Law Firm Computing in the 90s: Litigation Support

by Vicky Harris

Litigation Support is not a new concept. There have always been clerks running around after lawyers preparing and organising documents. What is new in Litigation Support is the advent of computerised technology.

Until fairly recently law firms were still totally reliant on sophisticated electric typewriters; then came a revolution in terms of office technology which was wordprocessing. Data stored in word processed form, however, is dead information. It cannot be sorted and retrieved in the flexible manner which is attributed to databases. A database is information stored in computer readable form. It is a collection of text or numerical items which can be stored and searched.

Over the last decade, therefore, we have experienced dramatic changes in working practices. We are faced with increasingly complex litigation generated in our modern industrial society. Computers have started to filter into the court room. The need to control large amounts of documentation is made possible with the advent of sophisticated software and appropriate technology to support those applications.

Litigation Support Databases

It was once considered that the advent of computers would announce the dawning of an era - the era of the paperless office. However with the rise of associated photocopying and facsimile technology, the numbers of documents have multiplied greatly with increased copies in circulation. Litigation databases help control and locate the information in documents that flow into the lawyer's possession during preparation and trial of a case.

To understand better the way most databases work, it is possible to breakdown the database into four levels. The highest level is the software program. This is the set of instructions that translates key stroke entries into commands recognised by the computer's processor. The program helps form and interpret the users commands. The second level in the database contains all the data entered by the user. The third level contains the individual records each of which describes one particular document. These records, when combined, form the database. The fourth and lowest level contains the fields that are part of each record. Each field contains one specific kind of information (eg. date, name, type) about one particular document. Software groups fields into records and then groups records into the database.

A database is required to perform two major tasks. First to store information and secondly to retrieve specific details. Traditionally, people store information in filing cabinets of some description. Experience shows that the greatest shortfall of that system is that it is hard to remember where specific pieces of information are kept, and to recall accurately every instance a specific name or reference is mentioned. By contrast a computerised database stores everything in one place and can recall information immediately.

Why use a Litigation Support Database?

The effective management of documents makes significant contributions to the litigation effort. The main reasons for using a litigation database are as follows. First, it is cost efficient. A lawyer's time is charged at a significant rate not only because of the long training involved in law, but also because of the accompanying overheads. Legal work is essentially information processing in one form or another. Work time is spent retrieving, reprocessing and creating information. Lawyers read, read and re-read key documents but it is only necessary to record bibliographical data once and record summaries of a document once. Thus, this task may be completed by a clerk at a much lower cost and information can be retrieved again and again so that the cost efficiency of the operation becomes apparent. It is possible thus to free the lawyer to work more efficiently and effectively.

As anyone who has handled large volumes of documents knows, it can only be described as drudgery. Manual sorting and filing of documents still occurs but with the aid of a database it is made considerably easier and more efficient. The flexible nature of a database is critical to litigation matters. Documents which are relevant to the case may need to be inserted at a later stage when either issues may change in a case or additional issues become important. Flexibility in creating the information as the case progresses is thus vital.
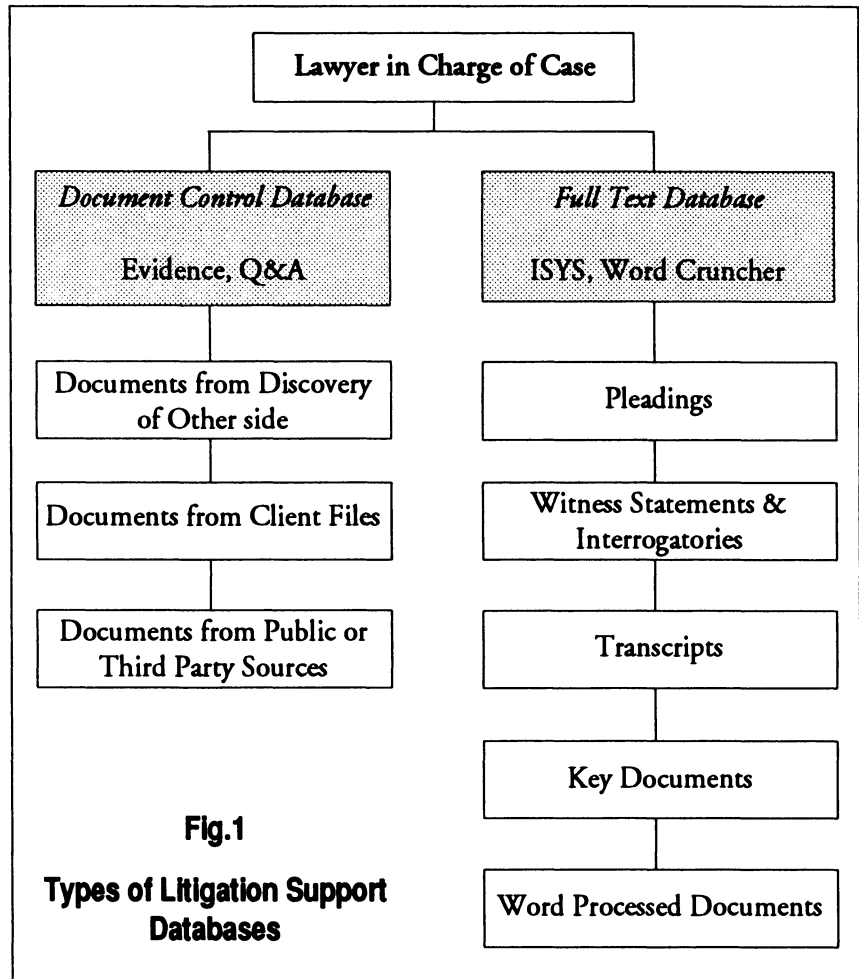
A further reason for using a litigation database is its portability. This is very important where several barristers are involved who require the data to be accessed in chambers. With notebooks and portable computers, this problem can be overcome quickly. Also there is a psychological advantage in taking a computer into court. A well organised database can tip the scales and provide that 'winning edge'.

