

2024 NYIPLA TRANSACTIONS BOOTCAMP DAY 3 – M&A DUE DILIGENCE AND RELATED ETHICAL ISSUES

Eric Greenwald
Merck & Co., Inc.

Jonathan Berschadsky
Merchant & Gould PC

Timothy McNamara
Goldman Sachs Group, Inc.

Christopher Loh
Venable LLP

Briana Barron
Arcus Biosciences

DISCLAIMER

The opinions herein are those solely of the speakers,
and do not reflect those of the speakers' organizations or clients.

TODAY'S AGENDA

- Diligence Basics
- Data Room
- Non-Data Room Diligence
- Substantive IP Analysis
- Reviewing Deal Documents
- Problem Solving
- Ethics

DILIGENCE BASICS - TYPES OF M&A

Types of IP M&A:

- Horizontal, vertical, concentric, market-extension or product extension, conglomeration, stock purchase, asset purchase, collaboration.

Key Focus:

- Avoid getting bogged down in corporate transaction details.
- Prioritize IP transfers and the underlying technology/science to ensure that the assets critical to the deal align with your business goals.
- Understanding the specific IP being transferred helps identify potential risks, such as licensing restrictions, pending litigation, or enforcement issues.
- This focus will guide document review and the key questions to ask during discussions (e.g., conference calls with key personnel).

DILIGENCE BASICS – Example M&A Transactions

- Purpose of M&A: to acquire patent portfolio that can be asserted in litigation
 - ❑ Documents sufficient to ensure acquiror has standing to sue
 - ❑ Documents that may indicate warts (validity/enforceability concerns)
- Purpose of M&A: collaboration
 - ❑ Third party inbound/outbound-licenses

DILIGENCE = AN INSURANCE POLICY

- Determining the Appropriate **Scope and Focus** of Diligence
 - Tailor diligence based on client goals, risk tolerance, and priorities.
- **Minimizing Risk:** How much risk (time and \$\$) is client willing to take on?
 - Identify client's goals
 - Which IP or products/services matter?
 - Who are competitors?
- Identify issues important to business objectives
 - Patent protection / Barrier to entry / Term of exclusivity
 - Freedom to operate / Litigation concern
 - Company-Owned IP / In-Licensed IP
 - Trade Secrets / Key employees

TYPES OF IP TRANSFERS

- M&As typically involve the following types of IP transfers:
 - Full acquisition of target company and all its IP assets
 - Partial acquisition of certain business of target company and related IP assets
 - Collaboration agreements, in which IP is split or jointly owned
 - License agreements
 - Discovery agreements
- Many M&As involve multiple types of IP transfers. For example, a partial acquisition may require a license-back by the acquiror to the target of IP that overlaps both the acquired business and the target's retained business.

DILIGENCE BASICS

- Most deals involve different types of lawyers.
- Only a small cohort of those lawyers have relevant experience with intellectual property or underlying technology/science.
- As IP counsel, you will be uniquely suited to spot and advise on:
 - IP-related legal issues
 - Technology/science related issues
- It is your job spot and **to propose solutions** to those issues.

DILIGENCE BASICS – TIMING

- The timeline for conducting diligence will be dictated by factors beyond your control, including:
 - Business/regulatory issues
 - Data room opening
 - Data room population
 - Public announcement of deal
 - Closing date
- Many due diligence tasks will be of the “hurry up and wait” kind!
- Be flexible and patient.

DILIGENCE BASICS – CLIENT INTERACTIONS

- Ideally, **a single line of communication** should flow between the deal lawyers at your firm and the in-house lawyers at the client.



- Without a single line of communication, key issues may be miscommunicated or missed.
- There are exceptions: check with more senior members of the team before communicating directly with client/outside-counsel.

DILIGENCE BASICS – CLIENT INTERACTIONS

- Beware of **memorializing negative issues in writing** without prior client approval.
 - Such written communications may unnecessarily expose the client to liability.
- Ideally, a negative issue should be discussed first with the client on a call.
- If the client asks for a written communication addressing the issue, use appropriate measures to preserve attorney-client privilege.
- Do not identify a problem in writing without also proposing a solution.

DILIGENCE BASICS – OTHER INTERACTIONS

- Interactions with other individuals who are not your client or your firm's attorneys.
- Preserve attorney-client privilege when interacting with them.
- Observe the line of communication.
- If in doubt, ask a more senior attorney at your firm whether/how you should respond to a communication or request from those individuals.
- **Watch out for who is in the “To:” and “cc:” lines when emailing!**

DATA ROOM

- A data room is a secure online (or physical) location that contains the confidential documents of the target company.
- You must sign an NDA as a condition to gaining access to the data room.
- You may have limited access to data room documents (need to know docs., limited only to viewing images, no printing, downloading or copying allowed).
- The organization and content of the data room will vary with each deal.
- The organization and content of a data room may change significantly even over the course of one deal.
- **Check the data room frequently for additional documents!**

DATA ROOM – ORGANIZATION

- If possible, organize data room like request list.

10-October-2022¶

PROJECT GAMER¶ LEGAL DUE DILIGENCE REQUEST LIST¶

In relation to Target Company, Inc. (the "Company"), please supply copies of the following documents and other requested information (or an appropriate negative statement). We reserve the right to make further enquiries in the light of the information received.¶

1. → INTELLECTUAL PROPERTY ¶

- 1.1 → Please provide an overview of what registered intellectual property rights (including pending applications) are owned by the Company (including patent rights, trade marks and designs). For each please:¶
 - 1.1.1 → provide their registration/application number, territory of registration/application, status and the proprietor details.¶
 - 1.1.2 → give details of any known or reasonably expected risks affecting the validity, enforcement or ownership of the same; and¶
 - 1.1.3 → confirm whether any challenge has been made in respect of the same.¶
- 1.2 → Please provide an overview of the software architecture in respect of the Company's products, and the ownership and licensing of the intellectual property and copyright thereof. In particular, please:¶
 - 1.2.1 → provide a description of the software architecture, including details of modules, operating systems and applications thereof, including, in each case, for the following products (including all historical, current and beta/prototype versions): Company Product 1, Company Product 2 (collectively the "Products").¶
 - 1.2.2 → confirm that the Company holds all necessary licenses and consents to third party software required for each Product or on which each Product runs (e.g. operating systems, database software etc.).¶
 - 1.2.3 → explain what technical documentation exists for each Product (e.g. to enable engineers to understand the software, coding, routines, architecture etc.) and how frequently this is updated and tested for each Product;¶
 - 1.2.4 → provide details of who created and/or developed the code relating to the software in each of the Products, in particular, please:¶
 - (a) → confirm whether the code was exclusively developed "in-house" by employees and, if so, by whom.¶

DATA ROOM – ORGANIZATION

Example data room:

The screenshot displays the VDRPro interface. At the top, there's a navigation bar with 'VDRPro' and a dropdown menu for 'Project Advisor Feed'. Below this is a secondary navigation bar with tabs for 'DOCUMENTS', 'INSIGHTS', 'PERMISSIONS', 'USERS AND GROUPS', 'REPORTS', 'Q&A', and 'REDACTION'. A 'Settings' icon is also present. The main content area shows a list of folders under the heading 'All Folders'. The folders are organized into a table with columns for selection, ID, title, type, added by, added on, last modified by, and modified on. A 'Live Chat' button is visible on the right side of the interface.

	#	TITLE	TYPE	ADDED BY	ADDED ON	LAST MODIFIED BY	MODIFIED ON
<input type="checkbox"/>	1.0	Registered Patents	Folder	James	02/20/2017 07:19 AM	Richard	08/26/2021 10:23 AM
<input type="checkbox"/>	2.0	Registered Trademarks	Folder	James	02/20/2017 07:19 AM	Richard	08/26/2021 10:23 AM
<input type="checkbox"/>	3.0	Inbound Licenses	Folder	James	02/20/2017 07:19 AM	Richard	08/26/2021 10:24 AM
<input type="checkbox"/>	4.0	Outbound Licenses	Folder	James	02/20/2017 07:19 AM	Richard	08/26/2021 10:24 AM
<input type="checkbox"/>	5.0	Open Source Licenses	Folder	James	02/20/2017 07:19 AM	Richard	08/26/2021 10:25 AM
<input type="checkbox"/>	6.0	Legal and Regulatory	Folder	James B	02/20/2017 07:19 AM	James B	02/20/2017 07:19 AM
<input type="checkbox"/>	7.0	Employment Agreements	Folder	James	02/20/2017 07:19 AM	Richard	08/26/2021 10:30 AM
<input type="checkbox"/>	8.0	Material Trade Secrets	Folder	James	02/20/2017 07:19 AM	Richard	08/26/2021 10:31 AM
<input type="checkbox"/>	9.0	Copyright Registrations	Folder	Richard	08/26/2021 10:32 AM	Richard	08/26/2021 10:33 AM
<input type="checkbox"/>	10.0	Assignment Agreements	Folder	Richard	08/26/2021 10:33 AM	Richard	08/26/2021 10:33 AM
<input type="checkbox"/>	11.0	Past Litigation	Folder	Richard	08/26/2021 10:34 AM	Richard	08/26/2021 10:34 AM
<input type="checkbox"/>	12.0	Investigation History	Folder	Richard	08/26/2021 10:35 AM	Richard	08/26/2021 10:35 AM

DATA ROOM – MAKING/HANDLING REQUESTS

- Target company may state that request list is overly broad
- Work together to request most relevant documents and if applicable based on stage of negotiations (e.g., are fundamentals acceptable, is system compatible, is IP value commensurate with deal, etc.)
- Thorough and complete due diligence still must be performed

DATA ROOM – EXAMPLE RE PATENT DOCUMENTS

For patent diligence purposes, typical minimum request includes the following documents:

- All patents and patent applications assigned to the target, and prosecution histories thereof
- All patents and patent applications in- and out-licensed by target, and prosecution histories thereof
- All patent assignment agreements to which the target is a party
- All patent in- and out-license agreements to which the target is a party
- Employment agreements between the target and the named inventors of the above-mentioned patents
- Freedom-to-operate and validity analyses for the above-mentioned patents
- Publications of subject matter of the above-mentioned patents
- Litigation documents concerning the above-mentioned patents

DATA ROOM – PATENT DOCUMENTS

- While you should prioritize review of documents directly related to patents, many other data room documents may be potentially important and may even save you time. For example:
 - A general business PowerPoint may list the patents that the target considers most valuable, and the target's loss-of-exclusivity assumptions for key products.
 - FDA or other regulatory documents can disclose manufacturing processes for the products, which processes the client may want to have analyzed for FTO.
 - The “other contracts and agreements” folder may include end-user IP licenses that do not permit transfer of the target's licensee rights.
 - Patent marking compliance.

NON-DATA ROOM DILIGENCE

- Non-confidential resources can be used before the data room is open to make a preliminary assessment of:
 - Chain of title to relevant patents
 - Note that recordation of patent assignments and licenses at USPTO Patent Center and EDGAR is voluntary; thus, not all relevant assignments and licenses may be publicly available.
 - Scope (claim coverage and geographic) of target patent estate
 - Potential patentability/validity issues
 - Potential issues concerning non-employee inventors and third party co-assignees or licensees

NON-DATA ROOM DILIGENCE

- Several aspects of IP diligence can be addressed before the data room is open, using non-confidential resources. For example:

SEC Edgar https://www.sec.gov/edgar/searchedgar/companysearch.html	Significant litigation, IP agreements and licenses, information re potential on-sale or public-use bars, regulatory issues
Espacenet https://worldwide.espacenet.com/	INPADOC patent families, US and EP prosecution histories, EP opposition proceedings
USPTO PATENT CENTER https://patentcenter.uspto.gov/#/	US prosecution histories, US continuity data, recorded assignments of US patents, PTAs
Docket Navigator	US patent litigation
Darts IP (Clarivate)	Worldwide patent litigation
Derwent Innovation (Clarivate)	INPADOC and DERWENT patent families, projected expiration dates

SUBSTANTIVE ANALYSIS OF TARGET PATENTS

1. Assess Chain Of Title

- Ensure that key patents have clear chain of title from inventors to target by analyzing all relevant agreements.
- Ensure that there are no limitations in any agreements that may impede the acquisition of patents by acquiror.
 - Review target's agreements with third parties (co-assignees, licensees) to ensure that none include restrictions on acquisition of target's patents by acquiror.
 - Resolve any such issues through novations/side letters with third parties.

