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Computerised Litigation Support: A Practical Study

by David Levin

For lawyers familiar with commercial litigation, the name *Occidental Insurance v. Bank of Melbourne* has a particular ring. The case at trial actually consisted of three Supreme Court actions running concurrently. The court was primarily concerned with only the two main actions. The proceedings were complicated by the number of parties involved and the complex series of issues alleged to give rise to the relief claimed. There were approximately twenty defendants in one action, eleven third parties and four or five fourth parties in the other, with multiple cross-issues between virtually all parties. Diagrams were produced for the use of the court and the parties to show the interwoven claims more clearly. One of these diagrams is Fig.1 showing the third party claims made by one group of defendants, namely Battery Group Ltd and its directors, in one of the actions which gives some indication of the involved nature of the proceedings. As a result there were approximately 100 claims which would have had to have been ruled on by the Court, had the action proceeded to judgment.

In this article I seek to identify the problems which were faced in relation to such litigation from the plaintiffs' viewpoint and how computer resources assisted

(a) in overcoming the administrative difficulties;

(b) in permitting the plaintiffs' case to be more clearly presented; and

(c) in allowing the case as it ran over an extended period of time to be more easily controlled.

Continued on page 3 ☞

In this issue ...

Current Uses of Technology Examined and Alternative Dispute Resolution & Computers

Computerised Litigation Support: A Practical Study
by David Levin 1

From the Editors 2

The Selection of Hardware & Software: Tips & Traps
by Stephen McNamara 9

Society News 12

Law Firm Computing in the 90's: Litigation Support
by Vicky Harris 20

Alternative Uses for Litigation Support Techniques
by Elizabeth Broderick 24

The Legal Profession of the Future
by Michael Paterson 29

Mediation of Computer Disputes
by Geoffrey Grinter 31

Mediating Computer and Other Technology Disputes
by Connie Carnabuci 33

Case Notes 35

Book Reviews 39

Abstracts 42

☞ *Continued from page 1*

The plaintiff in any litigation bears a considerable administrative onus. Generally defendants are not anxious to reach the point of trial. It is for a plaintiff's solicitors to press for the action to be set down in the court, and then to have the pleadings and other documents in a state ready for the action to proceed on the allotted day. The particular problems faced in the *Occidental* litigation are thankfully rare, but the general nature of the problems is common to many actions, and the experience gained is relevant to all persons involved in litigation.

Computer Use: An Overview

A diagram of the manner in which computers were used in the litigation on behalf of the plaintiffs is shown in Fig 2. Those parts of the diagram appearing within circles and linked by arrows to the Court represent computer documents or databases of which printed output was provided to the court and to other parties. Those parts of the diagram appearing within rectangular boxes represent computer files or databases maintained for the use of the plaintiffs' solicitors and counsel and not made available outside that group.

Pleadings

'Pleadings' are the documents in which each party sets out in concise language what it claims against other parties and what it says to claims made against it by other parties. The plaintiffs' pleadings, as were most if not all of the pleadings of the other parties, were prepared on word processors. In virtually all cases, pleading documents were produced in counsels' chambers on MS-DOS machines. Pleadings are filed in hard copy (there being no provision for electronic filing in the Supreme Court of Victoria) in the Commercial Registry of the Supreme Court. Upon filing, each document received a unique numerical code referable to the action and a short verbal description applied by the operator in the Registry in accordance with limitations imposed by the software used in the Supreme Court. With only three or four parties and thirty or forty documents such a system operates reasonably satisfactorily, but because of the software limitations a print-out of the computerised index from the Court was insufficiently helpful to allow precise identification of many individual documents. For example, the court's computerised index might identify a document by its unique number and by a description such as 'Defence'. However it did not differentiate between a Defence to a Third Party Notice, a Defence to a Fourth Party Notice, a Defence in the substantive action or a Defence to a Cross-Claim; nor did it necessarily state to which opposite party's document the Defence in question was addressed.

Discussion with the officers in the Registry, who were extremely helpful on an individual basis, could not improve the description of the documentation beyond that permitted by the operating software. We therefore decided, at an early stage, to re-index the court index (on a dBase IV database) so as to permit a sharper definition of each document and to facilitate the retrieval of filed documents. By order of the court, access was provided to the printout from the court's computerised record of lodged documents. Based on this document we produced more detailed dBase IV documents to provide the necessary index of the filed documents. The index was produced as often as required, but in any event a few days before each directions hearing in the Commercial List, and circulated to the parties. The index was produced in each of the two principal actions and printed in two ways, firstly by reference to the unique number by which the Court could identify the document, and secondly by reference to the solicitors or party filing the document. By so doing, this allowed any person to quickly find the court number for, say, a Third Party Notice addressed to a particular party filed by a particular opposite party and also allowed a document to be identified if only the Court number were known. The index proved extremely useful as the number of filed documents exceeded 1000 in the actions. Novel orders were made by the court to require parties issuing summonses in interlocutory (preliminary) hearings to state in the summons to which documents reference would be made at the hearing, identifying such documents by Court Number. This permitted the Judge to have such documents immediately available and saved a considerable amount of court time.

