



Source: National Center for State Courts



Source: National Center for State Courts





Elon Musk 🐼 🛛 @elonmusk · Mar 12

Al will probably be smarter than any single human next year. By 2029, Al is probably smarter than all humans combined.





KanekoaTheGreat 📀 @KanekoaTheGreat · Mar 12

Futurist Ray Kurzweil Tells Joe Rogan Al Will Achieve Human-level Intelligence by 2029

"We're not quite there, but we will be there, and by 2029 it will match any person. I'm actually considered conservative. People think that wi...

THE WALL STREET JOURNAL.

Sam Altman Seeks Trillions of Dollars to Reshape Business of Chips and AI

OpenAl chief pursues investors including the U.A.E. for a project possibly requiring up to \$7 trillion

By Keach Hagey Follow and Asa Fitch Follow Feb. 8, 2024 9:00 pm ET

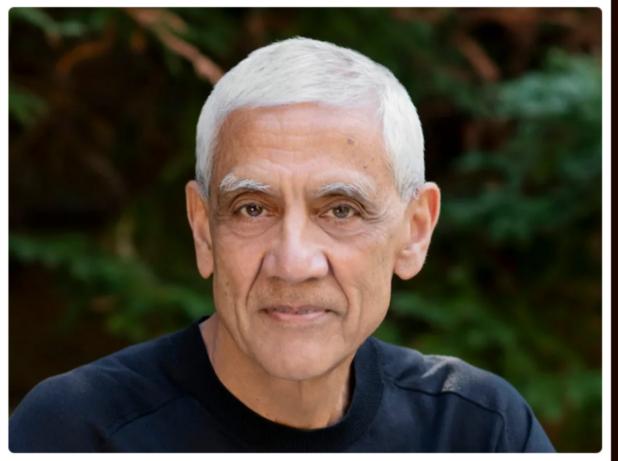


Al could mean free doctors and lawyers for everybody in 10 years, OpenAl investor Vinod Khosla believes

- Silicon Valley Venture Capitalist
 & Billionaire Businessman
- Early Investor in OpenAI
- Initial \$50 million investment now valued in the billions

Aaron Mok

December 3, 2023 · 3 min read



Al could mean free doctors and lawyers for everybody in 10 years, OpenAl investor Vinod Khosla believes

Terms You Need To Know

• Generative AI

- Machine Learning
- Generative Pre-Trained Transformer ("GPT")
- Neural Networks

• Large Language Model ("LLM")

Plugins

• Retrieval Augmented Generation ("RAG")

Hallucination

LLM Agents

Deepfake

Brookings Institute, The Brookings Glossary of AI and Emerging Technologies.

Google, Machine Learning Glossary.

CNET, ChatGPT Glossary: 42 AI Terms That Everyone Should Know (Feb. 1, 2024).

The Alan Turing Institute, Data Science and AI Glossary.

Test Comparisons of free and paid versions of Anthropic, Open.AI, and Microsoft LLMs

Free version of Anthropic's Claude 3 performs at or nearly the same level as Open.AI's paid GPT-4 model.

	Claude 3 Opus	Claude 3 Sonnet	Claude 3 Haiku	GPT-4	GPT-3.5	Gemini 1.0 Ultra	Gemini 1.0 Pro
Undergraduate level knowledge MMLU	86.8% 5 shot	79.0% 5-shot	75.2% 5-shot	86.4% 5-shot	70.0% 5-shot	83.7% 5-shot	71.8% 5-shot
Graduate level reasoning GPQA, Diamond	50.4% 0-shot CoT	40.4% 0-shot CoT	33.3% 0-shot CoT	35.7% 0-shot CoT	28.1% 0-shot CoT	-	-
Grade school math GSM8K	95.0% 0-shot CoT	92.3% 0-shot CoT	88.9% 0-shot CoT	92.0% 5-shot CoT	57.1% 5-shot	94.4% Maj1@32	86.5% Maj1@32
Math problem-solving MATH	60.1% 0-shot CoT	43.1% 0-shot CoT	38.9% 0-shot CoT	52.9% 4-shot	34.1% 4-shot	53.2% 4-shot	32.6% 4-shot
Multilingual math MGSM	90.7% 0-shot	83.5% 0-shot	75.1% 0-shot	74.5% 8-shot	-	79.0% 8-shot	63.5% 8-shot
Code HumanEval	84.9% 0-shot	73.0% 0-shot	75.9% 0-shot	67.0% 0-shot	48.1% 0-shot	74.4% 0-shot	67.7% 0-shot
Reasoning over text DROP, F1 score	83.1 3-shot	78.9 3-shot	78.4 3-shot	80.9 3-shot	64.1 3-shot	82.4 Variable shots	74.1 Variable shots
Mixed evaluations BIG-Bench-Hard	86.8% 3-shot CoT	82.9% 3-shot CoT	73.7% 3-shot CoT	83.1% 3-shot CoT	66.6% 3-shot CoT	83.6% 3-shot CoT	75.0% 3-shot CoT
Knowledge Q&A ARC-Challenge	96.4% 25-shot	93.2% 25-shot	89.2% 25-shot	96.3% 25-shot	85.2% 25-shot	-	-
Common Knowledge HellaSwag	95.4% 10-shot	89.0% 10-shot	85.9% 10-shot	95.3% 10-shot	85.5% 10-shot	87.8% 10-shot	84.7% 10-shot

