

Feasibility and Viability of the Digital Library in a Private Law Firm*

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The authors reveal the results of a research study on the feasibility and viability of the digital library. Using information derived from surveys of law librarians, legal publishers, and attorneys, they provide a snapshot of the current state of the digital library in a private law firm setting.

¶1 The technology revolution is reaching deep into private law firms in the United States. Electronic legal research has become a staple of law practice. The concept of a digital or virtual library has been the topic of discussion for at least a decade. In February 2001, Holly Riccio described looking for scholarship and resources on the virtual library.¹ She found archives for an online discussion on the topic and eagerly read about barriers such as the high price of digital legal resources, difficulties accessing resources due to technology failure, complex and confusing licensing agreements, and the difficulties of charging back for online resources. She then noticed with dismay that the discussion thread had occurred in February 1993.

¶2 Past discussions of the digital library often focused on the pitfalls instead of the possibilities of using of digital legal research materials. Law firms are increasingly dependent on technology to share information with global offices, as telecommuting becomes more prevalent to help lawyers' work and life balance, and the law firm comes under other competitive pressures.² Law librarians must embrace the challenges of a digital library or find themselves championing a research mission that does not support the changes occurring in the law firm.

* © Catherine Sanders Reach, David Whelan, and Molly Flood, 2003. The authors would like to thank the many lawyers, librarians, and publishers who responded to the surveys conducted as part of the AALL/Aspen Publishers grant-supported research study described in this article, and particularly the American Association of Law Libraries and Aspen Publishers for supporting the research.

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1. Holly M. Riccio, *The Virtual Library Past, Present, and Future*, LLRX (Dec. 3, 2001), at <http://www.llrx.com/features/virtuallibrary.htm>.

2. Comm. on Research About the Future of the Legal Profession, Am. Bar Ass'n, *Deliberations of the Committee on Research About the Future of the Legal Profession on the Current Status of the Legal Profession 6-7* (Aug. 31, 2001), at <http://www.abanet.org/lawfutures/report2001/finalreport.pdf>.

Digital Library Research Project

Scope

¶3 In February 2002, the American Bar Association's Legal Technology Resource Center,³ aided in part by an American Association of Law Libraries (AALL)/Aspen Publishers grant, undertook a research project to study the feasibility and viability of a digital library in the private law firm. For the purpose of the study, feasible is defined as "able to be accomplished; possible,"⁴ while the denotation of viable is "capable of being successful or continuing to be effective."⁵ One impetus for this research project was the dearth of available literature and accompanying data on the acceptance and existence of digital libraries in private U.S. law firms. The goals for the research included creating a working definition of a "digital library" and gathering statistical data by surveying different populations, rather than relying on intuitive or assumptive information. Additionally, the research sought to explore the difference between a digital library and a virtual library, and to investigate the infrastructure needed to support a digital library, both of which are topics identified by the AALL Research Agenda.⁶

¶4 In reporting on this research, this article does not attempt to provide a vision of the future of the private law firm library. Rather, it provides statistics and analysis that help create a snapshot of the current state of print and digital collections in the private law firm library, the availability of print and digital publications from for-profit legal publishers, and lawyers' use and acceptance of digital materials for legal research. As a stipulation to the receipt of the grant, the authors agreed to avoid overlap with the work of the AALL Special Committee on the Future of Law Libraries in the Digital Age, which was investigating a similar topic. The committee's charge was to "consider the implications of electronic publishing for the future of law libraries and to prepare a report examining the issues and outlining the different scenarios or models to describe the law library of the future."⁷

Methods

¶5 The methods used for this research project included a combination of original survey research and secondary research of the available literature. Three survey populations were identified: law librarians, lawyers, and legal publishers. The law

3. The American Bar Association Legal Technology Resource Center provides resources and information for the legal profession, focusing on technology use by lawyers in private law firm settings. Online research and law firm information management technologies are among the topics the Center addresses on behalf of the Association's members and the profession at large.

4. Webster's II New Riverside Dictionary 252 (rev. ed. 1996).

5. *Id.* at 752.

6. Am. Ass'n of Law Libraries, AALL Research Agenda [§] VI.B-C (2000), *reprinted in* 2002-2003 AALL DIRECTORY AND HANDBOOK 502, 504 (2002), *available at* <http://www.aallnet.org/committee/research/agenda.asp>.

