

STM & BUSINESS DATABASES IN SLOVENIA STM IN POSLOVNE BAZE PODATKOV V SLOVENIJI

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Pridobljeno: 10.02.2003 – Sprejeto: 28.04.2003

Professional article
UDC 004.658:659.23:004

Abstract

Through a detailed view of STM and business journals available in Slovenia, this article depicts the value of particular databases and the impact of a tremendous influx of information into the country in recent years. The two most comprehensive databases that are available from EBSCO, the world's largest intermediary between publishers and libraries, are explored. EBSCO's company strategies with regard to its academic databases are described. The article examines which databases are strongest in each discipline, and covers issues such as the availability of journals most-cited, full text formats, peer-review status, embargo periods, backfiles, and other important facets.

Key words: databases, EBSCO, Slovenia

Strokovni članek
UDK 004.658:659.23:004

Izvleček

Na osnovi podrobnega pregleda STM in poslovnih baz podatkov, dostopnih v Sloveniji, članek analizira pomen in vrednost posameznih baz podatkov in omenja vpliv velikega priliva informacij v državo v zadnjem času. Predstavljeni sta dve najbolj izčrpnii (obsežni) bazi podatkov založbe EBSCO, ki je največji svetovni posrednik med založniki in knjižnicami. Opisane so tudi strategije družbe EBSCO, ki se nanašajo na akademske baze podatkov. Članek ugotavlja, katere baze so najpomembnejše v posameznih vedah in obravnava vprašanja kot so: dostopnost najbolj citiranih serijskih publikacij, polni tekstovni formati, pomen recenzijskih postopkov, časovni embargo, baze podatkov s starejšimi publikacijami itd.

Ključne besede: podatkovne baze, EBSCO, Slovenija

BROOKS, Sam: STM & Business Databases in Slovenia. Knjižnica, Ljubljana, 47(2003)1-2, 175-183

Dissemination of information through full text databases has expanded more in the last several years than during the previous history of these resources. Based on experience with reference products not to par with those that set today's standard, inaccurate assumptions may have been drawn by researchers and librarians. With the tremendous enhancements made in recent years, a new, closer look at these scholarly databases is not only essential, but will also prove valuable to anyone facilitating or conducting research. Though the following concentrates mainly on invaluable content enhancements, the power of important and improved components such as software functionality, usability, speed, and accessibility should not be overlooked.

Much of the database progress that has been realized by researchers in Slovenia and all around the world may be attributed to a surprisingly large quantity and quality of full text journals in both the hard sciences (STM) and soft sciences (humanities, social sciences, business, etc.). Just a few years ago, there were virtually no full text physics journals available via these aggregated databases. But, as it currently stands, there are nearly 100 physics journals available in PDF in EBSCO's Academic Search Premier (ASP), and this number is growing. This is but an example of only one of the many subject areas within the realm of hard sciences that has experienced a swell of new content made available in ASP. Primarily a soft sciences database in previous years, ASP is now a combination of some of the world's finest journals in both the soft and hard sciences.

PDF full text coverage in ASP is particularly strong in the biological sciences, chemistry & chemicals, communications & media, computer science, education, engineering, environmental studies, history, language & linguistics, medical sciences, philosophy, physics, politics & political science, psychology & psychiatry, religion & theology, and sociology & social work. Holding the distinction as the world's largest collection of academic full text journals in both the hard and soft sciences categories, ASP is the most-used research tool in hundreds of universities across dozens of countries.

In fact, every university library in Slovenia, Slovakia, Czech Republic, Poland, Russia and many other nations in Central & Eastern Europe is accessing ASP, and the usage statistics in Poland and Russia are astonishing. In the United States, it is not uncommon for a university to spend in excess of \$2,000,000 per year on their journal subscriptions. Even with such vast collections of journal material, these libraries commonly find it necessary to subscribe to *Academic Search* to complement their collections. For libraries in Central & Eastern Europe with less flexible budgets, the need for such a database is paramount. The goal of full text databases is not to replace existing subscriptions; it is to bring many new sources into the library at a reasonable cost. As depicted recently in the Johns Hopkins University Press publication, *portal: Li-*

libraries and the Academy, Paula Watson, an *Academic Search* customer and Director of Electronic Information Services at the University of Illinois – Champaign/Urbana, states, “Journal cancellation is not an issue for us. We do not rely on aggregated databases to replace print or e-journal subscriptions” [1, p. 50]. Further emphasizing the point that full text databases are not a replacement for individual journal subscriptions, a November 2002 article in *Against the Grain* offered unmistakably that these databases are, “no substitute for journal subscriptions” [2, p. 30].

