

THE USES AND ABUSES OF TECHNOLOGY IN THE COURTROOM

**Keynote address prepared for the Society of Construction Law, Australia
Conference of 2013**

Robert McDougall*

Introduction

- 1 It is with great pleasure that I welcome you to the 2013 conference of the Society of Construction Law, Australia. During a period of dramatic change for both construction lawyers and the construction industry, the Society plays a leading role in promoting informed discussion of the issues facing the sector. It continues to provide a forum for cogent analysis and reasoned debate, ensuring that the profession remains adaptive to the ever-changing environment in which we find ourselves.
- 2 I would like to take a little time this evening to discuss the impact of technology on the practice of law, and specifically the use and misuse of courtroom technology.

The impact of technology

- 3 I have been working in the law for more than 40 years. Over that time, the seemingly endless proliferation of new and increasingly sophisticated technology has fundamentally and irrevocably changed the practice of litigation. Moreover, it is continuing to do so, both within and outside the courtroom. The area of litigation that is, perhaps, most affected by the impact of technology is that involving building and construction disputes,

* Judge, Supreme Court of New South Wales. I acknowledge, with thanks, the contribution of my tipstaff for 2013, Mr Patrick Boyle BComm LLB to the preparation of this paper. The views expressed in this paper are my own, and not necessarily those of my colleagues or the Court.

where the determination of often complex questions of fact necessitates the compilation, categorisation, evaluation and presentation of vast quantities of information. The birth of the digital age has exponentially increased the quantum of material before the court.¹ Unfortunately, it has not significantly increased the quantum of relevant material. Instead, the profession and judiciary are now obliged to burrow through an ever-larger haystack in search of the proverbial needle. Technology is the cause of, and, appropriately utilised, may be also the solution to the problem of too much information. Whilst significant advancements have already been made in the way in which information is created, stored and analysed, greater attention needs to be given to the ways in which technology might be enlisted to assist advocates persuasively and succinctly to present their case.

- 4 Since the 1970s, Australian courts have witnessed a massive increase in the scale and complexity of litigation.² I have had the dubious honour of sitting on one side or the other of the bar table (although not in the same hearings) during some of the largest of these proceedings including *Estate Mortgage*, the HIH Royal Commission, the *Ingot* litigation, and *Ballard Constructions v Multiplex*. Although I was never brave enough to calculate the precise quantum of material involved, the estimates of my colleagues do not surprise me. In the trial of *Bell Group Limited (in liq) v Westpac Banking Corporation [No 9]*,³ Justice Owen received 134,706 documents (equating to 452,212 pages or 3.5 tonnes of paper) over 404 days.⁴ Justice Sackville had a similarly bleak experience in the 'C7 Litigation' involving Channels 7 and 9,⁵ which produced 85,654 documents (or 589,392 pages) of material over 120 days.⁶

¹ See The Hon Justice Peter Vickery, 'Managing the paper: Taming the Leviathan' (2012) 22 *Journal of Judicial Administration* 51.

² The Hon Justice Clifford Einstein, 'Technology in the Courtroom – 2001 – [Friend or Foe?]' (2001) <http://www.lawlink.nsw.gov.au/lawlink/supreme_court/ll_sc.nsf/vwPrint1/SCO_speech_einstein_201101> accessed 26 July 2013.

³ [2008] WASC 239.

⁴ *Ibid* at [955]-[956].

⁵ [2007] FCA 1062.

⁶ The Hon Justice Sackville, 'Mega-Litigation: Tangible Consequences Flow from Complex Case Management' (2010) 48(5) *Law Society Journal* 47; cited in The Hon Justice Peter Vickery, 'Managing the paper: Taming the Leviathan' (2012) 22 *Journal of Judicial Administration* 51.

- 5 The vast increase in the amount of evidence put before the courts in commercial and construction cases has been accompanied by an equally vast increase in the amount of available law. Today, the decisions of almost all Australian Courts can be freely accessed online. In a 2004 article by Justice Ruth McColl,⁷ her Honour recorded that she typed 'estoppel' into the general search field in the free legal database of WorldLII. The search returned 9,556 hits.⁸ Nine years later, the same search returns 140,670 hits. This process of giving law "back to the community" is an important aspect of the court's commitment to open and accessible justice. It is to be encouraged. However, rather than making the practice of law obsolete, the increased availability of material has placed a greater premium on those able to distil precedent and principle from the otherwise undifferentiated mass of available information. Increasingly, this task requires the assistance of sophisticated legal databases to collect and categorise the law, and highly trained minds to analyse it. In this regard, this country has been the beneficiary of world leading tertiary institutions, increasingly sophisticated legal research databases and highly engaged professional bodies.
- 6 Despite the significant advancements in the way in which the profession manages and analyses information, comparatively less attention has been given to the presentation of that information in court. There appears to be a lack of appreciation within the profession as to what courtroom technologies are available and even less understanding of how these technologies might be effectively deployed. This is problematic because the successful use of courtroom technology is an increasingly critical aspect of an advocate's role. And standing behind an advocate's effective use of technology in court is thorough preparation, in particular on the part of solicitors, outside court.