7. SPECIAL COMM. ON THE FUTURE OF LAW LIBRARIES IN THE DIGITAL AGE, AM. ASS'N OF LAW LIBRARIES, BEYOND THE BOUNDARIES 1 (2002) [hereinafter BEYOND THE BOUNDARIES].

librarians' survey, administered online, explored the current structure of the private law firm library collection in terms of media and attempted to identify attitudes and trends affecting the feasibility and viability of a digital library. The legal publishers were surveyed via e-mail and telephone interview, to quantify the state of the industry and to see whether there is a shift toward electronic resources. Finally, lawyers participated in a broader print technology survey in November 2002, called the ABA Legal Technology Survey, an annual survey published by the ABA Legal Technology Resource Center. In addition to other technology benchmarks, this survey attempts to identify research habits and preferences, as well as capture data regarding the availability of sufficient technology to support a digital library.

Defining the Digital Library

¶6 There is no universally accepted definition of what a digital library is or what it contains. Clifford Lynch refers to it as “shorthand for digital collections in libraries.”⁸ He suggests that it is an “exten[sion] of the collection to encompass substantial amounts of digital materials, making use of information systems to provide access to them, and providing a coherence of access between their digital materials and their printed materials.”⁹ This broad definition incorporates both the collection and the services. For the purposes of this research project, we have defined a digital library as a library whose collection is wholly electronic—Internet-based, CD and DVD, and software-accessible (e.g., brief banks)—and yet maintains a physical location. Information professionals, if the law firm employs any, provide services virtually and physically from this location.

¶7 In contrast, we have defined a subset of the digital library to be a virtual library, where all services rendered by staff are electronic, not only the collection. These virtual information professionals may or may not be physically located in one place or even be employees of the business served by the virtual library. There is no physical dimension; lawyers perform all research from a computer in an office, at home, or on the road.

¶8 It was important to define this subset because a large number of lawyers do not appear to rely on a law librarian for legal information, either because they have not hired one or for other reasons. Lawyers reported that firm librarians perform only a small portion of the attorney's legal research, and that is primarily in law firms with fifty or more attorneys.¹⁰ In a recent AALL survey, only 12.4% of more than one thousand respondents in professional positions in law firms indicated that

8. Clifford Lynch, *Today and Tomorrow: What the Digital Library Really Means for Collections and Services*, in *VIRTUALLY YOURS* 85, 87 (Peggy Johnson & Bonnie MacEwan eds., 1999).

9. *Id.* at 86.

10. 2002 LEGAL TECHNOLOGY SURVEY REPORT: ONLINE RESEARCH (forthcoming fall 2003) (question 104). The mean response percentage indicated 1.6% of all research was performed by firm librarians, including 0% (solo), 0.1% (2–9 lawyer firm), 0.5% (10–49 lawyer firm), 6.3% (50–99 lawyer firm), 5.8% (100 or more lawyer firm).

their firms had forty or fewer attorneys.¹¹ These law firms may be able to support the digital law library but probably would not need any physical space, especially if their law firm does not have a librarian.

¶9 One of the scenarios suggested by the AALL Special Committee on the Future of the Law Libraries in the Digital Age to describe the possible law firm library of the future suggests that the library will be the “center for knowledge management within the organization.”¹² Ideally, a digital library will incorporate both information and knowledge management components so that a lawyer can research based on prior work product, as well as primary legal resources. For the purposes of this study, however, the concept of digital libraries and collections suggests legal research materials, rather than including materials such as internal documents, brief banks, and best practices.

Law Office 2002: Technology and Demographics

¶10 The American Bar Foundation performed research in 1995 on the demographics of lawyers by firm size. That research found that nearly half of all lawyers were sole practitioners, with another third practicing in law firms with two to forty lawyers.¹³ Of the estimated one million active attorneys in the United States, only approximately 108,000 work in law firms with 155 lawyers or more.¹⁴

¶11 There is no environmental distinction between solo lawyers and the largest firms in the likelihood of supporting a digital library. The technology available to all lawyers in the United States allows for Internet access to online resources and electronic access to CD and other firm data.¹⁵ One area where there is significant