Organisational Strategy

Adequate planning is critically important to the success of any database system. Organisational strategy can sometimes take on the proportions of a military campaign in terms of outlining objectives and tasks. It is also important to know how your software applications work and the relative utilities involved

At the outset of a case, a lawyer must sift through the documents to decide whether to use a full text database and what materials require a document control database (see Figure 1). Under a full text system, the database contains the entire text of a document. There are relatively few constraints on the kind of search that can be done because the software simply looks at every word in the document. In order to locate a particular reference to a word in a document, the system will display that word in context on the screen with reference to the particular file or document in which it is found.

This type of full text retrieval program, such as *WordCruncher* or *ISYS*, can be used for witness statements, and any wordprocessed documents relevant to the case. It accepts data in a computer readable form from a variety of wordprocessing programs. This is useful particularly for transcripts which are taken for the court

Fig.1

Types of Litigation Support Databases

```
                    ┌──────────────────────────┐
                    │  Lawyer in Charge of Case │
                    └──────────────────────────┘
              ┌──────────────┴──────────────┐
   ┌──────────────────────┐      ┌──────────────────────┐
   │ Document Control     │      │ Full Text Database   │
   │ Database             │      │                      │
   │ Evidence, Q&A        │      │ ISYS, Word Cruncher  │
   └──────────────────────┘      └──────────────────────┘
              │                             │
   ┌──────────────────────┐      ┌──────────────────────┐
   │ Documents from       │      │ Pleadings            │
   │ Discovery of Other   │      │                      │
   │ side                 │      │                      │
   └──────────────────────┘      └──────────────────────┘
              │                             │
   ┌──────────────────────┐      ┌──────────────────────┐
   │ Documents from       │      │ Witness Statements & │
   │ Client Files         │      │ Interrogatories      │
   └──────────────────────┘      └──────────────────────┘
              │                             │
   ┌──────────────────────┐      ┌──────────────────────┐
   │ Documents from       │      │ Transcripts          │
   │ Public or Third      │      │                      │
   │ Party Sources        │      │                      │
   └──────────────────────┘      └──────────────────────┘
                                            │
                               ┌──────────────────────┐
                               │ Key Documents        │
                               └──────────────────────┘
                                            │
                               ┌──────────────────────┐
                               │ Word Processed       │
                               │ Documents            │
                               └──────────────────────┘
```

by a variety of shorthand writing companies. It is possible at the end of the day to index every word of the transcript and within a period of 20 minutes provide the lawyer with an easy tool for searching. Also with some ingenuity it is possible to cross-reference exhibits and witnesses in a transcript.

Under a document control system the database is designed, as its name indicates, to control documents by providing the lawyer with the ability to organise, cross-reference and locate summaries of each document. *Evidence* is an IBM-PC software program which was specially designed for large litigation cases. Other general database programs such as BRS / Search, Titan, and Q&A can be customised to perform similar functions. *Evidence* has a number of useful features which assist the location and entry of document details.

