

THE CHANGING ECONOMIC ENVIRONMENT

ACCESS VS OWNERSHIP: ACCESS WHERE?, OWN WHAT? - A CORPORATE VIEW

Roger Brown

Paper presented at the 18th UKSG Annual Conference, Exeter, April 1995

Introduction

I am purporting to represent the corporate library viewpoint but, as I am sure you will appreciate, libraries in the corporate sector are varied and highly specialised and to represent all their views would be an impossibility. Therefore, I will draw on my experiences within SmithKline Beecham Information Management Department, as an example of this type of corporate library.

SmithKline Beecham (SB) is one of the world's leading healthcare companies. Its principal activities include the discovery, manufacture and marketing of pharmaceuticals, over-the-counter (OTC) medicines and health-related consumer brands, and clinical and laboratory testing. These activities are grouped into three business sectors, Pharmaceuticals, Consumer Brands and Clinical Laboratories, which rank amongst the world's leaders in their industries. The Company's transnational status is reflected in the 130 countries in which we sell over 300 branded products, with 54,000+ employees world-wide, and the pharmaceutical sector, in which I work, has 90 sites world-wide, with currently six R&D sites in the UK, and two in the USA.

15% of pharmaceutical sales are invested back into R&D. This continued investment is the lifeblood on which the future of the Company depends. It is estimated that it costs £150m spread over the 10 years that it takes on average to bring a successful drug to the market. The sums of money are large and so is the risk to the Company, for 90% of the compounds, that start in development at year one, will fail to reach the market for one reason or another.

Within R&D the Information Management Department operates transnationally with major units in the UK and the USA. The libraries are part of Scientific Information. We have 6 libraries in the UK, and 2 in the US. Over 5,000 R&D staff are supported by this network of libraries. By the end of next year most of our UK R&D activity will have been consolidated on our site at Harlow, which is currently being expanded. Included in the development is a new Information Resources Centre for the enlarged site.

*Roger Brown is Senior Librarian,
SmithKline Beecham
Pharmaceuticals, Brockham Park,
Betchworth, Surrey*

Customer needs and expectations

Speed of information delivery is ever more important. Our customers are rightly becoming more demanding, requiring good quality information, quickly and increasingly in an electronic format. Parts of our service are under considerable pressure to provide information quickly to their customers. Up to 50% of requests can be urgent, being required to a deadline of between 'now' and 'tomorrow'. In our industry 'Time is money' was never more appropriate. Many individuals in academic or public libraries may not identify with the same customer needs for urgent information that librarians in the corporate environment experience.

Whatever the type of library, however, common to all are a clearly defined subject area, a known customer base and the requirement to support and contribute to the goals of the parent organisation. This last point is the most important of all. If the library does not understand and does not work towards the same goals as the parent organisation, then that library risks becoming increasingly irrelevant to the parent organisation, with the resulting consequences of lost budget, staff and overall credibility.

Within my organisation, we are fortunate that we have considerable support from the Chairman down. This support is not automatic. It has had to be earned by showing that we are responsive to the Company's needs and are providing as good a service as it is possible to achieve given the resources available to us. Service level agreements ensure that our services are timely, of high quality and meet the expectations of the user community. If service levels are not met then we have escalation procedures which help us to identify the process failure and rapidly correct it.

Technology change

I would now like to take you on a journey. The place is one of SB's R&D libraries some time in the future. It is first thing in the morning.

A member of library staff switches on their PC. They go into the library requesting system to process the requests entered by customers from their home PCs or laptops, at the end of the previous day or overnight. The requested titles

are matched automatically against various holdings lists. The first match is against the titles on the ADONIS discs held in the library, and a file is sent to the ADONIS workstation. Another file is sent to the BLDSC via ARTTel. Using title matching software connected to their journal receipt system, the BLDSC will report back electronically on those that they cannot supply immediately. These are sent electronically to UnCover. Meanwhile the ADONIS workstation has been sending digitised images of the requested documents directly to the requester's PC. UnCover documents also start to arrive via the Internet from their scanned image database and are delivered automatically to the requester's PC. Using spare bandwidth on an orbiting communications satellite the BLDSC starts to send a file of documents that is picked up by our communications dish, processed by a library PC, and again delivered directly to the requester's PC. By 11.00am the requester has received all the documents ordered, perhaps, only three hours before. They start to select key passages from the documents and are planning tomorrow's research on the strength of the information obtained.

Is this so very far away? I think not. Many elements are already in place. Others are technically feasible, but not yet commercially available.

