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**AE** INNOVATIVE  
PROSECUTION  
SOLUTIONS

# TECHNOLOGY AND PROSECUTION: THE EVOLVING COURTROOM

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## QUICK GUIDE



QUICK GUIDE:  
TECHNOLOGY AND PROSECUTION: The Evolving  
Courtroom

**QUICK GUIDE: TECHNOLOGY AND PROSECUTION: THE EVOLVING COURTROOM ..... 1**

REMOTE APPEARANCES ..... 1

*Equipment and Connectivity*..... 1

*Security and Public Access* ..... 1

*Remote Models and Procedural Issues*..... 2

VISUAL DISPLAY ..... 3

ARTIFICIAL INTELLIGENCE AND DATA ANALYTICS..... 3

RECORDED AND AUTOMATED TRANSCRIPTION ..... 4

CONCLUSION..... 5

# QUICK GUIDE: TECHNOLOGY AND PROSECUTION:

## The Evolving Courtroom

Advances in technology are quickly changing the longstanding practices of traditional courtrooms. The work of a prosecutor is centered around the court, and as new options evolve, prosecutors may find efficient and inexpensive ways to handle their workload. Prosecutors also will have to weigh these opportunities against the legal and ethical duties of criminal litigation, as well as the practical considerations about the quality and reliability of any emerging technology.

This paper discusses several forms of evolving courtroom technology, including remote appearances and advances in visual display, artificial intelligence, data analytics, and recorded and automated transcription. For a full discussion of these issues see [Technology and Prosecution: The Evolving Courtroom](#). [\[Add link\]](#)

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### Remote Appearances

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The Covid-19 epidemic spurred the widespread use of videoconferencing technology to continue working while maintaining social distancing requirements. Although some court systems had long used remote models for limited criminal litigation matters, the constraints of the pandemic revealed that many phases of a criminal prosecution can be readily handled remotely. As a result, the use of remote appearances continues to expand, raising several considerations for courts and prosecutors.

#### Equipment and Connectivity

Courts must ensure that all parties to a remote criminal proceeding have the necessary technical resources, including reliable internet service of sufficient speed and bandwidth, adequate computing devices, and technical support as needed.

#### Security and Public Access

Online court activity requires proper cybersecurity measures to ensure the integrity of the proceedings and protection from data theft and other forms of cyberattack. Security must be maintained while still allowing the public to access the virtual courtroom. Live streaming platforms and audiovisual recordings are some of the ways courts can provide a secure public viewing method for remote proceedings. In certain sensitive cases, courts must establish methods for restricting remote public access.

## Remote Models and Procedural Issues

Remote appearances generally utilize two models. In a *fully virtual court proceeding*, no one is present in a physical courtroom. Instead, the judge, court staff, counsel, defendant, and all other participants appear remotely from their individual locations. In a *hybrid court proceeding*, the judge and court staff are in the physical courtroom, while one or more of the other participants appears using videoconferencing. Both models must protect the due process and other constitutional and statutory rights of the defendant. These requirements are more easily met in proceedings that do not involve the introduction of physical or testimonial evidence, such as arraignments, motion arguments, pleas, and sentencing. Proceedings that involve the introduction of evidence, such as trials or certain hearings, require thought and planning about how to ensure the defendant's due process and other rights are protected. Courts and prosecutors must determine how to handle several important procedural issues, such as:

- How to provide the defense with the opportunity to adequately review physical exhibits.
- How the foundation of physical evidence will be established if all parties are not physically present with an exhibit.
- How witness credibility can be adequately evaluated, as well as tested through cross examination.
- How to ensure remote witnesses are not improperly influenced during their testimony.
- How juries might be selected and deliberate remotely.

Courts may consider requiring defendants who wish to participate in a remote proceeding to waive claims that the remote nature itself is grounds for alleging constitutional, statutory, or other legal violations.

Remote proceedings offer many potential benefits to prosecutors, defendants, and court systems, including:

- Courtroom efficiency
- Cost savings
- Mitigating prosecutor understaffing
- Improved appearance rates for defendants
- Reduced time and travel for witnesses
- Protecting victims of domestic violence and sex crimes
- Improved foreign language interpretation
- Immediate recording and transcription of proceedings

Remote proceedings also present issues to be resolved, including:

- Authorization to conduct remote proceedings in criminal matters by law or rule

- Cost of technology, technical support, and training
- Access to necessary technology and technical support
- Access for those with disabilities
- Standardization of when and how to conduct remote proceedings
- Private communication within a remote proceeding
- Credibility determinations of remote witnesses
- Confrontation Clause requirements
- Developing valid waivers and agreements for remote proceedings
- Improper influence on witnesses during remote proceedings
- Impact of remote proceedings on victims and witnesses
- Public access and what not to display
- Absence of formality

## Visual Display

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Another area of rapidly evolving courtroom technology is the use of visual display tools. Displaying evidence and information in the courtroom using computers, monitors, screens, and software provides both benefits and issues to resolve for courts and prosecutors.

Some of the benefits of visual display technology include:

- Time savings when presenting numerous pieces of evidence.
- Improved arguments and witness testimony using presentation slides and exhibit display.
- Effective presentation of jury instructions.
- Enhanced visibility for members of the public observing remotely.

Some of the issues to resolve about the use of visual display tools include:

- The logistics of witnesses introducing and discussing evidence.
- Preservation of the proceeding's record when it includes visual display.
- Ensuring prejudicial information is not presented through visual display.
- Ensuring visual display does not allow for the cherry-picking of beneficial evidence.

## Artificial Intelligence and Data Analytics

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Artificial Intelligence and data analytics are increasingly being integrated into the criminal justice system. Many courts currently rely upon AI and analytics-based risk assessment and recidivism prediction programs. This technology may soon be used to expedite certain prosecutorial and court functions, and to predict the actions of judges and jurors.

Some of the benefits of these technologies include:

- Speeding up labor-intensive processes, such as legal research and video/document review.
- Reducing bias in decision-making (although risks of increased bias also exist).
- Persuasive arguments based on “neutral” analysis.
- Better case outcomes through predictive analysis of juror and judicial behavior.

Some of the issues to resolve about AI and data analytics include:

- Increased bias due to analysis based on bias-tainted data sets.
- Privacy issues when using personal or private information to make predictive decisions.
- Reliability of the technology.
- Handling of important decision-making functions by machines.

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## Recorded and Automated Transcription

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Advances in technology have the potential to transform the creation of courtroom transcripts and the records of proceedings. Instead of human reporters transcribing testimony and chronicling courtroom events, computers and cameras have begun doing this job. *Audiovisual recording* of the entire courtroom proceeding enables a human court reporter to create the full transcript later. *Automated transcription systems* use Artificial Intelligence to transcribe speech to text and are becoming available for the courtroom.

Automated and audiovisual court records have benefits for prosecutors and courts, including:

- Potential cost savings with one-time expenditures for equipment and software versus ongoing and increasing costs for human reporters.
- Transcription solutions for when no human reporter is available.
- Same-day transcripts.
- Preservation of the entire record, particularly with audiovisual recordings that capture the movement of parties and visual display.

Some of the issues to resolve about automated and audiovisual court records include:

- Replacement of human reporters and their innate human capabilities
- Accuracy of machine-based court reporting
- Data storage and cost for electronic transcripts

## Conclusion

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This paper presents information about developments currently at the forefront of the evolving courtroom. In today's tech environment, new ideas are constantly coming into view, and prosecutors must be prepared to weigh the costs, benefits, and unknowns.