Discovery

'Discovery' is the process by which each party in the litigation provides to each other party a list of documents which it has or has had which are relevant to the proceedings. Each document or bundle of documents should be identified by description and each is often given a number. At an early stage the Plaintiffs' solicitors and counsel decided that, because of the volume of material that was the subject of discovery, it was critically important to be able to identify any document from any party involved in the action in the shortest possible time. We therefore gave each document a number which, in retrospect, proved rather more complex than was strictly nec-

essary. The numbering system identified whether the document had been obtained on discovery or by some other means; the party whose document it was; the volume of that party's discovery where the solicitors for the Plaintiffs had filed the document and, of course, the document number as given by the party discovering the document in its affidavit of discovery. Thus a number 1 01 1 017 translated as document 17 of the Firstnamed Defendant's affidavit of documents and could be found in the first volume of its discovered documents.

A very real problem with which the system had to cope was that Affidavits of Documents commonly used identifying 'numbers' which to a computer are not numbers at all: for example a document may be discovered as "17(a)" or "164(a)(d)" or even "264.G.379(a)". These descriptions had to be maintained in order to identify immediately the relevant document within the affidavit of the party so discovering. We therefore devised a system which permitted such entries to be recorded, and from which the computer generated a numerical sequence. On screen each document had two 'numbers': one was a true computer generated number and the other was in fact a text identification commonly in numerical form but which could include more than one decimal point and/or capital letters, small letters, brackets, slashes, etc. Thus document "1 01 1 017(a)" (a text identification) translated to document 1011017 in the computer generated numerical entry. A search could therefore be conducted for the document 1011017 which would actually produce the series of documents discovered by the First Defendant under the number 17 which might consist of three documents identified as 17(a), 17(b) and 17(c). One could search for the entry '017(a)' of the text identification field, but this could throw up documents of any other party also discovered under the number '17(a)'. Though this may appear of doubtful relevance to non-computer users, let me assure you that when searching for one of 50,000 documents, knowing the numerical reference rather than the text reference could improve the speed of search by a factor of ten or more.

A Discovery Database

Having agreed on the manner in which each discovered document should be identified, my instructing solicitors embarked upon the task of entering on computer each document discovered by our clients and/or other parties. They did this using Apple Macintosh machines operating *FileMaker Pro* software. An epitome in computerised form of each document was prepared. We did not have facilities nor did we ever consider imaging each document on screen. I wanted to operate a system which would be free-standing (i.e. not requiring a permanent telephone link to a distant mini) and capable of operating on a portable computer in court. At that time Gigabyte memory (which is what one would have needed for imaging all documents), was of limited availability and extremely expensive. The entry form was updated and revised from time to time as the input of material continued.

Court Book

In order to conduct complex litigation, it is necessary for the plaintiff to compile a court book, with each page individually numbered, which contains most of the relevant documents to which reference is likely to

