TECH in the Courtroom

Integrated Courtroom Technology (ICT) Comes to the Commercial Division of Supreme Court, Westchester County

By Hon. Alan D. Scheinkman and Sheng Guo

In January 2018, the Commercial Division of Supreme Court, Westchester County, became the first civil court in the state to implement Integrated Courtroom Technology (ICT). The Westchester Commercial Division ICT project built off the 2016 development of ICT in the new, state-of-the-art Family Court in Yonkers, New York. Since then, ICT has expanded into Family Court courtrooms in New York City.

The ICT initiative focuses on enabling all courtroom participants – judges, clerks, attorneys, litigants, witnesses, jurors, and members of the public – to take fullest advantage of modern evidence presentation systems. It "glues" multiple components of courtroom technology into a modular, powerful, yet easy-to-use platform to promote efficiency and ensure full access to all participants in the proceeding. These are the key components:

- An excellent sound system that permits all participants to clearly hear the proceedings.
- Audio and video conferencing for remote appearances and remote interpreting.
- An evidence presentation system that permits attorneys to display physical and electronic evidence, and witnesses to annotate the evidence, in a controlled fashion to all court participants.
- Assistive listening capacity for hearing-impaired participants.
- Monitors for displaying testimony when real-time court reporting is used.
- Secure Wi-Fi access for judges with state-issued Surface tablets/laptops and open public internet access for the public.

In developing the ICT courtrooms in Yonkers Family Court, we were able to work from essentially raw space, unencumbered by existing walls and infrastructure. In contrast, we did not have the luxury of designing and building the courtroom technology components from scratch in the Commercial Division courtroom. Courtroom 105, located in the Westchester County Courthouse Annex, is spacious and dignified but its preexisting technology had become obsolete, even though



the facility was not all that old. The annex was designed in the 1990s and built in the early 2000s.

Our goal from the beginning was to obtain the latest and best courtroom technology and to tailor it to fit the needs of the Commercial Division while maintaining the aesthetics and integrity of the courtroom. We took into consideration the punch list of desired courtroom technology features developed by the Commercial Division Advisory Council, chaired by Robert Haig, Esq. of Kelly, Drye and Warren, and took our list of requirements to the technology experts and architects from both the Ninth Judicial District staff and the Office of Court Administration. Sheng Guo, OCA's Chief of Technology, attended several days of trials and hearings in the pre-existing courtroom so that he could see, first-hand,



Hon. Alan D. Scheinkman is the Presiding Justice of the Appellate Division, Second Department.

Sheng Guo is the New York State Office of Court Administration's Chief of Technology.

how the court and counsel worked with traditional presentation methods and develop an appreciation for how courtroom presentation could be improved by the use of modern technology.

The Commercial Division handles important, complex commercial litigations, quite often involving multiple parties, with each party potentially having multiple attorneys and legal support staff. Jury trials are not uncommon. Use of video-recorded depositions is frequent. Discussion of complicated contractual provisions occurs all the time. Unlike the situation in family courts, the courtroom has a jury box and also has two pairs of counsel tables. It is vital that all parties – counsel, witnesses, the court and the public – be able to clearly see, hear and understand all proceedings. *sotto voce* conversations between counsel and clients at the counsel table, the inadvertent broadcast of dialogue not intended for public dissemination may be avoided by toggling a convenient on/off switch.

EVIDENCE PRESENTATION SYSTEM

In the Commercial Division, it is hardly uncommon to see attorneys hauling in voluminous amounts of evidence and documents by hand truck. Because of the lack of evidence presentation system, many attorneys struggled to set up an easel and used a pre-printed foamboard to show the evidence. At times, counsel would write on a flipchart to illustrate a point. In jury cases, the judge, counsel and the witness might have copies of the key exhibits before them as the contents were described, while jurors and the



SOUND REINFORCEMENT SYSTEM

Even though the pre-existing courtroom had a decent standalone sound system consisting of an audio mixer, microphones and ceiling-mounted speakers, only the front counsel tables were equipped with microphones. While the sound quality was loud and clear when the attorneys spoke directly into the microphones at a sitting position, the microphones were not very useful when attorneys were standing while speaking – a hardly infrequent occurrence. Nor were the microphones able to amplify the voices of counsel at the podium.

