

Digital Subscriptions and Content Management in the Internet Era

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ABSTRACT

The Internet offers a wealth of opportunity for the library fraternity and the user community in terms of content enrichment, information access, dissemination, sharing, management and manipulation. The Information Super Highway, as it is rightly put, simultaneously act as a content publisher, content holder and a content disseminator. During the recent past there has been a considerably shift in the library acquisitions the world over, as the digital media dominates all its other counterparts in terms of its effectiveness, high-end flexibility, ease of access and dissemination. The plethora of formats, standards, protocols, and platforms of the Internet wonder world offer a wide spectrum of applications to the user community which undoubtedly empowers them in their smooth journey to value added and pin-pointed information at the stroke of a button

or the click of a mouse. Today, the three predominant forms of information source/carrier are the print, CD/DVD/HDD and Web. The latter two are on an intense march forward with its reach, richness and robustness. With the information revolution coupled with media explosion, librarians are posed with multi-faceted problems of collection development issues, diminishing financial resources, and the spiraling cost of information. It has therefore become imperative on the part of librarians to learn the basics of digital subscriptions, digital collection development and its efficient management for one's own survival sake, leave alone the unprecedented user pressure. This paper discusses the variant forms of collection development and management through the Digital Media, with a view of support the "Access" Vs "Ownership" slogan. Also highlights the benefits of consortia approach to digital collection and elaborates the IPR, Copyright and related issues involved while arranging digital subscriptions. The tricks and catches in the digital subscription scenario, looking forward to exploiting the ignorance of the librarian is also discussed.

DIGITAL INFORMATION COLLECTION DEVELOPMENT

The information professional's never-ending challenges.

A Library's digital information collection development objective is not far from its original mandate, i.e., to select those digital / electronic materials, which will support the current curricular and research needs of the parent institution or organization to which it is attached.

There is a paradigm shift, both from the approaches of the users as well as in their access facilities. In most of our endowed campuses and research centers, the user community have access to digital information using personal computers in their offices, libraries, computer centers, Net kiosks etc. Consequently, the Libraries provide (or rather forced to provide) access to a wide variety of materials using an equally wide variety of access mediums to meet the user needs.

ELECTRONIC SELECTION CRITERIA

Libraries today buy licenses for an ever-increasing number of information resources from a range of different publishers and providers, and use a diverse set of technologies for information delivery [1]. In addition, a wealth of relevant resources are freely available on the Web for libraries to incorporate into their e-collections and to make them readily available to their users. Materials may be in print and/or electronic form; formally and/or informally published; and stored locally, for access via an institution's intranet, or remotely and accessible via the Internet. A number of services are outside the library's control, but nonetheless libraries want to integrate their resources, presenting the information from any particular source within the context of the complete collection. Searching across repositories is only part of the solution. While not all subscriptions lend themselves to electronic delivery, electronic subscriptions offer a great potential for increased value to the entire organization. The move from atoms to bits complicates the jobs of information professionals, but the benefits - competitive advantage, access to information by a wide spectrum of the users, can be tremendous.

Like print materials, digital titles added to the collection need to match the needs of the clientele assuring appropriate scope, content, depth, and quality. The materials selected should be affordable, the content must be timely, bibliographically accessible and in the appropriate language, etc. It is also presumed that there are no technical reasons why the library cannot provide access, e.g., doesn't use a proprietary browser, permits printing, etc., and that their use by library user and librarians will not require an inordinate amount of training.

Similarly hyper-linking assumes major importance. The simplicity and ubiquity of the Web is such that users now have high expectations of their own digital library environments in terms of ease of navigation between the many and varied electronic information resources. They also expect minimum efforts for their information-seeking activities. It is the librarian, as information

intermediary, who is in a better position to determine how resources should be interlinked to provide for ease of navigation, i.e. what should be linked to what, and how it should be linked. The librarian has traditionally applied a broader range of knowledge to packages of information and is now challenged in extending their skills to highly diverse and widely dispersed users wherever and whenever they need it. The Web is undoubtedly facilitating linking among digital items - and we see many excellent examples of this in current offerings from information providers - secondary and primary publishers, and from the aggregators.

