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Ros Macdonald

Anne Wallace

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# REVIEW OF THE EXTENT OF COURTROOM TECHNOLOGY IN AUSTRALIA

Ros Macdonald & Anne Wallace\*

## INTRODUCTION

The first stage of courtroom technology in Australia concentrated largely on the use of technology in the hearing itself and the establishment of a technological infrastructure in the courtroom to make that possible.<sup>1</sup> Courts also needed to establish protocols and procedures to address the preparation of cases for trial in electronic form and the use of the technology in the courtroom.

The use of courtroom technology in Australia is now well established, particularly for larger and more complex litigation. However, there are still challenges associated with its more widespread use. These challenges include cost issues (for both courts and law firms), the need for training, common standards, and a legal culture that is more supportive of the use of technology in the trial process.

Courts are beginning to look to the university sector for assistance in coming to grips with training, research, and the development of policy and protocols. The work being done at Queensland University of Technology (QUT) is a leading example of this type of partnership.<sup>2</sup>

## I. THE ADOPTION OF COURTROOM TECHNOLOGY

Computer technology began to make its way into Australian courtrooms in the late-1980s and early-1990s in two situations. There were a number of complex white-collar crime trials and a number of Royal Commissions and government inquiries.<sup>3</sup> For the first time, investigators began to use sophisticated computer

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\* Dr. Ros Macdonald, Senior lecturer and Shine Roche McGowan Moot Coordinator Queensland University of Technology Law School. BA Qld 1983, LLB (Hons) Qld 1986, GradDipLegalPrac QIT 1988, LLM QUT 1992, PhD QUT 2004. Anne Wallace, Deputy Executive Director, Australian Institute of Judicial Administration LLB (Tas) 1981, LLM (University of Melbourne) 2002.

<sup>1</sup> For a description of services enabled by technology in the courtrooms of Western Australia, see DEPARTMENT OF JUSTICE IN WESTERN AUSTRALIA, JUSTICE ONLINE, at <http://www.justice.wa.gov.au/home.asp> (last visited Jan. 20, 2004).

<sup>2</sup> See QUEENSLAND UNIVERSITY OF TECHNOLOGY, THE <E.LAW> QUT MOOT COURT, at <http://www.law.qut.edu.au/about/mootcourt.jsp> (last visited Jan. 21, 2004).

<sup>3</sup> THE CHALLENGE OF THE INFORMATION SOCIETY: THE APPLICATION OF MODERN TECHNOLOGIES IN CIVIL LITIGATION AND OTHER PROCEDURES, at <http://ruessmann.jura.uni-sb.de/grotius/english/Reports/australien.htm#fn66> (last visited Jan. 24, 2004).

technology to sort and manage the often extensive documentation that was involved. The period from the mid-1970s onwards also saw a rapid increase in the number of large commercial cases involving voluminous documentation.<sup>4</sup> The use of technology began to carry over to the trial process in these types of cases, with the adoption and development of litigation support and presentation packages for use in the courtroom.<sup>5</sup>

At the same time, courts were coming to recognise the need to provide a means to take evidence from vulnerable witnesses, such as children, at a location removed from the physical environment of the courtroom. They began to use closed circuit television, and later videoconferencing, to provide audio and visual links between courtrooms and remote locations for this purpose.<sup>6</sup>

## II. COURTROOM TECHNOLOGY TODAY

The adoption of fully equipped electronic courtrooms for large-scale inquiries and Royal Commissions has now become standard practice in Australia.<sup>7</sup> It is notable that many electronic courtrooms that are built specifically for these purposes are dismantled at the conclusion of the hearing.<sup>8</sup> Furthermore, the use of fully equipped electronic courtrooms in large-scale commercial litigation and complex criminal trials is becoming more common.

At least one fully equipped electronic courtroom is now available in most jurisdictions.<sup>9</sup> Several jurisdictions have more.<sup>10</sup> New court buildings are being

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<sup>4</sup> JUSTICE CLIFFORD EINSTEIN, TECHNOLOGY IN THE COURT ROOM — 2001 — [FRIEND OR FOE?], at [http://www.lawlink.nsw.gov.au/sc/sc.nsf/pages/einstein\\_201101](http://www.lawlink.nsw.gov.au/sc/sc.nsf/pages/einstein_201101) (last visited Jan. 20, 2004).