SUBSTANTIVE ANALYSIS OF TARGET PATENTS

2. Assess Scope Of Patent Estate

- Identify all issued patents and pending patent applications, including all family members.
- Identify filing dates and putative priority dates for each patent family.
- Summarize claim and geographic scope for each patent family.
- Note any variation in inventive entity among different members of each family.
- Estimate, if possible, expiration dates for each patent family.
 - Include PTA/PTE where applicable.
 - Assess potential double patenting issues.

SUBSTANTIVE ANALYSIS OF TARGET PATENTS

3. Assess Strengths And Weaknesses Of Patent Estate

- Review status of pending patent applications and summarize patent office rejections.
- Review status of any pending patent post-grant proceedings.
 - USPTO PGRs/IPRs
 - EPO opposition proceedings
- Review status of any pending patent litigation.
- If requested by the client, conduct FTO and validity analyses, respectively, for target's key products and patents.

FTO AND VALIDITY ANALYSES

- As part of the diligence, your client may ask you to conduct a freedom-to-operate (FTO) analysis of the target's key products.
- Your client may also ask you to conduct a validity analysis of the target's key patents.
- FTO and validity analyses differ in that:
 - FTO analyses focus on the **present**: unexpired or about-to-issue patents owned by a third party that may cover the key products and thus may subject the acquiror to infringement liability.
 - Validity analyses focus on the **past**: prior art that may render the acquired patents invalid for anticipation, obviousness, and/or double patenting. Section 112 issues also should be assessed.

FTO AND VALIDITY ANALYSES

- FTO and validity analyses are related in that:
 - Prior art identified in a **validity search** can potentially be used to address **FTO concerns**.
 - For example, a prior art reference identified when assessing the validity of the target's patent portfolio may also potentially render a problematic FTO patent anticipated or obvious.

FTO AND VALIDITY ANALYSES

- To search for references relevant to either FTO and validity, consider engaging a third party search service.
- Before pulling the trigger:
 - Ensure that you have **client permission** to share relevant information about the relevant products and patents with the search service.
 - Ensure that the service can conduct the search within the appropriate time and budget constraints.
 - Ensure that you and your team have sufficient time and personnel to review and analyze the results of the search.

FTO AND VALIDITY ANALYSES

- Search strategies will vary depending on technology. Some search strategies include:
 - Keyword searches (including synonyms and aliases)
 - Chemical structures
 - Sequence searches for proteins and nucleic acids
- Search strategies often involve a tradeoff between comprehensiveness and relevance.
 - Broad searches are more likely capture important references.
 - But broad searches also are more likely to include irrelevant references that must be weeded out.

FTO AND VALIDITY ANALYSES

- Certain technologies (e.g., chemical compounds) are more amenable to FTO and validity searching than others (e.g., software), wherein nomenclature is less uniform and the relevant prior art can include materials, such as trade show brochures, that is difficult to find.
- Even well-defined technologies such as chemical compounds may pose challenges. For example:
 - Conducting searches for claims to nucleotide sequences that display “>80% homology” to a specific sequence.
 - Conducting searches for a finished compound that can be made using several potentially patented intermediates.
 - Reviewing search results which include patents that claim large genres of chemical compounds.

FTO AND VALIDITY ANALYSES

- The target may have previously conducted its own FTO and/or validity analyses.
- If the target's FTO and/or validity analyses are not included in the data room, consider asking for them.
 - The target, however, may be unwilling to share in view of a potential waiver of attorney-client privilege.
 - “To take advantage of the common interest doctrine the plaintiffs must still satisfy their burden of proving first that the material is privileged and second that the parties had an identical legal, and not solely commercial, interest.”

Katz v. AT&T Corp., 91 F.R.D. 433 (E.D. Pa. 2000)

REPORTING ISSUES TO CLIENT

- Ask the client before putting anything in writing.
- Do not identify problems in writing without also proposing solutions.
- State clearly any assumptions on which you are relying (e.g., assumed patent priority and expiration dates, assumed construction of relevant patent claims).
- State clearly any limitations on searches conducted (e.g., search strategy and search terms used, date restrictions on search results).
- Identify the legal authority upon which you are relying. If there are ambiguities, note them.

REPORTING ISSUES TO CLIENT

Sample reporting letter:

Loh & Berschadsky LLP

Direct Contact | Jonathan Berschadsky
555-555-1212
JBerschadsky@lohberschadsky.com

November 10, 2024

Acme, Inc.: IP Due Diligence Report on FTO and Patentability

CONFIDENTIAL AND PRIVILEGED ATTORNEY-CLIENT COMMUNICATION

This Memorandum sets forth our evaluation of Acme Inc.'s ("Acme" or the "Company") Freedom-to-Operate (FTO) in the U.S. with its three most advanced therapeutic antibody products (ABC-123, DEF-321 and GHW-555; hereinafter "the Acme Products"), along with a U.S. FTO assessment on two of the three technologies considered essential to Acme's antibody discovery platform (hereinafter "the Acme Platform Technologies"). It also provides our preliminary assessment on whether any of Acme's U.S. patent applications (or international applications designating entry into the U.S.) provide support for the Acme Products and the Acme Platform Technologies, along with a patentability assessment of the claims currently pending in Acme's relevant patent applications to determine the scope of potentially patentable coverage available to the Acme Products and the Acme Platform Technologies.

I. EXECUTIVE SUMMARY

II. SCOPE AND LIMITATIONS OF OUR INVESTIGATION

As a part of this due diligence, Acme's publicly available U.S. and International (PCT) application publications were identified, and then analyzed to determine which applications potentially describe, and preferably claim, the Acme Products and Platform Technologies. Further analysis of these publications was conducted to better understand the nature of the Acme xxxx

REVIEWING DEAL DOCUMENTS

While the structure of a deal may be dictated largely by non-IP concerns, your client may ask you to review and comment on provisions of the deal documents.

Because you will likely be one the few members of the diligence team that is familiar with patents and the relevant technology, your input on those provisions can be particularly valuable.

REVIEWING DEAL DOCUMENTS

Reviewing definitions:

- Non-IP counsel may not have the expertise or familiarity to determine whether definitions in the document match the scope of key patents and products.
- You will thus be uniquely situated to ensure that the definitions are technically accurate and align with your client's interests.
- You should review/revise definitions with an eye to ensuring that they match what your client intends to acquire or transfer as part of the deal.
- Pay close attention to geographic, temporal and field-of-use limitations in the definitions!

REVIEWING DEAL DOCUMENTS

Reviewing IP assignment and licensing provisions:

- Exclusive or non-exclusive assignment or license?
- Geographic scope?
- Right to transfer, license and/or sublicense included?
- Any carve-out of standard patent rights (make, use, sell, offer for sale, distribute, import)?
- Any field-of-use limitations?
- Any reservation of rights by target, successor or third parties?
- **Limitations on an assignment/license can affect standing to sue.**

REVIEWING DEAL DOCUMENTS

Other deal document provisions relevant to patents/IP:

- Ownership of future or joint IP
- Prosecution/litigation responsibilities and cost-sharing
- Key employee/resource sharing
- Representations and warranties
- Non-compete provisions
- Indemnification provisions
- Survival provisions
- Patent/IP schedules

REVIEWING DEAL DOCUMENTS

Following the money:

- Royalties and milestone payments
- Fees associated with transfer of title to technology, e.g. third party pharma/biologics service agreements

PROBLEM SOLVING

A client will not want to hear about a problem without also being presented with a potential solution!

Communicating a problem to a client without proposing a potential solution also may expose the client to liability.

PROBLEM SOLVING

Potential solutions to restrictions on transfer of patent rights, licenses, obligations, to acquiror:

- Novation allowing acquiror to substitute in for target in an existing agreement
- Side agreements
- Written consent to acquisition

PROBLEM SOLVING

Potential solutions to patent claim scope/validity issues:

- Continuation/divisional applications
- Request for continued examination (RCE)
- Reexamination and reissue
 - But look out for potential intervening rights issues!
- Walk away?

PROBLEM SOLVING

Potential solutions to FTO issues:

- Licensing problematic patents
- Obtaining opinion of counsel re non-infringement and/or invalidity
- Pre-grant patent proceedings, e.g., IPRs/PGRs
- Declaratory judgment litigation
- Using representations and warranties and indemnification provisions
- Walk away?

ETHICS CONSIDERATIONS

- **Preserve the confidentiality of the deal until its public announcement.**
 - Follow provisions of all NDAs.
 - Maintain single line of communication.
- **Maintain attorney-client confidentiality.**
 - Against other individuals working on the deal.
 - Against third party search services.
- **Avoid exposing client to liability on potentially negative issues.**
 - Don't write on potentially negative issues unless asked to do so by the client.

ETHICS CONSIDERATIONS

- **Conflicts of Interest in M&A Transactions.**
 - Know who is your client.
 - Joint Representation.
 - Waivers
- **Attorney-Client Privilege.**
 - Disclosure of Confidential Information.
 - Common Interest Rules/Agreements.
 - May depend on forum.
- **Ways to avoid waiving privilege of opinions of counsel.**

QUESTIONS?

2024 NYIPLA TRANSACTIONS BOOTCAMP DAY 3 – AI: DATA, CYBER AND LICENSING ISSUES

Mario Ayoub
Bond, Schoeneck & King
PLLC

Danny Spencer
Freshfields US LLP

Jonathan Berschadsky
Merchant & Gould PC

DISCLAIMER

The opinions herein are those solely of the speakers,
and do not reflect those of the speakers' organizations or clients.

TODAY'S AGENDA

- Privacy in the Age of AI: Adapting Your Website Policies to Stay Compliant
- AI and Cybersecurity: Risks and Recommendations
- IP Issues in AI Licensing

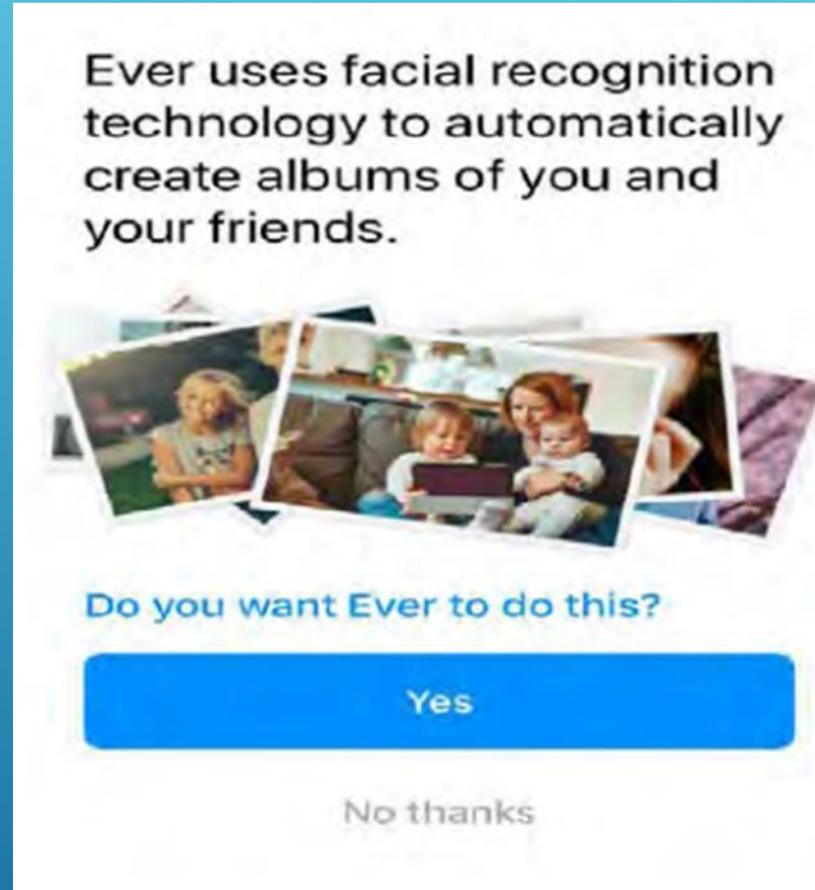
PRIVACY IN THE AGE OF AI: ADAPTING YOUR WEBSITE POLICIES TO STAY COMPLIANT

- **State of the Law**
- **ToU and Privacy Policy Examples**
- **Additional Considerations**
- **Summary of Guiding Principles**

FEDERAL TRADE COMMISSION (FTC): REQUIRES TERMS OF SERVICE TO BE CLEAR AND UNAMBIGUOUS.

