



Only Connect

Databases proliferate in technical societies that depend upon the accumulation of facts, and the accessibility of information grows as technology progresses. In the past, databases have been isolated from other databases by distance and time, but now that so many governmental and private databases are computer-based the possibility of their communicating with each other may threaten privacy and confidentiality

system with 200 Kbytes storage per disk then you could hold 1,500 records on each floppy. In a tape-based system with 48 Kbytes of memory you would probably be able to have only 300 records (allowing about 10 Kbytes for the program and operating system). In practice, if you wish to sort the file into order or do other such manipulations, you will need some spare working space, and it is wise to limit the size of file to half the available area. The two storage systems differ so drastically because tape files must be read into memory and processed as a whole, whereas the speed of disk file accesses allows files to reside on disk and be processed in memory.

A database management system would enable you to take information from one file — the total expenses for the year, for instance — and link or compare this with information from another file, such as the total income from membership fees.

You could then take an informed decision about whether to start a recruitment campaign, cut down the number of meetings or spend the profits on a new computer for the club. You might wish to send a standard letter to club members informing them of the situation. The database could provide the names and addresses and print them straight onto envelopes or sticky labels. Alternatively, it could link with a word processing package to write letters and reports. Although there are many things that the ideal database can do, you will not easily find one that provides all the facilities together, particularly if you have a home computer with restricted available memory space and tape rather than disk storage. Many of the less sophisticated database packages handle only one file at a time, so that although you could hold all the different sets of information described above, you could not link or compare them in true database fashion.

A real danger in all data processing is putting all of your precious information into a computer and then through some accident obliterating it. It is essential with important information to keep security copies and also to take a print-out at intervals so that nothing can be irretrievably lost.

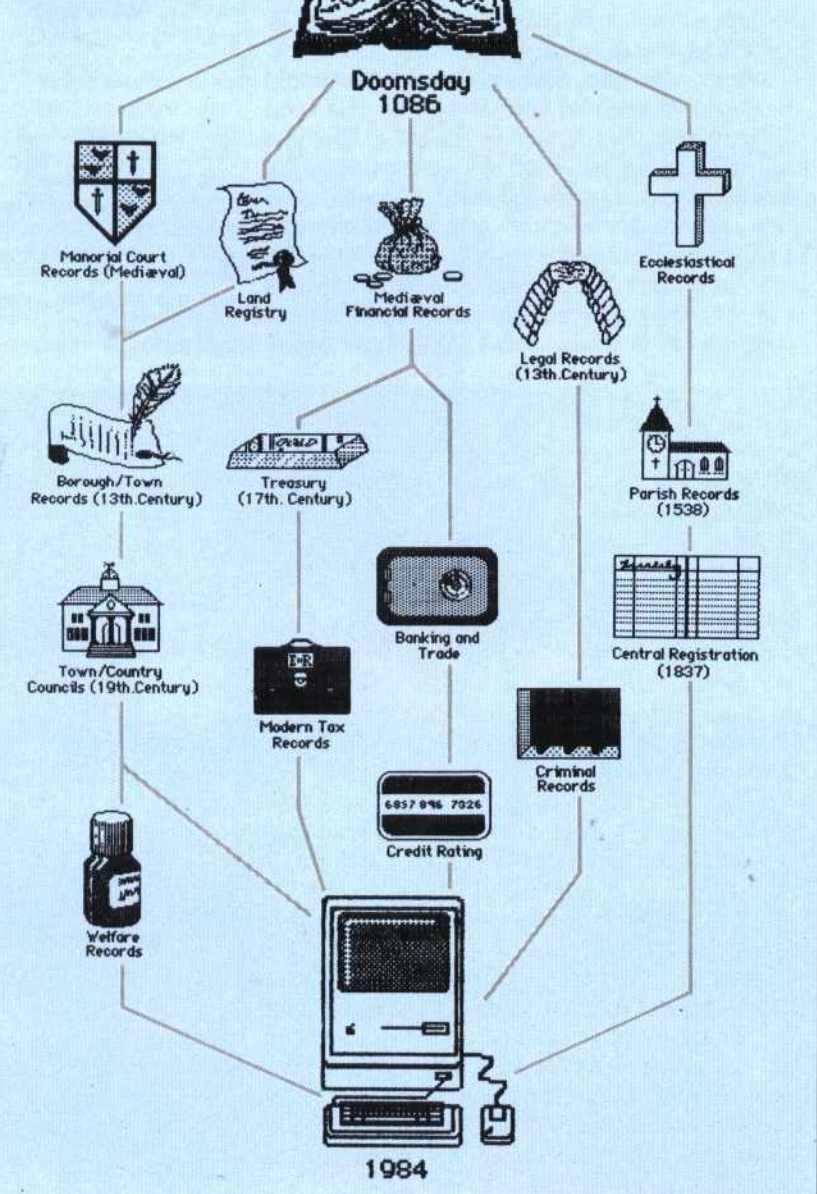
A simple database package will handle a single file of information. The system should make the routine work of entering data into the file as easy as filling out a form, and it should allow you to access information both on the screen and to a printer. The user should be able to select individual records by stating search and sort criteria such as 'all members who have not paid this year and have a given postcode'. Such a package should also be able to print out specific record fields, such as the name and address fields alone for mailing lists. This simple kind of package is available for most tape-based home computers. If you have a disk system, however, the range of software available is much greater.

Apart from the uses already suggested, database systems on home computers can be used to catalogue record collections, books, bibliographical references and stamp collections, or keep records of cricket or football team scores. More specialised information-handling tasks include second-hand book collecting and the organisation of self-help baby-sitting groups.

Slightly more sophisticated packages will allow you to design a data entry form on the screen to match a previous paper-based system. Other packages will let you select numerical items that are greater or smaller than a stated amount (such as all members owing more than £10). It is therefore important to shop around for the package that best suits your specific needs.

A computer with a database package is useful for tasks that involve repetition, or where a lot of information needs to be sorted or searched through quickly. But some applications are not at all suitable for database systems. It is not sensible to search through something like a file of telephone numbers on a home computer every

From Domesday To 1984



INFORMATION FROM HEAD OF RESEARCH, PUBLIC RECORDS OFFICE

IAN MCKINNELL