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11. AM. ASS'N OF LAW LIBRARIES, BIENNIAL SALARY AND ORGANIZATIONAL CHARACTERISTICS 2001, at S-36 (2001) [hereinafter AALL BIENNIAL SALARY SURVEY]. More than 70% of the respondents in professional positions were in law firms with seventy or more lawyers; the figure increased to more than 80% of the seven hundred nonprofessionals covered by the survey. *Id.*
 12. BEYOND THE BOUNDARIES, *supra* note 7, at 33. The committee's "vision" in its Scenario 7 continues: "Library staff works with practice groups to facilitate knowledge sharing within and among groups. . . . [S]taff also works to develop technology-driven systems that allow knowledge sharing. . . . In this scenario, the library moves beyond the boundaries of the traditional definition of a library and operates as a leader within the organization in support of the practices." *Id.*
 13. CLARA N. CARSON, THE LAWYER STATISTICAL REPORT: THE U.S. LEGAL PROFESSION IN 1995, at 21 (1999).
 14. In the *National Law Journal's* 2002 ranking of the top 250 law firms by size, the aggregate count of lawyers in the firms is 108,361, with firm size ranging from 155 to 3246. *The NLJ 250 Annual Survey of the Nation's Largest Law Firms*, at <http://www.nlj.com/nlj250/> (last visited May 8, 2003). There is no exact figure for the number of practicing lawyers in the United States. The American Bar Association Market Research Department collected information from state bar licensing bodies showing active lawyers for each state, but this number does not eliminate all those licensed to practice in multiple states. The total number of active, resident attorneys in 2002 was 1,049,751. MARKET RES. DEP'T, AM. BAR ASS'N, NATIONAL LAWYER POPULATION BY STATE, at <http://www.abanet.org/marketresearch/2002nbrolawyersbystate.pdf> (2003).
 15. Less than 10% of the 671 lawyers responding to the 2001 technology survey indicated that they did not access the Internet. Fifty-four percent of those 61 lawyers indicated that they had access at their office but chose not to use it. All of the lawyers who had no access to the Internet were in law firms with ten or fewer lawyers. Seventy-seven percent of the responding lawyers stated that they had

difference is in the division of research labor between firm librarians and lawyers. Law firm librarians provide a very small percentage, if any, of research performed in all law firms, according to respondents to the ABA's 2002 Legal Technology Survey.¹⁶ Sole practitioners indicated that firm librarians provided no research, while respondents from law firms with 50 to 99 lawyers reported that firm librarians performed a mean of 6.3% of research. The 2001 AALL salary survey suggests that the occurrence of law librarians in firms with fewer than 40 attorneys is likely to be smaller than any other firm size.¹⁷

¶12 Support and infrastructure for the digital library in the private law firm appear both feasible and viable. Ninety-eight percent of the lawyers responding to the most recent ABA technology survey indicate that they use a computer at work.¹⁸ There is a tremendous range in sophistication of computer resources, but both e-mail and Web access are widely available and fast Internet connections are becoming more common. E-mail was available to 99.7% of respondents, while 97.9% indicated they had access to the Internet at work. A dial-up connection to the Internet from their office is used by 20.4% of the respondents, while 24.9% use a T1 or T3 line, and 35.9% use digital subscriber lines (xDSL) or cable connections.¹⁹ This minimal level of technology—computer, Internet connection, CD-ROM drive, and printer—is enough to open the door to the digital library.

Lawyer's Legal Research Habits

¶13 Survey questions on legal research were sent to a random sample of ABA member attorneys as part of the Legal Technology Resource Center's annual technology survey in November 2002. Responses for the set of legal research questions ranged from 500 to 600 attorneys. The average age of the respondents was 49, with an average of 19 years in the practice of law. Respondents were primarily partners, followed by solo attorneys and associates.

¶14 The statistical data from this survey indicate that attorneys seem to be comfortable accessing and using online legal research materials. Among those who perform legal research, 63% performed their own legal research, rather than assigning it to an associate, paralegal, or law librarian.²⁰ The respondents typically

access to a CD drive at their firm. 2001 LEGAL TECHNOLOGY SURVEY REPORT: LAW OFFICE TECHNOLOGY 62, 102-03 (2002).

16. 2002 LEGAL TECHNOLOGY SURVEY REPORT: ONLINE RESEARCH, *supra* note 10 (question 104). The mean response percentage indicated 1.6% of all research was performed by firm librarians, including 0% (solo), 0.1% (2-9 lawyer firm), 0.5% (10-49 lawyer firm), 6.3% (50-99 lawyer firm), 5.8% (100 or more lawyer firm).
17. AALL BIENNIAL SALARY SURVEY, *supra* note 11, at 21.
18. 2002 LEGAL TECHNOLOGY SURVEY REPORT: ONLINE RESEARCH, *supra* note 10 (question 33).
19. *Id.* (question 139). Access to the Internet was lowest in solo firms, at 95.1%, while solos were also most likely to have a dial-up connection. Firms ranging from 2 to 49 had DSL connections, but most firms with more than ten lawyers (where respondents knew what their connection speed was) had a T1 or better connection.
20. 2002 LEGAL TECHNOLOGY SURVEY REPORT: ONLINE RESEARCH, *supra* note 10 (question 105).