⁷ The Hon Justice Ruth McColl AO, 'IT in the Courtroom from both sides of the bench – the transformation of justice' (2004) 6 *UTS Law Review* 13.

⁸ *Ibid* at 16.

Courtroom technology

- 7 The New South Wales Supreme Court recently completed a multi-million dollar upgrade of its Queens Square facilities. Many courtrooms are now equipped with the ability to provide digital court reporting, telephone conferencing, hearing loops, real time transcripts, desktop mirroring, multimedia evidence playback and video conferencing. In building these facilities, we endeavoured to provide the basic infrastructure, to support the parties' provision of any additional technologies they might require. This approach is intended to enable the Court to keep pace with the rapid developments in courtroom technology.
- 8 Parties are encouraged by the General Practice Note 7 to use courtroom technology wherever it reduces the costs or increases the efficiency with which proceedings are conducted.⁹ These factors, however, should not be the only considerations. Too often parties fail to consider whether the technology they intend to use will actually improve their ability to persuade the court. In this respect, the words of Justice Michael Kirby are instructive:

“Using technology correctly and skillfully can assist and advocate in effectively presenting a case to the court. However, such technology is no more than a tool to be used. By itself, the technology cannot transform a losing argument into a winning one. It will not mask or improve inadequate advocacy. Even with the development of technology, the basic skills of effective advocacy remain the same as they have always been. A flashy power-point summary of arguments...will not hide gaps in logic.”¹⁰

- 9 With this statement in mind, I will provide some commentary on the efficacy and limitations of some of the most commonly used courtroom technologies, namely; video conferencing, eCourtbooks and real time transcripts.

⁹ Supreme Court of New South Wales, *General Practice Note No 7 - Use of technology*, 9 July 2008, at [4]; see also Supreme Court of New South Wales, *General Practice Note No 15 – Use of audio visual links in criminal and certain civil proceedings*, 6 November 2008.

¹⁰ The Hon Justice Michael Kirby AC CMG, ‘The future of appellate advocacy’ (2006) 27 *Australian Bar Review* 141, 151.

Video conferencing

- 10 As the name suggests, and as most of you know, video conferencing allows witnesses to give their evidence remotely via an audio-video link to the courtroom. Since about 2004, most jurisdictions within Australia have embraced the use of this technology.¹¹ This is perhaps unsurprising given the size of the country and the associated difficulties with requiring witnesses to appear in person. Eighteen of the 32 courts in the NSW Supreme Court's Queens Square facilities now have the ability to support video conferencing.
- 11 The use of video conferencing can save the court considerable time and cost, whilst enabling a party to adduce evidence that might not otherwise have been available. It is particularly useful where a witness is uncontroversial, and of great value for witnesses who are vulnerable, dangerous, disabled, or outside the jurisdiction.¹² It does however have certain limitations, including;
- (1) *Risk of irrelevant information:* Although the use of video conferencing presents an important opportunity to save time and reduce costs, parties should carefully consider in each case whether these benefits will actually be realised and whether the evidence presented will actually assist the court. The greatest concern with this technology is that it may result in parties calling more and more witnesses, with less and less relevant information.
 - (2) *Expense:* The courts existing copper based connections cost the parties around \$1,200 per hour. Although the Attorney General's department is currently looking to reduce this cost by investing in the provision of IP based connections, this technology will not be available for a number of years.

¹¹ Ros MacDonald and Anne Wallace, 'Review of the Extent of Courtroom Technology in Australia' (2004) 12(3) *William & Mary Bill of Rights Journal* 649, 650.

¹² Video conferencing was originally adopted by the courts to allow children and vulnerable witnesses to give evidence free of intimidation or risk to their personal safety; see Anne Wallace, 'Virtual Justice in the Bush': the Use of Court Technology in Remote and Regional Australia' (2008) 19 *Journal of Law, Information and Science* 1.

