REFLECTION NOT REJECTION: HARNESSING THE BENEFITS OF TRIAL TECHNOLOGY

By Sheryl Jackson

1. Introduction

There is no doubt that the benefits of technology for the business community generally have been accepted and that technology permeates most aspects of almost every business enterprise. As providers of service to a business community which now thinks and conducts its affairs predominantly by electronic means, it is perhaps surprising that litigation lawyers continue to undertake litigation in a form which is predominantly paper-based.

More than ten years ago there were judicial predictions that:1
Relative cost, and efficiency considerations will combine to demand an increasing use of technology in the actual conduct of trials.

Despite this, Queensland is one of several jurisdictions which can still only claim less than a handful of matters tried in a form fairly regarded as “electronic.”2

The trial in Emanuel Management Pty Ltd v Fosters Brewing Group Ltd [2003] QSC 205 (“Emanuel”) began as an electronic trial, with the use of commercial applications provided by a commercial service provider.3 It is one of only two trials4 conducted in Queensland with the use of sophisticated courtroom technology provided by commercial service providers.

In an address given in 2003 while the Emanuel trial was proceeding, the Honourable Justice HG Fryberg said:5
Finally, a word about the use of computers to handle evidence during a trial – the so-called e-trial. The concept is wonderful. In a large case, which in practice means a commercial case, significant costs can be saved in relation to document handling, and documents can be made much more readily accessible to the court and the parties. But it’s not here yet, not properly. If you don’t believe me wander up to the Banco court and watch the Emanuel trial for a

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1 Justice L Olsson and Rhode I, “Coming Ready or Not: Courts and Information Technology” (1997) 71 Reform 10 at 12.
2 There is no single definition of an “electronic” trial. For consideration of the features which may be involved in the conduct of a trial electronically, and the benefits which may be brought to a trial through the use of technology, see Jackson S, “New Challenges for Litigation in the Electronic Age”, (2007) 1 Deakin L R 101-105. See also Stanfield A, E-Litigation (Thompson Legal and Regulatory Group) 2003, p 71.
3 E.law Australia was retained to provide the technical services and computer equipment for the trial.
4 The other was the trial in Charter Pacific Corporation Limited v Belrida Enterprises Pty Ltd [2002] QSC 254 before Fryberg J. That trial, which occupied some 157 hearing days over 18 months, proceeded as a partially electronic trial.
while. You can’t blame the failure of the barristers and the judge to use the system on them, at least not completely. There are numerous reasons why the two e-trials so far attempted by the court have not produced high levels of satisfaction with the technology amongst the participants. I will not try to list them now as I have not analysed them in detail. Also it is early days. We are learning as we go along and someone has to play the role of the guinea pig.

Five years after the making of that statement it remains very much the case that, “the e-trial is not here yet, not properly”, despite strong evidence supporting the view that “the concept is wonderful” and capable of generating enormous efficiencies. The Queensland Court’s Information Management Team has very recently developed innovative technology to support an e-trial, although this technology lacks much of the more sophisticated functionality of the commercial applications. However, there have since the trial in Emanuel been no attempts in Queensland to adopt at trial the more advanced technology available through commercial service providers.

The perception that the adoption of technology in Emanuel was unsuccessful, along with the absence of countervailing evidence from other electronic trials in Queensland, is undoubtedly a contributing factor to the slowness of the uptake of technology at trial in this state.

This paper draws upon the available evidence in Australia and elsewhere about the substantial efficiencies and other intangible benefits technology, particularly evidence presentation technology, offers to the trial process. It then considers the Queensland experience in a small number of matters which have employed courtroom technology at trial in different ways, with a focus on the experience in Emanuel. It suggests that it is the manner in which the technology has been applied when it has been adopted at trial in Queensland which may have been ineffective and inefficient, and that it has been demonstrated that technology skilfully applied not only reduces court time, but also significantly enhances the process of presentation of factual material to the court for the judge’s consideration. The paper also highlights the obvious fact that available technology is continually evolving, and there are a range of options which overcome the practical difficulties that may have been experienced. The analysis may assist E-Court advocates in Queensland and also in other jurisdictions that have yet to realise the significant benefits possible when trial technology is effectively utilised.

The view needs to be emphatically put that previous unsatisfactory electronic trial experience should not be used as an excuse for arguing about courtroom efficiency and the new technology. It needs to be seen as a beginning from which best practice trial technology will develop, and from which substantial benefits will accrue.

2. **Why use of technology in the courtroom? Some success stories**

Until quite recently most of the matters that have been conducted in an electronic courtroom have been matters anticipated to be long-running and involving enormous numbers of documents. It is probably true to say that in some of these the use of technology has been virtually compelled because of the volume of documentary and

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6 The Queensland Courts are encouraging the use of this technology during a 2008-2009 pilot period. For information about this pilot project, see http://www.courts.qld.gov.au/4265.htm.
other evidence to be presented and managed, to the point that a conventional paper-based approach would have been impossible. In *Seven Network Limited v News Limited* [2007] FCA 1062, for example, the electronic database of discovered documents contained 85,653 documents, comprising 589,392 pages, and 12,849 documents, comprising 115,586 pages, were ultimately admitted into evidence. After explaining the nature of the “electronic courtroom” used in this case, Justice Sackville said: “It would have been virtually impossible to conduct the trial without the use of modern technology.”

Justice Einstein made similar comments in the course of the trial in *Idoport v National Australia Bank Ltd*. After that trial had proceeded for over one year his Honour said: “Looking back, in some ways it seems to me almost impossible to imagine how the case could have been conducted without the use of the [Technology] Court.”

There is clearly no real choice but to adopt trial technology if, as in the *Seven Network News* and *Idoport* cases, the documentation involved is of such a scale that the use of technology is the only practical way the trial can proceed. It might be argued that if the trial could only be managed with the aid of technology this is because technology generates efficiencies. It becomes axiomatic that the benefits of those efficiencies should be enjoyed regardless of whether it might otherwise be possible to conduct the trial in a form that is purely paper-based. Such an argument is strengthened by an increasing body of evidence that the adoption of technology at trial or other hearing produces benefits that justify, and in fact demand, its adoption much more broadly than has to date been the case.

In the United States, Lederer reports “anecdotal evidence” that evidence presentation technology saves a minimum of one quarter to one third of the otherwise traditional amount of time necessary to present a case and that experimentation in the

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8 *Seven Network Limited v News Limited* [2007] FCA 1062 at [15]. For further statistics in relation to the extent of the documentation in this case, see [11]-[16].
9 *Seven Network Limited v News Limited* [2007] FCA 1062 at [10]. The judge subsequently noted (at [48]) that the writing of the judgment would also not have been possible without the electronic databases prepared for the trial and the search functions they incorporated.
10 File nos 50113/98, 50026/99 and 3991/00. The final hearing of these matters had consumed 200 sitting days, but the case was dismissed in January 2002, when the plaintiffs were unable to secure funds to continue the proceedings and meet orders for security for costs: *Idoport Pty Limited and Anor v National Australia Bank Limited and 8 Ors; Idoport Pty Limited and Anor v Donald Robert Argus; Idoport Pty Limited “JMG” v National Australia Bank Limited* [52] [2002] NSWSC 18.
12 The Law Reform Committee in Victoria concluded, in 1999, that the benefits of courtroom technology, while more obvious in large cases, are equally applicable to smaller cases, and that for technology to truly facilitate access to justice, more emphasis should be placed on providing the infrastructure for use in all cases, rather than merely the high profile complex cases: Parliament of Victoria Law Reform Committee, “Final Report – Technology and the Law”, Chapter 10 (Courtroom Technology), May 1999 at http://www.parliament.vic.gov.au/lawreform/inquiries/Technology%20and%20the%20Law/final%20report.pdf viewed 17 October 2008 at 10.21 and 10.63.
“Courtroom 21 Project” suggests a minimum savings of about 10% even in a short, one hour, case, with only a few documents.13