First a check digit facility helps prevent accidental transposition of numbers during data entry. Secondly an automatic look ahead facility assists greatly in the entry of long company names often repeated in the documentation.

These databases can be run on a multiuser system or across a network, thus speeding up the process for data entry. Each has an indexing facility for entering bibliographic references of the document attributes, and other user-defined fields or indexes. There is the further option allowing the user to summarise the document in a free-text manner.

The sorts of documents which are put on this type of database include those from the client's files, third party sources such as newspaper articles, and the discoverable docu-

ments from the other side. This type of database is very useful for producing a discovery list of documents and for referencing privileged documents.

It is thus necessary to identify the categories of documents and the relativity of their contents before deciding what type of database will be useful. Usually it is far more practical to use a combination of the two systems. Part of the planning exercise involves establishing the relationship between lawyers and litigation support staff (see attached diagram). As information begins to flow from the client to the lawyer, a work planning method can be set up along the lines of a critical path in terms of the time taken for particular steps of the operation to take place.

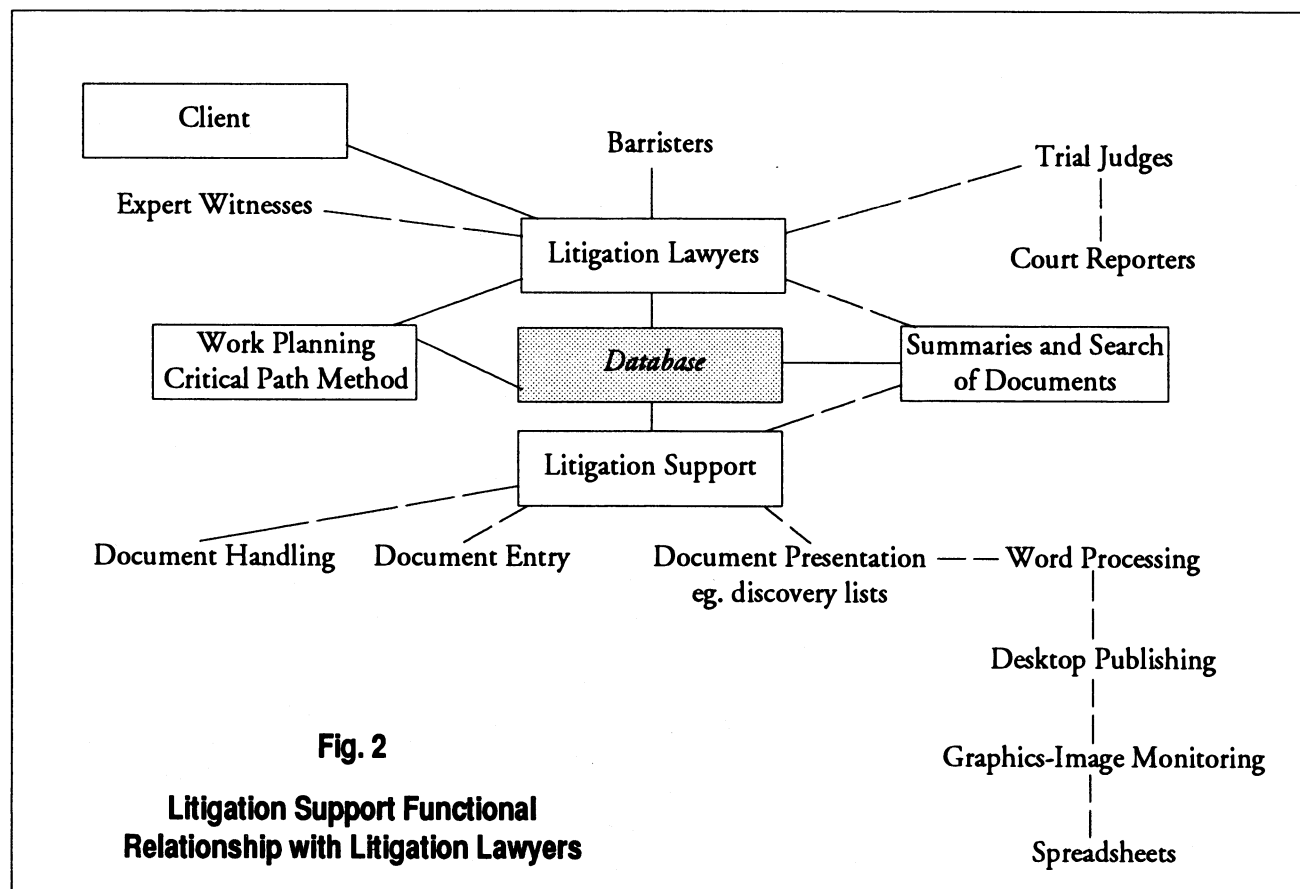There are four stages involved in the document handling process:

◆ Stage one is the screening of documents to examine the potential relevant materials and to eliminate, as efficiently as possible, those documents which are not likely to be needed in the case.

