

Title: Browsing the Intangible: Does Visibility Lead to Increased Use?

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Abstract: Library collections have become fractured as increased acquisition of ebooks has created hybrid print and digital collections. These developments have implications for user awareness of the most current items in the collection and their ability to understand their relationship to print collections, due to ebooks' absence in the physical library space. At the William M. White Business Library at the University of Colorado, Boulder, collocated displays are deployed in the print stacks to promote awareness of ebook collections and enable browsing and serendipitous discovery. This project revealed the difficulty of assessing ebook collections and their promotion when many platforms are involved.

Keywords: ebooks, academic libraries, e-resources, book displays, marketing and promotion

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Browsing the Intangible: Does Visibility Lead to Increased Use?

The William M. White Business Library is a branch of the University Libraries system at the University of Colorado, Boulder, whose purpose is to meet the research and learning needs of the students, staff, and faculty of the Leeds School of Business. With electronic monograph availability still far from a complete duplication of print availability, the library relies on a hybrid collection to meet user needs. In addition to dozens of databases and hundreds of electronic journal subscriptions, the library holds over 20,000 print volumes and offers access to over 22,000 electronic books.

The business library began the move to an e-preferred collection-development model in late 2011. An unforeseen outcome of this shift was that, when browsing the stacks, the visible collection appears to have frozen in time. Though electronic journal content achieved widespread and overwhelming adoption years ago, similar acceptance of scholarly ebooks has lagged noticeably behind. Over the past 3 years, the business library has experienced a 13.6% decline in circulation of materials from our on-site stacks. While electronic collection usage has increased over the same period, it has not done so at a rate commensurate with the drop in print usage. Considering the importance of currency in business research and our decision to move to an e-preferred collection-development model, the decrease in collection usage can likely be attributed, in part, to the invisibility of many of the newest materials.

Anecdotally, many business library patrons commonly associate the library collections with their physical space, within which our electronic collections are not readily visible. Not only does this invisibility lead these patrons to believe the collections are smaller than they truly are but also eliminates an important access point and research method. With the adoption of open-stack libraries, librarians provided patrons two ways to access materials: searching the catalog

or browsing the shelves. Since ebooks have no physical manifestation to shelve, browsing a section of the stacks misses important, current information located only online in electronic collections and reduces the usefulness of browsing as a tool for identifying relevant material.

Although much effort has been spent searching for ways to improve online discovery tools in order to incorporate research on book-selection behaviors exhibited in print stacks, little has been done to integrate print and digital collections in a way that enables browsing both formats simultaneously. As long as libraries maintain hybrid collections, providing browsability of each collection separately misses the opportunity to facilitate serendipitous discovery irrespective of format.

As libraries pour increasing financial and personnel resources into expanding electronic collections, they should exert similar effort in creating methods of access as was given to print collections in the past. Incorporating digital materials into the print collection whenever possible is one obvious tactic for improving discoverability. Doing so would promote awareness of digital materials while appealing to the segment of our user base that has become accustomed to physical books, their organization, and the inherent ability to browse an organized shelf.

Literature Review

When considering the literature to inform this study, two topics proved salient: book-selection behaviors and strategies for marketing e-resources. While a comprehensive review of the ebook literature prior to 2012 exists (Blummer & Kenton, 2012), it has been strongly argued that given the rapidly changing nature of the technology surrounding e-resources, studies' usefulness declines as time passes (Becker, 2015). With that in mind, this literature review will focus on studies conducted after Blummer and Kenton's article unless it presents an important and persistent concept or idea.