<sup>5</sup> AUSTRALIAN LAW REFORM COMM'N, TECHNOLOGY— WHAT IT MEANS FOR FEDERAL DISPUTE RESOLUTION, ISSUES PAPER NO. 23 § 5.42–5.49 (1998) (describing the use of those technologies in later cases), at <http://www.alrc.gov.au/publications/publist/ip.htm> (last visited Jan. 20, 2004); EINSTEIN, *supra* note 4 (describing the evolution of the technology and the current technology used in the technology courts).

<sup>6</sup> LAW REFORM COMM., PARLIAMENT OF VICTORIA, TECHNOLOGY AND THE LAW, § 10.34 (1999) (noting that videoconferencing is becoming more common in a greater variety of contexts), available at <http://www.parliament.vic.gov.au/lawreform> (last visited Jan. 17, 2004).

<sup>7</sup> Adoption of fully equipped electronic courtrooms for a large-scale inquiry occurred most recently for the Coroner's Inquiry into a bushfire disaster in the Australian Capital Territory last year.

<sup>8</sup> ALLISON STANFIELD, E-LITIGATION § 5.10 (2003).

<sup>9</sup> *Id.*; JEFF LEEUWENBURG & ANNE WALLACE, THE AUSTRALIAN INST. OF JUDICIAL ADMIN. INC., TECHNOLOGY FOR JUSTICE 2002 REPORT 4 (2003).

<sup>10</sup> See LEEUWENBURG & WALLACE, *supra* note 9, at 10 (noting that as these courts become more common, the courts are starting to concentrate on more detailed issues in connection to their development). See also EINSTEIN, *supra* note 4.

constructed with the necessary infrastructure to enable quick installation of computer equipment.<sup>11</sup> In older buildings there can be difficulties with infrastructure,<sup>12</sup> but most courts are beginning to install basic facilities, and are incorporating various aspects of technology into their existing courtrooms.<sup>13</sup> In a typical jurisdiction, there may be one or two courts with videoconferencing facilities, several with data projection facilities, and a variety of other more portable technologies that can be moved as needed.<sup>14</sup>

A full electronic courtroom would usually consist of a networked computer operation providing electronic document management and exhibit handling and display (with sophisticated storage, imaging, searching, and retrieval capabilities), as well as real-time electronic transcript and electronic communications facilities. Intranet and Internet technology is used to establish secure networks for the parties to access court documents, files, and transcripts and also communicate by e-mail. Transcript analysis tools are provided for the parties and the judge. In addition to documentary evidence in electronic form, these systems also allow the addition of video and audio evidence in digital format. An electronic courtroom is also equipped with facilities enabling it to receive evidence by video link, and in some cases, to broadcast a hearing itself.<sup>15</sup>

Improvements in hardware in recent years have made it possible to use technology in a wider range of cases, instead of only complex or long trials. More flexible and adaptable systems mean that parties can use the technological components most suited to the needs of their particular case, rather than having to adopt a whole system.<sup>16</sup> For example, videoconferencing is now widely available in Australian courts, even in courts with minimal courtroom technology.

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<sup>11</sup> See, e.g., Judge Michael McInerney & David Jones AM, *The Role of IT in the County Court*, Address to 3rd AIJA Technology for Justice Conference (Oct. 21, 2002) (Australian Institute of Judicial Administration, *Technology for Justice 2002*, CD-ROM, Jan. 2003) (discussing the new County Court Building in Victoria).

<sup>12</sup> See STANFIELD, *supra* note 8, at § 5.20.30 (observing that a lot of courtrooms do not even have enough power points to accommodate the number of computers that will be needed even for a small electronic hearing).

<sup>13</sup> STANFIELD, *supra* note 8, at § 5.10. In the Supreme Court of Victoria, nine of the twenty-two courtrooms are equipped with videoconferencing facilities; the same number have the Cyber Courtbook litigation support system; all except five courtrooms are equipped for real-time transcripts; and three are equipped for document display. SUPREME COURT OF VICT., *COURTROOM TECHNOLOGY, COURTROOM FACILITIES*, at <http://www.supremecourt.vic.gov.au/CA256CC60028922C/page/Courtroom+Technology-Courtroom+Facilities?OpenDocument&l=90-Courtroom+Technology~&2=20-Courtroom+Facilities~&3=~> (last visited Jan. 21, 2004).

<sup>14</sup> See, e.g., QUEENSL. COURTS, *TECHNOLOGY AVAILABLE IN CRIMINAL COURTS (BRISBANE)*, at <http://www.courts.qld.gov.au/about/technology.htm> (revised Apr. 16, 2003).

