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Access to Business Research Resources through Academic Library Web Sites: A Survey

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Abstract

This study is an examination of access to business research resources through academic library Web sites, including research databases, catalog services, research guides, and business librarians. The Web sites of 114 academic libraries serving top business programs in the United States were studied. Results reveal a wide range of access to business research databases among the schools studied (anywhere from 11 to 100 business databases available). Over 95% of the schools provided business research guides, and nearly all schools provided at least some contact information for business librarians.

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INTRODUCTION

Electronic access to library resources has remained among the most pressing topics facing academic libraries in recent years, and there is every reason to believe it will continue to do so in the years to come. Among some distance learners, electronic access to library resources may be the only access they will ever have. Even among resident students (and not a few faculty), the library Web site is, for all intents and purposes, *the* library. No effort should be spared, therefore, in determining how much material is really available electronically, how it is being delivered, and the degree to which we supply appropriate instructional guides and tutorials to help users make the most of these costly resources.

There are few areas in the academic community in which the increasing prominence of electronic resources is more apparent than in our schools of business. It has been recognized for some years that business students are among the heaviest users of academic library reference services and resources (Littlejohn & Talley, 1990). If anything, current-day business students are more likely than their predecessors to perceive library research as important, and are more likely to have had library instruction (Senior, Wu, Martin, & Mellinger, 2009). The reasons for this are relatively obvious—business resources are often extremely time-sensitive and therefore can be delivered and updated more effectively in electronic format. Furthermore, many business students, particularly those in graduate programs, hold full-time jobs and have family responsibilities. These students welcome—in fact, demand—easy off-campus access to library resources (Atkinson & Figueroa, 1997).

With the academic library's responsibility for acquiring and delivering electronic business reference resources, however, come hard challenges. We need to determine, for instance, how just how many of these resources are required to adequately serve our academic communities. We also need to ensure that we deliver these resources in a manner that maximizes benefits. Finally, we need to provide adequate instruction for these complicated systems, and we need to do so in a way that reaches all of the library's users. The first step in providing this level of service is finding out just where we really stand—we need, in other words, at least a rudimentary measurement of the electronic business resources being supplied at this time. The objective of this study was, therefore, to accumulate data and report on the number and types of business research resources currently offered through academic library Web sites. This information can provide a useful set of benchmarks that will help to establish standards by which all libraries can judge their own level of access to electronic business research resources. The current study also examined the methods by which these resources were delivered and promoted, and the availability of instruction or assistance through the library Web sites.

LITERATURE REVIEW

As the prevalence and prominence of electronic resources continues to grow in our academic libraries, it is not surprising that there is a large and increasing body of research in this area. Blummer (2007) provides an excellent review of past research related to academic library Web sites, pointing out that most studies have focused on one of three aspects: 1) design, 2) usability and navigation, and 3) content and services available through the site. Kirkwood (2000) used a methodology similar to that of the current study to examine the organization and structure of business-related academic library Web sites, noting at that time a move toward uniformity, but concluding, "the most consistent thing discovered by this study is that there remains a large

amount of inconsistency across sites" (p. 36). In a 2009 update of this study, however, Lyons and Kirkwood found "marked improvement" (p. 345) overall. Other writers have published reviews of specific business databases, as in Oulanov's study of student perceptions of EBSCO's *Business Source Premier* (2008), or have attempted to provide a broad review of a large number of available online business resources (e.g., Golderman & Connolly, 2005). The current study seeks to further existing research by examining the availability of electronic business resources across academic library Web sites of leading business programs in the United States.

The practice of surveying services and materials available on library Web sites to determine their number, effectiveness, design and content is a common one. To examine the online availability of policies toward non-affiliated users of library resources, Coffta and Schoen (2000), and later Barsun (2003), reviewed the Web sites of academic libraries in the United States affiliated with the Association of Research Libraries (ARL). Detlor and Lewis (2006) used a similar method to review services and resources available through academic library Web sites. Among their key findings was a lack of "high-level customization and integration expected of commercial search engines" (p. 254). These researchers pointed out that academic libraries must be prepared to meet the standards of technological proficiency presented by Web search engines like *Google* and *Yahoo*. They used the results of this study to provide a series of practical recommendations for the improvement of online services through academic library Web sites. The current study seeks to expand this research to the specific needs of business researchers.

Business Research Databases and Electronic Journals

Among the most important business reference resources drawing users to academic library Web sites are electronic article indexes, and full-text electronic access to articles. The literature surrounding electronic journals is predictably vast. O'Hara offers a detailed annotated

bibliography (2007a) and an excellent review of literature (2007b). Research continues unabated

in such areas as migrating from print to electronic journals (Fortini, 2007), insuring access to

electronic journals over time (Crawford, 2008), and a continuing examination of patterns in

electronic journal usage (e.g., Frank, 2007). Several studies have moreover, reviewed or studied

specific business research databases, such as Hahn's (2009) review of RMA's *eStatement Studies*

database, Watkins's (2009) review of *Westlaw Business*, or Oulanov's (2008) study of *Business

Source Premier*, in which students rated the database highly in terms of several criteria including

efficiency, user effort, adaptability and retrieval features.

Electronic Books in Business

Electronic Books (e-books) accounted for 11% of the book acquisition budgets of

academic libraries as of late 2006, and that figure is estimated to increase to 20% by 2011

(Primary Research Group, 2008). As e-books gain in distribution and acceptance, researchers

have been quick to study many aspects of electronic book use and perception in academic

libraries. Bunkell and Dyas-Correia (2009), for example, compared the effectiveness of e-books

and print books, finding that e-books hold the advantage in such areas as accessibility and ease

of searching. Other researchers have focused on perceptions and attitudes towards e-books,

finding that both students (Gregory, 2008) and faculty (Carlock, 2008) express a dislike for e-

books and a stated preference for print books, though Walton reported in 2007 that actual usage

statistics indicate broader acceptance of e-books than is implied by attitudes expressed by

students and faculty. Several recent studies have researched access to e-books across academic

libraries. Dinkelman and Stacy-Bates (2007) surveyed access to e-books at 111 academic library

Web sites, finding that over half of the libraries dedicated a separate Web page to e-books, but

the content and quality of the pages varied considerably. Hutton (2008) tracked the availability

of ten specific e-books through the online catalogs of ten academic libraries serving distance learners, finding only three titles available through any of the libraries. She pointed out the importance of developing electronic collections and improving access to them. Only a few researchers have examined e-books as related to specific disciplines. Ugaz (2008), for example, studied electronic access to medical textbooks, while Levine-Clark (2007) looked at both usage and user perceptions of e-books in the humanities at the University of Denver. The current study seeks to extend existing research by determining how many top academic business libraries provide efficient, easy-to-understand access to business-related e-books through their online catalogs or Web sites.