In the United Kingdom, the process has been slow, and the use of technology in civil cases is still quite rare. There have, however, been a number of large scale matters have been conducted with the use of technology. For example, information technology was successfully employed for Lord Justice Hutton’s inquiry into the circumstances surrounding the death of British scientist David Kelly. The technology employed included a document display system. All the evidence put before the hearing, which comprised about 10,000 pages, was scanned and the images displayed on monitors, avoiding the need for participants to retrieve documents from files. Writing about the use of technology at this Inquiry, Richard Susskind reported that “this has saved time.” He also noted the experience that “past users of transcription and display technology agree that these systems reduce the length of hearings by at least a quarter.”14

Similarly, Lord Justice Brooke wrote in 2004:15

Some of the technology I have described has also been a feature of some of the major criminal trials conducted in England and Wales over the last 10 years. Experience has shown that the combination of a LiveNote transcript and electronic presentation of evidence (“EPE”) has significantly reduced the length of these trials, and made the task of judge, lawyers, witnesses and, above all, juries, correspondingly easier. Over the last three years we have equipped one courtroom at nine different Crown Court centres with the cabling and hardware needed for electronic presentation of evidence, and the evaluation report on this experiment showed that this technology is here to stay.”

In Australia technology has also been more frequently been employed in criminal trials16 and long-running Commissions of Enquiry,17 but increasingly it is being adopted in complex commercial matters. The technology adopted in many of the

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13 Lederer F, “High-Tech Trial Lawyers and the Court: Responsibilities, Problems, and Opportunities, An Introduction”, the Centre for Legal and Courtroom Technology and the Court 21 Project at: http://www.legaltechcenter.net/publications/articles/hightech.pdf viewed 17 October 2008. Courtroom 21 is a joint project of the William and Mary College School of Law and the National Centre for State Courts in Williamsburg, Virginia. It is a demonstrational and experimental project investigating ways technology can improve the legal system.
15 Lord Justice Brooke, Vice-President of the Court of Appeal (Civil Division) and Judge in charge of modernisation, “The Legal and Policy Implications of Courtroom Technology: The Emerging English Experience” paper delivered at the International Conference at Williamsburg, 13.2.2004, at 5.
16 See Plibersek R, “Computers: Managing Complex Litigation “Some Other Way” Sydney, NSW 2000 at: http://www.sinch.com.au/article_man_comp_lit/index.htm viewed 16 September 2008. The author notes the benefits of the use of courtroom technology include the acceleration of the process of the tender of evidence, assistance to counsel in the preparation of written submissions and closing addresses resulting in substantial savings to the parties and the court. The author also refers to research concluding that jury comprehension of evidence is greatly improved when presented in the form of diagrams and visual aids.
17 Examples include the Royal Commission of Enquiry into the failure of HIH Insurance and the Royal Commission into the Building and Construction Industry, which both ran between November 2001 and May 2003.
matters which have proceeded electronically has not been the subject of published evaluations by the participants. There are, however, reported evaluations of the use of technology in a range of hearings in Australia and New Zealand, beginning in the early 1990s. It is appropriate to consider some of those matters here.

2.1 The Kalajzich Inquiry (1994)

The first time in New South Wales that an inquiry or a trial proceeded as a “virtually paperless” hearing was the Kalajzich Inquiry into doubts or questions concerning the guilt of Andrew Peter Kalajzich of three offences, including one of murder, relating to the death of his wife, Megan, on 27 January 1986.

The specified objectives for the service provider were:
1. To implement cost effective systems and to support the preparatory and research work of counsel assisting the Inquiry and Justice Slattery;
2. To implement systems within the courtroom to aid the flow of the proceedings, reduce the number of sitting days and consequently reduce cost.

The technology set-up for the trial involved a network of personal computers supporting: an image database of all relevant documents and photographs; full text databases of selected subsets of that material, and a structured database to support hard copy records management. The judge had a separate terminal on the bench which concurrently displayed the exhibits and material shown to witnesses. Also, there was a large screen on the bench near Justice Slattery by which all (except the judge) could view exhibits or material. Through personal computers on the bar table connected to the network, counsel had independent access to the same and other material.

Justice Slattery found by the end of the Inquiry that his “initial fear and trepidation about using computers and information technology” had been eliminated. He concluded that the objectives in using the technology in the Inquiry were achieved and that the equipment in the courtroom unquestionably reduced the time the witnesses spent in the witness box. He observed, in particular, that considerable time was saved in not handing an exhibit to a witness or in passing material among counsel and to the judge. Although finding it difficult to assess the overall extent of the acceleration of the course of the hearing, he estimated it to be in the vicinity of 25 to 30% with proportional cost savings.

2.2 The Estate Mortgage case (1997)

In this complex litigation, partners from Arthur Anderson were appointed trustees of Estate Mortgage. They sought to recover $1 billion lost by unit-holders in the trust

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19 Systematics Pty Ltd was retained to provide the technical services and computer equipment for the enquiry.
20 Justice John Slattery AO, n 18 at 81.
21 Justice John Slattery AO, n 18 at 81.
22 Justice John Slattery AO, n 18 at 84.
23 Justice John Slattery AO, n 18 at 82-3.
collapse. The parties were represented by 27 counsel, including 11 senior counsel. There were about 80 hearing days before the matter settled.

The facilities designed and provided for the trial included:
- Court book database and image library;
- Court document presentation. The documents included documents produced by the parties which were added to the electronic court record on an on-going basis throughout the hearing;
- Public document image view. The display of images in the courtroom was controlled by an operator, under instruction of the judge and counsel;
- Transcript management services, including real time transcript;
- Network infrastructure;
- Communication services, including dial-in access to all home page facilities, allowing remote access and participation, and email; and
- Audio/visual broadcast and recording services.

The database used to store and deliver images was available via the internet. The documents could be viewed on all monitors within seconds after they were requested. The use of browser technology meant that any computer could access the information within or outside the courtroom by using an account and password. The information stored on the court system was accessible from any computer attached to the in-court network by viewing the Estate Mortgage home page using an internet/intranet browser such as Netscape Navigator or Microsoft Internet Explorer.

In 1993 the parties all agreed on the use of an electronic form of discovery involving the imaging of all documents relating to the cases. The discovery protocol included a descriptive naming format for all documents. Standard form for the collection of data, document naming, and types of images to be produced were also agreed. Before trial more than 1.5 million pages, and a further 200,000 documents during the trial, were imaged and stored on 3 servers. All documents and images were hyperlinked.

The benefits flowing from the technology employed, as summarised from the views expressed by the practitioners after the trial were:
- Saving of time and costs and improving the quality of presentation;
- Saving of space in the courtroom, as well as in the offices and homes of all participants;
- Convenience of access to any document any time from any location;
- Saving of time and costs at the hearing. A key reason for this was the speed of delivery of all relevant information in court. About 75,000 documents were referred to during the 80 days of the hearing. It was reported that the plaintiff's

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25 Systematics Pty Ltd was engaged by the parties and by the Supreme Court of Victoria to provide comprehensive facility design and provision. The Intranet approach for the court system was developed for the contractor by Mr Chris Priestley.
solicitors estimated a saving of 30% to 40% in hearing time in the first 80 days ($3,000,000 in legal costs)\textsuperscript{27}.