<sup>15</sup> See STANFIELD, *supra* note 8, at § 5.30.20.

<sup>16</sup> *Id.* § 5.20.40.

Videoconferencing is used for a range of pretrial and administrative purposes, as well as in hearings.<sup>17</sup> In large measure, its popularity is a product of both the enormous distances courts have to cover, particularly in the larger States, and the consequent costs associated with travel for witnesses, lawyers and the judiciary.<sup>18</sup>

The use of document imaging and scanners in the courtroom has been found to be useful for many types of cases, regardless of complexity. For example, it enables a witness giving evidence about a particular location to easily refer to a map displayed on a screen for all participants to see.

Greater technological sophistication has also made it possible to extend the use of courtroom technology outside the boundaries of a physical court building. The Federal Court of Australia has set up a number of portable electronic courtrooms in quite remote locations, to hear indigenous land rights claims; most recently the court has used wireless technology.<sup>19</sup> Sophisticated recording techniques are used to capture oral evidence in culturally appropriate ways. Once a transcript of a hearing is captured from remote locations, it can be made available in the field. In addition to oral testimony, technology has also enabled the court to capture other kinds of evidence. For example, audio and video technology have been used to capture evidence given in the form of dance ceremonies by Aboriginal people.<sup>20</sup>

Courts are also increasingly using technology to manage prehearing and case-preparation stages. Several courts offer the use of e-mail and secure Internet bulletin-board facilities to conduct directions hearings and supervise case preparation. In some courts, it is possible for lawyers to file proceedings, request hearing dates, and conduct searches on their case files online.<sup>21</sup>

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<sup>17</sup> These purposes include: taking evidence from persons overseas, from persons in custody, and from experts; conducting circuit hearings, directions hearings or pretrial conferences, chamber applications, appeal hearings, and applications for special leave in the High Court; handing down judgments; conducting remands and bail applications; and, on occasion, passing sentences. See AUSTRALIAN LAW REFORM COMM'N, *supra* note 5, §§ 5.37–5.41, 5.57; *Courts and Tribunals Practice Notes* 72 LAW INST. J. 71 (1998); G.R.D. Waldron et al., *Audio Visual Technology and Victorian Courts*, (Australian Institute of Judicial Administration, Technology for Justice 1998, CD-ROM, 1998); The Hon. Daryl Williams, Address to the Australian Institute of Judicial Administration Technology for Justice Conference (Mar. 23, 1998) (Australian Institute of Judicial Administration, Technology for Justice 1998, CD-ROM, 1998). Videoconferencing is being used in Western Australia to provide interpreting services to persons appearing in country proceedings. Ben Williams, *Ministry of Justice Video Link Service* (March 2001) 28(2) BRIEF 33.

<sup>18</sup> LAW REFORM COMM., *supra* note 6, at § 10.33.

<sup>19</sup> STANFIELD, *supra* note 8, at § 5.30.20.

<sup>20</sup> See LEEUWENBURG & WALLACE, *supra* note 9, at 4 (noting that the technology allows this type of evidence to be captured in “culturally appropriate ways”).

<sup>21</sup> See, e.g., QUEENSL. ECOURTS, ECHAMBERS, at <https://ecourts.courts.qld.gov.au/eChambers/eChambersCurrentCases.htm> (revised July 16, 2003); FEDERAL COURT OF AUSTRALIA, ECOURT, at <http://www.fedcourt.gov.au/ecourt/ecourt.html> (revised June 20, 2003); LAND AND ENVIRONMENT COURT, ECOURT, at <https://ecourt.lec.lawlink.nsw.gov.au/eCourt/home.do> (last visited Jan. 21, 2004).

Technology can also be used to communicate information about cases and the role of the courts to the wider community. All Australian courts now have Web sites that include both general information about their function and procedures, as well as specific information about individual cases — for example, hearing lists and decisions.<sup>22</sup> Judgments are available both on court Web sites and on services such as AustLII.<sup>23</sup> Some courts have begun to experiment with using technology to deliver decisions in other forms. For example, the Federal Court has used Internet streaming technology to publish “live” judgment summaries on its Web site in cases of significant public interest.<sup>24</sup>

The next step toward wider use of courtroom technology is the implementation of electronic filing. Australian courts are moving towards e-filing systems that will directly integrate filed documents into the courts’ case management and document library systems.<sup>25</sup> The availability of an electronic court file will create a further impetus for the use of technology in the courtroom.

