Information Services & Use 11 (1992) 387–398
Elsevier – Printed in The Netherlands

News, Trends and Comments

NEW PRODUCTS AND SERVICES

Kodak's Photo-CD Transfer System (+44 (0)442 61122) seems to be nearing the market. The idea is to supply special equipment to processing centres for making compact discs. Customers take their 35 mm exposed colour films to the centre and their film strips are transferred to the disc as digitized images. To view the results the customer either runs the disc on a CD-ROM XA player, microcomputer, and display (or TV-set display), or looks at the prints which are also supplied. The player will cost about £300. One disadvantage is that current widely-used players will not do. However Photo-CD is CD-I compatible so the two systems may assist each other to catch on.

Ordinary colour film from an estimated 250 million 35 mm cameras world-wide will thus become available for display on TV receivers, home computers, or for publication in magazines at a price and quality appropriate for the application. It has not been feasible until now to use 35mm film as the starting point for full-page magazine quality pictures.

Specific applications for using images transferred from the disc include desktop publishing, multimedia, advertising - for example by Estate Agents, and so on. Kodak estimate that the market for desktop colour imaging will reach $5 billion by 1995.

A disc will be able to store about 100 6 Mbyte photographs. A photograph will be digitized at 2000 x 3000 pixels with 24 bit colour - a total of 144 Mbits or 18 Mbytes, and compressed to 6 Mbytes. The cost of supplying a disc with 24 photos on board and also supplying colour prints from the customer's film strip will be in the range £12 - £16. The disc is returnable for adding new photos.

The processing equipment will include a Sun workstation to receive images from a film scanner with three parallel CCDs each handling one primary colour, and output them to a printer which will provide a printed set of disc pictures on a small card to act as an index, and also to a CD disc-writer developed by Philips which will create the CD. For supplying colour prints the CD will be run on a separate system which applies the data to a thermal printer.

The software supplied will provide for all the processing, and will include colour management and control to the Kodak PhotoYCC specification in order to provide consistent colour. The system will run on MS-DOS (Windows 3.0), Macintosh, Unix, and OS/2 machines.

Consistent colour reproduction has been a problem for years.

PhotoYCC might be adopted as a de facto standard. As a good start, Adobe will support it when they introduce level 2 Postscript.

The entire system processes images at 2000 x 3000 pixels with 24 bit colour. Customer's prints are produced on a Kodak XL 7700 digital continuous tone machine which receives CD-ROM data and prints pictures by overlaying combinations of CMY (Cyan-Magenta-Yellow) colours from a three-colour ribbon. The A4 size colour print which I received from Kodak looks like a high grade conventional colour print. The quality is quite remarkable for a printer of this kind.

The processing kit will cost around £75,000.

Provision is made for utilising only as much data as may be needed from the 6 Mbyte per picture input being received by the microcomputer from the CD-ROM player, according to the requirements of the application. For example a 720 x 480 VGA display with 16 bit colour can only accommodate about 5.5 Mbits. Thus in this case the storage, speeds, bit-rates etc., in a microcomputer appropriate for a VGA display will not be attempting to cope with excessive data.

On the other hand if the images are being output to, say, a Linotron printer capable of utilising, say, 20 Mbytes (uncompressed) per image to produce photographic-quality pictures, then all the picture data will be supplied to it.

Similarly the cost of transmitting images to a remote point will be no more than is needed for images of the required quality.

Obviously the arrival of this system will provide colour pictures, with storage problems greatly eased, of a quality way above anything currently in use in the "low-end" market. With appropriate printing a picture will look like a professional colour print.

The quality of amateur photography captured on 35mm 36-exposure film available from High Street shops for about £4 and processed as just described should be adequate for almost any application. When Kodak follow up, as I assume they will, by providing software for producing colour separations for making printing plates, excellent quality will appear in quantity-produced pictures derived from an "amateur photography" source.

The Intelligence Database was launched by Trend Monitor (+44 (0)705 864714) in January 1992. It is the database used to compile *Trend Monitor Reports* and associated services.