Although some minor issues were raised by the participants, it was also reported:\textsuperscript{28} The consensus from the Estate Mortgage post-mortem was that the savings in time and legal costs from the system were translatable into shorter and smaller trials involving 3 to 4 lever arch folders of documents and that use of the same system would make litigation accessible to small as well as large firms.

The Law Reform Committee of Victoria\textsuperscript{29} has noted “the use of technology in this case has received international acclaim.”

\section{2.3 Southern Equities Corporation Ltd v Arthur Andersen (2001/2)}

The first fully electronic trial conducted in the Supreme Court of South Australia was that in \textit{Southern Equities Corporation Ltd v Arthur Andersen.}\textsuperscript{30}

The matter was brought in the name of Southern Equities Ltd (formerly Bond Corporation Holdings Ltd), the ultimate holding company of some 300 companies in the Bond Group of Companies, which was then in liquidation. The action was for damages and other relief for negligence and breach of duty against a firm of chartered accountants as auditors for the Bond Group of companies for the financial year ended 30 June 1988.

The proceedings were issued in 1994. The case preparation took between six and seven years, and the evidence involved many thousands of documents relating to the original transactions, to the audit of those transactions, to the overall approach to and execution of the audit and to the quantum of the plaintiff’s claim. The trial was expected to last for two years or more.\textsuperscript{31}

The trial began on 21 November 2001. There was a break in January 2002 and a two week break in March 2002. The parties reached a settlement in May 2002. Most of the trial time involved the plaintiff’s opening and the tendering of documents, and a short opening by the defendant to identify some of the real issues. There was some evidence from lay witnesses, but the matter settled during what would have been a very long cross-examination of the first expert witness called by the plaintiff.

The proceeding had been managed by Debelle J, but Bleby J took over the management at a late stage. Bleby J gave directions establishing a timetable for the

\textsuperscript{27} See also: Parliament of Victoria Law Reform Committee, n 12 at 10.2. It is there reported that “those involved in the case have estimated that using the technology reduced court time, and therefore costs, by almost 50%.”

\textsuperscript{28} Justice Tim Smith and Chivers I, n 26 at 18.

\textsuperscript{29} Parliament of Victoria Law Reform Committee, n 12 at 10.16.

\textsuperscript{30} Action No 1474 of 1994. The trial began on 21 November 2001, but settled out of court in May 2002 before completion of the trial.

\textsuperscript{31} Justice David Bleby, “The First Electronic Trial, South Australian Supreme Court”, paper prepared at the request of the Historical Collections Librarian of the Supreme Court library for the purpose of recording some of the judge’s reactions as trial Judge to the electronic aspects of the trial, October 2002 at 1.
electronic scanning of all documents to be tendered in the matter and for ensuring that timely contractual and other arrangements were entered into between the provider of the technology\textsuperscript{32}, the parties to the litigation, and the Courts Administration Authority.\textsuperscript{33}

The court set-up involved two screens on the bench. Although both were fully functional displays attached to the judge’s computer and able to be controlled by the judge, they were initially configured so that one screen would receive the same content as was being published to the witness. There was one screen in the witness box, one for the judge’s associate, two for counsel for each party, and one for the operator. Each of these were attached to fully functional computers. There was also one screen for court reporters and one for the small public gallery at one end of the courtroom. During the court sessions a courtbook operator published the document called for to each screen.\textsuperscript{34}

The electronic courtbook enabled users to gain instant and 24 hour access to any document stored in the system. The software incorporated extensive search facilities. All relevant information about any exhibit was available instantly, including reference to the page of transcript where it was tendered. The transcript, which was loaded into the system at the end of each hearing day, also incorporated word search facilities, enabling instant access to any page or passage of transcript, with associated comprehensive word search facilities, enabling almost instant finding of any passage. The transcript was equipped with hypertext links to every exhibit mentioned. There was also a facility for all users to make their own secure annotations about any exhibit. The system also provided internet access to cases and legislation data bases, and to chronologies and other facilities.\textsuperscript{35}

Bleby J admitted that his background was one of “technical ineptitude”, that he had no useful keyboard skills and very basic computer search skills. These skill levels meant that he came to the system “with some trepidation in my technologically impaired state.” After his experience, the judge said that the only limitations he found with the use of the system resulted from his lack of keyboard skills. Nevertheless he concluded that “for those equipped with such skills, or even for those without, the system provides new horizons, not only of efficiency, but of availability and quality of information.”\textsuperscript{36} Despite his background, his limited keyboard skills, and his initial reservations the judge’s evaluation of the efficiencies of the electronic conduct of the trial provide a resounding endorsement. He said:\textsuperscript{37}

The efficiencies of the system have been written about by others. I endorse those estimates of others that the actual trial time saved by not moving, retrieving and returning paper is at least 25%. That efficiency speaks for itself. So whatever the limitations, that was an enormous bonus.

\textsuperscript{32} Systematics Pty Ltd was retained to provide the technical services and computer equipment for the trial.
\textsuperscript{33} Justice David Bleby, n 31 at 2.
\textsuperscript{34} Justice David Bleby, n 31 at 4.
\textsuperscript{35} Justice David Bleby, n 31 at 3-4.
\textsuperscript{36} Justice David Bleby, n 31 at 5.
\textsuperscript{37} Justice David Bleby, n 31 at 2.
Justice Bleby’s conviction following his experience in this case about the benefits trial technology has to offer were reiterated in *Harris Scarfe v Ernst & Young (No 3) [2005] SASR 407* at [18]-[22]. In that case, despite opposition from one party, his Honour directed the use of an electronic courtroom at trial.\(^{38}\)

### 2.4 Visa International Service Association v Reserve Bank of Australia (2003)

One example of a shorter trial,\(^ {39}\) which successfully ran electronically, is the challenge by Visa International and Mastercard to the Reserve Bank’s decision to bring the credit card schemes under its regulatory control in *Visa International Service Association v Reserve Bank of Australia [2003] FCA 977*. In providing a summary of the issues in dispute and some of his key reasons for judgment (before publishing his full reasons for judgment) Tamberlin J said:

Due to the use of advanced courtroom technology…the hearing was reduced to the relatively short period of six weeks. *Without this assistance from the technology and cooperation of the litigants, the hearing could have extended over many months.*

### 2.5 W v Crown (2007)

Another example of the adoption of advanced courtroom technology in a shorter trial is the recent trial in New Zealand of a historical child abuse case in July-August 2007, in *W v Crown* (unreported). This was the first electronic trial conducted by New Zealand Crown Law.

Observations about the technology made by one of the Crown Law counsel engaged at the trial, included: \(^ {40}\)

- The electronic document display proved simple for witnesses, some of whom were elderly and had little familiarity with computers;
- The system ensured security through a combination of user login and pre-configured user groupings, allowing degrees of access in the court environment, such as sharing within a team, with opposing counsel and the court, without the witness seeing the documents being discussed; and
- Pages could be tagged, prioritised and comments recorded, so that “someone else can come along later and see what you thought was important, at what stage you were at, or, for instance, what was used in briefing a particular witness.”

Crown Law’s Litigation Services Manager reported\(^ {41}\) that the case was completed in 32.5 days instead of the estimated 45, and that both counsel and the judge attributed

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\(^{38}\) For detailed analysis of the court’s jurisdiction to make orders requiring the use of technology, see Jackson, n 2 at 89-97.

\(^{39}\) Although a shorter trial, Tamberlin J noted in his judgment summary that there was a great deal of material presented to the Court. There were almost seventeen hundred pages of transcript, over a thousand pages of written submissions, and over ten thousand five hundred documents had been discovered. Many of these documents consisted of several hundred pages.