Subject Guides and Tutorials

Subject Guides and Tutorials are common instructional tools offered through most academic library Web sites in one form or another. Given their ubiquity, however, it is surprising to find that there remains a pronounced lack of consensus on the definitions of these terms. As far back as 1997, Brandt, for example, found that the term tutorial "was applied to everything from a page with a list of hyperlinks/URLs with no descriptions, to outlines used in presentations, to what amounted to very lengthy articles" (p. 45). Hrycaj (2005) takes a promising approach in adapting an existing definition of tutorials from computer science—a "program that provides instruction for the use of a system of software"—and broadening it to include "virtually anything" (p. 211). This definition recognizes the reality of the practical use of the term—it is used for just about any sort of instructional guide tacked onto a Library Web page. The definition of the term "Subject Guide," appears even more slippery. Many authors avoid making hazy distinctions among guides and tutorials by adopting a method similar to Lyons and Kirkwood (2009), who included both under the single term "instructional element,"

then examined the variety of different terms used to describe them. Tchangalova and Feigley (2008) may, however, have best defined the difference by declaring that the "main idea of a guide is to provide a starting point for the researcher" (Definition section, para. 3). The current study follows this approach by identifying tutorials as brief instructional guides to any library process or resource, while subject guides (under any of their many names) provide tips or advice on beginning research on a given topic or subject.

Much has been written about subject guides and tutorials. Courtois, Higgins, and Kapur (2005), for example, studied perceptions of the usefulness of subject guides at George Washington University, asking a single question—Was this guide helpful?—and receiving mixed responses. Similarly, Lindsay, Cummings and Johnson (2006) assessed student learning from online tutorials, finding that many students were highly confident that they had learned from tutorials, but underperformed on practical tests of the skills taught in them. Other writers described methods of creating and implementing subject guides and tutorials, such as Tim Wales, who described the use of Captivate software (2005) and content management systems (2008), to create subject guides and tutorials. Recently, a research group at the University of South Carolina School of Medicine Library studied online tutorials at 126 medical library Web sites to determine in some detail the format and design of medical library tutorials offered online (Anderson, Wilson, Yeh, Phillips, & Livingston, 2008). The current study uses a similar method to examine the availability and form of business-related library Subject Guides and Tutorials.

Business Librarians

The last of the business reference resources examined was access to the Business Librarian. As the prevalence of electronic resources continues to grow, and as the number of reference questions continues to fall (Banks & Pracht, 2008), some may begin to question the

value of highly specialized, costly library professionals and faculty. Fitzpatrick, Moore, and Lang (2008) found, however, that academic library users prefer to deal with qualified reference librarians. This supports the results of a recent study on scholarly communities and the relationship of researchers and librarians in which scholars expressed the need for traditional forms of scholarly communication, even as a greater proportion of their scholarly work and interaction was performed online (Genoni, Merrick, & Willson, 2006). Granfield and Robertson (2008) concluded that the reference desk is still the most popular "live" reference resource, and that "virtual reference" (synchronous, online "chat" or "instant messaging" with a reference librarian [p. 45]) was preferred by a significant number of users who worked off campus, especially graduate students. No existing research has, however, been devoted to the study of the prevalence of electronic access to librarians. The current study seeks to determine if and how the academic libraries serving top business programs provide online access to business librarians.

METHODOLOGY

From November of 2008 through January of 2009, data were gathered on the number and types of business research resources available electronically through the campus libraries of 116 U.S. colleges and universities. The campuses chosen for inclusion were those with the most highly rated business programs. The research resources provided by these top business programs, taken as a group, provide a viable benchmark of the current state of electronic access to academic business research resources. Top-rated programs were identified using lists published by leading business periodicals such as *Forbes* (Settimi & Badenhausen, 2007)*, U.S. News & World Report* (2008), the *Wall Street Journal* (Srivastava, 2008), and *Business Week* (2008a & 2008b). A complete list of schools studied may be found in Appendix A.

For each school chosen, data were collected on the availability of business resources through the online library catalogs and library research databases. The availability of instructional support online was also examined, including subject guides, tutorials, and librarians specializing in business reference and research. Results are not reported by institution—it was not the objective of this study to compare or pass judgment on specific colleges or universities, but to use their collective judgment to provide a broad snapshot of the relative availability of electronic business research resources through academic libraries at this time. Where appropriate, however, specific Web pages or online resources representing a unique or exceptional approach to providing online business research resources have been identified.

Databases and Other Electronic Resources Chosen for Inclusion

The databases included in the current study were drawn from the offerings of the largest U.S. academic libraries (Kyrillidou & Bland, 2008), including Harvard University, Yale University, the University of California at Berkeley, the University of Illinois at Urbana-Champagne, and Columbia University. All business databases available through these top schools were compiled into a single master list. In general, this list was limited to business-related, paid resources open only to authorized campus users, but exceptions were made for resources that showed up repeatedly on the libraries' lists of business databases (e.g., *Google Scholar*). The final list consisted of 209 databases and may be viewed at the end of the Protocol for the Business Web Site Survey (Appendix B).

Business Resources through the Library Catalog

The current study concerns itself with online library catalogs only in so far as they relate to electronic access to business resources. Toward this end each library catalog was checked to determine whether users could do a subject search of business books, and, if so, whether there

were instructions or tips on how to do so. The catalogs were also examined for access to a detailed help guide or tutorial on the catalog search page. The site was then searched for obvious methods of finding electronic business books (e-books). Many users employ the library catalog to find access to periodicals, so each site was reviewed to determine if users could check for access to business periodicals through the online library catalog, whether they could check for all formats (paper, microform, electronic), and whether they could link directly to articles, or at least to databases, through the catalog. Finally, the library Web sites were examined to see if they fulfilled a role common in public libraries, but sadly lacking on academic library Web sites— providing reading lists or lists of recommended works for business students. It quickly became obvious that academic libraries do not, as a rule, supply such services, so the study was limited to determining whether each site offered at least a list of new titles by subject.

Business Subject Guides and Tutorials

For the purposes of this study a "subject guide" was defined as a library instructional guide focused on a single academic discipline--specifically, in this case, business and/or economics. A similarly vague but practical distinction was used for the term "tutorial"—this refers to a library instructional guide focused on performing a particular function (for example, accessing electronic materials from off-campus) or using a specific tool (such as a specific research database).

Business Librarians

To evaluate the accessibility of business librarians through academic library Web sites, it was first determined whether each of the libraries identified their business research specialists online at all (some did not), and, if so, the number of business librarians was recorded. The sites were then examined for each of four common forms of contact information: telephone number,

email address, office location, and instant messaging address. To assess the degree of

personalization of business librarians on the library Web site, four methods librarians commonly

use to express their personalities online were identified: photographs of the librarian,

biographies, Web pages on the library Web site, and links to separate Web sites for the

librarians.

