publications in subscription journals (hybrid journals).
- 6. Open platform:
 - a. Primo offers open interfaces that can be used by libraries to customize Primo, integrate it with other services in the library, and enhance the Primo implementation with new functionality.
 - b. The EL Commons collaborative platform provides in-depth documentation of the Primo open interfaces and enables library developers to exchange code extensions that they have developed.

EBSCO Information Services (EBSCO Discovery Service)

There are many specific features and functionality that set EBSCO Discovery Service apart from competing discovery services. The following is an overview of the key areas for your consideration:

While EDS provides the widest coverage of content sources, it is the robust metadata associated with EDS that is distinctly different than the typically thin metadata associated with competing services.

Relevancy ranking is critical in a discovery service with hundreds of millions of records. Not only are the EBSCO algorithms for relevancy fine-tuned to leverage and weight results based on critical fields, but EBSCO has the ability to leverage the rich metadata alluded to above, and is able to utilize subject headings, along with author-supplied abstracts, author keywords, article titles and other elements of metadata in order to apply its relevancy algorithms and present the user with the most valuable results on the first page. Competing services suffer when the metadata available to perform relevance ranking against is less than ideal.

Patron functionality is an important facet of a library's operation. EBSCO has partnered with 30 ILS vendors worldwide to allow a library to use the interface of their choosing, and allow for patron functionality and catalog searching within the search experience. Providing choice is important to EBSCO and our customers and giving the library the ability to decide how to implement the superior content and relevancy in EDS with the ILS system of their choice allows the library the ability to best serve its community.

Although this point is often confused, the overwhelming majority of leading indexes do not participate in discovery services. While individual publications indexed in these indexes may be covered in some inferior way in a discovery service, the depth and quality of the indexing sets these databases apart, and makes them critical components of a library's resources. There is no substitute for the index itself. Because EDS leverages the EBSCOhost platform, for customers subscribing to these important indexes on EBSCOhost, EDS is able to bring these results into the discovery experience. This is perhaps the biggest differentiator for EDS vs. competing services, and has proven to increase usage of these essential indexes for EDS customers. To be clear, this is not accomplished through federation, it is through unique EDS technology that allows records from indexes to which a library subscribes to become infused as part of the discovery experience. While other services may attempt to convolute this issue by inferring that they cover a certain percentage of the journals in a given index, this approach pales in comparison to the ability to bring actual records (full indexing) from key databases to which you subscribe into the user experience. The difference in the quality of a given record from a typical discovery service vs. the same record from a respected subject index is dramatic-and has a profound effect on the quality of searching, relevance ranking, and subsequent value to the end user.

While earlier in this document references are made to various on-screen customization options, perhaps the most important customization comes through the ability to create "profiles" in EDS, each being its own subject-specific rich discovery experience. This allows each library to optimize the value derived from EDS by providing its user communities an experience that is tailored specifically for them. Furthermore, when it comes to catalogs, customers have options to share and expose not only their own catalog (and institutional repositories), but also other appropriate catalogs (e.g., catalogs from other institutions in the same consortia or group). By leveraging EBSCO's CustomLinks and other options, ILL can be facilitated directly from an EDS search where a user finds a catalog record from a partner site, and initiates the request to loan the item. This capability provides a seamless sharing experience between institutions that each subscribe to EDS.

Infor (Iguana)

Iguana features a complete content management system enabling the library to fully integrate its website and catalog. The system has a permissions controlled CMS where access can be assigned based on staff roles (i.e., Administrator, design, content update only, etc.). Iguana is WCAG 2 Level AA compliant and supports multi-lingual access for both content and discovery.

Iguana is widget-based. A widget may include content—such as news or an event—or a "function" e.g., search. Widgets can be placed anywhere on a page and can be re-used across pages.

Core features include:

- An automated featured items list. Prominently displayed as a book river or carousel, featured items may include new acquisitions, recently returned items, new DVDs, reading lists, subject based resources etc. Once a patron logs in, the featured item list will display items that may be of interest to the patron. Featured items can also be associated with a profile—say a branch or a population group (e.g., "teens" or "kids").
- Publisher module for calendar, news events, etc.
- Mashups. Third-party mashups can be readily integrated within Iguana. E.g., Google Maps (with branch locations and opening times), Twitter and Facebook feeds, RSS feeds, etc.
- Iguana enables the library to create different profiles for different constituents and branches.
- Iguana provides a "People who borrowed this title also borrowed . . ." feature.

