ERM(S) + Workflow

Fall 2016

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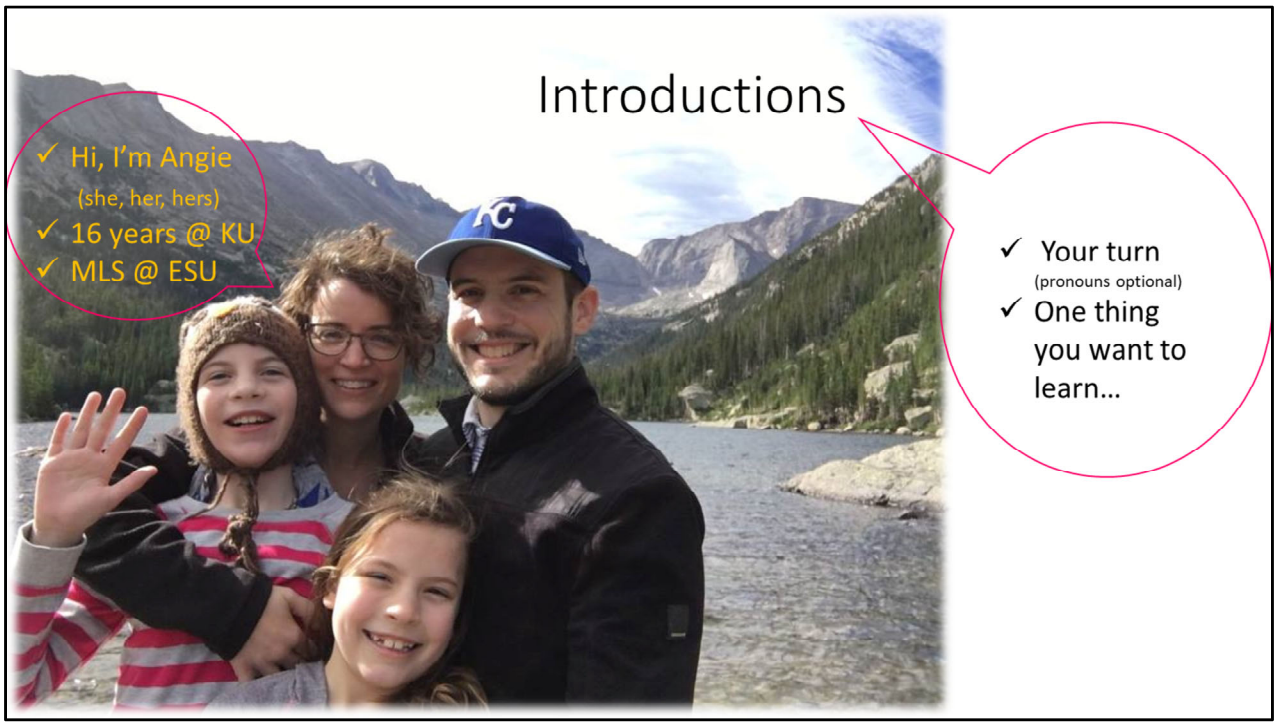

My name is Angie Rathmel. I've been working at KU for the past 16 years – all of in the Acquisitions and Resource Sharing area and most of it dealing with serials and electronic resources. This practical experience has been helpful since during my MLS studies there was no course in e-resource management. Shortly after receiving my MLS from Emporia State, I was hired as one of two e-resource librarians at KU. In that role, and in my role as head of Acquisitions & Resource Sharing, my professional and research interests center around change in response to e-resources (and by extension open access resources), particularly the responses in workflow systems and tools, and in interpersonal and organizational communication.

Could each of you use the chat to introduce yourself and let me know one thing you're hoping to learn in tonight's class.

Outline

- Focus
  - Systematically (from the vantage point of systems/tools)
  - Constructively (from course outline so far)
- Basics
  - Definition
  - View inside/outside
- Evolution, Current, and Future State
  - Lifecycle and Workflow
  - Staffing and Organization
  - System Alternatives, Market

ERM System

- Knowledge Base (KB)
  - Holdings, description
- Administration around the KB
  - Beyond bibliographic descriptors
  - Ongoing maintenance of holdings
  - License, usage
- Administration of administration
  - IPs, URL, EZ Proxy configurations
  - Administrative logins, contacts

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The ERM system at its core is a knowledge base, you'll hear that term a lot. Basically the catalog where you describe what electronic resources your library owns or wants to make discoverable by associating holdings to those records. The integrated library system (ILS) is also a knowledgebase, primarily, historically developed for libraries' print holdings, although it contains e-holdigns as well. For oversimplified comparisons, ILS=print as ERM(S)=electronic holdings. The ERM system was somewhat in response to the fact that the ILS had limitations by virtue being designed for print. The ILS didn't have structure for administrating other necessary elements for describing electronic resources, its holdings, and managing their discovery on an ongoing basis.

So a major defining major part of the ERM, distinguishing it from the ILS, is the administration function around the knowledge base holdings. For example, the way those particular e-journal and e-books are packaged, their cost, how the access is maintained, the terms of use or license associated with it, and how they are used, the statistics for evaluation.

There is also another layer of administration of these administrative details that the ERM manages as well. For example the tracking your IP ranges, and EZ Proxy configurations, in order to manage ongoing maintenance of holdings and access. Where you go to download statistics and manage interfaces for each of your providers requires centralized

management of those admin portal login details, and the contacts for troubleshooting.

Knowledge Base

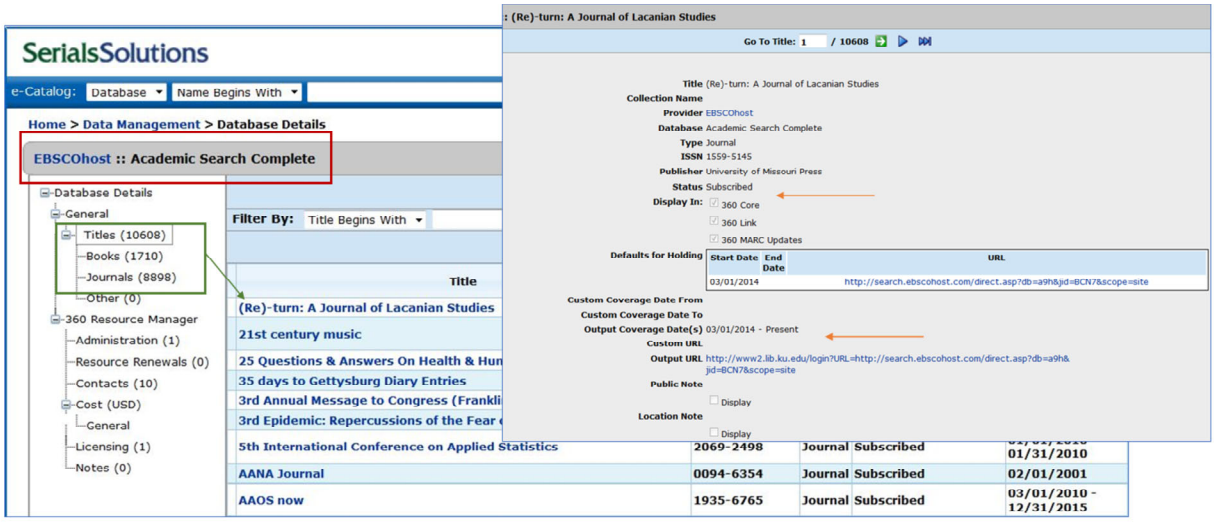
- Selection to Discovery
  - Items under consideration now or in the past.
  - What options for purchase are available (platform, package)

中国重要报纸全文数据库 (China Core Newspapers Full-Text Database)	2~6	Subscribed	597	同方知网(北京)技术有限公司
GEOBASE	BUH	Subscription Not Pursued	0	OCLC
Chemical & Engineering News Archives	D2J	Trial expired	3	American Chemical Society
Computer Science Index	BAQ	Trial expired	0	EBSCOhost
ICE Science Journals	TC4	Trial expired	5	ICE Publishing
John Milton Bibliography	JTF	Trial expired	0	University of Toronto
Library, Information Science & Technology Abstracts (LISTA) with Full Text	ELW	Trial expired	369	EBSCOhost
MarketResearch.com Academic	ADB	Wishlist	0	MarketResearch.com

So, the Knowledge Base function of the ERM is primarily providing a centralized place for tracking selections and holdings. As you select and track resources in the ERM, they are "turned on" and become connected to that linking and discovery capability. When we're talking about selection from a workflow and staffing perspective in the ERM is providing two things. There's the Acquisition as a Cataloging function – what options are available to buy and selecting what record to attach the holding once its purchased and available. But the ERM can help track at what stage of the selection process the e-resource is in and provide a historical perspective on the selection process for a particular resource. Let's see what this looks like in more detail.