\(^{41}\) *LawTalk*, n 40.
the saving to the use of the court presentation software\textsuperscript{42}, and the use of real-time transcript, which was hyperlinked to the document management system.

3. The Queensland Experience

There have been a very small number of civil trials conducted in Queensland which have involved the use of trial technology in significant ways.

The trial in \textit{Emanuel} began as an electronic trial, with the use of commercial applications provided by service providers.\textsuperscript{43} Very recently the Queensland courts have developed simple and inexpensive technology to support an e-trial. That technology was first adopted at trial level in the Supreme Court in \textit{Covecorp Constructions Pty Ltd v Indigo Projects Pty Ltd}\textsuperscript{44} (\textit{Covecorp}).

The experience of the use of technology in the \textit{Emanuel} case was the subject of commentary and evaluation by the presiding judge\textsuperscript{45}, one of the senior solicitors\textsuperscript{46}, and a senior counsel\textsuperscript{47} involved in the trial. It will be considered in some detail. The experiences of some involved in the \textit{Covecorp} hearing will also be reported more briefly.

Though the technology employed in both matters involved a different degree of sophistication it is fair to say that it did not result in the kind of efficiencies which have been reported above.

At a quite basic level, several recent trials have involved provision by the parties for use at the trial of CDs containing statements, expert reports, and documentary evidence using Microsoft Excel. The trials in \textit{Mt Nathan Landowners (in liq) v Morris [2008] QSC 239} and \textit{BHP Coal Pty Ltd v O & K Orenstein & Koppel AG [2008] QSC 141} are examples. An examination of the employment of technology in this way is outside the scope of this paper.

3.1 \textit{Emanuel Management Pty Ltd v Fosters Brewing Group Ltd}

The plaintiffs in this action were 65 companies which were members of a failed property development group (“the Emanuel Group), and their liquidator. They sued two groups of defendants. The first of these comprised a number of companies which had formed part of the Elders Finance Group which had for many years financed the

\textsuperscript{42} The system used in the courtroom was \textit{Systematics Court}, an off-the-shelf product available from Systematics Pty Ltd.

\textsuperscript{43} E.law Australia was retained to provide the technical services and computer equipment for the trial.

\textsuperscript{44} BS 10157 of 2001 and BS 2763 of 2002. The trials of both actions were to be heard together. The trial commenced on 8 October 2007 but the matter settled out of court on 6 November 2007 before the trial was completed.

\textsuperscript{45} Justice Richard Chesterman: “Managing Complex Litigation,” address to the Law Society’s Continuing Legal Education program, 22 October 2003 at 7.

\textsuperscript{46} McDonnell J, “Managing Complex Litigation – The solicitor’s perspective,” address to the Law Society’s continuing Legal Education program, 22 October 2003. This paper covers a range of matters relating to the management of complex litigation, including (at 11) issues relating to an electronic trial.

operations of the property development group, as well as individuals who had been
directors of companies in the Elders Finance Group, and the ultimate parent company
of the Elders Finance Group. The other group of defendants included the accounting
firm which had provided professional services, including auditing, to members of the
Emanuel Group, as well as some individuals who had been members of that firm. The
litigation was extremely complex.

The trial ran between 19 August 2002 and 17 April 2003 and occupied more than 100
sitting days. Eight senior counsel and six junior counsel were engaged. The judgment
was published on 17 July 2003.

The documents available for the trial in electronic form included a database
containing disclosed documents, and also a searchable database containing documents
tendered, pleadings, witness statements, written openings (and ultimately closing
submissions), and electronic transcript uploaded at the end of each hearing day. Real-
time transcript was not used. Access to the database was password protected,
providing secure access to the documents in court, as well as 24 hour out of court
access through a website established for the trial.

An operator sat at the bench in front of the judge. It was intended that the operator
displayed on a computer the documents requested by counsel and described by the
document identifier. The image on the operator's computer was projected onto a large
computer screen which was visible to the witness and all in the court room.

Justice Richard Chesterman was the presiding judge. He was supplied with a
computer monitor. Each group of counsel had two or three monitors on the bar table
which were networked to the operator’s computer. Those computers could be simply
switched from displaying the “Court View” image on the operator’s computer to
independent use as personal computers. Computer screens were also provided for
each group of solicitors, and these operated in the same way as counsels’ screens. The
solicitors were also able to print from their computers to laser printers on their tables.

Although the trial began as a fully electronic trial, “the attempt to conduct a paperless
trial was in the end effectively abandoned in favour of paper copies organised in a
conventional manner.”48 In considering why this occurred, Justice Chesterman
examined the role played by technology at the trial in the context of the purpose of the
trial process. As he explained, the concern for individual litigants is to give the client
the best chance of winning49:

“The challenge is to come with the best means by which the facts, and the
arguments to which they can give rise, can be put before the court, and
understood by the court…
The case will be won or lost by reference to the judge’s view of the legal and
factual merits of the respective cases. What you want to do is to give your
client the best chance of winning. This surely means putting forward
supporting facts and arguments as simply and convincingly as possible. You

48 Justice Richard Chesterman, n 45 at 7.
49 Justice Richard Chesterman, n 45 at 3, 5. For recent comments to similar effect, see David Levin QC,
“e-Trials and e-Tribulations: Some personal thoughts on the myths of electronic trials”, paper delivered
The conclusion Justice Chesterman reached after his experience in Emanuel was that the traditional method of presentation at trial is in fact the most effective means by which the facts, and the arguments to which they can give rise, can be put before the court, and understood by the court. He said:50 “My recent experience suggests that the technology will not be of any real use in the conduct of a long and complicated trial.”

The practitioners who provided evaluations about the role played by technology similarly reported a range of limitations and did not find the technology of much use for the presentation of evidence, although they did acknowledge that the technology offered other benefits.51

The author suggests, however, that the successful electronic trial experiences elsewhere demonstrate that the skilful use of technology will enhance the effectiveness of the trial process to achieve its objective. It is appropriate in this regard to analyse the specific reflections of the participants in Emanuel about the impact of technology on the trial process, with a view to identifying why the adoption of technology did not result in the same positive evaluations as those which have been summarised above. More importantly, this analysis may assist in determining what changes should be made in future electronic trials to ensure more beneficial outcomes.

3.1.1 Locating documents

Although there is a range of different trial technology software applications available,52 and they vary in functionality and sophistication, all enable immediate access to all documents in the relevant database, and incorporate search and sort features to facilitate the location of any document quickly and simply.53

Documents included in the database of disclosed documents or an agreed bundle are described according to a document management protocol. The protocol explains how documents are to be numbered and scanned. It also prescribes the information, known as fields, which should be included, such as: date, document type, author, author organisation, recipient and recipient organisation. The protocol also sets out how the information in each field should be provided.

Provided the protocols are strictly and consistently followed, all documents included in the electronic courtbook for a matter are accessible electronically in the courtroom and can be called up almost instantly. This means the equivalent of a room full of paper documents can be at the parties’ fingertips both in the courtroom and elsewhere.

50 Justice Richard Chesterman, n 45 at 7.
51 McDonnell, n 46 at 11; Bond, “The use of technology in trials”, n 47 at 7-8.
52 Commercial software applications commonly used in Australian Courts include “Ringtail Courtbook” from FTI (http://ftiringtail.com/web/) and “Court” from Systematics Pty Ltd (http://www.systematics.com.au/). The “ECourtbook” recently developed by the Queensland Court’s Information Management Team utilises SharePoint Team Services (Sharepoint is a web-based collaboration and document management platform available from Microsoft. It can be used to host websites which can be used to access shared documents and workspaces, as well as a range of specialised forms of applications.)
53 For more detailed consideration of the benefits of document management systems both pre-trial and at trial see Jackson, n 2 at 100-105.
Secure and efficient access to these documents is also available to the trial judge, the court staff and the parties, remotely after hours. This allows participants in the trial to work efficiently outside the courtroom.

