REAL-TIME AI ADVOCACY—DEPLOYING MULTIMODAL GENERATIVE & AGENTIC AI IN LITIGATION

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ABSTRACT

This Article examines the transformative potential of multimodal generative AI and agentic AI in litigation, arguing that these technologies represent a paradigm shift from automation to cognitive augmentation. Multimodal AI systems can integrate and analyze text, images, audio, and video simultaneously, allowing litigators to cross-reference evidence, detect contradictions, and generate persuasive demonstrative evidence in real time. Agentic AI adds autonomous execution, enabling the creation of "AI Litigation Agents" capable of managing complex litigation workflows that can perform real-time tasks ranging from analyzing expert reports and deposition transcripts to drafting cross-examination outlines with integrated visual exhibits. These developments compress what once took days or weeks of manual preparation into minutes, fostering unprecedented agility in both pretrial strategy and live courtroom advocacy.

While the evidentiary challenges raised by multimodal generative AI of authenticity and reliability under Federal Rules of Evidence 901, 702, and 707 remain significant, they are secondary to the transformative practice applications outlined here. The legal system's response to these hurdles will determine how quickly and fully AI can move from an experimental tool to an embedded partner in advocacy, shaping the future of litigation.

INTRODUCTION: THE EMERGENCE OF MULTIMODAL & AGENTIC AI IN LEGAL SETTINGS

A. The Confluence of Advanced AI & Modern Litigation

The legal profession stands at the threshold of a technological transformation poised to be as consequential as the advent of computer-assisted legal research, the buildout of the internet, or the

widespread adoption of personal computers.[1] For decades, legal technology has focused primarily on automation—streamlining time-consuming, high-volume tasks such as online legal research, e-discovery review, and document creation and management.[2] While impactful, these innovations largely operated as a supplement to a lawyer's core functions as a litigator or transactional attorney. The current wave of artificial intelligence ("AI"), however, represents a fundamental paradigm shift from mere automation to cognitive augmentation.[3] Advanced AI systems, particularly those developed in 2024–2025, do not just automate tasks but enhance and amplify the cognitive functions central to the practice of law: reasoning, strategic analysis, persuasion, and complex problem-solving.[4] Unlike any invention before it, this new generation of AI can summarize complex information, engage in nuanced dialogue, and even guide or make decisions, offering a co-intelligent partnership that can fundamentally redefine legal workflows.[5]

At the heart of this revolution are two converging technological pillars: multimodal generative AI and agentic AI. Multimodal generative AI refers to systems that can process, integrate, and generate content across a spectrum of data types, including text, images, audio, and video.[6] This capability is uniquely suited to the legal field, where evidence is rarely confined to a single format. Concurrently, agentic AI

1. *Compare Generative AI Could Radically Alter the Practice of Law*, THE ECONOMIST (June 6, 2023), https://www.economist.com/business/2023/06/06/generative-ai-could-radically-alter-the-practice-of-law (the view in 2023) (on file with Syracuse Law Review), *with* Marjorie Richter, *How AI is Transforming the Legal Profession*, THOMSON REUTERS (Aug. 18, 2025), https://legal.thomsonreuters.com/blog/how-ai-is-transforming-the-legal-profession/ (the view in 2025) (on file with Syracuse Law Review).

2. *See generally* Benoît Mazzetti, *A Short History of LegalTech in the Era of Digital Transformation*, STORYSHAPER: IDÉES (Mar. 20, 2024), https://www.storyshaper.io/en/post/petite-histoire-legaltech-transformation-digitale (on file with Syracuse Law Review).

3. *See Automation vs. Augmentation: Will AI Replace or Empower Professionals?*, SG ANALYTICS (Mar. 2025), https://www.sganalytics.com/blog/automation-vs-augmentation (on file with Syracuse Law Review); *AI Augmentation: Enhancing Human Capabilities*, HUM. CENTERED AI INST. (Nov. 25, 2024), https://www.hcai-institute.com/blog/ai-augmentation-enhancing-human-capabilities (on file with Syracuse Law Review).

4. *See* Xin Wang et al., *Multi-Modal Generative AI: Multi-Modal LLMs, Diffusions and the Unification*, ARXIV 1–2, 4 (Nov. 25, 2025), https://doi.org/10.48550/arXiv.2409.14993 (on file with Syracuse Law Review).

5. *See id.*

6. *See id.* at 1; Kaihang Pan et al., *Generative Multimodal Pretraining with Discrete Diffusion Timestep Tokens*, ARXIV 1 (Apr. 20, 2025), https://arxiv.org/pdf/2504.14666 (on file with Syracuse Law Review).

introduces a new level of autonomy. Agentic AI systems are capable of perceiving their digital environment, reasoning, planning, and executing complex, multi-step tasks to achieve a specified goal with minimal human supervision.[7] An agentic system does not simply respond to a prompt, it proactively pursues an objective.[8]

The convergence of these twin pillars—the ability to understand and create across all data modalities and the autonomy to act on that understanding—creates unprecedented opportunities to enhance pretrial preparation and courtroom advocacy.[9] Litigators can now leverage these tools to analyze deposition testimony with unparalleled depth, craft compelling visual aids in real time, and develop case strategies with a cognitive partner that can process information at a scale and speed far beyond human capacities.[10] However, this transformative potential is matched by the magnitude of the disruption it brings.[11] The integration of such powerful and autonomous technologies into the highly structured and tradition-bound U.S. legal system introduces formidable challenges to established legal practice and evidentiary frameworks, demanding a thorough re-examination of the role of attorneys, how evidence is authenticated, how reliability of legal sources and legal analysis is assessed, and how the integrity of the justice system is preserved in an age of intelligent machines.[12]

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7. *See* Ranjan Sapkota, Konstantinos I. Roumeliotis & Manoj Karkee, *AI Agents vs. Agentic AI: A Conceptual Taxonomy, Applications and Challenges*, 126 INFO. FUSION (forthcoming 2026) (manuscript at 1–2, 4), https://doi.org/10.1016/j.inffus.2025.103599 (on file with Syracuse Law Review).

8. *See What Is Agentic AI?*, AMAZON WEB SERVS., https://aws.amazon.com/what-is/agentic-ai (on file with Syracuse Law Review) (last visited Feb. 16, 2026).

9. *See* Ralph Artigliere & Ralph C. Losey, *The Future is Now: Why Trial Lawyers and Judges Should Embrace Generative AI Now and How to Do It Safely and Productively*, 48 AM. J. TRIAL ADVOC. 323, 323–24 (2025).

10. *See* Mark Winston Bobb, *An Introduction to Artificial Intelligence for Lawyers*, GPSOLO MAG. (Feb. 13, 2024), https://www.americanbar.org/groups/litigation/committees/pretrial-practice-discovery/practice/2024/a-litigators-guide-to-using-generative-ai/ (on file with Syracuse Law Review).

11. *See* Sterling Miller, *Generative AI: Adoption and Ethical Considerations for Legal Departments,* THOMSON REUTERS, https://legal.thomsonreuters.com/en/insights/articles/artificial-intelligence-adoption-and-ethical-considerations-for-legal (on file with Syracuse Law Review) (last visited Jan. 15, 2026).

12. *See generally* Abhishek Dalal et al., *Deepfakes in Court: How Judges Can Proactively Manage Alleged AI-Generated Material in National Security Cases*, 2024 U. CHI. LEGAL F. 75, 78–79 (2025).

B. The State of the Art in Multimodal Generative AI in 2025

The field of multimodal generative AI has advanced at a breathtaking pace, moving from a niche area of research to a dominant force in the technology landscape.[13] As of 2025, the state of the art is characterized by two dominant families of techniques: multimodal large language models ("LLMs"), which excel at multimodal understanding and legal communication (including writing), and generative diffusion models, which exhibit remarkable power in multimodal generation (including creation of exhibits, demonstrative evidence, and illustrations).[14] The ongoing effort to unify these two capabilities into a single, cohesive framework represents the frontier of AI research.[15]

1. Foundational Multimodal Technologies & Architectures

Multimodal LLMs are the direct descendants of the text-only models that first captured public attention—e.g., chatbots such as ChatGPT—but they have been architecturally enhanced to process and comprehend a rich tapestry of data inputs, including images, audio, and video.[16] A common architectural approach involves integrating a pre-trained LLM with specialized encoders for different modalities.[17] For instance, to inject visual understanding, many models employ a variant of the Contrastive Language-Image Pre-training ("CLIP") model, which learns to connect images with text.[18] Visual features extracted by a CLIP image encoder are projected into the LLM's input space, allowing the model to "see" and reason about images in the context of a textual prompt.[19] This allows a model to seamlessly analyze a case file containing a mix of police reports (text), witness photographs (images), and audio recordings of interviews.[20]

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13. *See* Shukang Yin et al., *A Survey on Multimodal Large Language Models*, 11 NAT'L SCI. REV. 1, 2 (2024).

14. *See, e.g.*, Omer Bar-Tal et al., *Lumiere: A Space-Time Diffusion Model for Video Generation*, 3–4 (SIGGRAPH ASIA 2024 CONF. PAPERS, Dec. 3, 2024), https://dl.acm.org/doi/10.1145/3680528.3687614 (on file with Syracuse Law Review).

15. *See, e.g.,* Yeong-Joon Ju & Seong-Whan Lee, *From Generator to Embedder: Harnessing Innate Abilities of Multimodal LLMs via Building Zero-Shot Discriminative Embedding Model*, ARXIV 1–3 (Aug. 1, 2025), https://arxiv.org/pdf/2508.00955v1 (on file with Syracuse Law Review).