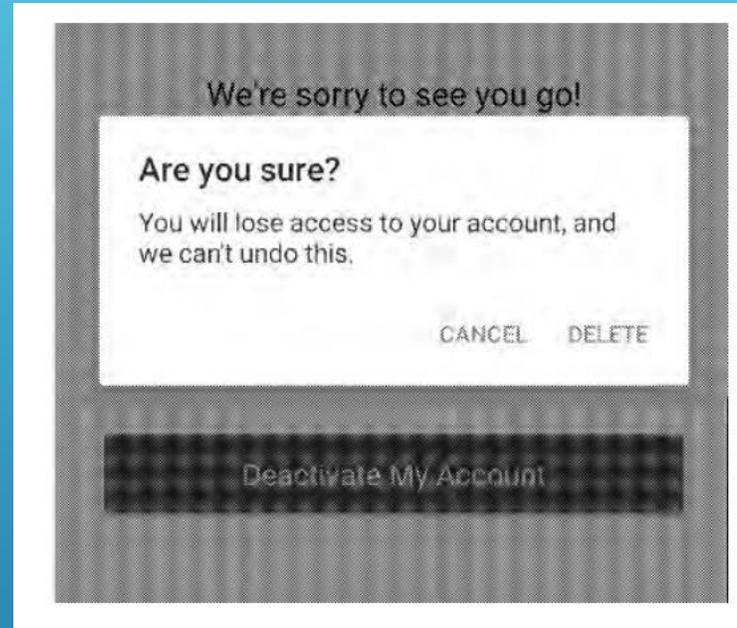
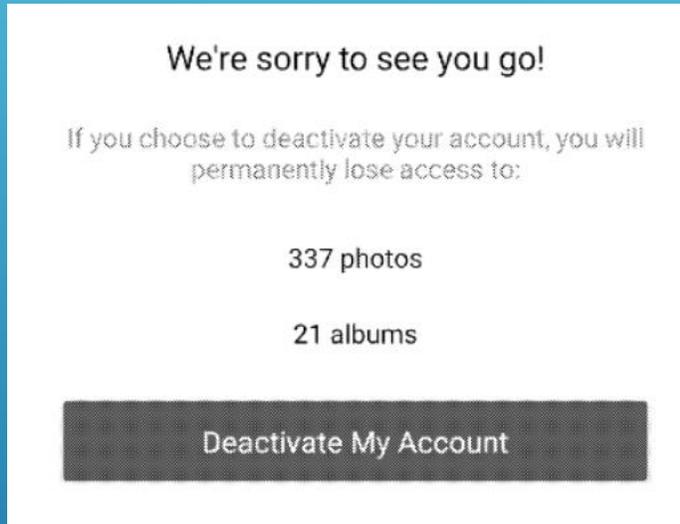
- **“AI (and other) Companies: Quietly Changing Your Terms of Service Could be Unfair or Deceptive”**
- **“It may be unfair or deceptive for a company to adopt more permissive data practices—for example, to start sharing consumers’ data with third parties or using that data for AI training—and to only inform consumers of this change through a surreptitious, retroactive amendment to its terms of service or privacy policy.”**
- **Regarding biometric information, the FTC has stated that it will take a holistic approach to determining if the technology violates Section 5 of the Federal Trade Commission Act.**

FTC: IN THE MATTER OF EVERALBUM, INC.



Count I. Misrepresentation Regarding Ever Users' Ability to Control the Ever App's Face Recognition Feature

FTC: IN THE MATTER OF EVERALBUM, INC.



Count II. Misrepresentation Regarding Deletion of Ever Users' Photos Upon Account Deactivation

FTC: IN THE MATTER OF EVERALBUM, INC.

Notice and Affirmative Express Consent Provision

- ▶ Respondent must “prior to using Biometric Information collected from a User to (1) create a Face Embedding or (2) train, develop, or alter any face recognition model or algorithm, must:
 - ▶ A. Clearly and Conspicuously disclose to the User from whom Respondent has collected the Biometric Information, separate and apart from any “privacy policy,” “terms of use” page, or other similar document, all purposes for which Respondent will use, and to the extent applicable, share, the Biometric Information; and
 - ▶ B. Obtain the affirmative express consent of the User from whom Respondent collected the Biometric Information.”

FTC: IN THE MATTER OF EVERALBUM, INC.

- “Clearly and Conspicuously’ means that a required disclosure is difficult to miss (i.e., easily noticeable) and easily understandable by ordinary consumers, including in all of the following ways:
 - 1. In any communication that is solely visual or solely audible, the disclosure must be made through the same means through which the communication is presented. In any communication made through both visual and audible means, such as a television advertisement, the disclosure must be presented simultaneously in both the visual and audible portions of the communication even if the representation requiring the disclosure (“triggering representation”) is made through only one means.
 - 2. A visual disclosure, by its size, contrast, location, the length of time it appears, and other characteristics, must stand out from any accompanying text or other visual elements so that it is easily noticed, read, and understood.
 - 3. An audible disclosure, including by telephone or streaming video, must be delivered in a volume, speed, and cadence sufficient for ordinary consumers to easily hear and understand it.
 - 4. In any communication using an interactive electronic medium, such as the Internet or software, the disclosure must be unavoidable.
 - 5. The disclosure must use diction and syntax understandable to ordinary consumers and must appear in each language in which the triggering representation appears.
 - 6. The disclosure must comply with these requirements in each medium through which it is received, including all electronic devices and face-to-face communications.
 - 7. The disclosure must not be contradicted or mitigated by, or inconsistent with, anything else in the communication.
 - 8. When the representation or sales practice targets a specific audience, such as children, the elderly, or the terminally ill, “ordinary consumers” includes reasonable members of that group.”

ADDITIONAL FTC CASES & CONSIDERATIONS

- FTC v. Rite Aid Corporation

- “Clear(ly) and Conspicuous(ly)” means that a required disclosure is difficult to miss (i.e., easily noticeable) and easily understandable by ordinary consumers, including in all of the following ways:
 - 1. A visual disclosure, by its size, contrast, location, the length of time it appears, and other characteristics, must stand out from any accompanying text or other visual elements so that it is easily noticed, read, and understood.
 - 2. An audible disclosure, including by telephone or streaming video, must be delivered in a volume, speed, and cadence sufficient for ordinary consumers to easily hear and understand it.
 - 3. In any communication using an interactive electronic medium, such as the Internet or software, the disclosure must be unavoidable.
 - 4. The disclosure must use diction and syntax understandable to ordinary consumers and must appear in English, Spanish, and each other language in which a Covered Business provides signage or other disclosures in the physical location or on the website where the disclosure appears.
 - 5. The disclosure must comply with these requirements in each medium through which it is received, including all electronic devices and face-to-face communications.
 - 6. The disclosure must not be contradicted or mitigated by, or inconsistent with, any other statements or representations in or near the disclosure.
 - 7. When the deployment of an Automated Biometric Security or Surveillance System targets a specific group, such as children, the elderly, or the terminally ill, “ordinary consumers” includes reasonable members of that group.

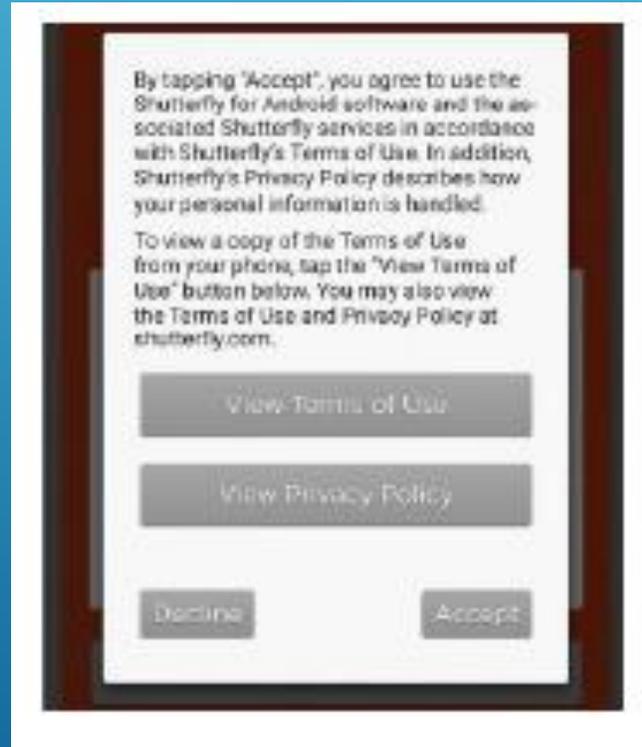
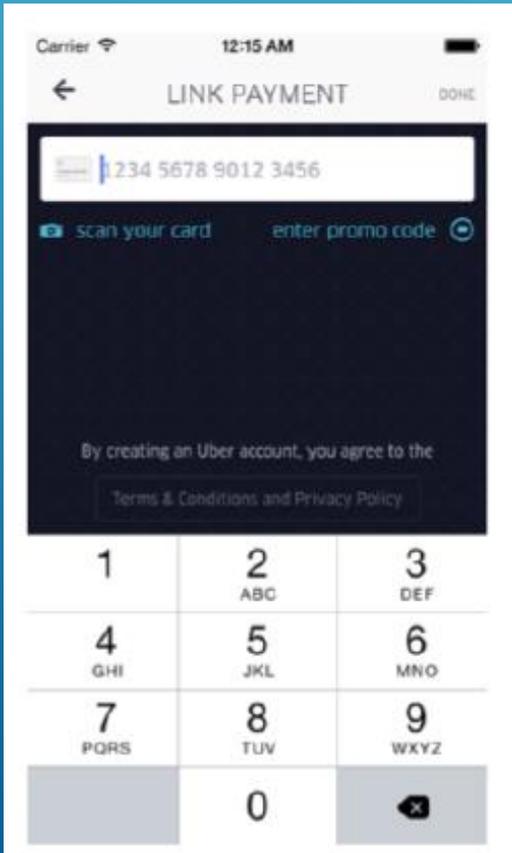
FTC SUMMARY

- ✓ Be clear.
- ✓ Give notice.
- ✓ Give the opportunity to opt out.

CASE LAW: MODIFICATION OF CONTRACT TERMS

- For a modification of terms of service to be enforceable, it should:
 - Be provided with reasonable notice and an opportunity for the user to review it
 - Offer a reasonable opportunity to reject the modification and continue under the existing terms
 - Be enacted after reasonable notice, with the user either accepting the modification (e.g., by clicking "I Agree") or not rejecting it and continuing to benefit from the relationship after the rejection period.

TERMS OF SERVICE MODIFICATION CASE LAW SPECTRUM



Strictly necessary cookies



On

These cookies are essential so that you can move around the website and use its features. Without these cookies services you have asked for cannot be provided.

[See list of strictly necessary cookies](#)

Functional cookies



On

These cookies allow the website to remember choices you make to give you better functionality and personal features.

[See list of functional cookies](#)

Performance cookies



On

These cookies help to improve the performance of BBC Online. If you're a user outside the UK and want to opt-out of advertising cookies, you have to turn-off performance cookies.