Trial participants can sort documents by fields, enabling the documents to be grouped under any of the available fields and located quickly. If, for example, counsel wishes to view all of the documents dated between particular dates, these documents can be immediately identified and quickly located. In a paper-based trial, an individual or team of people may take a significant amount of time to locate and retrieve the required documents, even if an index has been prepared in electronic form.

All the available trial software also incorporates powerful search facilities. If, for example, a document assumes particular importance in the course of the trial, the database can be searched to find quickly any other documents in which the document of interest was mentioned.

In specifying in more detail the problems encountered in locating material in *Emanuel* Justice Chesterman said that not all the documents to which the parties referred in evidence were on the database and that “one didn’t know whether a failure to find a document was because it wasn’t there or because the search technique was inadequate. This led to a lack of confidence in the database so that reliance was placed on paper.”54

It is submitted that these statements show there was a problem with what had been done in the course of trial preparation by the parties, rather than demonstrating limitations of trial technology. The failure in an electronic environment to have a document available in the trial Courtbook, or to have it properly identified, is analogous to a failure in a traditional paper-based trial to bring a particular hard copy document to court for the trial, or to have paper documents so indexed as to enable efficient location and retrieval. There is no doubt that consistency and accuracy of the input into the database is crucial, but provided all of the documents are entered and correctly identified in compliance with the applicable protocol any documents required will be accessible to all in the courtroom almost instantaneously.

McDonnell recognised that the focus should be upon the practice adopted by the parties. Like Justice Chesterman, he did not find the technology useful for the presentation of evidence in *Emanuel*. However, he attributed the difficulty to what the parties’ representatives had done, rather than on the technology itself, noting 55 that “the parties did not follow a process whereby all documents had to be incorporated onto the computer system.” He contrasted the practice in *Emanuel* with that in the HIH Enquiry, 56 explaining: “This is the opposite to what was done in the HIH

54 Justice Richard Chesterman, n 45 at 5.
55 McDonnell, n 46 at 11.
56 The HIH Royal Commission ran between November 2001 and May 2003 to examine the reasons for and circumstances surrounding the collapse of HIH Insurance in March 2001. Electronic courtroom technology was employed to facilitate the presentation of complex evidence to the Commissioner and the many parties involved. The same commercial service provider engaged in *Emanuel*, E.law, undertook the IT management services. The services it provided included: management of the IT environment (encompassing clustered Windows 2000 servers, network infrastructure, security, internet
Enquiry whereby no party could rely on any document that had not been entered into the court database the night before.”

The difference in the approach taken by the Commission to the calling of evidence in paper form, as highlighted by McDonnell, is important. A determination by the presiding judge to so regulate proceedings in a manner which requires parties’ representatives to embrace rather than avoid adoption of the trial technology suggests one course of action which might assist in overcoming one of the difficulties experienced in the location of electronic documents in Emanuel.

That difficulty can also now be overcome by using immediate scan/publish technology. This technology means that paper documents can be quickly scanned and incorporated into the court database during a trial.

Another key to overcoming these difficulties lies in the timing of any direction that the trial be conducted electronically. Bond observed said that despite the enormous resources devoted to trial preparation, the parties did not have sufficient time before the trial commenced to complete that aspect of the preparation. This supports the proposition which has been strongly argued elsewhere that the efficiencies which may be generated by the adoption of trial technology are maximised when the decision to conduct the trial electronically is taken at an early stage of the proceedings.

Justice Chesterman’s reflections on his experience in this regard may be contrasted with those of Justice Bleby in describing his experience in the trial in Southern Equities v Arthur Anderson, as discussed above. Justice Bleby noted, contrary to his initial perception, that he did not have to rely on his associate or the court operator to find documents for him and post them to his screen. Rather than rely on his associate, he soon found that “the system had been developed to such a high standard of user-friendliness that its use did not detract from my concentration on the trial.” He described it as “a pleasure to use” and found that he was doing his own searches and retrieving information without delay, difficulty or interruption to the conduct of the trial. Interestingly, he said:

On some occasions I even began feeling frustrated when counsel, relying on hard copy documents, were causing minor delays.

3.1.2 Understanding electronic evidence

Related to his concern about locating the material is Justice Chesterman’s reservation about whether the use of the technology is the best means by which the facts and the arguments to which they give rise, can be put before the court. Both the judge and

and VPN connectivity, disaster recovery, and desktop and help desk services) and E-Courtbook management, including evidence and real-time transcript management.

57 Bond, note 47 at 9.
58 Jackson S, “Keeping it simple: Court-provided technology brings the ‘electronic trial’ to the ordinary litigant” (2008) 20(1) Bond L R 52, 80. See also Kennedy Taylor (Vic) Ltd v Grocon Pty Ltd [2002] VSC 32 at [17].
59 The system used for this trial was Systematics Court.
60 Justice David Bleby, n 31 at 5.
Bond expressed the view that the nature of the case may make it inappropriate to put
the documents, or all the documents, in electronic form.\(^{61}\)

Justice Chesterman’s primary criticism of documents in electronic form is that they
are harder to read than in print and harder to compare with other documents when a
contemporaneous comparison is called for. He said:\(^{62}\)

\[\text{I think we all accept that it is \textit{easier to read typed script on paper than images on a screen}. It does not much matter if the document is short but it becomes quite tedious if one has to look at clauses of a lease or a mortgage, or lengthy contract. It is also harder to skip from page to page or clause to clause, and back again as one often has to do.\] … It cannot be done on the screen where one can look only at one document and indeed part of one document at a time. Even if the technology allowed the use of split screens the images would be too small and too fragmented to be of any use.

The observation that “one can look only at one document and indeed part of one
document at a time” no doubt reflected the facilities set up for the trial in Emanuel. It
is submitted, however, that it does not reflect the reality of what can be achieved in a
courtroom. In the same way that it is possible to have several hard copy documents
open on a desk at the same time, it is simple and inexpensive to arrange for more than
one computer screen to display documents at the same time. Split screens may also
provide an appropriate alternative. If the documents are large or otherwise require it, larger screen sizes may be used.\(^{63}\) It is obviously necessary that there is enough screen space and high quality display.

The set-up of the technology in Southern Equities v Arthur Anderson, for example, enabled each user to scroll through any document published by the operator to their computer screens, and also to open another window to gain access to some other document or transcript at the same time. It was possible to return to the document or page of transcript left to view another window simply by opening another or series of windows for different purposes.\(^{64}\) This feature enabled the participants to view multiple documents and make comparisons.

Widdeston has observed that “presentation of documents on screen in such a way as
to enable them to be inspected, enlarged, highlighted or otherwise electronically
enhanced and manipulated by witnesses, advocates, judges or jury members can
produce gains that were simply not available before the technology was introduced.”\(^{65}\) In the recent trial in New Zealand in W v The Crown\(^{66}\), these features were of demonstrable value. In that case a 21 inch portrait monitor was applied for the witness and counsel. Because it involved actions alleged to have taken place in institutions

\(^{61}\) Justice David Bleby, n 31 at 5; Bond, “The use of technology in trials”, n 47 at 6.
\(^{62}\) Justice Richard Chesterman, n 45 at 6.
\(^{63}\) Justice Bleby noted in relation to the set-up for the trial in Southern Equities v Arthur Anderson that in order to produce a satisfactory image of many of the documents the screens had to be “reasonably large”: Justice David Bleby, n 31 at 2.
\(^{64}\) Justice David Bleby, n 31 at 4.
\(^{66}\) See 2.5 above.
going back to the 1960s many of the original documents were fragile hand-written
notes. The computer environment enabled them to be viewed over and over again.67

Justice Chesterman conceded68 that short documents such as minutes or emails or
inter-office memoranda are the kind of documents that can be displayed and read
easily. This is significant as, frequently, large numbers of the documents included in
an E-Courtbook for trial will be documents such as invoices, progress payment
claims, memos, emails etc which are in fact very short.