16. *See* Yin et al., *supra* note 13, at 1–2.

17. *See id.* at 2.

18. *See id.*

19. *See id.* at 2–3.

20. *See, e.g.*, *Gemini 3*, GOOGLE DEEPMIND, https://deepmind.google/models/gemini/) (on file with Syracuse Law Review) (last visited Jan. 31, 2026);

On the visual and graphical generation side, Latent Diffusion Transformer ("LDT") architecture models[21] and Generative Adversarial Networks ("GANs")[22] are the primary engines of creation.[23] LDT models, such as the technology powering OpenAI's Sora video generator,[24] work by starting with random noise and progressively refining it, step-by-step, into a coherent image or video that matches a user's text prompt.[25] GANs operate via a competitive two-network system: a "generator" creates content, and a "discriminator" evaluates it against real-world data, pushing the generator to produce increasingly realistic outputs.[26] These technologies are capable of producing synthetic media that often is indistinguishable from reality.[27]

The most advanced research in 2025 is focused on creating unified models that can perform both understanding and generation within a single, elegant framework.[28] Current systems often use separate models for these tasks, but researchers are exploring new architectures that combine the strengths of autoregressive LLMs and

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Introducing Claude Opus 4.5, ANTHROPIC: NEWS (Nov. 24, 2025), https://www.anthropic.com/news/claude-opus-4-5 (on file with Syracuse Law Review).

21. *See generally* Junzhong Ji, Runfeng Zhao & Minglong Lei, *Latent Diffusion Transformer for Point Cloud Generation*, 40 VISUAL COMPUT. 3903 (2024); Shang Chai, Liansheng Zhuang & Fengying Yan, *LayoutDM: Transformer-Based Diffusion Model for Layout Generation* (2023 IEEE/CVF CONF. ON COMPUT. VISION & PATTERN RECOGNITION, June 17–24, 2023), https://doi.org/10.1109/CVPR52729.2023.01760 (on file with Syracuse Law Review); Hannah Lee et al., *The Tug-of-War Between Deepfake Generation and Detection*, ARXIV (July 8, 2024), https://arxiv.org/html/2407.06174v4 (on file with Syracuse Law Review).

22. *See generally* Alakananda Mitra, Saraju P. Mohanty & Elias Kougianos, *The World of Generative AI: Deepfakes and Large Language Models*, ARXIV (Feb. 6, 2024), https://arxiv.org/abs/2402.04373v1 (on file with Syracuse Law Review).

23. *See Generative AI Models Explained*, ALTEXSOFT (Sep. 4, 2024), https://www.altexsoft.com/blog/generative-ai (on file with Syracuse Law Review).

24. *See Sora: Creating Video from Text*, OPENAI, https://openai.com/sora (on file with Syracuse Law Review) (last visited Feb. 15, 2024) (describing Sora as a diffusion transformer model).

25. *See id.*; William Peebles & Saining Xie, *Scalable Diffusion Models with Transformers*, ARXIV (Mar. 2, 2023), https://arxiv.org/abs/2212.09748 (on file with Syracuse Law Review).

26. *See* Ian J. Goodfellow et al., *Generative Adversarial Networks*, ARXIV 1 (June 10, 2014), https://arxiv.org/pdf/1406.2661 (on file with Syracuse Law Review).

27. *See* Bobby Chesney & Danielle Citron, *Deep Fakes: A Looming Challenge for Privacy, Democracy, and National Security*, 107 CAL. L. REV. 1753, 1757 (2019).

28. *See generally* Ju & Lee, *supra* note 15.

diffusion-based generators to achieve seamless multimodal comprehension and creation simultaneously.[29]

2. Multimodal Capabilities for Legal Applications

The practical capabilities enabled by these technologies are directly applicable to the challenges of modern litigation. Multimodal systems provide a holistic approach to evidence analysis, allowing legal teams to cross-reference a witness's deposition transcript (text) with their demeanor in the video recording, or to analyze an expert's report (text) alongside the medical images (e.g., X-rays, MRIs) it purports to describe.[30] This integrated analysis can reveal nuances and inconsistencies that would be difficult to spot when reviewing evidence in silos.[31]

Beyond analysis, the content creation capabilities are equally transformative. These tools can be used to enhance existing evidence through techniques like super-resolution, which sharpens low-quality images or video stills, or inpainting, which can reconstruct missing or obscured portions of an image.[32] More profoundly, they can generate entirely new demonstrative exhibits from simple text prompts.[33] A litigator could, for example, ask the AI to "create a 3D animated recreation of the car accident as described in the police report, from the

29. *See Once Upon a Prompt: The Multimodal Magic of LLMs and Diffusion*, MEDIUM (July 1, 2025), https://medium.com/foundation-models-deep-dive/once-upon-a-prompt-the-multimodal-magic-of-llms-and-diffusion-9c447cd9673b (on file with Syracuse Law Review).

30. *See How AI-Powered Evidence Analysis is Transforming Personal Injury Litigation: Best Practices for Lawyers*, PAXTON, https://www.paxton.ai/post/how-aipowered-evidence-analysis-is-transforming-personal-injury-litigation-best-practices-for-lawyers (on file with Syracuse Law Review) (last visited Nov. 21, 2025); Ace4 AI, *Why Legal Teams Can't Afford to Ignore Multimodal AI in 2025*, LINKEDIN (June 28, 2025), https://www.linkedin.com/pulse/why-legal-teams-cant-afford-ignore-multimodal-ai-2025-ace4-ai-4cx0f (on file with Syracuse Law Review).

31. *See* Katie Wolf, *Catch Inconsistencies Faster: How AI Enhances Your Legal Analysis*, FILEVINE (May 28, 2024), https://www.filevine.com/blog/catch-inconsistencies-faster-how-ai-enhances-your-legal-analysis (on file with Syracuse Law Review).

32. *See* Oluwatobi Emehin et al., *Generative AI in Forensic Data Analysis: Opportunities and Ethical Implications for Cloud-Based Investigations*, 5 INT'L J. RES. PUBL'N & REVS. 2941, 2942–43 (2024); Paschalis Giakoumoglou et al., *A Large-Scale AI-Generated Image Inpainting Benchmark*, ARXIV 1 (Feb. 10, 2025), https://arxiv.org/pdf/2502.06593v1 (on file with Syracuse Law Review).

33. *See* Erin Beikirch, *The Future of Legal Graphics: AI & Interactive Technology*, ICONOGRAPHICS (May 22, 2025), https://www.iconographicsdesign.com/post/the-future-of-legal-graphics-ai-interactive-technology (on file with Syracuse Law Review).

perspective of the driver in the northbound lane," a task that would have previously required a team of specialized animators and days, if not weeks, of work.[34]

The current discourse often treats the analytical power of MLLMs and the creative power of diffusion models as separate functions. One tool summarizes a document, while another creates an image. However, their true disruptive potential in litigation emerges from their integration into what can be characterized as a dynamic generative-analytical loop.[35] This loop compresses a workflow that once took days or weeks into a matter of minutes, fundamentally changing the cognitive process of building a legal argument.[36] The traditional process is linear and slow: a lawyer reads an opposing expert's lengthy report, identifies a potential flaw, schedules a team meeting to brainstorm how to best illustrate that flaw for a jury, sends a detailed request to a graphic design firm, reviews multiple drafts of the resulting chart or diagram, and finally approves a finished demonstrative.

The new workflow, enabled by unified or interconnected multimodal AI, is interactive and immediate. For example:

> *The lawyer uploads the expert's report and prompts the MLLM to analyze and summarize it, perhaps asking it to "identify any inconsistencies between the expert's stated methodology and the data presented in Table X of the results page." Upon reviewing the AI's output and confirming a critical discrepancy, the lawyer's next prompt is not to a human but to the generative component of the system: "Create a bar chart that visually contrasts the expected results based on the stated methodology with the actual results from Table X, highlighting the difference in red." An effective demonstrative exhibit is generated instantly.*

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34. *See* Kevin James Doran, *Using Artificial Intelligence for Your Trial Presentation*, ABA: GPSOLO MAG. (Feb. 13, 2024), https://www.americanbar.org/groups/gpsolo/resources/magazine/2024-january-february/using-artificial-intelligence-your-trial-presentation (on file with Syracuse Law Review).

35. *See* Beikirch, *supra* note 33 (explaining that "traditional static visuals are being replaced by dynamic, data-driven graphics" and that interactive visuals permit "real-time modifications based on courtroom discussions"); *see also* Bilel Benjdira et al., *Fusing LLMs and Diffusion Models: A Comprehensive Survey of Progress, Challenges, and Future Directions in Generative AI*, 30 COMPUT. SCI. REV. (forthcoming May 2026), https://doi.org/10.1016/j.cosrev.2025.100881 (on file with Syracuse Law Review).

36. *See* Doran, *supra* note 34.