Due in large part to the huge expansion of hard sciences content, ASP now has a print equivalent value of more than \$1,000,000 per year. In other words, if a library wanted to buy a subscription to every single journal available in full text in ASP, their cost would be over \$1,000,000 per year. Though its availability via the World Wide Web allows the database to provide the most current information, EBSCO has tremendously expanded the backfile data available in ASP. Thus, the database provides a retrospective view of information, including full text coverage for many journals dating back into the 1960s, and in some cases as far back as the 1920s.

For many universities in Central & Eastern Europe, access to ASP means access to many journals which have never before been available to students and faculty. However, for several reasons, it does not represent an easy way to replace existing journal subscriptions. For example, the most cited journals, such as *Nature*, *Science*, *Journal of Chemical Physics*, etc. frequently come with embargo periods. That usually means that the publisher withholds the most current full text until a specified period of time has elapsed (usually somewhere between three months and twelve months, depending on the journal). This is done to prevent existing subscribers from canceling subscriptions, but at the same time to allow non-subscribers to have some access to these journals through the database. Generally, non-subscribers find this useful because they can gain access to tens of thousands of articles (in PDF) from these critical journals. For example, while no current full text articles are available from *Journal of Applied Physics* due to the publisher-imposed embargo period, the database does contain PDFs for more than 13,000 articles (and growing) from this highly prestigious STM journal. (Information on this topic, with regard to EBSCO's practices, etc. can be found in a *Serials Review* article published in 2002 [3].)

Not all journals in ASP contain embargo periods. In fact, there are more than 1,700 full text journals in ASP with no embargo at all. These publishers are relying on libraries to maintain their subscriptions to these journals. If libraries use the databases to cancel journal subscriptions to titles with embargoes or without, the publishers will remove their content from the databases. This has already happened with some smaller full text databases produced by com-

panies who did not alert all of their customers to the dangers of misusing their full text products. EBSCO has done a good job of avoiding this turmoil by informing its customers of these issues. EBSCO's Web site offers that, "this potential turmoil can likely be avoided if librarians make print and e-journal purchasing decisions independent of whether the full text of a journal is available in an aggregated full text database. Proceeding in this way should result in price and content stability within aggregated databases, ensuring that end users continue to enjoy the benefits of access to these large collections of valuable data" [4].

Often those evaluating databases may look to the total number of titles in a given database, rather than the total number of quality, appropriate journals. EBSCO offers the largest full text academic collections, but more importantly, its databases contain more peer-reviewed journals than any other database offered from competing firms. This is due to a fairly simple reason. EBSCO is the world's largest subscription agency and shares the core business of all academic publishers: journal subscriptions. Participation in databases represents a secondary revenue stream for publishers. Therefore, most reputable publishers are very careful in this regard and will not expose themselves to the volatility and instability associated with conducting business with risky enterprises that do not share a financial stake in the publisher's well-established core business. Thus, to satisfy any apprehension regarding subscription cancellations, they generally do not work with non-subscription agents in this area. Because EBSCO is the only subscription agent who is also a full text database vendor, EBSCO experiences de facto exclusives for thousands of academic journals. In other words, due to natural market conditions, academic publishers have overwhelmingly decided that they want the exposure of EBSCO's full text databases, while they do not want the peril associated with participating in databases marketed by outfits that share no financial stake in their core business. Therefore, leading academic publishers are (by-in-large) only partnering with full text database vendors who are also subscription agents (i.e. EBSCO).