### III. CURRENT ISSUES

#### *A. Regulating the Use of Technology*

Australian courts have found a need to establish protocols and procedures to address the preparation of cases for trial in an electronic courtroom. A number of courts have published practice directions and rules to guide the parties and to encourage early consideration of the use of technology.<sup>26</sup>

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<sup>22</sup> For a list of Australian court Web sites, see AUSTRALIAN INSTITUTE OF JUDICIAL ADMINISTRATION, LINKS, AUSTRALIAN COURTS, at <http://www.aija.org.au/links.htm> (last visited Jan. 21, 2004).

<sup>23</sup> AUSTRALASIAN LEGAL INFORMATION INSTITUTE, NEWS & ADDITIONS, at <http://www.austlii.edu.au> (last updated Jan. 23, 2004).

<sup>24</sup> FEDERAL COURT OF AUSTRALIA, JUDGMENTS, VIDEO ARCHIVES OF JUDGMENT SUMMARIES, at [http://www.fedcourt.gov.au/judgments/judgmts\\_video01.html](http://www.fedcourt.gov.au/judgments/judgmts_video01.html) (revised June 20, 2003).

<sup>25</sup> The South Australian courts are progressively implementing electronic filing. Justice Trevor Olsson & Steven Taylor, E-filing and Its Implications for the Courts and the Legal Profession, Presentation delivered to AIJA Technology for Justice Conference (Oct. 22, 2002), at <http://www.aija.org.au/tech3/program/presentations/AIJATECH1.DOC> (last visited Jan. 21, 2004). The County Court of Victoria planned to have fully implemented an e-filing system in its civil jurisdiction by the end of 2003. Adam Turner, *Online Beats the Queue at Court*, THE AGE, Sep. 23, 2003, at 5; COUNTY COURT OF VICT., GUIDE TO E-FILING, at [http://www.countycourt.vic.gov.au/efiling\\_guide.doc](http://www.countycourt.vic.gov.au/efiling_guide.doc) (last visited Jan. 21, 2004). The Federal Court of Australia is moving progressively to full electronic filing, in which filings will be fully integrated with a new case management system. Information supplied by the Federal Court of Australia (October 2003) (on file with authors).

<sup>26</sup> See, e.g., FEDERAL COURT OF AUSTRALIA, PRACTICE AND PROCEDURE, PRACTICE NOTE NO. 17, at [http://www.fedcourt.gov.au/pracproc/practice\\_notes\\_cj17.htm](http://www.fedcourt.gov.au/pracproc/practice_notes_cj17.htm) (last visited Jan.

These protocols and procedures have been adapted and refined, and at least one jurisdiction is moving towards a more mandatory approach to the use of technology.<sup>27</sup> In a number of jurisdictions, the courts have power to order the use of technology and there is emerging caselaw on its exercise.<sup>28</sup> Relevant factors include the likely contribution of the technology to ensuring that a hearing proceeds quickly and efficiently.<sup>29</sup>

Courts have also taken steps to regulate the use of videoconferencing and address procedural issues concerning its use. Guidelines and practice directions, which are in some cases quite detailed, address issues such as the presence of third parties, provisions for confidential communications between an accused and his legal representative, and even control of camera viewpoint and audio links.<sup>30</sup>

### *B. Standards*

Many of the protocols that have already been issued address the question of consistent standards for the capture of data in electronic form. To date, the protocols have largely been confined to the preparation of documents in electronic form to be used at trial or in the discovery process.

However, the need to develop common standards to ensure the smooth flow of documents through all levels of the court process is a continuing challenge and was the subject of a major report to the Australian Council of Chief Justices in 1998.<sup>31</sup> Although some work has been done on the development of standard meta data