This is not merely an increase in efficiency; it is an evolution in cognitive and strategic agility. It allows for a fluid, real-time development of case strategy, where the means of persuasion are created in lockstep with the process of analysis. This creates a powerful feedback mechanism, enhancing both the lawyer's understanding of the case and their ability to advocate for it.[37]

C. The Emergence of Agentic AI in Professional Domains: From Automation to Autonomy

While multimodal AI provides the sensory and creative capabilities, agentic AI provides the autonomy to act. The emergence of agentic systems marks a significant leap from reactive AI, which produces content in response to a prompt, to proactive AI, which can independently reason, plan, and execute a series of actions to achieve a goal.[38] An agentic system is not just a tool, it is a digital collaborator tasked with an objective.[39]

Agentic AI is defined by its capacity to operate independently, making decisions and taking actions without requiring explicit human instructions at every step.[40] This autonomy is built upon a foundation of four core principles that distinguish it from simpler automation tools:

- First is *autonomy* itself, the ability to assess situations and make decisions in real time.
- Second is *goal-oriented behavior*, which ensures that every action taken is in service of a specified objective, allowing the agent to manage complex, layered tasks.
- Third is *adaptability*, the capacity to adjust its strategy based on new data, feedback, or changes in its environment, such as an unexpected filing by opposing counsel.
- Finally, *continuous learning* enables the agent to refine its performance over time by analyzing the outcomes of its actions, becoming more effective with experience.[41]

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37. *See generally* Beikirch, *supra* note 33; Doran, *supra* note 34.

38. *See* Sapkota, Roumeliotis & Karkee, *supra* note 7, at 24.

39. *See* Clive, *What Are AI Agentic Workflows? A Beginner's Guide*, KROOLO (May 9, 2025), https://kroolo.com/blog/ai-agentic-workflow (on file with Syracuse Law Review).

40. *See id.*

41. *See id.*; *see also Agentic AI Components: How Agentic AI Works*?, ASSISTENTS.AI (Nov. 6, 2024), https://www.assistents.ai/blog/agentic-ai-components (on file with Syracuse law Review); Jagreet Kaur, *Agentic AI Frameworks,*

The architecture of these systems is typically modular, designed to support this autonomous behavior:

- A *perception module* allows the agent to interpret its environment, processing text, sensor data, or other inputs.
- A *decision-making engine*, often powered by an LLM, is responsible for reasoning and planning.
- An *action module* executes the plan by interacting with other software, tools, and Application Programming Interfaces ("APIs").
- Finally, a *memory and learning module* stores past experiences and outcomes to inform future decisions.[42]

For high-stakes professional environments like law and finance, deploying such powerful autonomy requires a structured, governance-focused approach. Experts advocate for a three-tier implementation framework:

- *Foundation Tier*, which establishes controlled intelligence and strict security gateways.
- It then moves to a *Workflow Tier*, which allows for structured autonomy within predefined operational boundaries and with human checkpoints.
- Only after trust is established in these controlled environments can an organization move to the *Autonomous Tier*, where the AI is given dynamic intelligence to pursue high-level objectives.[43]

As of 2025, agentic AI is already making significant impacts across various industries. In finance, autonomous systems execute complex trading strategies that account for real-time market data and geopolitical events.[44] In healthcare, AI agents analyze patient data to develop personalized treatment plans and monitor progress.[45] In logistics, they optimize global supply chains by rerouting shipments and

Tools and Use Cases, XENONSTACK (July 7, 2025), https://www.xenonstack.com/blog/agentic-ai (on file with Syracuse Law Review).

42. *See, e.g.,* Clive, *supra* note 39; ASSISTENTS.AI, *supra* note 41; Kaur, *supra* note 41.

43. *See* Subash Natarajan & Ahilan Ponnusamy, *Agentic AI Architecture Framework for Enterprises*, INFOQ (July 11, 2025), https://www.infoq.com/articles/agentic-ai-architecture-framework (on file with Syracuse Law Review).

44. *See* Anna Gutowska, *What is a Multi-Agent System?*, IBM, https://www.ibm.com/think/topics/multiagent-system (on file with Syracuse Law Review) (last visited Aug. 27, 2025).

45. *See id.*

negotiating with suppliers in response to dynamic conditions.[46] The legal field is now seeing the introduction of its own specialized agentic platforms. For example, Thomson Reuters has announced that its Co-Counsel platform will incorporate agentic workflows capable of autonomously performing tasks like deposition analysis, document drafting, and compliance risk assessment based on high-level user goals.[47]

On July 17, 2025, OpenAI released its ChatGPT Agent Mode,[48] which takes the "Operator" functions previously released in 2025 that allow the chatbot, ChatGPT, to browse, select (i.e., click on), fill in information, and otherwise navigate webpages much like a human user would,[49] and combines it with the deep research functions associated with OpenAI's earlier o1, o3, and o4 models, which empower the agent to figure out the necessary steps in research and problem-solving and make and execute decisions in research without human intervention.[50] When combined, the agent is able to figure out and reason through how to complete tasks of great complexity.[51] As described earlier, the Agent Mode has a perception module that takes screenshots of webpage content allowing the agent to interpret its environment, process text, and analyze data, along with a deep research planning and decision-making engine that is the equivalent of OpenAI's most powerful thinking and reasoning models, and an action module that executes the plan by interacting with other software, tools, and APIs.[52] However, in its current (late July 2025) form, OpenAI's Agent mode does not have a memory and learning module to store past experiences and data from outcomes, and this is intentional, to try to head

46. *See id.*

47. *See* Ali Hughes, *Thomson Reuters Ushers in the Next Era of AI with Launch of Agentic Intelligence*, THOMSON REUTERS (June 2, 2025), https://www.thomsonreuters.com/en/press-releases/2025/may/thomson-reuters-ushers-in-the-next-era-of-ai-with-launch-of-agentic-intelligence (on file with Syracuse Law Review).

48. *See ChatGPT agent - release notes*, OPENAI, https://help.openai.com/en/articles/11794368-chatgpt-agent-release-notes (last updated Jan. 2026) (on file with Syracuse Law Review).

49. *See ChatGPT agent*, OPENAI, https://help.openai.com/en/articles/11752874-chatgpt-agent (last updated Jan. 2026) (on file with Syracuse Law Review).

50. *See Introducing ChatGPT agent: bridging research and action*, OPENAI (July 17, 2025), https://openai.com/index/introducing-chatgpt-agent/ (on file with Syracuse Law Review).

51. *See id.*

52. *See id.*

off the possibility that hackers and prompt injectors will be able to tap into stored information for malicious purposes.[53]

I. THE IMAGINATION GAME: ENVISIONING THE ROLE OF MULTIMODAL & AGENTIC AI IN LEGAL PRACTICE

I have devoted a huge portion of my research efforts since November 2022 (the "ChatGPT Moment") to studying the possible applications of generative AI and now agentic AI in legal practice and legal education settings. As a result of these efforts, I am frequently invited to address local and statewide bar associations and individual law firms and corporate legal departments on AI and its applications, challenges, and risks. One observation that I constantly take away from these talks is that lawyers and law firms, and to a certain extent, judges, are having a very difficult time moving toward the adoption of and then adapting to AI assistance in the practice of law. And my conclusion is that a central reason for this failure is a lack of imagination regarding the *possible* applications and assistance of multimodal generative and agentic AI in legal practice.

My heading for this section calls to mind the motion picture *The Imitation Game*,[54] which tells the story of the father of computer science and grandfather of artificial intelligence, Alan Turing, whose early "computer" developed during World War II was able to crack the Nazi Enigma code. By all accounts, the Enigma code was a genius-level cryptography system, but Turing was able to think beyond the state-of-the-art decryption techniques and produce a super-genius-level decryption tool. It was the envisioning of the application of mathematical and data science tools to the problem of the Enigma's cryptography that led to Turing's success.

Similarly, attorneys, judges, law professors, and law students must develop the imagination regarding the possible applications of multimodal generative and agentic AI so that they can envision the ways that the technology can enhance litigation and transactional practice. The imagination game requires a futuristic vision; none of us in the law and other professions have lived and worked with agentic AI and artificial super-intelligence, but rather than simply waiting and letting it happen to us in the legal profession, we can prime our imagination with the perspectives of others who can envision the future. I am speaking about authors, artists, and filmmakers, particularly in the

53. *See* OPENAI, *supra* note 49.

54. *See generally* THE IMITATION GAME, Blu-ray (Black Bear Pictures 2014).

science fiction genre, who can open the doors to our own envisioning of an AI assisted future. This section aims to start that process.

I would enjoy spending the rest of the Article discussing vision and imagination, but I will limit this section to discussing four multimodal AI or agentic applications for law that are here and now in July 2025, four AI applications that are right around the corner, and lastly, four AI applications and their science fiction references that are more futuristic but increasingly within reach because of the pace of development of multimodal LLM and agentic AI applications.

A. Legal Applications of Multimodal & Agentic AI—The Here & Now

Lawyering Task	**Here and Now AI Application**	**How AI Supports the Task**
Document Review, Discovery, and Evidence Coding – Lawyers and paralegals manually sift through hundreds or thousands of discovery documents to identify relevant evidence, annotate key portions, and classify them by issue, privilege, or relevance.	Like other machine learning and data analysis tools of the first two decades of the twenty-first century, multimodal LLMs can rapidly review and summarize text, classify documents by legal issues, and flag key excerpts using few-shot or fine-tuned prompts. Optical Character Recognition-enabled vision-language models can process scanned documents, photos,	For sizeable projects, AI can reduce weeks of review to a few days or even hours depending on data volume; enables quicker relevance decisions and faster motion drafting.[55] With AI, you can talk back and have conversations with documents to glean whatever information is desired or to gather connections and patterns that would be massively difficult and

55. *See* Petra Pasternak, *Am Law 100 Firm Slashed Doc Review Time by Two-Thirds With GenAI*, EVERLAW (Apr. 17, 2025), https://www.everlaw.com/blog/case-studies/am-law-100-firm-slashed-doc-review-time-by-two-thirds-with-genai/ (on file with Syracuse Law Review); Deshdeep Singh, *The Impact of Artificial Intelligence on Document Review Efficiency in Legal and Compliance Settings*, LINKEDIN (July 11, 2025), https://www.linkedin.com/pulse/impact-artificial-intelligence-document-review-efficiency-singh-8owoc/ (on file with Syracuse Law Review).