INTERNATIONAL MONETARY FUND

Gen-Al: Artificial Intelligence and the Future of Work

Prepared by Mauro Cazzaniga, Florence Jaumotte, Longji Li, Giovanni Melina, Augustus J. Panton, Carlo Pizzinelli, Emma Rockall, and Marina M. Tavares

SDN/2024/001

IMF Staff Discussion Notes (SDNs) showcase policy-related analysis and research being developed by IMF staff members and are published to elicit comments and to encourage debate. The views expressed in Staff Discussion Notes are those of the author(s) and do not recessarily represent the views of the IMF, its Executive Board, or IMF management.

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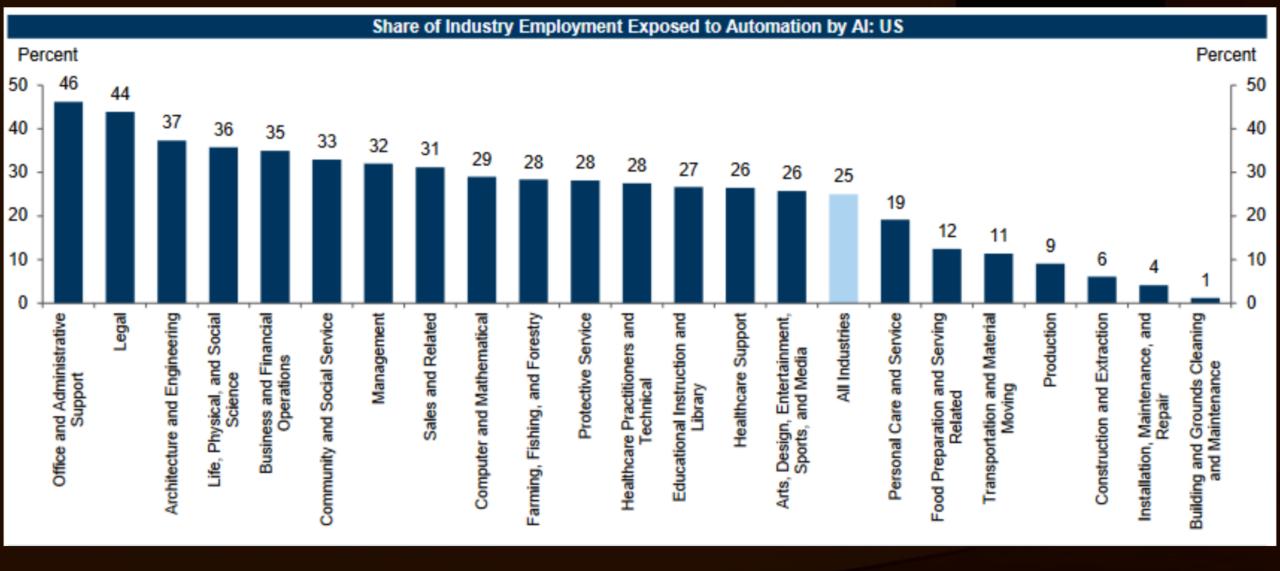
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Jan. 2024 IMF Staff
Discussion Note

Executive Summary

Artificial intelligence (AI) is set to profoundly change the global economy, with some commentators seeing it as akin to a new industrial revolution. Its consequences for economies and societies remain hard to foresee. This is especially evident in the context of labor markets, where AI promises to increase productivity while threatening to replace humans in some jobs and to complement them in others.

Almost 40 percent of global employment is exposed to AI, with advanced economies at greater risk but also better poised to exploit AI benefits than emerging market and developing economies. In advanced economies, about 60 percent of jobs are exposed to AI, due to prevalence of cognitive-task-oriented jobs. A new measure of potential AI complementarity suggests that, of these, about half may be negatively affected by AI, while the rest could benefit from enhanced productivity through AI integration. Overall exposure is 40 percent in emerging market economies and 26 percent in low-income countries. Although many emerging market and developing economies may experience less immediate AI-related disruptions, they are also less ready to seize AI's advantages. This could exacerbate the digital divide and cross-country income disparity.



