

# Perception versus Reality: Electronic Data Interchange in the Law Library Environment\*

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*Ms. Bluh provides an overview of electronic data interchange (EDI) and explores why, despite its apparent advantages, the library community has been slow to utilize it. She also describes the pros and cons of EDI within the law library environment.*

¶1 Electronic data interchange (EDI) has been a topic of discussion among librarians for quite some time. In 1992, at a workshop on EDI, Dan Tonkery said:

EDI—Everyone’s Discussing It.

EDI—Everyone’s Deferring It.

EDI—Everyone’s Doing It.<sup>1</sup>

In the early 1990s there was a great deal of talk, some of it quite intense, about EDI; and it was accurate to suggest that, other than talk, very little of consequence was actually taking place, particularly with regard to libraries. At that time, contrary to this slogan, it was hard to find anyone who was doing more than talking about it! Now that nearly a decade has passed, are we any closer to realizing EDI in the library environment today than we were then? We will try to answer this question by examining the perceptions and the realities that surround EDI, by reviewing the status of EDI in the library community, and by elaborating on the pros and cons of EDI within the law library environment.

## The Perception

¶2 At its most basic level, electronic data interchange may be defined as the exchange of business information between organizations without human intervention. “The business communication of libraries with book jobbers and serials

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\* © Pamela Bluh, 2001. This article is based in part on a presentation made at the Annual Meeting of the American Association of Law Libraries, July 16, 2000, as part of a program entitled “How Will the Law Library Work in a Paperless World? The Impact of Electronic Data Interchange.”

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1. Dan Tonkery, Remarks at a program sponsored by the Association for Library Collections and Technical Services on “EDI and the Library: A Preconference on Electronic Data Interchange Standards for the Acquisition of Library Materials” (June 25, 1992).

subscription agencies involves ordering, acknowledgment, claiming, reporting, and invoicing. Increasingly, such business communication is done electronically. . . . The group of standards that address these needs . . . are generally referred to as . . . EDI (Electronic Data Interchange)."<sup>2</sup>

¶13 There is much about electronic data interchange that is either not understood or is misunderstood, resulting in a sense of mystery and intrigue. Often EDI is confused with data processing. Whereas data processing is the "systematic performance of operations upon *data*, such as handling, merging, sorting and computing,"<sup>3</sup> EDI is a transaction where data is simply exchanged and transferred from one point to another but the data itself is not manipulated or changed in any way. There is nothing to see with an EDI transaction; for all intents and purposes, it is invisible. Consequently, it may seem like a spontaneous happening, giving the appearance of magic.

¶14 EDI uses a vocabulary or syntax that is not widely understood. The lexicon of EDI is full of abbreviations, codes, and terminology understood by only a handful of individuals. When terminology seems complex or difficult to grasp, it often lends credence to the notion that something mysterious is taking place. And so it is with electronic data interchange. For those unfamiliar with the language or jargon, it seems unintelligible and therefore mysterious.

¶15 Since EDI transactions are invisible and use distinctive terminology, those engaged in EDI development may be perceived as members of a secret society. To the uninitiated, the organizations involved in the development and testing of electronic data interchange, often referred to only by their initials—SISAC, ICEDIS, EDItEUR, BIC<sup>4</sup>—seem like fraternities or special clubs. For many years, membership in these organizations, although ostensibly open to all segments of the information chain, including librarians, consisted almost entirely of publishers, a few subscription agents and book jobbers, and even fewer vendors of integrated library systems. Particularly for librarians in the United States, participation was often logistically and practically difficult. Although a few librarians managed to become active in EDI development, they were very much in the minority. Consequently, as EDI evolved, an air of elitism, while not consciously fostered or promoted, seemed to exist, with the result that membership in these groups was rather significantly restricted. Thus an atmosphere of secrecy appeared to surround EDI development, which ultimately heightened the mystique. Only in the last several years have EDI activities become more open and collegial, alleviating some of the initial impressions that had formed.

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2. Richard W. Boss, *Information Technology Standards*, LIBR. TECH. REP., July–Aug. 2000, at 70, 70.

3. INFO. TECH. SERV., GEN. SERV. ADMIN., FEDERAL STANDARD 1037C, TELECOMMUNICATIONS: GLOSSARY OF TELECOMMUNICATIONS TERMS (1996), available at [http://www.its.blrdoc.gov/fs-1037/dir-010/\\_1439.htm](http://www.its.blrdoc.gov/fs-1037/dir-010/_1439.htm).