Lawyering Task	Here and Now AI Application	How AI Supports the Task
	or handwritten notes. The difference is that now in the mid-2020s you can interact with the data not just in terms of spreadsheets and tables, but in a human language conversation.	time-consuming for humans to gather.
Deposition and Trial Preparation – Preparing for depositions or trial involves reading lengthy transcripts, highlighting inconsistencies, creating outlines, and identifying video clips or prior statements for impeachment.	Generative AI can ingest past deposition transcripts, identify inconsistencies, generate suggested impeachment questions, and auto-extract highlight reels from video using speech-to-text and Natural Language Processing tagging. You also can interact with the transcript to glean whatever information is desired or to gather connections and patterns that would be massively difficult and	Estimates are that AI assistance with deposition preparation or review for trial cuts preparation time by 50–70%, with automated cross-referencing and smart highlight extraction reducing the burden on human attorneys.[56]

56. *See* Singh, *supra* note 55; *Generative AI Shines with Deposition Transcript Summaries*, ESQUIRE DEPOSITION SOLS. (June 30, 2025), https://www.esquiresolutions.com/generative-ai-shines-with-deposition-transcript-summaries/ (on file with Syracuse Law Review); *How AI Legal Analysis Cuts Deposition Time Drastically*, PROPLAINTIFF.AI (Mar. 13, 2025), https://www.proplaintiff.ai/post/how-ai-legal-analysis-cuts-deposition-time-drastically (on file with Syracuse Law Review).

Lawyering Task	Here and Now AI Application	How AI Supports the Task
	time-consuming for humans to gather.	
Drafting and Revising Legal Briefs – Although writing legal briefs with AI assistance is somewhat controversial because of a few spectacular failures by attorneys who did not understand how to use or supervise the content of AI generated outputs,[57] when used and supervised properly, AI can excel at many aspects of the planning, writing, and editing process for motions, briefs, contracts, legal	Multimodal LLMs and agentic AI deep research systems can do incredibly thorough research, brainstorm ideas, offer input on strategies, answer questions, and draft sections or whole documents of legal writing at speeds that surpass all humans. Agentic AI systems can be trained on legal content and factual context sources selected by the attorney. But these systems still must be directed and supervised by human attorneys or	In general terms, generative AI is a master writer, and it will act as an brief writing, contract creating, and memo drafting associate-level attorney in your law office if called upon. But AI has a "hallucination" and confabulation problem that still has not been eliminated in current (July 2025) AI systems.[58] A skilled user needs to monitor the outputs of AI for correctness and veracity in the statements and the sources cited.

57. *See, e.g.*, Mata v. Avianca, Inc., 678 F. Supp. 3d 443, 448–49, 466 (S.D.N.Y. 2023) (sanctioning attorney for including fake, AI-generated legal citations in a filing); Park v. Kim, 91 F.4th 610, 614–16 (2d Cir. 2023) (referring attorney for potential discipline for including fake, AI-generated legal citations in a filing); *In re* Baby Boy, 2025 IL App (4th) 241427, ¶¶ 130–31 (same); Kruse v. Karlen, 692 S.W.3d 43, 52–53 (Mo. Ct. App. 2024) (dismissing appeal because litigant filed a brief with multiple fake, AI-generated legal citations); Kohls v. Ellison, No. 24-cv-3754, 2025 U.S. Dist. LEXIS 4928, at *11–13 (D. Minn. Jan. 10, 2025) (excluding testimony of expert witness whose report contained fake AI-generated sources).

58. *See* Roland Moore-Colyer, *AI Hallucinates More Frequently as It Gets More Advanced — Is There Any Way to Stop It from Happening, and Should We Even Try?*, LIVE SCI. (June 21, 2025), https://www.livescience.com/technology/artificial-intelligence/ai-hallucinates-more-frequently-as-it-gets-more-advanced-is-there-any-way-to-stop-it-from-happening-and-should-we-even-try (on file with Syracuse Law Review).

Lawyering Task	Here and Now AI Application	How AI Supports the Task
instruments, and memoranda.	judges with the knowledge and experience to make sure the outputs of the AI are correct and verified by actual legal sources.	"Ground truth" based AI systems, such as NotebookLM, can be trusted to work with the documents, files, and legal authorities provided to the system and not go off the script and into the internet dumpster. Retrieval Augmented Generation ("RAG") systems can generate drafts based on structured case facts and citation databases.
Creating Demonstrative Exhibits and Timelines – Visual generative AI systems have empowered attorneys to design and create exhibits, charts, timelines, and visual aids that match the facts of the case and resonate with judges or juries.	Latent Diffusion Transformer ("LDT") architecture models[59] can produce compelling, case-specific graphics, timelines, and courtroom-ready visuals from textual prompts describing the factual narrative or sequence of events. Visual aids can be created in minutes rather than	Previously, the creation of effective and persuasive exhibits, illustrative aids, and demonstrative evidence used to require an entire production process that required technicians and artists with knowledge and experience in the use of graphic design programs, photography and photo

59. *See, e.g.*, Ji, Zhao & Lei, *supra* note 21; Chai, Zhuang & Yan, *supra* note 21; Lee et al., *supra* note 21.

Lawyering Task	Here and Now AI Application	How AI Supports the Task
	days, enhancing and illustrating brief writing, contract negotiations, trial readiness, and any other form of communication with visual rhetoric and persuasion—all without the expense and time required in old school graphic design bottlenecks.[60]	editing, and videography and video editing. All of those hurdles and the time and expense they represent have been wiped away with the introduction of diffusion technology visual generative AI that creates charts, diagrams, photographs, and video, and every kind of visual in between.

B. Legal Applications of Multimodal & Agentic AI—the Near Future

In this category, by "near future" I mean in the next six months or so counting from July 2025. Several of these applications might be reachable right now with a concentrated, brute force, very complicated, and very expensive bespoke solution. But more elegant and efficient solutions for these tasks are within reach with the rapid rate of progress in today's technology.

60. *See* Beikirch, *supra* note 33; Diana Sterk & Sarah Prather, *AI Enters the Courtroom With New Rule Governing Illustrative Aids*, BLOOMBERG L. (July 23, 2025, at 04:31 ET), https://news.bloomberglaw.com/us-law-week/ai-enters-the-courtroom-with-new-rule-governing-illustrative-aids (on file with Syracuse Law Review).

Lawyering Task	Near Future AI Application	How AI Supports the Task
On-the-Fly and In-Courtroom Generative Visual Exhibit Agent – This solution extends the last "here and now" application to an agentic, in-courtroom, real time and on-the fly designer and creator of visuals for illustrating, confronting, rebutting, or rehabilitating the testimony of a fact witness or expert witness.[61]	A litigator with a laptop could produce a visual in a matter of minutes, but a human in the loop actually slows down the process as the human has to devise and revise a series of prompts to create a single image, and by the time it is finalized, the testimony and any opportunities to confront or respond to testimony have moved along with the flow of a typical trial. The application imagined here is an AI agent with multimodal seeing and hearing abilities that sits in court (most likely launched on a laptop) and converts live testimony to text in milliseconds, and—when a fact or expert witness describes a machine part, medical injury,	As discussed above, visual generative trial technology already produces images, diagrams, timelines, and 3-D cut-aways in seconds. The next step is an agentic solution that will work in real time at the speed of a trial. An AI agent could watch and listen to the proceedings, tracking each part of a friendly or hostile witness's testimony, and on its own or prompted by an attorney produce a supportive or responsive visual in real time. The reaction time from testimony to exhibit production would be nearly instantaneous. With non-AI methods of production, counsel would need days or even weeks of planning,

61. *See Trial Tech Essentials: AI for Courtroom Presentations*, NEXLAW (July 11, 2025), https://www.nexlaw.ai/blog/ai-trial-tech-courtroom (on file with Syracuse Law Review).

Lawyering Task	Near Future AI Application	How AI Supports the Task
	accident scene, or statistical model—spins up a diffusion pipeline (e.g., Imagen 3) to create a diagram, 3-D animation, or comparative chart tailored to that exact description of the testimony. Counsel reviews the draft on a tablet, taps "approve," and the image is ready to support or respond to an objection.	attempting to anticipate what exhibits, diagrams, or visuals might be needed to explain or support friendly testimony, or what might come up in a hostile witness's testimony that might be confronted or rebutted with an exhibit or visual. All of this was a grand guessing game, and like most game theories, sometimes you guess right, and sometimes wrong. A multimodal agentic AI solution practically eliminates the need for guessing and the time and expense of preproducing visuals that may never be used, shaving days of trial prep time and eliminating mid-trial recesses for graphics revisions.