RESULTS AND DISCUSSION

The Web sites of 116 top business programs were examined; 114 of them offered some

form of online access to the campus library. The average undergraduate enrollment at the schools

selected was 15,565, while enrollment in graduate business programs averaged 630 (see Table

1). Of the schools studied, 47 (40.5%) had separate library Web sites for business research. Most

of these sites offer basic information for business researchers but link to the main library site for

key services like catalogs and research databases. Particularly interesting is the emergence of

hybrid "virtual" business libraries and information centers. The University of Florida, for

example, offers "Business Library 2.0," an outstanding source of business research information

that includes dozens of detailed guides and tutorials, as well as easy access to library catalogs

and databases (http://businesslibrary.uflib.ufl.edu/).

Linking to Business Research Databases

There is no doubt that electronic access to academic journals, books, and other research

materials stands among the most vital services available through academic library Web sites. An

evident, expedient path to these resources is, therefore, of critical importance. As shown in Table

2, most academic libraries (88.8%) provided a direct link to databases from the front page of the

library Web site, and the path from front page to research databases was usually obvious and

convenient (84.5%). Almost all of the libraries offered a separate list of business-related research

databases, and about half (49.1%) also supplied a list of databases broken down into business sub-topics (e.g., finance, marketing, and human resources). Many of the libraries (89.7%) also provided brief annotations for each of the databases, so that inexperienced users would be able to quickly identify the most appropriate resources for the task at hand.

Relatively few libraries (21.6%), however, offered links to database instruction or tutorials from the list of databases. This seems a lost opportunity to provide instruction and guidance at exactly the point where online and distance users could most benefit from it. Nor does the creation of such tutorials need to be a time-consuming process—many of the libraries that did provide instruction simply created links to instruction materials provided by database vendors, or even to materials posted through other colleges and universities. It was also interesting to note that a third of libraries (33.6%) possessed some type of federated search system, though, as noted above, only 12.1% used this federated search system to allow article searches from within the library catalog. On the face of it this seems another lost opportunity to provide a significant benefit: the sort of "one-stop" search users have come to expect in the age of Google. It is possible, however, that problems in the design or implementation of federated search systems might be impeding their acceptance on a broader scale. For example, a notice had been posted to one leading university's library Web site, warning that the federated search system was "working inconsistently."

Availability of Business Research Databases through Academic Library Web Sites

The schools in this study provided their campuses with an average of 36.3 business research databases. The range was wide, from a minimum of 11 to a maximum of 100. The 25 business research databases most often included in academic library lists are shown in Table 3. There were few surprises—most of the databases at the top of the list are familiar, respected

names. A complete list, including all databases found on 4 or more lists of suggested business research databases, may be found in Appendix C.

Electronic Books

Because their content and distribution is so different from that of the other databases, e-book vendors were tracked separately. Totals are shown in Table 4, but results should be regarded with suspicion, as the choices made by specific libraries to include or exclude e-book vendors from the list of business research databases appears to be entirely arbitrary. Nonetheless, the presence of e-book vendor *NetLibrary* on the lists of business databases for over a quarter of the academic libraries in the study does seem to indicate growing support and acceptance of e-books by both business researchers and academic librarians.

Business Research through Academic Library Catalogs

General results of our examination of the availability of business resources through online library catalogs are shown in Table 5. Virtually all library Web sites studied allowed users to locate books by subject. Only a little over half of the libraries (52.6%), however, explained how to do this in an obvious way on the main catalog page, though almost all libraries supplied some type of catalog tutorial or help function somewhere. It was encouraging to find that a wide majority of academic libraries (69.0%) did provide an obvious and effective means of searching for e-books by subject through the catalog. The University of Texas at Dallas (2009) provided a highly effective model for e-book access—a link on the front library Web page took the user to an e-book Web page, which offered an e-book search and links to a number of other resources (http://www.utdallas.edu/library/resources/ebooks.htm).

Every library catalog studied provided information on the availability of periodicals and journals, and all but one included access information about all common periodical formats

(paper, microform and electronic). Only 14 libraries (12.1%) currently enable users to search for articles within the catalog search area. Most libraries providing this service appear to do so using a federated search function. The federated search system is one in which a single search box is used to search multiple sources—through several databases, for instance, and in some cases the library catalog as well. In this way the user can, in principle, find periodicals, books, and specific articles on a given topic, all with a single search.

As mentioned previously, most academic libraries do not provide readings lists or suggestions for their users. Bentley University is a praiseworthy exception, offering lists of popular books and new books, audiobooks, DVDs and music (http://library.bentley.edu/libservices/newbooks.asp). Some libraries (31.0%) did, however, offer a searchable listing of new titles, normally through the library catalog.

Access to Business Subject Guides and Tutorials through Academic Library Web Sites

Business subject guides were available through 95.7% of the library Web sites in our sample (see Table 6). Almost all of these (88.8%) provided online help for a number of subtopics, such as researching industries or performing marketing research. Nearly all of them were offered in Web format (html), with only a few isolated examples of downloadable options like pdf or MS Word documents. Most of the subject guides consisted largely of lists of research databases recommended for specific research topics, though many also included links to open Web resources, research tips and advice, and links to other library or campus resources. Some librarians linked blogs or personal Web pages to the subject guides. As shown in Table 6, a large number of schools (70.7%) offered tutorials on practical skills like using specific databases. Only a little over a quarter of the schools in our sample, though, offered any form of online instruction targeted to specific user groups, such as new students, graduate students, or distance learners. An

interesting approach to additional instruction was offered by the Dartmouth College Library, which provides students, faculty and staff with the opportunity to sign up for instructional library workshops online (http://www.dartmouth.edu/~library/biomed/services/education/).

As shown in Table 7, most academic libraries refer to these guides as either research guides (the most popular term) or subject guides, but many of the libraries used any of an eclectic variety of alternatives, including creative offerings like help sheets, research starting points, and gateways to information. These results are roughly in accord with similar observations in Lyons and Kirkwood (2009); differences may be attributed to previously described differences in the way the two studies defined guides and tutorials (see the Subject Guides and Tutorials section of the Literature Review).

Business Librarians

With few exceptions, most of the academic libraries identified their business librarians somewhere on the library Web page (see Table 8). The average number of business librarians at each library was 2.28. Over 90% of the schools provided some form of contact information for their business librarians. The most popular forms of contact were telephone and email. Less than half of the schools offered an office location for the librarians, though many suggested a visit to the library Reference Desk for face-to-face research assistance. Particularly interesting is the emergence of instant messaging, with just short of 20% of the librarians offering either an instant messaging interface on their subject guides or Web pages, or instant messaging addresses in the their contact information.