4. Serials Industry Systems Advisory Committee; International Committee on EDI for Serials; Pan-European Book Sector EDI Group, Book Industry Communication.

¶16 Underscoring the seemingly arcane nature of EDI is the hyperbole that surrounds it. There has always been speculation about the benefits of EDI and how much simpler and more efficient library operations would be as a result of the introduction of EDI. In fact, “many people in the library community . . . have been discussing and promoting the benefits of Electronic Data Interchange (EDI) for several years, yet it is still not a reality in libraries. . . . Other industries, such as transportation, banking, and health care, have seen their production rates rise, their services expand, and their staff become reenergized and retooled by the implementation of EDI.”<sup>5</sup> However, no large body of concrete evidence to support such claims seems to exist in the library field. As a result, the claims tend to be based either on experiences from other industries, which may or may not be relevant, or they are exaggerated to such a degree that the hypothetical advantages attributed to EDI are quite out of proportion to the actual benefits which could be derived from its use. The hype surrounding EDI contributes to the feeling that it is a miracle cure which could solve all the staffing, budgeting, and procedural problems faced by librarians, if only it were implemented! Thus the mystique is perpetuated.

### The Reality

¶17 EDI transactions are governed by standards approved by various national and international agencies. In the United States, the American National Standards Institute (ANSI) Accredited Standards Committee X12 has the responsibility for developing and maintaining the EDI standard, known as X12. In Europe, the International Standards Organization (ISO), together with the United Nations’ Economic Commission for Europe (UN/ECE) developed a slightly different standard known as EDIFACT, an acronym for Electronic Data Interchange for Administration, Commerce, and Transport. In the last several years there has been a slow but definite shift toward EDIFACT as the basis for the international development of EDI business messages, and in the library community work is being done on the transmittal of purchase orders, claims, and invoice information using EDI.

¶18 Over the last dozen years or so, EDI for libraries has been the subject of numerous articles, books, conference programs, and workshops.<sup>6</sup> Despite all the talk, progress in introducing EDI into the library environment has been modest, and even more limited in the law library environment. If EDI is to become a useful

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5. Joan C. Griffith, *Why Not EDI? One Librarian’s Perspective*, *LIBR. ADMIN. & MGMT.*, Summer 1996, at 147, 147.

6. See *infra* appendix for selected resources on EDI in libraries. For additional information on Web sites, books, periodicals, and articles in the areas of law, information services, information systems, and health services, see THURGOOD MARSHALL LAW LIBRARY, UNIV. OF MARYLAND SCH. OF LAW, SELECTED RESOURCES ON ELECTRONIC DATA INTERCHANGE, at <http://www.law.umaryland.edu/Marshall/edi.htm> (last modified Jan. 25, 2001).

business tool for the library community, including the law library community, the realities of EDI must be clearly understood.

¶9 “EDI is the globally accepted and implemented method for exchanging business information electronically in machine-readable formats.”<sup>7</sup> While the concept of EDI and the production of messages is quite simple and is based on a generic, highly structured format, the semantics required to convey data within the information services universe, which includes libraries, publishers, agents, and vendors, as well as suppliers of integrated library systems, makes EDI complex. EDI relies on the principle of partnership, and the players in a transaction are known as “trading partners.” In a typical commercial EDI transaction there are normally two trading partners, the buyer and the seller. In the library environment, the partnerships may be more elaborate, with three, four, or even more trading partners. Generally the library is the buyer and the publisher is the seller, but there may be several intermediaries between library and publisher. It is no easy task to get two partners to adhere to the standards. Imagine trying to get four or five partners to agree!

¶10 Who are the law library’s potential partners? Primarily they are the large domestic legal publishers from whom law libraries buy the majority of their materials. They are also the middlemen—subscription agents and book jobbers—who serve as the link between the library and the publishers. And they are the vendors of integrated library systems used by libraries to manage collections. In the law library community these segments must all be involved in order for EDI to be successful and for all the partners to realize the full potential of EDI.