Knowledge Base - Selection

Adapted from original slide in *Electronic Resources Management @ UMKC Libraries* (Pennington, 2015)

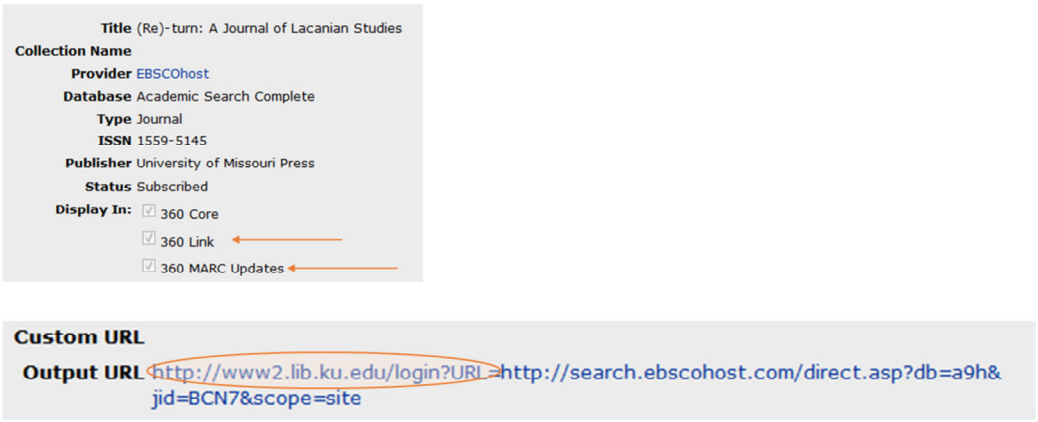


The ERM I'm going to use in all my examples called Serials Solutions 360 RM product. We're going to look here at the basic knowledge base structure (starting with the data element called the "provider") and drilling down to the most familiar bibliographic level data (books and journals).

Shown here in the breadcrumb we see the relationship between the platform provider **EBSCOhost** and its database **Academic Search Complete**, and the **titles** within that database.

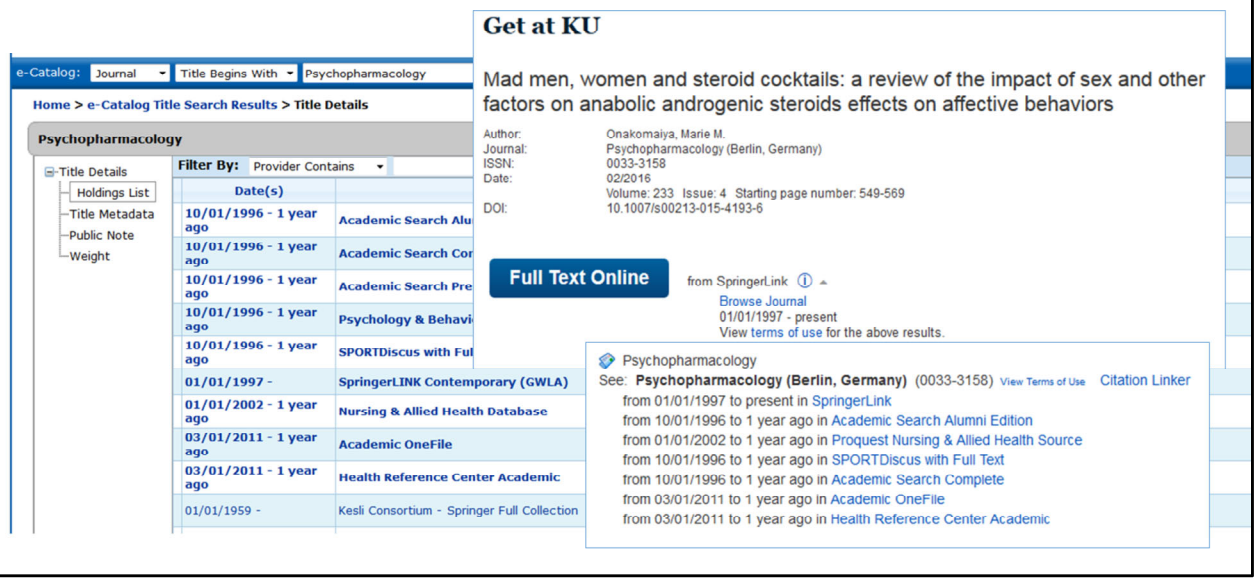
One more level of down to the individual title is where you see the more specific bibliographic details including the access URL. It is here you would make edits in order to select this as part of your holdings by changing the status to **Subscribed** and manage the **coverage date ranges** of your holdings. It is also here where you take the initial step to enable linking and discoverability.

Knowledge base – Linking, Discovery, EZ Proxy



Shown by the fact that Display In categories are checked. 360Link in this case indicating the linking to discovery in enabled, and 360 MARC indicating your choice to add a MARC record to your ILS catalog for a duplicate layer of discovery. The URL includes what's called a proxy prefix that enables it to authenticate users as part of your network. All of this is set up centrally in your ERM to add to every resources unless you choose (for open access title, for example) to omit it. Here you are seeing the proxy addition to the URL at the title level of this record. But the way the ERM is structure around the provider allows you to set specific details at that top layer and the systems manages the inheritance down, so you are not maintaining thousands of URLs.

Knowledge Base – Discovery (Inside-Out)

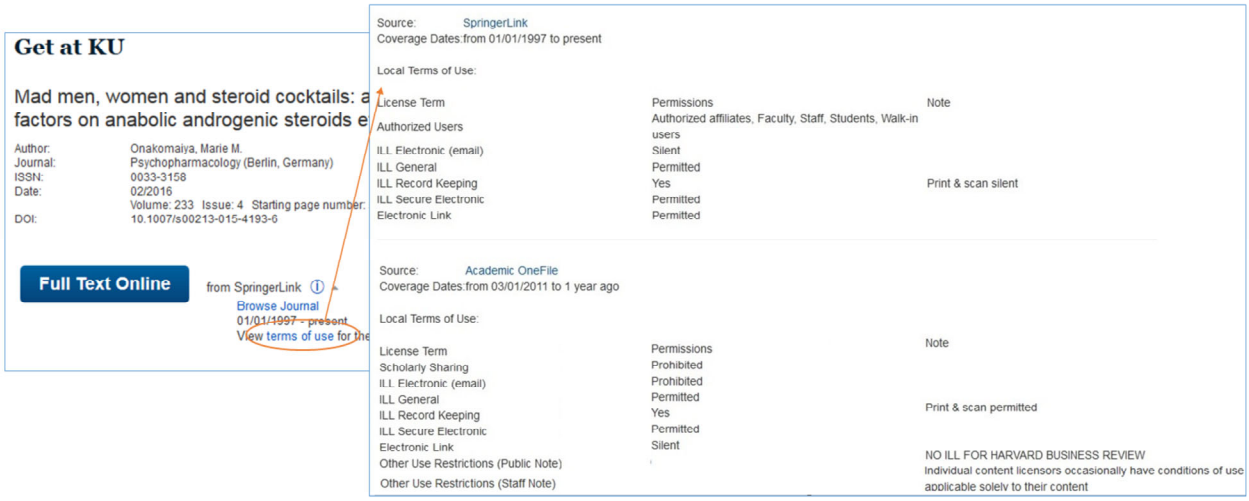


To illustrate discovery a little further detail, let's look at another journal level detail in the ERM to show how the ERM structures what the patron sees. I am showing here a journal title ***Psychopharmacology*** and the various different databases in which we have selected to track our holdings. The ERM allows me to sort these results however my workflow needs to see it. But ERM also allows me to administer what sorting priority is given to the patron, so that you can optimize their display to show what databases and holdings are the most reliable.

