

# Treading the Grapes at UKSG — The CD-ROM Experience

John Urquhart,  
Newcastle University

## Is There A Bar To Progress?

Over 30 people congregated in the bar at the annual UKSG conference for an informal meeting on networking CD-ROM. First we asked who was doing it. The following institutions are actively engaged: Charing Cross Medical School; Bristol, Lancaster and South Bank Poly; Bradford CTC; and the Universities of Bath, Birmingham, Bradford, Manchester (UMIST) and Sussex. But the present leaders seem to be Erasmus University in Holland and the University of Limerick and the latter's representative issued an open invitation to witness their 100 PC, 32 disk drive configuration - which users can't get enough of - it's a small world.

Not present at the christening was Tony Sean, who earlier in conference had, to a largely hostile audience, delivered a passionate denunciation of CD-ROM and all its works, echoing his and Derek Law's notorious article in the November 1990 issue of L.A.R.: Is CD-ROM A Transient Technology?<sup>(1)</sup>

So some cry forward and some cry back, but everyone is enjoying themselves, plunging into the vat to tread the grapes. You meet all sorts of interesting people in this CD-ROM game; usually at the end of telephone lines or via FAX machines; and discover all sorts of organisations are doing it, which you never even knew existed. But are we treading too much on each other's toes? Is CD-ROM a game, or just an orgy? There seem to be four main problem areas which we could concentrate on. The first and potentially the most disastrous is standardisation. There now appears to be general agreement on hardware, but not software. A previous paper in Serials<sup>(2)</sup> gave a table showing how six different software systems accessed just one identical product - Medline.

## The Spectre Of Diversity

Is software diversity a growing problem? I'm afraid it is. There is dramatic growth in CD-ROM products; but also a corresponding increase in software diversity: the number of software programs appears to grow at present as the two thirds power of the total number of CD-ROMs.<sup>(3)</sup>

Now SPAG has been set up to look at standards and I'm sure they will welcome additional support (contact Sally Whitaker Tel. 071 836 8911 Fax 071

836 2909). But will it be enough? As Law and McLean put it, and for once I agree with them:

"The market situation for CD-ROM is highly antithetical to the development of standards. Medline, for example is available from many competing suppliers who pitch for libraries' money either on the basis of cheapness which can mean lash-up software and little technical development or unique selling points (which by definition means no standardisation). To maximise revenue, suppliers want to sell additional files on the back of their primary products. The very last thing a supplier wants is for the customer to be able to make successive purchase decisions independently of each previous decision".

The present situation has been compared to having to sit in a new car with the instruction manual for six hours before being able to drive away. Of course, as users we would all like emulations, so that we only need to press one set of buttons, but will the users play ball? After ten years and a ten fold increase in online databases, the average number of these data-bases per host still hovers around the 6.7 mark.

My own view is that the printed book has been so successful for the last 500 years precisely because the access system became codified, partly due to the heroic work of Gutenberg, who did so much to refine and standardise existing typefaces. But until a similar character comes along in the CD-ROM world the efficient accessing of the world's knowledge via I.T. will be the victim of variety.

## Networking

Networking CD-ROM is the next topical area. Law and Sean don't think it has much of a future; "In the medium-term, CD-ROM might be useful as one element in a very-local-area-network, serving the needs of undergraduates and acting in part as an adventure playground for people taking their first steps in the serious use of information. But the gut feeling of the authors is that in the long-term (5-10 years in this context) it is destined for the oblivion

## CD-Rom Networking: Contact Addresses

Name of Institution	Contact Name	Tel. No	Fax No.
Blackwells	John Cox	0865 792792	0865 791438
BLDSC	Mike Curston	0937 546061	
Bowker Saur	Diana Grimwood Jones	071 493 5841	071 580 4089
Charing Cross Medical School	Nicky Whitsed	081 846 7152	081 846 7222
Compact Cambridge Europe	Barbara Regoski	31 206715686	
Chadwyck Healey	Duncan Christelow	0223 311479	0223 66440
HFRC Edinburgh	Michael McKeen	031 443 2727	
Huddersfield Poly	Brian Hackett	0484 422288 ex. 2043	0484 51798
Henley The Management College	Jane Graves	0491 571454	
International Union of Crystallography	Jim King	0244 345431	0244 314888
Inst. Cancer Research	Gay Davies	071 352 5946	071 352 3299
London Hospital Medical College	Paul Hockney	071 377 7608	071 377 7677
Management Library; Cranfield Inst. of Tech.	Jo Webb	0234 752726	0234 751806
Napier Poly Edinburgh	Marian Kerton	031 455 3303	
National Library of Wales	Jean Jones	0970 623816 ex. 256	
Optech	Kim Boulton	0252 714340	0252 711121
Research Publications	Janet Wood	0734 583247	0734 591325
Royal Postgrad. Med. Sch.	Liz Davies	081 740 3246	081 740 3203
Robert Gordons Inst. Tech.	C. Paterson		
St. George's Hospital Medical School	Susan Gove	081 672 9944 ex. 56063	081 767 4696
University of Birmingham	Richard Biddiscombe Michelle Shoebridge	021 414 5835	021 471 4691
University of Limerick	Lindsay Mitchell	061 333644	
University of Loughborough	Cathie Cape	0509 233070	
University of Newcastle	John Urquhart	091 222 6000	091 261 1182
University of Southampton	Glenda Davies	0703 593521	
University of Twente The Netherlands	Gerard van Marle	31 53 89 2060	31 53 35 1805
J. Whitaker & Sons Urquhart J.A. 0593 0460	Rosemary Ball 912 TTGAU TCE F2 CNCA	071 836 8911	071 836 2909