### *Legal Publishers*

¶11 Legal publishing in the United States is dominated by a relatively small number of publishers. To investigate the capabilities of legal publishers with regard to EDI, in spring 2000 I asked representatives of six legal publishers<sup>8</sup> whether their companies were using EDI and if so, how. And conversely, if they were not using EDI, did they have any plans to do so in the near term? These inquiries were designed to obtain a general impression of the current landscape; even though the sample of half a dozen publishers is quite small, it may well represent the majority of legal publishing activity in the United States. Among this group of publishers, knowledge of and interest in electronic data interchange is minimal. Only the Hein Company has adopted a proactive approach with regard to EDI development. However, it may be worth noting that Hein, as both publisher and agent, and with a large number of academic law libraries among its customer base, has a greater vested interest in providing the services most sought after by its clientele.

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7. INT’L. COMM. ON EDI FOR SERIALS, *New to EDI?* at <http://www.icedis.org/newtoedi.html> (last visited Dec. 19, 2000).

8. Aspen Publishers, Bureau of National Affairs, CCH, William S. Hein and Company, LEXIS Publishing, and West Group.

¶12 While this overall picture of EDI in the legal publishing environment is somewhat discouraging, it is understandable. Legal publishers are under no real pressure to invest resources in developing EDI capabilities because their primary market, law firm libraries and individual practitioners, has neither the need nor the capability to conduct business using EDI. Even though academic law libraries may have substantial accounts with legal publishers, these accounts represent only a fraction of a legal publisher's overall revenue. For the academic law librarian this may be a hard reality to accept. Whereas in academe in general, libraries are among the largest buyers of scholarly material, in the law environment, acquisitions by academic law libraries are overshadowed by acquisitions from practitioners. In the general marketplace, where publishers deal with a large volume of transactions, such as supplying multiple copies of a single title to public libraries or thousands of copies to bookstores, EDI makes sense because it allows libraries and suppliers to realize economies and efficiencies of scale. In the law library market, on the other hand, the volume of sales, while it is huge in the aggregate, consists primarily of individual transactions to small businesses. Since the individual transaction load is small, publishers do not believe they would realize significant benefits from an investment in EDI. Most law firm libraries, even larger ones, do a modest volume of business, particularly in comparison to academic libraries, and do not feel that EDI would improve their overall technical performance. In addition, many of these libraries, even if their technical services are automated, use online systems that are not EDI compliant and would require expensive upgrades to provide that capability. Lacking the necessary infrastructure—hardware, software, and programming capabilities—needed to develop and maintain EDI means that it is not a cost-effective investment for this segment of the community at this time.

¶13 Another important consideration when examining EDI in the legal arena is the breadth of the marketplace. While sales of practitioner-oriented legal materials in the United States may be very substantial, in terms of the global marketplace this type of material has limited appeal. The commercial publisher and the publisher of scholarly material have fewer limitations and, in fact, have the potential of a worldwide market at their disposal. With a limited market and a clientele without the capabilities for EDI, legal publishers have little incentive to introduce EDI and will give very careful consideration to the question of whether an investment in this technology would be appropriate and cost-effective.

#### *Subscription Agents and Book Jobbers*

¶14 The situation for subscription agents and book jobbers, particularly those with a large academic library customer base, presents quite a different story. Interest in EDI among agents and jobbers has always been moderately high, and this group has been moving cautiously toward implementation of EDI for a number of years. Why are these companies investing in EDI?

¶15 The universe of potential partners for subscription agents and book jobbers is much larger than that expected by legal publishers. The major agents and jobbers count academic and research libraries, public and special libraries, including law libraries, among their customers. These libraries, large and small, represent a significant segment of an agent's business. Not only is the marketplace much more extensive, but the players in the marketplace represent a much greater diversity in the subscription agent's realm so that an investment in EDI becomes not only worthwhile but even essential for sustaining a successful business relationship.

¶16 As the Internet and World Wide Web emerge and mature as the medium of choice for electronic commerce,<sup>9</sup> vendors have discovered that EDI transactions can be securely and effectively transmitted over the Internet. Although implementing EDI is not a trivial matter and requires a substantial investment in terms of money, technology, and effort, in this particular market sector, EDI is gaining ground. For example, the Faxon Company reported that although they "have a long way to go with publishers, as most fulfillment systems are still not interfaced," they are loading claims and invoices with many ILS vendors, and over 30% of all their claims are received via EDI.<sup>10</sup> The Internet has made subscription agents and jobbers aware of the possibilities of electronic commerce and has also served to expand their horizons in terms of potential customers. By harnessing the globalizing force of the Internet and the World Wide Web, and by adhering to international standards for the transmission of information, it is possible for a company to do business and expand into markets around the world. EDI is the medium through which this can be accomplished: an "international language" which is universally understood. In order to compete in this new, expanded, worldwide marketplace, the ability to handle EDI transactions is critical.