[See list of performance cookies](#)



[Read the full Privacy and Cookies Policy](#)

ADD'L CONSIDERATIONS: ILLINOIS BIOMETRIC INFORMATION PRIVACY ACT (BIPA)

BUSINESS

Illinois Facebook users to get 'third and final' check from record \$650 million biometric privacy settlement

- ▶ The plaintiffs:
 - ▶ “allege that the Tag Suggestions program violated BIPA because Facebook did not: ‘[1] properly inform plaintiffs or the class in writing that their biometric identifiers (face geometry) were being generated, collected or stored; [2] properly inform plaintiffs or the class in writing of the specific purpose and length of time for which their biometric identifiers were being collected, stored, and used; [3] provide a publicly available retention schedule and guidelines for permanently destroying the biometric identifiers of plaintiffs and the class (who do not opt-out of 'Tag Suggestions'); and [4] receive a written release from plaintiffs or the class to collect, capture, or otherwise obtain their biometric identifiers.” *In re Facebook Biometric Info. Privacy Litig.*, 185 F. Supp. 3d 1155, 1159 (N.D. Cal. 2016)

ADD'L CONSIDERATIONS: ILLINOIS BIOMETRIC INFORMATION PRIVACY ACT (BIPA) (CONT'D)

- **740 ILCS 14/15 Retention; collection; disclosure; destruction.**

- “(b) No private entity may collect, capture, purchase, receive through trade, or otherwise obtain a person’s or a customer’s biometric identifier or biometric information, unless it first:
 - (1) informs the subject... (2) informs the subject ... and (3) receives a written release...
- (c) No private entity in possession of a biometric identifier or biometric information may sell, lease, trade, or otherwise profit from a person’s or a customer’s biometric identifier or biometric information.” 740 Ill. Comp. Stat. Ann. 14/15
- “§ 15(c) is a flat-out prohibition. See 740 ILCS 14/15(c). In other words, unlike the collection, possession or dissemination of biometric data, no private entity may ‘otherwise profit’ from biometric data even if they inform and obtain permission from the subject. Compare, e.g., 740 ILCS 14/15(d) (allowing dissemination of biometric data with consent from subject), with 740 ILCS 14/15(c) (containing no exceptions).” *Vance v. Microsoft Corp.*, 534 F. Supp. 3d 1301, 1308 (W.D. Wash. 2021).

ADD'L CONSIDERATIONS: BIOMETRIC INFORMATION TERMS OF USE

COURTS

Six Flags Great America agrees to

\$3

SC

Sara

Publis

Freddie Mac Home Single-Family Division Multifamily Division Capital Markets Division Renters, Buyers and Owners

Freddie Mac

About Our Business Research & Perspectives Media Room Careers Search Q

HOME / TERMS AND CONDITIONS

Freddie Mac Biometric Information Privacy Policy

For security and similar purposes, Freddie Mac uses various tools that capture biometric information from certain individuals seeking entry to our facilities or particular areas within our facilities. For purposes of this policy, "biometric information" is data derived from an individuals' biometric identifiers, such as a fingerprint, handprint, voiceprint, retina or iris pattern, face geometry, or other unique biological pattern or characteristic that is used to identify a specific individual. Biometric information does not include photographs or audio or visual recordings.

As of the Revision Effective Date of this policy, as noted below, Freddie Mac only captures biometric information from employees, on-site contractors, and other individuals who work for or with Freddie Mac. The captured biometric information is derived from facial, fingerprint, or handprint scans. The scanned image is analyzed by software that identifies major features of the face, fingerprint, or handprint and converts those features into a mathematical code that, to the best of our knowledge, cannot be reverse-engineered or converted back to the scanned image. We do not retain the scanned image itself, and we only use it to create this mathematical code. Only the mathematical code is retained. This mathematical code is biometric information for purposes of this policy and we collect, retain and use it as follows:

- Terms and Conditions
- Linking Policy
- Privacy Policy
- State Privacy Notices
- Biometric Information Privacy Policy**

ADD'L CONSIDERATIONS: MISC.

- Data privacy laws (e.g., California, Colorado, Connecticut, Florida, Illinois, Montana, Oregon, Texas, Utah, Virginia, Washington, and the European Union)
 - ▶ right to opt-out of the processing of personal data for advertising or sales.
- Violation of the Right of Publicity
- State Deceptive Trade Practice and/or Unfair Competition Laws

GUIDING PRINCIPLES

- ▶ Clearly inform users what company can and cannot do.
- ▶ Clearly inform users of their rights.
- ▶ Clear grant to license to third parties for commercial purposes
- ▶ Ability to opt out
- ▶ More explicit and unambiguous consent to ToU and Privacy Policy
- ▶ Scroll through terms
- ▶ Notifications of change through pop-ups, e-mail, and icon (3-prong notification)
- ▶ Separate Biometric Privacy Policy

AI AND CYBERSECURITY - OVERVIEW

- Understanding Cybersecurity Risks
- Legal Landscape
- Emerging AI Cybersecurity Frameworks
- Recommendations for Safely Implementing AI Systems

AI CYBERSECURITY RISKS

Exposure and Theft of Nonpublic Information.

- AI tools rely on vast troves of high-quality data to deliver accurate and detailed insights.
- ChatGPT is trained on 570GB of data pulled from books, web texts, and articles.
- Aside from training data, many generative AI tools will collect and retain user prompts and conversation history.
- Reliance on big data introduces risks of unauthorized disclosure data in transit and at rest.

Example: ChatGPT Security Breach.

- OpenAI discovered a data breach in March 2024
- Threat actor was able to access specific user prompts, chat history, and some users' financial account information.
- Vulnerability traced to OpenAI's vendor, Redis, a data platform that caches user information and manages user requests.

AI CYBERSECURITY RISKS

Third Party and Vendor Vulnerabilities.

- **October 2024 NY DFS Industry Letter:** “Supply chain vulnerabilities represent another critical area of concern for organizations using AI or a product that incorporates AI. AI-powered tools and applications depend heavily on the collection and maintenance of vast amounts of data. The process of gathering that data frequently involves working with vendors and Third-Party Service Providers (“TPSPs”). Each link in this supply chain introduces potential security vulnerabilities that can be exploited by threat actors. As a result, any TPSP, vendor, or supplier, if compromised by a cybersecurity incident, could expose an entity’s NPI and become a gateway for broader attacks on that entity’s network, as well as all other entities in the supply chain.”

AI CYBERSECURITY RISKS

AI Model and IP Theft.

- Entities that develop proprietary AI models may be subject to IP theft.
- The theft of AI models and proprietary algorithms is a lucrative target for insiders and competitors.
- Threat actors may include state-sponsored actors or disgruntled employees that already enjoy unfettered access to sensitive information.

Example: Tesla Settles Lawsuit Against Engineer Who Stole Autopilot Source Code (2021).

- Tesla claimed that an engineer downloaded its autopilot code to his personal device before leaving the company to join Xpeng, a Chinese Competitor.
- As part of the settlement agreement, the engineer agreed to pay Tesla an undisclosed amount.

AI CYBERSECURITY RISKS

Social Engineering.

- A type of attack that uses psychological manipulation to trick a victim into giving away sensitive information or performing a dangerous action. (e.g. phishing email campaigns)
- AI has been used to generate deepfake video and audio to solicit IT access credentials and payments.
- **Example:** In February 2024, finance worker at a multinational firm was tricked into paying out \$25 million to fraudsters using deepfake technology to pose as the company's chief financial officer in a video conference call.

AI-Enhanced Cyber Attacks.

- AI can amplify the potency, scale, and speed of existing types of cyberattacks.
- Threat actors can use AI quickly and efficiently to identify and exploit security vulnerabilities, often allowing threat actors to access more information systems at a faster rate.

LEGAL LANDSCAPE

October 2023 Executive Order. The Biden administration tasked certain federal agencies with the following tasks:

- Launch an initiative to create guidance and benchmarks for evaluating and auditing AI capabilities, with a focus on capabilities through which AI could cause harm, such as in the areas of cybersecurity and biosecurity.
- Establish standards requiring companies developing AI models to include cybersecurity protections to assure the integrity of model training against sophisticated threats.
- Develop guidance for best practice for financial institutions to manage AI-specific cybersecurity risks.
- Introduce training standards for responsible use of generative AI that addresses cybersecurity, privacy, and data protection.

LEGAL LANDSCAPE

New York Stop Hack's and Stop Hacks and Improve Electronic Data Security Act (SHIELD Act)

- The SHIELD Act requires any person or business that maintains private information to adopt administrative, technical, and physical safeguards.
- **Administrative Safeguards:**
 - Identifying reasonably foreseeable internal and external risks
 - Assessing the sufficiency of safeguards in place to control the identified risks
 - Training and managing employees in the security program's practices and procedures
 - Adjusting the security program in light of business changes or new circumstances
 - Selecting service providers capable of maintaining appropriate safeguards and requiring those safeguards by contract.

LEGAL LANDSCAPE

SHIELD Act Continued.

- **Technical Safeguards**

- Assessing risks in network and software design
- Assessing risks in information processing, transmission and storage
- Detecting, preventing, and responding to attacks or system failures
- Regularly testing and monitoring the effectiveness of key controls, systems, and procedures

- **Physical Safeguards.**

- Assessing risks of information storage and disposal
- Detecting, preventing, and responding to intrusions
- Protecting against unauthorized access to or use of private Information during or after the collection, transportation, and destruction or disposal of information
- Disposing of private information within a reasonable amount of time after it is no longer needed

SECURITY FRAMEWORKS

NIST – Guidelines for Secure AI Development (2024).

1. Design Stage:

- **Understanding Risks and Threat Modelling:** Emphasizes the importance of raising staff awareness about threats and risks. System owners and senior leaders should understand threats to secure AI and their mitigations. Data scientists and developers should maintain awareness of relevant security threats and help risk owners make informed decisions.
- **Secure Design:** Focuses on designing systems for security alongside functionality and performance. This includes considering supply chain security, appropriate AI-specific design choices, and implementing scanning and isolation when importing third-party models or serialized weights.

2. Development Stage:

- **Supply Chain Security:** Assess and monitor the security of AI supply chains across the system's life cycle. Acquire and maintain well-secured and well-documented hardware and software components from verified sources.
- **Asset and Technical Debt Management:** Identify, track, and protect AI-related assets, including models, data, software, and documentation. Manage technical debt throughout the AI system's life cycle.

SECURITY FRAMEWORKS

NIST – Guidelines for Secure AI Development (2024).

3. Deployment Stage:

- **Protecting Infrastructure and Models:** Apply good infrastructure security principles and appropriate access controls to APIs, models, and data. Protect models and data from direct and indirect access by implementing standard cybersecurity best practices.
- **Incident Management:** Develop incident management procedures that reflect different scenarios and are regularly reassessed. Provide high-quality audit logs and other security features to customers and users.

4. Operation and Maintenance Stage:

- **Monitoring and Logging:** Monitor system behavior and inputs to observe changes affecting security. Follow a secure-by-design approach to updates and participate in information-sharing communities to share best practices.
- **Responsible Release:** Release models, applications, or systems only after appropriate security evaluation. Provide users with guidance on the appropriate use of the model or system, highlighting limitations and potential failure modes.

SECURITY FRAMEWORKS

CISA – Deploying AI Systems Securely (2024).

1. Secure the Deployment Environment:

- **Governance:** Ensure the IT environment applies sound security principles, such as robust governance, well-designed architecture, and secure configurations. Identify roles and responsibilities for each stakeholder and ensure the AI system fits within the IT environment's security boundaries.
- **Architecture:** Establish security protections for the boundaries between the IT environment and the AI system. Apply secure by design principles and Zero Trust (ZT) frameworks to manage risks.
- **Configurations:** Apply existing security best practices to the deployment environment, such as sandboxing, monitoring the network, configuring firewalls, and securing sensitive AI information.

2. Continuously Protect the AI System:

- **Validation:** Use cryptographic methods, digital signatures, and checksums to confirm each artifact's origin and integrity. Thoroughly test the AI model for robustness, accuracy, and potential vulnerabilities.
- **Monitoring:** Collect logs to cover inputs, outputs, intermediate states, and errors. Monitor the model's architecture and configuration settings for unauthorized changes.
- **API Security:** Secure exposed APIs by implementing authentication and authorization mechanisms, using secure protocols, and validating input data.

SECURITY FRAMEWORKS

CISA – Deploying AI Systems Securely (2024).

3. Secure AI Operation and Maintenance:

- **Access Controls:** Enforce strict access controls, such as role-based access controls or attribute-based access controls, and require multifactor authentication (MFA) for administrative access.
- **User Awareness:** Educate users, administrators, and developers about security best practices and promote a security-aware culture.
- **Audits and Testing:** Engage external security experts to conduct audits and penetration testing on ready-to-deploy AI systems.
- **Logging and Monitoring:** Implement robust logging and monitoring mechanisms to detect abnormal behavior or potential security incidents.
- **Updates and Patches:** Regularly update and patch the AI system to ensure accuracy, performance, and security.