Book Selection

The bulk of the recent literature regarding book selection examines the behaviors exhibited by users when interacting with the print collection. The importance of browsing and serendipitous discovery are identified as being of significant importance to not only the selection of materials, but also as an important strategy for identifying relevant information during the research process (Hinze, McKay, Vanderschantz, Timpany, & Cunningham, 2012). Additionally, one study focused on the information-seeking and selection behaviors of historians (Martin & Quan-Haase, 2016; Martin & Quan-Haase, 2013), and another on computer scientists (Stelmaszewska & Blandford, 2004), both studies demonstrating similarities in seeking and selection behaviors that indicate the importance of these concepts across disciplines. Each of these studies also examines the limitations of digital environments in providing browsing and serendipitous discovery, and each makes suggestions for improving them by designing digital libraries and catalogs to mimic the beneficial characteristics of print stacks. However, these studies lack discussion of how the existence of separate physical and digital collections influences the information-seeking and selection process.

In addition to demonstrating the relevance of proximity when users are searching for information, these studies also examine the factors influencing ultimate selection of materials for further use. Typically, the findings indicate that after locating the relevant area of the stacks, patrons used cues from the materials themselves to make selections. Studies consistently identified book covers, as well as information about the item such as table of contents and summaries, as important selection influences (Stelmaszewska & Blandford, 2004, Tingle & Tovstiadi, 2016; Hinze, et al., 2012). Only one of these studies attempts to use these factors to promote digital materials in a physical environment (Tingle & Tovstiadi, 2016). Discussion in

each of these studies indicates a belief that these factors are also likely to be important to digital content discovery and selection.

Marketing E-Resources

Commonly cited works suggest that a lack of awareness of academic libraries' ebook collections among our users is significant, ranging from 28.9% (Levine-Clark, 2006) to 33% (Soules, 2009) to 45% (Shelburne, 2009) to 52% (*Library Journal* [LJ], 2012) to 56% (LJ, 2016). In their survey of university students in China, Wang and Bai (2016) discovered that "more than 70% of respondents did not know that the library had been providing e-book databases" (p. 253). Meanwhile, a 2011 study of seven academic libraries revealed a lack of a formalized strategy for marketing e-resources, despite a general recognition of that need. Most frequently, the promotion that did occur typically centered on library websites, OPACs, and user education (Vasileiou & Rowley, 2011). Likewise, the Blummer and Kenton literature review presents a strong focus on digital promotion techniques (2012). However, as described above, many have found that a purely digital marketing strategy presents difficulties for browsing and serendipitous discovery research methods. Recognizing this reality, many studies have been conducted on the efficacy of marketing techniques within the physical library space for increasing awareness and use of digital collections.

In an attempt to better integrate physical and digital collections, many have come back to updating the traditional book display. One study of a series of displays in an academic library using physical books noted a 27% increase in the number of items that were checked out once and a 14% increase in items that were checked out multiple times for titles located in the display compared to those in the stacks, indicating the usefulness of such a strategy (Aloi, Esposito, Gotsch, Holliday, & Kretz, 2007).

More recently, attempts have been made to apply the success of physical book displays to the promotion of digital collections in the physical space. A study at Brigham Young University created displays of books on business topics that used physical books and supplemented them with LibGuide lists of relevant ebooks. Acknowledging the importance of visually attractive covers, printed placards featuring cover art were printed to replace absent dust jackets or items that were checked out. They noted overall average checkouts per month increased by 58.2%, with the highest change occurring in general business (100% increase) and finance (83% increase) subject areas (Camacho, Spackman, & Cluff, 2014). Another study attached printed covers and summary information for ebooks in their collection, along with Quick Response Codes (QR codes) linking to the ebooks, to wood blocks that were displayed in a prominent location in the library. However, systematic assessment was not performed (Reese, 2014). A study conducted by the author using mixed-format displays separate from the stacks showed little overall impact on use, except for a display that combined cover art and summary information for the ebooks selected (Tingle & Tovstiadi, 2016). Results from an effort to promote supplementary e-resource materials using QR codes for a campus' common book project seem to indicate the potential for strategies that link materials that are relevant to others already in use (Baker, 2010), strengthening the case for facilitating strong topical connections.