start with fee-based online resources (46%), or a legal-specific search engine (32%) when performing online research.²¹ Thirty-one percent of the responding attorneys begin their access to these materials through the law firm's portal, when available.²²

¶15 The survey data shows that lawyers' use of online legal research is competing directly with print. The respondents to the ABA's 2002 Legal Technology Survey reported that 37% (mean) of the time they used fee-based online legal services while 34% of the time they used print.²³ Lawyers specifically reported going to fee-based online resources for federal and state primary law (cases, statutes, and regulations) more often than print resources (see figures 1–2).²⁴ However, lawyers still prefer to use print materials for law reviews, periodicals, and treatises (see figure 3).²⁵

Figure 1

Format Used Most Often: Federal Primary Law

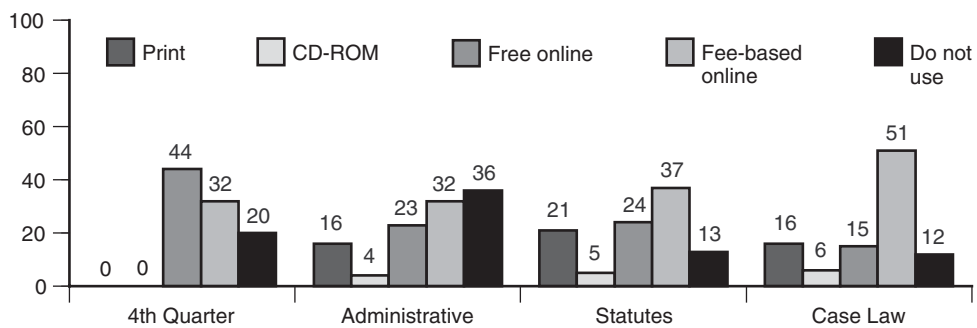
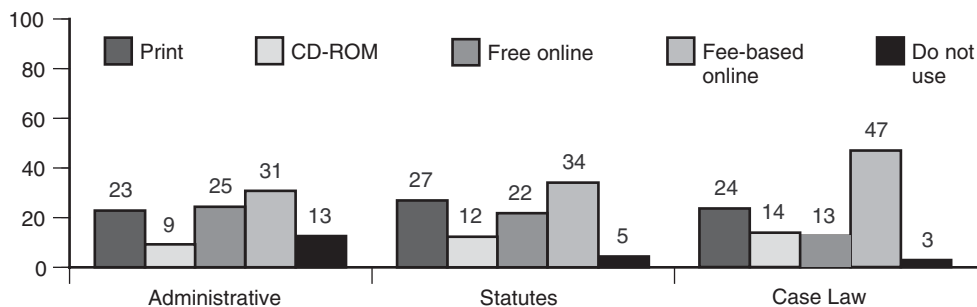


Figure 2

Format Used Most Often: Your State Primary Law



21. *Id.* (question 112).

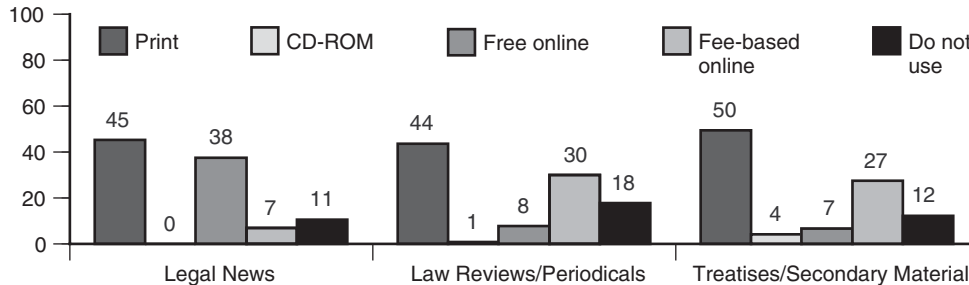
22. *Id.* (question 113).

23. *Id.* (question 120). Sixteen percent reported using free online services and 12% reported using CD-ROM or other removable media.

24. *Id.* (question 121).