SAFELY IMPLEMENTING AI SYSTEMS

- Start with a cyber risk assessment.
- Examine existing data governance policies to determine whether updates are needed.
- Create an AI acceptable use policy that addresses at least the following items:
 - Treatment of personally identifiable information/company proprietary information
 - Access controls
 - Clear guidelines regarding the use of approved AI tools
 - Enforcement and disciplinary procedures for inappropriate use of AI tools and/or improper disclosure of data
- If purchasing/licensing an AI tool from a vendor:
 - Request and review security documentation (SOC attestations, risk assessments, certifications)
 - Execute a data processing agreement in addition to the licensing agreement to clearly establish cybersecurity safeguards/data ownership/use restrictions.
 - Conduct an annual risk assessment for all vendors.
- If developing an AI tool in-house or with a contract developer:
 - Align development with NIST and CISA guidance
 - Clearly articulate cybersecurity requirements with developers and memorialize these requirements in the development agreement.
 - Establish a regular process to test the AI model after deployment and conduct risk assessments annually and after any security incident.

AI TRANSACTIONS – AN OVERVIEW

Many types of AI transactions:

- M&A / investments, JVs, collaborations and development arrangements, licensing, etc.

Today's focus:

- Key IP considerations in AI licensing deals
 - IP ownership
 - Infringement
 - Contractual risk allocation

AI LICENSING – THE TYPICAL ‘PRODUCT’

- AI provider makes its AI model available to customers
- Customer input data is processed by model, which produces output – words, images, video, music, software, etc.



- Who owns what?
 - R&D – patents
 - Most systems – copyright and rights in data

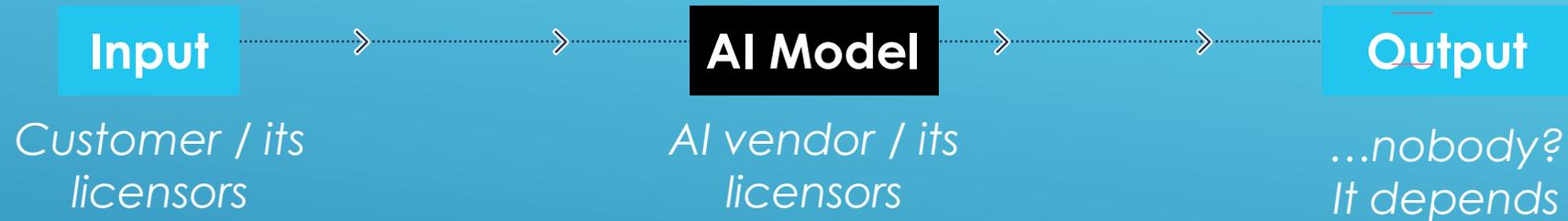
AI LICENSING – COPYRIGHT OWNERSHIP

Default rules – Copyright Act of 1976:

- Copyright protects original works of authorship fixed in any tangible medium of expression – ideas not protected
- Initial ownership vests in author – human author requirement
- Copyright ownership distinct from ownership of embodiment
- Ownership transferred by writing signed by conveyor

AI LICENSING – COPYRIGHT OWNERSHIP

Applied to our typical product:



Output:

- Who's the author?
- *Thaler v. Perlmutter* (2023): no copyright in AI-generated work
- Copyright Office guidance:
 - Need sufficient degree of human involvement – e.g. in creative arrangements or modifications
 - Copyright can protect human-authored aspects of work
- Rules differ outside US!

AI LICENSING – COPYRIGHT OWNERSHIP

What should your AI licensing contract include?

- Express assignment of ownership of output and related IP rights to customer
- License from customer to vendor to use input and output:
 - to provide the service
 - to train the AI model
- Data retention: anonymized / de-identified / aggregated?

AI LICENSING – INFRINGEMENT RISK

Infringement risk:

- Input, output and model itself could all infringe third party rights
- Customer's output risk enhanced by:
 - training data
 - black box system
- Fair use / text and data mining exceptions / webscraping

Contractual risk allocation:

- Depends what you can negotiate!
- Often...
 - Customer bears infringement risk relating to input and output
 - Vendor may bear infringement risk relating to model itself

AI LICENSING – OTHER IP CONSIDERATIONS



QUESTIONS?

JESSICA L. LIPSON
212.735.8683 - jlipson@morrisoncohen.com
Partner & Co-Chair, Technology, Data & IP

Jessica Lipson's practice focuses on technology transactions, transactional intellectual property work and privacy and data security matters.

Jessica helps her clients to understand and mitigate the risks of using third party technology and engaging with technology vendors, manage and enforce their domestic and foreign trademark portfolios, acquire and implement technology and intellectual property assets, transfer technology to outsourced vendors, understand and address the risks and compliance obligations pursuant to the myriad privacy and data security laws in the U.S. and abroad (including the CCPA and GDPR), and monetize their technology, data and intellectual property assets.

Jessica represents clients in a broad variety of industries, including Internet/e-commerce, software and online services, digital assets, entertainment, banking and financial services, consumer products, pet care, accounting, manufacturing, retail, travel, IT and others.

Jessica is able to communicate with legal, business and technical teams with equal ease, facilitating the conversations required for all subject matter experts to understand the data compliance obligations imposed on their business and allowing a better and more seamless implementation of compliance efforts. Given her engineering background, she can also seamlessly discuss technology issues and the details of statements of work with her clients, to help them achieve desired outcomes in their contracting process with minimal disruption or delay. As part of mergers and acquisitions, financing and private equity transactions, Jessica brings unparalleled advice that is not only practical, but also insightful and efficient, to minimize deal delays and keep costs for the transaction within expected parameters.

As a chemical engineer with a minor in environmental engineering, Jessica is keenly interested in technology and all of its applications, including artificial intelligence (not only the generative kind, but also all other technology that is designed to mimic human thought or human-like decision-making and problem-solving), robotics, the internet, communication, innovative software applications, quantum computing, energy, clean technologies and all other ways of transferring scientific knowledge to practical use.

Jessica is a member of the firm's diversity and Mansfield certification committees, and co-leads the firm's Women's Initiative Network. She also mentors associates through the firm's formal mentorship program (as well as her own team, more informally).

Prior to joining Morrison Cohen, Jessica practiced as a technology lawyer with Proskauer Rose LLP, Baker & McKenzie LLP and Morgan Lewis & Bockius LLP.

ETHICAL USE OF GENERATIVE AI

Jessica L. Lipson Esq.
Partner, Morrison Cohen, LLP
for NYIPLA's 2024 IP Transactions Bootcamp

ABA Formal Opinion 512 – July 29, 2024

- First, and highly anticipated opinion from the ABA on Gen AI.
- New York Bar Taskforce on Artificial Intelligence has also issued its own recommendations to the NYS Bar, following similar protocols and advice.

Ethical duties when using Gen AI

- Competence
- Confidentiality
- Communication
- Supervision
- Fees/Billing

Duty of Competence

- Rule 1.1 requires a lawyer to provide competent representation to its clients.
- Requires the legal knowledge, skill, thoroughness and preparation reasonably necessary.
- As it pertains to use of Gen AI:
 - Understand benefits and risks associated with the technology we use.
 - Don't need to be an expert, but need a reasonable understanding of capabilities and limitations.
 - Not static - need to stay up to date. Ongoing effort.
- In practice:
 - Gen AI is not a source of truth.
 - Gen AI hallucinates and picks up incorrect information.
 - Potential for bias.
 - NEED TO CONFIRM OUTPUT IS ACCURATE BEFORE USE.
 - WE ARE ULTIMATELY RESPONSIBLE FOR LEGAL ADVICE GIVEN. CANNOT RELY ON MACHINES.
 - MUST MAKE DECISION, USING OUR OWN INDEPENDENT LEGAL JUDGEMENT, AS TO WHEN TO USE GEN AI FOR A TASK.

Confidentiality

- Rule 1.6 states that a lawyer must protect the confidentiality of client information.
- Gen AI presents risk of disclosure, if client information used as prompts.
- Opinion cautions against use of Gen AI even within our own firms, if there are ethical walls in place with other attorneys.
- ABA suggests we may need to get client “informed consent” (ethical standard for any disclosure of confidential information) to use of these tools.
- In practice:
 - Engagement letter disclosures are NOT informed consent, even if client signs agreement.
 - Need to understand terms of use and privacy policy of the tool used.
 - Need to understand risks of inputting data into the Gen AI system, and how that input might become output for another.
 - Talk to experts to understand risks.
 - Need to explain risks to clients, so they understand, before consent is given.

Communications with Clients

- Rule 1.4 requires that lawyers consult with clients about the means by which the client's objectives are to be accomplished.
- We must explain the matter to the client to the extent reasonably necessary to permit the client to make informed decisions about the presentation.
- In practice:
 - Cannot hide use of Gen AI tools from client, if they ask.
 - If inputting client confidential information, must get client informed consent first.
 - Might be required to affirmatively disclose use of Gen AI, if appropriate. When appropriate?
 - Client's needs and expectations
 - The scope of representation
 - Sensitive of information
 - How useful or important will Gen AI be to the particular task
 - Significance of the task to the overall representation
 - How the Gen AI tool will process the client's information
 - The extent to which knowledge of the lawyer's use of Gen AI tool will affect the client's evaluation of, or confidence in the lawyer

Communications with the Court

- Rule 3.1 states that a lawyer cannot bring or defend a proceeding or assert or controvert an issue in a proceeding, unless there is a basis in law or fact for doing so.
- Rule 3.1 also prohibits asserting material factual statements that are false.
- Rule 3.3 also prohibits lawyers from knowingly making false statements of law or fact to a court, or fail to correct a material false statement already made.
- Rule 8.4 states that a lawyer cannot engage in conduct involving dishonestly, fraud, deceit or misrepresentation.
- ABA opinion states that even unintentional misstatements to a court can involve a misrepresentation, under the rules.
- Avianca case - lawyers sanctioned for submitting false citations in brief.
- California State Bar has also issued opinion stating that lawyers must review and confirm accuracy of submittals to court.
- NJ Supreme Court also issued guidance in January 2024, requiring that lawyers verify information generated by Gen AI tools is accurate, prior to submitting to a court.

Duty of Supervision

- Rules 5.1 and 5.3 require that lawyers and the firms they work in to supervise non-lawyers and junior lawyers who work for them.
- ABA opinion makes clear that this includes the technology they use.
- Opinion also draws the conclusion that law firms must establish clear policies regarding the firm's use of Gen AI, and enforce them.
- According to opinion, it is a lawyer's job to:
 - Ensure Gen AI tool is properly confirmed to preserve confidentiality and security of data.
 - Investigate the reliability, security and limitations of the Gen AI tool.
 - Determine whether the tool retains information submitted by the lawyer after the lawyer is done processing the information.
 - Understand the risks that Gen AI tools are likely target of threat actor attacks.

Fees

- Rule 1.5(a) requires that lawyer's fees be non-excessive or illegal.
- Rule 1.5(b) requires us to communicate to the client the basis on which we base our fees and expenses.
- In practice:
 - Consider if your fees are excessive, based on the time and effort required to perform the work.
 - Consider what other similarly situated firms/lawyers charge for similar work in your area.
 - Consider the benefit the client received from the representation.
 - Disclose the use of Gen AI tools prior to beginning representation.
 - Do not charge fees for time not spent, when billing hourly.
 - On fixed fee arrangements, still can't overbill, based on level of effort. Fee still needs to be reasonable under the circumstances.
 - Can charge for use of the Gen AI tool (like we do for Lexis/Westlaw), so long as its done without markup and the fee is reasonable, and not considered "overhead" (e.g., maintaining a library, utilities, insurance, etc.).

Conclusion

- We are ultimately responsible for the work performed, and to make sure the client understands what we need to do, and how we do it.
- Need to understand the risks of using the technology and the terms/privacy policy.
- Can't input any client confidential information without client's informed consent under most circumstances.
- Need to discuss use of Gen AI with clients. Might need to get consent, if inputting confidential info or using it in a substantive way.
- Need to be sure the output is accurate, so we don't mislead courts or opponents, make false statements or claims.
- Some courts require disclosure of use of Gen AI. Check your local court's rules!
- Need to ensure output is accurate and use independent legal judgement to supervise that work, just like you would the work of a junior attorney.
- Fees must be reasonable, and client needs to understand how they were arrived at.