The database consists of 10 Mbytes of data comprising two years of coverage of over 400 publications about Computers, Communications, Media, and Socio-technology. Included with it is the Strix free text retrieval software for MOS-DOS and most UNIX machines. The database is up-dated by floppy disc.

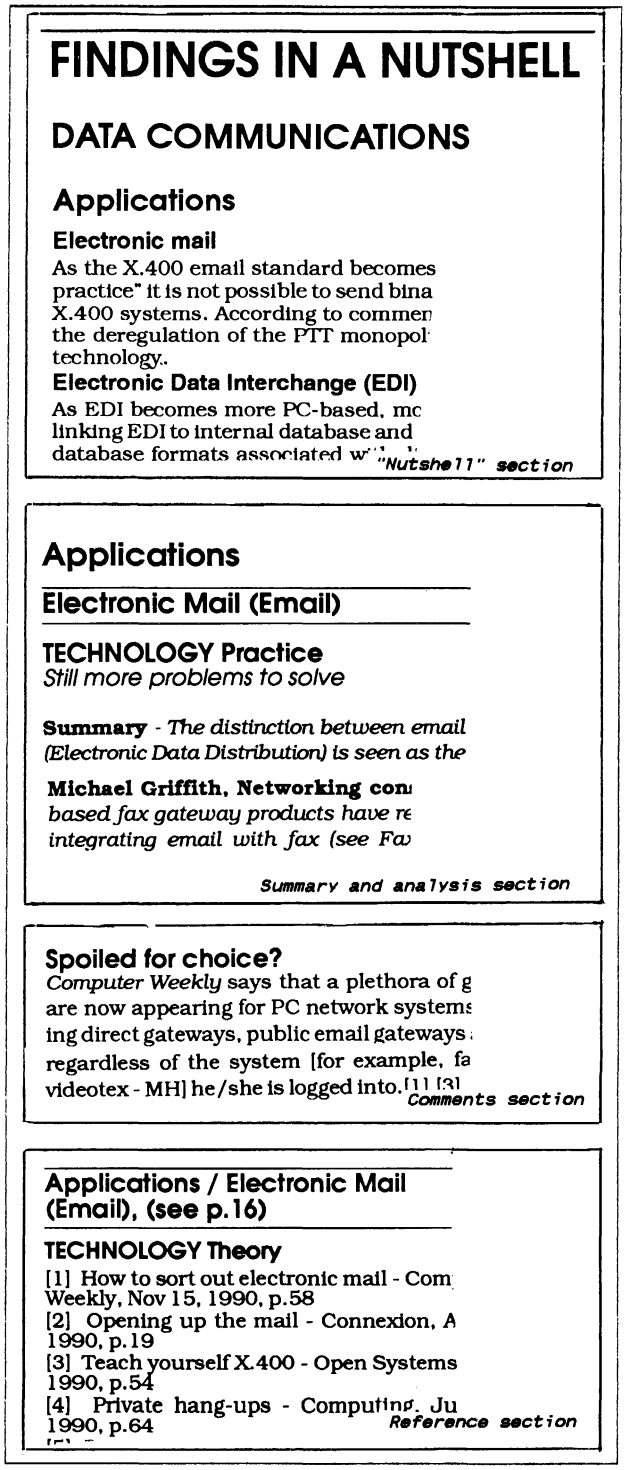
The price is £1250 for the first two years, and £650 per year for the up-dates.

Trend Monitor say that it is "a new kind of corporate intelligence resource enabling people to make the more informed and intelligent decisions required in difficult economic times. Since the database runs on your own machine, there are of course no telecommunication delays or costs.

There is a comprehensive general subject index, but the "main line" arrangement of the database will be evident from the clips, shown in the illustration on the next page,. It shows parts of a major sub-division of *Trend Monitor Reports* called "Data Communications". Each sub-division has four parts - A summary (called a "Nutshell) of selected major developments, a summary and analysis of each of the major developments,

a precis of each journal item about that topic, and finally a reference to the items extracted.

In short, the database/publication contains commentaries and analyses generated by subject experts appropriately classified, in order to provide a general or more detailed overview of what's going on. Only a person interested in the fine detail would need to refer to the original article.