Journals defined as 'peer-reviewed' are publications which utilize a review board of experts whose role is to read all articles to decipher appropriateness. Further, these boards will edit and scrutinize content for sake of accuracy before they are eventually published. This is a unique and often lengthy process, much different than that of other (non-peer-reviewed) periodicals. As a result of this additional layer, articles appearing in peer-reviewed journals are considerably more reliable/appropriate for research. In the July 2001 issue of the *Journal of Academic Librarianship*, the article "Integration of Information Resources and Collection Development Strategy" offers insight into the value of peer-reviewed journals included in full text databases. "The quantity of peer-reviewed, or refereed, content is a simple indication of the level of scholarly materials con-

tained in databases. Although not all scholarly content is peer-reviewed, it is certainly a good starting point when determining the validity of an academic reference resource" [5, p. 16]. These journals are not only of high quality, but also generally expensive to publish, therefore usually expensive to purchase as well. ASP is the only way for many libraries to be able to afford to bring a number of these scholarly journals into their institutions.

As of December 2002, ASP contains 2,720 full text peer-reviewed journals. This number may not seem remarkable until it is pointed out that no other database has as many as 1,000 full text peer-reviewed journals.

In recent years, PDF has emerged as the overwhelmingly preferred full text format for academic libraries. Thus, EBSCO is using PDF as the primary full text format for academic journals (including STM and soft sciences) and business journals. With these publications, EBSCO tries as often as possible to provide a native (searchable) PDF. PDF has been selected as the standard for these publications because this format is needed to properly display scientific formulas, equations, diagrams, charts, graphs, clinical images, etc. EBSCO is offering many more journals in PDF and more native PDFs than other database vendors. Not only does PDF maintain an article as it originally appeared, but many "prefer PDF files for printing because of their image quality and because they maintain the print version's layout" [6, p. 34].

Another rare, yet valuable quality attributed to ASP is its ability to provide full text journals (most often in PDF) for journals published outside of the United States. Most full text databases offer very limited coverage from non-U.S. publications. As of October 2002, ASP contains 1,731 full text journals published outside the United States, with the great majority (1,350) coming from three countries: United Kingdom, the Netherlands, and Germany. There are some journals available from countries further in the East, including more than a dozen from Slovenia, Czech Republic, Estonia and Poland. Examples of full text Slovenian journals include *Journal of International Relations & Development* (University of Ljubljana) and *Acta Geographica* (Znanstvenoraziskovalni Center Sazu). This is significant because other full text databases contain no scholarly journals from this region. EBSCO plans to continue to expand its coverage from these areas.

Business Source Premier (BSP) is the largest full text business database in the world. It contains full text for more than 2,800 periodicals. This database also offers an unprecedented number of full text journals from outside the United States. BSP contains 910 full text journals published outside the United States, with the great majority, 749, coming from three countries: United Kingdom, the Netherlands, and Germany. In addition, full text business journals are provided from Switzerland, Belgium, France, Norway, Czech Republic, and Slovenia. EBSCO plans to continue to expand its coverage in these areas.

Continuing to gain momentum through content additions, BSP is particularly comprehensive in accounting, economics, finance, management, marketing, MIS, POM, and public administration. In fact, BSP is the only way that universities can gain institution-wide electronic access to many of the leading journals in these disciplines, including *Harvard Business Review*, which is available in PDF in the database with cumulative coverage dating back to its first issue in 1922.

As alluded to previously, a great advantage associated with ASP and BSP is the extensive work that has been (and will continue to be) done to expand the full text archive that is made available through these databases. In mid-2001, EBSCO made the decision to move forward with an unprecedented plan to create greatly expanded backfiles for academic journals in its full text products. There are two separate initiatives in the project, which have equipped researchers with a retrospective file with which to conduct extensive research.

With regard to this backfile expansion, the first initiative is called the Business Source Backfile Initiative (BSBI). In researching this undertaking, EBSCO used journal ranking studies, reports depicting the most-cited publications, periodical usage statistics, and direct feedback from some of the world's most prestigious business schools (librarians and professors) to create a list of the 300 top scholarly business journals published. Then, EBSCO partnered with several large universities in New England, New York and Pennsylvania (including Wharton and Cornell) to obtain the back issues for all of these titles back to 1965 or the first published issue (whichever is more recent). The goal was to create the deepest indexing and abstracting backfiles available for the world's best business journals to be made accessible in EBSCO's comprehensive business index: *Business Source*[®]. In addition, because EBSCO is using PDF as the main format for full text in its scholarly databases, EBSCO worked with publishers to gain permission to process PDF backfiles for as many of the publications as possible. In the end, PDF rights were granted for more than 200 of these top 300 business journals. Again, PDF was chosen for this project because it is the most advantageous format for electronically representing this scholarly content.