ELECTRONIC JOURNALS : DIRECT, SECOND PARTY, AND AGGREGATORS

Electronic journals are the digital equivalent of their print counterparts. Whereas databases may contain only some full text or links to full text, electronic journals are literally the entire journal. For a good catalog of electronic journals currently available, see the World Wide Web Virtual Library: Electronic Journals [2]. An electronic journal is the whole journal, and libraries can subscribe to electronic journals from publishers or through a second party (e.g. vendors) just like they subscribe to print journals. This distinction between publishers and second parties is an important one, as these are the two ways libraries get electronic journals. Some companies create collections of entire journals and sell access to these collections. Second party electronic journal databases are different from other databases because in a second party electronic journal database, the entire journal is collected, as opposed to a full text database like "Academic Search Elite", where all, some, or none of any given journal may be included. Examples of second party electronic journal databases include:

1. JSTOR [3], which specializes in making back issues of a wide variety of humanities and social science journals available electronically;
2. Ingenta [4], the most appreciated journal portal, facilitates users to read, print, and email articles from 4,500 electronic journals from 140 publishers. Ingenta is the world's largest website

for the search and delivery of research articles and it offers access to article summaries from over 25,000 publications linked to the full text of over 5,200 titles. Full text access is set from over 170 publisher partners, but typically individual subscribers, or individuals within institutions that subscribe, can access the full text of their publications for free. For libraries and information professionals, Ingenta provides an extensive range of free and customized online services, from enabling authenticated campus-wide access to subscribed full text articles to creating branded library gateways incorporating management tools and deposit account facilities; 3. ProjectMUSE [5], which provides electronic access to journals in the fields of literature and criticism, history, the visual and performing arts; cultural studies, education, political science, gender studies, and many others; 4. Emerald Library [6], which contains over 140 electronic journal titles with full text articles published since 1994; 5. CatchWord [7], which provides access to hundreds of journals from approximately 44 publishers.

In India, J-Gate of M/s. Informatics Ltd. [8], is the best example for an E-journal gateway. The mission of J-Gate is to provide an e-content and e-commerce gateway for academic, research and corporate libraries in India to subscribe, access and manage their electronic journals. The vision for J-Gate is to act as:

- An electronic aggregator for several thousand scientific journals
- A common access and search interface for all the journals a library subscribes to
- An insured and dependable journal archive source for the libraries
- A large database for journal literature available, possibly free, to all Indian scientists, scholars, students and professionals for browsing table-of-content and abstracts
- An online e-journal subscription agent
- An online host for Indian journals

J-Gate is being implemented in a phased manner. Following are some of the features J-Gate will support when fully implemented:

- Browse and search a directory of e-journals
- Select a journal title in the directory and access TOCs and full text articles, from the Informatics journals archive or from the publisher's web site
- Search a bibliographic database of articles and access the full text from the Informatics archive or from the publisher's site
- Support archiving needs of clients for their e-journals
- Support online subscription, renewals and payment processing
- Support Indian journal publishers to host their journals
- Support copyright cleared article delivery to our subscribers for journals they do not subscribe.

Another category is aggregators. Aggregators use to buy the copyright of the journals in bulk and provide access to the journals through a single interface. Examples of aggregators include EBSCO Online [9] and PROQUEST [10]. EBSCO's Business Source Premier and Academic Search Elite are very popular services which attempt to provide management tools for full-text electronic journals. PROQUEST's ABI/Inform is yet another popular full-text journals service. There are advantages as well as drawbacks in each case. In the case of electronic journals, either sourced directly from the publisher or through a second party, the users have the advantage of accessing the journals direct. The disadvantage is that in the electronic journal services, search facilities are kept at a low profile. Whereas in the aggregated services, search facilities are fairly high, with low priority for content layout, get up etc.