Innovative Interfaces (Encore)

Encore brings together the entire discovery experience into one easy search that works across local collections, articles, eBooks, eResources and digital content so that no content is left behind. With relevance-ranked results, facets for narrowing results, and a personalized browse, the user experience is seamless and complete. Encore brings best of breed through partnerships and APIs to remain open to innovation and opportunity.

ProQuest (AquaBrowser)

High-quality discovery layer for local collections, with

bright and shiny user interface specially developed for public libraries, enriched with relevant external information (web services) from LibraryThing, LastFM, iTunes, Wikipedia, and optional with Syndetics ICE.

Extendable with profiles per library (for consortia) facilitating local header and footer URLs, look and feel, branch boosting or filtering.

The flexibility of the AquaBrowser architecture enables customized solutions for libraries. Two EMEA National Library projects exemplify the ability of AquaBrowser to deliver a superior end user experience, whether it is using the AquaBrowser search engine or interoperating through APIs to other search engines and systems.

ProQuest (Summon)

The Summon service is the first and only discovery service based on a single, unified index architecture, providing discovery across a library's collections without bias to content type, vendor, or platform. Leveraging its unique "match and merge" technology to combine rich metadata and full text from multiple sources, the Summon service creates a single record optimized for discovery. This unique approach exposes resources to more users, directs researchers to full text when available, and maximizes the value and usage of a library's collections. The Summon index contains more than 1.4 billion items, normalized and mapped to a common schema, in which the vast majority of article and book content is full-text searchable.

The combination of a unified index and a unified result set impacts just about every factor that's important to a discovery service. Features such as speed, unbiased relevance ranking, dynamic user display options, granularity of facets, ease of navigation across result sets, ability to pre-scope searches, discipline-scoped searching, recommendations and suggested searches, data-driven design features and important contextual guidance are all possible in the Summon service because of its unique system architecture.

The Summon service offers unlimited flexibility and customization options and makes customization far easier to achieve for any library regardless of staff size and resources. This is possible because the Summon service is a built to purpose discovery engine that revolves around a single, unified index of content and relies on a powerful API that is inherent to the service.

Launching new capabilities and the constant evolution of the Summon service is possible because of our rapid and agile development methodology. Offered via a Software as a Service (SaaS) model, all libraries using the Summon service get all new features and enhancements instantly with no development work required, no re-deployment or additional investments in people or hardware, and no downtime for users. With the introduction of new groundbreaking features, the Summon service continues to deliver on its mission to return researchers to the library by providing a user experience that resonates with users familiar with open web search engines. Recent enhancements include streamlined navigation and contextual guidance features that significantly advance the research experience and provide greater opportunities for librarians to deliver value and scale their services to connect with more users.

OCLC (WorldCat Local)

In addition to the WorldCat Local discovery service, OCLC offers syndication services through partnerships and collaborations with more than 200 partners that make library collections accessible to searchers through leading search engines and other websites, where most information searches begin. WorldCat offers libraries expanded visibility on the web through these partnerships.

OCLC's WorldCat Local is the web-based discovery service that delivers access through a single-searchbox to more than 2 billion items from the searcher's library—and from thousands of collections in libraries around the world through WorldCat.

With WorldCat Local, users can discover:

- More than 977 million articles with easy access to full text
- More than 37 million digital items from trusted sources like Google Books, OAIster and HathiTrust
- More than 15 million e-books from leading aggregators and publishers
- · More than 30 million pieces of evaluative content
- More than 238 million books in libraries worldwide

Discovery through WorldCat Local is based on metadata and library holdings information in World-Cat and the WorldCat knowledge base. The integration of metadata and holdings information in World-Cat and WorldCat Local means library staffs do not have to manage a separate data load into their discovery service.

WorldCat Local can be configured to support library fulfillment services and processes. Users are presented with the most appropriate fulfillment option for the resource format they want to obtain.

SirsiDynix (Enterprise/Portfolio)

Embedded product literature provided. The company provided standard product literature but did not contribute additional narrative comments.

VTLS (Chamo Discovery)

Chamo Discovery is OPAC centric. It does everything the OPAC needs to do plus accesses external indexed databases, external Z39.50 databases and external proprietary databases. It also accesses content management systems. It is extremely fast. It is lightening [sic] fast if the metadata is loaded in a single or multiple Virtua databases.

Villanova University (VuFind)

VuFind is designed to be an easy-to-install product with extremely flexible configuration options, built on a highly flexible and customizable underlying architecture. It should deliver good results from a simple "out of the box" install, but it also offers tremendous flexibility for the developer who wishes to customize any aspect of its appearance or functionality.