

The importance of aggregators for libraries in the digital era

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Abstract

Purpose – The purpose of this paper is to define different types of aggregators and discuss their importance for libraries in the digital era.

Design/methodology/approach – A review of literature on aggregators was carried out. The paper focuses mainly on the various aggregators and outlines their advantages and disadvantages for libraries.

Findings – Libraries have been working with publishers and aggregators for many years; however, the issues related to aggregators are not well documented. Aggregators have been helping libraries to facilitate their services to users but they have some disadvantages for libraries such as the lack of library influence in selecting individual titles; the lack of control over the contents of aggregator packages; and the confusion of library users when accessing different packages.

Originality/value – The paper provides a useful overview to researchers in any field, enabling them to achieve quickly a clear picture of aggregators in the electronic environment.

Keywords Digital libraries, Library networks

Paper type General review

Introduction

Users in digital libraries often expect a seamless, integrated, transparent network that allows them to link quickly and painlessly to documents they seek. They want easy access to full text and content providers such as aggregators are working with libraries and publishers to achieve this goal. However the variety of aggregators in the digital environment causes some confusion to information professionals as well as to end users. Until recently, there was only one type of aggregator which could be described as a “licensed full-text content aggregator”. Therefore, to the user the term aggregator was taken to mean the aggregation of full-text content. This kind of aggregator used to sell their collections to libraries which was a secondary publishing function. But today there are different types of aggregators accessible through the web. Three kinds are defined in this paper and their importance for libraries is discussed. The purpose is to give a clear picture of aggregators in the electronic or digital environment.

Three kinds of aggregators

The word “aggregate” means the total obtained by adding items together. One may define aggregation as bringing together in a coherent collection disparate information sources. Ball believes this is to be the core traditional library

business (Ball, 2006). Simon Inger (2001) made a distinction between three classes of company that have become “aggregators” in this new world. Firstly, there are those companies whose primary focus is to provide a hosting service for publishers – the content host. Secondly there are those who index or categorise disparate content on other content host services – the gateways. And lastly the “traditional” aggregators of licensed full text content – the full-text aggregators. Taken broadly, aggregators can be categorized as follows:

- 1 *Hosting aggregators:*
 - Ovid, SilverPlatter, Dialog, CatchWord, Highwire Press, Allen Press, the American Institute of Physics, the hosting services of Ingenta and so on.
- 2 *Gateways aggregators:*
 - Subscription Agencies as Gateway Service Providers – SwetsNet, RoweCom, Informatics (J-Gat);
 - Traditional Abstracting and Indexing Producers/Publishers – ISI, BIOSIS, CSA, INSPEC, etc.; and
 - Third Party Link Service Providers – CrossRef; SFX from ExLibris (Open URL).
- 3 *Full-text aggregators:*
 - Perpetual Access models with archiving space for the library – Ovid, OCLC; and
 - Annual Lease Access models – ProQuest, EBSCO.

A brief description of three major aggregators, based on their web sites, illustrates their diversity

EBSCO

One of the most prominent aggregators, has serviced the library industry for more than 60 years. EBSCO Information Services is a service provider for e-journals, e-journal and e-book packages and print subscriptions. In addition they produce a suite of e-resource management tools, full-text and secondary databases and related services for all types of

The current issue and full text archive of this journal is available at www.emeraldinsight.com/0264-1615.htm



Interlending & Document Supply
35/4 (2007) 222–225
© Emerald Group Publishing Limited [ISSN 0264-1615]
[DOI 10.1108/02641610710837536]

libraries and research organizations. More than half of the subscriptions handled by EBSCO have an electronic component. EBSCO's solutions include systems to consolidate ordering, invoicing, claiming and renewals as well as assistance with licensing and registration requirements for e-journal and e-package customers worldwide. It's 32 regional offices, located in 21 countries, serve customers in more than 200 countries. In its seventh decade of business, EBSCO has relationships with more than 79,000 publishers globally (EBSCO Information Services, 2007). Approximately 250 full text and secondary databases are made available via EBSCOhost. A customizable, intuitive search experience, EBSCOhost is designed to cater to various user needs and preferences at every level of research (EBSCOhost Connection, 2005).

ProQuest

ProQuest provides seamless access to, and navigation of, more than 125 billion digital pages of the world's scholarship, delivering it to the desktop and into the workflow of researchers in multiple fields, from arts, literature, and social science to science, technology, and medicine. ProQuest's content pools are available through libraries of all types and include the world's largest digital newspaper archive; periodical databases comprising the output of more than 9,000 titles and spanning more than 500 years; a dissertation collection, and other scholarly collections. Since 1938, ProQuest have worked with the worldwide publishing community to preserve and provide access to information (ProQuest, 2007).