Lawyering Task	Near Future AI Application	How AI Supports the Task
The Real-Time Witness Rebuttal or Rehabilitation Agent – Every deposition, hearing transcript, and video clip sits in a vector database indexed down to the level of individual words or even syllables in speech. When a witness utters a clause that diverges from prior testimony, the agent surfaces the conflicting line—plus the timestamped video excerpt—on counsel's screen, along with a suggested impeachment question. One click throws the prior statement onto the courtroom monitor.[62]	A human attorney after many hours of diligent trial prep will have a decent command of the contents of testimony of friendly and hostile witnesses from depositions and earlier hearings and may have memorized some of the responses to interrogatories and requests for admission. And this knowledge could allow the attorney to pull up or pull out the right information at the right time. But the agent contemplated here will have indexed every piece of information about the case, every word of testimony, interrogatory answer, or admission, and can monitor trial testimony to catch any discrepancy between	Modern transcript analysis platforms already let lawyers search across thousands of pages in seconds; agentic orchestration turns that reactive workflow into proactive, sub second prompts that can cut cross examination prep from hours to moments. By instantly cross-referencing and analyzing the full breadth of information, exhibits, and verbal, video, and audio testimony from the case, an AI can review live testimony and catch inconsistencies a human might miss even assuming the human's attention span could keep up with the pace of the trial. The memory and recall functioning of this agent will be better and

62. *See id.*; *see also* Katie Rice, *Faster Witness Impeachment With Speech Technology*, REV (May 9, 2025), https://www.rev.com/blog/witness-impeachment-speech-tech (on file with Syracuse Law Review).

Lawyering Task	Near Future AI Application	How AI Supports the Task
	the testimony and the record.	faster than any human lawyer.
Augmented-Reality Courtroom Presence or AR Agent – Augmented reality bridges the "talking heads on a screen" experience of Zoom and video conferencing courtroom experiences with actual, live, in person experiences. I mark this as the next, near-term development short of completely immersive virtual reality experiences.[63]	An augmented reality ("AR") appearance involves the virtual appearance of an attorney, witness, judge, or mediator aided by AR eyewear. AR generally places the image of the person—or a virtual image of the AI agent—in an overlay of reality thus giving them a realistic "presence" in the room that exceeds the mere "face on a screen" non-presence of Zoom and video conference software.	Anyone whose presence in a courtroom or arbitration or mediation session is necessary or advantageous might be facilitated by AR—thus, judges, mediators, attorneys, witnesses, and experts could make a very realistic appearance as an overlay on actual appearance of the room itself. The AR could move about the room and interact in many ways similar to actual presence. If the AR was an AI agent, then the AI itself could have a presence in the room short of taking an actual android or 3-D robotic form.

63. *See* Suzanne Young, *Augmented Reality Presentations: How AR and VR Technologies Are Changing the Legal Landscape*, PROTEXTURE LAWYERS (Dec. 26, 2024), https://blog.protexurelawyers.com/cybersecurity-tactics-for-law-firms-1-0 (on file with Syracuse Law Review); Scott Schlegel, *Augmented Reality (AR) in the Courtroom*, JUDGE SCOTT SCHLEGEL: BLOG (Jan. 10, 2024), https://judgeschlegel.com/blog/augmented-reality-ar-in-the-courtroom (on file with Syracuse Law Review).

Lawyering Task	Near Future AI Application	How AI Supports the Task
The Judge's Best Friend: Agentic AI Evidence Guru – As will be discussed below, dealing with the admissibility of AI-generated and AI-augmented evidence whether sua sponte or in response to objections will be a difficult job for trial judges. But why not address a problem caused by AI with a solution offered by AI—the Agentic AI Evidence Guru that will assist the trial judge with a careful, methodical review of the evidence.[64]	AI-generated and AI-augmented evidence (e.g., potential deepfakes) present challenges of authenticity, relevance, and risk of prejudice that are difficult to untangle. Proposals have been floated to try to tie AI-affected evidence to registration and authentication mechanism (e.g., metadata; blockchain registration).[65] An agentic AI "co-judge" agent could monitor audio, video, and incoming exhibits in real time and evaluate the authenticity and provenance markers according to the rules and practices that will be endorsed under the Federal Rules of Evidence	When counsel moves to admit an AI-generated or AI-augmented exhibit—for example, an image that purports to be a social-media screenshot introduced in a domestic relations case—the agent will instantly check metadata, hash the file against its blockchain registry, run deepfake-detection models on any images, and flash a confidence score and give a suggested answer on the most likely evidentiary objections (e.g., lack of authenticity, hearsay, relevance, undue prejudice) on the

64. *See* Alix Faulkner, *From Case Law to Code: Evaluating AI's Role in the Justice System*, MONTR. AI ETHICS INST. (May 26, 2025), https://montrealethics.ai/from-case-law-to-code-evaluating-ais-role-in-the-justice-system (on file with Syracuse Law Review).

65. *See Digital Authenticity: Provenance and Verification in AI-Generated Media*, NOS.: BLOG, (Nov. 7, 2023), https://numbersprotocol.io/blog/digital-authenticity-provenance-and-verification-in-ai-generated-media (on file with Syracuse Law Review) (discussing provenance and authentication tools such as blockchain registration, metadata recording mechanisms, watermarking, and digital signatures).

Lawyering Task	Near Future AI Application	How AI Supports the Task
	and AI-evidence rulings.	judge's private display.

C. Legal Applications of Multimodal & Agentic AI—the Future

As noted above, this last section is more futuristic than the others, but I don't mean to suggest it is limited to the far future or even beyond the current decade of the 2020s. The trajectory of AI development makes all of the applications discussed below reachable, just not necessarily in the next six months. But as the predictions probe into the hazy future, to facilitate the envisioning process I have added science fiction references that might help ground the vision of these AI applications of the future in the imaginings of the literary and artistic past.

AI Application	Science Fiction References	Law Practice Applications
"Oracle" – the firm's archivist, scribe, and chargé d'affaires. An officer you can converse with.[66]	"Ship's computer" from the original *Star Trek* series; a supercharged Alexa or Siri; various sci fi and video game "AI in your ear" incarnations (J.A.R.V.I.S. in *Iron Man*; Batman's Batcomputer; Cortana in *Halo*; Bagley in	Similar to Abridge AI,[67] used in medical applications (doctor visits, etc.), the "Oracle" can be an extra set of eyes and ears for every official planning meeting among attorneys and every counseling session with clients. Beyond the clerical, archival, research, and document drafting tasks that such a system could perform, the Oracle can access all firm files and documents, being

66. *See* Jennifer Chadband, *Embracing AI in Records and Information Management: A New Era of Efficiency and Innovation*, ZASIO (Apr. 1, 2025), https://zasio.com/embracing-ai-records-information-management (on file with Syracuse Law Review).

67. *See We Transform Conversations into Insights with AI*, ABRIDGE, https://www.abridge.com/about (on file with Syracuse Law Review) (last visited Jan. 11, 2026).

AI Application	Science Fiction References	Law Practice Applications
	Watch Dogs: Legion).	the "firm's memory," and also consult on legal issues in a question-answer format (like chatbots at present) or as a more agentic problem solver and solution maker (like a senior associate or "of counsel" at the firm).
"Barrister" – the litigation domain expert. Barrister's knowledge in evidence law, civil or criminal procedure, or the law of any subject area would make it an invaluable in-courtroom protocol droid.[68]	C3PO from *Star Wars*; all of the helpful androids from the *Alien/Aliens* series; just about any seeing, hearing, thinking, and communicating android who researches, analyzes, and reasons at speeds transcending all humans. Imagine an in-courtroom expert who is ready with the answer before the judge finishes saying, "On what grounds?"	We are still several advancements away from fully locomotive androids, but most of the pieces are there—the multimodal generative AI brain with deep research and deep reasoning abilities; Agentic AIs with task completion and problem solving capabilities; computer vision coupled with a "world model" so the android can make sense of and learn from its experiences in the world; persistent memory across all of its AI functions so it does not forget what it learns and what it has been trained to do. It is really just the "walk upright and carry on like a human" part that we're waiting for.

68. *See AI in Litigation: 7 Ways Legal Technology Can Improve Litigation Workflows*, BLOOMBERG L. (Feb. 5, 2025), https://pro.bloomberglaw.com/insights/technology/7-ways-legal-technology-can-improve-litigation-workflows (on file with Syracuse Law Review).

AI Application	Science Fiction References	Law Practice Applications
"Juris" – the instant, adaptable, upgradable artificial super-intelligence. Artificial Super-Intelligence ("ASI") is predicted to be the stage of AI that will follow Artificial General Intelligence ("AGI").[69]	Most depictions of Artificial Super-Intelligences are dark and dystopian: HAL 9000 from *2001: A Space Odessey*; Skynet in the *Terminator* franchise; VIKI in *I, Robot.* But perhaps consider Data from *Star Trek: The Next Generation*, as a friendly and helpful ASI.	While AGI is the imagined archetype of an AI that is equally competent to expert humans in every area of knowledge and expertise, ASI is the imagined archetype of a superhuman intelligence that exceeds all humans in all areas of knowledge and expertise, including those that are beyond current human knowledge and mastery. An ASI would be infinitely adaptable and upgradable. Assuming that an ASI will tolerate working with humans and following their requests, the ASI agent would eliminate the need to hire an outside expert for a new client matter or litigation. A firm would not need to poach a domain expert in a new practice area from another law firm, just ask "Juris" to download or otherwise tap into the world's knowledge and other ASIs' knowledge in any area of study.

69. *See* Gabe Pereyra, *Preparing for Legal Super Intelligence*, HARVEY: BLOG (July 22, 2025), https://www.harvey.ai/blog/preparing-for-legal-super-intelligence (on file with Syracuse Law Review).