THE GROWING PROMINENCE OF E-JOURNALS AND THE SWINGING PRICING MODELS

For want of brevity and focus, this paper will concentrate on the issues of "E-journals" and aggregated scholarly literature, primarily and originally appearing in E-journals. About 10 years

ago when Electronic Journals first appeared the publishers didn't know how to sell them, nor librarians knew how to handle them. The technology scenario prevailing those days were entirely different too. Technology kept advancing and after 10 years, today the e-journals are sold as hot cakes in the developed world. The trends in the developing world also are equally encouraging, especially in India. This fast change in mindset has taken many publishers by surprise. Earlier, negotiations that involved expanded access to electronic text usually began with print subscriptions as the bottom line of the deal. During the past couple of years, especially in the West, a number of consortia demanded that print and online be negotiated separately. They wanted online access at the core of pricing negotiations because their users clearly preferred online. They wanted an online-plus-print model, rather than print-plus-online. This is called "flip pricing" [11]. As a model, flip pricing is not new. Academic Press introduced the concept with its first e-journal package. Few publishers adopted that model, however, and most libraries have continued to receive print and online more or less as a package deal. This has resulted as a real blessing to the Indian libraries. The reflections of the flip pricing has started crystallizing of late and most of the leading publishers have started offering flip price models to Indian libraries too, mostly under the consortia banner.

The evolution of the deeply discounted prices (DDP) model is yet another significant development in the journals pricing front in the recent past. As DDP has evolved, three models have emerged that govern the relationship between agents and publishers. First, the publisher requires the customer to place electronic orders directly with them; with the second version, customers may place their orders with agent or publisher, but customers are given an incentive to deal direct; and in the third scenario, customers are free to order either way.

In 2000, 75% of publishers offered online free with print, with the rest charging extra for online. But every year, publishers change their mind on this one issue, and last year the pendulum

seemed to be swinging back in favor of charging extra for online with a print subscription. Of the 7,623 e-journals with set prices in EBSCO's reserve, 61% were offered free with a print subscription for this year (2001). The majority of major publishers still offer online "free" with print as a rule. The list includes Cambridge University Press, Elsevier, Emerald, Oxford, Routledge, Sage, Springer Verlag, and Taylor & Francis. Blackwell Science charges extra, but the other Blackwell imprints do not. University presses are split. Duke, Indiana, Johns Hopkins, and Penn State, charge; MIT, Chicago, and California do not. Society presses are also split, but the majority appear to charge for online with print. The list of STM publishers that charge extra include giants such as Academic, Wiley, Kluwer, Dekker, Nature, Plenum, and S. Karger.

COPYRIGHT AND IPR ISSUES

Issues of copyright, intellectual property, and fair use are important to libraries, but librarians are struggling to make sense of all the issues in the new Digital Age [12]. We need to learn a lot about the "tricks of the trade" so that our hands are not burnt in the process. The number of accessible electronic journals are fast growing steadily. Studies are in progress the world over towards determining the trends in copyright policies among scholarly electronic journals. There are a number of issues which the Librarian should be highly careful while entering into digital subscriptions. Catches can come in multiple forms with the vague yet meticulously manipulated term "licensing". The audit and accounts are to be amply briefed about the problems and features of digital subscriptions. Proper measures and back-up agreements are to be ensured from the publishers/vendors.

In the case of free electronic journals, according to literature, the policies are found to be quite generous in the area of fair use and encourage sharing of information. Some of the salient features of copyright issues of a select set of freely accessible electronic journals are as follows: (1) copyright policies are informal, (2) policies are common to print and electronic titles, (3) contributing

authors generally retain copyright, (4) noncommercial uses permitted include browsing, printing personal copies, and downloading, and (5) republishing is not permitted. Several of these journals address library use.