Dialog

Dialog offers organizations the ability to retrieve data from more than 1.4 billion records of information, accessible via the internet or through delivery to enterprise intranets in such fields as business, science, engineering, finance and law. As part of the Deep Web, which is estimated to be 500 times larger than the content accessible via web search engines, Dialog products offer depth and breadth of content coupled with the ability to search with precision and speed. The Dialog collection of over 900 databases handles more than 700,000 searches and delivers over 17 million document page views per month. It has direct operations in 27 countries (Dialog, 2007).

Advantages and disadvantages of aggregators

Aggregators have some advantages and disadvantages for libraries. They offer the products of a number of producers, often combining them into packages and selling them to libraries. For database producers, the advantages of dealing with aggregators are that they make the investment in the hardware, software, marketing and other costs of serving the subscribers; for libraries, the advantages of contracting with aggregators is that they handle the licensing issues with the database producers, provide the necessary patron authentication, and simplify the user interface. In many cases, aggregators even facilitate searching across multiple databases. Aggregators also serve both producers and libraries by combining complementary products in packages that are easier to sell and buy. Purchasing of collections and/or organizing access to composite collections allows libraries quickly to address the information needs of their patrons.

Inger (2001) describes how both small and large publishers gain benefits from aggregators:

Small publishers gain very much through careful deal-making with aggregators. In particular, by using an appropriate content host, the small publisher achieves the same "shop-window" status as its larger counter-part. In addition it can use gateways to further improve its visibility. The very existence of value-for-money content hosts ensures the continuation of the tradition of the small publishing house in being able to secure a niche market for its niche products. Larger publishers save money by outsourcing many of their non-core competencies. Electronic journal hosting can and should be one of those functions, just like printing, typesetting and distribution...

Scholarship as a whole gains from a combination of the above benefits for libraries and publishers alike. Aggregators facilitate the diversity of publication from large numbers of publishers rather than promoting the continued conglomeration of publishing houses.

Aggregators provide services to libraries, however libraries do not have control over all the titles in the database; some may leave, others enter. For librarians, accessing an aggregator database is like accessing a service not a guaranteed list of titles. As a service, accessing a title within a service is not the same as buying because it is only rented. If librarians want to collect the title, they have to subscribe.

Another related disadvantage is the lack of influence the library has in selecting individual titles. Traditionally libraries have followed certain criteria in the selection process for materials, the review process for aggregator packages (particularly electronic packages) on the other hand, seems relatively lax. Rarely are individual titles in a package subjected to the same kind of careful review that is reserved for their paper counterparts. Perhaps buying in bulk makes the careful review of dozens or even hundreds of titles seem too daunting or simply impractical (Hickey, 1995). If libraries are not able to select on a title by title basis and the selection of the content of aggregator packages is being performed by the aggregator, how do the latter do this job? How selective are the aggregators themselves? It is difficult to answer to this question. Publishers whose titles are included in a packages may benefit, as the aggregator is offering the publisher broader distribution of it to a wider audience. Yet what happens to those publications that are not included in a package? It seems possible that the viability of some smaller publishers could be threatened by the very fact that they are not part of a package (Moothart, 1996).

The other disadvantage for those libraries that subscribe to more than one package, is the inconvenience and confusion created among users by having to switch between packages. Often a comprehensive search will require using more than one package, but how does the user know that, and how does the user know which package to switch to? The pre-packaged form of aggregated products makes it difficult to identify and integrate the specific contents with the rest of the collection as well as with other packages. So, there is a need to arrange and display packages to the user more meaningfully. One way to improve the situation might be to unbundle the contents of various packages and arrange them in a more integrated and logical scheme. This would allow the library to classify them by both type of resource and by subject matter, which would seem much more useful to users than a series of package labels. Some libraries are already beginning this process and are making their contents more accessible to users (Stover and Sink, 1996).

The importance of aggregators

Generally speaking aggregators have played an intermediate role and their services have been used by libraries and publishers for many years. They have performed functions such as handling orders, billing, payments, renewals and cancellations. Although electronic publishing has had a great impact on the supply chain of library contents, aggregators are unlikely to disappear. The electronic environment has presented publishers with a new way to aggregate (without the middlemen) by bringing content together and offering all their electronic journals to libraries as a package. With the emphasis in the electronic environment on the aggregation of content rather than services, many traditional aggregators, in danger of being dis-intermediated, have redefined their business. The traditional indexing and abstracting services have enhanced their databases by licensing the rights to include full text. Subscription vendors have created new lines of business providing access to large numbers of journals from a variety of publishers. Some primary publishers, such as Elsevier Science and Academic Press, have decided to take on the role of aggregator, maintaining control of their content and its distribution (Case, 2001). Aggregations by commercial publishers, often called the “Big Deal”, are marketed by publishers as a way to cap inflationary journal prices and to enable access to large numbers of previously unsubscribed journal titles.