AI Application	Science Fiction References	Law Practice Applications
"Nan" – Agentic AI Conflicts and Compliance Officer.	Although most authors and filmmakers who conceive of ASI also conceive of the intelligence turning on and harming mankind, a friendly ASI would make a great conflicts and compliance officer simply because of the ability to track client and attorney activities and information and evaluate new clients and client matters at great speeds, accuracy, and level of ability.[70]	Conflicts checking, ethics, and regulatory compliance would benefit from a centralized AI that was given access to all of the firm's information on existing clients, as well as the files and work product of all attorneys and employees.[71] Checking and cross-referencing data is an AI's bread and butter, but beyond that skill the same AI could perform market analysis based on strengths and numbers of clients and attorneys and the work product that is performed firmwide, and reveal opportunities that are difficult to find without processing and digesting enormous amounts of enterprise data. This level of AI can answer questions you haven't yet dreamed of asking about your firm and its business.

70. *See* Thomas Fox, *How Compliance Can Leverage Agentic AI Systems, Part 2*, LINKEDIN (Jan. 30, 2025), https://www.linkedin.com/pulse/how-compliance-can-leverage-agentic-ai-systems-part-2-thomas-fox-0mmzc/ (on file with Syracuse Law Review).

71. *See generally* Mary K. Pratt, *Agentic AI Compliance and Regulation: What to Know*, TECHTARGET (Aug. 26, 2025), https://www.techtarget.com/searchenterpriseai/feature/Agentic-AI-compliance-and-regulation-What-to-know (on file with Syracuse Law Review).

II. TRANSFORMING COURTROOM ADVOCACY: MULTIMODAL & AGENTIC AI IN PRACTICE

The convergence of multimodal understanding and agentic execution is set to fundamentally reshape the practical arts of litigation, from the painstaking work of deposition review to the dynamic environment of the courtroom itself. These technologies offer to compress workflows, deepen analytical insight, and introduce a new level of responsiveness to trial advocacy.

A. Enhancing Deposition Analysis & Strategy

The review of deposition transcripts is a cornerstone of trial preparation, yet it has traditionally been a laborious, time-consuming, and manual process prone to human error and inconsistency.[72] AI-powered tools are now revolutionizing this critical task. By leveraging natural language processing ("NLP") and machine learning, these systems can ingest hundreds of pages of transcripts and, in minutes, deliver structured, actionable insights.[73]

These AI tools automatically perform sophisticated analysis that goes far beyond simple keyword searching. They can execute topic and issue tagging, categorizing testimony into relevant themes such as liability, damages, or witness credibility.[74] The AI can perform speaker tracking, cleanly separating a witness's answers from the attorney's questions, and even analyze sentiment and emotional tone.[75]

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72. *See Generative AI Shines with Deposition Transcript Summaries*, ESQUIRE DEPOSITION SOLS. (June 30, 2025), https://www.esquiresolutions.com/generative-ai-shines-with-deposition-transcript-summaries/ (on file with Syracuse Law Review); Emma Johnson, *Smarter Depositions: How AI is Changing Transcript Review*, AZ BIG MEDIA (May 22, 2025), https://azbigmedia.com/business/law/smarter-depositions-how-ai-is-changing-transcript-review (on file with Syracuse Law Review).

73. *See* Theertha Raj, *AI Transcript Analysis: Features, Tools and Reviews*, LOOPPANEL (July 24, 2024), https://www.looppanel.com/blog/ai-trsanscript-analysis (on file with Syracuse Law Review).

74. *See id.*; Rodney R. Nordstrom, *A New Method of Witness Preparation Using AI*, IND. STATE BAR ASS'N (Apr. 13, 2025), https://www.inbar.org/blogpost/1981821/509793/A-New-Method-of-Witness-Preparation-Using-AI (on file with Syracuse Law Review); *How AI Deposition Summaries Are Transforming Litigation Support*, DEPOIQ, https://www.depoiq.com/post/how-ai-deposition-summaries-are-transforming-litigation-support (on file with Syracuse Law Review) (last visited Nov. 19, 2025).

75. *See* Indhuja Lal, *AI Thematic Analysis: Benefits, Tools, and Techniques Explained*, HEYMARVIN (May 23, 2025), https://heymarvin.com/resources/ai-thematic-analysis/ (on file with Syracuse Law Review); Bob Ambrogi, *Verbit Launches Legal Visor, An AI-Powered Tool to Deliver Real-Time Deposition Insights*, LAWSITES (Mar. 24, 2025), https://www.lawnext.com/2025/03/verbit-launches-

Perhaps most powerfully, these systems excel at contradiction detection. They can flag internal inconsistencies within a single witness's testimony or, by cross-referencing multiple transcripts, identify critical discrepancies between the statements of different deponents.[76] This capability allows attorneys to build more robust impeachment packages and develop highly targeted cross-examination strategies with a precision and speed that was previously unattainable.[77] Advanced platforms, such as those offered by CaseMark[78] and AI.Law,[79] can even map testimony directly to the specific elements of legal claims and defenses pleaded in the case, providing a clear and organized view of how the evidence supports or undermines each part of the argument.[80]

B. Real-Time Demonstratives & Visual Advocacy

While AI is transforming the analytical work that happens before trial, multimodal generative AI is poised to change the persuasive work that happens in front of the jury.[81] The ability to create compelling demonstrative exhibits from simple text prompts democratizes the creation of high-quality trial visuals, reducing what was once hours or days of work for a graphic designer into minutes of work for a lawyer.[82] Litigators can now rapidly generate timelines, charts, and even

legal-visor-an-ai-powered-tool-to-deliver-real-time-deposition-insights.html (on file with Syracuse Law Review).

76. *See* Wolf, *supra* note 31; Julie Feller, *AI's Role in Deposition Preparation & Analysis*, U.S. LEGAL SUPPORT: BLOG (Apr. 1, 2024), https://www.uslegalsupport.com/blog/ais-role-in-deposition-preparation-analysis/ (on file with Syracuse Law Review); DEPOIQ, *supra* note 74.

77. *See CaseMark's Cutting-Edge Deposition Summary Workflow: A Legal Game-Changer*, CASEMARK (Nov. 8, 2023), https://www.casemark.com/post/casemarks-cutting-edge-deposition-summary-workflow-a-legal-game-changer (on file with Syracuse Law Review).

78. *See id.*

79. *See Court-Ready AI for Litigation Teams*, AI LAW, https://www.ai.law (on file with Syracuse Law Review) (last visited Feb. 16, 2026).

80. *See Mastering Legal Writing: How Deposition Summary AI is Revolutionizing the Legal Industry*, AI LAW, https://www.ai.law/deposition-summary (on file with Syracuse Law Review) (last visited Feb. 16, 2025); Scott Kveton, *The Impact of AI on Legal Strategy and Decision-Making*, CASEMARK (Nov. 28, 2024), https://casemark.com/blog/the-impact-of-ai-on-legal-strategy-and-decision-making (on file with Syracuse Law Review).

81. *See* NEXLAW, *supra* note 61.

82. *See id.*

complex crime scene or accident recreations that previously required specialized software and expertise.[83]

The true frontier in this domain, however, is the potential for *real-time* generation in the courtroom.[84] Traditionally, demonstrative exhibits were static and needed to be prepared well in advance of trial. Generative AI opens the possibility of a more dynamic and responsive form of visual advocacy. Imagine a scenario where a witness on cross-examination gives an unexpected or confusing answer. The trial lawyer could, in the moment, turn to their laptop and prompt an AI to "generate a simple diagram illustrating the process the witness just described" or "create a side-by-side comparison of the witness's testimony today with their contradictory statement from page fifty-four of their deposition." The ability to generate a clarifying or impeaching visual aid on the fly, in direct response to live testimony, would be a profoundly powerful tool, transforming demonstratives from a pre-planned monologue into a dynamic part of the courtroom dialogue.

C. The Agentic Advocate's Assistant: A Synthesis

The ultimate application of these technologies in litigation lies in their synthesis—the creation of an "agentic advocate's assistant," or at this point we might just call it an "AI Litigation Agent"—that combines multimodal analysis with autonomous execution.[85] This system would move beyond performing discrete tasks to managing complex litigation and lawyering skills that require information gathering and on the spot analysis, decision-making, and execution.[86]

> *A lawyer could assign the agent a high-level goal, such as: "Prepare for the deposition of the plaintiff's engineering expert. Analyze their expert report, identify all claims that are not supported by industry-standard testing, and prepare a preliminary cross-examination outline with supporting exhibits." Upon receiving this instruction, the agent would autonomously execute a series of steps. First, it would ingest and analyze the*

83. *See* Cory Weck, *How AI Visual Evidence is Transforming Personal Injury Litigation*, MCCUNE L. GRP.: BLOG (Aug. 12, 2025), https://mccunewright.com/blog/2025/08/how-ai-visual-evidence-is-transforming-personal-injury-litigation/ (on file with Syracuse Law Review).

84. *See id.*; NEXLAW, *supra* note 61.

85. *See, e.g.*, Andrew Fletcher, *The Key to Autonomous Legal Workflows with Agentic AI*, THOMSON REUTERS (June 5, 2025), https://legal.thomsonreuters.com/blog/the-key-to-autonomous-legal-workflows-with-agentic-ai/ (on file with Syracuse Law Review).

