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Progressive Trends in Electronic Resources Management in Libraries

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Chapter 2

Considerations of a Digital Age:
The Hows and Whys of Electronic Resource Management from a Collection Development Perspective

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ABSTRACT

This chapter talks about electronic resources from a collection development perspective. Working from the assumption that most institutions will need some electronic resources to adequately serve their patron population, this chapter explains what issues collection development staff may need to address when electronic resources are being incorporated into the existing collection. These issues include costs and benefits of electronic resources, how the collection development policy will be affected by the inclusion of electronic resources, and faculty/staff reactions to the incorporation of new materials. This chapter also strongly advocates the addition of an electronic resource manager or multiple electronic resource staff members and their close cooperation with the collection development staff.

INTRODUCTION

Electronic resources are not the next big thing in libraries. They are already the thing, less a luxury and more of a necessity. At the San Francisco public library, for example, patrons made a total of two million electronic searches in one year alone (Malnig, 2008); on the cost side, the Association for College & Research Libraries estimates that e-resources made up 44 percent of purchases for the average academic library, as of 2007, with that number sure to rise (Noh, 2012).With numbers like this, that are ever increasing, it may feel that libraries have no choice: evolve or die. This can create panic among an administration that wants their institution to succeed. However, if a library is considering adding electronic resources to the existing collection, or expanding current electronic resource holdings, there are many things to consider before embarking on what can be a

costly endeavour. Not all electronic resources are appropriate for all libraries. For example, the University of Idaho began adding E-books to their library's electronic resource collections in 2000, trying to stay ahead of a perceived user demand for E-books, but a recent review of the collection's usage statistics does not provide any evidence of the demand they expected (Sprague and Hunter, 2009). A rush to judgement in this case caused a very expensive error because they misjudged the desires of their patron population.

That being said, for many institutions, electronic resources are still an important step in the evolution of the library. Surveys and usage statistics from the University of Illinois supported their decision to incorporate E-books into their collection (Shelburne, 2009). The reasons for choosing electronic resources are clear: empowering a mobile patron population, facilitating access to materials, and reducing space concerns. However, the concerns of the institution may not be so clear. There may be questions about the cost of materials, duplication of existing materials (or duplication within the electronic resources), and preparation of the library staff and patrons for the influx of new information. A strong collection development policy, updated for the existence of electronic resources, can answer these questions and relieve some of the anxiety associated with adding electronic resources to an institution's collection.

BACKGROUND

What do librarians mean when discussing electronic resources? Simply put, electronic resources, also sometimes referred to as "e-resources", are those resources that are housed virtually and accessed through electronic means. Virtual movie and music collections could also be considered electronic resources. When electronic resource managers (ERMs) talk about electronic resources, they are typically talking about e-books and da-

tabases. ERMs are the people hired to work on the problems that electronic resources cause for libraries. These materials often have complicated agreements that librarians must keep track of, as well as technical problems that ERMs must solve on a daily basis.

While electronic resources have been around in some format since the 1980s, when the first electronic card catalogues were first introduced, some libraries are still fumbling their way around the use of electronic resources. While the public expectation of electronically available material continues to rise, many libraries are lucky if they can get a portion of their funding diverted to electronic resources. This is especially true of public libraries, which frequently have trouble with funding. There, print sources remain strong, with 72% of the reference budget for the average public library paying for print materials in 2003 (Roncevic, 2004 p.5). While trends in public and academic libraries indicate growth in electronic resources, this survey suggests that the growth is slower in public libraries.

It can be difficult for libraries to incorporate electronic materials into their collection for many reasons, including a lack of money or a lack of expertise. Chandel and Saiki note in their article that librarians have been dealing with print resources "for centuries (p. 149)." There are individuals who have been working with print resources for literally decades themselves. Newer and younger librarians may be more familiar with the use of electronic resources, but it cannot be guaranteed that they would have any expertise in negotiations or technical specifications of resources because of the limitations of entry level jobs. The few librarians in between have mainly had on-the-job-training and will be familiar with only certain types of management software and practices, since so much of it is different from institution to institution.