◆ Stage two is numbering. Each document is labelled either by automatically generating labels or bar-coding. There is not much point in referencing documents on a database unless you can refer back to the original document.

◆ The third stage involves data entry following the indexing, abstracting and summarising of documents to be placed on the database. The major options for data entry are keying, scanning, and electronic transmission. Entry by scanning may involve using an optical character reader (OCR) which allows each character to be recognised and searched

using programs such as *ISYS*, *WordCruncher* or *Folio Views*. This procedure is used primarily with full text databases and is limited to transferring high quality typeset or typewritten documents. Entry by electronic transmission is the form used in transferring data from transcript firms via diskette to the full text database.

◆ The final stage in the database process is validation of the documents that have been entered to check for errors in input or omitted information. The database should be able to report in some specified form (for example chronologically or alphabetically) lists of data entered in particular fields to assist in this stage.

The time to complete each stage is set out in Figure 3.

The presentation of documents can be enhanced by the facility of desk-

---

Client

Barristers

Trial Judges

Expert Witnesses

Litigation Lawyers

Court Reporters

Work Planning
Critical Path Method

Database

Summaries and Search
of Documents

Litigation Support

Document Handling   Document Entry   Document Presentation — — Word Processing
eg. discovery lists

Desktop Publishing

Fig. 2

Graphics-Image Monitoring

**Litigation Support Functional
Relationship with Litigation Lawyers**

Spreadsheets

top publishing and graphics which can be incorporated into reports. Computer aided designs are also becoming part of the court room scene with graphical presentation of cases. This has prompted Lord Griffith, an English judge, to refer to such presentations as 'Lies, damned lies and graphics!' As the case progresses, further data can be added from expert witnesses and indeed any document which is in wordprocessed format.

It is important to remember that although the lawyer is in charge of the case, the bulk of the data handling is performed by litigation support staff. The main use the lawyer gets from the database is in the reporting of documents and text searches.

The Future

What then does the future hold for litigation support? Data storage is one of the principle problems confronted by someone considering using a large database as part of the litigation support system. However the cost of a hard disk has begun to decline drastically. A hard disk with 300 megabytes of information is no longer considered a large scale magnetic storage device. For most typical database applications, this amount of storage is more than adequate.

It is now possible, however, to store graphic images of actual documents related to the litigation on a computer and to produce those documents for discovery directly from the computer. Storing graphic images in a computer-readable format, however, takes up a relatively large amount of space. A typewritten page of information stored as a text file takes up about 2 kilobytes. That same page of information stored as a graphic image may take up to 500 kilobytes

Fig. 3

Estimated time expectancy in 1,000 document case:

Task	Time (hrs)
Discussion and plan	1
Determining relevant documents	10 - 50
Determining privileged documents	2
Transportation of documents	?
Chronological sorting and ordering. (Depends on state of documents (50-100 per hr))	10 - 20
Numbering of documents (100 per hour)	10
Completing data prep sheets (40 per hour)	25
Data entry (40 per hour)	25
Validation (100 per hour)	10
Solicitor check for privileged documents	2
Run program	2
Print final list	2
Total	**103 (min)** **151 (max)**

of storage space using currently available compression routines which shrink the amount of information necessary to reproduce a computer-generated graphic.

Optical storage devices are very helpful for large scale storage. They are similar to the compact disks that are now widely accepted in place of records and audio tapes. This type of storage device utilises laser technology as a replacement for the traditional magnetic storage system of computer hard disks and floppy disks or back-up tape drives. Once the price of this technology drops significantly, it will become more widely accepted.

It is thus not impossible to envisage in the future that the whims of the environmentally conscious will be satisfied. More and more documentation will be transferred electronically and the days of cases involving huge amounts of paper documents are numbered. Disks sent to counsel will be bound in a new form of pink ribbon. ✍

Vicky Harris, LLB (Hons), is the CAD/Litigation Support Manager, Clayton Utz, Melbourne. This is an abstract of her presentation to the Association of Litigation Support Managers on 14 August 1992, in Melbourne.