Source: Goldman Sachs Global Investment Research



Tracking Technology and Innovation for the Legal Profession

Chief Justice Roberts, In Year-End Report, Says Al Won't Make Judges Obsolete, But Will Transform their Work



<u>Chief Justice Roberts's</u> <u>Report</u>

By Bob Ambrogi on January 2, 2024

ABAJOURNAL

Latest version of ChatGPT aces bar exam with score nearing 90th percentile

BY DEBRA CASSENS WEISS

MARCH 16, 2023, 1:59 PM CDT



Share











Bar exam score shows AI can keep up with 'human lawyers,' researchers say

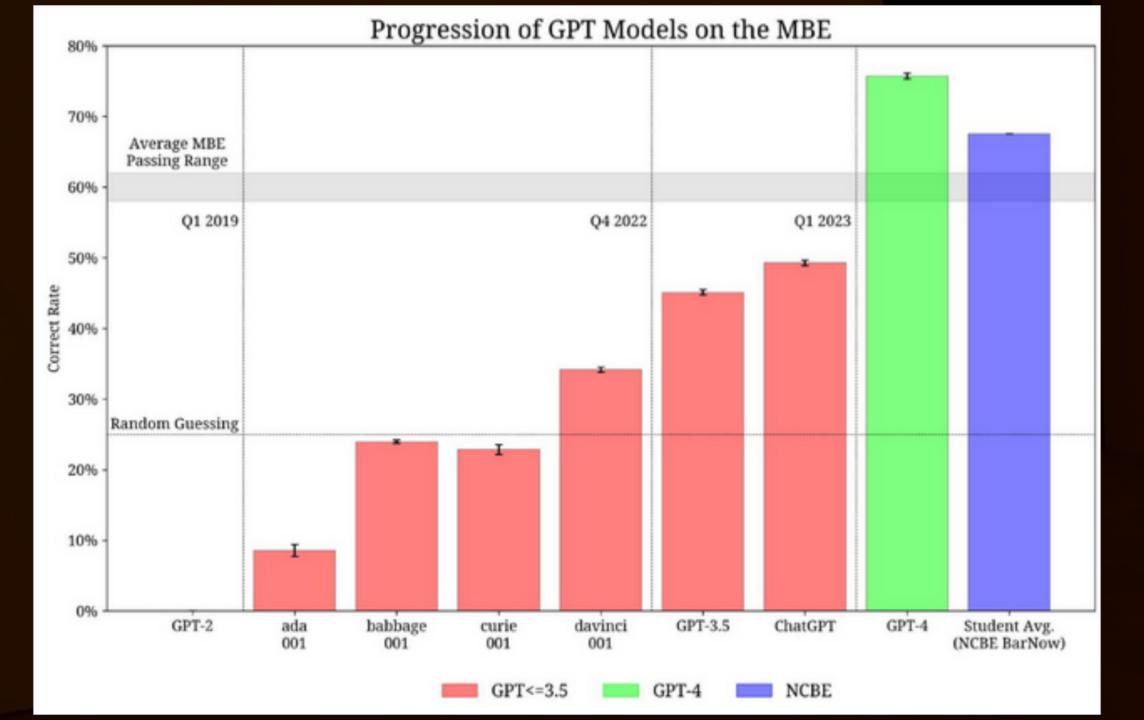
By Karen Sloan

March 15, 2023 2:17 PM EDT - Updated a year ago





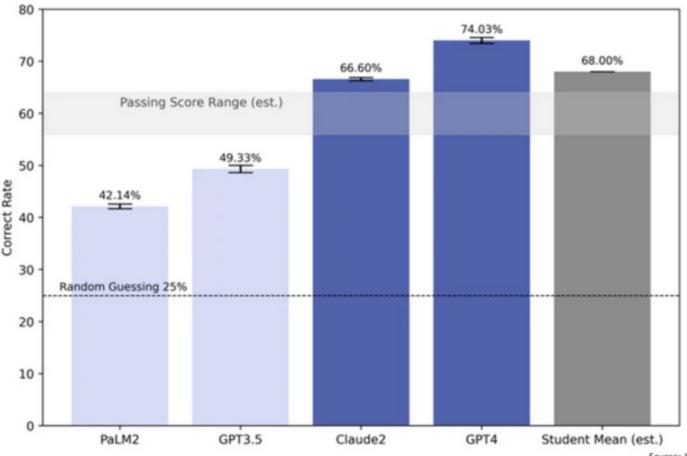






Tracking Technology and Innovation for the Legal Profession

Generative AI, Having Already Passed the Bar Exam, Now Passes the Legal Ethics Exam



Source: LegalOn Technologies

GPT-4 & Virginia Bar Exam

ChatGPT 4 v

In March 2022, Lender's lawyer recorded duly authenticated abstracts of its judgment against David in the office of the Clerk of the Circuit Court of the City of Chesapeake and in the office of the Clerk of the Circuit Court of the City of Roanoke.

Does Lender have a right to enforce its judgment against the following:

- (a) The home in Suffolk? Explain fully.
- The farm in Chesapeake? Explain fully.
- (c) The vacation home in Roanoke? Explain fully.