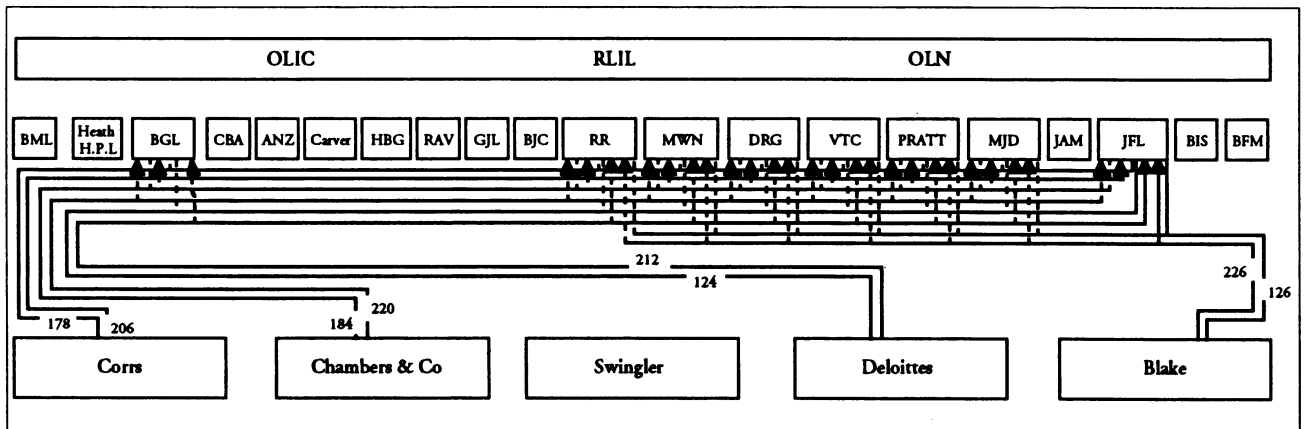

Fig. 1

BGL and Directors Third Party Claims

be made in the course of the conduct to the litigation, together with a separate book of the relevant pleadings. Many of the pleading documents, by the date of commencement of the hearing, will have been superseded by amendments or become irrelevant for some other reason. In the *Occidental* case the court book for trial totalled ten ring binder volumes which by the end of the evidence had expanded to thirteen volumes. The court pleadings book totalled four volumes.

Preparation of the court book was a complex exercise which was considerably assisted by having the documents available on a computer system. The database of discovered documents was sorted into chronological order and then documents identified which clearly had to be placed in the court book. Decisions were taken to place in a logical order documents bearing the same date and to cull out multiple copies of the same document. There were, for example, many copies of documents in the hands of a number of the parties. Of course there might have been notations or variations in the documents, or fax headers or footers which might reveal a time and date on which the document was sent or received. An assessment had to be made as to whether certain of the multiple copies with minor variations of a particular document were required in the court book or whether a single copy was sufficient.

Having prepared an index of the documents for the court book which suited the plaintiffs, the index had to be circulated to all other parties to allow them to notify the plaintiffs' solicitors of documents which they wanted to have placed in the court book. Having collated the responses from the other solicitors a master copy of the court book was put together. Each document had to be marked to show its source: i.e. 'D1/17'. This was particularly necessary when very similar documents were held by numerous parties. Finally the individual pages of the court book were numbered and the court book volume and page number for each document was entered in the computer. This permitted me to identify swiftly the location of any particular document in the court book when, as happened fairly frequently, parties sought to tender documents as exhibits which were already in the court book. The process of preparing the court book took in excess of six weeks.