So this is search results of the journal itself in a patron interface. This is especially important for when patrons are searching for articles with a more general search.

In this search result the link resolver function is going to try to match them with the most reliable result, either by taking them directly to that full text article or to an intermediary like this screen where they can click Full Text Online.

Administration around KB – Licenses

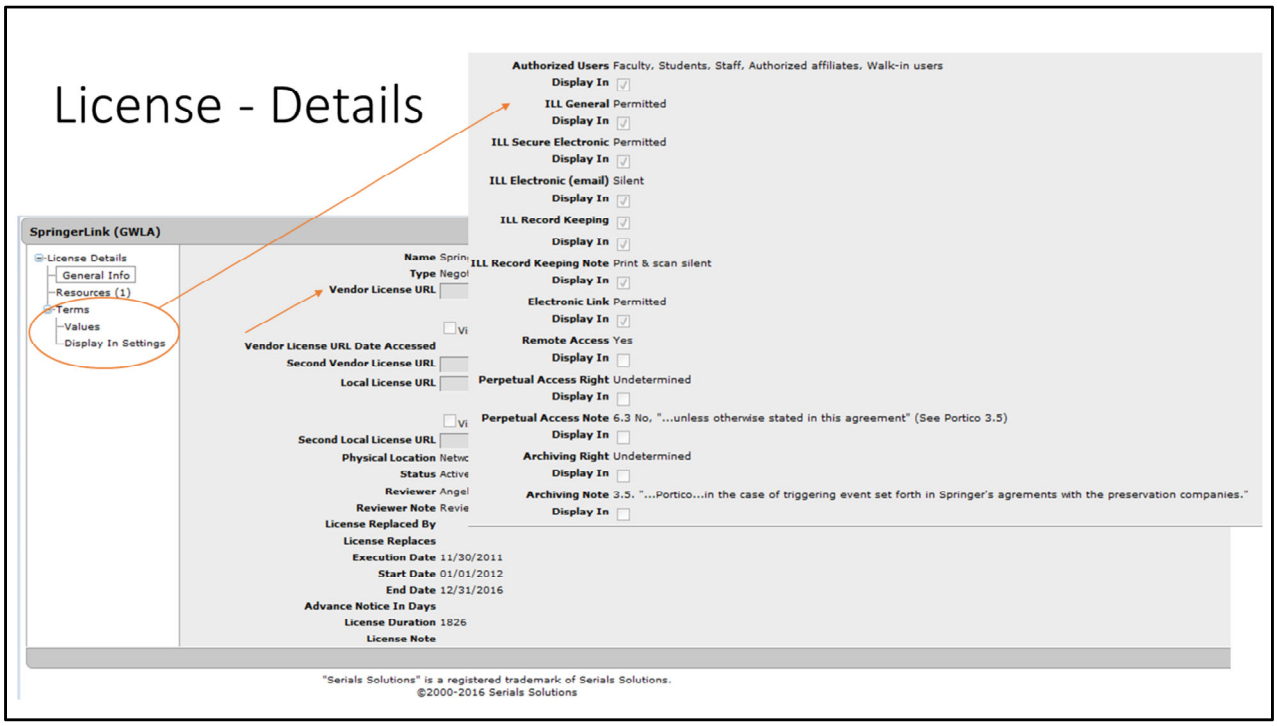


You can begin to see how the ERM manages administration around our holdings in the knowledge base, centralized around the provider. I'm going to use this same intermediary link resolver result screen to work my way back to how some of the ERM administrative details like licenses are managed.

The ERM allows staff to track licenses associated with a resource, but it also has the same mechanisms to make the terms of the license (CLICK) to display to patrons in the discovery layer. In all honesty, patrons never use this, and unlike "click through agreement" we are most familiar with accepting to download an app or update our software, reviewing and accepting these terms are not usually a required action by patrons to access the full text. But if they did, or if staff more likely did when troubleshooting, (CLICK) you'd be able to see terms that were first administered and managed in the ERM and made displaying to public in this interface. (CLICK FOR EXAMPLE to external webpage). You can see its showing the terms for each one of these providers. (BACK to PPT).

So even though users may not directly use this display, the staff and workflow that depends on this piece of the display staff troubleshooting access for patrons that may be related to for example their users status or whether the provider allows ILL for a particular article in the database, or in some cases more restrictive terms that apply only to a portion of the content in the database (e.g. HBR). You can see that the display here is only showing those

most relevant and frequently referenced terms. But there are 76 possible fields in the ERM that you could display. As you image looking at just these few displaying that could get real messy real quick from a design and usability perspective.

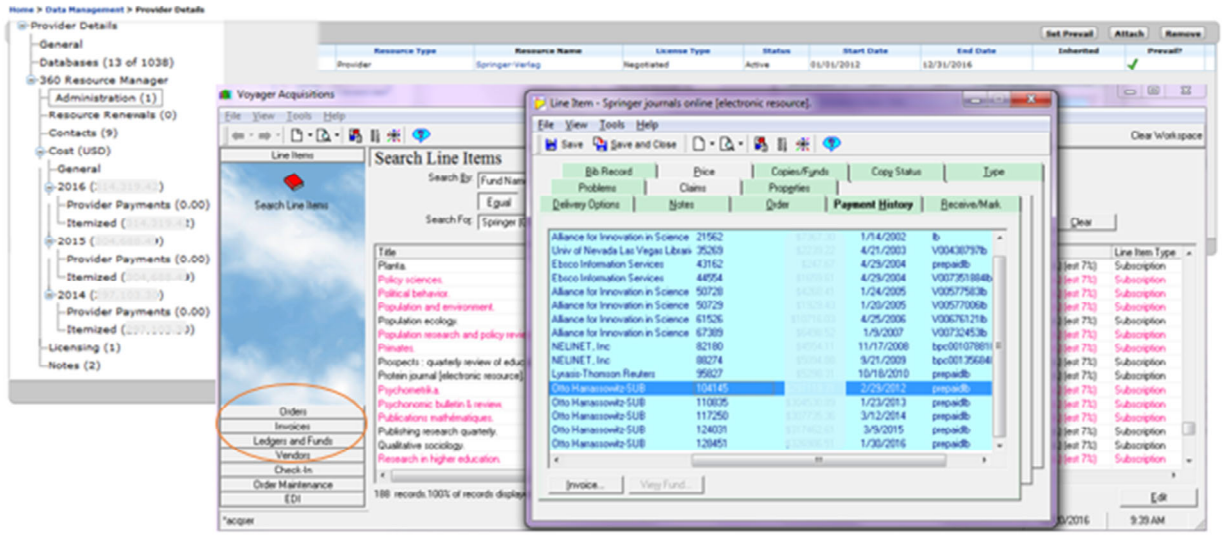


Now, let's go into the ERM live now using the Springer license to show staff the ERM serves as a centralized repository for electronic resource license data, and in some cases, a repository for the license document itself.