¶17 Perhaps the experience of William S. Hein and Company is informative. For some time, Hein, in partnership with an integrated library systems vendor and an academic law library,<sup>11</sup> worked to develop the capability to transmit serials invoices using EDIFACT. The development effort was complicated and time-consuming and required the company to invest in some expensive software. Yet according to Dan Rosati of Hein, the effort and expense will ultimately pay off. Not only are other academic law libraries waiting eagerly to make use of this particular EDI functionality, but the experience gained in developing this specific EDI transaction set will also stand the company in good stead as it develops addi-

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9. E-commerce is a term used to refer to all forms of online business activity and is not limited solely to EDI transactions. See posting of Jonathan Robin, jrobin@atelier.fr, to E-CARM@c3po.kc-inc.net (Mar. 3, 1998), at <http://www.kc-inc.net/e-carm/archive/9803/msg00035.html> ("E-commerce . . . can be simplified to an exchange of goods or services initiated online.").

10. E-mail from Dan Tonkery, President, Faxon, Rowecom's Academic and Medical Services, to the author (June 13, 2000) (on file with author).

11. Endeavor and the University of Pittsburgh Law Library.

tional EDI messaging capabilities with other partners.<sup>12</sup> Libraries in the United States, including law libraries, could become the beneficiaries of the work that subscription agents and book jobbers are doing with EDI.

### *Integrated Library System Vendors*

¶18 A third link in completing a successful EDI transaction is provided by the vendors of integrated library systems. Every year, *Library Systems Newsletter* conducts a survey of the leading vendors of integrated library systems active in the North American marketplace. Results from the most recent survey<sup>13</sup> contain a useful synopsis of the EDI capabilities of twenty such vendors who were polled with regard to a variety of functionality, including EDI. The results of the survey indicated that “EDIFACT online ordering and claiming is . . . beginning to become available, although the majority [of vendors] are still offering BISAC online ordering and EDI X.12 online claiming—both standards superseded by EDIFACT.”<sup>14</sup> The survey also revealed that, of the twenty vendors polled, only five reported being able to handle EDIFACT online ordering and claiming. Those appear to be the vendors with a customer base of large research libraries that do business with European-based publishers, book jobbers, and subscription agents.

¶19 Why has EDI been so slow to gain momentum among the vendors of integrated library systems in the United States? Enhancements to integrated library systems are customer-driven and, by and large, the customers want new, high profile features that enhance public services and make systems marketable and exciting in very obvious ways. EDI is a component of acquisitions and serials functionality, very often two of the last functions to be fully initiated. EDI is not a glamorous, highly visible activity. On the contrary, EDI is invisible and decidedly mundane—the ultimate low profile activity! So, it should be no surprise that EDI is not at the top of most development lists.

¶20 Despite the existence of standards, some subscription agencies, publishers, and vendors of integrated library systems have modified the standards in ways that may inhibit the use of EDI. While these changes were usually done to accommodate specific customer needs, even minor adjustments complicate the task of transmitting data. As an indication of the extent of this problem, a subscription agency, in responding to an RFP which requested the vendor to “describe the firm’s ability to provide an interface with Integrated Library Systems for purposes of transferring bibliographic data or for other purposes,” explained that they

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12. Telephone Interview with Daniel Rosati, Senior Vice President, William S. Hein & Co. (spring 2000).

13. *Annual Survey of Automated Library System Vendors: Integrated, Multi-User, Multi-Function Systems Running on Main-Frames, Minis, and Micros That Use a Multi-User Operating System*, 20 LIBR. SYS. NEWSL. 9 (2000).

14. *Id.* at 9.

were working with “82 ILS vendors to build 159 interfaces for the efficient management of serials data.”<sup>15</sup> Imagine that level of activity being replicated by every subscription agent and ILS vendor, not to mention the costs involved and the time-consuming nature of the testing needed. In addition, some of the proprietary changes that ILS vendors have made to accommodate EDI actually work quite well, making the decision to change even more problematic.