FINDINGS IN A NUTSHELL

DATA COMMUNICATIONS

Applications

Electronic mail

As the X.400 email standard becomes practice" it is not possible to send bina X.400 systems. According to commen the deregulation of the PTT monopol technology.

Electronic Data Interchange (EDI)

As EDI becomes more PC-based, mc linking EDI to internal database and database formats associated w

"Nutshell" section

Applications

Electronic Mail (Email)

TECHNOLOGY Practice

Still more problems to solve

Summary - *The distinction between email (Electronic Data Distribution) is seen as the*

Michael Griffith, Networking con *based fax gateway products have re integrating email with fax (see Fax*

Summary and analysis section

Spoiled for choice?

Computer Weekly says that a plethora of g are now appearing for PC network systems ing direct gateways, public email gateways regardless of the system [for example, fa videotex - MH] he/she is logged into.[1] [3]

Comments section

Applications / Electronic Mail (Email), (see p.16)

TECHNOLOGY Theory

[1] How to sort out electronic mail - Com Weekly, Nov 15, 1990, p.58

[2] Opening up the mail - Connexion, A 1990, p.19

[3] Teach yourself X.400 - Open Systems 1990, p.54

[4] Private hang-ups - Computing, Ju 1990, p.64

Reference section

TRENDS AND COMMENTS

Freedom of Information

The current issue of our associated *Journal of Information Science* contains an Editorial entitled "Freedom of Information and Windbagggery". It is an account of the promises, mostly pre - election, made by the British Conservative and Labour parties during the last 25 years, about what they were going to do about it. Nothing happened.

One of the reasons for inaction has been nicely put:- "Power is delightful, absolute power is absolutely delightful"; with the prevailing secrecy laws, no heads roll because of gross governmental incompetence because few know about it and nobody is telling.

I won't repeat the history of what was said and not done - it

was recounted in *JIS* - but now they have actually got the gall to do yet another repeat performance. Presumably they assume that almost everyone will have forgotten their earlier promises.

The Daily Telegraph, Conservative in outlook, reported an exchange in the House of Commons on January 24th 1991. Tim Renton, Minister for the Civil Service, opposed a new Freedom of Information Bill, while Robin Corbett, spokesman for the Labour Party, said that they would introduce their own Bill if elected.

The same words now being used by Renton were used on a similar earlier occasion by his Labour predecessor, while Corbett used the words of Renton's predecessor. However, Renton and Corbett are using the same words as were used by members of their own parties on a different earlier occasion. Absolute power is, of course, only delightful when you are in a position to use it.

I suppose you could take the view that this is simply human nature. Alternatively you may feel that when politicians argue, the level is so pathetic that nine out of ten ordinary people could do better.

Telecoms 1. Expansion

According to a **Communications Week** advertisement there were 384M telephones in the world in 1974 but by 1990 there were 820M. In the same period the number of facsimile machines grew from 100,000 to 16M. These figures are provided by Siemens, the advertiser, who says that it spent $2.4 billion developing their EWSD switch for the public telephone system.

While telephone growth is steady at 4% per year, non-voice terminals increase by about 25% per year; it is estimated that by 1990 there were about 43M data terminals world-wide. Telecommunication services generate annual revenues of about $350 billion.

Telecoms 2. The European Commission and telecommunications realities

Joe Rogaly, writing in the Financial Times for November 26th 1991, obviously thinks that the EC's efforts to harmonize, liberalise, and reform Europe's telecoms are a waste of time.

He says "The European Commission wants to run information technology and communications. People behind desks in Brussels cannot help constructing schemes that give them more work to do. It is in their nature to create a demand for more people to sit at more desks all around them. They sincerely believe that intellectual constructs adumbrated in their drafts and debated in endless committees will benefit mankind".