Figure 1.

of the motorised microfilm cartridge viewer and the U-Bix video player..."

They felt that online information accessed over national networks such as JANET and eventually SUPERJANET would prove to be a more enduring form of knowledge retrieval. If JANET is also extended to the commercial world then this argument is relevant to all potential planners of CD-ROM networks. There has already been an enthusiastic response to the national networking of ISI products, such as Science Citation Index and Current Contents and no doubt other mainstream data bases will be added; but with a new CD-ROM product being developed somewhere every 4 hours it is difficult to see how JANET systems would want to negotiate or carry the burgeoning variety of available texts. CD-ROM is here and now, and there is one overwhelming argument in its favour, the users love it, and networking only multiplies their desire.

So the urgent topics are how to install and run a network; what it costs to install and run, and the additional charges for networked products. *Figure 1* sets out some of the people interested or working in this area.

UKOLUG is a main player in the technology area (contact Nicky Whitsed tel. 081 846 7159 fax 081 846 7222), particularly as their experience of online should give them a balanced view of network opportunities and constraints. As for network charges is that not part of a third CD-ROM problem area - what to charge for optical products?

### Pricing Policy

Nicky Whitsed has been a great fighter for multiple copy discounts, but why should the prices fight be left to one or two intrepid librarians? Is not CD-ROM pricing a policy that affects us all, particularly in the UKSG? We already know about price rises in print.<sup>(4)</sup> On current trends an academic library, paying out £600,000 now for periodicals would have to find over £2 million in 10 years time. Now add on the cost of acquiring CD-ROMs. *Figure 2* demonstrates the problem. Where is the money going to come from? Library jobs?

Correct pricing policies are important not just for librarians but the success of the CD-ROM industry itself. Some have acclaimed this laser based technology as the biggest information breakthrough since the invention of movable type, with the implication that historically its growth and social impact will be as dramatic as that of the printed book. But was technology the key factor in the spread of printing? Or was it economic, social or even religious factors? Interesting to note that the first recorded book printed with movable type occurred in Korea in 1409<sup>(5)</sup> and yet in spite of prior invention and superior paper technology in the Far

East, the race was won by the West. Perhaps the most significant factor was the price ratio of the printed book compared with the economic cost of labour to reproduce a hand written copy. In 1450 a new manuscripted book would cost £5, equivalent to buying a motor car. By 1570 printed folio prices had dropped by a factor of 10.<sup>(6)</sup> The new merchant venturers of CD-ROM have not taken a leaf out of Gutenberg's book. Dramatic reductions in production costs are not being reflected in the price. An optical "platter" only costs two dollars to produce, similar to the run-on cost of a printed volume, but its much greater storage capacity implies that run on costs per gigabyte are two orders of magnitude lower than in hard copy. Yet CD-ROM prices are near or even above the printed version. No doubt producers see their CD-ROM versions competing with their traditional market. They have forgotten or they never knew that printing ran riot through Europe precisely because the old copying houses of Catholicism no longer held the monopoly. What if printing presses had been controlled by the state or by the Pope? Would they also have perceived a limited audience which necessitated new media prices being commensurate with the old? Who will challenge the monopoly? The first £49.95 CD-ROM published in the Ukraine will be awaited with interest, or will it be Korea again?

In the interim CD-ROM prices will have a magnifying effect on all library buying policies. So the psychology of current CD-ROM publishers is very relevant to a library analysis of future prospects, and at the moment that psychology springs from the traditional values of the commercial publisher.