86. *See id.*

> *expert's report (text) and any accompanying data or diagrams (images). It might then conduct its own targeted research into the relevant industry standards. Using its analytical capabilities, it would identify weaknesses, unsupported conclusions, and contradictions. The agent would then draft a structured cross-examination outline, complete with suggested questions and citations to the expert's report. Finally, for the most critical points of impeachment, it would prompt an integrated generative model to create visual exhibits—such as charts or diagrams—that starkly illustrate the flaws in the expert's reasoning.*

This entire workflow, representing the convergence of analysis, strategy, and persuasion, would be completed autonomously, presenting the lawyer with a comprehensive package of strategic materials. This is the promise of agentic AI in law: not merely to provide information, but to actively structure it for strategic advantage.[87]

III. PRIMARY CHALLENGES TO AI IMPLEMENTATION IN THE U.S. LEGAL SYSTEM

Despite the immense potential of multimodal and agentic AI, its integration into the U.S. legal system faces significant challenges. These are not minor hurdles but obstacles that are rooted in the core principles of evidence law, professional responsibility, and the operational realities of legal practice. Overcoming them will require not only technological advancement but also careful adaptation of legal doctrine and professional norms.

A. Evidentiary Hurdles: Authenticity, Reliability, & Hearsay

The admissibility of AI-generated content in court is poised to become the single greatest challenge to its use in litigation.[88] Although the Federal Rules of Evidence ("FRE") were intended to be adaptable to changing practices and technologies in litigation,[89] the rules were

87. *See id.*

88. *See generally* Dalal et al., *supra* note 12 (discussing the application of Rules 403, 702, and 901 to deepfake evidence).

89. *See* Jonathan D. Frieden & Leigh M. Murray, *The Admissibility of Electronic Evidence Under the Federal Rules of Evidence*, 17 RICH. J.L. & TECH. 5, 1–2 (2011) ("nothing 'magical' about the admission of electronic evidence"); Penny White, *Federal Rules of Evidence: Role of Judges in the Evidentiary Process*, NAT'L JUD. COLL. (Jan. 15, 2015), https://www.judges.org/news-and-info/judicial-news-judicial-edge-federal-rules-of-evidence/ (on file with Syracuse Law Review) ("In order to admit electronic evidence, the same rules apply . . . Most scholars and courts

designed for a world of human witnesses and physical documents, but now the same rules are being stretched to accommodate evidence created, altered, or augmented by opaque and complex algorithms.[90]

The first hurdle is *authenticity*. Under FRE 901, the proponent of a piece of evidence must produce sufficient support for a finding that the item is what the proponent claims it is.[91] For AI-generated content, this can be exceedingly difficult. Due to the "black box" nature of many sophisticated AI models, even the system's own developers may struggle to explain precisely how a particular output was generated from a given input.[92] This lack of transparency makes it challenging to establish a verifiable chain of custody and prove the evidence has not been manipulated.[93]

The second, and perhaps most widely publicized, hurdle is *reliability*.[94] Generative AI models are notoriously prone to "hallucinations"—the confident assertion of falsehoods, including the fabrication of legal citations and entire case precedents.[95] This fundamental

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agree that the issues related to the authentication and admissibility of electronic evidence simply depend on an application of the existing evidence rules. Although technical challenges may arise, the rules are flexible enough in their approach to address this new kind of evidence.").

90. *See* Stephen Millan, *From Courtroom to Digital Sphere: How Technology Is Redefining Evidence Presentation in Criminal Cases*, STEPHEN MILLAN CRIM. L. (Oct. 27, 2024), https://stephenmillan.com/criminal-law/from-courtroom-to-digital-sphere-how-technology-is-redefining-evidence-presentation-in-criminal-cases (on file with Syracuse Law Review).

91. FED. R. EVID. 901(a) states that "the proponent must produce evidence sufficient to support a finding that the item is what the proponent claims it is[,]" which encompasses demonstrating a reliable process or system of creation as outlined in FED. R. EVID. 901(b)(9). FED. R. EVID. 901(a), (b)(9).

92. *See AI-Generated Evidence: Challenges and Evolving Standards Under the Federal Rules of Evidence*, TODAY'S MANAGING PARTNER (Feb. 25, 2025), https://todaysmanagingpartner.com/ai-generated-evidence-challenges-and-evolving-standards-under-the-federal-rules-of-evidence (on file with Syracuse Law Review) (noting that "because AI systems generate content independently—often through opaque processes—even experts may struggle to verify how a specific output was produced").

93. *See* NOS.: BLOG, *supra* note 65; George Bellas, *Deepfakes in the Courtroom: Problems and Solutions*, PROMPT (Ill. State Bar Ass'n, Springfield, Ill.), Mar. 2025, at 3 ("Deepfakes make it difficult for courts to ascertain the authenticity of digital evidence. Traditional methods of establishing authenticity and standards of proof will be challenged.").

94. *See* Scott A. Milner, *AI-Driven Fake Evidence: A Rising Challenge for eDiscovery and Legal Teams*, MORGAN LEWIS: PUBL'NS (Mar. 26, 2025), https://www.morganlewis.com/pubs/2025/03/ai-driven-fake-evidence-a-rising-challenge-for-ediscovery-and-legal-teams (on file with Syracuse Law Review).

95. *See* Daniel Wu, *Lawyers Using AI Keep Citing Fake Cases in Court. Judges Aren't Happy.*, WASH. POST (June 3, 2025),

unreliability has already led to federal courts sanctioning attorneys who submitted briefs containing AI-generated fake cases, as seen in landmark incidents like *Mata v. Avianca, Inc.*[96] and *Park v. Kim*.[97] In response, a growing number of federal and state courts have issued standing orders requiring attorneys to certify that any AI-generated content in their filings has been meticulously verified for accuracy.[98]

The threat of *deepfakes*—hyper-realistic but entirely fabricated images, audio, or video—presents a direct assault on the truth-finding function of the courts.[99] Recognizing this danger, the U.S. Judicial Conference's Advisory Committee on Evidence Rules has considered a new evidentiary rule, proposed Rule 901(c), which would establish a burden-shifting framework for challenges to potentially fabricated AI evidence.[100] Under this proposal, the party challenging the

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https://www.washingtonpost.com/nation/2025/06/03/attorneys-court-ai-hallucinations-judges (on file with Syracuse Law Review); Zach Warren, *GenAI Hallucinations Are Still Pervasive in Legal Filings, but Better Lawyering is the Cure*, THOMSON REUTERS (Aug. 18, 2025), https://www.thomsonreuters.com/en-us/posts/technology/genai-hallucinations/ (on file with Syracuse Law Review).

96. *See* Mata v. Avianca, Inc., 678 F. Supp. 3d 443, 448–49, 466 (S.D.N.Y. 2023).

97. *See* Park v. Kim, 91 F.4th 610, 614–16 (2d Cir. 2024).

98. *See, e.g.*, Standing Order Re: Artificial Intelligence ("AI") in Cases Assigned to Judge Baylson (effective June 6, 2023), https://www.paed.uscourts.gov/rules-orders/standing-order-re-artificial-intelligence-ai-cases-assigned-judge-baylson (on file with Syracuse Law Review); Standing Order for Civil Cases (effective Jan. 1, 2026), https://www.cod.uscourts.gov/Portals/0/Documents/Judges/SKC/SKC_Standing_Order_Civil_Cases.pdf (on file with Syracuse Law Review); Standing Order Requiring Certification Re: Use of Artificial Intelligence (AI) in Filings (effective Oct. 21, 2024), https://www.cod.uscourts.gov/Portals/0/Documents/Judges/SP/SP_Standing_Order_AI_Filings.pdf (on file with Syracuse Law Review); Standing Order Regarding the Use of Artificial Intelligence in Litigation (effective Apr. 15, 2025), https://19thcircuitcourt.state.il.us/DocumentCenter/View/5530/C-202—-Standing-Order-Regarding-Artificial-Intelligence---4-15-25 (on file with Syracuse Law Review).

99. *See* CONF. OF STATE CT. ADM'RS, GENERATIVE AI AND THE FUTURE OF THE COURTS 8–9 (2024) (warning that deepfakes "pose a plethora of risk to courts" and may "upend[] the fact-finding function of courts" and public confidence); Daniel J. Capra, *Deepfakes Reach the Advisory Committee on Evidence Rules*, 92 FORDHAM L. REV. 2491, 2496 (2024) (explaining how deepfakes challenge courts' ability to authenticate audiovisual evidence and stressing risks to adjudicative truth-finding).