After quoting the remarks of Michael Hardy, a senior EC telecoms official, who said "Notions of a command economy or *dirigisme* can be dismissed; we know that they do not work", Rogaly continues "In that case why make the attempt? Given the gang of 12 monopolies running the post and telecommunications of the 12 EC states, any "consensus" (for which read conspiracy) reached under the guiding hand of the directorate-general for you-know-what will inevitably be a ramp injurious to consumers and stifling to innovation. Yes, BT is not quite a monopoly, but it certainly is for the purpose of the present argument."

I agree entirely with Rogaly's opening remarks. The impression the EC gives is that it spends too much time footling about with absurdities like the strength of British beer. Of course that impression may be entirely false - the British Press loves to headline easily understandable controversial trivialities at the expense of incomprehensible major issues. But the Commission is equally at fault. Its PR efforts, if any, to convince

us that it is doing a good job, seem to be non-existent. It's supposed to be putting forward ideas to improve the lot of the inhabitants of Europe. You would think it would be interested in cultivating the good will of those inhabitants.

When Rogaly also says that telecoms are in the grip of a gang of monopolies, implying that this is a bad thing, he is quite right. But he is quite wrong when he says that the best solution is to leave them alone. On the contrary, this is an area where the EC is fully justified in making a major effort to bring about a change.

An inefficient telecoms infrastructure is a heavy load. Europe's fragmented telecoms where country borders are barriers, represents a heavy overhead compared with the single-country systems of America and Japan.

Sir Leon Brittain, the commissioner for the encouragement of competition, points out that it costs 69c for a call from Boston to Washington, but $2.08 for a cross border call in Europe over the same distance.

Early in 1991 the EC attempted to implement a £266M project to link computers handling customs, social security, and VAT, believed to be essential when border controls are removed. National governments sat on the proposal.

Roland Huber (EC telecoms) says that some European PTTs charge 9 times more for leased lines then in some other parts of the world. Europe operates without the economy of scale required for efficient telecoms, says Huber. In December 1991 the EC issued a directive to establish unified tariffs and accounting for leased lines. It will encounter much opposition.

The EC's report "The European electronics and information technology industry: state of play, issues at stake and proposals for action" does not provide the address, phone, or fax number of its originators, nor is it dated - curious omissions for a document which includes a good deal about communications. However it is full of good intentions.

I cannot tell whether these proposals tackle the problems in the right way, or whether they are feasible or politically possible. What I am fairly sure about is that the EC is the only organisation with the power to bring about the necessary changes. I hope they will keep on trying.

Electronic Journals

I though that the growth of electronic journals was zero after a few brave attempts in the last twenty years. However Eugene Garfield lists 6 peer-reviewed journals in Current Comments (his editorial pages) in *Current Content*s 45, November 11th, 1991).

They are all on the Bitnet and Usenet networks in the US and will soon be joined by *Current Clinical Trials* published by the AAAS.

Garfield says that "the definition of peer reviewing undergoes a metamorphosis" in networked electronic publication. But "while some scientists such as Nobel laureate Joshua Lederberg believe that the peer review process is the glue that holds the scientific establishment together, others are now questioning what would be lost by the disappearance of refereeing. In the latter instance readers would have to decide the merits of a paper for themselves, which, some argue, is already necessary because of ineffectual refereeing".

Information ignored

In an IS&U editorial (Volume 9, Page 325, 1989) entitled "The risks of ignoring information", I discussed information and bridges - in particular the apparent ignoring of available information at the time the Tacoma bridge was designed. Subsequently a book "Great Information Disasters" edited by F.W.Horton and D.Lewis was published (Aslib. London, 1991).

In that book a chapter entitled "The Tacoma bridge disaster: a letter in disregarding information?" by A.E.Cawkell appeared. The drift of the article is that there were some earlier bridge disasters bearing a remarkable resemblance to the collapse of the Tacoma, and that the "vital statistics" of that bridge were completely out of line when compared with those of other suspension bridges of the period - in other words the designers ignored available information.

In my review of bridge data I cited people like Sutherland, Davenport, and Scruton. Their information about suspension bridge design was based on aerodynamic theory and wind-tunnel testing. So far as I am aware there have been no failures since the consequential post-Tacoma design changes.