Other studies have integrated the displays into the stacks to collocate e-resources with their print counterparts to promote browsing. QR codes appear frequently in these articles as the link between the physical and digital collections, but their deployment and use of book-selection factors varies. One study at two medical libraries placed QR codes, linked to lists of ebooks on specific topics, in the corresponding section of the physical stacks. The authors found that use of the QR codes was low, but overall use of the collection was high, which they believe may indicate the usefulness of this strategy to promote awareness, if not direct use. Researchers also received anecdotal evidence that users may have preferred the QR code to

direct them to a specific ebook (Ratajeski & Kraft, 2015). The University of Saskatchewan used direct links through paper markers placed near the appropriate call number with a QR code link to the ebook, but included only the title, author, and call number in the physical display. Furthermore, assessment was not performed to determine its success (Maddison, 2014). The Zombie Library project at Idaho State University comes closest to directly incorporating the digital collection into the physical stacks by creating dummy books with covers, titles, call numbers, QR codes, and bibliographic information. While they experienced little use during the study period, only the reference collection was included and summaries or table of contents were not placed on the dummies (Semenza, Koury, & Gray, 2013).

Overall, there exists a significant body of literature drawing on patrons' book-selection behaviors in the print collection for improving user experience with ebooks in a digital environment and on marketing e-resources within the physical library. These lessons indicate the importance of browsing as a research tool, cover art and contents to aid selection, and the potential of displays to promote awareness and use. However, no single study has systematically assessed the use of a marketing strategy that incorporates all of these factors. Furthermore, there are no best practices for marketing ebooks or other e-resources.

Method

A 2016 weeding project removed around 3,000 items from the business library stacks. Streamlining the collection to the most current and relevant materials makes the collection easier for users to use, but, as many of the recent purchases were in electronic format, the collection development appeared to have peaked in 2012. To increase awareness of current collections, the business librarian selected three sets of ebooks to highlight at different times

throughout the year. The researchers anticipated that by promoting a few titles, awareness and therefore usage would increase for all business ebooks.

The weeding project resulted in increased shelf space, allowing librarians to develop collocated displays within the stacks. The items in some areas were sparser than in others, and those vacant shelves were noted as possible locations for the first integrated display locations. Researchers also analyzed trends in the print circulation to identify popular call-number areas that may look sparse due to the books' being currently in use.

Using the create-lists function in Sierra, the library's integrated library system, and the acquisitions profile as a guide, researchers generated a list of all the ebooks available within the business library stacks' call-number areas (researchers are fortunate that the technical services staff have included an "ebook" material type in all of the ebook catalog records). Researchers compared the list of ebooks with a similar list of print materials.

Nearly all of the business library's 20,000 physical items fall into the H class, although the business library also holds several hundred items in B, G, and T. The H class is very broad, and the call numbers (e.g., HD9000.U5 2016) can be very narrow, so librarians chose to shorten the call numbers in the lists to the subclass level (e.g., HD30 or HF5415) to create manageable groups. In the cases where the subclass is still very large (500+ items), researchers examined a more specific subclass (e.g., HD30.2 or HF5415.5) to illuminate topical trends.

Researchers divided the ebook list into five spreadsheets, each covering one or two LC subclasses. They excluded records for patron-driven ebooks and publication dates prior to 2015. Drawing on circulation statistics for the print collection and the areas flagged during the

weeding project, researchers looked for ebooks already in the collection that could fill the gaps and that could potentially be popular items. Researchers made an effort to display titles from a wide range of platforms rather than limit to one or two vendors.

Lastly, researchers searched for each highlighted title to include only those items with visually interesting covers. This narrowed the list significantly. Due to the availability of ebooks that matched all of the criteria, we expanded the list to include some older (2012 and 2013) items. Areas lacking new ebooks or ebooks with interesting covers were noted for future acquisition.