Current hierarchical systems in libraries can also be challenged by the addition of an ERM, as the position often straddles the work of both tech-

nical and public services. This may cause friction in both departments, as well as over-work for the librarian in the ERM position. Advertisements for ERM positions reviewed between 2000 and 2008 found that these positions continue to list job responsibilities that are not related to the management and procurement of electronic resources, such as reference work and cataloging (Murdock, 2010). Logic dictates that many of these responsibilities are part of the ERM workload because of budget restraints and staff shortages, but they are no less a problem for someone working as an ERM. Recommendations made by Digital Library Federation (DLF) contradict these current practices; the DLF has recommended that having only one person in charge of electronic resources might spread an individual too thin, much less having that one person manage electronic resources and perform additional duties such as reference or instruction (Murdock, 2010). If electronic resources are going to be a major addition to an institution, the creation of a separate department is ideal.

This is a struggle that has gone on for decades now. It may continue to go on for decades more, until the next big idea takes over. However, a strong collection development policy and some forward thinking may make the transition to or expansion of electronic resources smoother.

COLLECTION DEVELOPMENT CONCERNS

Costs vs. Benefits

The one question that is on every librarian's mind is the cost of the materials they are providing to their patrons. Unlike physical copies of books, that need only be replaced if damaged and thus are a one-time cost, electronic databases through aggregators such as EBSCOhost are reoccurring costs. Furthermore, these electronic databases are much more costly than their print counterparts because the library is not just paying for access

but also the convenience and ease of use. It is much like the difference in price between items in a grocery store versus those same items in a convenience store. One would not expect to pay the same prices for a loaf of bread in both places, because the convenience store can and will charge more; they know that someone coming into a convenience store needs the bread right now, and does not have the time to go to the grocery store. In exchange for more money, they waste less time.

Because of the nature of electronic resources, the library must be willing and able to budget funds for keeping access to electronic databases year after year. This is where it is important for the subject librarians, the collection development manager, the ERM, and anyone else vital to the acquisition of materials to be aware of what their patron population is and is not using. Space considerations aside, a poor choice of a book can sit on the shelf gathering dust for years before anyone even thinks of weeding it, and the prevailing opinion in libraries, when it comes to print materials, is that more is better. To an extent, that is true because it ensures that the library has materials for every taste and research venture. However, when put in a real-world context, a library with this type of policy can hurt both fiscally and physically. As noted by Chan, increased pressure has been placed on libraries to acquire electronic resources, which are costly, while budgets continue to shrink, resulting in a need for reprioritization of funds (2008). This reprioritization may not be across the board, of course, as different disciplines use electronic resources differently, most notably those disciplines in the humanities (Termens, 2008), but a collection development policy can be developed to ensure fair treatment of this issue.

Duplication of Materials

The second consideration when discussing the possibility of electronic resources is duplication of existing collections. Will the agreements cause substantial overlap with the physical collections?

In the past, duplication has not been as much of a concern in libraries as it possibly should be. There are two parts to the duplication problem however, when it comes to electronic resources.

First, there is the problem of duplicating the print versions that already exist in an institution that is making the switch to electronic resources. While duplication of these materials may begin as a purposeful alternative to ever-growing stacks, purchasing large databases with many journals included can quickly get out of hand. Furthermore, there is the duplication of abstract indexes, which may not be complete duplicates. For example, comparing the abstracts in the Physical Education Index to the included materials for SportDiscus, an analogous collection, leads to 47% overlap, according to the holdings of Western Kentucky University. This is quite the overlap, but the materials not included in the overlap are also important. Therefore, this overlap must continue to exist until agreements are made with other vendors to get digital access to the other half of the collection in PEI.

The other half of the problem is much more difficult to deal with. This problem is overlap in the virtual collections themselves. Many journals are included in aggregates by several different vendors, each with their own coverage dates, embargo rules and permissions. This can lead to the library appearing to pay for the same journal over and over again, which is a waste of precious resources. This is a product of the packages that vendors sell to the libraries.

Staff and Patron Preparation

Once the policies are in place and the cost has been considered, libraries should spare a thought to the individuals who will be using the electronic resources. Is the staff of the library prepared to teach the use of the databases? Are they prepared to let go of the physical copies of the materials? Is the patron population prepared to use the electronic resources now offered by the institution. All of the

questions regarding staff and patrons can be broken down into two categories: feelings and knowledge. Either the staff and/or patrons have feelings for print books or against electronic resources or lack knowledge about electronic resources.