(CLICK) Here is where a URL to the license (at the publisher site or your negotiated license stored on a local network).
(CLICK) And where you input license terms values either to manage within the ERM or which of those 76 possible terms are you want to display on the patron interface.

Despite the limitation of the patron display and the license details are a necessary piece of the administration around the knowledgebase, because it allows it to be connected not just to the bibliographic holdings and titles involved, but also connected to the other details, such as cost.

Administration around KB – Cost Data



Cost is probably the most potentially valuable and yet unrealized aspect of the ERM system and why ERM are on the whole failing to meet libraries' needs.
One reason for this is because this cost data is already stored and managed in the library's main integrated library system (ILS)

(CLICK) And the ILS provides order, invoice, and accounting details necessary to manage budgeting of all library resources. Just as with ILS knowledge base, the ILS accounting features were also not designed to accommodate additional e-resource data needs like the license, e-resource vendor contacts, and renewal mechanism. Unfortunately, ERM design never developed sufficient interoperability with the ILS so when it comes to cost data, many institution lack the staff to support for loading and managing that data in two systems.

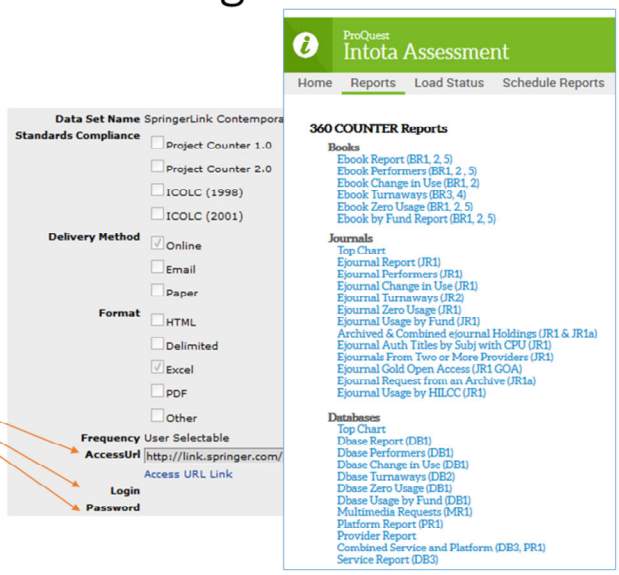
Cost Data - Detail

- Institutional size (Carnegie Classification)
- Number of users (FTE, sim user limits)
- One-time vs ongoing
- Big Deals, multi-year contracts
- Consortia
- Evaluation with usage

One of the reasons cost data management is so necessary and yet unrealized in either the ILS or ERM has to do with the fact that the pricing and accounting associated with e-resources is extremely complex. First, book prices are fairly stable between institutions, but e-resource are priced according to institutional size or number of users.
Second, whether purchasing e-resources as a one time purchase (like back-file) or as a ongoing commitment (subscription database) there are costs associated with ongoing maintenance and accounting for that provision of access. Other cost complexities come as e-resources are often bundled into various packages. These deals that may or may not be offered to institutions in equal ways; institutions may request multi-year pricing discount in response to the particular budget environments at any given time; or institutions may group together in a consortia as another way to collective bargaining tool for controlling costs. Each introduces different complexity to cost management and reporting. Reporting cost is the end-result of this administrative aspect of the ERM, as a evaluation tool. But equally important to that end is begin able to tying that cost evaluation to the evaluation of usage of these resources.

Administration around KB – Usage

- COUNTER standard (now in Release 4)
- SUSHI protocol (or other automated collection)
- Centralize admin access
- Repository
- Reporting, peer comparison



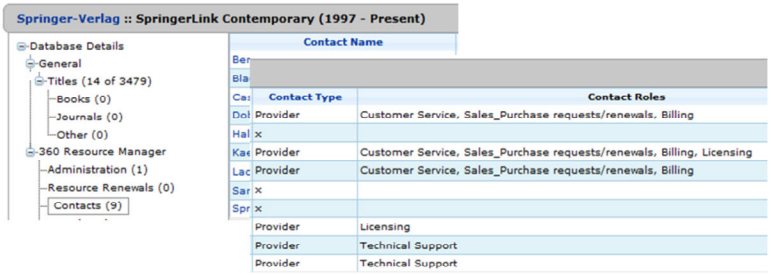
ERMs address the management of usage data in a repository kind of way as well, usually as a separate module or feature of the ERM because at the time separate vendors were also offering this service and also because of the complexity and system resources needed to store and manage usage data itself. Normalization of data across multiple providers is not easy. ERMs often are limited to loading COUNTER compliant (or standardized) usage data. Often because this is what is reported out. ERMs or other separate usage collection services outside the ERM have also attempted to offer automation of the usage collection process using SUSHI protocol or other automated mechanism.

How the ERM helps this process is by allows you to collect that data (whether automated or manual) in one place with the rest of the administration details around your knowledge base. It does that in three ways.

First by centralizing the access points to the providers of the usage data. Then, possibly, as a repository for the data, and the third possibly by providing additional layer of visual analysis or peer comparison of data.

Administration of administration

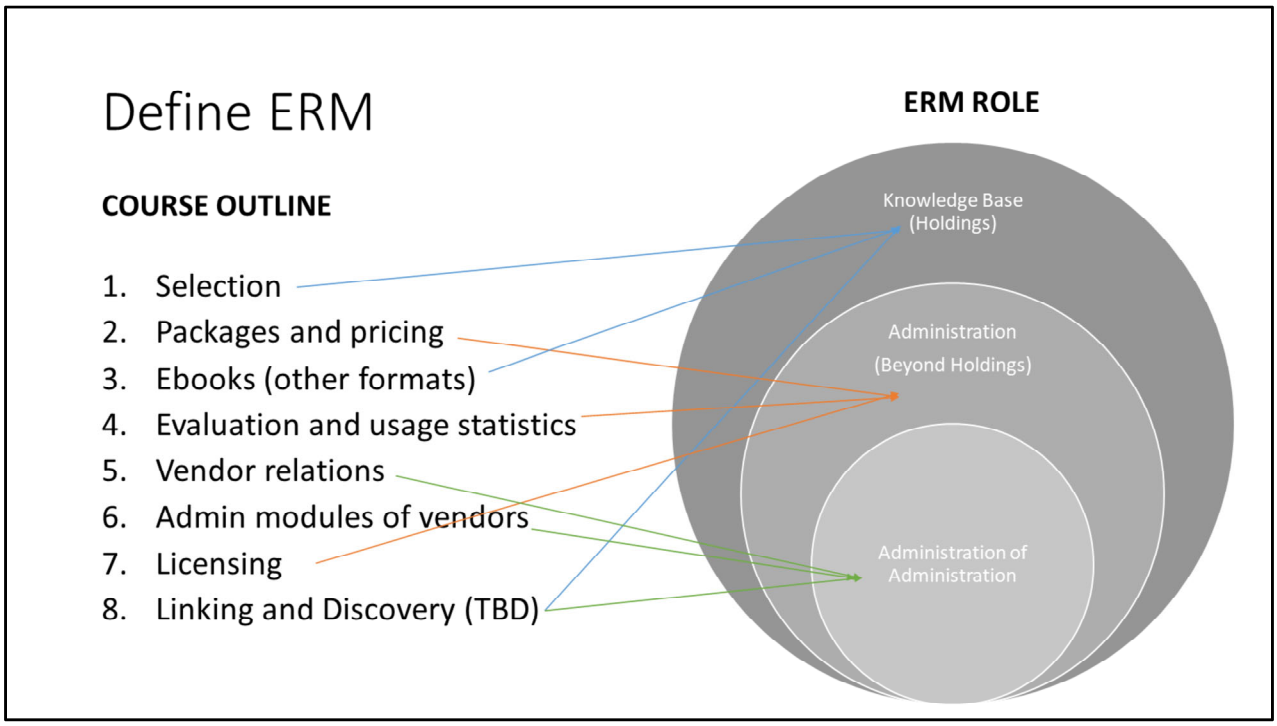
- Vendors
  - Admin portal login
  - Contacts (many)
  - Interface branding, display



- Holdings Administration:
  - IP
  - EZProxy
  - Local A-Z display

The way the ERM administers such administrative details is the final layer of functionality. The ERM's centralization of the vendor's administrative portal details that assists in the usage collection process is one example. That portal also administers each providers search display features and the ability to add library branding. Vendor contacts may seem minor, but centralization here is important given there are many for each different aspect of e-resource management of a particular resource(from sales, to licensing, to tech support). the core of the administration of the administration around the knowledge base.