Researchers selected 53 titles for the integrated display. Drawing from the book-selection literature, covers and small, descriptive blurbs were collected for each item to provide users the information necessary to decide its usefulness. We printed full-color 5"x7" versions of the covers to fit our single-side, countertop, clear plastic sign holders. Since we wanted to enable browsing of the selected ebooks in the context of the wider literature and to promote serendipitous discovery, we needed to place them next to print books covering the same subject. To accomplish this, we noted the call number of the ebook on the back of each cover image. At the beginning of the display period, each was deployed to the appropriate shelf in the print stacks (see Figure 1).

[Insert Figure 1]

Assessment of the display was measured through the collection and analysis of the ebook usage statistics. Working closely with our e-resources staff, we attempted to gather usage data from the vendors for each title in the display.

Results

The 53 selected titles come from a wide variety of platforms and provide a good representation of the overall business library collection. A small number of items came from outside of the class, but the sample was largely made up of materials from the H class. This is similar to the overall collection, and thus this small pool of titles serves as a microcosm for the collection as a whole. In addition, 11 ebook platforms were represented, which is a small percentage of the available platforms but nonetheless emblematic of the availability of ebook titles in the business library collection.

The COUNTER (Counting Online Usage of Networked Electronic Resources) Code of Practice is the guiding framework for consistent e-resource usage reporting. The increasing adoption of COUNTER-compliant usage reporting has made it more possible to track and compare usage of ebook collections within platforms. However, as vendors are able to define for themselves what constitutes a section use (e.g., chapter, page), the comparability between platforms is imperfect. To account for the potential discrepancies or divergent definitions, we adopted a simple binary (i.e., Used/Not Used) model for assessment of the displayed titles.

[Insert Figure 2]

In the course of the display period, 7 of the 53 titles were used at least once (see Figure 2), indicating a use rate of 13.2%. The previous display experiment had a use rate of 12.3% across three displays. It is possible that the integrated displays were slightly more successful than the stand-alone displays, but a .9% difference is not sufficient to be certain. Having experimented with both types of displays, it appears to us that there is potentially equal value in both, and libraries with limited shelf space or lacking a dedicated display area could achieve the

same outcome using either method. Compared to the estimated use of the business ebooks in 2016 overall (10.82%), the titles in the integrated display showed slightly more use. While the 2016 data is an estimate, it is based on available data and is a necessary consequence of the difficulty in acquiring the data.

Discussion

Of the platforms represented in the display, patrons used only items from three. However, only nine of the eleven included platforms provide title-level usage data. Thus, there is no way to know whether the titles from those platforms that were displayed were used. For the purpose of this assessment, those items were counted as not having been used. It is difficult to determine success of an ebook marketing or promotional effort when data about the outcomes is lacking. Any effort to create a multi-platform promotional effort is likely to encounter the same difficulties and will require significant effort on the front end to ensure the ability to collect the necessary data.

Nearly all of the vendors in our study which supply COUNTER-compliant usage reports use the BR2 R4 (Counter Release 4, Book Report 2: Number of Successful Section Requests by Month and Title) format. The consistency of formatting and time period are critical to comparative assessment. However, during the assessment piece of this project, the zero-use data would have been extremely helpful. Few vendors provide it, and the COUNTER Code of Practice does not require zero use to be reported. This omission is understandable, but it does impact the ability to assess collections.

Data-driven collection development is only as good as the data used to make the decisions. Beyond the two included platforms that do not provide title-level usage data,

researchers encountered several other hurdles in gathering the data, ranging from delays in releasing the data to conflicting numbers when the same report was run at different times. These factors, taken together, create significant problems for assessing a hybrid collection. As libraries evolve from offering content through a single ebook provider to content on a wide range of platforms, gathering assessment data may require even more time and effort.

Conclusion

With the move forward into hybrid print and digital collections, it is important to remember the principles of our professional past. Librarians are responsible for ensuring the usefulness and discoverability of collections. As laid out by S.R. Ranganathan (1931), librarians must work to ensure readers find the books they need and use systems that save users' time. This responsibility includes developing a collection based on user requirements, promoting awareness of that collection, developing library arrangements and establishing practices that allow users to find materials as efficiently as possible.