Thank you!

Bio:

- Jessica is a Tech Transactions, Privacy/Data Security and Intellectual Property attorney with extensive experience working with technology and technology clients. She is a chemical and environmental engineer by training, and has worked in technology related fields for nearly 30 years, including nearly 20 years as an attorney. She is the head of the transactional Tech Transactions, Privacy/Data Security and Intellectual Property practices at Morrison Cohen, LLP, a mid sized law firm in New York City, where she has been practicing law for over 12 years.
- Jessica's full bio can be found at: <https://www.morrisoncohen.com/professionals/jlipson>
- She can be reached at: Jlipson@MorrisonCohen.com or 212-735-8683.



Patent Docs

August 19, 2024

ABA Issues Formal Ethics Opinion on Use of Generative AI Tools

By Joshua Rich --

Following in the footsteps of the U.S. Patent and Trademark Office^[1] and the state bars of California,^[2] Florida,^[3] New Jersey,^[4] New York,^[5] and Pennsylvania,^[6] the American Bar Association has weighed in on attorney's ethical use of Generative AI (GAI) tools with a formal ethics opinion entitled "Generative Artificial Intelligence Tools."^[7] The ABA opinion highlights many of the same ethical rules as the previous guidance, opinions, and reports, but from a different perspective. As a result, it identifies issues and proposes ethical requirements slightly different from others. And while the ABA's suggested steps for discharging ethical obligations are not binding on any attorney, the concerns are universal and the suggested steps likely to be persuasive if complications arise.



Unlike the other guidance, the ABA formal opinion is limited to ethical considerations arising out of generative AI. The ABA recognizes that lawyers are already using AI in many contexts, ranging from legal research to technology-assisted document review to contract analytics. There are ethical issues that arise in those other contexts, but they are different from those that relate to GAI. Further, the opinion recognizes that the guidance would need to be updated as technology develops, "anticipat[ing] that [the ABA] Committee and state and local bar association ethics committees will likely offer updated guidance on professional conduct issues relevant to specific GAI tools as they develop."^[8]

The ABA opinion starts where the Model Rules do, with the duty of competence.^[9] There are three ways that the use of GAI implicates the duty of competence: knowing the GAI tools available to be used, understanding the capabilities and liabilities of any GAI tool the lawyer chooses to use, and ensuring that use of the GAI tool does not return inaccurate information.

On the first issue, knowledge of available GAI tools, the opinion counsels that:

[E]ven in the absence of an expectation for lawyers to use GAI tools as a matter of course, lawyers should become aware of the GAI tools relevant to their work so that they can make an informed decision, as a matter of professional judgment, whether to avail themselves of these tools or to conduct their work by other means. . . . Ultimately, any informed decision about whether to employ a GAI tool must consider the client's interests and objectives.^[10]

That is, lawyers cannot remain competent by simply ignore the possible use of GAI tools; they must learn whether such a tool is reasonably necessary for their client's work.

Once lawyers decide to use a GAI tool, they must understand the tool well enough to be able to explain it to clients, to allow them to make an informed decision whether the tool should be used for their project.

This means that lawyers should either acquire a reasonable understanding of the benefits and risks of the GAI tools that they employ in their practices or draw on the expertise of others who can provide guidance about the relevant GAI tool's capabilities and limitations. This is not a static undertaking. Given the fast-paced evolution of GAI tools, technological competence presupposes that lawyers remain vigilant about the tools' benefits and risks. Although there is no single right way to keep up with GAI developments, lawyers should consider reading about GAI tools targeted at the legal profession, attending relevant continuing legal education programs, and, as noted above, consulting others who are proficient in GAI technology.^[11]

For most lawyers, this means they will have to continually ensure they understand the benefits and risks of not only the technology they are currently using, but also updates and new tools. GAI tools will therefore add to the educational burden borne by lawyers.

Finally, the ABA's opinion highlights one of the most notorious risks of using a GAI tool, providing inaccurate responses such as "hallucinations" that would lead to incorrect legal advice or made up citations submitted to courts. The formal opinion asserts that lawyers must engage in "an appropriate degree of independent verification or review of [the] output," with the level of review dependent on the tool and task being performed.^[12] For submission to a court or critical advice, careful review of every citation and statement would be in order;^[13] for basic letters or other less important work, less effort might be needed.

The opinion next addresses the duty of confidentiality, perhaps the most acute concern for most lawyers in using GAI tools. All of the previous guidance identifies the risk of submitting a client's confidential information in prompts, which may run afoul of a lawyer's duty to avoid disclosure of such information. That is, client information included in a GAI tool prompt is put in the hands of the GAI tool model, and may be used to teach the model and get disclosed to others. But the opinion emphasizes another ethical risk unique to law firms: potential disclosure or use within the firm of one client's information for the benefit of another. The opinion identifies considerations that lawyers must consider in both situations, as well as how to discharge the related ethical duties.

As a general matter, a lawyer must first determine if client information will be adequately protected from disclosure. "In considering whether information relating to any representation is adequately protected, lawyers must assess the likelihood of disclosure and unauthorized access, the sensitivity of the information, the difficulty of implementing safeguards, and the extent to which safeguards negatively impact the lawyer's ability to represent the client."^[14] Those considerations intersect with the duty of competence, as a lawyer must understand the GAI tool and associated issues to evaluate those considerations.

The novel concern addressed in the opinion is intra-firm disclosure of client confidences through the use of a GAI tool. The opinion sees no way to avoid such disclosure (as long as the firm uses the tool on more than one client's projects) and, instead, suggests that lawyers obtain informed consent for such potential disclosure from clients:

[A GAI tool] may disclose information relating to the representation to persons in the firm (1) who either are prohibited from access to said information because of an ethical wall or (2) who could inadvertently use the information from one client to help another client, not understanding that the lawyer is revealing client confidences. Accordingly, because many of today's self-learning GAI tools are designed so that their output could lead directly or indirectly to the disclosure of information relating to the representation of a client, a client's informed consent is required prior to inputting information relating to the representation into such a GAI tool.^[15]

Of course, if client confidences are segregated within a GAI tool, the risk of disclosure dissipates; using the tool in that way, however, severely limits the benefits of the tool. More likely, the lawyer will have to obtain the client's informed consent to a potential disclosure through use of the GAI tool. In either circumstance, however, under the duty to reasonably consult with the client, "clients would need to be informed in advance, and to give informed consent, if the lawyer proposes to input information relating to the representation into the GAI tool."^[16]

For the consent to be informed, the client must have the lawyer's best judgment about why the GAI tool is being used, the extent of and specific information about the risk, including particulars about the kinds of client information that will be disclosed, the ways in which others might use the information against the client's interests, and a clear explanation of the GAI tool's benefits to the representation. Part of informed consent requires the lawyer to explain the extent of the risk that later users or beneficiaries of the GAI tool will have access to information relating to the representation. To obtain informed consent when using a GAI tool, merely adding

general, boiler-plate provisions to engagement letters purporting to authorize the lawyer to use GAI is not sufficient.[17]

In order to provide the fulsome explanation necessary to obtain informed consent, a lawyer will have become educated about the specific GAI tool, at least in terms of the legal obligations related to access to information:

As a baseline, all lawyers should read and understand the Terms of Use, privacy policy, and related contractual terms and policies of any GAI tool they use to learn who has access to the information that the lawyer inputs into the tool or consult with a colleague or external expert who has read and analyzed those terms and policies. Lawyers may need to consult with IT professionals or cyber security experts to fully understand these terms and policies as well as the manner in which GAI tools utilize information.[18]

This required self-education is not unlike that which a lawyer must undertake in other situations where they entrust data to supervised personnel or third parties. They must also establish clear policies for permissible use of GAI and take reasonable steps to ensure compliance with those policies (and all professional obligations) by subordinate lawyers, other firm personnel, and third parties.[19]

Finally, the opinion raises potential effects that GAI tools may have on the reasonableness of fees charged. Lawyers charging an hourly rate must bill only their actual time worked; they cannot "value bill" for the efficiency realized through use of a GAI tool. Even if the lawyer charges a flat fee, if the use of a GAI tool avoids all or nearly all work, the fee may be unreasonable. And charging the client for the use of a GAI tool may not be ethical. "To the extent a particular tool or service functions similarly to equipping and maintaining a legal practice, a lawyer should consider its cost to be overhead and not charge the client for its cost absent a contrary disclosure to the client in advance." [20] And a lawyer cannot charge for all of the education needed to learn about the GAI tool and other issues necessary to obtain informed consent from the client.

In short, the ABA formal opinion points out the many potential ethical pitfalls that arise out of the use of a GAI tool. But the opinion also provides some guidance on how to avoid those pitfalls. As tools develop and become better integrated into law firm practice, the requirements set forth in the opinion should become less burdensome and easier to meet.

[1] "Guidance on Use of Artificial Intelligence-Based Tools in Practice Before the United States Patent and Trademark Office," 89 Fed. Reg. 25,609 (Apr. 11, 2024). An outstanding discussion of the PTO's Guidance is available at <https://www.patentdocs.org/2024/04/the-usptos-guidance-on-use-of-ai-based-tools-in-practice.html>.

[2] State Bar of Cal. Standing Comm. On Prof'l Resp. & Conduct, "Practical Guidance for the Use of Generative Artificial Intelligence in the Practice of Law" (2023), available at <https://www.calbar.ca.gov/Portals/0/documents/ethics/Generative-AI-Practical-Guidance.pdf>.

[3] Fla. State Bar Ass'n, Prof'l Ethics Comm., Op. 24-1 (Jan. 19, 2024), available at <https://www.floridabar.org/etopinions/opinion-24-1/>.

[4] NJ S. Ct. Comm. on AI & the Cts., "Preliminary Guidelines on New Jersey Lawyers' Use of Artificial Intelligence" (Jan. 24, 2024), available at <https://www.njcourts.gov/sites/default/files/notices/2024/01/n240125a.pdf?cb=aac0e368>.

[5] NY State Bar Ass'n Task Force on Artificial Intelligence, "Report and Recommendations of the New York State Bar Association Task Force on Artificial Intelligence" (Apr. 6, 2024), available at <https://nysba.org/app/uploads/2022/03/2024-April-Report-and-Recommendations-of-the-Task-Force-on-Artificial-Intelligence.pdf>.

[6] Pa. State Bar Ass'n Comm. on Legal Ethics & Prof'l Resp. & Philadelphia Bar Ass'n Prof'l Guidance Comm., Joint Formal Op. 2024-200 "Ethical Issues Regarding the Use of Artificial Intelligence," (May 22, 2024), available

at

<https://www.pabar.org/Members/catalogs/Ethics%20Opinions/Formal/Joint%20Formal%20Opinion%202024-200.pdf>.

[7] Am. Bar Ass'n Standing Comm. on Ethics & Prof'l Resp., "Generative Artificial Intelligence Tools" Formal Op. 512 (July 29, 2024), available at

https://www.americanbar.org/content/dam/aba/administrative/professional_responsibility/ethics-opinions/aba-formal-opinion-512.pdf.

[8] ABA Formal Op. 512, p. 2.

[9] See Model Rules R. 1.1.

[10] ABA Formal Op. 512, p. 5.

[11] ABA Formal Op. 512, p. 3.

[12] ABA Formal Op. 512, p. 4.

[13] As the opinion points out, submission of information to a tribunal that has been provided by a GAI tool also implicates Model Rules 3.1, 3.3, and 8.4(c). ABA Model Op. 512, p. 9-10. The same duties would apply with regard to submissions to the USPTO.

[14] ABA Formal Op. 512, p. 6.

[15] ABA Formal Op. 512, p. 7.

[16] ABA Formal Op. 512, p. 8 (citing Model Rules of Prof'l Conduct R. 1.4). Even if no client information will be inputted, the client must be informed that a GAI tool is used if it asks.

[17] ABA Formal Op. 512, p. 7.

[18] ABA Formal Op. 512, p. 7.