While most libraries provided some form of contact information for librarians, it must be noted that on many of the library websites it was very difficult to find this information. Users were often required to drill down through several layers of unfathomable Web site terminology

before finally ending up with a list of librarians. Another obstacle to accessing business librarians was a regrettable lack of consensus regarding the title used to describe them. As shown in Figure 1, terms like Subject Librarian, Subject Specialist, and Business Librarian were common, but the most numerous classification was "other". This broad class included an arcane selection of titles including Author, Library Technician, User Education, Library Staff, and various administrative titles. Such terms may be confusing even to experienced users; they are likely to present a real challenge to incoming students or transfers—precisely those users, in other words, most in need of assistance.

Perhaps as important as providing electronic contact to librarians is providing a bit of personality and a friendly face online. Here academic libraries often fall short, with less than half (49.1%) providing any sort of personalization of the librarian (see Table 8). Personalization most often consisted of a simple photo posted on the subject guide or librarian staff list (46.6%), though some librarians posted biographies, résumés, Web pages, and, in a couple of cases, a link to a separate Web site maintained by the librarian.

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CONCLUSIONS AND RECOMMENDATIONS

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In an age when the utility of the library as an institution is questioned openly and often, 61% of our college students use the library Web site, 58% use electronic journals and magazines, and 44% use online databases at least once a month (De Rosa, 2005). These figures will certainly continue to grow in the future. It is critical, then, that business libraries have useful, up-to-date data on the number and types of business research resources being supplied through academic library Web sites. By surveying 114 of the academic library Web sites serving the leading business programs in the United States, this study yields relevant benchmarks and standards to guide and assess the provision of research resources at all academic libraries.

Regarding the sheer volume of resources offered, perhaps the most interesting finding is the large range in the number of business research databases offered to the students of leading business programs—from a low of 11, to a high of 100. It is apparent, then, that there is considerable latitude for academic libraries to mold their holdings to fit the specific needs of the institution. Consider that information was collected on the availability of over 200 business research databases, and no single school provided more than half that number of research databases to their students.

Overall, the results of this study indicate that our academic libraries supply an outstanding selection of resources online, though in some cases the arrangement and presentation of resources does not seem to be optimized for the convenience of the user. One of the most popular resources offered by academic libraries, for example, is access to research databases. On average, libraries provide access to over 36 business databases. Nearly all of the libraries studied offered an easy, obvious path to an annotated list of databases through the library Web site, and nearly all provided a list of databases chosen specifically for business research. Less than a quarter of the sites, however, offered instruction on the use of these complicated resources anywhere near the links themselves. A user would, in other words, have to search through the site again to find help in using a database. Similarly, online catalogs provide easy access to books and serials, and it is relatively easy to limit the search to business topics. Less than a third of the libraries studied, however, posted new titles on the Web site, and only a couple of libraries provided recommended reading lists for business students.

Such results provide evidence of the considerable effort expended by academic libraries to offer the best research resources to their users, while indicating that greater effort should be expended in helping their users become knowledgeable and comfortable with electronic

resources and their contents. If such shortcomings exist, however, they do not appear to be due to a lack of effort. Virtually all libraries, for instance, offer some kind of business subject guide, and nearly all provide specific research guides for business subtopics such as accounting or company research. At the same time, only a little over a quarter of the libraries have taken the extra step to provide instruction cultured to different levels of users (e.g., graduate, undergraduate, and visitors). Additionally, any attempt to locate these subject guides is hampered by a lack of consistency in the terms used to describe them.

The same pattern may be observed in the methods of contacting business librarians provided through academic library Web sites. Most libraries provide contact information for the business librarian—usually through the relatively traditional formats of email and telephone. Less than 20%, however, have taken the next step by offering access through such updated applications as instant messaging. Among those sites that personalize their librarians in some manner, most do so with a traditional photo, while only a small percentage offer some type of electronic introduction, such as a Web page or site. It is unclear, though, whether this is because librarians are reluctant to experiment with new methods and approaches, or whether they are simply too short of time to take them on.

Academic librarians face a daunting struggle to remain current in their knowledge of an endless parade of new research databases, vendor interfaces, Web design principles, and software applications. If keeping up with all of this is challenging to library professionals, though, how much more confusing must the library Web site be for the library's users? While a comprehensive set of recommendations concerning online access to business research resources is well beyond the scope of this study, a few fundamental points stand out:

1. Leading academic libraries must give careful thought to research databases they offer their users. Quantity alone is not the issue—many top business schools offer a limited selection, while some programs that are not highly ranked offer a large number of research databases. The key is a careful, judicious selection process.

2. The libraries studied tend to be very strong in offering resources, but somewhat limited in helping students understand how to use these complicated systems. Instructional materials should be posted in obvious proximity to the electronic resources themselves.

3. Lack of consistency in the terms used to describe various electronic resources continues to be a stumbling block for academic library Web sites.

4. Lack of consistency in the terms used to describe business librarians on the Web sites leads to confusions for users.

5. While most leading libraries expend considerable time and money recruiting highly qualified business librarians, online access to these valuable personnel could be improved. More up-to-date modes of communication (such as instant messaging, texting, and others) should be investigated.

These recommendations arise from the results of the current study, but more research is needed. We need stronger insights into the effectiveness of the content and design of academic library Web sites. Web site usability studies can help reveal the way in which users navigate Web sites, which could help improve academic Web site design. Focus groups and interviews could help to clarify the terms and vocabulary that would make the most sense to the greatest number of users, improving the wording on the Web sites. Finally, in-depth surveys of classroom

assignments and faculty research needs could help guide decisions on appropriate database selection and content.

Electronic resources will continue to grow in importance and as a percentage of the acquisitions budgets of academic libraries into the foreseeable future. The skills of academic library faculty, staff and administration in managing these costly commodities must, therefore, continue to grow at a similarly aggressive rate. A necessary step in this direction is the provision of usable data on which to base rational decision-making, and the current study has, perhaps, made some humble contribution in this area. By basing decisions on reliable, up-to-date data, we stand the best chance of meeting our unpredictable future in an effective, confident, and responsible manner.

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Table 1
Average Size of Programs
(Size of program in terms of Total Enrollment)

	Undergraduate (Total)	Graduate Business
Total number of schools	114	116
Schools with no business program	2	0
Mean FTE	15,565	630
Median FTE	13,854	489
Minimum FTE	1,785	27
Maximum FTE	53,298	3,291

Total Enrollment = all degree-seeking students, obtained from college and university Websites where possible, or from the *Princeton Review*(2008).