While significant effort has been applied to ensuring that physical and digital collections provide flexible searching and browsing access points, less has been done to enable such access across formats, leaving users to explore those intersections on their own. Finding ways to collocate digital collections within the print stacks presents an opportunity for librarians to create missing connections between items in different formats while saving users' time by mitigating the need to search and browse each format separately. Furthermore, given the demonstrated lack of user awareness of digital collections, such effort provides an important opportunity to reveal these hidden materials and help users connect to the material they need.

Ranganathan's third law also implores librarians to be intentional about collection development and to ensure that it meets the needs of users. The difficulties experienced assessing the efficacy of this ebook promotion project point to a stumbling block in the application of this traditional librarian role. To make good collection development and promotion decisions, complete and useable data needs to be available.

Although we find the slight increase in use of integrated display titles over separate display titles and as compared to the overall ebook collection encouraging, we hesitate to affirm our method as definitive. After this initial study, we have continued to collect use data for all of 2017 with the intent to analyze trends over a full year. The use of yearlong data will allow us to explore whether marketing a small subset of titles increases overall use of business ebook titles.

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Figure 1. Example ebook display item.

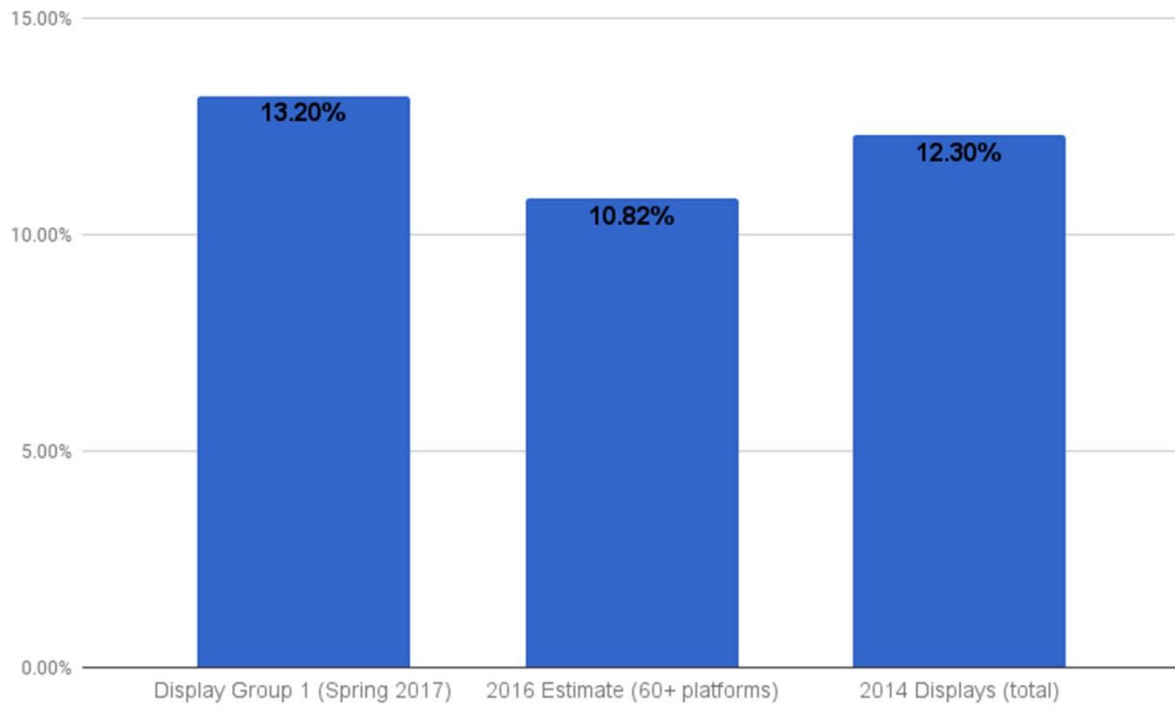


Figure 2. Percentage of ebooks with use.