ChatGPT

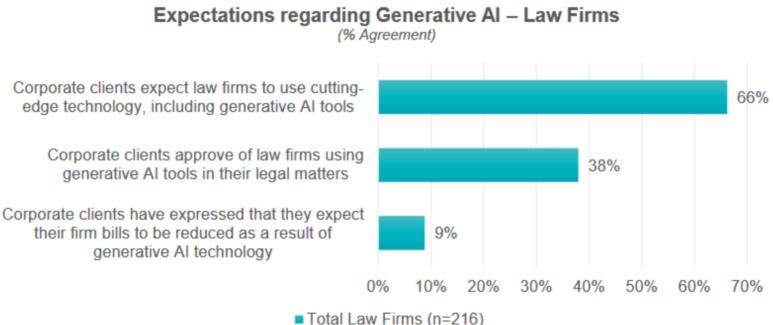
In Virginia, the enforcement of judgments against property, the characterization of property as marital or separate, and the effects of property transfers on creditor rights are governed by specific statutes and case law. I'll address each of the properties in question based on these principles:

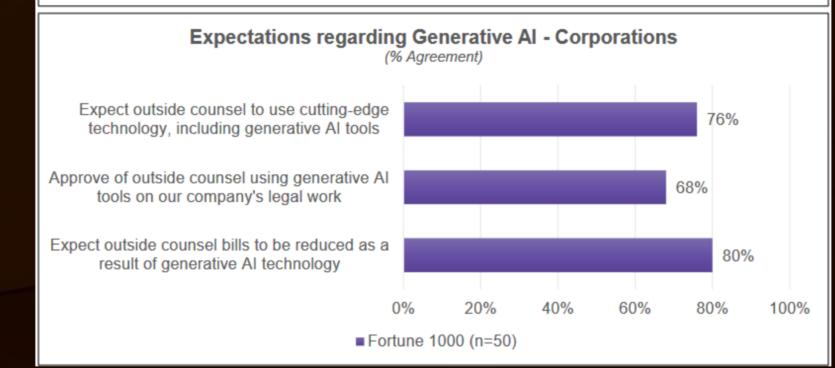
(a) The Home in Suffolk

Under Virginia law, the home in Suffolk initially was David's separate property, having been received as a gift before marriage. Normally, separate property is subject to claims by creditors for debts incurred by the spouse who owns the property. However, David transferred the home to Suzy's name alone, citing "natural love and affection." This action could be scrutinized under Virginia's fraudulent conveyance laws (e.g., Virginia Code § 55-80 and § 55-81), which protect creditors against transfers made with the intent to hinder, delay, or defraud creditors. Given the timing of the transfer—after David's business failed and before the judgment was entered— Lender may argue that the transfer was intended to protect the property from creditors •



- 80% of executives expect a reduction in legal costs from outside counsel
- Two-thirds of in-house counsel approve of law firms using generative AI, but only one-third of large law firm executives believe corporate clients approve of the use.





16TH ANNUAL LAW DEPARTMENT OPERATIONS SURVEY

















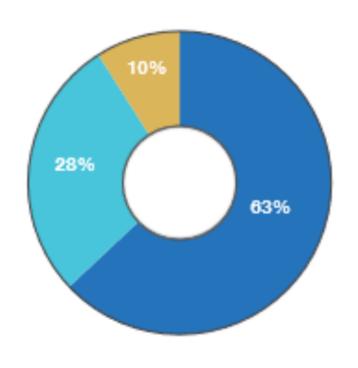


Do you expect generative AI to enable you to bring more work in-house?

Do you think wider adoption of generative AI will lower your law spend?

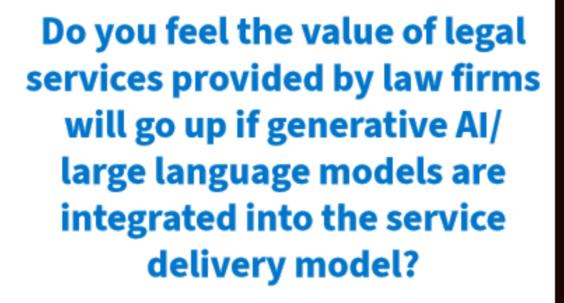


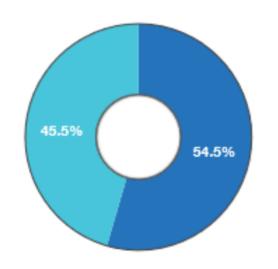
We ___ our law firms to use generative AI



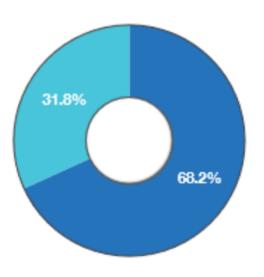


For work that is augmented with the use of generative AI, do you expect that firms will increase their use of AFAs/modified billing?









ALM | LAW.COM INTERNATIONAL



Bennett B. Borden partner with DLA Piper. Courtesy photo

Q&A

DLA Piper's Chief Data Scientist: Firms Resisting AI Are 'Dinosaurs Day Before the Meteorite Hit'

While seeing generative AI becoming an essential technology in legal market, DLA Piper's new chief data scientist also noted that human review of AI outputs is likely to become more and more complex in the future.