However an exchange about a new theory is now in progress via major journals such as *Siam Review* and the *American Journal of Physics*, spilling over into a front page story in the *San Francisco Examiner* (to the disgust of one scholarly participant).

The protagonists are Joe McKenna, maths professor at the University of Connecticut, who is stirring it up with some new mathematics, and Robert Scanlan of Johns Hopkins. According to David Berebby, writing in *Discover* (February 1992) Scanlan thinks that McKenna is "off his trolley".

The controversy is about the equations describing the vibration of bridge decks and hangers. McKenna claims that if his calculations were used, safe, less expensive, lighter structures could be built with material added only at the right place to prevent earthquake damage.

Meanwhile the Golden Gate bridge is about to be stiffened at a cost of $128M to make it more earthquake resistant.

Instead of information being ignored there now seems to be too much of it. It seems likely that in the long bridges of the future, the deck will be suspended by stays along its length, each one running directly to the top of towers. Instead of a deck suspended by hangers dropped from the familiar graceful cables, the new bridges have a webbed appearance and cost less than their predecessors.

Persons and the person-machine interface. 1. TV control

Being a male chauvinist pig I find it hard to discard the phrase "man machine", but I am sure I am doing the right thing.

According to an article by David Bailey in the *Daily Telegraph* of February 6th 1992, "there are 14 million video recorders in the UK but few of their owners can make them obey orders". One reason is that they are "deterred by the domestic meltdown which can follow a time-shifting bungle".

There's something in that last comment. Two ...er...um... technically sophisticated people (who I will call x and y to protect the innocent) in our house had a bit of a shemozzle the other day. X wound the tape back, supposedly to the beginning, not knowing that Y had previously used the memory button to mark it. Consequently only about half of it was re-

wound (as a matter of fact X did not know that a memory button existed).

X then set up two programmes, and returned later in joyful anticipation. The first played back alright, but alas, the second had only just started when it was replaced by the "snowstorm at night" effect - the sure sign of a misdemeanour. Not enough tape was left to record it - result a shemozzle.

Bailey says that the hand controller for the Sony SLV373 video recorder "is about the length of a New York cop's nightstick and looks like the flight deck of a jumbo jet". However help is at hand. Apparently 100,000 Videoplus handsets, costing £60, have already been sold in the U.S. A number for each programme is printed in TV lists from co-operating publishers. All you do is key the number on your recorder which then sets up the timer automatically.

Bailey quotes Professor Thimbleby of the University of East Anglia who believes that the "sexy button factor" is part of the trouble. Most consumers would not buy a simple machine with limited controls because they are impressed by fancy features which they believe they will master.

But Thimbleby's remarks do not apply to the Cawkell family. The manufacturer of our new TV has supplied a controller which has *fewer* buttons. I, for one, thought that this was a step in the right direction. However the other day Kathleen, having just seen the "Food & Drink" programme, tried to write down a recipe for a dish described on the associated Cefax (Teletex) information pages.

She wrote down a sentence but then the page vanished. It re-appeared a few minutes later. Seven pages were needed for about five recipes so Cefax cycled round them. The routine was to write furiously as long as the page lasted; wait for it to return; write furiously again, and so on.

Said I: - "why don't you use the freeze button?". But there is no freeze button on the new controller. The manufacturer has effectively simplified the design by removing it.

Persons and the person-machine interface 2. Parking your car in Geneva

Bear with me while I tell you another short story about people, machines, and information. The car-park in Geneva looks Swiss, clean, and efficient. I collected a ticket coloured red from a machine, proceeded to one of the five underground floors in the car park, and parked.

Upon returning I inserted the ticket into another machine and the thing demanded 8.75 francs exact money. I wandered along the lakeside road and returned, none too pleased, with some change. I proceeded to the lift and noticed that each button was coloured differently. Having forgotten my floor number I pressed the button which matched my red ticket. This idea brightened me up - sensible people the Swiss!

But when I got to the floor at the exact place where I had left the car it had gone. As I made a slow tour of the entire floor I noticed several people wandering about examining cars. They had all suffered the same loss. Still clutching their red tickets they had changed into zombies with glazed eyes, shuffling gait, and a ghastly pallor from having been too long underground.