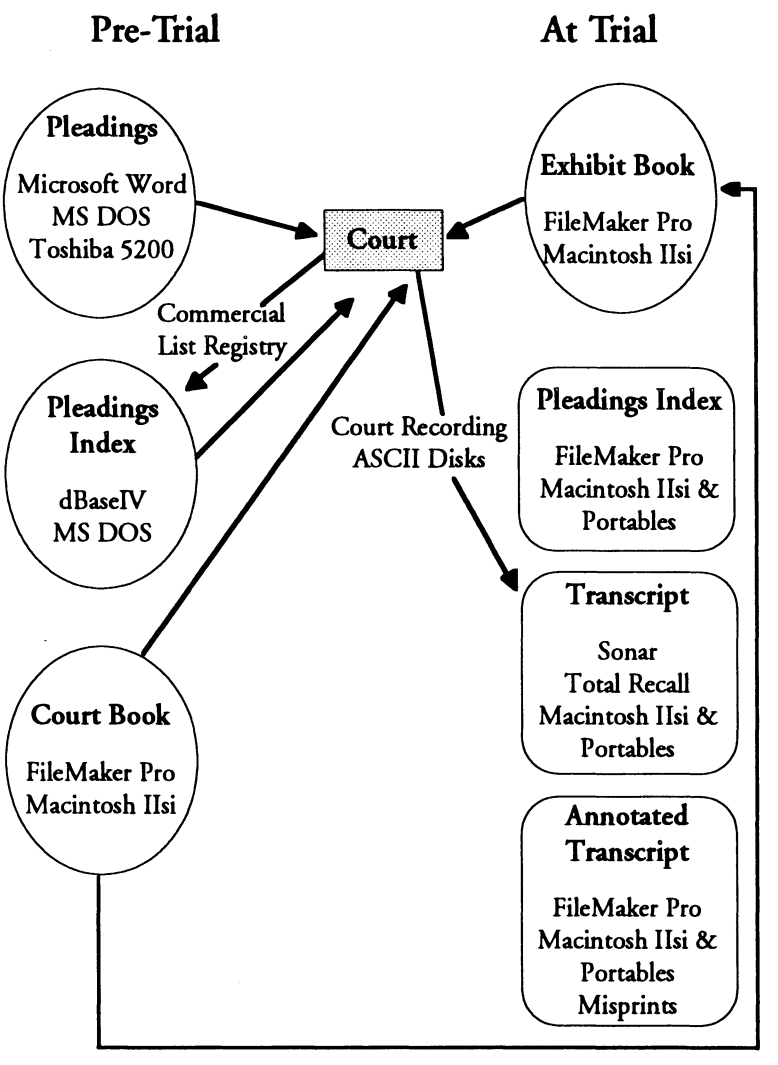

Fig. 2

The Plaintiffs' Litigation Support

Trial

At trial, a number of ongoing mechanical tasks were required to be completed on a daily basis. A list of exhibits had to be maintained which could be circulated to the Court and to the respective parties. In order to make searching for documents as swift as possible, I was anxious to have all exhibits identified numerically rather than by a combination of numbers and letters. Courts commonly identify one party's documents by letters, 'A', 'B', 'C' etc.

and the opposite party's by numbers. Such a system would have been awkward to use in a case with so many parties and such a volume of exhibits. At the outset we therefore requested the court to adopt a numbering system based on our numerical identification of the parties. We could not foresee any one party producing more than 999 exhibits for which the numbering system was designed to cope, and this proved correct: we produced just under 400 exhibits, one other party produced just over 400 and the remaining parties each tendered less than this. The system of numbering proved highly successful.

The exhibit list was maintained on the portable Macintosh computer in court in real time. It was compiled in the database on which the discovered documents had been catalogued and which recorded the page of the court book where the document appeared. As transcript was received and noted, the exhibit list was cross-referenced to the transcript page where the tender of the exhibit was made. This permitted the plaintiffs to know at all times whether a particular page of the court book had been tendered as an exhibit, and if so by whom and when.

The electronic 'court book' was updated to show which documents or pages had been made exhibits, or marked 'for identification' only, or were admitted subject to some particular objection which could be resolved at a later stage. Towards the end of the oral evidence a list of all documents which had not been exhibited in the proceedings was notified to the court so that such documents could be removed from the volumes of the court book. Such a list was produced in minutes on the *FileMaker Pro* database, by searching for all documents which appeared in the court book but which had not been given an exhibit number. To perform the same task manually would have taken many days.

Database Searching

Using the *FileMaker Pro* system a search could be made of any field or combination of fields in the records. A typical search might be:-

(a) all documents of party A sent to party B during a defined period of days, weeks or months; or

(b) a company minute of company X relating to a meeting on a certain date and time; or

(c) a letter of a certain date.

The possible searches were limited only by the structure of the entered records and the imagination of the searcher. The display was capable of swift alteration to highlight any particular facet of the database. We had seven or eight screen displays which were in regular use for different purposes. For example if attention was being drawn to the derivation of the document as it passed through a series of fax machines and received the signatures of various persons in different places, the Fax History display might be relevant.

Transcript

The transcript was received during the course of a day's hearing, and in any event by 6:30 p.m. a complete printout of the transcript was available together with an ASCII disk of that section of the transcript. Each party dealt with transcript in its own way. Control of transcript is always a personal matter. It has been my experience that, helpful as full text electronic retrieval of transcript may be, it needs to be augmented. There is no alternative to the hard grind of noting up transcript on a daily basis. We used Total Recall to find particular words appearing in the transcript, and also made notes of the transcript daily (or rather nightly) on a *FileMaker Pro* database. As a backup in chambers, the transcript was also placed on an MS-DOS machine and searched using *ISYS*.

Used in collaboration, these two computerised methods of controlling transcript proved highly successful. As the case grew to 90 sitting days, our transcript notes grew to 7,000 to 8,000 entries. A search could be made of a word or combination of words using Total Recall, and without leaving the software the full text of the transcript could be instantaneously called up on the screen to confirm the context and evidence. Alternatively in *FileMaker Pro* a search could be made of all of the evidence relating to a particular defined field or combination of fields, such as date or span of time, time of day, exhibit, court book page, witness, counsel or event, as defined by a numerical code. The events code was built up from experience as the case proceeded. For example, all events of a particularly important meeting had a single code number; all evidence which we considered could be taken to be admissions of incompetence had a particular code number; all statements of evidence which were in conflict with other evidence of the same witness had a particular code number. All of these searches could be undertaken whilst sitting in court.

A useful adjunct to the transcript database was a transcript misprint record. When reading the transcript, errors were noted and recorded. From time to time a list of errors and corrections was printed and circulated amongst all parties. In the absence of a dispute the list was treated as agreed, and provided to

the Judge's Associate for recording in the Judge's copy of the transcript. Thus in a ninety day hearing, hardly any time was wasted dealing with problems in the recorded transcript.