25. *Id.*

Figure 3

Format Preference: Secondary Materials**Trends in Legal Publishing²⁶**

¶16 Results for the survey of U.S.-based for-profit publishers of print legal publications were tallied in January 2003. A list of qualifying publishers was compiled from AcqWeb's list of law publishers²⁷ and FindLaw's list of legal publishers.²⁸ The publishers responded to a brief survey via e-mail or telephone. From a list of sixty solicited publishers, the twenty-six who responded represent a good mix of small, medium, and large publishers covering all types of legal publications in all types of jurisdictions.

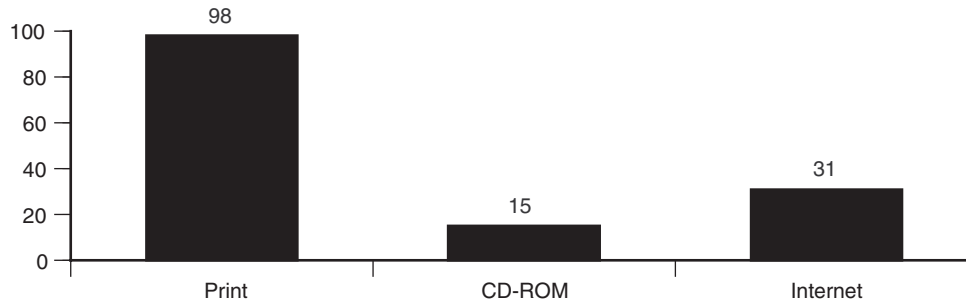
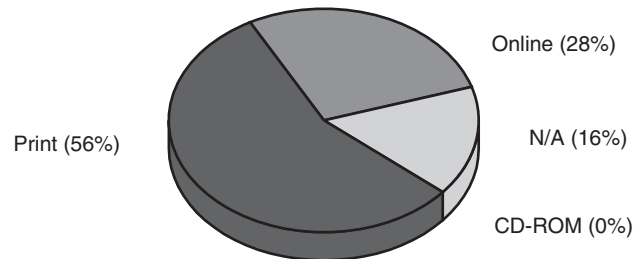
¶17 When asked whether they published materials in any digital formats, more than half the responding publishers (52%) indicated that they published materials in both CD-ROM and on the Internet. However, with a possible answer of 100% for production of each of the above media, print is still the dominant format, with Internet publications making up about a third of total production and CD-ROM, 15% (see figure 4). Sixty-two percent of the publishers plan to offer print titles in a digital format, but most (92%) also will continue to put out the print counterpart. Very few of the responding publishers (13%) have plans to produce more digital materials than print titles.

¶18 When asked about the pricing of different formats, most legal publishers quickly responded that print was the most expensive to the customer (see figure 5). The reason most often cited was publisher production costs, which have to be passed on to the consumer. One publisher remarked, when asked if it had plans to convert print titles to digital, that they were "converting digital to print." Those respondents who said that their online titles were more expensive cited accessibility, searchability, and timeliness of the materials as the reasons the cost exceeded print versions.

26. Survey data from the survey of legal publishers is unpublished and was gathered as part of the AALL/Aspen Publishers grant-supported research study described in this article.

27. ACQWEB'S DIRECTORY OF PUBLISHERS AND VENDORS: LAW PUBLISHERS, at <http://acqweb.library.vanderbilt.edu/acqweb/pubr/law.html> (last updated Dec. 8, 2001).

28. FINDLAW, LEGAL PUBLISHERS, at <http://www.findlaw.com/04publications/> (last visited May 10, 2003).

Figure 4*Total Production by Format***Figure 5***Highest Price Format*

The Private Law Firm Library²⁹

¶19 In summer 2002, law librarians were invited via e-mail discussion lists, including those of AALL chapters and special interest sections, the Special Libraries Association Legal Division, and law-lib, to take part in an online survey. While nearly 300 librarians responded to the survey, the respondents representing private law firm libraries numbered 170. For the purposes of this study, only the private law firm librarian responses were used in the survey analysis. Demographically, the private law firm respondents tend to have master's degrees in library and information sciences (76%), hold administrative positions (72%), and work in firms with more than 150 attorneys (58%).

¶20 When asked to speculate on the total percentage of each format in their library's collection, 34% of the responding librarians indicated that 61–80% of their collection was in print, while 29% responded that fee-based online access was closer to 21–41% in their library (see figure 6). Only 21% of the respondents indicated that they plan to replace more than half the print collection in the next

29. Survey data from the survey of law librarians is unpublished and was gathered as part of the AALL/Aspen Publishers grant-supported research study described in this article.

five years, although 49% agreed that shelf space would decrease. A greater percentage agree that it is highly unlikely that they would replace local or state law and treatises, while replacement of current awareness materials and federal case law is highly likely (see figures 7–9). Law librarians seem to show a high awareness of the fact that many federal and state resources, and even secondary resources, are available for purchase in digital formats (see figures 10–12).