The other administration of administration has to do with the metadata associated with the access details for all your resource. IPs, EZproxy, etc.



So here is a look at the basic function of the system the context of what you've already covered in your course so far.

1) The knowledge base connecting to selection and how e-resource content is packaged, and linking capabilities is what connects the knowledge base to allow it to be discoverable to patrons.
2) The administration function around the knowledge base holdings, relates to what you've covered as far as packages and pricing license and usage data.
3) And the administration of those administrative details that the ERM manages is what we're talking about in the work of vendor relations and the administrative modules of vendors.

QUESTIONS?
Outline Check-in

- Focus
  - Systematically (from the vantage point of systems/tools)
  - Constructively (from course outline so far)
- Basics
  - Definition, Evolution
  - View from the inside
- **Evolution, Current, and Future State**
  - **What does it do, does it not do (well)**
  - **Lifecycle, Workflow, Staffing**
  - System Alternatives, Market

What questions do you have about the inner workings of the ERM before we get more into the details of workflow and staffing?

Question for you…

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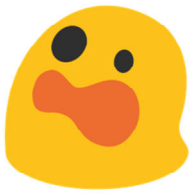
Those who've taken a catalog class,
Question: What's another word we could use here to define this administration of all this data about data?
Answer: Metadata

Albeit in a different sense than is commonly understood for that term, metadata and the necessity of standards is a core part of ERM systems and workflow. As such, there are some guiding standards ERM metadata, which I'll point to as we go thought various sections of the ERM system and workflow, but much of this work and its data remains unstandardized, which is why e-resource management has engendered phrases such as taming the tiger, putting out fires, or herding cats.

So I going to talk about how the ERM as a system evolved as an attempt to herd cats of metadata, so to speak. But also talk about how that chaotic metaphor extended to the development of the e-resources lifecycle, workflow, staffing and organizational structures. This will include a discussion of system alternatives and the state of the ERM in libraries and in the market.

Evolution of ERM(S) Standards + Workflow =



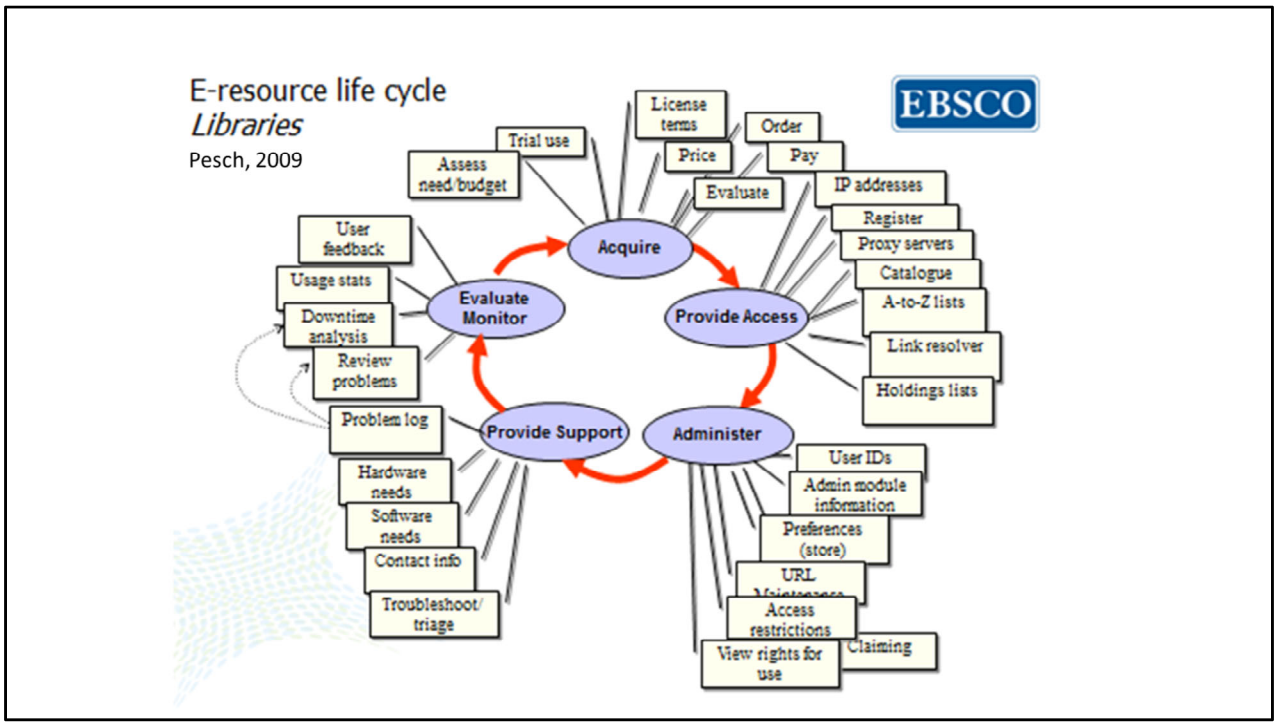
Adapted from original slide in *Electronic Resources Management @ UMKC Libraries* (Pennington, 2015)

- 2004 Digital Library Federation report of the DLF ERM Initiative
- Licensing: SERU, LIBLICENSE, ARL Best Practices
- Usage: COUNTER, SUSHI
- National Information Standards Organization (NISO)
- Problems:
  - Duplicate (and still manual) entry and maintenance of data in multiple systems or modules.
  - ERMs don't do a great job of supporting actual workflows.
  - In general, pace of e-resources vs 12-year old design