It may be observed, however, that some of the cases which have successfully
employed trial technology have involved many long and complex documents. In Visa
International Service Association v Reserve Bank of Australia [2003] FCA 977, for
example, Tamberlin J noted in his judgment summary that:

There was a great deal of material presented to the Court. There were close to
seventeen hundred pages of transcript, over a thousand pages of written
submissions and there were over ten thousand five hundred documents which
had been discovered. Many of these documents consisted of several hundred
pages...Eight expert witnesses were called to give evidence, including
economists and accountants. There were a number of other non-expert
witnesses.

3.1.3 Pace and rhythm of presentation

Both Justice Chesterman and Bond found that the speed of document retrieval was
sometimes too slow.69 The documents had been imaged for the Emanuel trial as single
page TIFF files.70 To view a document which is made up of multiple single-page
TIFF files, it is necessary to download a file (ie a single page), view that page, and
then go back and download the next file (page) to view it. Any single page can be
retrieved extremely quickly, but the process overall is sometimes regarded as
cumbersome.

An alternative which may be adopted is the use of “multiple-page” PDF71 or of a
single “multiple-page” TIFF file. In either case a single file is downloaded. Users are
able to scroll through a multiple page PDF or to page through the various images
(pages) in the TIFF file.72 In the recent trial in Covecorp the documents were loaded
into the ECourtbook in fully searchable multiple-page PDF using court-provided
software. The technology enabled the witness to use a mouse to scroll through any

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litigation.htm. For further consideration of the value of courtroom technology in presenting and
preserving evidence, see: Parliament of Victoria Law Reform Committee, n 12 at [10.4]-[10.6].
68 Justice Richard Chesterman, n 45, 9-10.
69 Justice Richard Chesterman, n 45 at 8; Bond, “The use of technology in trials”, n 47 at 6.
70 TIFF stands for “Tagged Image File Format”.
71 PDF stands for “Portable Document Format”. This technology allows documents from other sources
to be accurately reproduced on the internet, preserving the documents’ layout, fonts, links, images etc.
Searchable PDF format allows users to search for image data from full text, and to extract data.
72 One benefit of single-page publications when compared with multiple-page publications relates to
the quality and completeness of the court record. For example, in Systematics Court single page
publications are logged to show exactly the location shown to the witness, whereas multiple-page files
can only be logged to show that the file has been shown to the witness. This can be significant when
large documents are involved.
document in the Court View to any particular part of that document. This feature was commonly used by the witnesses. It enabled them to view any relevant parts of a document to understand its context and to locate quickly any particular part of the document to which counsel was referring. All of the trial participants found it invaluable that the witnesses could do this, and also that the witnesses could then use the cursor to point to particular parts of a document, especially when the documents under consideration were long documents.\footnote{Jackson, n 58 at 68-69.}

An associated difficulty raised by Bond\footnote{Bond, “The use of information technology in civil litigation – a barrister’s perspective”, n 47 at 10.} about the presentation of the evidence was that the process of giving a document identifier to an operator, asking the operator call up the document and asking the witness to look at that document was far too slow. He found it did not lend itself to the pace and rhythm which one tries to introduce in either examination in chief or to cross-examination.

A requirement for counsel, when referring to a document, to refer to its full identification number (for example: “F O S dot zero zero six dot zero one two dot zero one eight”) is clearly an unnatural way to address the witnesses and the court. Bond suggested as a partial solution to this difficulty that the examiner and cross-examiner could provide relevant lists of materials to the operator in court before the examination or cross-examination. As he acknowledged, this is probably a matter of discipline in that it is not much more difficult to put together a list of the relevant document identifiers and give it to the operator than it is to arrange for junior counsel or instructing solicitor to put together a hard copy cross-examination bundle.

Some software available through commercial service providers enables counsel to create their lists of documents, sequence them, and then publish directly or through their instructing solicitor, as an alternative to relying on a courtbook operator to control publication.\footnote{This feature is available in Systematics Court.}

Another partial solution suggested by Justice Fryberg\footnote{See Jackson, n 58 at 75.} is the use of a form of “short-hand” reference to the required documents - for example: “Could the witness be shown plaintiff’s document one twelve six?” Alternatively, short courtbook document numbers can be allocated on the system. In \textit{W v the Crown}, for example,\footnote{See 2.5 above.} a simple three digit courtbook numbering system was used for reference throughout.

### 3.1.4 Refining the scope of evidence

As Justice Chesterman noted in his paper, every litigator has experienced, as actions proceed through the various stages of preparation for trial, and the trial itself, and then the appeal, how issues become condensed and refined and reduce in number. This is a natural phenomenon and it should occur in every trial if it is well run. In this process the number of documents to which regard is to be paid, and the scope of evidence, are both reduced. This is the result of the thoughtful examination of the materials and the
issues as identified in the pleadings and this leads to efficiency. However, as Justice Chesterman observed:\footnote{Justice Richard Chesterman, n 45 at 4-5.}

\begin{quote}
It may be frustrated if the focus of the parties is on the mindless reproduction and transmission of documents because that reproduction can occur more easily with modern technology....What I am saying in a roundabout way is that technology should not be used just because it is available. People might climb Mt Everest because it is there but you should not send the judge 10,000 pages of irrelevant documents because you can do so by pressing a button.
\end{quote}

It would certainly be a daunting task to support a practice of sending a judge 10,000 pages of irrelevant documents! However, one of the criticisms that may fairly be directed to the process of disclosure of documents in recent years, irrespective of whether it is undertaken with the aid of computer technology, is that the number and volume of documents disclosed has increased enormously. In Queensland\footnote{Uniform Civil Procedure Rules 1999 (Qld) r 211.}, as in South Australia\footnote{Supreme Court Civil Rules 2006 (SA) r 136.}, the obligation to disclose applies only to those documents which are “directly relevant to an allegation in issue” rather than to documents that meet the much broader classic test of “relevance” as explained in the judgment of Brett J in \textit{Compagnie Financiere du Pacifique v Peruvian Guano Co.}\footnote{(1882) 11 QBD 55.} It is suggested, however, that the deliberate restriction of the scope of disclosure brought about by the change to the rules of court\footnote{In Queensland this change was originally made in 1994 by amendment to Order 35 of the then Rules of Supreme Court 1900 (Qld), and subsequently adopted in r 211 the Uniform Civil Procedure Rules 1999 (Qld).} has in practice had little effect. Frequently, large volumes of documents are exchanged between the parties before trial that clearly do not meet this test and, usually, only a small fraction of the disclosed documents are actually tendered into evidence.