¶21 Some librarians have long been outspoken proponents of EDI and have lobbied tirelessly to give EDI a higher profile. Nevertheless, until recently, references to EDI in RFPs were often watered down and expressed in terms of “desirables” rather than “mandatories.” As more and more libraries, particularly academic libraries, migrate toward third-generation integrated library systems, interest in EDI is intensifying. This is certainly due, in part, to the efforts of the group of EDI advocates, but more importantly, to the gradual change in the perception of EDI as a valuable administrative tool. Library administrators, under tremendous pressure to maintain *status quo* staffing levels while at the same time providing an ever greater array of sophisticated services, are suddenly discovering that EDI may very well provide an attractive, attainable mechanism that will allow them to introduce new, high profile services with existing staff. By utilizing EDI in one area, resources, particularly human resources, may be redeployed to another area. Consequently, greater emphasis on EDI and more stringent requirements for its use are being written into proposals for third-generation integrated library systems.<sup>16</sup>

¶22 In looking for explanations or reasons why EDI has not taken the library market by storm, it may be worth considering an example from outside our own industry. Several years ago, as one of a series of presentations on EDI, John Fitts, a vice president at Ebsco Industries, related a tale about EDI from the field of retailing that illustrates why the commercial sector has embraced EDI. He described the relationship between Company W, a large national retailer, and PRADCO, a manufacturer of fishing equipment, which is based solely on EDI transactions. The decision to utilize EDI was made, not through negotiation or discussion, but by *fiat*, as Mr. Fitts paraphrased the letter that PRADCO received:

Dear Valued Supplier: We will no longer transact business with you using paper. We will not warehouse your merchandise as you will manufacture same and deliver it to our stores on demand as we need it. Attached are specifications you will adhere to. You have six months to comply.<sup>17</sup>

¶23 Essentially, the retail giant gave the manufacturer an ultimatum—adopt

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15. Private response to a Request For Proposal by the University of Maryland, Baltimore, for Subscriptions for Domestic Journals for the Thurgood Marshall Law Library (June 5, 2000) (on file with author).

16. For a careful, well-crafted assessment of the relationship between EDI and the ILS vendor, see Bruce Compton, *The ILS Vendor and EDI: A Perspective*, LIBR. ADMIN. & MGMT., Summer 1996, at 164.

17. John Fitts, *Dancing with a Gorilla: EDI in the Retail Sector*, LIBR. ADMIN. & MGMT., Summer 1996, at 171, 171.

EDI or forget about doing business with us. Mr. Fitts continued: “Most EDI relationships in the retail market start in this fashion—it is known as ‘dancing with a gorilla.’ Basically it means that the retailer leads, and the supplier follows.”<sup>18</sup> In order to remain competitive, suppliers must meet the requirements of EDI, or else find themselves out of business. In the library world, particularly in academe, we are unfamiliar with this kind of pressure. Our relationships with our business partners are generally very civilized, perhaps even genteel, and we rarely issue ultimatums. Of course, there is one significant difference between the relationship of a retailer with a manufacturer and a library with a publisher: in the retail sector, if one manufacturer can’t deliver the goods, another is ready and willing to do so. In our industry, in many cases, the publisher has what amounts to a monopoly. If a library needs a specific title, it has no choice but to buy it from the only available source or do without. The nature of the competition is quite different and thus the impetus for introducing EDI is also different.

### Why EDI?

¶24 Understanding the nature of the library marketplace and the factors that influence e-commerce can help in sorting out the advantages and disadvantages of EDI for law libraries. In the commercial, for-profit sector, EDI gives businesses the competitive edge needed for survival and for success. Libraries, as nonprofit organizations, are, generally speaking, less concerned by such considerations of survival and therefore likely to be more conservative in their EDI business dealings than those in the for-profit sector. If survival and profitability are excluded as motivating factors, are there potential benefits and advantages that law libraries might derive from EDI? Law librarians should consider the following reasons to move toward the use of EDI.

¶25 **Improved efficiency of routine operations.** Tasks such as ordering and claiming, acknowledging and responding to orders and claims, and processing invoice information are quite time-consuming in the traditional library processing environment. EDI would improve the efficiency of routine tasks significantly.

¶26 **Freeing staff to deal with complex problems.** Even if EDI were in full production, not all tasks will be handled by EDI, nor will all publishers or vendors implement EDI. However, by using EDI for routine tasks, staff will be able to devote time and energy to solving complex problems that require individual attention and fall outside the scope of EDI.

¶27 **Providing value-added services.** As library systems become more complex, more and more opportunities present themselves for designing specialized services. In an EDI environment, staff are liberated from dealing with mundane

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18. *Id.* at 172.

tasks and may focus instead on developing new, high demand, user-oriented services that capitalize on the potential of the electronic, online environment.