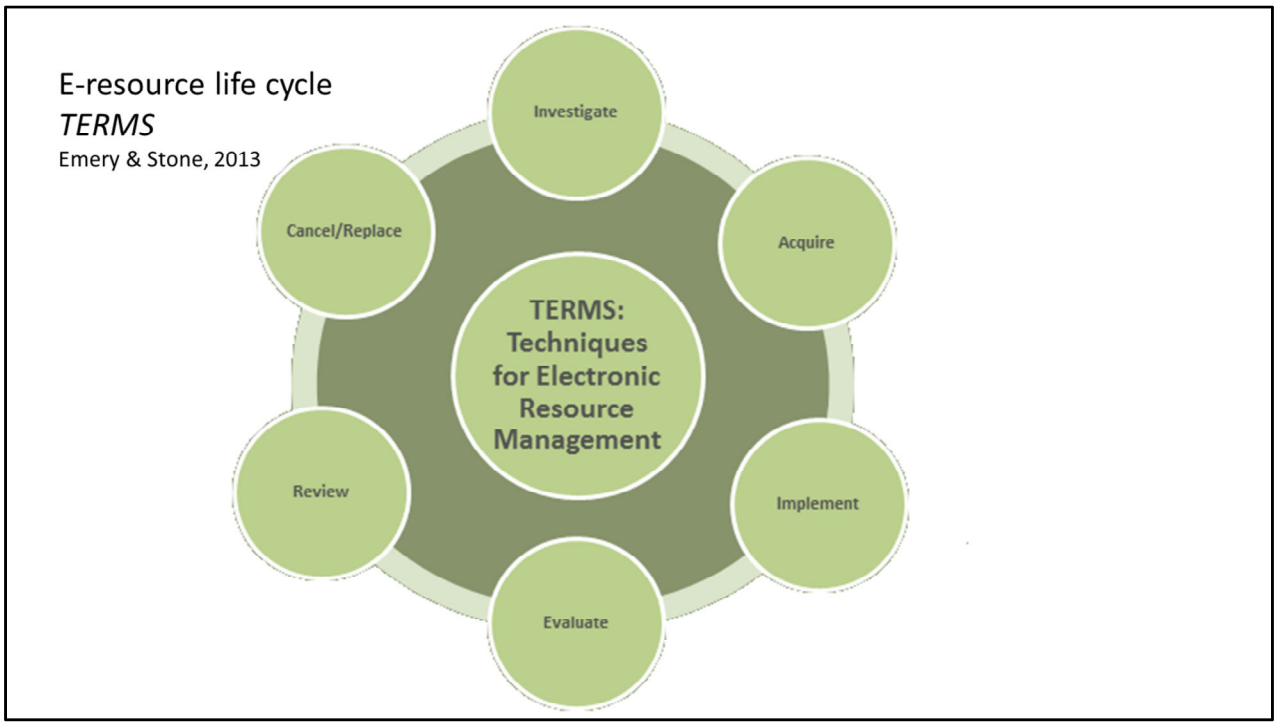
Given the upcoming holiday, I prefer to express the chaos with this ghost emoji -- a little scary, but basically harmless. So, how have standards helped manage some of this chaos?

One of the first attempts to address the ILS inability to handle the needs of e-resource metadata was the DLF ERM Initiative which outlined standardized features and functions needed to support managing electronic resources. ERM platforms were developed using the report as a blueprint. Other guidelines evolved associated with various ERM aspects – licensing, usage. The SUSHI protocol was one of many other workflow and system standards (KB standards, Linking, Transfer are other examples) developed as part of the National Information Standards Organization (NISO)

However part of the problems from the get go, were the fact that it was a separate system that did not integrate well with existing systems. Much of the usefulness of that system required duplicating data the ILS did provide into the ERM (biggest example e.g. cost data). In this way it just didn't do a great job of supporting workflow. It was designed with data in mind instead of workflow. As acquisition of e-resources grew and the development of different kinds of possible e-resource format grew, outpacing the design of our systems to accommodate it. So, this raised significant workflow problems. To address this, ERM began to look at metadata elements from the perspective of workflow, which was no longer linear, but cyclical – and staffing competencies.



Oliver Pesch in 2009 (who worked for EBSCO at the time) outlined the e-resources life cycle in this image has been used often to illustrates the complexity of the workflow management involved and the chaos that has challenged e-resources management workflow and systems to date. But you can see here too the details involved in administrating data around the e-resource lifecycle.



It was this diagram that lead Jill Emery and Graham Stone to develop a crowdsourced wiki-project to collect best practices from practitioners in the field for the techniques associated with each point in the lifecycle. Their project developed 6 TERMS.

Understanding the e-resource lifecycle and workflow and the particular work involved at each stage has been useful for refining the use of ERM systems to address workflow. The emphasis on the lifecycle is addressed in another key project, the development of CORE Competencies for E-resources Librarians.

Core Competencies Of Electronic Resources Librarians

NASIG Executive Board, July 22, 2013
Revised with minor edits by CEC, January 26, 2016

1. Lifecycle of ERM
2. Technology
3. Research and Assessment
4. Effective Communication
5. Supervision and Management
6. Trends and Professional Development
7. Personal Qualities: Flexibility, Tolerance for Complexity/Ambiguity, Customer Service, Time Management

If I were to address how the ERM supports these competencies I would say that is pulls data together at each point in the lifecycle, but the librarian must understand how they fit together.

The ERMS as a specific piece of technology, needs to interoperate (and the librarian must understand the interoperability) with other systems and technology.

The ERM and later the newer Library Services Platform understand the important of data and assessment and incorporate data elements necessary to evaluate resources. But the librarian must remain understand the limitations of data and how to effectively analyze data for decision-making.

You cannot rely on the tool to replace librarians. However, when evaluating systems, their ability to complement to work of e-resource staff and help address efficiency in this work is critical. In these last several competencies is where the ERM has not been as effective. There are basic workflow needs that the ERM simply can't yet address. Two of the biggest are staffing and communication across the e-resource lifecycle. The TERMS lifecycle project and these competencies have helped guide

and align staffing support with the increase in e-resource acquisition, there is still a great deal that is still developing with respect to how e-resource staffing is organized and managed.

Staffing and Organization

- E=somebody/group vs E=Everybody/group
- Serials, but what about e-books?
- Staffing e-specialities

06/06/2008 (Day 2.158) – Hat by Kaptain Kobold
(CC BY-NC-SA 2.0)

I've found in my own research and reorganizational efforts at my institution, that question of best ways to staff and organize of e-resources responsibilities center around the question of whether e-resources is specialized work of a person or group, or if it is better distributed among everyone's responsibilities? Typically e-resources work evolved out of serials work, as a specialized function. But more and more, and particular as e-books evolved out of print based and linear workflow, e-resources has had to become everyone's concern. In fact, discussion around the core competencies has addressed the fact that they are not intended to account for the responsibilities of a single e-resource librarian position. The one person wearing many hats is not very sustainable in libraries where e-resources content account for nearly 80% of budget. As I mentioned at KU when I was hired into a specialized e-resource librarian, I was one of two, and still e-resource responsibilities were also covered in other areas of the organization. While it may still be necessity in some organizations to designate a specialty in this way, the strict interpretation of one person to many hats (or responsibilities) is not desirable. In additional to potentially overloading a single person, you prevent everyone from experiencing and evolving with the change that effects every part of the library from selection to discovery.

To help see how these responsibilities are staffed in either model, I'll outline some of the key specializations and areas of the library where you will find these responsibilities.

Job ads for e-resource librarians

Adapted from original slide in *Many Hats of E-resources Librarianship* (Emde & Rathmel, 2012).

- Titles from past few years of ads (my unscientific survey):
  - E-resources librarian
  - Serials & e-resources librarian
  - Systems & e-resources librarian
  - Electronic and Web Resources Librarian
  - E-collections & Assessment Librarian
  - Librarian for Collection Development & Digital Resource Management
  - Head of Library Systems and Electronic Resource Management
  - Coordinator of Acquisitions and E-resources

Stetson Hat Ad, 1952 by alsis35
(CC BY-NC 2.0)

As you can see E-resource Librarian is still among the job titles being advertised for these skills. However, many jobs now include assessment, management of electronic resources as part of collection management/development, and others may involve website management or even IT systems specialization. You can also see trends in management and non-librarian specific position names, like Coordinator. As I mentioned, beyond these specializations in individual positions, e-resources responsibilities can be also be distributed across the lifecycle of the work.

Selection

Adapted from original slide in *Many Hats of E-resources Librarianship* (Emde & Rathmel, 2012).

