

## **Interactive Information**

### **CD-ROM Panel — CD-ROM: A Publisher's View**

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I was delighted to be invited to speak today because of the opportunity it provides to review the role which CD-ROM now plays in Chadwyck-Healey's publishing. CD-ROM has grown rapidly in importance for us over the last year and has occupied much of my time and that of several colleagues, and now seems an ideal moment to appraise its value to us as a publisher and the use we will make of it in the future.

Our involvement with CD-ROM goes back some time, however. Chadwyck-Healey registered a company in the name of CD-ROM Ltd back in 1985, when the medium was first emerging; this has recently become a fully active company, now known as CD-ROM Consultants Ltd, which is providing the Chadwyck-Healey group with data preparation and pre-mastering services.

We actually began to promote CD-ROMs in 1987, starting with Supermap, the US Census on CD-ROM, which was produced by an Australian company, Space-Time Research. It would be fair to say that initially sales were very slow, as few of our customers, even in the USA, had suitable equipment and they were not prepared to invest in it until a wider range of publications was available on CD-ROM. In many ways the market for CD-ROM in 1987 resembled that for microforms twenty or more years earlier, with a lack of equipment and a certain suspicion of the medium holding up widespread acceptance - and sales.

It was in the middle of last year that sales of CD-ROM publications really began to take off for us, and, I suspect, for most other publishers. In the UK several important databases became available on CD-ROM - for example, BNB from The British Library and UKOP, the Catalogue of United Kingdom Official Publications, from ourselves and HMSO. Along with Whitaker's Bookbank these

gave many librarians a reason to acquire CD-ROM equipment. We know that UKOP was the first CD-ROM publication acquired by a number of university and special libraries in Britain. We also launched the British Library General Catalogue and the French National Bibliography on CD-ROM and orders for these and our other publications grew quickly.

The list of CD-ROM publications available from Chadwyck-Healey is now quite long and varied and I am showing it here (Appendix A) not so much as an advertisement for the products but to illustrate the variety of databases now available.

As you might expect from Chadwyck-Healey many of them are bibliographic publications including four national bibliographies, a "national bibliography" of official publications and the great historic catalogue of The British Library. But there are also full-text databases like our US patents database, FullText, reference works like Le Robert Electronique, statistical databases with maps like Supermap and the world digital Zap database, MundoCart/CD.

We are also preparing indexes on CD-ROM to several of our microform publications, to enhance access to them by researchers and even to provide linkages between them.

Our involvement with such a variety of databases for a variety of users in many countries has given us, I believe, a unique insight into the current market for CD-ROM publications and considerable experience in their development and production.

You might ask, however, why we have embraced this new medium so wholeheartedly. Why do we ask you to buy expensive hardware in order to be able to use some of our publications?

There are several answers:

### **1. Advantages over Microform and Paper**

We specialise in reference publishing and in large research publications which bring together information from a wide range of sources. CD-ROM is ideal for catalogues and bibliographies and for large databases because of its storage capacity and the extra access it provides.

This does not mean that we will abandon publishing in print and microform, but some publications which would have appeared on paper or fiche will now appear on CD-ROM.

### **2. Advantages Over Online**

The arguments for supplying information on CD-ROM rather than online have been rehearsed many times and I do not intend to go into them again now. In general they are not relevant to our CD-ROM publications, most of which are new databases and have never been available online.

I know that there is considerable interest at present in making databases available via JANET or similar networks, thereby providing wide access at a potentially lower price than commercial online services charge. Arguments in favour of this method of distributing information ignore, however, two aspects of our publishing.

The first is its specialisation. Some of our publications, including some of those on CD-ROM, have a relatively limited market. It is simply not cost-effective to mount a database on a mainframe if it will be used by relatively few specialists; it makes more sense for those specialists to buy that database on CD-ROM.

The second is its internationalism. We sell our publications in almost every part of the world; CD-ROM, being distributable, allows us to do so effectively in a way which could not be achieved with an online database. We can as easily supply one CD-ROM to 100 countries as 100 CD-ROMs to one country.

### **3. Unique Qualities of CD-ROM**

Thirdly, CD-ROM allows us to create products which would be impossible in any other medium. I am thinking here particularly of our Supermap products. These combine enormous statistical databases with map data and software which enables users to analyse and manipulate data and present the results graphically.

We are planning more products which take advantages of CD-ROM in this way and I am sure that other publishers are doing the same.

At this point I would like to look at the costs of producing a CD-ROM publication. I had, in fact, intended to show you a piechart of one of our publications to illustrate the balance of the production costs, but the closer I looked the clearer it became that they varied enormously and that no one publication would be representative.

In the development of any CD-ROM publication there are two main elements (Appendix B): the data to go on the disc and the software to retrieve it; the actual production of the discs, whilst not insignificant, particularly on a frequently published subscription title, will usually be third in importance.

The cost of the data will largely depend on whether you, the publisher, are the owner of that data and whether it is in machine-readable form; the cost of the software will, to a large extent, depend on its quality, and the software you choose will depend on the nature and complexity of the database you wish to publish.

Let me take two examples, UKOP and the British Library General Catalogue, the one priced at £800 per year, the other at £9,000 for a one-time purchase.