March 21, 2023 at 01:26 PM

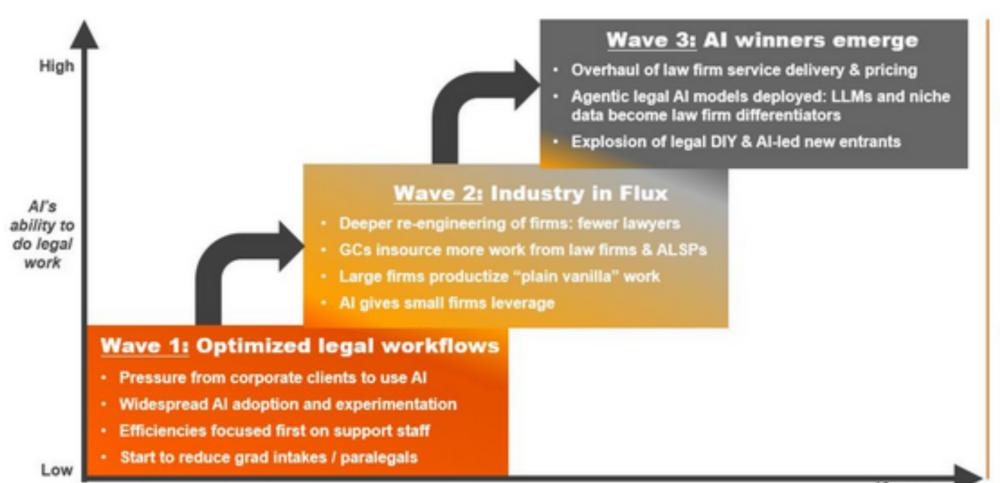
② 7 minute read

Legal Technology

By Isha Marathe | March 21, 2023 at 01:26 PM

The original version of this story was published on Legaltech News

We predict 3 overlapping waves of transformation



In the near term, it will transform legal working practices and law firm cost bases

The influence of GCs will grow as corporates take work back in-house and demand Al-driven efficiencies from law firms

In the longer term, it will lead to business model transformation & crossindustry disruption.

We could see some disintermediation of legal professionals

Pro Bono & Access to Justice

• Low-income Americans do not get any or enough legal help for 92% of their civil legal problems. 50 million Americans are below 125% of the poverty threshold, and nearly 75% of that number has at least 1 civil legal problem each year.

Legal Services Corporation, The Justice Gap: The Unmet Civil Legal Needs of Low-Income Americans (Apr. 2022).

• Because **the need** for low-income individuals' legal assistance **greatly outweighs the number of lawyers who can assist**, AI can step in to help spot users' legal needs, build out and maintain legal navigators, assist legal services organizations with client in-take, and make court processes and forms easier to navigate.

Kristen Sonday, Forum: There's potential for AI chatbots to increase access to justice, Thomson Reuters (May 25, 2023).

ABAJOURNAL

California Innocence Project harnesses generative AI for work to free wrongfully convicted

BY MATT REYNOLDS

AUGUST 14, 2023, 8:45 AM CDT

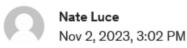
- The California Innocence Project uses CoCounsel to sift through thousands of legal documents to identify patterns, including inconsistencies in witness statements.
- Relativity offers a generative AI translation software for free to legal aid organizations, which assists in translating hours of witness testimony and interviews to English.



VANDERBILT UNIVERSITY

Vanderbilt Law School Announces Creation of Al Law Lab

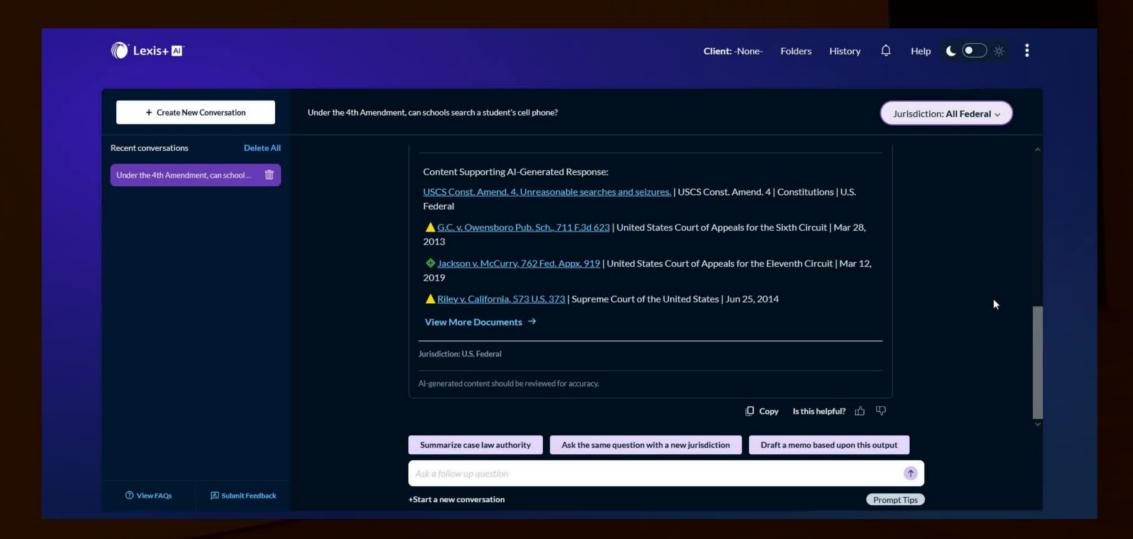
Law School



Dean <u>Chris Guthrie</u> announced the creation of the Vanderbilt AI Law Lab (VAILL) to explore how artificial intelligence intersects with the delivery of legal services and access to justice.