I returned to the surface ready for combat with the first available car-park attendant but there weren't any. The whole place was entirely automated. I accosted a couple of Swiss chaps who couldn't help but as soon as I questioned a third he responded with a broad grin.

He explained that *all* the tickets were red! There was no helpful

self-evident colour-coded lift-button ticket-matching system. The colours of the buttons had no significance and it was indeed unfortunate that the colour of one of the buttons was red!

I tried another two floors. There was my car exactly where I left it.

Demise of Libraries, Library Schools, and Information Science?

"Arise, mes enfants! Aux armes citoyens! (To the barricades comrades)" are the words used by Donald Kraft, Editor of the Journal of the Society for Information Science, in the title for his editorial in JASIS 42(8), 545, September 1991.

The words express entirely appropriate sentiments but I prefer the resonance of the original "Aux armes citoyens! Formez vos bataillons!" Kraft suggests that this is the kind of action required by the profession at this juncture.

In the same issue the article "The library community at the technological and philosophical crossroads: necessary and sufficient conditions for survival" by Laurence Heilprin, first published in 1980, is reprinted.

Kraft says "The library community, plodding along at what they may think has been a fairly furious pace, is being overtaken by waves of scientists, technologists, and entrepreneurs who are moving even faster ...to retain their identity as a community, library and information science must change. These remarks are prompted by the closure of a number of library schools in the U.S.

The alternatives (here summarised) offered for survival by Heilprin are:-

1. Do nothing beyond present functions.
2. Strive unsystematically for greater efficiency.
3. Strive systematically for greater efficiency and add education focused on new relevant science, technology, skills, and forms of organization.
4. Strive for greater efficiency, do some research directed toward discovery and establishment of information science, and add massive life-time continued education in the areas just mentioned.
5. (4. with added emphasis) To retain leadership indefinitely, education and training should cover the processes by which recorded knowledge is transmitted. Post first-degree professional and scientific education should be pursued under life-long contract.

Heilprin considers that if courses of action 1 or 2 are pursued, there is a 90% probability that the "library community will break up" within the next 20 years. The adoption of course 5 would reduce that probability to 5%.

He continues "All these matters are known in educational and academic circles. None is new nor impossible to implement. The main difficulties in adoption are the usual ones; administrations do not see the point or do not have funds; faculty of library schools do not want to feel threatened by having to know more or perform research they are not accustomed to; workers in libraries are too occupied, feel too harassed, or perhaps are fearful of "going back to school" after a few years instead of having achieved permanently "safe" job niches.

BOOKS

Practical Information Policies by Elizabeth Orna.
Gower Publishing Co., Aldershot, England. 1990.
ISBN 0-566-03632-0. 298 pages. Price £35.

The earlier chapters in this book cover the need to define the objectives of an enterprise, information audits, policy formulation, technology and human resources, and policy implementation and monitoring. 11 case history chapters follow, then an appendix entitled "Minimal information policies for small enterprises", and a good index.

The outcomes of a successfully implemented Information Policy are listed by Orna as seven benefits. Rolled up into a short statement, the benefits are the identification and co-ordination of information resources leading to correct decisions about IT investment and its successful application in the organisation as a whole.

The author says she got the idea for the book at a 1988 conference when one of the speakers asked an audience of over 100 information professionals how many of their organisations had an information policy. when only 4 hands went up she decided that something should be done.

"Information" is handled in departments manned by people qualified in mathematics, data processing, accountancy, engineering etc. Such people, who are controlling information activities, says Orna, "have, by the nature of their professional background, a limited understanding of how enterprises work, and a restricted conception of what information is and how it can be used".

In other words they are doing their own information thing so that instead of working within an information policy "a range of highly personalised systems of varying effectiveness and eccentricity is operating".

In the absence of a co-ordinating policy, when these departments started to hear about and investigate information technology they probably came under "The malign influence of the manufacturers" as Orna puts it (quoting Alan Gilchrist), between whom there is "fierce competition to create new packages, one small step ahead (or least different from) competitors, often resulting in poor support and downright bad documentation".