Figure 6

Library Collection

% of Total Collection	Format				
	Print	CD-ROM	Fee-Based Online	Audio/Video	Other
0–20	2	96%	26	100%	94%
21–40	24	7	29%	0	7
41–60	25	0	22	0	0
61–80	34%	0	18	0	0
81–100	26	0	4	0	0

Figure 7

Likelihood of Replacing Print with Digital: Federal Primary Law

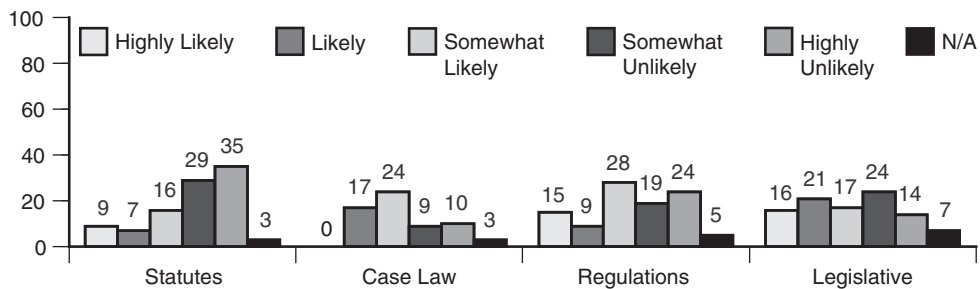


Figure 8

Likelihood of Replacing Print with Digital: Your State Primary Law

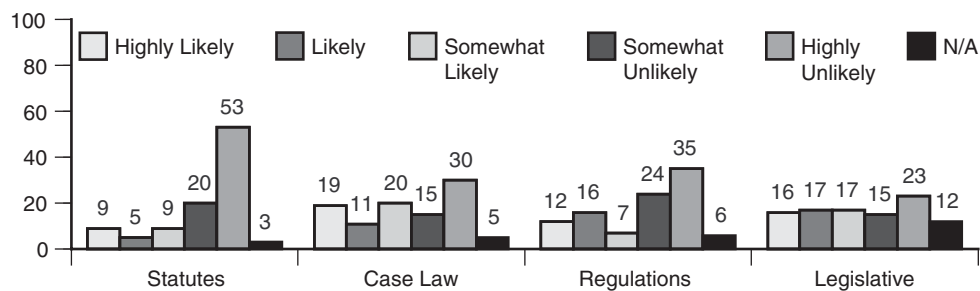


Figure 9

Likelihood of Replacing Print with Digital: Secondary Materials

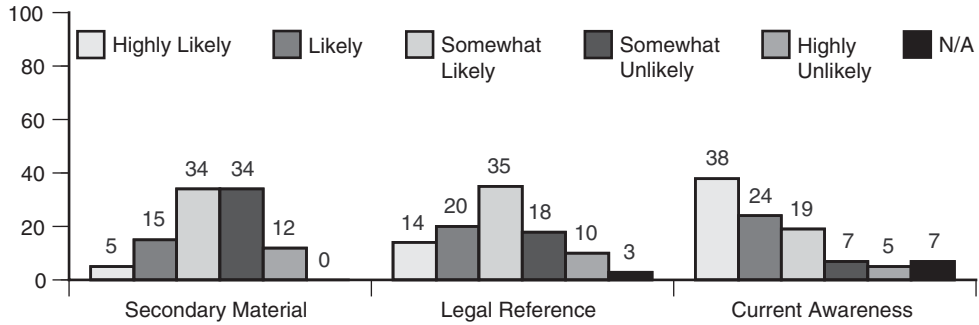


Figure 10

Format Available? Your State Primary Law

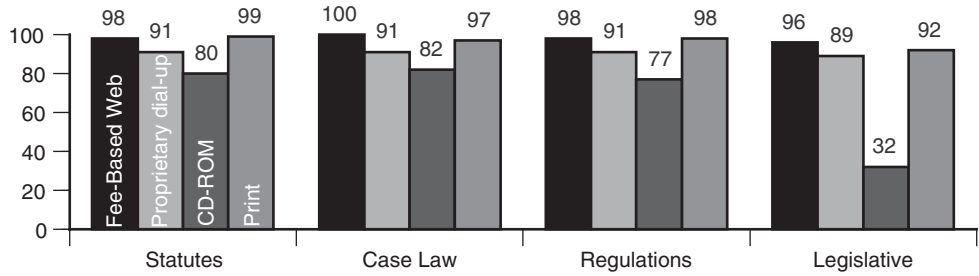


Figure 11

Format Available? Secondary Materials

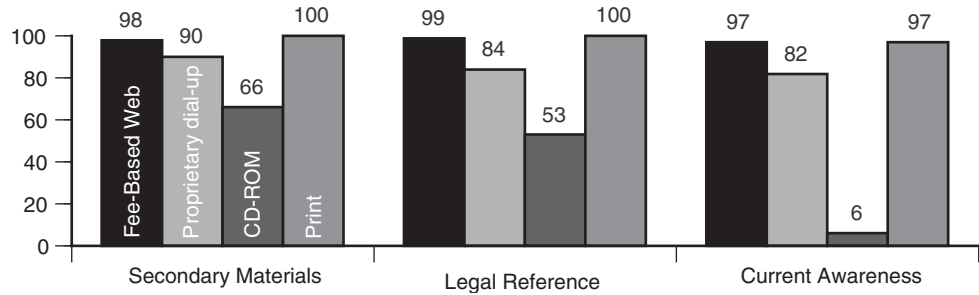
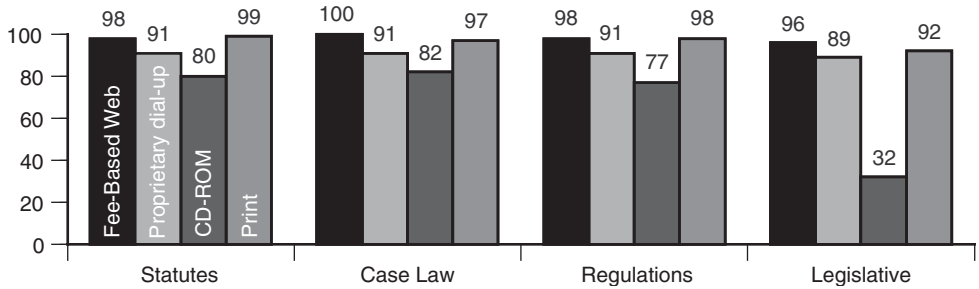


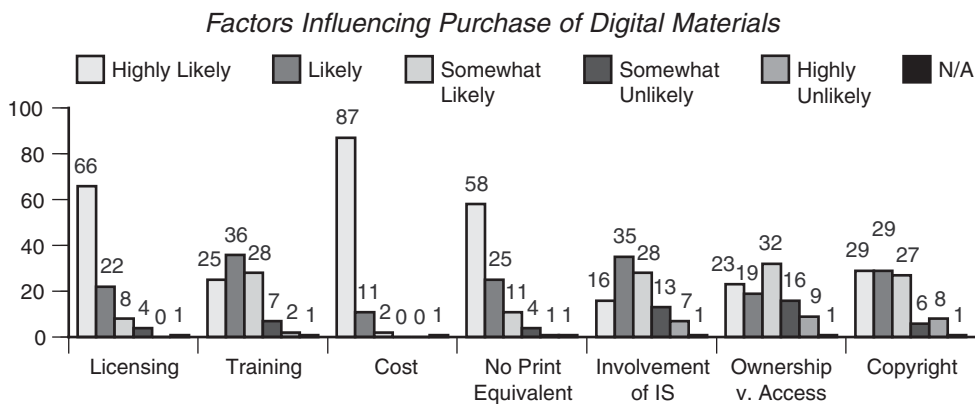
Figure 12

Format Available? Federal Primary Law



¶21 The most common reason to replace a print resource with a digital product is that it provides better access for patrons (53%), with a lack of space as a secondary motivation (41%). Sixty-six percent of the respondents indicated that the least common reason to replace a print title is that the digital product is less expensive. The reasons that were selected to be highly likely to affect the purchase of a digital product were high cost (87%), complicated licensing (66%), and lacking an alternative print copy in the collection (58%) (see figure 13).

Figure 13



¶22 The libraries participate in or sponsor a firm online catalog (56%) or Intranet (80%), although portal technologies still lag (26%). Librarians are using these products to help their patrons find research materials, whether print or online. Half of the respondents are cataloging digital resources (53%), including fee-based online resources (59%) and CD-ROMs (85%). Often, a print title record in an online library catalog will provide a link or notation regarding the online availability (41%).