Many large libraries are themselves becoming aggregators. Users need an integrated interface that allows them to search and access quickly any document they seek in an electronic environment. SFX helps libraries to become real aggregators. It is a context-sensitive link server that allows linking between web resources in the scholarly information environment. An SFX source is a web-based resource in which the user searches, and from which a user may link out to additional resources and services by clicking on an SFX button. The SFX solution offers libraries flexibility and choice. Reference librarians can choose appropriate content from a range of information vendors and link this content as desired. They can then provide links to services that they feel are appropriate for their end users. In other words, the user may be re-directed not to content on a publisher web site, but perhaps to a manifestation of that content through the library’s chosen gateway or in a locally held full-text aggregation (SFX, 2007).

Aggregators have challenged the librarians’ role in collection development. David Ball believes that libraries have had a near-monopoly role in the aggregation of printed material, but that electronic publishing is challenging this role. The emergence of aggregator packages has had a considerable impact on the role of the collection manager in the library. Traditionally they have been responsible for selecting library materials and they had control over it. If it is supposed they select aggregator packages particularly in electronic format, how much of the selection is performed by the library staff (collection manager) and how much is performed by the aggregator? It is clear that the libraries would not have complete control over contents of the packages, because selection is not so much a matter of choosing the contents of a package as it is choosing between different packages. They may be shift from one of micro-selection to macro-selection and choose the packages which include multiple titles (Monroe, 1997).

There has been a trend toward consortia buying in recent years. These consortia play an important role in the current collection development environment in libraries. “Library consortia”, as a concept, refers to co-operation, co-ordination and collaboration between, and amongst, libraries for the purpose of sharing information resources. Consortia, as collaboration efforts, in general are tailored to meet the unique needs of their membership. Consortia purchasing projects have become a basic tool that expand collections and support cooperative technological development for libraries. This is so much the case that some aggregators will only negotiate with consortia rather than with individual institutions which suggests that library networks play an important role in influencing the cost and terms of aggregator packages. By negotiating contracts for group access to aggregator packages, regional library cooperatives are able to obtain a discount for their member institutions. In turn, aggregators benefit by being able to market packages to a larger subscription base, including many smaller libraries that might not otherwise be able to afford such packages (Brunell, 1997).

How does consortia buying change the way libraries and information providers operate? It seems that consortia purchasing leads to the homogenization of databases. In many cases, consortia are licensing the same full-text indexing and abstracting services and aggregations from the same publishers on reasonably similar terms. On the other hand, we should keep in mind that consortia have to serve a wide range of users with various levels of education and needs. In spite of homogenization being a disadvantage, consortia purchases are increasing access for users. Therefore, the role of consortia may go beyond negotiating price. To some degree, consortia may be able to influence the content of aggregator packages. This sometimes involves a process in which a particular consortium may survey its member libraries and ask them to vote on various content options, e.g. a certain roster of databases. The option that receives the most votes may then become the package that all the voting libraries subscribe to, with perhaps minor local modifications. This is particularly true when libraries decide not to subscribe to a complete package or cannot afford to, and must then negotiate for the portion of the package that best suits their local needs (Miller, 1996).

Conclusion

Libraries work in a customer-supplier relationship with aggregators and publishers, buying in information products on behalf of their users. Though, to the user the term aggregator is taken to mean the aggregation of full-text content, the companies who are collectively termed aggregators today range from those who aggregate full text on a selective basis, organized by subject, to those who simply provide a non-selective hosting service for full-text publishers, to those who aggregate abstracts and metadata. Librarians need to understand the intermediate roles played by different aggregators in the digital era. In the electronic supply chain, there are some benefits of aggregators for database producers, publishers as well as libraries. The traditional role of aggregators is challenged by electronic publishing and both libraries and publishers have found themselves in a position to become aggregators themselves; however, there are benefits for them in working with “professional” aggregators in order

to facilitate their services to users. It can be a lot simpler to contract with a limited number of aggregators for access to electronic contents than to negotiate with numerous publishers even though libraries may not have complete control over selecting titles. However some disadvantages of aggregators for libraries are: the lack of library influence in selecting individual titles; the lack of control over the contents of aggregator package and the confusion of library users when accessing different packages.

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