

NOTE ON THE TRENDS IN INFORMATION TECHNOLOGY AND COMPUTERS

All recent studies of the future of information technology predict that this will be an area of major change and innovation. Computers are already being tied into telecommunication networks throughout the world and this process will undoubtedly accelerate. It is predicted, for example, that in the U.S.A. the volume of data transmission via telecommunication networks will exceed speech transmission by 1975.

The following major trends have been predicted (Diebold, John, M5):

- future information systems will be more versatile and will more nearly parallel the real flow of information within an organization or information network such as a library system
- information systems will tend increasingly to be "real time"; that is, they will reflect important and routine events as they occur such as immediate requests from one library to another for data on a particular volume or paper.
- systems flexibility for new applications will be vastly increased, and costs greatly reduced, through a broad range of new peripheral equipment developments. This will make it much easier for the individual or small organization to contact and be contacted through a national or international network.
- significant cost reduction and vastly expanded use of random-access files and memory will permit the drawing together on an integrated basis of all the data relevant to a single topic. This means that documentation at present compiled by laborious manual techniques with months of correspondence and postal delays will be easily assembled in a few minutes. This will completely change the economic of the production of any reference book. The data will be cheap to assemble and therefore hard to sell on a quickly out of date printed form.
- a totally new data storage and processing capability - graphic storage and processing - will become economical and commonly available. This will reduce composition costs in publication production so that any conceivable reference work could be produced within weeks.

One result of these changes will be the creation of new markets for information. Commercial companies dealing in information cutting across all subject boundaries will be created. An early example of this is the recent creation of the Information Company of America which will: develop an array of saleable information services; contract to operate any information systems, centres and publications; and conduct research projects. These developments will be of great importance to small documentation centres although it is not yet possible to determine whether they will be able to survive and precisely how they will have to adapt to international data networks.