I would like to take that scenario again and examine some of the processes and implications. There are many questions to which we do not yet have answers. Where is the printed journal? What about costs? What about copyright? I do not pretend to be able to offer all of the answers but I do know that we are moving rapidly towards such a scenario.

Firstly let us start with our customer, the research scientist. In my example particular pieces of information were requested that were known to have been published. The future virtual library copes well in my example but it is not the only information need of the scientist. They want a journal collection in which to browse. This is not easily achieved with an electronic substitute. If the scientist cannot browse, then it is less likely that serendipity, that chance discovery, will occur; and it is accepted that serendipity can be the mechanism by which research advances. The scientist also needs a good

book collection. Book collections are ranked by our customers only just behind provision of a good journal collection. Whereas it is reasonably easy to foresee the day when all journal articles will be available electronically, the same cannot be said for books.

The next step in my scenario was the electronic request to the library and the system for handling such requests. We introduced such a system to our customers two years ago and we now receive all library requests electronically. Paper request forms are no longer handled.

Recently, a new Windows-based current awareness service for our R&D customers was launched, which allows them to select key words and rank these according to their relative importance. The search is then carried out on a database licensed from ISI (the Institute for Scientific Information - publishers of *Current Contents*). Through ranking the key words, the documents that are most relevant to the customer float to the top of the list. Depending on the number of hits, the customer can choose to view the whole list or just the most relevant references. Each week the database is updated and the customer can then easily transfer records from this database into the library requesting system, with no re-keying of information required. A few of the many advantages of this system are:

- no delay in customer seeing a reference they want, and that request coming through to the library;
- the quality of information transferred from the ISI data is far better than when customers key in request citations themselves.

One downside, as far as the library staff are concerned, is that this new service now alerts our scientists to published information two weeks earlier than any paper current awareness service. This has resulted in extra pressures on document delivery as we hunt down newly published documents, perhaps only days after publication: a good example of how customer expectations increase as the quality of service improves. The scientists do not know, and do not care, that it takes 2-6 weeks to ship a journal from the United States. They know that the item has been published and they want it now!

The electronic requesting of articles from the BLDSC via ARTTel is something we have been

doing for many years, and we continue to be involved in the development of this service with the BLDSC. Although not presently available, the transmission of documents back to us by satellite is something of which we have experience, having taken part in a trial with British Aerospace and BLDSC a few years ago. We know, therefore, that the technology works, but unfortunately the sponsors of the trial could see no likelihood of a commercial product and the project came to a halt. However, the BLDSC is involved in other initiatives such as Group IV fax and the EDIL project.

UnCover is the next player in my scenario. This is again an area where we have experience, being the first registered European customers of the UnCover Service, following the lead taken by our US library in Philadelphia. At present, searching the UnCover database can be cumbersome and time consuming but it is a relatively new service and is being continually developed and enhanced. With the developments in title-matching software it is not too difficult to foresee the day when item identification in UnCover is an entirely automated procedure.

At present the receipt of items from UnCover is by fax and this can be to the requester's fax machine rather than the library's. As I said earlier, however, it is to the scientist's PC that the document needs to be delivered, not to the laboratory secretary's fax machine. UnCover is making progress here with a small proportion of items being held as digitised images from which fax copies are transmitted. It ought to be a small step from here to delivering the scanned image itself. We have also been following the progress of projects such as Right Pages, Ariel and the more local developments at De Montfort University with their virtual library project.

So my scenario ends with the requester reviewing the information supplied. The requests were not particularly urgent or rush. Gone are the days when some requests sat for perhaps weeks, or even months, with a supplier whilst we waited for their copy to be available. That is simply not good enough. Our company initials 'SB' are also the initials of a "simply better" philosophy that encompasses continuous improvement and process improvement in everything that we do. If a process can be

improved, it should be. If time cycles can be shortened, they should be. If a document can be obtained within hours, it should be (as long as costs are not extortionate).

The suppliers or vendors that I quoted in my scenario are just examples of those of which we have knowledge or experience. They are not the only suppliers in their respective fields, and we are not necessarily tied to any or all of them. We will evaluate any service that has the potential to offer what we want, in the time that we want it, and at a competitive cost.

Budgets

Where are the funds going to come from to provide the types of services which I have just described? Budgets are a problem even for pharmaceutical companies. The industry watchers amongst you will no doubt be aware of the pressures now being applied on the pharmaceutical industry, with health reform programmes, restricted lists and generic substitution all creating a new type of industry. Familiar names in the UK, such as Wellcome and Fisons, have been affected by these changes very recently.