"All the problems created by the manufacturers cut-throat competition to "move boxes" are passed smartly down the line till they land on the end-user - who is also the one paying the creator of the problems for the privilege of solving them".

One contributing factor which the author does not mention is the way otherwise sophisticated people melt when they come within the orbit of computer people. The phrase "caveat emptor" is forgotten - at least that has been my experience.

Orna also dwells on another kind of practitioner in the information technology business - who might be called the "hands-off experts" - researchers who "move in a dream world divorced from real user's needs... encouraged by funding agencies who often do not want to admit failure by stopping grand but useless projects". Ignoring the real world "they try to find general features which can cover all applications... but the real world is not like that".

The Case Studies occupy about half the book and the largest

describes British Library activities. The UK has no national information policy. "The British Library is answerable to government and dependent on it for funding but has not been able to look to it for leadership" says Orna.

The importance and financial requirements of the custodian of the country's intellectual inheritance is hard to assess. Orna exercises some restraint when she talks about the government's lamentable role in supporting the British Library. "Seeking to bring government to appreciate the facts is a vital aspect of the Library's policy".

However "...Government support is being steadily withdrawn... it will decline in real terms until 1992 and possibly longer". Government attitudes were made quite clear when they sold a site in London and the Treasury pocketed £9M of the proceeds. It is said that the whole of it was promised for the new building in St.Pancras.

The government should be treated with the contempt it deserves in these matters, but at the same time I am not aware of a determined campaign mounted by the British Library to arouse national interest. To that extent its policy has failed. After all it runs the largest, most effective, highest revenue-earning supply service in the world at Boston Spa. This is probably unknown to 99% of the public. It could start by drawing the attention of the public to these facts. A one minute TV commercial showing the system at work would be most un-scholarly but it could not be ignored.

Orna might have dwelt longer on this aspect, but for the most part, her review is a very good account of the nationwide activities of the British Library.

The Glaxo case study is also most interesting. Glaxo is highly successful - it may be the most successful company in Britain.

The extraordinary thing is that according to Orna, in 1988 "There was no willingness to compromise (in IT systems) for the common good... few standards existed for internal document layout... there were communication problems... lack of basic objectives... problems of presentation... organizational problems... no senior management structure to manage the use of IT.. etc".

Would it be reasonable to ask "If Glaxo can achieve such outstanding success without an information policy, how important is such a policy as an ingredient to success?".

However whatever the 1988 situation, it has been considerably reformed since. Leading-edge users (after the formation of the new Information Systems & Services Division) became involved in educating their colleagues, information flow greatly improved, managers now think about company objectives and cost benefits, managers and directors are much more aware of the value of information, a successful document architecture project has been implemented, and so on.

In the UK Central Government study, Orna suggests that there are three essential conditions for the successful introduction of information management:-

- Top management must be committed to the principles of managing information.
- Policy and Objectives for information management must be defined.
- An individual or unit must have a clear responsibility for implementation.

Information must be viewed as being of major importance in the UK National Health Service - another case history included in this book. The following paragraph describes a change which surely must be revolutionary in medical circles. I cannot image that it will be welcomed with open arms by the British Medical Association.

"The programme... seeks to find the means of transferring to the clinicians (which I presume means General Practitioners in the case of general medical practices) the responsibility for transforming the complex information in the medical files into accurately coded records which can be relied on and used with confidence.

This is far from the case at present because record creation is usually done by medical staff - another instance of the failure to recognize record-creation as a high level information handling job. Transferring responsibility to busy clinicians involves both culture changes and ingenuity in the design of the technology so that human beings supply their professional expertise without being called on to waste time on mechanical exercises, while the technology transforms their knowledge into the format required by the record".

If this ever happens there will be universal agreement that Information Management has truly arrived.

This is an excellent book. I commend it to you without reservations.

Authors and Information Technology by Jane Dorner
BNB Research Fund Report 52. The British Library, Boston Spa. 1991. ISBN 0 7123 3257 X. 86 pages. £15.