Table 2
Access to Business Research Databases and Journal Articles
Through Academic Library Web Sites

	Freq	%
Direct link to databases from front page	103	88.8%
Obvious path to databases from front page	98	84.5%
Business databases listed separately	106	91.4%
Business subtopics for databases listed	57	49.1%
Databases annotated	104	89.7%
Tutorials available on database list page	25	21.6%
Federated search system	39	33.6%

Table 3
25 Databases Most Frequently Included on Academic
Library Lists of Business Research Resources

Research Database	#	%
LexisNexis Academic	105	90.5%
Business Source (various)	98	84.5%
EconLit	93	80.2%
ABI/Inform (various)	76	65.5%
Mergent Online	76	65.5%
Hoover's	74	63.8%
STAT-USA	73	62.9%
Factiva	70	60.3%
Standard & Poor's (various)	70	60.3%
Regional Business News	66	56.9%
Value Line	62	53.4%
LexisNexis Statistical	58	50.0%
JSTOR	57	49.1%
Source OECD	57	49.1%
Bus & Company Resource Ctr.	55	47.4%
Intl Financial Statistics	55	47.4%
Wall Street Journal	54	46.6%
World Dev. Indicators OL	51	44.0%
Mintel Reports	50	43.1%
Reference USA	50	43.1%
Conference Board	49	42.2%
Global Market Insight	47	40.5%
PsycINFO	47	40.5%
Academic Search (various)	45	38.8%
CCH Tax Research Network	45	38.8%

Table 4
E-Book Vendors on Business Database Lists

	#	%
NetLibrary	29	25.4%
Ebrary	19	16.7%
Safari Tech Books	16	14.0%
Books 24x7	11	9.6%
Springer e-Book Collection	1	0.9%
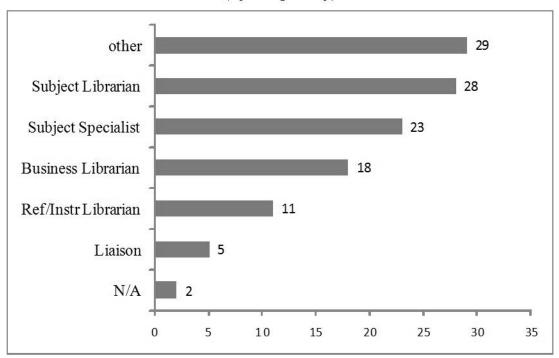
Table 5
Business Research Resources
through Academic Library Catalogs

Item	#	%
Catalog: search by subject	113	97.4%
Subject search explained	61	52.6%
Catalog tutorial available	106	91.4%
Can search e-books by subject	80	69.0%
Can search for serials	114	99.1%
Catalog: serials in all common formats	111	95.7%
Article search from catalog	14	12.1%
Databases linked from catalog	109	94.0%
New titles readily available by subject	36	31.0%

Table 6
Access to Business Subject Guides and Tutorials

Item	#	%
Business subject guides available	111	95.7%
Subject guide offers business subtopics	103	88.8%
Tutorials available (any topic)	82	70.7%
Separate business tutorials	32	27.6%
Tutorials included with subject guides	21	18.1%
Instruction for different types of users	31	26.7%

Table 7
Term used for Subject Guides

	#	%
Research guide	51	44.0%
Subject guide	28	24.1%
Research by subject	6	5.2%
Library guide	2	1.7%
Guide	2	1.7%
Research help	1	0.9%
Pathfinder	1	0.9%
Other	23	19.8%
N/A	2	1.7%

Table 8
Access to Business Librarians Through Library Web Site

	#	%
Business librarian(s) noted on Web site	109	94.0%
Business librarian(s) identified by name	108	93.1%
Some kind of contact information for business librarian	107	92.2%
1. Email	103	88.8%
2. Telephone	103	88.8%
3. Office location	47	40.5%
4. Instant Message (IM)	21	18.1%
Business librarian personalized in some way	57	49.1%
1. Photograph	54	46.6%
2. Biography	23	19.8%
3. Web page	18	15.5%
4. Web site	2	1.7%

Figure 1
Titles Used to Identify Business Librarians
(by frequency)

Title	Frequency
other	29
Subject Librarian	28
Subject Specialist	23
Business Librarian	18
Ref/Instr Librarian	11
Liaison	5
N/A	2

Appendixes

Appendix A

Schools Included in Study (listed alphabetically)

COLLEGE OR UNIVERSITY	BUSINESS SCHOOL
American University	Kogod School of Business
Arizona State University	W. P. Carey School of Business
Babson College	F. W. Olin Graduate School of Business
Baylor University	Hamkamer School of Business
Belmont University	College of Business Admin
Bentley College	McCallum Graduate School of Business
Binghamton University	BU School of Management
Boston College	Carroll School of Management
Boston University	Boston University School of Mgmt
Brandeis University	Brandeis International Business School
Brigham Young University	Marriott School of Management
Bryant College	BC College of Business
Buffalo University	BU School of Management
Carnegie Mellon University	Tepper School of Business
Case Western Reserve University	Weatherhead School of Management
Clemson University	CU College of Business
College of New Jersey	College of NJ School of Business
College of William & Mary	Mason School of Business
Colorado State University	CSU College of Business
Columbia University	Columbia Business School
Cornell University	S.C. Johnson Graduate School of Mgmt
Dartmouth College	Tuck School of Business
Drexel University	LeBow College of Business
Duke University	Fuqua School of Business
Emory University	Goizueta Business School
Florida State University	FSU College of Business
Fordham University	Fordham Graduate School of Business
George Washington University	George Washington School of Business
Georgetown University	McDonough School of Business
Georgia Institute of Technology	GIT College of Mgmt
Harvard University	Harvard Business School
Howard University	Howard Univ. School of Business
Hult International Business School	Hult International Business School
Illinois State University	ISU College of Business
Iowa State University	ISU College of Business
Indiana University	Kelley School of Business
James Madison University	JMU College of Business
Lehigh University	College of Business and Economics