In the ICT implementation, the existing microphones on the front counsel tables were replaced with new ones with a better voice pick-up range and which are no longer in rigidly fixed positions. As a result, all the participants in the courtroom can hear the attorney's voice whether he or she is sitting or standing. With the addition of microphones to the back counsel tables, attorneys no longer have to switch between front and back tables, thus making the courtroom more efficient. A microphone was also placed on the podium. The new microphones are capable of picking up sound throughout the courtroom. While the microphones are so sensitive that they may capture public were left to make sense of the testimony without the benefit of having the exhibits before them. These old-fashioned approaches could be avoided only if the attorneys could hire a vendor to install multiple display monitors for use in a particular case. This involved trucking in more equipment and running temporary cables to connect those monitors to the attorney's computer. This was a costly and time-consuming endeavor, not to mention the safety hazards posed by open wires on the floor and the difficulty of positioning the equipment so that everyone could see it without blocking means of ingress and egress.

In the new design, attorneys can present evidence from any one of the four counsel tables, or from the podium. All forms of evidence may be presented, including documents, video (live or recorded), and audio (live or recorded). All that is needed is a laptop or tablet (or even a smartphone) that can send the video signal to the HDMI port and an HDMI cable. It does not matter what type or version of computer operating system (e.g., Windows or Mac) or applications (e.g., Word, Wordperfect, Excel, Adobe) are used. Counsel can retrieve and present evidence which is stored on their computers locally or which is stored in the "cloud" using high-speed Wi-Fi connections, provided by the court free of charge. In addition, attorneys may present physical evidence using the document camera on the podium.

For the convenience of the attorneys, a wireless charging station has been installed on each of the four counsel tables, and a USB charging port is also available on the podium.

The evidence presentation system simply takes the video images from the computer screen of the presenting attorney and replicates and re-displays them in real time to the judge, clerk, court reporter, witness, the other counsel, the jury, as well as the spectators. (As discussed below, the judge and the clerk have the ability to limit crisp and clear images, including fine print in documents or details in photos, from a high-definition monitor right in front of them. Second, since individual monitors are installed, the presiding judge or the clerk can control who can see the evidence and when. For instance, the judge may preview the evidence before allowing it to be displayed to the opposing counsel or to the jury and the public. The ability to control the evidence display sequence, obviously, will reduce the chance of accidentally displaying inadmissible evidence to the jurors or others.

One of the common complaints in the past when temporary monitors were installed was that the temporary monitors disrupted the visual communications between the judge and attorneys, or between the attorneys and



the presentation so that, for example, the jury does not see a proposed exhibit until it has been admitted into evidence.) Each counsel table has one 24-inch Full HD (1080p) monitor, with the ability to accommodate two monitors on demand when needed. The judge, court clerk and court reporter all have individual monitors. In the jury box, a total of eight monitors were installed so that every two jurors share a monitor. In addition, two 48-inch monitors with articulated arms were installed on the side walls for the spectators.

A touchscreen monitor was provided for the witness stand. The witness can annotate the evidence on the screen using his or her finger or a stylus. In this fashion, the witness can mark a person or location depicted on a photograph. The clerk can take a snapshot of the annotated evidence and save it onto the court's network for future reference, such as for printing it for purposes of an appellate record. It is envisioned that a procedure for "assembling" the original evidence in electronic format and saved annotated evidence for jury deliberation will be developed down the road.

The distributive nature of the displays has significant advantages. First, of course, the viewers will be able to see

the witness or jury. We have rectified the problem by using low-profile monitor mounts on the counsel tables and the bench. Those monitors can be adjusted to lower positions so that there are clear lines of sight among courtroom participants.