There are the proponents of the physical book who may be in the library staff or their patron population. They may be nervous about the addition of electronic resources because it often means the withdrawal of physical copies from the library's collection. The first argument against a de-accession of library materials is the inability to find a physical copy of the journal article or book when needed. This may actually be an important concern – studies show that, in Australia for example, only about 50% of English-language books are available in a library, down from 70% in the 1990s (O'Connor and Jivolsky, 2009, p.122). The trend toward de-accessioning books and serials is growing, with millions of books de-accessioned over a decade, and hundreds of thousands of serials withdrawn over that same time period (O'Connor and Jivolsky, 2009). The second argument is a preference matter – some people do like physical copies of books and articles rather than digital copies. These people will probably always exist, because physical books for some, if not all, subject areas will continue to exist. Some materials are simply better accessed in print, given the current limitations of electronic devices. Third, print copies of books, and to a lesser extent, journals may need to be retained because of the historical and research value of the actual physical copy itself; there may be inscriptions from authors, evidence of unique binding practices, or writing in the margins. Art libraries especially, find that the quality of colour reproduction in electronic scans may not match the quality of the source material and would need to retain print copies of their holdings for accuracy of analysis.

Librarians' objections to electronic resources may also have to do with the ephemeral nature of the internet. Libraries' own websites change frequently, as they add more Web 2.0 technol-

ogy, or migrate servers or do any other manner of things. Librarians have seen things disappear off their own web pages, which they would like to believe they have some control over. It is not surprising that some librarians may not want to rely on a virtual collection housed elsewhere and provided at someone else's discretion and based on someone else's expertise. When a library gets a printed volume, it becomes their possession. Electronic resources just do not work the same way. Add to that budgetary concerns, and it can seem like electronic resources are fleeting.

Solutions and Recommendations

It seems a little dire to think of all of the problems associated with incorporating electronic resources into a library collection, but there are solutions to the problems, and better yet, in some instances, ways to avoid the problems altogether. Working through the stated problem list, there are several things that library committees and ERMs can do.

The first problem is, of course, money. When it comes to the cost of the new electronic holdings, there are cost cutting measures that can be taken if a budget is the primary concern of the institution. Consortia are an excellent way to split the cost among many member institutions; however, there is some need for caution here if the institution is not a member of a popular consortium. Patrons who visit many libraries (especially, for example, public libraries in neighbouring towns) through the course of their lives may expect materials from the institution that they may not have without membership to the consortium. A real world example of this is the Kentucky Virtual Library (KYVL) system. Over 30,000,000 searches were performed using the KYVL system in the fiscal year 2011-2012. One hundred and seventeen public libraries are members of the system. However, those numbers do not include all the libraries in Kentucky; Kentucky has 120 counties, and several counties, including Breathitt and Ballard, are not members of the consortium that pays for and

maintains KYVL. Anyone moving to either of those counties from another county in Kentucky may be dismayed by the fact that they those public libraries do not have the same access as all of the others. Furthermore, many K-12 libraries are also members of this consortium and therefore even the youngest members of the patron population may have expectations of the library. This is no doubt true in other places where there are popular consortiums. The general public is unlikely to understand without explanation that these materials are not free to the library because their access to them is free and there is no physical copy.

At the simplest level, a consortium need not be any more than a buying club, with practical benefits but no management (Termens, 2008). This definition of consortia has been both a positive and negative thing; in one respect, it is felt that consortia should not be any more than that, because it threatens the autonomy of the member institutions, but in another, the lack of guidance and consensus when it comes to the materials can be detrimental to all of the member institutions involved. A better, more organized consortium has, in theory, the power to change how vendors interact with libraries (Sanville, 1999). More active management by all members of the consortium may also reduce friction among the institutions; it has been noted that institutions in a consortium will not always use all of the materials equally (Termens, 2008). This is to be expected, because even among similar institutions, the faculty and students will have different research interests. It is important to be aware of these differences to make sure each member institution feels like they are receiving a sound return on their investment. This will ensure that the consortium continues to exist to help provide the institutions they serve with stable access to materials, a concern already partially covered in this chapter.