Little has been done to address the resulting inefficiencies and no doubt there is a need for new measures to deal with the explosion in the number of documents ordinarily disclosed in commercial matters. However, it may be asked when irrelevant documents are exchanged between parties and produced to the court in paper form, whether the criticism of this wasteful practice should be directed to the technology used (the photocopier) or to the practitioner who mindlessly allows it to occur.\footnote{For colourful criticism of the lawyer’s lack of prudence in photocopying material for court, see: The Hon Justice Michael Kirby AC LMG, “Legal professional ethics in times of change”, paper delivered at the St James Ethics Centre Forum on Ethical Issues, Sydney, 23.7.96, at: http://www.nswbar.asn.au/docs/professional/pcd/kirby.pdf viewed 17 October 2008, at 3. See also Levin, n 49 at 5-6.}

It is submitted the same is true when digital technology is adopted. If an examination of the manner in which technology has been used in a particular matter shows inefficiencies flowing from the use of technology, the appropriate response is to locate and eliminate those inefficiencies in the litigation process, so that the potential for technology to improve both the quality of presentation of the parties’ cases and the efficiency of the trial process can be realised. An obvious way for a trial judge to influence conduct such as that described is by the making of appropriate costs orders.
3.1.5 Sequence and context

It may be important to preserve and to display a document in the form in which it appeared in a party’s possession, and this may include whether it was on a file and, perhaps, where on the file. Justice Chesterman noted that the location may indicate a chronology proving when knowledge of some fact was conveyed to a party or something similar. His Honour suggested as an example the position with auditors and what they know and that the audit files themselves and the relative position of documents on the files can often be important. The judge expressed concern in this context about the implications of digitising documents, and argued that there is no substitute in such a case for reproducing the file rather than separately reproducing documents electronically, which will interfere with sequence and context.84

If an important document in a matter is a paper file and the sequence and context of its component parts is significant, parties clearly should be permitted to produce and refer to the original paper file. The conduct of a matter as an electronic trial should not detract from this.

It is suggested, however, that it is becoming increasingly likely that relevant original files will in fact be electronic in their native format. The practice in a traditional paper-based trial of converting such documents to paper and producing these to the court is open to the similar criticism that the sequence and context may be lost. This difficulty will only be overcome when effective litigation processes have been developed for dealing with native electronic documents.85

3.1.6 Agreed bundles

In preparation of an action for trial parties commonly seek directions from the court which include directions about the preparation of agreed bundles of documents for the trial. In his paper Justice Chesterman provided valuable insight into the use and content of agreed bundles in the context of trials conducted in paper-based or partially paper-based form. He explained that an agreed bundle of documents is a collection of documents that the parties agree are relevant and admissible, and expressed his view that the bundle should be kept as small as the circumstances of the case allow, and that there is no point in putting in copious pages of documents that might become relevant or which one hopes might be proved. He says: “The agreed bundle should be reserved for those documents which are plainly relevant and plainly admissible. If everyone has a copy of the bundle it facilitates the presentation of evidence and argument.”86

84 Justice Richard Chesterman, n 45 at 10.
85 New South Wales and Victoria are the only Australian jurisdictions that have to date attempted to deal directly with the discovery of documents in their native electronic form, such as emails and their attachments, and electronic documents found on hard disks, and to attempt to address some of the associated issues: see Practice Note SC Gen 7 “Supreme Court – Use of Technology”, issued 9 July 2008 with effect from 1 August 2008 (NSW); Practice Note No 1 of 2007, “Guidelines for the Use of Technology in any Civil Litigation Matter” (Vic). This is also a component of the strategy proposed for the Federal Court of Australia: See K Deane, “Federal Court finalises e-discovery rules” The Australian, 5.11.2007 at: http://theaustralian.news.com.au/story/0,25297,22590494-17044,00.html viewed 17 October 2008.
86 Justice Richard Chesterman, 45 at 11.
As the judge observed, however, agreed bundles frequently give rise to enormous difficulty and anxiety and can be the source of significant dispute between the parties and consequent expenditure. He noted that it is very common to find documents in the agreed bundle that should never have been inserted.

There is no doubt that an agreed bundle may be of great practical assistance in a paper-based trial, especially when kept to a core bundle of key documents. One key benefit of an agreed bundle is its conciseness, which leads to ease of reference and convenience. Another is that it assists with the clarity of presentation in that it facilitates the examination and cross-examination of witnesses by reference to the documents in the bundle. There is convenience and saving of time if everyone has the same compilation of papers and the witness, judge and parties can have their attention directed easily to the particular passage or passages at the same time.\(^{87}\)

It is suggested, however, that the justifications for the agreed bundle do not always translate into the electronic environment if very large numbers of documents will be tendered. Assuming pre-trial steps have also been undertaken electronically, it may be appropriate to simply permit the parties to include in the ECourtbook all documents required by any party. Conciseness offered by an agreed bundle in a paper-based trial will not be forgone as it is a simple process at any time to export the documents that have been admitted into a spreadsheet and separate electronic bundle. Similarly there is no negative impact in terms of clarity of presentation, as the manner of presentation of documents in an electronic trial means that once the document to which examination is directed is called up, the process of directing attention of all in the courtroom to a particular passage or passages is instantaneous.

As the requisite documents will already be in digital form this approach means minimal costs will be incurred, and significant costs and time-delays might be avoided. Any argument that might arise about the admissibility of any document in the ECourtbook may be raised at the time it is sought to tender the document. If viewed appropriate, a core bundle of key documents in paper form could be used in conjunction with the ECourtbook.

The availability of all documents in an electronic database to which the judge has access means the judge may have access to documents that are not admitted. It is submitted that this is no different from the present position in which a judge will have access to the whole of an agreed bundle, though experience shows that in fact only a fraction of the documents in the bundle are likely to be admitted into evidence. If this is viewed as a significant concern for a particular matter, however, it is possible to configure the technology to preclude the judge’s access to documents before they are tendered and admitted.

3.1.7 Accepted benefits

The practitioners involved in Emanuel acknowledged that the preparation of the database and access to it in court generated efficiencies in a range of ways:

\(^{87}\) Justice Richard Chesterman, 45 at 11.
It was the only practicable way in which disclosure obligations could be met; It enabled the delivery of briefs and draft statements to counsel with hypertext links to documents referred to; The sort facilities assisted with the preparation of bundles of documents for cross-examination or the proofing of witnesses by enabling, for example, the efficient collection of all documents written by or to a particular individual or falling within particular dates; and The search facility could be used to refer to pleadings, opening statements, submissions and the transcript to assist in answering questions arising during both witness examination and submissions or to locate quickly documents relevant to some aspects of testimony given by a witness.88

Bond also reported that the ability to access the electronic database over the net made the task of preparing final submissions “immeasurably easier” and that it was especially helpful to be able to cut and paste from electronic versions of relevant documents.89

The benefits of the use of trial technology extend beyond the trial itself. Particularly in a complex matter the use of trial technology has the potential to provide enormous assistance to the trial judge in the preparation of his or her judgment. Justice Chesterman recognised the further potential for technology to assist with the delivery of judgments, especially long judgments, enabling the inclusion of an index to the reasons connected by hypertext links so that it is possible to move quickly to a point of interest.90

3.2 Covecorp Constructions Pty Ltd v Indigo Projects Pty Ltd

The trial in Covecorp Constructions Pty Ltd v Indigo Projects Pty Ltd91 (“Covecorp”) proceeded as an “electronic trial” with the use of court-provided technology. The trial was the first of its kind at trial level in Queensland92, although court-provided technology has been successfully applied in three recent appeals in the Land Appeal Court.93

88 Bond, “The use of technology in trials”, n 47 at 10-11. Bond noted that some documents had been copied as images only and there was no capacity to copy from these. If the text is reasonable, the difficulty can be overcome by the use of optical character recognition technology (“OCR”) at a cost of approximately $0.03 per page.
89 Bond, “The use of technology in trials”, n 47 at 11,12.
90 Justice Richard Chesterman, n 45 at 20.
91 File Nos BS 10157 of 2001; BS 2763 of 2002. The trial commenced on 8 October 2007 but the matter settled out of court on 6 November 2007 before completion of the trial.
92 The only other jurisdiction to have adopted a similar approach to E-trials is Western Australia. The Supreme Court in that jurisdiction, in collaboration with the Department of Justice, has developed new software internally and has adopted a hands-on role to manage large trials internally. Rather than relying upon the parties to take the initiative and to appoint external service providers, it uses a combination of court staff and consultants who are appointed by the court.
93 The first of these was PT Limited & Westfield Management Limited v Department of Natural Resources and Mines [2007] QLAC 0121.
The necessary computer equipment was provided by the court. It was intended that all of the documents required by either party to be available at the hearing were amalgamated into an “agreed bundle” which were all captured as multiple-page fully searchable PDF files. The agreed bundle and witness statements were loaded into the “eCourtbook” for the trial.