COLLEGE OR UNIVERSITY	BUSINESS SCHOOL
Loyola College	Sellinger School of Bus & Mgmt
Loyola University	LU School of Business
Louisiana State University	E.J. Ourso College of Business
Marquette University	College of Business Admin
Mass. Institute of Technology	Sloan School of Management
Miami University	Farmer School of Business
Michigan State University	Eli Broad College of Business
New York University	Stern School of Business
North Carolina State	Jenkins Grad School of Management
Northern Illinois University	NIU College of Business
Northeastern University	NEU Graduate School of Business
Northwestern University	Kellogg School of Management
Ohio State University	Fisher College of Business
Penn State University	Smeal College of Business
Pepperdine University	Graziadio School of Business and Mgmt
Purdue University	Krannert School of Management
Rennselaer Polytechnic Institute	Lally School of Mgmt & Technology
Rochester Institute of Technology	Saunders College of Business
Rice University	Jones Graduate School of Management
Rollins College	Crummer Graduate School of Business
Rutgers University	Rutgers Business School
Santa Clara University	Leavey School of Business
Seton Hall University	Stillman School of Business
Southern Methodist University	Cox School of Business
Stanford University	Stanford Graduate School of Business
Temple University	Fox School of Business
Texas A&M University	Mays Business School
Texas Christian University	Neeley School of Business
Thunderbird School of Global Mgmt	Garvin School of Intl Management
Tulane University	A.B. Freeman School of Business
University at Buffalo (SUNY)	UB School of Management
University of Alabama	Culverhouse Col. of Comm. & Bus. Adm
University of Arizona	Eller College of Management
University of Arkansas	Walton College of Business
University of California, Berkeley	Haas School of Business
University of California, Davis	UC Davis Graduate School of Mgmt
University of California, Irvine	Merage School of Business
University of California, Los Angeles	UCLA Anderson School of Management
University of Chicago	Univ of Chicago Grad School of Business
University of Colorado, Boulder	Leeds School of Business
University of Connecticut	UC School of Business

COLLEGE OR UNIVERSITY	BUSINESS SCHOOL
University of Delaware	Lerner College of Business & Econ
University of Denver	Daniels College of Business
University of Florida	Warrington College of Business
University of Georgia	Terry College of Business
University of Houston	Bauer College of Business
University of Illinois	UIUC College of Business
University of Iowa	Tippie College of Business
University of Kentucky	Gatton College of Business & Econ
University of Louisville	UL College of Business
University of MD, College Park	Robert H. Smith School of Business
University of MA, Amherst	Isenberg School of Management
University of Miami	UM School of Business Admin
University of Michigan	Ross School of Business
University of MN, Twin Cities	Carlson School of Management
University of Missouri	Trulaske College of Business
University of NC, Chapel Hill	Kenan-Flagler Business School
University of Notre Dame	Mendoza College of Business
University of Oregon	Lundquist College of Business
University of Pennsylvania	Wharton School
University of Pittsburgh	Katz School of Business
University of Richmond	Robins School of Business
University of Rochester	Simon School of Business
University of San Diego	USD School of Business Admin
University of South Carolina	Moore School of Business
University of Southern California	Marshall School of Business
University of Tennessee	UT College of Business Admin
University of Texas, Austin	McCombs School of Business
University of Texas, Dallas	UT Dallas School of Management
University of Utah	Eccles School of Business
University of Virginia	Darden Grad School of Bus Admin
University of Washington	Foster School of Business
University of Wisconsin, Madison	UW School of Business
Vanderbilt University	Owen Grad School of Management
Villanova University	Villanova School of Business
Wake Forest University	Babcock Grad School of Management
Washington University	Olin School of Business
Yale University	Yale School of Management

Appendix B

Protocol for Business Web Site Survey

School_____ **Date**_____

Access to Business Information from Library Web Site

- Is there a separate Business Library, and/or Business Library Web Page?   Yes   No
  (If so, go there to do the survey—if not, use the regular library)0

- If there is a separate Business Library Web page, describe how you find and access it from the Library Home page?

- Briefly describe the Business Web page (major classification/links from the page, design, etc.)

Library Catalog/Books

- Can you search by subject (Business, marketing, finance, etc.)?   Yes   No

  o If so, was there an explanation of how to do this?   Yes   No

  o Is there a Catalog tutorial or help function?   Yes   No

- Is there an obvious way to search for electronic business books by topic?   Yes   No

- Can you find periodical availability through the Library catalog?   Yes   No

  o Formats? (i.e., microform, paper, electronic, aggregators, others_____)

- Can you search for articles through the Library Catalog pages?   Yes   No

- Can you link or connect to article databases through the catalog?   Yes   No

- Are there suggested readings or a reading list for business students?   Yes   No

Instruction/Subject Guides/Tutorials

- Are Subject Guides available?   Yes   No

    o   What is the format (HTML, pdf, Word, Flash, others:_____)?

    o   Where are Subject Guides located on the Web Site? _____

    _____

    o   What are they called on the Web Site?   _____

    o   Subtopics?   Yes   No   How many?_____

    o   Describe content briefly:_____

    _____

    _____

    _____

- Are tutorials (instructions on how to use a specific database or resource) available?   Yes   No

    o   How do you find them?_____

    o   Are there separate tutorials or instruction available on business research?

        ▪   If so, how many? _____

        ▪   Describe content briefly:_____

        _____

        _____

    o   Format: HTML, pdf, Word, Flash, other: _____)?

    o   Included on the Subject Guide?   Or separately? (Describe_____)

    o   Is online instruction provided for different types of users? (Circle all that apply)

        ▪   Students   Faculty   Staff   Visitors   Disabilities

        ▪   Undergraduate   Graduate   Faculty

Business Librarian/Business Specialist

- Does one exist?   Yes   No   If so, how many? _____

- Librarian(s) identified by name?   Yes   No

    o How did you find this information? _____

    o What term is used to identify the librarian?_____

- Is there contact information for the Business Librarian(s)?   Yes   No

    o What Kinds? (Link to email, phone, office, IM, other: _____)

- Business Librarian(s) personalized in some way? (Photo, Bio, Web Page, Web Site,

    Other:_____)

Articles/Article Indexes Company Directories/Business Databases:

- How do you access articles and databases? (Describe)_____

    _____

    - o Is there a direct link on the library home page?   Yes   No

    - o Is the path to research databases either explained, or obvious?   Yes   No

- Is there a Federated search?   Yes   No   Vendor or platform?_____

- How do you find the Business Databases? _____

    _____

    - o Are they identified or listed as Business databases?   Yes   No

    - o Identified by topic?   Yes   No   How?_____

    - o How many are there (from following checklist)? _____

    - o How many vendors of Electronic Books? _____

    - o Note any anomalies _____

- Are the databases annotated or described in any way?   Yes   No

- Is database instruction or help available from the database list area?   Yes   No