The second cost-cutting measure with regards to electronic resources is to take advantage of open-access journals. This is particularly advantageous in academic libraries, where communication with

subject librarians and faculty outside the library can help the ERM decide on the best, most well respected open access journals available for the various majors offered at the institution. The most well-known and easily incorporated open access journals are those offered by the Directory of Open-Access Journals (DOAJ), which was founded with the express purpose of aggregating open-access journals for the use of libraries and researchers. The DOAJ defines open access journals as those, "journals that use a funding model that does not charge readers or their institutions for access," which is a commonly accepted definition (Lund University Libraries, 2012). The DOAJ maintains their collection, adding journals based on quality, access, and coverage. They only aggregate journals. Other than the DOAJ, there are other open-access journals available, run by institutions and organizations. Furthermore, universities are beginning to create repositories of works by their own faculty and students, which hold a wealth of information. Many institutions allow faculty members to upload pre-edit copies of materials that are published in journals, subject to the regulations and approval of those journals. In addition, in 2008, Congress mandated that the NIH direct researchers funded by it to submit their research to an open-access database.

The third cost-cutting measure is the librarian's old stand-by, weeding. Weeding a collection to remove unused materials is of paramount importance to keep any collection relevant and vital, but in the world of high-cost electronic resources, it can save the library thousands of dollars. The best way to weed these materials is to track use and eliminate sources that are not used. On the technical side, OpenURL is one of the main components of early usage tracking and is still widely used today. OpenURL and the addition of a link resolver can give the library reports of journal access by measuring the number of times users go through the link on the library website to the resource.

Though it was somewhat slow to catch on, many database providers and other resources, such as GoogleScholar, are now OpenURL compliant (Stewart, 2011). With OpenURL so widespread, the use of simple tracking may be all the library needs to know what resources to keep and which ones to purge. However, there is still more that can be done to track usage and help the weeding process.

Counting Online Usage of Networked Electronic Resources (COUNTER), an international standard for usage statistics, working in tandem with the Standardized Usage Statistics Harvesting Initiative (SUSHI) protocol, can generate usage statistics and is a welcome addition from both the publishing side and the library side of user access (Stewart, 2011). Like all standardization efforts, including OpenURL before it, it has taken some time for journal providers to become SUSHI and COUNTER compliant, but the trend is growing. It still takes a librarian to aggregate the data from several database providers to get a clear picture of resource usage, but even that is changing as third-party tools become available (Stewart, 2011).

Once usage statistics have been gathered for the various databases in the library's collection, it is important to factor in the inevitable duplication that occurs when libraries subscribe to multiple databases. Because of the limitations of packages available from vendors, it will not be possible to eliminate all overlap of electronic databases, but it is important that duplications be eliminated where they are possible. First, it is just good business practice not to be paying for something more than once, if it can be avoided. Second, it will be less confusing to the patron population if there are not multiple access points to materials. Finally, it will be easier in future aggregation of usage statistic data if there are not multiple access points to materials. The only exception to this rule would in the case of experimental or trial access to materials. In that case, it would be more important

to keep the previous accessibility of the items in question, in the event that funding is withdrawn for the new database.

Cost-Benefit Analysis (CBA), primarily used in business, can be used to make expenditure decisions in a library setting, but because of its inherent use with money, librarians sometimes shy away from it. Librarians are not in the money-making business, though some services and their means are provided at charge, such as copiers. Instead, librarians view the benefit in cost-benefit analysis in a different light: they want to know how many times a patron will use the materials they provide; the number of uses replaces money in this scenario, but the idea is the same. Materials are expected to be used a certain amount of times for them to be worth purchasing. This does beg several questions, as posed by Linn (2009):

- How does one quantify use?
- Is all use equal?
- If there is a different level of benefit, how much of a difference is there? (p. 83)

and so on. In this case, it is up to the individual library to make those decisions. It is likely that for most resources, any usage would constitute use for the cost benefit analysis.