Housed within the school's Program on Law & Innovation (PoLI), VAILL's mission is to harness AI to expand access to legal services and knowledge and improve the delivery of legal services. Its objectives include training students to navigate an AI-driven landscape, pioneering ethical applications of the technology, and forging partnerships between academia, industry, and the legal community to bring projects to life.

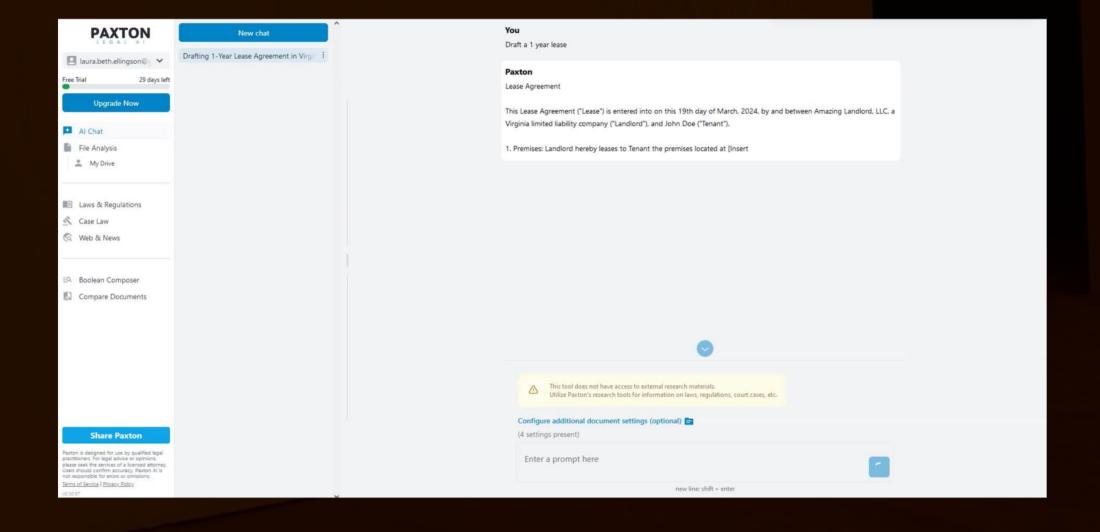
Lexis+ AI Demo



Legal AI Tools

- <u>Lexis+ AI</u> [Free Trial]: Legal research, drafting, summarizing cases/documents, document review utilizing Open.AI and Anthropic's LLMs.
- <u>CoCounsel</u> [Free Trial]: Legally trained version of Open.AI's LLM that performs document review, legal research, deposition prep, & contract analysis
- <u>CoCounsel Core with Westlaw Precision</u>: AI-assisted research using Westlaw's databases with CoCounsel's features integrated
- <u>Harvey</u>: Legally trained version of Open.AI's LLM that assists attorneys with research, drafting, contract analysis, regulatory compliance, litigation predictions, and various legal administrative tasks
- <u>Paxton AI</u> [Free Trial]: Legally trained LLM for legal research, drafting, & regulatory compliance

Paxton AI Demo



More Legal AI Tools

- <u>Vincent AI</u>: Legal research, analyze documents, compare jurisdictions, and build arguments to support or oppose propositions
- <u>Clearbrief</u>: Legal research and drafting
- <u>Disco's Cecilia AI</u>: Document review and deposition summaries
- Relativity aiR: Discovery document review and deposition/trial prep
- Luminance: Contract drafting/analysis, negotiation, and compliance
- Spellbook [Free Trial]: Contract drafting and analysis
- <u>Superlegal</u>: Contract review
- <u>LexMachina</u>: Litigation analytics

AI News & Free Tutorials for Lawyers

- University of Arizona Law Library Generative AI Research Guide
- LinkedIn Learning AI courses (free first month or free with Premium LinkedIn)
- <u>The Brainyacts</u>: Semiweekly Newsletter on the pragmatic use of generative AI in legal profession
- AI & Legal Information Database: Crowd sourced database of articles, court cases, judicial opinions, attorney guidance, and state bar regulations concerning generative AI
- Scholarship on AI Lawyering Blog
- Podcast: <u>AI Lawyer Talking Tech</u>

Cautions

Virginia Rules of Professional Conduct

AI Limitations

AI Evidence

AI Governance Policies

Rules of Professional Conduct

- Competence: Rule 1.1 cmt. 6

 Duty to be informed about benefits/risks of new technology
- Communication: Rule 1.4(a) & cmt. 5, Rule 1.5(a)-(b)

 Duty to inform client of AI use and fees should reflect efficiency gained
- Confidentiality: Rule 1.6(d) & cmt. 19, Rule 1.6 cmts. 20-21

 Duty to prevent disclosure of client info through AI use

Limitations of Generative AI

- Generative AI tools are limited by the parameters of their databases.
 - Knowledge is limited to the database used to train (scope of content and knowledge cutoff date).
 - May generate incorrect information (hallucinations).
 - May produce biased content.
- Generative AI tools may not have sufficient data encryption or security features to protect information. Most legal AI tools are now starting to make assurances of data security (e.g., Lexis+ AI, Westlaw CoCounsel Core, Paxton AI, etc.).