CONFERENCING SYSTEMS

One of the recommendations from the Chief Judge's Task Force on Commercial Litigation in the 21st Century was to encourage judges to conduct conferences by telephone rather than requiring the attorneys to travel to court. However, using old school technology involved having to turn on the speakerphone on the handset and then put it near a microphone, introducing complexity and rendering poor call quality. Moreover, it could be difficult for a judge to effectively manage the call because the audio equipment allowed the speaker to keep speaking indefinitely. In the ICT implementation, audio conferencing and video conferencing are integrated well with the courtroom sound system. You can hear the voice of the remote party clearly, as if he or she is talking directly to a microphone in the courtroom. More important, video conference technology, such as Skype, is much more effective than plain audio conferencing. Because

the participants can see and hear each other, the problem of a run-on call is resolved; further, use of the video equipment enables the participants to discuss a displayed document. The use of courtroom video conference technology is expected to expand. A variety of circumstances may arise (e.g., a snowstorm, a travel delay, or a health problem) that may prevent an attorney or a witness from appearing in person in the courtroom. However, it may be acceptable in non-testimonial situations for counsel and other participants to appear remotely via video conferencing. In the future, counsel may be able to wait in their offices for their case to be reached for a video conference, rather than having to physically travel to a courthouse and wait during a lengthy calendar call. This should increase efficiency and reduce cost and delay. Where the parties consent, a witness may even be permitted to testify remotely as well.

Additionally, there are cases in which a participant does not understand English or is hearing impaired. Rather than rely exclusively on the availability of an on-site language interpreter, which must be arranged in advance, it can be effective to use video conferencing for translation. The interpreter can sit at his or her office in a remote location, connect to the courtroom video conferencing system using Skype, hear and see the court proceeding, and translate in real time.

ADA COMPLIANCE

It is critical to make proper accommodations for people with disabilities when implementing courtroom technology. An infrared-based assistive listening system was installed to address the needs of the hearing impaired. Sound from the audio mixer will be encoded, then transmitted via an infrared emitter. Upon request, the court personnel can assign an infrared receiver and a microphone, or an induction loop for those using compatible hearing aids. Avoiding messy cable runs on the floor not only helps to preserve the beauty of the courtroom, it also makes the courtroom safer for all users by eliminating tripping hazards and obstacles to mobility. In the Commercial Division courtroom, the contractor was able to hide all video and power cables under the in-carpet Connectrac wireways. The special ramp design ensures a very gradual slope to the wireways, which is a requirement for ADA compliance.

STREAMING

While the courtroom is spacious, there may be times when it is not able to accommodate all who wish to be present in large or well-publicized cases. The built-in streamer can stream court proceedings live to an overflow room. In addition, the judge may authorize the stream to be viewable by law clerks who conduct legal research in the chambers. We will explore the possibility of streaming court proceedings to attorneys' offices after clearing the legal and security obstacles.

The other usage of the streamer would be for the court reporter to connect his or her laptop, and stream realtime transcript over the Wi-Fi network. A hearingimpaired individual, especially the one with severe hearing loss, can read the streamed transcript from a court-provided laptop.

CONCLUSION

Keeping New York's pioneering Commercial Division at the cutting edge, the newly initiated ICT part in White Plains will enable more efficient, effective case management in complicated business disputes, better serving the justice needs of New York's business community and supporting the state's role as a global commercial hub.

Are you feeling overwhelmed?

The New York State Bar Association's Lawyer Assistance Program can help.

We understand the competition, constant stress, and high expectations you face as a lawyer, judge or law student. Sometimes the most difficult trials happen outside the court. Unmanaged stress can lead to problems such as substance abuse and depression.

NYSBA's LAP offers free, confidential help. All LAP services are confidential and protected under section 499 of the Judiciary Law.

Call 1.800.255.0569

NEW YORK STATE BAR ASSOCIATION LAWYER ASSISTANCE PROGRAM