Databases

#	Y/N	Research Database	#	Y/N	Research Database
1		ABI/Inform (ProQuest) _____	46		Corporate Affiliations (LexisNexis)
2		Academic OneFile (Gale)	47		Corporate ResourceNet (EBSCO)
3		Academic Search (EBSCO)_____	48		CorpTech
4		Access World News (NewsBank)	49		CountryData (PRS Group)
5		Accounting & Tax (ProQuest)	50		Country Watch
6		Ad$Spender	51		CQ Researcher (CQ Press)
7		AICPA Accounting & Auditing Literature	52		Credo Reference
8		Amadeus (Bureau Van Dijk)	53		CRSP_____
9		American Accounting Association	54		CSMAR (Chinese financial data)
10		American Firms in Foreign Countries	55		Current Index to Statistics
11		Asian Business	56		Datastream (Thomson)
12		Asian Wall Street Journal	57		Deal Pipeline
13		Associations Unlimited (Gale)	58		DemographicsNow
14		Auction Block	59		Digital Dissertations (ProQuest)
15		Audit Analytics	60		Direction of Trade Statistics (IMF)
16		Bal of Payments Statistics (IMF)	61		Dissertation Abstracts
17		Bank Scope	62		EconLibrary.com
18		Bankruptcy Insider (deal.com)	63		EconLit
19		Bankruptcy Law 360	64		Economagic
20		Barron's	65		Economatica
21		Best's Insurance Reports	66		Economia y Negocias
22		Blackwell Reference Online	67		Economist Intel. Unit_____
23		Bloomberg_____	68		eMarketer
24		BNA Tax Management Portfolios	69		Emerald _____
25		BNA _____	70		Encyclopedia of Associations
26		BoardEx	71		Entrepreneurship Research Portal
27		Business & Co. Resource Ctr (Gale)	72		Europa World
28		Business & Industry Database (Gale)	73		Execucomp
29		Business Insights	74		Expanded Academic ASAP (Gale)
30		Business Monitor Online	75		Factiva
31		Business NewsBank	76		FAITS (Faulkner Adv for Info Tech St.)
32		Business Periodicals Index	77		First Call Historical Database
33		Business Plans Handbooks	78		First Research
34		Business Source (EBSCO)_____	79		First Search (OCLC)
35		Cabell's Directory	80		Food Institute
36		Capital IQ (S & P)	81		Foreign Firms Oper in U.S.
37		CCH Accounting Research Manager	82		Forrester Research
38		CCH Tax Research Network	83		Foundation Directory
39		CCH _____	84		Frost & Sullivan
40		China Data Online	85		Galante's Venture Cap Pri. Equity Dir.
41		Choices (Simmons) _____	86		Gale _____
42		ClimateWire	87		Gartner Online Info. Resources
43		Compact Disclosure	88		General Business File ASAP (Gale)
44		Compustat (S & P)	89		Global Development Fin (GDF Online)
45		Conference Board	90		Global Financial Data

#	Y/N	Research Database	#	Y/N	Research Database
91		Global Insight	138		Million Dollar Database (D&B)
92		Global Mkt Info Database (GMID)	139		Mintel Reports
93		Google Scholar	140		Moody's Default Risk Service
94		GuideStar_____	141		Morningstar _____
95		Health Business Full Text (EBSCO)	142		NBER Working Papers
96		Hein Online	143		Nelson's Dir of Investment Managers
97		Hispanic Business 500 Directory	144		New York Times
98		Historial Annual Reports (ProQuest)	145		New York Times Historical
99		Hoover's (D&B)	146		Newsletters ASAP (Gale)
100		Hospitality & Tourism Comp (EBSCO)	147		OneSource
101		IAOR (Intl Abstracts in Oper Research)	148		OptionMetrics Ivy DB
102		I/B/E/S (Thomson)	149		Orbis
103		IBIS World	150		Osiris
104		Icarus (D&B)	151		Oxford_____
105		IndiaStat	152		PACAP (Japan)
106		Info Sci-Online (IGI Global)	153		PAIS_____
107		Informs PubsOnLine	154		Passport Reference and Markets
108		InfoTech Trends	155		Periodicals Archive Online
109		InfoTrac	156		Plunkett Research
110		IngentaConnect (Ingenta)	157		PolicyFile
111		Inspec	158		Political Risk Services
112		Inst. For Study of Security Mkts (ISSM)	159		Polling the Nation Online
113		Institutional Investor Journals	160		ProductScan Online
114		Institutional Investor.com	161		ProQuest_____
115		Intl Directory of Company Histories	162		PsycARTICLES
116		International Financial Statistics (IMF)	163		PsycINFO
117		Investext Plus (Gale)	164		RDS Business Reference Suite (Gale)
118		ISI Emerging Markets (Compustat)	165		Readers' Guide Retrospective
119		ISIS (insurance companies)	166		Red Books_____
120		Islamic Finance Info. Service (IFIS)	167		Reference USA
121		JSTOR	168		Regional Business News (EBSCO)
122		Jupiter Research	169		Research Insight (Compustat)
123		Key Business Ratios (D&B)	170		RGE Monitor
124		Lehman Live	171		RIA Checkpoint
125		LexisNexis Academic	172		Risk Abstracts
126		LexisNexis Statistical	173		SAGE_____
127		Making of the Modern World	174		Science Direct (Elsevier)
128		Mgmt and Organization Studies (SAGE)	175		Scopus
129		Market Indicators and Forecasts	176		SDC Platinum (Thomson Reuters)
130		MarketLine Business Information Center	177		Securities Mosaic
131		MarketResearch.com (academic)	178		Simply Map
132		MasterFile Premier (EBSCO)	179		Small Business Resource Ctr (Gale)
133		Materials Business File (MBF)	180		Soc. Science Research Network (SSRN)
134		MediaMark_____	181		Sociological Abstracts (CSA)
135		Mergent _____	182		Socrates (social & environmental perf)
136		MergerArbAlert (Deal.com)	183		SourceOECD
137		Mergers and Acquisitions	184		Spectrum Stock Ownership Databases

#	Y/N	Research Database	#	Y/N	Research Database
185		Sports Business Research Network	202		Web of Science
186		Springer_____	203		Westlaw Campus Research
187		SRDS_____	204		Wilson_____
188		Standard & Poor's _____	205		World Competitiveness Online (IMD)
189		Statistical Abstract of the U.S.	206		World Dev Indicators Online (WDI)
190		STAT-USA	207		WorldCat
191		TableBase (RDS)	208		WRDS (Wharton Research Data Service)
192		Thomas_____	209		Zephyr
193		Thomson _____			
194		Value Line Investment Survey			
195		Vault Online Career Library			**Electronic Book Vendors**
196		VC Deal	210		Books 24x7
197		Voting Analytics Data	211		Ebrary
198		Wall Street Journal	212		NetLibrary
199		Wall Street Journal Historical	213		Safari Tech Books
200		Ward's Bus. Dir. (Pub. & Private Cos.)			
201		Web of Knowledge			

Appendix C

Research Databases Most Frequently Included on Academic Library Lists of Business Research Databases (Frequency ≥4)