UKOP is jointly published by ourselves and HMSO. The databases it contains belong to us and HMSO. The only data costs, therefore, were those incurred in preparing the data for publication on CD-ROM, essentially some cleaning up of the data.

The principal cost element in UKOP is therefore the retrieval software. After carefully surveying the different softwares available we chose OptiWare, produced by Online Computer Systems. We felt it to be by some way the best available for the UKOP database. It has also been used for BNB on CD-ROM, as well as the national bibliographies of France and Germany. A certain amount of customization was required to provide easy access to what is a quite complex database.

The same basic software was later chosen for the British Library General Catalogue, as this is a similarly complex bibliographic database. Again, a considerable number of enhancements have been made to it to deal with some of the idiosyncrasies of the Catalogue.

As with UKOP, the retrieval software is a significant cost in the production of the CD-ROM but of equal or greater significance is the cost of converting the 360-volume printed Catalogue to machine-readable form, some of which needs to be recovered through sales of the CD-ROM.

For neither of these publications have I mentioned the costs of marketing but these too must be taken into account as, for us and, I imagine, for other publishers like us, they have so far been substantial in relation to the number of sales and in relation to the costs of marketing microform and printed publications.

The reason is quite simple: until recently we and other publishers have been trying to promote not only our publications on CD-ROM but the whole concept of publications on CD-ROM. Much time and money have been invested in persuading you that CD-ROM is a viable and effective medium for storing and accessing information in libraries.

Judging by the orders we are receiving for UKOP and the British Library General Catalogue the UK market for CD-ROM publications has developed considerably in the last year. Most, though not all university and polytechnic libraries now have CD-ROM equipment in their public reading areas; none, however, have sufficient. I know that at least one librarian in this room has not yet ordered UKOP because of a lack of equipment.

Public libraries are also now installing hardware, though few have yet acquired any for their users; the use of CD-ROMs in public libraries is almost wholly confined to bibliographic services. The installation of CD-ROM hardware in the reference area of public libraries will be, I believe, an important step in the development of the market in the UK.

Overseas, the picture is varied. In general, in countries in which library automation is widespread there has been a reasonably quick adoption of CD-ROM. In other countries it has been slower. Much depends on the availability on CD-ROM of a publication of national importance such as a national bibliography.

Much, too, depends on the attitude of central government to library funding and new technology.

The French Ministry of Education has installed 600 CD-ROM drives in schools; the Spanish Ministry of Culture has placed a large order for drives to give to libraries. Oh that our own government were similarly far-sighted!

Finally, I would like to address the somewhat vexed issues of supplying CD-ROM subscription publications on licence only; of returning superseded discs; and of networking CD-ROMs. On these issues I can only speak for Chadwyck-Healey. I would be interested to hear the views of other publishers and librarians.

On the first issue: on all our subscription publications but one if your subscription lapses you still keep the final disc. (The only exception is the French national bibliography; it is a condition imposed by the Bibliotheque Nationale and we are trying to persuade it to drop it.) All libraries are forced at some time to cancel or suspend subscriptions and we do not believe they should then lose all the information they have acquired; otherwise one of the main advantages of CD-ROM over online is lost.

On the second issue: our current policy requires customers to return one disc on receipt of an update; we offer very generous discounts on orders for extra copies so that multi-site libraries can have up-to-date discs wherever they are needed.

On the third issue our policies vary. For example, we permit customers to network the British Library General Catalogue as much as they like within a single site - within a library building or between libraries or even departments on a university campus. In general we would not restrict the networking of any of our CD-ROM publications within a single building, provided that our partners on any particular project have no objections. We would expect to develop our networking policies in conjunction with our customers, as they develop their CD-ROM networking capabilities.

Indeed, our whole approach to CD-ROM publishing will develop as our markets develop and I hope that, through meetings like this, we will be able to continue a fruitful dialogue with our customers. □

## **Appendix - A -**

### **CD-ROMs published, co-published and distributed by Chadwyck-Healey companies, April 1990**

British Library General Catalogue of Printed Books to 1975  
BNB On CD-ROM  
Bibliographie Nationale Française depuis 1975  
Deutsche Bibliographie aktuell  
Spanish National Bibliography (forthcoming)  
UKOP (Catalogue of United Kingdom Official Publications)  
GAO (US General Accounting Office Masterfile 1976+)  
Myriade (Le Catalogue National des Publications en Série)  
Documentation Française  
International Register of Microform Masters (forthcoming)  
APS    Automated Patent Searching  
        FullText  
        ClaimSearch  
Le Robert Electronique  
Supermap US Census 1980  
Small Area Statistics 1981 (England, Scotland and Wales) (forthcoming)  
Australian, New Zealand and Hong Kong Censuses also available  
MundoCart/CD

## **Appendix - B -**

### **CD-ROM Publishing Costs**

1. Data	Acquisition Royalties Preparation Conversion
2. Software	Development Customization Licence Royalties/Fee
3. Disc Production	PreMastering Mastering Pressing
4. Documentation	Manual Supporting Literature
5. Packaging	
6. Customer Support	
7. Marketing	