There is also cost in maintaining a physical collection. Materials in a physical collection must be bound (especially in the case of journals, which are typically released in a paper cover quarterly and then bound together at the end of the year in a hard cover), repaired after substantial handling, and in some cases, replaced. They could be destroyed in a natural disaster. Even a seemingly small problem, like a roof leak, could mean the destruction of whole shelves worth of material. Libraries routinely devote large portions of their budgets to the task of maintaining the collection. The cost is not just in money, either; when studying the time devoted to managing a collection (including shelving, weeding, repairs and replacements, among other activities) it came to

a difference of 45 hours versus 4,000 hours over a year, with digital, of course, being more time efficient (Gadd, 1998, p. 313).

Finally, any budget considerations should be assessed based on the future needs of the library and its programs, not past spending. In a study by Chan, which utilized a modified zero-based budget (MZBB), faculty members endorsed determining budget allocation by current submissions rather than previous expenditures (2008). The library in that study had also made a policy switch to electronic journal subscription preference, and the MZBB rewarded those departments that had made efforts to switch to electronic journals where possible (Chan, 2008). In Chan's own words,

The MZBB review required faculties to justify their future funding needs beyond the base budget by reviewing changes in curriculum/research, cost projections, organizational and environmental changes, such as, current teaching technology, increasing emphasis on electronic resources and diminishing use of printed journals. (Chan, 2008 p. 51)

This was markedly different from other models in libraries, where much of the budget is based on an assumption that any changes to departments will by necessity result in an increase in budget, if only to cover inflation, when this is not necessarily true.

Duplication of library materials is a problem that every library struggles with. However, in print form, it easy to see when materials are duplicated: they sit on the shelf next to each other with identical call numbers. A search of the library's catalogue lists the multiple items. Furthermore, and possibly most importantly, the librarian can choose to purchase a duplicate or refrain from purchasing a duplicate by itself. Even if the book comes as part of a standing order, it can be returned. The packages that vendors of electronic materials sell to libraries have been formulated with a set number of journals, and it does not matter to the vendor if a serial is already in the library's collection from another vendor. In addition, most

electronic resources purchased at the beginning of an electronic resources collection will overlap some part of the current physical collection in the library. It is imperative that there is a reasonable and sustainable policy in place before overlaps occur.

Preparations must be made for complete withdraw or storage of items that are deemed superfluous, and process for this should be written into the collection development policy. With shelf space at a premium and the electronic version available to be accessed by multiple at the same time under most agreements, physical versions of journals are unnecessary. The most likely thing to happen to duplicate items is the withdrawal of the item, but some materials may have other value in their physical form or may be rare copies that the library decides to maintain.

The best, most cost effective practice for retaining print copies of duplicated resources, according to Courant and Nielson, is off-site storage, with that method costing $0.86 per year, versus $4.26 per year to keep a printed volume on the shelf (Courant and Nielsen, 2010). The library must be willing and able to acquire off-site storage. This off-site storage, while outside of the library, does not necessarily have to be out of the library's control. An excellent example of this is the Auxiliary Library Facility (ALF) at Indiana University. The ALF is a building that is used for off-site storage of materials at Indiana University that are not needed on a daily basis but have not been deemed unworthy of keeping. This auxiliary facility exists as a repository of materials removed from the larger collection, but is still circulating, thanks to a robust network of technology and staff that allow materials to move quickly among not only the various libraries at the main campus, but also all of the other campuses in the IU system. This means that the IU libraries have achieved the best of both worlds; because the ALF is only accessed by staff, it can be packed tighter and all the way to its ceiling, and yet all of those materials are available to IU affiliates and no doubt their ILL partners.

Dealing with duplication within the electronic format is a more complicated matter. There will always be some duplication of materials in the electronic format as long as there are various vendors from which to get the materials. In fact, there is sometimes duplication of materials within different databases from the same vendor. For example, there are many journals that are cross-listed under the different EBSCOhost databases, with each record listing its own coverage dates. The best practice for trying to manage this problem is to be aware of what materials the library is already paying for from other vendors and making ever attempt to negotiate with the vendors for less overlap. Some overlap can even be a good thing, because it leaves room for future negotiations with vendors.