Research Database	Freq	%	Research Database	Freq	%
LexisNexis Acad	105	90.5%	Wharton Res Data Service	39	33.6%
Business Source (various)	98	84.5%	Science Direct	38	32.8%
EconLit	93	80.2%	Morningstar	37	31.9%
ABI/Inform (various)	76	65.5%	ISI Emerging Mkts	36	31.0%
Mergent Online	76	65.5%	Emerald (various)	35	30.2%
Hoover's	74	63.8%	IBISWorld	35	30.2%
STAT-USA	73	62.9%	RIA Checkpoint	35	30.2%
Factiva	70	60.3%	PAISvar	34	29.3%
Standard & Poor's (various)	70	60.3%	Business & Industry	32	27.6%
Reg Bus News	66	56.9%	MarketSearch	31	26.7%
Value Line	62	53.4%	Million Dollar Db	30	25.9%
LexisNexis Stat	58	50.0%	General Bus File	28	24.1%
JSTOR	57	49.1%	SRDS	28	24.1%
Source OECD	57	49.1%	Faulkner Adv	26	22.4%
Bus & Co Resource Ctr	55	47.4%	Thomas (various)	26	22.4%
Intl Fin Stats	55	47.4%	CCH (various)	25	21.6%
Wall Street Journal	54	46.6%	Glob Dev Finance OL	25	21.6%
World Dev. Indicators OL	51	44.0%	MarketLine	25	21.6%
Mintel Reports	50	43.1%	PsycArticles	25	21.6%
Reference USA	50	43.1%	Thomson Datastream	24	20.7%
Conference Board	49	42.2%	Red Books	23	19.8%
Glob Mkt Insight Db	47	40.5%	Wilson (various)	23	19.8%
PsycINFO	47	40.5%	Accounting & Tax	22	19.0%
Academic Search (various)	45	38.8%	Associations Unlimited	22	19.0%
CCH Tax Research Network	45	38.8%	Bloomberg (various)	22	19.0%
EIU (various)	44	37.9%	Global Insight	22	19.0%
TableBase (RDS)	43	37.1%	NYT Historical	22	19.0%
Web of Science	42	36.2%	Gale (various)	21	18.1%
Investext Plus	40	34.5%	MediaMark	21	18.1%
Sports Bus Res Network	40	34.5%	Plunkett OL	21	18.1%
Gartner Online	39	33.6%	ProQuest (various)	21	18.1%
NBER Wrk Papers	39	33.6%	Compustat	20	17.2%
Thomson (various)	39	33.6%	Corporate Affiliations	20	17.2%

Research Database	Freq	%	Research Database	Freq	%
Dissertations & Theses	20	17.2%	First Research	11	9.5%
New York Times	20	17.2%	Access World News	10	8.6%
SDC Platinum	20	17.2%	Bus & Mgmt Practices	10	8.6%
WSJ Historical	20	17.2%	Country Watch	10	8.6%
CCH Accounting Research	19	16.4%	Euromonitor Mkt Rpts	10	8.6%
Glob Financial Dev	19	16.4%	Galante's	10	8.6%
Google Scholar	19	16.4%	Hosp & Tour Comp	10	8.6%
SSRN	19	16.4%	RMA eStatements	10	8.6%
Mergent (var)	18	15.5%	Socrates	10	8.6%
Vault Career	18	15.5%	10K Wizard	9	7.8%
Business Insight	17	14.7%	CRSP	9	7.8%
China Data	17	14.7%	Dissertation Abstracts	9	7.8%
IngentaConnect	17	14.7%	Europa World	9	7.8%
Simmons Choices 3	17	14.7%	GuideStar	9	7.8%
Statistical Abstract of U.S.	17	14.7%	Hein Online	9	7.8%
Forrester Research	16	13.8%	IMF Bal of Payments Stats	9	7.8%
Oxford (various)	16	13.8%	InfoTech Trends	9	7.8%
Simply Map	16	13.8%	InfoTrac	9	7.8%
Ad$Spender	15	12.9%	Springer (various)	9	7.8%
eMarketer	15	12.9%	DOAJ	8	6.9%
Historical Annual Rpt	15	12.9%	Jupiter Research	8	6.9%
Key Bus Ratios	15	12.9%	Sage (various)	8	6.9%
OneSource	15	12.9%	Zephyr	8	6.9%
BNA Tax Mgmt Portfolios	14	12.1%	Ad*Access	7	6.0%
Cabell's	14	12.1%	Bank Scope	7	6.0%
Digital Dissertations	14	12.1%	Credo Reference	7	6.0%
Exp Academic ASAP	14	12.1%	Economia y Negocias	7	6.0%
Orbis	14	12.1%	Foundation Directory	7	6.0%
Pol Risk Service	14	12.1%	I/B/E/S	7	6.0%
Westlaw Campus Research	14	12.1%	Making Mod Wld	7	6.0%
Business Monitor Online	13	11.2%	Mint Global	7	6.0%
CorpTech	13	11.2%	Pollling the Nation	7	6.0%
Frost & Sullivan	13	11.2%	ProductScan	7	6.0%
IMF Dir of Trade Stats	13	11.2%	Scopus	7	6.0%
Research Insight	13	11.2%	Wiley Interscience	7	6.0%
Web of Knowledge	13	11.2%	AICPA Literature	6	5.2%
Academic OneFile	12	10.3%	Business Plans Handbook	6	5.2%
Materials Bus File	12	10.3%	Corporate ResourceNet	6	5.2%
Risk Abstracts	12	10.3%	Economagic	6	5.2%
Sociological Abst	12	10.3%	First Search	6	5.2%

Research Database	Freq	%
Mgmt & Org Studies	6	5.2%
Osiris	6	5.2%
WorldCat	6	5.2%
Amadeus	5	4.3%
Dir Foreign Firms in U.S.	5	4.3%
Dir of U.S. Firms/Foreign	5	4.3%
EconLibrary	5	4.3%
Entrep Res Portal	5	4.3%
Execucomp	5	4.3%
Global Road Warrior	5	4.3%
Health Business FT	5	4.3%
Informs	5	4.3%
Kompass	5	4.3%
Market Insight	5	4.3%
PolicyFile	5	4.3%
RDS Bus Ref Ste	5	4.3%
RGE Monitor	5	4.3%
Small Bus Res Ctr	5	4.3%
Amercian Factfinder	4	3.4%
Audit Analytics	4	3.4%
Capital IQ	4	3.4%
CQ Researcher	4	3.4%
Demographics Now	4	3.4%
IMD World Comp Online	4	3.4%
IndiaStat	4	3.4%
Inst Investor Journals	4	3.4%
Intl Dir of Co. Hist	4	3.4%
MasterFile Prem	4	3.4%
Readers Gd Retro	4	3.4%
Ward's Bus Directory	4	3.4%