ACCESS RELATED ISSUES

Access to E-Journals could be arranged from the respective publishers against UserID/Password or through IP authentication. For a wider audience, IP based access is mostly preferred, as the users need not have to bother about the UserID and Password every time. A useful alternative is to provide the UserID/Password in the library's portal / website so that users can pick them up during usage, and over a period of time, they also by-heart them. Libraries need to take care of the 'site license' aspects of content access, as some publishers lay stringent rules on this, making the life of the Librarian miserable. Before jumping into such services, the Librarian should ensure necessary Internet bandwidth also, failing which complaints will pile up, resulting in a growing aversion against the electronic services in general. For full-text access to E-Journals and datasets published online, usually non-exclusive, non-transferable right and licenses are provided by the publishers. Unlimited access is provided to Tables of Contents, article abstracts, chapter summaries and websites for other Electronic Products.

Another important aspect is the local administration of access management by the users. Users are to be properly oriented towards effective and efficient use of the Net as well as the journal sites. Unnecessary and unscrupulous hits, revisits and downloads can result in frequent choking of the Net connectivity, posing unwanted problems to the entire user community on campus, and also to LAN/Net system administration.

THE IIM CONSORTIA EXPERIENCE

The year 2000 was a landmark in the history of IIMs, with the formation of the IIM Consortia. IIMK took leadership in the formation of the IIM Consortia, and had the first meeting in Calicut.

The objective was to ensure among the IIMs, optimum utilization and enhancement of the resources, and to minimise the expenditure by consortia based subscriptions to the commonly subscribed databases and journals. The idea was to approach publishers of CD-ROM Databases to begin with, as a consortia, for better pricing and services. Eventually, other digital databases and journals were also planned to be covered by the programme. The meetings were proved to be very productive and successful. During the first meeting itself, a host of databases were jointly purchased at very competitive prices, and a number of others promised supply of their products at a nominal cost.

In the case of journals, all the six IIMs put together subscribes to over 2550 scholarly titles of which around 1200 are duplications (overlapping titles). Among these, 33 titles are being subscribed to by all the IIMs. Having convinced on the dire need for a journals consortia, major publishers such as Elsevier [13], Kluwer [14], Wiley [15], Blackwell [16] and MCB University Press were approached and they all represented in the second meet which was held at IIM Bangalore in 2001. The end result has been highly praiseworthy, that over 740 E-journals IIMs are able to get online access, across all the IIMs, by paying a nominal additional amount. The table below shows the salient features of the digital subscriptions at IIMK based on the IIM Consortia.

In the above table, the titles mentioned in column no.3 are the total number of print subscriptions from the respective publishers, made by all the IIMs, except the MCB University Press. The access fee to their electronic counterpart are worked out with the condition that all the IIMs shall retain their existing print subscriptions. In summary, 5% to 10% extra charges are only levied over and above the print subscription costs, for the electronic access, across all the titles. In the process, individually each IIM has a great saving while there is a substantial increase in the information resource base. This is a classic example of the flip pricing where libraries get the real benefit of both consortia and technology infrastructure. For example, the Internet connectivity and the broad bandwidth are

Table 1 : Features of the IIM Journals Consortia

Name of the Publisher	Web Site Address	No. of Titles accessed by IIMK	No. of print subscriptions by IIMK	Cost of the total titles Accessed	Cost paid by IIMK under the Consortia
Blackwell Publishers	www.blackwellpublishing.co	268	17	US\$ 149700.00 Rs. 76,49,670.00	US\$ 2495.00 Rs. 1,27,494.50
Elsevier Science (Science Direct)	www.sciencedirect.com/web-editions	240	16	US\$ 216430.00 Rs. 1,10,37,930.00	US\$ 3607.16 Rs. 1,83,965.16
Kluwer Academic Publishers	www.kluweronline.Com	33	4	Euro \$ 24,753.00 Rs. 10,47,299.40	Euro \$ 412.50 (Rs. 17,453.00)
MCB University Press (Emerald Library)	www.emeraldinsight.com/ft	140	2	£11,999.00 Rs. 8,39,930.00	£1,650.00 Rs. 1,14,658.50
John Wiley & Sons, Inc.	www.wiley.com	60	5	US\$ 78110.85 Rs. 39,05,542.50	US\$ 1302.00 Rs. 67183.00

the prerequisites for this kind of a service delivery. Since all IIMs go together, the strength attracts the publishers to listen to our demands.