Further to this unprecedented expansion of back data, a growing number of journals are actually expanding beyond 1965. For example, *Academy of Management Journal* is available back to 1958, *Accounting Review* to 1926, *Journal of Marketing* to 1936, etc. Publishers like these (and their editors) are excited by the fact that students and professors all over the world will be able to access not only the current PDF issues of their journals, but the full run of the journal as well.

In the few cases where backfile expansions have been done by other organizations, this additional data has been offered to their customers at a high cost. The documented cases of retrospective data additions done by other companies are similar initiatives to EBSCO's, but on a much smaller scale. Thus, a huge advantage to the expanded backfiles that EBSCO creates is not only realized in amount and quality of the data, but in the simple fact that these are essentially free to all existing customers subscribing to these databases. Our initial impetus for providing this coverage as a value-added service as part of the databases is that this one-time investment, massive as it is, will result in increased buyer loyalty and increased system usage. In the end, the result will be positive for EBSCO, our customers, and our publisher partners. Further still, this emphasizes EBSCO's goal of heightening the availability of information, and providing the most powerful, inclusive reference resources for the benefit of the end user.

The second initiative is called the Academic Search Backfile Initiative (ASBI). This undertaking was based on totally different criteria than BSBI. Whereas *Business Source* is designed to be the world's most comprehensive business index, *Academic Search* is built with a different philosophy. *Academic Search* is meant to act as an academic library's core periodical index, covering virtually every subject of study. Therefore, there was no way to employ many of the measurements used in the BSBI research to determine which journals would be included. Instead, for ASBI, EBSCO relied almost entirely on a single method to determine which journals would be included.

Beth Howell, EBSCO's Director of Customer Satisfaction explains, "We figured that the best way to select the journals was to let our customers tell us which ones they would use most. Thus, we studied the usage of full text articles that were more than three years old and identified the top journals in Academic Search based on that criterion" [7].

As mentioned, soft sciences current coverage is very strong in ASP. This is no different with regard to the retrospective coverage. ASBI titles include: *Acta Sociologica*, *British Journal of Psychology*, *British Journal of Sociology*, *Central European History*, *International Journal of Psychology*, *Journal for the Scientific Study of Religion*, *Journal of Education*, *Political Science Quarterly*, *Journal of Genetic Psychology*, *Journal of International Affairs*, *Journal of Politics*, *Journal of Social Psychology*, *Social Forces*, etc.

Additionally, as the last few years have left ASP with a tremendous collection of current coverage of the hard sciences, similar improvements are represented in the back data now available in the database. Some examples of hard sciences ASBI titles include: *Addiction* (formerly *British Journal of Addiction*), *Advances in Physics*, *Annals of Internal Medicine*, *Annals of Science*, *Archives of*

Environmental Health, Astronomy & Astrophysics Review, BMJ: British Medical Journal, Contemporary Physics, International Journal of Environmental Studies: Sections A & B, Pediatrics, etc.

Over 100 journals will be on the final backfile expansion list for *Academic Search* and all with contain an archive of indexing, abstracts and PDF files for all articles. This expansion project is further outlined in the May 15, 2001 issue of *Library Journal* in an article entitled, "EBSCO Greatly Expanding Business Journal Back Files" [8].

EBSCO has made great progress in both of these initiatives. Both BSBI (*Business Source Backfile Initiative*) and ASBI (*Academic Search Backfile Initiative*) are near completion. More than 90% of all back issues in both initiatives are expected to be processed by the end of spring 2002 and available via the products by summer 2002. Throughout 2002, the small percentage of remaining issues will be located, converted to electronic format, and provided through our databases, as they become ready.

EBSCO is dedicated to the constant improvement and development of databases through quality content and software enhancements. The company is the leading provider of scholarly databases worldwide, largely due to its success in creating internationally significant reference resources. Furthermore, EBSCO was unanimously chosen to provide databases as part of the unprecedented project, *Electronic Information for Libraries Direct (eIFL Direct)*, an initiative spear-headed by the *Open Society Institute* [9]. The database content and level of service & training that EBSCO provides in the region depicts the firm's commitment to offering the best possible resources for customers in Central & Eastern Europe, and all over the world.

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