The set-up for this trial did not have all the functions of the more sophisticated commercially available software. It did not, for example, enable users to have separate access to private information or to make their own secure annotations on exhibits, did not support targeted publications, and did not facilitate the conduct of a trial without a dedicated courtbook operator. However, the Court’s aim in developing its eCourtbook and adopting this in Covecorp was to find a means to capture the key benefits offered by trial technology in a way that was affordable for parties, was simple to use, and would facilitate the adoption of technology much more widely than has been the case to date.

The experience in Covecorp, including a report on the perspectives of all of the participants in the process in that case, has been the subject of a detailed case study and that analysis will not be repeated here. It should be noted, however, that although the use of the technology did not result in an overall saving of costs in this trial, the parties attributed almost all the difficulties they identified to the fact that it had not been determined at an early stage that if the matter proceeded to trial it would be conducted electronically. The adoption of the court-provided “electronic court” nevertheless realised a wide range of benefits clearly recognised by all participants and, more significantly, demonstrated the potential to achieve much greater efficiencies. The participants in this trial made a range of recommendations about changes that may assist in realising these efficiencies in future trials. All of the participants in the trial expressed a keenness to participate in electronic trials in the future.

Had the trial proceeded to judgment, it is clear other benefits would have followed, including assistance for the judge in the preparation of his judgment, and the streamlining of the process of any appeal.

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94 This was a function Justice Bleby had found “extremely useful” in the trial in Southern Equities v Arthur Anderson: Justice David Bleby, n 31 at 3.
95 It is difficult to obtain detailed information about the costs incurred in using commercial service providers, as ordinarily they provide quotes for customised support services, including software. However, Systematics Pty Ltd have recently published on its website fees for the licensing of its evidence presentation and management environment Signature Court. These fees range from $50 to $150 per party per sitting day. See: http://www.systematics.com.au/content/standard09.asp?name=CT_Court viewed 15 September 2008.
96 Jackson, n 58.
97 Jackson, n 58. The court-provided technology developed for the Covecorp trial has been employed in two subsequent trials in the Supreme Court, and an appeal in the Planning and Environment Court. To date no formal evaluations of the role of technology in these matters are available.
98 Early in 2007 the Supreme Court initiated an electronic appeals book for appeals to the Court of Appeal. Queensland and Western Australia are currently the only two jurisdictions in which the use of electronic appeal books is part of the standard practice. The process of preparation of the electronic appeal book includes the scanning of all court documents and documents on the trial exhibit list. The use of the ECourtbook at trial meant that most of the requisite documents were already available in digital form and could be submitted on CD.
4. Way forward

The specific solutions and alternatives to better harness the benefits of trial technology as canvassed in this paper will not be repeated here. It is suggested, however, that the experiences to date show that it is vital to the successful employment of technology that parties comply with applicable Practice Notes; that they be disciplined in complying with agreements made about the use of technology at trial, and that there be judicial control. Further steps will be suggested which may reduce a range of other barriers to the broader adoption of trial technology.

4.1 Compliance with Practice Notes

Any attempt to conduct an “electronic trial” is doomed to failure if the participants cannot be confident the documents sought will be on the database and will be easily located when required.

There are in most Australian jurisdictions practice notes or directions that encourage parties to consider, from the start of proceedings, ways to use information technology to manage the discovery and inspection process efficiently, and also to use technology in appropriate cases at trial. When discovery or disclosure is to be given by exchange of electronic data, they all include a mechanism by which the terms of a protocol can be agreed or otherwise determined. Provided the information is classified consistently from the outset, the necessary components can be simply transferred into a case management database for trial. However, to be sure any given document can be easily located in the trial database it is not only essential that a protocol is agreed, but also that the protocol is strictly complied with. Although the value of compliance is equally applicable in case preparation, it is more likely to occur if the decision is also taken at an early stage that courtroom technology will be employed if the matter ultimately proceeds to trial.

It is possible that some efficiencies may be generated if the decision to proceed electronically is taken at a later stage, and document coding and scanning occurs at that stage but there must be sufficient time to enable accurate and consistent data entry for all documents.

4.2 Discipline and judicial control

Trial technology may be employed in a range of ways. Decisions need to be made about the method that is most appropriate, along with a range of associated issues about how that method will be employed in the particular matter.

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It is then imperative that practitioners are disciplined about complying with the chosen option and that there is judicial control, if necessary, to enforce this. If, having incurred the costs of preparing an electronic courtbook for trial, the parties are permitted to succumb to the temptation to line the courtroom with A4 folders and archive boxes, the costs of the trial are more likely to be multiplied than reduced. A similar outcome is likely if parties proceed as a matter of course to tender paper documents.

Even in a trial which is using very sophisticated courtroom software, there are likely to be occasions when reference must be made to original paper documents. Obvious examples are when the authenticity of a paper document is in issue, or when the sequence and context of documents in paper files is important. It is likely, however, that these documents will be a very small fraction of those tendered in any commercial matter. Further, the matter may be one in which the preparation and availability at trial of a small core bundle of paper documents will facilitate the assist the trial process to better achieve its purpose. The achievable goal in the short-term for the vast majority of matters is not “paperless” but less paper: much less paper!

4.3 Breaking down the barriers

A focus of developing “best practice” in the use of technology at trial will go some way towards encouraging its adoption more broadly, but there is also a range of other factors which act as barriers to a broader adoption of technology in litigation, in Queensland and elsewhere. The following might be suggested:

- The lack of education and training of both the judiciary and practitioners in the use of litigation support systems and consequent desire to adopt them;
- the ability of the scales of costs to properly facilitate full recovery of costs associated with the use of technology;
- a lack of any mandated requirement by Rules of Court or Practice Direction to adopt technology either pre-trial or at trial100;
- the current ease with which costs can be recovered even though the skilful use of technology would have made it unnecessary to incur them;
- lack of dedicated staff within the Court to facilitate the adoption of technology at trial101; and
- an overall natural cultural resistance to change that is embedded in the practice of law.

5. Conclusion

The courts and the justice system must accept the continuing challenge to find ways to ensure that the public funding for courts is applied responsibly and cost-effectively. The potential for technology to generate enormous efficiencies, not only pre-trial, but

100 For argument about the need for such a requirement and suggestions about a possible framework for it, see Jackson, n 58 at 79-81.
101 The position may be contrasted with that of the Supreme Court of Victoria. Paragraphs 1.3 and 1.4 of Practice Note No 1 of 2007, “Guidelines for the Use of Technology in any Civil Litigation Matter” provide for the appointment of an e-Master responsible for the implementation of the Practice Note, and for the appointment of an e-Litigation Co-ordinator.
also at trial, has been demonstrated. The debate must move from one about whether
technology should be more broadly adopted, to constructive discussion about the
ways in which benefits of trial technology might be better harnessed in particular
matters so that its potential to assist judges, practitioners and witnesses, and to
generate significant efficiencies, might be realised.