The MCB Press (Emerald Full-text Library) did the calculations in a different way, and they came out with a consortia model for the Indian higher learning institutions such as IITs and IIMs. In India, the Emerald Consortia is coordinated by M/s. Balani Infotech, New Delhi.

ELECTRONIC JOURNAL AGGREGATION PREFERENCES

The Libraries prefer a subject interface that permits the use of both a controlled vocabulary and keywords to search the full-text contents of electronic journals without giving up the ability to browse the contents of individual issues. It favors the following models of access:

- Web-based indexing and abstracting services linked to full-text electronic journals, e.g., Institute for Scientific Information's (ISI) [17] ability in the near future to link between SCI/SSCI/AHCI and the contents of full-text journals.
- Aggregated databases composed of a variety of media, e.g., newspapers, newsletters, government reports, monographs, reference works, etc., e.g., Business Source Premier, Academic Search Elite, Academic Universe, ProQuest Direct etc.
- Aggregated collections of journals published by a variety of publishers but sharing a common searching interface, e.g., J-Gate or J-Stor.
- Aggregated collections of journals published by a single publisher but sharing a common searching interface, e.g., Project Muse, Emerald Library etc.

CONCLUSION

It is becoming undoubtedly clear that the digital subscriptions are increasing in geometric proportions the world over, as technology gets absorbed by the library fraternity, and as digital materials

dominate the domain of the information space. The comparatively reduced / affordable cost of the digital information as against their print counterparts give yet another boost to libraries to jump into the bandwagon, though there are a host of catches in the reserve. The user awareness coupled with the unprecedented demand-pull will even otherwise certainly compel librarians and the management to opt for more digital subscriptions in the coming years. Librarians may also feel proud that they are catching up with the trends in technology, by going digital. At the same token, it would be appreciated if licenses provide the libraries with permanent rights to the content that has been paid for. Publishers should permit "fair use" of the information, understood to mean to include the same sorts of curricular and research purposes that have been pursued with the print materials. They should allow the libraries to enhance the use of the data to make it more visible or convenient as needed. Provisions should be there to allow reciprocal rights to terminate the license agreements.

REFERENCES

1. Terry, Ana Arias (2000). *How today's technology affects libraries' collection choices*. Computers in Libraries Vol. 20, No. 6, pp. 51-55.
2. World Wide Web Virtual Library- Electronic Journals : www.edoc.com/ejournal
3. JSTOR : www.jstor.org
4. Ingenta : www.ingenta.com
5. ProjectMUSE : muse.jhu.edu
6. Emerald Library : www.emeraldinsight.com/ft
7. CatchWord : www.catchword.com
8. J-Gate : j-gate.informindia.com
9. EBSCO Publishing : www.epnet.com
10. Proquest Information & Learning : www.umi.com
11. Orsdel, Lee Van; Born, Kathleen, *Doing the Digital Flip*. Library Journal (2002) Vol. 127 Issue 7, pp.51-55.
12. Pavliscak, Pamela (1996). *Trends in copyright practices of scholarly electronic journals*. Serials Review 22 (3): 39-47.

13. Elsevier Science Direct : www.sciencedirect.com/web-editions
14. Kluwer Academic Publishing : www.kluweronline.com
15. John Wiley & Sons : www.wiley.com
16. Blackwell Scientific Publishing: www.blackwellpublishing.co
17. Institute for Scientific Information: www.isinet.com