**¶128 Reducing errors.** Frequent and repeated keying and rekeying of data almost always results in errors. With EDI, data is keyed once but may be used multiple times, thus greatly diminishing the chance for mistakes to occur. In addition, problems associated with misinterpretation or misunderstanding are eliminated since EDI simply transfers information between trading partners speaking the same “language.”

**¶129 Improved response time.** EDI transactions occur quickly, so inquiries and problems can be dealt with expeditiously. By speeding up the notification process, a parallel improvement in the delivery of materials will be achieved, which is especially valuable in high pressure/high volume environments where timely delivery of information is critical and speed in obtaining answers is essential.

**¶130 Accurate and timely fiscal control.** Changes in order status which might result in budgetary adjustments can be easily tracked and confirmed as a result of EDI. Where budgets are volatile and under close and frequent scrutiny, up-to-date status information is very valuable.

**¶131 Strengthened customer relations.** EDI takes the guess work or the opportunity for confusion out of the loop and facilitates relations with publishers, agents, and jobbers. EDI transactions are unambiguous and eliminate the need for multiple messages, verbal and written explanations, and clarifications. As a result a stronger, more effective customer/client relationship may be achieved.

### Why Not EDI?

**¶132** On the other hand, there are equally valid reasons why law librarians might hesitate to adopt EDI.

**¶133 EDI requires a considerable investment.** The costs of hardware, software, programming, and testing, as well as less tangible costs, are considerable. Most trading partners find that such expenditures are not worth the return that can be realized.

**¶134 EDI is not glamorous.** It is a business transaction, a function of the “back room” and as such it attracts little attention. EDI tends to be ignored, or at best overlooked, in favor of more dazzling capabilities, especially those that are highly visible from the users’ perspective.

**¶135 Lack of interest.** Since most enhancements are customer-driven, and since the primary clientele of most domestic legal publishers are not interested in EDI and are not lobbying for its introduction, publishers find no compelling reason to provide these capabilities.

**¶136 Chaos.** Subscription agents and ILS vendors now support a plethora of interfaces, many of which may best be characterized as pseudo EDI. With so

many customized versions of EDI, designing efficient interfaces becomes more complicated and time-consuming as well as costly. In addition, some of these proprietary interfaces, even though they may not be “true” or “pure” EDI, are quite effective and users are reluctant to give them up.

**¶37 Confusion.** For several years the two standards, X12 and EDIFACT, have coexisted, somewhat less than harmoniously. Just as the pendulum has finally begun to swing toward the international standard, EDIFACT, a new form of EDI—Electronic Business Extensible Markup Language (ebXML)—is appearing on the horizon. While XML offers a more flexible format and ultimately could supersede X12 and EDIFACT, “the lack of XML standards and XML product development . . .”<sup>19</sup> will continue to keep things in a state of flux for some time to come. In addition, the investment in X12 combined with a substantial user base for X12 in the United States, particularly in the commercial sector and to a more limited degree within the library marketplace, means that it will take some time for a thorough migration from X12 to EDIFACT to occur.

### What Is a Librarian to Do?

**¶38** No magic formula exists to help librarians decide when EDI would be appropriate, and a decision to implement EDI depends on a number of factors, some of which are outside the library’s control. The desire to introduce EDI and the conviction that it will improve efficiency, enhance individual and corporate performance, and result in cost savings has to be balanced against the reality of an individual library’s technical capabilities. When the desire and the reality mesh and are equally strong, EDI may become an option.

**¶39** While the pursuit of EDI is to a large extent an institutional matter, broader ramifications exist for the law library community. If we believe our organizations would benefit from EDI, we need to become as well informed as possible about EDI and take every opportunity to become active in and support EDI standard-setting organizations. At the same time, we can no longer sit by passively, but must mount a vigorous campaign to lobby library administrators and others about the benefits of EDI. This must be done through concrete examples that clearly illustrate improved efficiency of daily operations and, even more critically, that demonstrate the positive impact of EDI on fiscal control and library management. Since no two situations are exactly alike, determining the critical factors that will best emphasize the value of EDI will have to be done on an institution-by-institution basis. Until EDI is more widely adopted by libraries in general, library administrators may have to look to other industries for direction.