Analysis

¶23 The prevalence of Internet-based legal research through the primary law information providers as well as other Web sites, search engines, and indexes, might suggest that the digital library is an option available to everyone. In reality, while many lawyers appear to be using digital resources to fulfill their need for primary and secondary materials, as illustrated in figures 1–3, there remains a preference for print secondary resources. These resources, including practice-specific and local law publications, are likely to remain in a print format due to the reluctance of publishers to provide a digital equivalent. These publishers feel that their publications are best suited to a print format and that there is little market for a digital version.³⁰

30. Verbatim responses from the survey of legal publishers conducted as part of the AALL/Aspen Publishers grant-supported research study described in this article.

These materials will continue to make up a very focused core print collection that could be housed in noncentral locations situated close to the attorneys who use them most often.

¶24 Today's law firm library still relies heavily on print resources (see figure 6). Law firm librarians have plans to replace less than half the print collection with digital resources in the next five years. While there is a fear of shrinking shelf space, law librarians cite many barriers to providing digital formats for their patrons (see figure 13). Librarians must face new challenges, working with publishers on licensing and contracts, learning more about copyright, and exercising their voices on the perceived high cost of digital publications. AALL's Special Committee on the Future of Law Libraries in the Digital Age rationalized that all private law firm libraries are "somewhere along the path to a totally electronic or virtual library"³¹ By not leaping the perceived barriers to the digital library and taking the initiative to provide solutions to technology problems, the threat of technology positions absorbing library positions and electronic retrieval systems replacing information professional could become a grim reality.³²

¶25 Legal publishers are eager to work with librarians to ensure migration to digital products. More than half of the legal publishers stated that print publications are priced higher than their online counterparts, which appears to be in direct opposition to librarian's concerns about the cost of print versus the cost of digital products. The cost comparison of print and online resources is never direct. Costs associated with books that add to the total purchase price—such as shelf space, loose-leaf filing, cataloging, updating, processing, and replacement—should be considered when making a comparison between print and digital products.

¶26 Librarians are also concerned about cost recovery, use statistics, and password management.³³ Some of these barriers may be more of a perception than a reality. Technologies exist that might address these concerns. For example, single sign-on can allow multiple databases or resources to rely on a single username and password for access, removing the obstacle of remembering unique security information to access a particular database. Cost recovery is occurring for activities as basic as faxing, phoning, and printing to ensure a client is charged for the particular costs associated with her case. Those recovery tools may be adaptable to the digital research needs of law firms. In some cases, the complexity of installing the technology—like access metering on CD-ROM servers or jukeboxes to ensure that the number of concurrent users does not exceed the number of licenses—may outweigh its benefits.

31. BEYOND THE BOUNDARIES, *supra* note 7, at 11.

32. *Id.* at 16.

33. Verbatim responses from the survey of librarians conducted as part of the AALL/Aspen Publishers grant-supported research study described in this article.

¶27 Many law librarians believe that lawyers display favoritism toward books,³⁴ but the 2002 lawyers survey research reveals that they have developed a high level of acceptance of digital resources.³⁵ In verbatim responses, many law librarians cited the potential impermanence of the vendor and the differences between access to material versus ownership of it as the reason for not purchasing digital titles. It is the responsibility of law librarians and legal publishers to develop clauses within their contracts to protect themselves from the liability of losing access to materials for which the firm has paid. A model to be followed for developing these types of protections may be found in the contracts between law firms and Web-based legal software vendors where sensitive and vital firm information is stored on a vendor's servers remotely. These agreements often contemplate the discontinuity of service and how and when the law firm can gain access to and control over its data.

¶28 As the concept of the digital library embraces not only a digital collection, but also the services and access points to these materials, law librarians have an incredible opportunity to expand their services. Librarians must be poised to take new roles in the law firm to provide leadership in a digital landscape.

Conclusion

¶29 While a digital library appears to be feasible, all three survey groups—lawyers, law librarians, and legal publishers—still see barriers to the medium. Legal publishers still note a strong attachment to the print products, law librarians see digital materials as more costly, and attorneys, while they are slowly embracing fee-based online research, continue to have a strong attachment to print. It certainly appears that federal case law, statutes, and regulations in a law firm collection can be entirely digital, but practice-specific resources, state resources, and treatises still need refinement in the digital world to be viable. The digital library remains more a vision than a reality.

34. Verbatim responses from the survey of librarians conducted as part of the AALL/Aspen Publishers grant-supported research study described in this article.

35. 2002 LEGAL TECHNOLOGY SURVEY REPORT: ONLINE RESEARCH, *supra* note 10 (question 121).