[19] ABA Formal Op. 512, p. 10-11 (citing Model Rules of Prof'l Conduct R. 5.1, 5.3).

[20] ABA Formal Op. 512, p. 13.

Posted at 10:04 PM in [Artificial Intelligence](#) | [Permalink](#)

Comments

Clear as mud.

Posted by: skeptical | [August 25, 2024 at 03:35 PM](#)

Verify your Comment

Previewing your Comment

Posted by: |

This is only a preview. Your comment has not yet been posted.



Your comment could not be posted. Error type:

Your comment has been saved. Comments are moderated and will not appear until approved by the author. [Post another comment](#)

The letters and numbers you entered did not match the image. Please try again.

As a final step before posting your comment, enter the letters and numbers you see in the image below. This prevents automated programs from posting comments.

Having trouble reading this image? [View an alternate.](#)



AMERICAN BAR ASSOCIATION

STANDING COMMITTEE ON ETHICS AND PROFESSIONAL RESPONSIBILITY

Formal Opinion 512

July 29, 2024

Generative Artificial Intelligence Tools

To ensure clients are protected, lawyers using generative artificial intelligence tools must fully consider their applicable ethical obligations, including their duties to provide competent legal representation, to protect client information, to communicate with clients, to supervise their employees and agents, to advance only meritorious claims and contentions, to ensure candor toward the tribunal, and to charge reasonable fees.

I. Introduction

Many lawyers use artificial intelligence (AI) based technologies in their practices to improve the efficiency and quality of legal services to clients.¹ A well-known use is electronic discovery in litigation, in which lawyers use technology-assisted review to categorize vast quantities of documents as responsive or non-responsive and to segregate privileged documents. Another common use is contract analytics, which lawyers use to conduct due diligence in connection with mergers and acquisitions and large corporate transactions. In the realm of analytics, AI also can help lawyers predict how judges might rule on a legal question based on data about the judge's rulings; discover the summary judgment grant rate for every federal district judge; or evaluate how parties and lawyers may behave in current litigation based on their past conduct in similar litigation. And for basic legal research, AI may enhance lawyers' search results.

This opinion discusses a subset of AI technology that has more recently drawn the attention of the legal profession and the world at large – generative AI (GAI), which can create various types of new content, including text, images, audio, video, and software code in response to a user's prompts and questions.² GAI tools that produce new text are prediction tools that generate a statistically probable output when prompted. To accomplish this, these tools analyze large amounts of digital text culled from the internet or proprietary data sources. Some GAI tools are described as “self-learning,” meaning they will learn from themselves as they cull more data. GAI tools may assist lawyers in tasks such as legal research, contract review, due diligence, document review, regulatory compliance, and drafting letters, contracts, briefs, and other legal documents.

¹ There is no single definition of artificial intelligence. At its essence, AI involves computer technology, software, and systems that perform tasks traditionally requiring human intelligence. The ability of a computer or computer-controlled robot to perform tasks commonly associated with intelligent beings is one definition. The term is frequently applied to the project of developing systems that appear to employ or replicate intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience. BRITANNICA, <https://www.britannica.com/technology/artificial-intelligence> (last visited July 12, 2024).

² George Lawton, *What is Generative AI? Everything You Need to Know*, TECHTARGET (July 12, 2024), <https://www.techtargget.com/searchenterpriseai/definition/generative-AI>.

GAI tools—whether general purpose or designed specifically for the practice of law—raise important questions under the ABA Model Rules of Professional Conduct.³ What level of competency should lawyers acquire regarding a GAI tool? How can lawyers satisfy their duty of confidentiality when using a GAI tool that requires input of information relating to a representation? When must lawyers disclose their use of a GAI tool to clients? What level of review of a GAI tool’s process or output is necessary? What constitutes a reasonable fee or expense when lawyers use a GAI tool to provide legal services to clients?

At the same time, as with many new technologies, GAI tools are a moving target—indeed, a *rapidly* moving target—in the sense that their precise features and utility to law practice are quickly changing and will continue to change in ways that may be difficult or impossible to anticipate. This Opinion identifies some ethical issues involving the use of GAI tools and offers general guidance for lawyers attempting to navigate this emerging landscape.⁴ It is anticipated that this Committee and state and local bar association ethics committees will likely offer updated guidance on professional conduct issues relevant to specific GAI tools as they develop.

II. Discussion

A. Competence

Model Rule 1.1 obligates lawyers to provide competent representation to clients.⁵ This duty requires lawyers to exercise the “legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation,” as well as to understand “the benefits and risks associated” with the technologies used to deliver legal services to clients.⁶ Lawyers may ordinarily achieve the requisite level of competency by engaging in self-study, associating with another competent lawyer, or consulting with an individual who has sufficient expertise in the relevant field.⁷

To competently use a GAI tool in a client representation, lawyers need not become GAI experts. Rather, lawyers must have a reasonable understanding of the capabilities and limitations

³ Many of the professional responsibility concerns that arise with GAI tools are similar to the issues that exist with other AI tools and should be considered by lawyers using such technology.

⁴ This opinion is based on the ABA Model Rules of Professional Conduct as amended by the ABA House of Delegates through August 2023. The Opinion addresses several imminent ethics issues associated with the use of GAI, but additional issues may surface, including those found in Model Rule 7.1 (“Communications Concerning a Lawyer’s Services”), Model Rule 1.7 (“Conflict of Interest: Current Clients”), and Model Rule 1.9 (“Duties to Former Clients”). *See, e.g.*, Fla. State Bar Ass’n, Prof’l Ethics Comm. Op. 24-1, at 7 (2024) (discussing the use of GAI chatbots under Florida Rule 4-7.13, which prohibits misleading content and unduly manipulative or intrusive advertisements); Pa. State Bar Ass’n Comm. on Legal Ethics & Prof’l Resp. & Philadelphia Bar Ass’n Prof’l Guidance Comm. Joint Formal Op. 2024-200 [hereinafter Pa. & Philadelphia Joint Formal Opinion 2024-200], at 10 (2024) (“Because the large language models used in generative AI continue to develop, some without safeguards similar to those already in use in law offices, such as ethical walls, they may run afoul of Rules 1.7 and 1.9 by using the information developed from one representation to inform another.”). Accordingly, lawyers should consider all rules before using GAI tools.

⁵ MODEL RULES OF PROF’L CONDUCT R. 1.1 (2023) [hereinafter MODEL RULES].

⁶ MODEL RULES R. 1.1 & cmt. [8]. *See also* ABA Comm. on Ethics & Prof’l Responsibility, Formal Op. 477R, at 2–3 (2017) [hereinafter ABA Formal Op. 477R] (discussing the ABA’s “technology amendments” made to the Model Rules in 2012).

⁷ MODEL RULES R. 1.1 cmts. [1], [2] & [4]; Cal. St. Bar, Comm. Prof’l Resp. Op. 2015-193, 2015 WL 4152025, at *2–3 (2015).

of the specific GAI technology that the lawyer might use. This means that lawyers should either acquire a reasonable understanding of the benefits and risks of the GAI tools that they employ in their practices or draw on the expertise of others who can provide guidance about the relevant GAI tool's capabilities and limitations.⁸ This is not a static undertaking. Given the fast-paced evolution of GAI tools, technological competence presupposes that lawyers remain vigilant about the tools' benefits and risks.⁹ Although there is no single right way to keep up with GAI developments, lawyers should consider reading about GAI tools targeted at the legal profession, attending relevant continuing legal education programs, and, as noted above, consulting others who are proficient in GAI technology.¹⁰

With the ability to quickly create new, seemingly human-crafted content in response to user prompts, GAI tools offer lawyers the potential to increase the efficiency and quality of their legal services to clients. Lawyers must recognize inherent risks, however.¹¹ One example is the risk of producing inaccurate output, which can occur in several ways. The large language models underlying GAI tools use complex algorithms to create fluent text, yet GAI tools are only as good as their data and related infrastructure. If the quality, breadth, and sources of the underlying data on which a GAI tool is trained are limited or outdated or reflect biased content, the tool might produce unreliable, incomplete, or discriminatory results. In addition, the GAI tools lack the ability to understand the meaning of the text they generate or evaluate its context.¹² Thus, they may combine otherwise accurate information in unexpected ways to yield false or inaccurate results.¹³ Some GAI tools are also prone to “hallucinations,” providing ostensibly plausible responses that have no basis in fact or reality.¹⁴

Because GAI tools are subject to mistakes, lawyers' uncritical reliance on content created by a GAI tool can result in inaccurate legal advice to clients or misleading representations to courts and third parties. Therefore, a lawyer's reliance on, or submission of, a GAI tool's output—without

⁸ Pa. Bar Ass'n, Comm. on Legal Ethics & Prof'l Resp. Op. 2020-300, 2020 WL 2544268, at *2–3 (2020). *See also* Cal. State Bar, Standing Comm. on Prof'l Resp. & Conduct Op. 2023-208, 2023 WL 4035467, at *2 (2023) adopting a “reasonable efforts standard” and “fact-specific approach” to a lawyer's duty of technology competence, citing ABA Formal Opinion 477R, at 4).

⁹ *See* New York County Lawyers Ass'n Prof'l Ethics Comm. Op. 749 (2017) (emphasizing that “[l]awyers must be responsive to technological developments as they become integrated into the practice of law”); Cal. St. Bar, Comm. Prof'l Resp. Op. 2015-193, 2015 WL 4152025, at *1 (2015) (discussing the level of competence required for lawyers to handle e-discovery issues in litigation).

¹⁰ MODEL RULES R. 1.1 cmt. [8]; *see* Melinda J. Bentley, *The Ethical Implications of Technology in Your Law Practice: Understanding the Rules of Professional Conduct Can Prevent Potential Problems*, 76 J. MO. BAR 1 (2020) (identifying ways for lawyers to acquire technology competence skills).

¹¹ As further detailed in this opinion, lawyers' use of GAI raises confidentiality concerns under Model Rule 1.6 due to the risk of disclosure of, or unauthorized access to, client information. GAI also poses complex issues relating to ownership and potential infringement of intellectual property rights and even potential data security threats.

¹² *See*, W. Bradley Wendel, *The Promise and Limitations of AI in the Practice of Law*, 72 OKLA. L. REV. 21, 26 (2019) (discussing the limitations of AI based on an essential function of lawyers, making normative judgments that are impossible for AI).

¹³ *See, e.g.*, Karen Weise & Cade Metz, *When A.I. Chatbots Hallucinate*, N.Y. TIMES (May 1, 2023).

¹⁴ Ivan Moreno, *AI Practices Law 'At the Speed of Machines.' Is it Worth It?*, LAW360 (June 7, 2023); *See* Varun Magesh, Faiz Surani, Matthew Dahl, Mirac Suzgun, Christopher D. Manning, & Daniel E. Ho, *Hallucination Free? Assessing the Reliability of Leading AI Legal Research Tools*, STANFORD UNIVERSITY (June 26, 2024), available at https://dho.stanford.edu/wp-content/uploads/Legal_RAG_Hallucinations.pdf (study finding leading legal research companies' GAI systems “hallucinate between 17% and 33% of the time”).

an appropriate degree of independent verification or review of its output—could violate the duty to provide competent representation as required by Model Rule 1.1.¹⁵ While GAI tools may be able to significantly assist lawyers in serving clients, they cannot replace the judgment and experience necessary for lawyers to competently advise clients about their legal matters or to craft the legal documents or arguments required to carry out representations.

The appropriate amount of independent verification or review required to satisfy Rule 1.1 will necessarily depend on the GAI tool and the specific task that it performs as part of the lawyer’s representation of a client. For example, if a lawyer relies on a GAI tool to review and summarize numerous, lengthy contracts, the lawyer would not necessarily have to manually review the entire set of documents to verify the results if the lawyer had previously tested the accuracy of the tool on a smaller subset of documents by manually reviewing those documents, comparing then to the summaries produced by the tool, and finding the summaries accurate. Moreover, a lawyer’s use of a GAI tool designed specifically for the practice of law or to perform a discrete legal task, such as generating ideas, may require less independent verification or review, particularly where a lawyer’s prior experience with the GAI tool provides a reasonable basis for relying on its results.