**¶40** We need to be much more assertive about the need for EDI when inter-

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19. *XML Hype and EDI Reality*, 20 *LIBR. SYS. NEWSL.* 46, 46 (2000) (reporting on survey of 2000 organizations regarding their experience with EDI/EDIFACT and prospects for using XML).

acting with our potential trading partners, particularly publishers. Just as we need to illustrate for our own communities how useful EDI would be, we must find ways to demonstrate to our trading partners that they will also derive benefits as a result of an investment in EDI, such as increased revenues, improved productivity, more efficient operations, and increased market share. We need to persuade them of the value of becoming involved with standard-setting organizations and convince them to simplify and standardize their activities.

¶141 We need to work closely with the vendors who supply us with integrated library systems. Since most law libraries are not among the major players in this arena, we need to find ways to make our voices heard, to gain representation and make our needs known, particularly where they may differ from the needs of other types of libraries, so that the companies with whom we do business realize that we are serious about EDI and have a vested interest in seeing it introduced in our market segment.

¶142 In order to be truly effective, and for all the trading partners to reap the maximum benefits EDI offers, the full business cycle<sup>20</sup> must be completed. As the common element that binds the potential partners together, the law library can facilitate this development. It is our responsibility to make sure that each constituent is aware of the needs of the other constituents in developing and maintaining a successful EDI relationship. If we want to take advantage of the potential of EDI, we need to work collegially:

- to persuade publishers, particularly the largest ones, to investigate and then invest in EDI using international standards;
- to establish partnerships with agents and jobbers who actively pursue EDI to develop the full EDI business cycle according to international standards;
- to convince ILS vendors of the importance of EDI so that their commitment becomes a reality; and
- to advise library administrators of the value of EDI, so that they consider it on a par with other automation initiatives within the library.

¶143 In 1995, the Library Administration and Management Association, a division of the American Library Association, sponsored a program called "Why EDI? What Managers Need to Know about Electronic Data Interchange." When the presentations from that program were published the following year, it seemed obvious that "the benefits of EDI appear to be indisputable, yet the hurdles that must be overcome are not insignificant."<sup>21</sup> At that same meeting, Friedemann Weigel, a managing partner and the director of information systems at

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20. See Friedemann Weigel, *EDI in the Library Market: How Close Are We?* LIBR. ADMIN. & MGMT., Summer 1996, at 141, 144.

21. Pamela Bluh, *Why EDI? What Managers Need to Know about Electronic Data Interchange*, LIBR. ADMIN. & MGMT., Summer 1996, at 138, 139.

Harrassowitz, the Wiesbaden-based bookseller and subscription agent, predicted that within the next three to five years “EDI will account for 50 percent to 80 percent of all communication between libraries and agents . . . .”<sup>22</sup> Although the law library community has not yet reached that level of acceptance, the perception of EDI as a strange, mystical phenomenon is beginning to give way to a more realistic understanding. Everyone still isn’t “doing it,” but with greater insight into its pros and cons will come a greater appreciation for the benefits of EDI for all sectors of the community.

## **Appendix** **Selected Resources on Electronic Data Interchange**<sup>23</sup>

### *Web Sites*

Book Industry Study Group, Inc., *EDI Bibliography* — <http://bisg.org/EDI-biblio.html>.

*Conventions for EDI Documents and Data Elements* — <http://lb.com/bisacwww/conventn.htm>.

*EDI for Books and Serials* — <http://www.ala.org/alcts/organization/as/edi/index.html>.

*EDI Implementation Checklist* — <http://lb.com/bisacwww/cheklist.htm>.

*EDItEUR* (Pan-European Book Sector EDI Group) — <http://www.editeur.org>.

*International Committee on EDI for Serials (ICEDIS)* — <http://www.icedis.org>.

### *Articles*

Barber, D., “Electronic Commerce in Library Acquisitions with a Survey of Bookseller and Subscription Agency Services,” *Library Technology Reports* 31 (1995): 491–610.

Bluh, Pamela, “Why EDI? What Managers Need to Know about Electronic Data Interchange,” *Library Administration & Management* 10 (Summer 1996): 138–39.

Bluh, Pamela, “Why EDI? What Managers Need to Know about Electronic Data Interchange. A Report of the Program Sponsored by the LAMA SASS Acquisitions Systems Committee . . .,” *Technical Services Quarterly* 13, no. 3/4 (1996): 117–21.

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22. Weigel, *supra* note 20, at 141.

23. The selected resources presented in this appendix highlight information that deals exclusively with the application of electronic data interchange to library and information services.

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