### The Legacy Of CD-ROM

Even if Tony McSean has his wish and in five years time Miss CD-ROM stumbles into the garret where he's spinning another yarn and all activity is terminated, the legacy of CD-ROM cannot be ignored. Already output is equivalent to a million different new book titles. In five years time it will be more than ten million. Any would-be princely liberator of knowledge will need not just a kiss but an armoury of software languages and technical expertise. So who is worrying today about tomorrow's problems? Some librarians may see the only escape from "I am a 49 year old librarian from Basingstoke" image is to become information technologists, but librarianship still has eternal objectives which are not the priorities of information transfer. The fact that librarianship has not yet solved the 3001 problem:

- Question: What would be left of our great knowledge empire in a thousand years time if it closed down tomorrow?

## Network Charges For CD-ROM

Product	Price	Network Charges (up to 8 terminals)	Network Charges (100 terminals)
ABI/Inform	\$4,950	\$100 per terminal	negotiable
Applied Sci & Tech Index	£ 965	Free	Free
Biological Abstracts	\$2,505	£3,390	£3,390
	(print subscribers)		
BLDSC Conf Proc	£ 450	Free up to 5	negotiable
Business Periodicals Index	£ 965	Free	
CAB Abstracts	£2,625	To be announced -	
	(3 years)		
CITIS (CBA)	\$1,650	?	?
CSA Aquatic Sciences & Fisheries Abs	\$1,250	Free at present	
CSA Life Sciences	\$1,250	Free at present	
Dissertation Abstracts	\$1,659	£100 per terminal	negotiable
Econlit	\$1,760	£1,630	£1,630
Engineering Index	£2,300	?	?
	(2 years)		
Georef	£1,325	£1,990	£1,990
HELECON	£1,250	?	?
INSPEC	\$3,500	\$100 per terminal	negotiable
Math Sci Disc	£1,470	£2,200	£2,200
	(print subscribers)		
PAIS	£1,355	£2,715	negotiable
Poltox I	£ 930	Free at present	
Psyclit	£2,100	£3,145	£3,145
	(print subscribers)		
Social Sciences Index	£ 835	Free	Free
Water Resources Abstract	£ 420	?	

Chadwyck Healey also produce several CD-ROMs, nearly all of which are networked free.

Figure 2

- Answer: A few clay tablets in the middle of Iraq is no excuse. The new optical substrates now offer an extremely long term perspective for recorded knowledge. The gold "disc" has already been highlighted between the pages of "Serials".<sup>(7)</sup> Permanent encapsulation of knowledge and pictures is the coming fashion. When Buckingham Palace put their latest venture on a permanent substrate,<sup>(8)</sup> it will have arrived. Perhaps the National Centre for Information Media and Technology (CIMTECH Tel. 0707 279691, Fax 0707 279115) could take on the archiving role, or would it be better to have an entirely new organisation: National Optical Archives and Holdings?

### The Matrix

So far I have ridden four themes, but there is clearly a criss-crossing matrix of questions and questioners that constitute the CD-ROM game. How should this game be played. Let us assume it is more like football or hockey than the Eton Wall game and different players have different roles playing for one team but interacting with players from other teams. The roles can be defined in terms of the questions they are pursuing, and to begin with they are looking for opposite numbers who are interested in the same questions, a kind of multi dating approach. Basic questions such as:

- 1. Who supplies C.D. products and advice?
- 2. Who supplies network technology?
- 3. Who has installed a CD-ROM network?
- 4. What are the main technical problems in installing CD-ROM?
- 5. What are the best P.C.'s and drives for CD-ROM.

- 6. What are the best information sources on CD-ROM?
- 7. Why are CD-ROM prices so high?
- 8. Where are the best places to visit to see CD-ROM technology in action?
- 9. When are there meetings on CD-ROM?
- 10. How are CD-ROM networks installed?
- 11. How much does it cost to install stand alone CD-ROM?
- 12. How much does it cost to install networked CD-ROM?
- 13. How much is and what will be the total costs of a commitment to a CD-ROM network?
- 14. How much education and training is involved when CD-ROM is introduced?
- 15. How many different software programmes are there for CD-ROM products and what can be done about it?
- 16. What is the impact of CD-ROM on user demand for other services, such as inter library loans?
- 17. What is the best way to produce CD-ROM in house?

### Do You Matrix?

The CD-ROM game is moving much too fast to rely solely on the printed word. Players want to interact at a personal level, but in a structured way. It is unlikely that anyone can pursue more than six questions efficiently, but they want to know who are the most interested in which sub fields of the CD-ROM world. So why not join in? Choose up to 6 questions from the 17 provided, or include your own. Add name, institution, telephone and fax number and return. Much more fun than contemplating adverts featuring 49 year old librarians from Basingstoke.

## References

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