Subject librarians

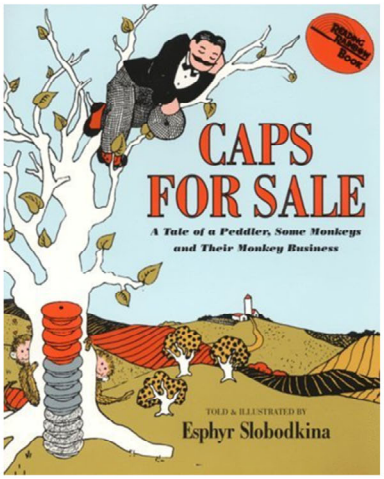
- Determine relevance
- Establish funding
- Request trials
- Evaluate feedback

Hat trials by ItzaFineDay
(CC BY 2.0)

Starting with selection. Usually this is the responsibility of selectors or bibliographers (subject librarians); whether they are in collection development unit, or in a liaison model that involved reference and instruction. They determine relevancy to Univ. programs, figure out how to budget for item, trial resources, ask for comments, Are other resources in subject area used? With selection comes deselection.

Acquisitions & Resource Sharing

Adapted from original slide in *Many Hats of E-resources Librarianship* (Emde & Rathmel, 2012).



© Esphyr Slobodkina, 1968

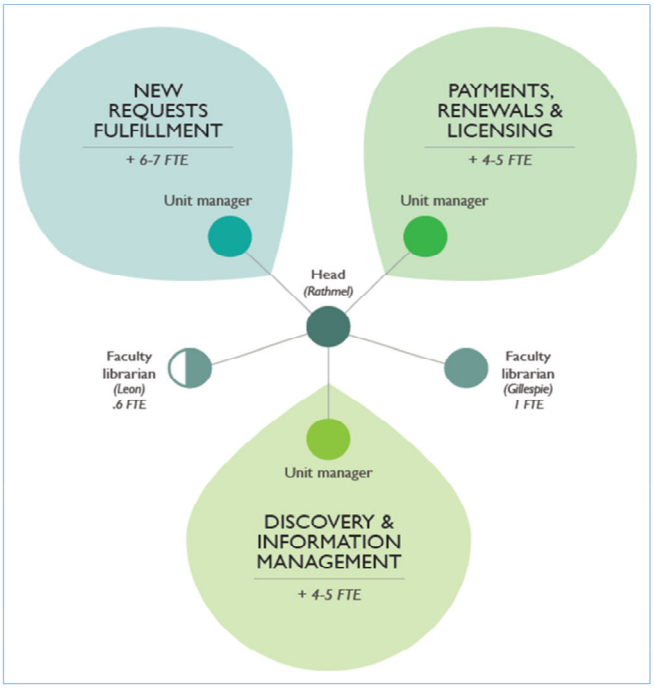
- New Requests Fulfillment
- Accounting, Renewals and reconciliation
- Information Management, e-Cataloging, Service desk

Acquisition, and at KU our acquisitions is combined with Resource Sharing (ILL) This is one of the ways we have worked to distribute e-resource responsibility across the organization. We've divided responsibilities into the request process both for acquisitions and interlibrary loan and document delivery – everyone is expected to know the processes and workflows around requests for e-materials as well as print.

Another unit coordinates with the accounting, payment, and invoicing; and the especially complex annual subscription renewals process. Because of the close relationship of license negotiation to sales and payment negotiation, licensing is part of this unit.

The work of e-resource in acquisitions is also more patron facing, since what we are acquiring electronically is them immediately available to patrons, there is not longer an intermediary, so cataloging, information management and troubleshooting with an actual service desk presence is part of our third unit in this department as well.

Acquisitions and Resource Sharing **Org Chart**



Design Credit: Courtney Foat, 2015

Here is what our departmental org chart currently looks like.

Licensing

Adapted from original slide in *Many Hats of E-resources Librarianship* (Emde & Rathmel, 2012).

At KU, responsibility of

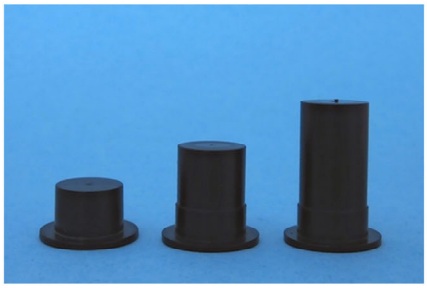
- License Specialist
- Serials/E-resources librarian
- Head of Acquisitions / Mgr of Payments, Renewals Licensing
- University General Counsel
- Consortia
- ILL, perpetual access, fair use

When looking at job ads, this task is still commonly part of e-resource librarians' roles. We currently have a Library Specialist devoted to this specialize task. Licensing is one of the hats I wore as an e-resource librarian in acquisition, and before that our serials librarian. As head of acquisitions & resource sharing I still have a role working with our license specialist and the university's general counsel who regularly negotiate licenses directly with publishers. I am often involved in licenses that involve consortia or groups of libraries – sometimes these are negotiated and signed by the consortia coordinator. Other responsibilities under license include interpreting right related to ILL, perpetual access, fair use and public performance rights often requested by instructors.

Usage stats

Adapted from original slide in *Many Hats of E-resources Librarianship* (Emde & Rathmel, 2012).

- Staff loads usage stats for bibliographers to review
- Excel, Access, and web publishing
- Detail-oriented!

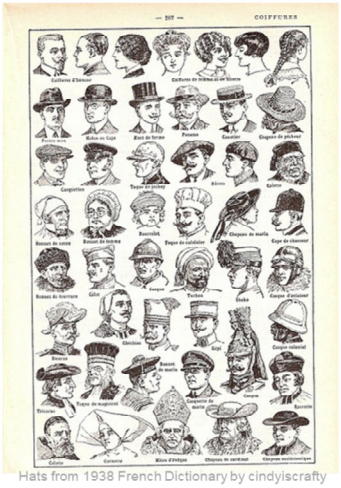


Hat Chart by pasukaru76
(CC BY 2.0)

We've talked about monitoring and collection usage statistics as very important feature in ERMs. We have a full time staff member who manages this often with additional student help. Over the course of many years we have tired this workflow as a manual process, used the ERM usage module, and explored separate assessment systems. While these states are made available to content development to review on their own, often staff pull together special groups of usage for comparison and reproduce the data in a format that is conducive to analysis, sometimes comparing across years, adding in cost, and other factors on request. This kind of work requires a keen eye for detail.

Cataloging

Adapted from original slide in *Many Hats of E-resources Librarianship* (Emde & Rathmel, 2012).



Hats from 1938 French Dictionary by cindyiscrafty

Databases:
- E-resource cataloger
  - Access thru Database A-Z and library catalog

E-Books:
- Catalog individually or in sets

E-Journals:
- Serials Solutions service manages holdings, titles, URLs
  - Access thru e-journal search and brief MARC records in library catalog

Cataloging is obviously involved in e-resource from the description, holdigns and discovery aspects. Some specialized positions in cataloging involve original cataloging of databases and e-resources, updating a web-version A-Z database list, and loading of MARC records sets associated with either database holdings, e-books, or demand driven discovery records (records for items not yet in our holdings).

As for journal content, our library subscribe to services from the vendor Serials Solutions to maintain our e-journal holdings. This activities is not managed in the Cataloging department because the information is so closely tied to the license and renewal process handled in Acquisition & Resources Sharing. Once a month, however, Cataloging receives updated files from Serials Solutions to add, delete, or insert updated brief MARC into our ILS knowledge base (aka catalog).

Maintenance

Adapted from original slide in *Many Hats of E-resources Librarianship* (Emde & Rathmel, 2012).