For us, in Information Management, it means that gone forever are the years of 10-20% budget increases to cope with similar increases in journal prices. In recent years increases in line with inflation, or below, have become the norm. The result of this pressure on budgets has been to make us put even greater emphasis on ensuring that every pound spent gives good value for money, and that we provide better services at lower cost. There is no doubt that we, in SB, have achieved this over the 5 years since the creation of SmithKline Beecham. Negotiations with suppliers to establish service contracts and service level agreements have resulted in improved service at lower cost but this is just part of the picture. We have also needed to prioritise our budget in order to protect the key areas and to support the access to information policy, moving away from providing collections: the so-called 'just in time' rather than 'just in case' strategy.

CD-ROM collections continue to be developed. They are the technology of the present, whether stand-alone or networked. The future for CD-

ROM is perhaps less certain, with access to the same information now possible via local network servers, or the Internet. Overall, the costs for accessing the information currently held on CD-ROM is likely to increase. Expenditure on books is expected to remain about the same.

Document delivery costs have increased through increased volume of requests and more use of premium services, such as delivery by fax. This trend will undoubtedly continue. With these two items increasing, the only one expected to fall is expenditure on journal subscriptions. It is not the total expenditure on journal information that is decreasing. Funds are being moved between the ways that this information is delivered. As long as publishers can develop services and alliances with other publishers, or suppliers, to provide access to refereed articles for libraries, or individual requesters, I do not see any reason for there to be a dramatic falling off in revenues for publishers.

How will we achieve the reduction in journal subscription expenditure and over what timespan?

Annual journal surveys are carried out at all of our sites. Groups of scientists are asked to rate journals held in the library as essential, useful or of no use. Over the last three years we have reduced collections to contain only those journals that are rated as essential. In a few cases, due to cost or availability elsewhere within SB, some of these essential titles have been cancelled. This trend is likely to continue with even more critical reviews taking place each year. Reliance on the availability of a title from a commercial document supplier, as an alternative to holding the title in-house, is certainly gaining momentum, as a result of increased journal subscription costs and improved access to documents from external suppliers.

Here, therefore, is the source of our increased spending on CD-ROM and document supply. I would estimate that 20% of our expenditure on journals has been switched to these other categories in the last three years, and that at this rate, we will be spending more on document supply than journal subscriptions within five years.

We are not in the business of building collections for posterity. Each of our titles has to

prove its worth. There are costs involved in acquiring, storing and managing journal collections that are poorly understood by most libraries. We have attempted to derive an algorithm showing the various cost and service implications of maintaining journal collections and then comparing these with the alternative of acquiring documents as and when required from document suppliers. I think it is fair to say that, at present, this is an inexact science, where more research is required.

The future for SB

We will be opening a new Information Resources Centre at our Harlow site at the end of next year. This new 700m² centre is in the middle of a £200m research complex for 700 scientists on a site that will eventually be home for 2,000 R&D staff. We have been presented with a great opportunity to establish a centre of excellence for information provision, making the best use of existing technologies but attempting also to create a facility that will serve our scientists well into the next century.

The philosophy that has driven our planning strategy includes:

- delivery of services to the scientist's desktop PC wherever practical;
- support of the 'learning organisation' by provision of open learning, multimedia and CD-ROM facilities;
- generous provision of open access PCs and docking stations to allow access to library services from the library facility, and for visitors to the site;
- reduced allocation of space for back-run journal storage, with limited runs of core journals only;

- provision of study areas for customers,
- enough flexibility to allow future change of use, e.g. storage areas capable of being converted easily to technology areas.

You can see from this that electronic information is the key. With few exceptions, we expect in future to be able to deliver all the information that research scientists need for their work, directly to their desk-top PC. The information/library staff's role will be in selecting the sources for that information, facilitating the access to the information and, if necessary, analysing the information before delivery to the scientist.

The one key feature not yet in place is the publisher's role. A few publishers seem to have grasped the concept and are working towards an electronic future. Others are reluctant, perhaps fearful for their future. Publishers need to be more innovative, forward-looking, prepared to test more ideas, more open with their customers. They need to allow access to their internal databases and create new packages of information. We have worked with publishers on new products in the past and would be happy to do so in future. I am sure that many other libraries would also be prepared to help in this way. We are not in competition. We are all part of the same information chain. In SB we look forward to working more closely with publishers, and others, to bring about such developments.

[Footnote: I would like to acknowledge the assistance of my colleagues within SB in the preparation of this paper, most especially to my colleague in the US, Arlene Smith. Arlene and I have collaborated on previous presentations in the US and UK, and some of the content and figures from previous presentations have been incorporated into this paper.]