The Hardware

The solicitors instructed on behalf of the plaintiffs had at an early stage decided to use Macintosh hardware and *FileMaker Pro* software. After discussion it was agreed that a single system run through a telephone connection from Sydney with machines in Melbourne acting merely as consoles to the Sydney system would be unsatisfactory and we decided to create a stand-alone system which could operate on any Apple Macintosh. This would enable us to have Macintosh portables in court or at home.

FileMaker Pro is an extremely user friendly database software. However when using a system where one command can alter the entire database without the possibility of an UNDO instruction to give the user the chance to correct an error, and when we had copies of the database being operated on a number of machines, we had to devise strict controls to reduce problems to a minimum. The controls ensured that:

- users who merely needed access to the system without needing to alter any record could be provided limited access through use of a password restricted entry system;
- a backup of the most recent database was always available;
- one database was designated as the master and the others were mere slaves.

FileMaker Pro can be set up with password protection, but once the password was entered, and the protection neutralised, the entire database was able to be altered. We therefore had to devise a working routine which ensured that:

- a backup was always available to allow the database to be restored in the event of a system failure in the course of running;
- a single database on a single machine was the master database, and all other databases created or altered separately were subordinate or slaves.

The system worked by using a physical marker on the machine, which was designated as holding the master database. Thus when a portable hard disk was used and attached to a portable Macintosh, the portable hard disk held the master database designation. By this system, subordinate databases of new discovery, or discovery from a new party could be compiled in Sydney and transferred via a phone line to Melbourne and dovetailed into the master database without risk of overwriting any existing information. From time to time a copy of the complete database was transferred for security purposes to Sydney.

The Backups

At least once and sometimes three times a day a backup of the document database and the transcript database would be undertaken. Initially backup was to floppy disks. However once the database exceeded six or seven floppy disks, the task became unwieldy. It was at this stage that a portable hard disk of 120Mb was brought into use which obviated the need for floppy disk backups completely. The portable disk, about the size of a small paperback book, could be connected to any one of a series of Macintosh machines which we used at different locations and a backup saved onto the other machine. The disk could also be taken home for extra safety.

Pleadings Index

At a fairly late stage in the trial, as the time for delivering final speeches was approaching, it became apparent that the pleadings book was difficult to use because of the complexity of claims and cross-claims between the respective parties. It was therefore resolved to produce a further database of the four volume pleading book, which could operate as an autonomous index. The input to this database was the existing index to the four volume set of pleadings. Rather than use the names of the parties however, we utilised the two digit numerical sequence which had been adopted for discovery and exhibits. Thus we could search for any filed pleading document issued by a particular defendant against another particular defendant, or for any document received by a particular party or for any document entitled 'Defence to Counterclaim', etc. This database was produced using *FileMaker Pro* and had the case proceeded to final speeches would have proved invaluable.

Conclusion

Looking back on the organisation of computerised support, it seems to me that there are several important features which must be borne in mind whatever system, whatever software and whatever case one is undertaking. The first and probably most important feature of any support system must be its flexibility. It is extremely difficult, at the outset of litigation, to foresee the twists and turns which will have to be accommodated. Issues which at the start loom large turn out to be unimportant; unforeseen areas of interest arise as the case proceeds. Any computerised system must be capable of speedy, convenient and reliable alteration. One of the great benefits of the *FileMaker Pro* system operating on a Macintosh is that the database can be reorganised 'on the fly' with ease. New screen displays can be created to address a particular search issue. Even simple things, such as the size of the typeface on the screen display can be dramatically altered thereby allowing colleagues sitting further away from the screen along the bar table to use the output conveniently.

The second important feature on which stress must be placed is the integrity of the database. The procedure used by the various counsel and solicitors involved in the case must ensure that at any one time everyone knows which database is the master database and that it is as complete and reliable as human ingenuity can ensure. If ever a time arrives when subordinate databases are altered, the altered information will be lost unless that information is satisfactorily transferred to the master database, without fear of corrupting that database.

The third feature of a reliable computerised support system must be a regular, systematic and easy system of performing a backup. That is, saving the entire database to another medium such as floppy disks, a portable hard disk, or a second computer, so that in the event of a malfunction the system can be retrieved in as close a form to the lost system as can be conveniently done in the swiftest possible time. Particularly when conducting litigation in court, it is totally unsatisfactory to be in a situation where the computer "goes down". I doubt that a court would accept as an essoign[1] the fact that a party's computer system had suffered a fatal malfunction.

David Levin was one of the junior barristers engaged for the Plaintiffs in the Occidental litigation. He is also convener of the Victorian Bar Computer Users Group.

Footnote

[1] An excuse for absence from court