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23, 2004); S. AUSTL. COURTS, GUIDELINES FOR THE USE OF TECHNOLOGY, PRACTICE DIRECTION NO. 52, at [http://www.courts.sa.gov.au/lawyers/practice\\_directions/civil\\_pd/civil\\_pd\\_52.htm](http://www.courts.sa.gov.au/lawyers/practice_directions/civil_pd/civil_pd_52.htm) (last visited Jan. 23, 2004); SUPREME COURT OF N.S.W., PRACTICE NOTE NO. 105, at [http://www.lawlink.nsw.gov.au/practice\\_notes/nswsc\\_pc.nsf/5ab5d5b26b500891ca256755000ac4b2/b78efae5c2ed52c4ca256763000d408b?OpenDocument](http://www.lawlink.nsw.gov.au/practice_notes/nswsc_pc.nsf/5ab5d5b26b500891ca256755000ac4b2/b78efae5c2ed52c4ca256763000d408b?OpenDocument) (last visited Jan. 23, 2004); SUPREME COURT OF VICT., PRACTICE NOTE NO. 1 OF 2002, at [http://www.supremecourt.vic.gov.au/CA256902000FE154/Lookup/PN/\\$file/PN-1-2002%20-%20IT.pdf](http://www.supremecourt.vic.gov.au/CA256902000FE154/Lookup/PN/$file/PN-1-2002%20-%20IT.pdf) (last visited Jan. 23, 2004); QUEENSL. COURTS, PRACTICE DIRECTION RELATING TO DOCUMENT MANAGEMENT, at [http://www.ecourts.courts.qld.gov.au/eCourtroom/PD\\_RE\\_DocumentManagement.htm](http://www.ecourts.courts.qld.gov.au/eCourtroom/PD_RE_DocumentManagement.htm) (last visited Jan. 25, 2004).

<sup>27</sup> Sandra Potter & Peter Moon, *Supreme Court of Victoria Practice Note 1 of 2002: Guidelines for the Use of Technology in the Civil Matters*, 49 COMPUTERS & L. 25 (2002).

<sup>28</sup> See, e.g., *Idoport Pty. Ltd. v. Nat'l Austl. Bank Ltd.* 49 N.S.W.L.R. 51, 54 (2000).

<sup>29</sup> *Id.*

<sup>30</sup> See, e.g., SUPREME COURT OF TAS., LAWYERS VIDEO CONFERENCING, at <http://www.courts.tas.gov.au/supreme/users/lawyers/video.htm> (last updated July 2, 2003); COUNTY COURT OF VICT., VIDEO CONFERENCING IN THE COUNTY COURT, at [http://www.countycourt.vic.gov.au/vid\\_conf.htm](http://www.countycourt.vic.gov.au/vid_conf.htm) (last updated Jan. 19, 2004).

<sup>31</sup> Joanne Sherman, *Council of Chief Justices Electronic Appeals Project — the Consultant's Overview*, 36 COMPUTERS & L. 29 (1998).

“tags” using tools such as XML, this has yet to give rise to any commonly accepted standards. As Stanfield recently pointed out:

Data consistency is the cornerstone for electronic solutions . . . if judgments, transcripts and filed documents can be produced . . . in a manner that is electronically consistent . . . then this will enable those documents and the information contained within them to be electronically processed. The result will be that information can be automatically extracted and used at all stages of the court process, from trial through to ultimate appeal.<sup>32</sup>

As Stanfield notes, the poor quality of many electronic source materials and the use of inconsistent formats adds considerable expense to the use of court technology.<sup>33</sup>

### *C. Cost*

Concern about the additional costs involved in setting up full electronic trials is a factor inhibiting their more widespread use, notwithstanding a general view that these systems can reduce the length of hearings. While improvements in hardware have meant some reductions in costs in recent years, there is still a live issue as to who pays for the technology installed in the courtroom. For commissions and inquiries, the cost of setting up an electronic courtroom has generally been funded by a specific allocation from the government, as part of the costs of the inquiry. In court cases, the cost either has to be met by the court, or by the parties, or by a combination of these sources.<sup>34</sup>

Generally speaking, while the court may provide the basic infrastructure, the costs associated with setting up and running the electronic courtroom and preparing the case for electronic trial have to be met by the parties. As previously noted, the costs of document preparation alone can be considerable.

Generally, full electronic courtrooms are used only in larger civil cases where the volume of documents involved and the amount at stake makes their use more economic. They are also used in larger criminal trials which involve considerable documentation or large numbers of exhibits.<sup>35</sup> One emerging issue for practitioners who use this technology is the extent to which traditional cost scales, and

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<sup>32</sup> STANFIELD, *supra* note 8, at § 7.20.

<sup>33</sup> *Id.*

<sup>34</sup> See THE CHALLENGE OF THE INFORMATION SOCIETY, *supra* note 3.