Potential Ethics Rules Implicated by AI Hallucination

- Rule 4.1(a): "In the course of representing a client a lawyer shall not knowingly: (a) make a false statement of fact or law "
- Rule 5.3(b): "With respect to a nonlawyer employed or retained by or associated with a laywer: . . . (b) a lawyer having direct supervisory authority over the nonlaywer shall make reasonable efforts to ensure that the person's conduct is compatible with the professional obligations of the lawyer "

While neither of these Rules expressly apply to statements generated by AI and Rule 5.3 appears to imply human nonlaywer assistants, an argument could be made that quality control of work product generated by AI is required by these Rules.

Mandatory Generative AI Use Certifications for Legal Filings?

REUTERS®US judge orders lawyers to sign Al pledge, warning chatbots 'make stuff up'

By Jacqueline Thomsen 🗸

June 2, 2023 1:17 PM EDT · Updated 3 days ago

U.S. District Judge Brantley Starr (N.D. Tex.) issued a standing order requiring all legal filings to contain a certification attesting that either no portion of the filing had been drafted by generative AI or that any language drafted by generative AI had been verified by a human being for accuracy. While other federal judges have since followed suit, some legal commentators have argued that such certifications are unnecessary. See Maura R. Grossman et al., Is Disclosure and Certification of the Use of Generative AI Really Necessary?, 107 Judicature, no. 2, 2023, at 68, 68-77.

AI-Generated Evidence in the Courtroom



ECHNOLOGY EXECUTIVE COUNCIL

Al deepfakes are poised to enter court proceedings at time of low trust in legal system

PUBLISHED WED, MAR 6 2024-10:48 AM EST

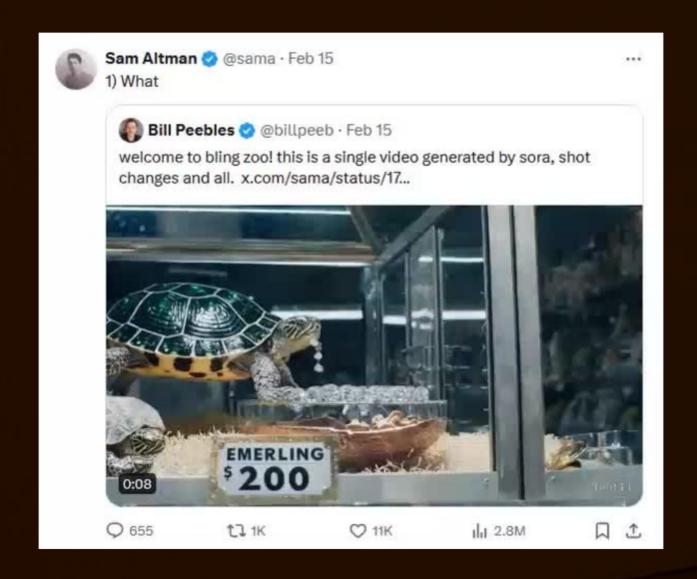




KEY POINTS

- The potential for deepfakes in the courtroom has become not just plausible, but according to experts, likely.
- The fear is that people will use deepfakes to create evidence to either provide alibis for activities or to try to prove the innocence or guilt of somebody.
- In addition to the risk of altered evidence, streamlining court reporting with Al opens up the doors to alteration.

Open. AI's Sora: Text to Video Demo



Evidentiary Considerations for Admissibility

- 1. Is it relevant?
- 2. Can it be authenticated?
 - Consider the possibility that evidence could have been altered by AI and also be aware that some may assert deepfake defenses without proof.
 - Forensic analysts will likely be necessary to examine evidence and provide expert testimony if necessary.
- 3. Do the requirements of Virginia Rule of Evidence 2:702 (Expert Testimony) apply to admitting evidence generated by AI?

Resources:

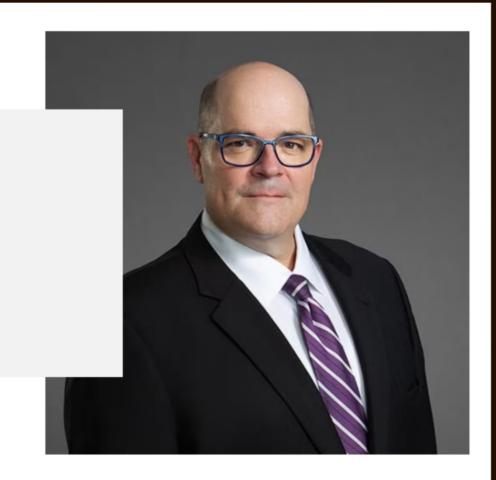
- · Paul W. Grimm et al., Artificial Intelligence As Evidence, 19 Nw. J. Tech. & Intell. Prop. 9 (2021).
- Cynthia Cwik et al., Artificial Intelligence, Trustworthiness, and Litigation, in Artificial Intelligence and the Courts: Materials for Judges (2022).