- Aim for a balanced approach to troubleshooting e-access problems
- Information Management & Service Points
- Managing vendors' administrative profiles

Hard hat by rob7812 (CC BY-NC-SA 2.0)

Angry Birds Crocheted Hat by KateWares (CC BY-NC 2.0)

Ongoing maintenance of these resources is an enormous part of the e-resource staffing responsibility, and requires a lot of coordinated effort. We try for a approach that balances our own internal information control while also making it easier for patrons to report errors. This is where for example the administration of vendor contacts and administrative profiles is important. Many people from many different parts of the organization rely on that "metadata" to address the upkeep of e-resources access and to troubleshoot problems patrons may experience. So it is necessary to have both centralized expertise and distributed effort.

Communication

Adapted from original slide in *Many Hats of E-resources Librarianship* (Emde & Rathmel, 2012).

1962 - Salad Hat by clotho98
(CC BY 2.0)

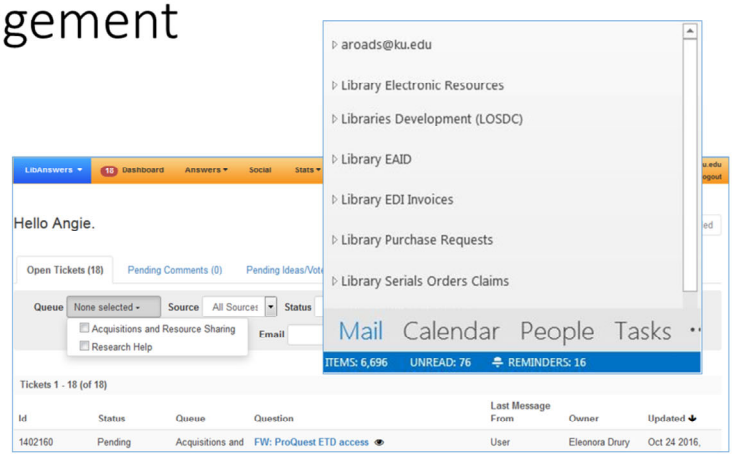
- Essential!
- Routinely report updates to Database list, changes in platforms, problems with vendors.
- Consult with reference staff regarding features at vendor sites
- Consult with IT staff on more technical issues.

You can see how communication in the organization is essential. Communication is much more than PR (as image suggests) it is an ongoing part of the entire process because of the many internal and external players and handoffs involved in the workflow.

There is strong communication between the technical services end and the public end. For example informing reference/instruction staff about database platform changes, new features, problems, as well as interface and search features available in databases. Communication with the IT staff regarding more technical aspects such as problems with the linking mechanism and EZ proxy configurations is also important. You may also work with IT to address excessive use claims by providers. IT Security office may be involved in identifying users involved, so you can communicate the terms of use associating the activity as a breach of contract, and the risks that effect the entire campus.

Information Management

- Email Communication
- Troubleshooting/ incident management
  - LibAnswers, JIRA
  - Callisto
- Other shadow systems:
  - Excel, Access, R/R
  - Trello, Basecamp, etc.
  - ScholarlyStats, EBSCO Usage Consolidation, LibAnalytics



Communication necessitates good information management. This is challenging when decision points across the lifecycle, happens almost entirely over email (license and renewal negotiation, troubleshooting and incident resolution, and increasing amount of customer service). It is not likely that an ERM or products that evolve from it will entirely replace our email systems. You should expect, however, to seek ERMs or other system solutions that facilitate these communication needs better than traditional email, for example, ticketing and customer relation management systems.

This is especially important for tracking problem resolution for better customer service communication, but also for the purposed of streamlining this part of the workflow as another valuable element in of assessment and evaluation. Like email, and these customer management tools, other shadow systems continue to permeate e-resource management workflows, from basic spreadsheets, to project management software tools, as well as separate e-resource usage assessment tools, or vendor provided usage assessment tools that aimed to take care of cost data de-duplication, or in library-wide assessment tools that address stats across library services beyond content use evaluation. It remains to be seen whether new library services platforms will eliminate the need these extra systems. But it is clear from the evolution of their develop that the began with a strong assessment focus and workflow design in mind.

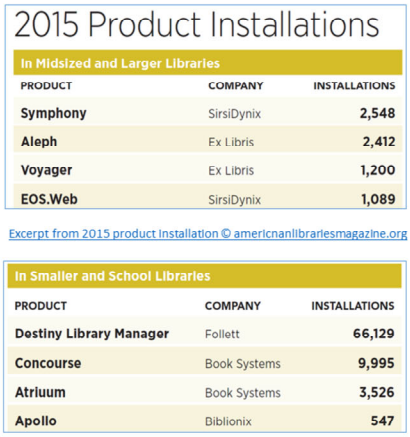
QUESTIONS?
Outline Check-in

- Focus
  - Systematically (from the vantage point of systems/tools)
  - Constructively (from course outline so far)
- Basics
  - Definition, Evolution
  - View from the inside
- **Evolution, Current, and Future State**
  - What does it do, does it not do (well)
  - Lifecycle, Workflow, Staffing
  - **System Alternatives, Market**

So before I conclude here and recap where the ERM is now and where its going, what questions do you have at this point about workflow and staffing?

Current and Future State

- ILS to ERM to LSP
- Breeding's Library Technology Guide
  http://www.librarytechnology.org/
- 2016 Library Systems Report
  https://americanlibrariesmagazine.org/2016/05/02/library-systems-report-2016/



2015 Product Installations

In Midsized and Larger Libraries

PRODUCT	COMPANY	INSTALLATIONS
Symphony	SirsiDynix	2,548
Aleph	Ex Libris	2,412
Voyager	Ex Libris	1,200
EOS.Web	SirsiDynix	1,089

Excerpt from 2015 product installation © americanlibrariesmagazine.org

In Smaller and School Libraries

PRODUCT	COMPANY	INSTALLATIONS
Destiny Library Manager	Follett	66,129
Concourse	Book Systems	9,995
Atriuum	Book Systems	3,526
Apollo	Biblionix	547

To recap, the ERM evolved out of workflow and data management and reporting needs that ILS were not meeting. Basically, ERMS served as linked repositories of data around the e-resource knowledge base, but didn't (still doesn't) integrate well with existing systems to maintain relevance to evolving workflows. This meant creation and reliance on additional shadow systems while ILS vendors and open source developers attempted reinvent both the ILS and ERM in what is know as Library Services Platforms (or formerly Universal Resource Management).

Marshall Breeding is well know in the library systems field. His library technology guide is an excellent resources, and what I've excerpted here is from his 2016 library systems report which shows the level of adoption of these new LSP systems remains minimal (e.g. ExLibris' Alma still at half of Voyager).

Assessment and evaluation of e-resources is a large part of what the ERM lack and what LSP developers prioritized in their systems – Alma, WorldShare Management, and FOLIO are the top new LSP on the market. But library are still not rapidly adopting these systems.

ERM(S) + Workflow Considerations

OFFERS

- Allows for additional metadata associated with e-resources
- Ability to track and communicate the e-resource lifecycle
- Potential for centralized assessment (usage, cost)

NEEDS

- Better integration with ILS
- To keep pace with development of new formats
- Accommodate the most customizable communication mechanisms along the lifecycle
- Data normalization and system deduplication
- To integrate troubleshooting

From my vantage point, ERMs are not currently being developed, development around the needs I've talked about here is being invested in LSP development. But, if I were to address needs and offers on what is currently available in ERM options and what LSP might consider developing specifically related to ERM workflow, it would be this.

References and Resources

Forthcoming…

Library Resource Management and Discovery Services: A Strategic View

Thursday, November 3, 2016, 2-3 pm, EST

The registration fee is $49 with special group rates available.
Can't make it on November 3rd? Register now and we will send you an email with instructions on how to watch at your convenience after the event.

I wanted to point out this upcoming webinar (it unfortunately is not one of the free ones), but it is presented by Marshall Breeding who will talk about the major trends in academic, public, and school libraries and how technology platforms are responding to the realities each type of library faces.

References and Resources

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