Finally, once the materials have been chosen and paid for, the administration must address any and all concerns from the people who will deal with these electronic resources. Addressing the concerns of faculty, staff, and patrons, especially in a large university setting where funding comes in part from donations, can be daunting. No one wants to create an ungrateful patron population that will not support its library. This can put librarians into a hard situation however, when it comes to de-accessioning print materials in favor of electronic resources. These concerns were mentioned earlier in the chapter, but they need not stymie the responsible withdrawal of materials.

Preparing faculty and/or staff is the most important thing an administrator can do for its library when electronic resources are introduced. While the patron population will largely deal with reference and instruction librarians to learn about the electronic resources available in the library, staff will have to learn about the electronic resources from the individuals who know the most about them: the electronic resources manager and the collection development department. It is imperative that reference and instruction librarians are not only told about the materials when they first become accessible, but also kept abreast of any situations that might arise with the electronic

resources, including scheduled downtimes and outages. From there, reference and instruction librarians, with the help of the ERM, can create teaching aids for the patron population.

Once they are comfortable with using the new electronic resources, the ERM and collection development staff can confront the issue of librarians and patrons who want to keep the duplicated and unnecessary print versions of materials. The first argument for print proponents, the inability to find a physical copy of journal articles and books when needed has three solutions, all of which should be applied in order to best serve the patron population. The most important part of the process is having strong interlibrary loan connections that can be used in the advent that access to materials is lost. The second part is to never de-accession materials to which there are no other access routes. This protects not only the patrons of the institution making the withdrawal but also all other institutions that may rely on the existence of that material in the library; this will account for much of the disappearance of holdings from libraries altogether. This also includes notifying ILL staff of loss of access, especially regarding temporary outages that may not be reflected in the library catalogue or their independent systems. Finally, if the institution desiring to withdraw a book is the holder of the last known copy of a book or serial, they should make an effort to preserve the material themselves, or, failing that, give the books to an institution capable of and willing to preserve the item. The second problem, the matter of preference, must be taken care of based on the population being served by the institution in question. Art libraries, for example, may prefer to use books despite their price because of the detail in the printed images. Some nuances may simply not show up in a digitized copy. Those books that are deemed worthy to keep in their print form because of the uniqueness of the copy should be preserved by institutions invested in their historical value. They become more than books, prized not only for their

intended informational use but also for what they can tell researchers about the past. Other subject areas may have similar concerns because of the quality of digitization of their materials in the past. Early digitization of materials did not occur at the same quality that newer digitization has, and may have been, in some cases, a digitization of a low-quality scan. An effort should be made to find adequate electronic copies and provide the staff with access to said copies prior to removing material from the collection. Communication with faculty and staff about arrangements for these problems will make the transition to electronic resources smoother.

The easiest way to assure patrons and faculty that materials will continue to be available to them, and thus ease their fears, is to review policies on perpetual access of journals. Unfortunately, libraries have not shown a strong commitment to bargaining for perpetual access rights. A survey done by Carr (2010) showed that while libraries say they are committed to securing perpetual access rights to the materials to which they subscribe, they do not bargain for them, reaffirming the results found by Stemper and Barribeau (2005). This is a mistake. While perpetual access rights can be costly, they will do a lot to soothe the fears of faculty and patrons who are concerned about materials disappearing from the collection. Libraries should ask themselves what they think the future of their library will look like, before they give away those rights. Other concerns about perpetual access rights include the vagueness of wording when they manage to secure any perpetual access rights. Stemper and Barribeau noted some of the vaguer wording, including this excerpt from AIP:

AIP will use reasonable efforts to retain in an archive all electronic information published by the American Institute of Physics. (p.102)

This begs the question what "reasonable efforts" are. Also, sometimes the ability to retain such an archive is out of the original publisher's hands, because journals often change publishers. These new publishers will have their own restric-

tions which override the original agreements. This problem is often not addressed at all (Stemper and Barribeau, 2005). However, all is not lost. There are some publishers who do address the problem, and are willing to commit some vague language toward maintaining original agreements in the event of a buy-out. Walters suggests some criteria for sustainable access based on the criteria at St. Lawrence University: "provisions for permanent library retention of content," "the university must participate through a library consortium," and the "provider must demonstrate a commitment" to perpetual access (p. 302.) Of these criteria, the provisions for content retention are the most important concept for a library to consider. From there, the library can push for provider commitment and consortium involvement.