100. *See* Memorandum from Daniel J. Capra to the Advisory Comm. on Evidence Rules 68–70 (Apr. 1, 2025), *in* ADVISORY COMM. ON EVIDENCE RULES, AGENDA FOR COMMITTEE MEETING: MAY 2, 2025 (2025), https://www.uscourts.gov/sites/default/files/document/2025-05_evidence_rules_committee_agenda_book_final.pdf (on file with Syracuse Law Review) [hereinafter Capra Memorandum] (introducing draft Rule 901(c) on "Potentially Fabricated Evidence Created by Generative Artificial Intelligence" and describing burden-shifting framework).

evidence would first need to make a sufficient showing of potential fabrication, at which point the burden would shift to the proponent to prove the evidence is authentic by a preponderance of the evidence.[101] While this rule has not yet been adopted, its consideration signals the gravity of the threat.[102]

In a landmark development reflecting the growing sophistication of AI, the Judicial Conference approved proposed Rule 707 in June 2025.[103] This new rule is designed for situations where machine-generated evidence, such as a complex data analysis or a risk assessment, is offered without a sponsoring human expert.[104] Rule 707 mandates that such evidence is admissible only if it satisfies the rigorous reliability standards of FRE 702, the rule governing expert testimony.[105] This effectively treats the AI system itself as a form of expert, requiring the court to scrutinize its methodology, the data it was trained on, its potential rate of error, and whether its principles are generally accepted—a high bar for many current AI systems.[106]

Paradoxically, while AI faces steep climbs on authenticity and reliability, it may have an easier path regarding the hearsay rule. Under FRE 801, hearsay is defined as an out-of-court statement made by a

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101. *See id.*; Al Windham, *AI-Generated Deepfakes in Court: An Emerging Threat to Evidence Authenticity?*, NAT'L L. REV. (June 11, 2025), https://natlawreview.com/article/ai-generated-deepfakes-court-emerging-threat-evidence-authenticity (on file with Syracuse Law Review) (summarizing the proposed 901(c) two-step showing and preponderance requirement).

102. *See* Nate Raymond, *US Judicial Panel Advances Proposal to Regulate AI-Generated Evidence*, THOMSON REUTERS (May 2, 2025), https://www.reuters.com/legal/government/us-judicial-panel-advances-proposal-regulate-ai-generated-evidence-2025-05-02 (on file with Syracuse Law Review) (committee voted 8-1 to seek public comment; not yet adopted).

103. *Proposed Amendments Published for Public Comment*, ADMIN. OFF. OF THE U.S. CTS. (June 10, 2025), https://www.uscourts.gov/forms-rules/proposed-amendments-published-public-comment (on file with Syracuse Law Review) (Standing Committee "approved publication of proposed amendments," including "Evidence Rule 609 and new Rule 707").

104. *See* Amy Hill, *Proposed Rule 707 Targets AI-Crafted Evidence*, WOMBLE BOND DICKINSON: INSIGHTS (June 5, 2025), https://www.womblebonddickinson.com/us/insights/blogs/proposed-rule-707-targets-ai-crafted-evidence (on file with Syracuse Law Review) (explaining coverage of AI-/machine-generated evidence offered without an expert).

105. *See* Capra Memorandum, *supra* note 100 at 13–14.

106. *See* Jessica Kerbel & Leonard J. Dietzen, III, *New AI Rule, Old Standard: Proposed Federal Rule of Evidence 707 Aims to Apply Daubert Standard to AI-Generated Evidence*, RUMBERGER KIRK: INSIGHTS (June 19, 2025), https://www.rumberger.com/insights/new-ai-rule-old-standard-proposed-federal-rule-of-evidence-707-aims-to-apply-daubert-standard-to-ai-generated-evidence (on file with Syracuse Law Review) (Advisory Committee notes highlight courts' consideration of inputs/training data representativeness and validation).

human "declarant" offered to prove the truth of the matter asserted.[107] Courts have consistently held that purely machine-generated outputs, which lack a human declarant, do not constitute hearsay.[108] Therefore, an AI-generated analysis, if it can pass the gauntlets of authentication and reliability, may be admissible for its truth without implicating the hearsay rule.

B. The Landscape for Litigators

The legal system's multi-pronged response to AI evidence is creating a complex and potentially contradictory landscape for litigators. There is a fundamental tension between the evidentiary principles of reliability and authenticity.[109] Proposed Rule 707 pulls AI-generated analysis toward the demanding reliability standards of expert testimony under FRE 702, forcing a deep inquiry into the AI's internal processes.[110] At the same time, the threat of deepfakes is pushing for heightened authenticity standards under FRE 901, demanding verifiable proof that the evidence is what it purports to be.[111] This creates a pincer movement of evidentiary scrutiny. A single piece of AI-enhanced evidence, such as a video analysis, might be challenged on both fronts. The proponent could be required to prove that the AI's analytical process is scientifically reliable (FRE 707/702) *and* that the resulting video is a true and accurate depiction and not a fabrication (FRE 901). The very complexity that makes an AI system powerful enough to produce valuable analysis also makes it opaque, creating a "black box" that is difficult to explain. This opacity makes it challenging to satisfy the reliability standards of Rule 707 and simultaneously

107. *See* FED. R. EVID. 801(c).

108. *See* Hope Elizabeth Newkirk, *Can Algorithms Be Declarants? The Future of Hearsay in the AI Landscape*, PACE UNIV. ELISABETH HAUB SCH. OF L.: BLOGS (June 2, 2025), https://haubadvocacy.blogs.pace.edu/2025/06/02/can-algorithms-be-declarants-the-future-of-hearsay-in-the-ai-landscape/ (on file with Syracuse Law Review) (explaining that "the definition of hearsay applies only to human declarants, while machine-generated evidence is generally treated as non-hearsay evidence because no actual 'person' is involved"); Allen Waxman, Jason Kort & Marcelo Barros, *Proving Admissibility of AI Outputs Centers on Authenticity*, BLOOMBERG L. (Feb. 25, 2025, at 04:30 ET), https://news.bloomberglaw.com/us-law-week/proving-admissibility-of-ai-outputs-centers-on-authenticity (on file with Syracuse Law Review) ("outputs from machines are not hearsay" because "only a person may be a declarant and make a statement" (quoting United States v. Washington, 498 F.3d 225, 230 (4th Cir. 2007))).

109. *See* TODAY'S MANAGING PARTNER, *supra* note 92 (noting that while machine-generated outputs may clear the hearsay hurdle, they still face obstacles in authentication (FRE 901) and reliability (FRE 702, FRE 707)).

110. *See id.*

111. *See id.*

complicates the task of proving authenticity under Rule 901. This collision of standards creates a potential "catch-22" for proponents of AI evidence, representing a central, structural barrier to the integration of advanced AI into U.S. courtrooms that will likely fuel expensive hearings and even mini-trials over AI-generated and AI-enhanced evidence in litigation for years to come.[112]

CONCLUSION

The integration of multimodal generative and agentic AI into litigation offers unparalleled opportunities for analysis, strategy, and persuasion. These technologies allow attorneys to tag testimony by issues, track speakers, and detect contradictions at speeds and depths beyond human capability.[113] These same platforms empower trial lawyers to instantly generate timelines, charts, or crime scene recreations, democratizing the once laborious process of demonstrative creation.[114] The synthesis of these technologies into an "AI Litigation Agent" signals an even greater transformation—an autonomous system capable of performing multi-step litigation workflows, from analyzing expert reports to drafting cross-examination outlines with visual exhibits.[115] These developments demonstrate the possibility of agentic AI as a co-counsel, not simply a tool.

Yet formidable evidentiary hurdles remain which are likely to slow the implementation of real-time AI advocacy. Generative AI's propensity to "hallucinate" and fabricate legal authorities has already produced sanctions in several cases. Courts have responded with standing orders requiring certifications that AI-generated filings have been verified.[116]

The evidentiary threat of deepfakes has led to the Advisory Committee on Evidence Rules proposing Rule 901(c), a burden-shifting

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112. *See id.*

113. *See* DEPOIQ, *supra* note 74; Ambrogi, *supra* note 75; CASEMARK, *supra* note 77.

114. *See* NEXLAW, *supra* note 61; Weck, *supra* note 83.

115. *See* Andrew Fletcher, *The Key to Autonomous Legal Workflows with Agentic AI*, THOMSON REUTERS (June 5, 2025), https://legal.thomsonreuters.com/blog/the-key-to-autonomous-legal-workflows-with-agentic-ai; Amanda Chaboryk, Chris Cartmell & Stephanie Baker, *The (Speculative) Rise of AI Agents in Legal*, SOC'Y FOR COMPUTS. & L.: BLOG (June 3, 2025), https://www.scl.org/the-speculative-rise-of-ai-agents-in-legal (on file with Syracuse Law Review); Sean Kalaycioglu et al., *AI-Powered Legal Intelligence System Architecture: A Comprehensive Framework for Automated Legal Consultation and Analysis*, ARXIV (Aug. 24, 2025), https://arxiv.org/abs/2508.17499 (on file with Syracuse Law Review).

116. *See* sources cited *supra* note 98.

framework to authenticate potentially fabricated evidence.[117] In June 2025, the Judicial Conference went further, approving proposed Rule 707 for comment, which requires machine-generated evidence to meet the rigorous standards of expert testimony under Rule 702.[118]

Paradoxically, hearsay doctrine may prove less of an obstacle. Under FRE 801, only human declarants make "statements," so machine-generated outputs are generally not hearsay. But this relative ease under hearsay contrasts sharply with the heightened scrutiny AI faces under reliability and authenticity standards—a "catch-22" that may fuel many protracted hearings over AI-based exhibits.

Ultimately, AI promises to enhance lawyering by collapsing analytical, strategic, and persuasive workflows into real-time advocacy. The legal system must reconcile the conflicting demands of Rules 702, 707, and 901, and manage the risks of fabrication and opacity, so that the promise of AI advocacy may be realized. The legal system's response to these hurdles will determine how quickly and fully AI can move from an experimental tool to an embedded partner in advocacy, shaping the future of litigation.

117. *See* Capra Memorandum, *supra* note 100; Raymond, *supra* note 102.

118. *See* ADMIN. OFF. OF THE U.S. CTS., *supra* note 103; Kerbel & Dietzen, *supra* note 106.