- (3) *Loss of impact:* There are widely differing views on the impact that the use of video conferencing has on a judge's ability to assess credit. I think that it does. But regardless, there is merit in the suggestion that it detracts from the impact of witness testimony; and
- (4) *Technical difficulties:* It seems, almost invariably, that there are technical difficulties in establishing and maintaining the connection between the court and witness. These issues are often associated with a failure by the parties to adequately test the system. A good warning comes from a recent American trial, of George Zimmerman, for murder. During the hearing, the Assistant State Prosecuting Attorney, Richard Mantei, attempted to use 'Skype' to question a witness. However, within minutes of establishing the connection, prank callers inundated the prosecutor's inbox. The testimony had to be abandoned. I understand a video of the incident has made its way on to You Tube for those interested.¹³

eCourtbooks

12 An electronic courtbook (or eCourtbook) is, as its name suggests, an electronic copy of all documents contained in the courtbook. Whilst the specific layout and functionality varies according to the software used by the parties, an eCourtbook typically allows the judge and parties to electronically add, annotate, mark up, and search all documents within the courtbook. The cost of the provision of an eCourtbook is borne by the parties, who also bear the responsibility for making sure that it works.

13 The advantages of using an eCourtbook include:

- (1) *Access:* The parties and court can access the courtbook remotely 24 hours a day;

¹³ 'Zimmerman Trial Skype Bombing' <<http://www.youtube.com/watch?v=VfJ1tTGjyS0>> accessed 28 July 2013; Daniel Cadet, 'George Zimmerman Trial Skype Testimony Disrupted by Prank Phone Calls,' *Huffington Post* (online), 7 March 2013 <http://www.huffingtonpost.com/2013/07/03/george-zimmerman-trial-skype_n_3541931.html>

- (2) *Navigating the evidence:* An eCourtbook permits the use of hyperlinks, which dramatically improves ones' ability to follow the evidence. When used effectively, this function saves the court and the parties considerable time. Parties appear to be becoming more adept in this regard. For example, in a recent claim brought by the Alice Springs Hospital, an electronic floor plan was used to identify specific defects with interactive markers. These markers could be clicked on to reveal a photograph and associated description of the defect;
- (3) *Forensic advantage:* eCourtbooks often allow events to be more readily placed within their appropriate temporal context. This is particularly useful within the context of claims for delay, where the determination of whether the timing of the alleged delay is consistent with the stage of project development is a major consideration. The availability of a digital copy of all documents also permits a more expedient search of the material by allowing, amongst other things, key word searches;
- (4) *Calling up documents:* Documents admitted into the eCourtbook are assigned an identification number. This allows material to be readily called upon during proceedings. This saves time when it comes to minor documents. However, in circumstances where the document is of great import or where it must be shown to the witness, a hard copy is invariably required. Further, there are times when the original document is essential. In these instances, no time is saved; and
- (5) *Objections to evidence:* The use of an eCourtbook is invaluable for the purposes of ruling on objections as they allow records of judicial rulings to be readily reflected on the court documents.

14 There are a number of limitations to the use of eCourtbooks. These include:

- (1) *Excess evidence:* Given the ease with which documents can be added to the Courtbook, there is a tendency to insert every potentially relevant document. Judges have attempted to address this issue by directing they would only look at the

documents to which they have been specifically referred, and thus that the onus is on counsel to take the judge to all relevant documents. However, as has been made clear by the Court of Appeal, once a document is admitted into evidence, it may be successfully relied upon to appeal a decision even though no reference was made to it at the trial;

- (2) *Failure to adhere to protocols:* As is true of any information database, the quality of the information is determined by the degree to which the parties comply with established protocols.¹⁴ In circumstances where a case involves a large quantum of material, the retention of independent third parties to establish and administer the eCourtbook is advisable;
- (3) *Does not save as much paper as it could:* Despite the availability of electronic copies of all documents, it seems to be thought necessary to provide hard copies of important documentation and hard copies of all material put before a witness. As a consequence, the reduction in the use of paper is not as great as it could be.