Strong existing collection development policies are imperative to success in electronic resources management. Review and update of those policies should be undertaken before agreements are made with vendors, so that faculty and support staff can prepare the physical collection, i.e., withdraw items that will be replaced by the electronic resource or move them to storage. A study by Manrum and Pozzebon (2012), of Middle Tennessee State University, found that, "the average completeness of each [studied] policy was 41 percent (p. 111)." Their criteria included policy standards about currency, authoritative standards, scope and depth, cost, licensing issues, termination rights, and interlibrary loan abilities, with the completeness of policy heavily skewed toward issues that also concern physical collections (Manrum and Pozzebon, 2012). Collection development librarians should take this time to decide what access should be available for the duplicate; storage without easy access capabilities can turn into a bigger headache than it is worth. Withdrawal of materials, however, is not the end of the world and can sometimes lead to other opportunities for the library. For example, the addition of an information commons, which

will lead to better access and use of electronic resources, may require downsizing of a physical reference collection.

The ERM and a collection development/acquisitions representative should review the policies regarding the new electronic resources with the faculty and staff responsible for various areas of the collection. They should also be able to present a clear idea of usage statistics for existing materials and project usage estimates for the new electronic materials, bolstering the cost benefit analysis previously discussed. This individual consideration should not stop at the staff. The patron population should be made aware of the introduction of electronic resources, including what materials are offered, what physical material may be removed, and how best to access the new materials. For institutions merely expanding their electronic resources, this may not be of utmost importance, but even then, it should still be a consideration. No one wants to spend money on a new database that no one knows about.

FUTURE RESEARCH DIRECTIONS

The way to go from here may not always be clear, as more technologies are added to libraries each and every day. It is not even possible to say with certainty that patrons will use the electronic resources given to them by our public and academic library. However, there are some things that can be kept in mind while turning an eye to the future.

The costs and benefits of electronic resources will always fluctuate. While the monetary cost, for example, of databases may continue to go up, the costs of providing access to patrons may start to go down. E-readers are becoming more affordable with each passing day, opening the experience up to patrons who might have thought they could not own such a device. This means that there could be fewer devices for the library to own and maintain. Consortia too, may grow, as well as the number

and popularity of open access journals. These ideas need to be studied, modeled, and researched, with the data available for all libraries to access so that they can make an informed decision on including electronic resources in their collection.

CONCLUSION

Because of the cost of electronic resources, it is not a step that should be taken lightly. It may not even be a step in the right direction for many libraries. This chapter asks the questions that every librarian involved in electronic resources management should ask themselves before resources are purchased; while all problems may not be foreseeable, there are many problems that are foreseeable and can be prevented or solved before they become too big.

There will be changes to the patron population. As discussed, the ideal patron may become more or less technologically literate over time. They may also become differently technologically literate – meaning that while they may be adept at various technologies, the technology of electronic databases or e-readers may be foreign to them. It is important that libraries do not assume that their patron population, and their abilities, are staying stable over time. Periodic assessment of patron populations, at all levels, should be conducted, even if it is as simple as anecdotal data provided by reference librarians. Though computers and other electronic devices are more widespread than ever, many devices are designed so that individuals are given information; they do not have to find it. That is where the librarian's role lays: in the finding of specific information among the millions of pieces of data thrown at humans daily.

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KEY TERMS AND DEFINITIONS

Aggregator: A company that organizes and consolidates various journals and/or databases into collections for libraries to purchase.

Collection Development: The act of gathering materials for a library which align with the library's expressed mission.

Consortium: A network of institutions that pool monetary resources to purchase access to materials.

Cost-Benefit Analysis: A comparison of what it takes to purchase and maintain materials versus the usefulness of the resource.

Electronic Resources: Library holdings designed to be accessed in a digital format.

ERM: Staff member whose primary responsibility is to maintain the digital holdings of a library.

Off-Site Storage: A place to keep library materials that are not withdrawn but do not have a place in the library's main building.

Perpetual Access: The right of a library to continue accessing already purchased materials after an agreement with a vendor has expired.