Proposed Amendment to FRE 901(b)(9)

- **(9)** *Evidence about a Process or System.* For an item generated by a process or system:
 - (A) evidence describing it and showing that it produces a reliable result; and
 - **(B)** if the proponent concedes that --- or the proponent provides a factual basis for suspecting that --- the item was generated by artificial intelligence, additional evidence that:
 - (i) describes the software or program that was used; and
 - (ii) shows that it produced reliable results in this instance.
- Replaces "accurate" with "reliable"
- Adds subsection (B) requiring the one against whom the evidence is produced to provide a factual basis for challenging
- <u>Tabled until Fall 2024</u> conference of Advisory Committee on Evidence Rules

"Companies should be wary of knee jerk reactions or blanket bans on AI use, which have the potential to derail legitimate and strategic AI work. Instead, use governance as a guardrail on activity and take simple steps like securing an enterprise license for AI tools, which are much more protective than personal ones."

Bennett B. Borden JD-MSc Partner and Chief Data Scientist USA



Source: <u>DLA Piper AI Governance Report</u>

Does Your Firm Need a Policy for Using and Creating AI Tools? Yes.

Resources for Drafting a Policy:

- U.S. Dep't of Commerce, National Institute of Standards and Technology, Artificial Intelligence Risk Management Framework (Jan. 2023).
- Wharton's Artificial Intelligence Risk & Governance Framework
- <u>Cindy Gordon, What Are Good AI Governance Practices and AI Ethics Sources?</u>, <u>Forbes (Oct. 30, 2023)</u> (collecting resources for creating AI ethical frameworks and governance policies).

Key Components of AI Governance Policies

- Quality Control Risks
- Contractual Risks
- Confidentiality/Privacy Risks
- Consumer Protection Risks
- Intellectual Property Risks

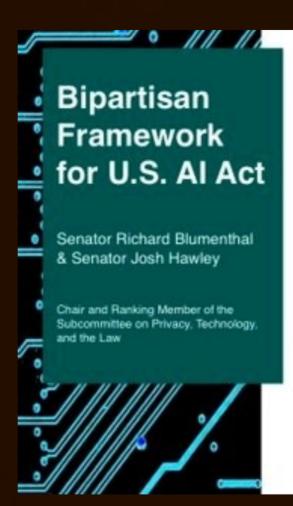
"Adoption of AI can be difficult without a proper governance structure. Even when low-risk/high-value use cases are identified, companies may still feel the need to ban Generative AI tools because they do not have the proper governance mechanisms to vet and authorize these appropriate use cases while also effectively prohibiting high-risk/low value use cases."

Source: Avi Gesser et al., The Value of Having AI Governance--Lessons from ChatGPT, Debevoise & Plimpton Data Blog (Apr. 5, 2023).

Regulation

- Divides technology into categories of risk, ranging from unacceptable, which is banned, to high, medium, and low hazards
- Provisions take effect in stages with full regulations in effect for all EU countries by mid-2026





- Establish a Licensing Regime Administered by an Independent Oversight Body: Companies developing sophisticated general-purpose A.I. models (e.g., GPT-4) or models used in high-risk situations (e.g., facial recognition) should be required to register with an independent oversight body. Licensing requirements should include the registration of information about AI models and be conditioned on developers maintaining risk management, pre-deployment testing, data governance, and adverse incident reporting programs. The oversight body should have the authority to conduct audits of companies seeking licenses and cooperate with other enforcers, including considering vesting concurrent enforcement authority in state Attorneys General. The entity should also monitor and report on technological developments and economic impacts of A.I., such as effects on employment. Personnel must be subject to strong conflict of interest rules to mitigate capture and revolving door concerns.
- Ensure Legal Accountability for Harms: Congress should ensure that A.I. companies can be held liable through oversight body enforcement and private rights of action when their models and systems breach privacy, violate civil rights, or otherwise cause cognizable harms. Where existing laws are insufficient to address new harms created by A.I., Congress should ensure that enforcers and victims can take companies and perpetrators to court, including clarifying that Section 230 does not apply to A.I. In particular, Congress must take steps to directly prohibit harms that are already emerging from A.I., such as non-consensual explicit deepfake imagery of real people, production of child sexual abuse material from generative A.I., and election interference.

In early September, a bipartisan group of U.S. Senators released a framework for federal legislation regulating AI.



Published: Mar 6, 2024

Comer & Raskin Introduce the Federal Al Governance and Transparency Act

WASHINGTON— House Committee on Oversight and Accountability Chairman James Comer (R-Ky.) and Ranking Member Jamie Raskin (D-Md.) introduced H.R. 7532 the Federal AI Governance and Transparency Act, which focuses government resources on increasing transparency, oversight, and responsible use of federal AI systems while protecting the public's privacy, civil rights, and civil liberties. The bipartisan bill centrally codifies federal governance of agency AI systems, establishes new mechanisms for transparency and accountability, and consolidates and streamlines other existing AI laws.

Virginia

- Virginia Consumer Data
 Protection Act (Spec.
 Session I 2021).
- HB 747 Artificial
 Intelligence Developer Act
 (continued to 2025
 session)