Real Time Transcripts

15 A real-time transcript is a roughly edited, unofficial, digital recording of proceedings, which is beamed onto screens of the parties, judge and in some circumstances the public screen, within seconds of any word being spoken in court. My experience has been that this technology can work well, and prove very useful. Unfortunately, it does not seem to improve the quality of the questions asked by counsel. It does however provide a substantial forensic advantage to the parties in cross-examining witnesses as it allows counsel to put a prior inconsistent statement to the witness immediately. It also provides a significant advantage to the judge in dealing with objections to questions, as the precise wording of contested question can be reviewed immediately. Some commentators have expressed concern that this technology may shift the focus of the proceedings from the witness to the screen or serve to prolong

¹⁴ See Sheryl Jackson, 'Court-provided Trial Technology: Efficiency and Fairness of Criminal Trials' (2010) 39 *Common Law World Review* 219, 226; *Seven Networks Limited v News Limited* [2007] FCA 1062 at [49] (Sackville J).

proceedings. This can be a real problem, but in my experience it has not impeded my attention to the witness.

Cost and a warning

16 It is too often assumed by practitioners that the costs of any courtroom technology would be prohibitive for all but the largest and most complicated proceedings. This view, however, is increasingly incorrect. Further, it ignores the seemingly unending history of improvements in the availability and affordability of technology. We have come a long way since the CEO of IBM allegedly predicted a world market for “maybe five computers,”¹⁵ and further still since Lord Kelvin predicted that: “Radio has no future. Heavier-than-air flying machines are impossible. X-rays will prove to be a hoax.”¹⁶ The assumption that courtroom technology is beyond the budget is problematic because it blunts the professions’ willingness to canvas both existing and prospective courtroom technologies. It arguably means that technologies are not used in smaller cases that might be greatly assisted by it. It also means that many practitioners do not give sufficient attention to potentially innovative ways in which they might present their case.¹⁷

17 Improvements in the affordability of courtroom technologies will have a dramatic impact on the nature of advocacy.¹⁸ In truth, the impacts have

¹⁵ Remarks attributed to Thomas Watson, as cited in Yossi Sheffi, ‘RFID and the innovation cycle’ (2004) 15(1) *International Journal of Logistics Management* 1, 4.

¹⁶ Remarks attributed to Lord Kelvin, as cited in Jeffrey Kanne, ‘The Digital Media Revolution: What It Means for the AJR’ (2011) 197(1) *American Journal of Roentgenology* 6, 7.

¹⁷ There are a number of successful collaborations between courts, universities and the profession which provide research and training on the use of technology in the courtroom, including; the Centre for Legal & Court Technology’s ‘Courtroom 21 Project’ (a joint initiative of the College of William & Mary and the United State’s National Centre for State Courts) and the University of Canberra’s e-court Project.

¹⁸ See The Hon Justice Michael Kirby AC CMG, ‘The future of appellate advocacy’ (2006) 27 *Australian Bar Review* 141, 147; Allison Stanfield, ‘Dinosaurs to Dynamos: Has the law reached its technological age?’ (1998) 21 *University of New South Wales Law Journal* 540; Phillip Talmadge, ‘New Technologies and Appellate Practice’ (2000) 2 *Journal of Appellate Practice and Process* 363; George Nicholson, ‘A Vision of the Future of Appellate Practice and Process’ (2000) 2 *Journal of Appellate Practice and Process* 229; Fredric Lederer, ‘The Effect of Courtroom Technologies on and in Appellate Proceedings and Courtrooms’ (2000) 2 *Journal of Appellate Practice and Process* 251.

already been felt in the profession. In a number of appellate jurisdictions, greater reliance is being placed on written submissions and the imposition of formal or informal time limits is becoming mainstream. The courts must be conscious of these impacts, lest the undiscerning adoption of technology dement the fair and just resolution of disputes. There are some technologies that have no place in the courtroom. I would include in this computer-generated animations. These three-dimensional models use computing software to reproduce a scene or event by collating available information and imposing a variety of assumptions. The technology is now widely used in the game of cricket, with Hawkeye decision review system, and has obtained a degree of acceptance in a number of American jurisdictions. The problem with these animations is that they are limited by the integrity of the inputs, the metrics used to analyse those inputs and the way in which the results are presented. As a consequence, they may be extremely prejudicial to a decision maker who does not understand or fully appreciate these limitations.

Conclusion

- 18 Technology continues to revolutionise the practice of law, creating both challenges and opportunities for the profession. Whilst significant advancements have already been made to the way in which lawyers generate, store and analyse information, further attention needs to be given to the way in which technology is deployed in the courtroom. Appropriately utilised, courtroom technology can provide advocates invaluable tools to persuasively and succinctly present their case. This ability however should not be assumed. Advocates should understand both the prospective advantages and limitations of any technology they wish to use. To this end, institutions such as the Society of Construction Law, Australia have a role to play in promoting an informed discussion and reasoned debate of this issue.