This report is full of interesting thought-provoking stuff, particularly if you are an author. It "aims to redefine the future roles of authors and publishers in the light of new invention. Machines are already working for doctors, dentists, teachers. How do they affect writers and editors?".

Dorner says "Unfortunately...the stamp of authority may be disappearing from published works. It is conceivable that new technology is putting traditional values at risk".

"We have carefully nurtured a publishing system since the days of Caxton which provides quality assurance. In electronic publishing the writer, copy-editor, typesetter, designer, and proof-reader are often the same person... Book and newsprint publishing aims to turn words into aesthetically pleasing form... new publishing put a great deal of power into the hands of people who have had no training or experience... good design has been pre-determined by software engineers, not by experts in typography".

Dorner quotes some gentle sarcasm by Maurice Line:- "Why bother to put pieces of information into a coherent logical structure when one effect of this is to give users the trouble of picking them out again? Why not put pieces of information - let us call them infobricks - into the computer as they stand, clearly labelled according to an international standard?"

In a questionnaire with 1279 respondents, half of whom were novelists, only 14% of those who added electronic markup were paid extra, and 17% of those who prepared pages were given a fee.

All kinds of interesting bits of information appear in this book - a good deal of it to with authors versus, rather than in unison with, their publishers. In fact Dorner says "it has frequently been publically acknowledged that the relationship is at its lowest ebb ever".

Among the conclusions are that while 70% of professional writers are using computers, only 10-15% of publishers use computers to process author's disks. In spite of that most authors do not use the technology innovatively. If author-publisher disk use increases, publishing contracts will need revising to make provision for problems.

Annual Review of Information Science and Technology.
Edited by Martha Williams. Learned Information, Medford, N.J. 1991. ISBN 0-938734-55-5. 514 pages.

The book *1066 and All That* was once mandatory reading. Perhaps it still is. Anyway thóse historical events which it liked were labelled A GOOD THING. ARIST is historic by IT standards (Volume 1 was 1966). Each time I review the current edition it receives the GOOD THING accolade and so it does for the 1991 edition. It is a highly professional work of reference, so I will content myself, and I hope readers, by pulling out only two items for discussion.

Fran Spigai (in "Information Pricing") reviews the extraordinary price increases of serials and comments on the large increases in publisher's profits. Two comments are quoted in this connection. "We are witnessing the ravages of commercialism in an industry with its roots in philanthropy" and "The book trade should share the responsibility to society of ensuring the widest possible access to ideas, knowledge, information, and enlightenment".

In response to the first comment, I am reminded of a government agent, the British Post Office, and its successor, the company British Telecom. Governments could not make up their minds whether the BPO should be a subsidised social service (uneconomic but socially desirable - cheap telephones in remote farmhouses, etc), or an efficient telephone system. It put customer service last. BT, on the other hand, is providing better service, is more responsive, and is usually more expensive. Without a regulatory authority, it would charge households and remote farmhouses much more. Such are the swings and roundabouts of capitalism.

In response to the second quotation, I don't think that manufacturers of X-Ray machines decrease their prices believing that they have a philanthropic duty towards suffering humanity, so I don't think there would be much response if publishers were asked to be philanthropic.

Things like competition and demand are more likely to be effective, but sufficient pressure cannot be exerted without co-operation between "customers". Authors want their papers to be read so if, for instance, fuzzy physicists got together via the Institute for Fuzzy Physics, to which most of them belong, published their own Proc.Fuzz.Phys, and sent in their papers to it instead of to the excessively costly J. Fuzz. Phys., Proc.Fuzz.Phys would become the preferred journal. This suggestion is not intended to be frivolous. If customers are really irate, surely they can think up some form of co-operative action?

Since this issue of IS&U features Images, I note what Eugenia Brumm says in her ARIST chapter about optical disc technology. "Indexing of images on optical document management systems receives short shrift in the literature. Although good indexing is the most important part of an optical system and is essential to the efficient management of information, little attention is devoted to it". Not unexpectedly, Brumm can dig up only a small handful of references about it.

A.E.Cawkell