<sup>35</sup> STANFIELD, *supra* note 8, at 1; Interview with Justice Clifford Einstein, of the Supreme Court of New South Wales, in Sydney, N.S.W. (Nov. 27, 2003); Interview with Justice Brian Martin of the Supreme Court of South Australia, in Adelaide, S. Austl. (Dec. 9, 2003) (discussing the Snowtown Murder Trial).



approaches to their interpretation, provide adequate recompense for the increased costs associated with using the new technology.

This issue was highlighted in the first reported case to deal with a costs order under the Victorian Rules of Court.<sup>36</sup> The case concerned the issue of whether a party could recover the costs of including all its discovered documents in an electronic database prepared for trial, or whether it was only entitled to the costs of preparing all the documents that it had a reasonable expectation of using during the trial.<sup>37</sup> The court discussed some of the issues involved in determining the type of work that would be covered by a costs order relating to the use of information technology at trial.<sup>38</sup>

The Victorian Supreme Court issued a new practice direction on the use of technology in civil matters in 2002, which sought to clarify that funds properly expended on the use of technology to increase efficiency and reduce costs "will be treated as 'necessary and proper for the attainment of justice or for enforcing the rights of a party'"<sup>39</sup> within the meaning of the costs rules. The cost rules are currently under review with a view to updating them to explicitly include components relating to the use of technology to prepare and conduct cases at trial.<sup>40</sup>

#### *D. Training and Resources*

Other concerns that have been voiced include the need for effective training for judges, court staff, and legal practitioners. Effectively operating technologically advanced courtrooms may require a large commitment of time and expertise by the judges' staff.<sup>41</sup> This commitment in turn, can impact the court's overall resources.

#### *E. Cultural Change*

The successful use of technology in the courtroom also requires a commitment from all members of the legal team to use the technology effectively.<sup>42</sup> The need for a close liaison and good communication between courts and law firms has been a common theme in much of the recent discussion on courtroom technology.

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<sup>36</sup> *Kennedy Taylor (Vic) Pty Ltd. & Anor v. Grocon Pty Ltd.* (2002) V.S.Ct. 32 (1 March 2002), available at <http://www.austlii.edu.au/au/cases/vic/VSC/2002/32.html> (last visited Dec. 19, 2003).

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> SUPREME COURT OF VICT., *supra* note 26, at 1. Potter & Moon, *supra* note 27, at 26.

<sup>40</sup> Interview with Sandra Potter, Director, 3C Consulting, in Melbourne, Vict. (Dec. 15, 2003).

<sup>41</sup> Interview with Justice Clifford Einstein, *supra* note 35; Interview with Justice Brian Martin, *supra* note 35.

<sup>42</sup> STANFIELD, *supra* note 8, at § 5.20.20.

Lack of familiarity with the technology or an unwillingness to use it is affecting its use in the courtroom. For example, in one recent case, cross-examination was still conducted largely with the use of hard copy documents, despite the provision that was made for an extra-large monitor to be set up beside the witness stand to enable a standard A4 size document to be displayed on the screen in its actual size.<sup>43</sup> Yet, in another recent case, the use of this type of technology did not seem to give rise to any objections.<sup>44</sup> While the technical limitations of the technology used may provide some of the answer (in the first case it was not possible for the witness to scroll through the document displayed on the screen), it also appears that there are differences in the enthusiasm for, and willingness to adopt, the use of technology in the courtroom.

#### *F. E-filing Challenges*

As courts move towards electronic filing, other challenges are emerging. These challenges include the need to upgrade existing case management systems to ensure that filed documents can be integrated with the court's internal systems, address issues of cultural change and the individual work practices of judicial officers and court staff, and address issues relating to authentication and the accessibility of court documents, not to mention concerns over privacy.<sup>45</sup>

#### *G. Courts and Universities*

As courts begin to consider some of these issues, it is clear that there is a need for greater research on the use of courtroom technology, in particular on technology's effects on the process and on the parties. Courts are beginning to look towards partnerships with universities to explore some of these issues. One example is a joint conference recently held in Queensland, organised by QUT in partnership with the Queensland Supreme Court, which explored public access, as well as privacy and security concerns in relation to electronic court records.<sup>46</sup>

There are also significant developments in legal education using courtroom technology, for students as well as for those in legal practice. The work being done at QUT <e.law> Electronic Courtroom, is a leading example of this. The <e.law>

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<sup>43</sup> *Idoport Pty Ltd. v. National Australia Bank Ltd.* (2000) 49 N.S.W.L.R. 51; EINHORN, *supra* note 4.

<sup>44</sup> Interview with Justice Brian Martin, *supra* note 35.

<sup>45</sup> Olsson & Taylor, *supra* note 25.

<sup>46</sup> QUT FACULTY OF LAW AND THE SUPREME COURT OF QUEENSLAND, COURTS FOR THE 21ST CENTURY: PUBLIC ACCESS, PRIVACY AND SECURITY, at <http://www.law.qut.edu.au/about/news.jsp> (last updated Jan. 22, 2004).

QUT Moot Court is one of Australia's most advanced electronic courtrooms.<sup>47</sup> It contains state-of-the-art information technology and audio-visual integration.<sup>48</sup> It is being used to educate students and the legal profession in the applications of new technologies to the courtroom.<sup>49</sup>

Current facilities include Ringtail Courtbook software, 14 multimedia computers with Internet and Library database access, document projector, video and audio recording capabilities including optional quad screen display and data projection facilities. Digital video and audio will be installed and videoconferencing facilities are included in the upgrade plan. All equipment in the facility is controlled by a touch screen, which includes the ability to send information to any of the 25 LCD screens.<sup>50</sup>

With the increasing use of technology in the courtroom in Australia, the QUT law school places a great store on the development of appropriate skills in its graduates. For example, the new Queensland Magistrates Court, which is currently under construction, will have permanent integrated infrastructure designed to support electronic courtrooms.

The law school is one of the largest in Australia, with an annual intake of between 700 and 900 students. Because of these numbers, it is impossible to give any detailed instruction in mooting to all students. All students, however, undertake limited advocacy training in a compulsory second year unit, Criminal Law and Procedure, but it is limited to a single session supported by a training video.

At QUT, intensive mooting is taught as an elective single semester unit for third and fourth (final) year students. The class is capped at thirty-two students and runs twice a year. The electronic court makes available a number of tools to the students that previously were either difficult or awkward to access. As an example, integrated video systems enable automatic videoing of students' performances. Afterwards, a constructive critique of students' style, presence, knowledge, and ability to answer questions is instantly possible, while the experience of facing the bench is fresh in the students' minds. Later, the best performances are used to illustrate technique.

The most important use of the systems, though, is in the running of cases — applications (previously called chamber applications) and appeals — electronically. The courtroom uses the latest Ringtail CourtBook software for training the students

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<sup>47</sup> QUT FACULTY OF LAW, THE <E.LAW> QUT MOOT COURT, at <http://www.law.qut.edu.au/about/mootcourt.jsp> (last visited Jan. 23, 2004).

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

<sup>50</sup> *Id.*

and then for running their cases. The applications are run exclusively in an electronic format and the appeals (in which students argue cases taken on appeal to the High Court of Australia, but which have not been heard) are orchestrated through mostly electronic means. Each student receives intensive training in the software and then is expected to use it in the courtroom. The students are adept at picking up software understanding and thrive in the interactive electronic atmosphere.

QUT was the first law school in Australia to teach in this way. The University of Melbourne now has an electronic moot court and other law schools in Australia and New Zealand are investigating the possibilities.

The QUT courtroom is being updated in 2004. The courtroom will soon be equipped with wireless technology and small space saving devices such as “roll-up” keyboards — keyboards made of translucent flexible synthetic materials, less than 5mm thick. Digital audio and digital video are being installed, innovations that will give students from around Australia and elsewhere who take part in the competition moots that the law school runs, the opportunity to review their performances immediately following their moots. This technology will also play a part in the virtual moots that are planned between east coast law schools in 2004. Also being installed is an integrated white board, which allows computer images to be displayed, marked up, and printed. In addition, the integrated white board will be very useful for teaching the theory of the case.

The moot court is not just used in QUT’s undergraduate program. The faculty of law runs two postgraduate programs that rely very heavily on the court — the Legal Practice course and the Bar Practice course. The Legal Practice course is a six-month full-fee paying course. At its conclusion students are able to practice as solicitors. It is an alternative in Queensland to two years in a law firm as a trainee solicitor. The Bar Practice course, on the other hand, is a prerequisite to admission as a barrister in Queensland. It is an intensive six-week course that runs twice a year. The moot court is used very heavily by these students and at the end of the course they are quite proficient in using the software. The compulsory nature of this course means that more and more barristers in Queensland are becoming trained to appear in the electronic courtroom.

An electronic and integrated trial system in Queensland courts is going to happen — is happening — slowly, but surely. It will be the graduates of QUT who will lead the way.