While GAI may be used as a springboard or foundation for legal work—for example, by generating an analysis on which a lawyer bases legal advice, or by generating a draft from which a lawyer produces a legal document—lawyers may not abdicate their responsibilities by relying solely on a GAI tool to perform tasks that call for the exercise of professional judgment. For example, lawyers may not leave it to GAI tools alone to offer legal advice to clients, negotiate clients’ claims, or perform other functions that require a lawyer’s personal judgment or participation.¹⁶ Competent representation presupposes that lawyers will exercise the requisite level of skill and judgment regarding all legal work. In short, regardless of the level of review the lawyer selects, the lawyer is fully responsible for the work on behalf of the client.

Emerging technologies may provide an output that is of distinctively higher quality than current GAI tools produce, or may enable lawyers to perform work markedly faster and more economically, eventually becoming ubiquitous in legal practice and establishing conventional expectations regarding lawyers’ duty of competence.¹⁷ Over time, other new technologies have become integrated into conventional legal practice in this manner.¹⁸ For example, “a lawyer would have difficulty providing competent legal services in today’s environment without knowing how

¹⁵ See generally ABA Comm. on Ethics & Prof’l Responsibility, Formal Op. 08-451, at 1 (2008) [hereinafter ABA Formal Op. 08-451] (concluding that “[a] lawyer may outsource legal or nonlegal support services provided the lawyer remains ultimately responsible for rendering competent legal services to the client under Model Rule 1.1”).

¹⁶ See Fla. State Bar Ass’n, Prof’l Ethics Comm. Op. 24-1, *supra* note 4.

¹⁷ See, e.g., Sharon Bradley, *Rule 1.1 Duty of Competency and Internet Research: Benefits and Risks Associated with Relevant Technology* at 7 (2019), available at <https://ssrn.com/abstract=3485055> (“View Model Rule 1.1 as elastic. It is expanding as legal technology solutions expand. The ever-changing shape of this rule makes clear that a lawyer cannot simply learn technology today and never again update their skills or knowledge.”).

¹⁸ See, e.g., *Smith v. Lewis*, 530 P.2d 589, 595 (Cal. 1975) (stating that a lawyer is expected “to possess knowledge of those plain and elementary principles of law which are commonly known by well-informed attorneys, and to discover those additional rules of law which, although not commonly known, may readily be found by *standard research techniques*”) (emphasis added); *Hagopian v. Justice Admin. Comm’n*, 18 So. 3d 625, 642 (Fla. Dist. Ct. App. 2009) (observing that lawyers have “become expected to use computer-assisted legal research to ensure that their research is complete and up-to-date, but the costs of this service can be significant”).

to use email or create an electronic document.”¹⁹ Similar claims might be made about other tools such as computerized legal research or internet searches.²⁰ As GAI tools continue to develop and become more widely available, it is conceivable that lawyers will eventually have to use them to competently complete certain tasks for clients.²¹ But even in the absence of an expectation for lawyers to use GAI tools as a matter of course,²² lawyers should become aware of the GAI tools relevant to their work so that they can make an informed decision, as a matter of professional judgment, whether to avail themselves of these tools or to conduct their work by other means.²³ As previously noted regarding the possibility of outsourcing certain work, “[t]here is no unique blueprint for the provision of competent legal services. Different lawyers may perform the same tasks through different means, all with the necessary ‘legal knowledge, skill, thoroughness and preparation.’”²⁴ Ultimately, any informed decision about whether to employ a GAI tool must consider the client’s interests and objectives.²⁵

¹⁹ ABA Formal Op. 477R, *supra* note 6, at 3 (quoting ABA COMMISSION ON ETHICS 20/20 REPORT 105A (Aug. 2012)).

²⁰ *See, e.g.,* Bradley, *supra* note 17, at 3 (“Today no competent lawyer would rely solely upon a typewriter to draft a contract, brief, or memo. Typewriters are no longer part of ‘methods and procedures’ used by competent lawyers.”); Lawrence Duncan MacLachlan, *Gandy Dancers on the Web: How the Internet Has Raised the Bar on Lawyers’ Professional Responsibility to Research and Know the Law*, 13 GEO. J. LEGAL ETHICS 607, 608 (2000) (“The lawyer in the twenty-first century who does not effectively use the Internet for legal research may fall short of the minimal standards of professional competence and be potentially liable for malpractice”); Ellie Margolis, *Surfin’ Safari—Why Competent Lawyers Should Research on the Web*, 10 YALE J.L. & TECH. 82, 110 (2007) (“While a lawyer’s research methods reveal a great deal about the competence of the research, the method of research is ultimately a secondary inquiry, only engaged in when the results of that research process is judged inadequate. A lawyer who provides the court with adequate controlling authority is not going to be judged incompetent whether she found that authority in print, electronically, or by any other means.”); Michael Thomas Murphy, *The Search for Clarity in an Attorney’s Duty to Google*, 18 LEGAL COMM. & RHETORIC: JALWD 133, 133 (2021) (“This Duty to Google contemplates that certain readily available information on the public Internet about a legal matter is so easily accessible that it must be discovered, collected, and examined by an attorney, or else that attorney is acting unethically, committing malpractice, or both”); Michael Whiteman, *The Impact of the Internet and Other Electronic Sources on an Attorney’s Duty of Competence Under the Rules of Professional Conduct*, 11 ALB. L.J. SCI. & TECH. 89, 91 (2000) (“Unless it can be shown that the use of electronic sources in legal research has become a standard technique, then lawyers who fail to use electronic sources will not be deemed unethical or negligent in his or her failure to use such tools.”).

²¹ *See* MODEL RULES R. 1.1 cmt. [5] (stating that “[c]ompetent handling of a particular matter includes . . . [the] use of methods and procedures meeting the standards of competent practitioners”); New York County Lawyers Ass’n Prof’l Ethics Comm. Op. 749, 2017 WL 11659554, at *3 (2017) (explaining that the duty of competence covers not only substantive knowledge in different areas of the law, but also the manner in which lawyers provide legal services to clients).

²² The establishment of such an expectation would likely require an increased acceptance of GAI tools across the legal profession, a track record of reliable results from those platforms, the widespread availability of these technologies to lawyers from a cost or financial standpoint, and robust client demand for GAI tools as an efficiency or cost-cutting measure.

²³ Model Rule 1.5’s prohibition on unreasonable fees, as well as market forces, may influence lawyers to use new technology in favor of slower or less efficient methods.

²⁴ ABA Formal Op. 08-451, *supra* note 15, at 2. *See also id.* (“Rule 1.1 does not require that tasks be accomplished in any special way. The rule requires only that the lawyer who is responsible to the client satisfies her obligation to render legal services competently.”).

²⁵ MODEL RULES R. 1.2(a).

B. Confidentiality

A lawyer using GAI must be cognizant of the duty under Model Rule 1.6 to keep confidential all information relating to the representation of a client, regardless of its source, unless the client gives informed consent, disclosure is impliedly authorized to carry out the representation, or disclosure is permitted by an exception.²⁶ Model Rules 1.9(c) and 1.18(b) require lawyers to extend similar protections to former and prospective clients' information. Lawyers also must make "reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of the client."²⁷

Generally, the nature and extent of the risk that information relating to a representation may be revealed depends on the facts. In considering whether information relating to any representation is adequately protected, lawyers must assess the likelihood of disclosure and unauthorized access, the sensitivity of the information,²⁸ the difficulty of implementing safeguards, and the extent to which safeguards negatively impact the lawyer's ability to represent the client.²⁹

Before lawyers input information relating to the representation of a client into a GAI tool, they must evaluate the risks that the information will be disclosed to or accessed by others outside the firm. Lawyers must also evaluate the risk that the information will be disclosed to or accessed by others *inside* the firm who will not adequately protect the information from improper disclosure or use³⁰ because, for example, they are unaware of the source of the information and that it originated with a client of the firm. Because GAI tools now available differ in their ability to ensure that information relating to the representation is protected from impermissible disclosure and access, this risk analysis will be fact-driven and depend on the client, the matter, the task, and the GAI tool used to perform it.³¹

Self-learning GAI tools into which lawyers input information relating to the representation, by their very nature, raise the risk that information relating to one client's representation may be disclosed improperly,³² even if the tool is used exclusively by lawyers at the same firm.³³ This can occur when information relating to one client's representation is input into the tool, then later revealed in response to prompts by lawyers working on other matters, who then share that output with other clients, file it with the court, or otherwise disclose it. In other words, the self-learning

²⁶ MODEL RULES R. 1.6; MODEL RULES R. 1.6 cmt. [3].

²⁷ MODEL RULES R. 1.6(c).

²⁸ ABA Formal Op. 477R, *supra* note 6, at 1 (A lawyer "may be required to take special security precautions to protect against the inadvertent or unauthorized disclosure of client information when ... the nature of the information requires a higher degree of security.").

²⁹ MODEL RULES R. 1.6, cmt. [18].

³⁰ See MODEL RULES R. 1.8(b), which prohibits use of information relating to the representation of a client to the disadvantage of the client.

³¹ See ABA Formal Op. 477R, *supra* note 6, at 4 (rejecting specific security measures to protect information relating to a client's representation and advising lawyers to adopt a fact-specific approach to data security).

³² See generally State Bar of Cal. Standing Comm. on Prof'l Resp. & Conduct, PRACTICAL GUIDANCE FOR THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE IN THE PRACTICE OF LAW (2024), *available at* <https://www.calbar.ca.gov/Portals/0/documents/ethics/Generative-AI-Practical-Guidance.pdf>; Fla. State Bar Ass'n, Prof'l Ethics Comm. Op. 24-1, *supra* note 4.

³³ See Pa. & Philadelphia Joint Formal Opinion 2024-200, *supra* note 4, at 10 (noting risk that information relating to one representation may be used to inform work on another representation).

GAI tool may disclose information relating to the representation to persons outside the firm who are using the same GAI tool. Similarly, it may disclose information relating to the representation to persons in the firm (1) who either are prohibited from access to said information because of an ethical wall or (2) who could inadvertently use the information from one client to help another client, not understanding that the lawyer is revealing client confidences. Accordingly, because many of today's self-learning GAI tools are designed so that their output could lead directly or indirectly to the disclosure of information relating to the representation of a client, a client's informed consent is required prior to inputting information relating to the representation into such a GAI tool.³⁴

When consent is required, it must be informed. For the consent to be informed, the client must have the lawyer's best judgment about why the GAI tool is being used, the extent of and specific information about the risk, including particulars about the kinds of client information that will be disclosed, the ways in which others might use the information against the client's interests, and a clear explanation of the GAI tool's benefits to the representation. Part of informed consent requires the lawyer to explain the extent of the risk that later users or beneficiaries of the GAI tool will have access to information relating to the representation. To obtain informed consent when using a GAI tool, merely adding general, boiler-plate provisions to engagement letters purporting to authorize the lawyer to use GAI is not sufficient.³⁵

Because of the uncertainty surrounding GAI tools' ability to protect such information and the uncertainty about what happens to information both at input and output, it will be difficult to evaluate the risk that information relating to the representation will either be disclosed to or accessed by others inside the firm to whom it should not be disclosed as well as others outside the firm.³⁶ As a baseline, all lawyers should read and understand the Terms of Use, privacy policy, and related contractual terms and policies of any GAI tool they use to learn who has access to the information that the lawyer inputs into the tool or consult with a colleague or external expert who has read and analyzed those terms and policies.³⁷ Lawyers may need to consult with IT professionals or cyber security experts to fully understand these terms and policies as well as the manner in which GAI tools utilize information.

Today, there are uses of self-learning GAI tools in connection with a legal representation when client informed consent is not required because the lawyer will not be inputting information relating to the representation. As an example, if a lawyer is using the tool for idea generation in a manner that does not require inputting information relating to the representation, client informed consent would not be necessary.

³⁴ This conclusion is based on the risks and capabilities of GAI tools as of the publication of this opinion. As the technology develops, the risks may change in ways that would alter our conclusion. See Fla. State Bar Ass'n, Prof'l Ethics Comm. Op. 24-1, *supra* note 4, at 2; W. Va. Lawyer Disciplinary Bd. Op. 24-01 (2024), available at <http://www.wvdc.org/pdf/AILEO24-01.pdf>.

³⁵ See W. Va. Lawyer Disciplinary Bd. Op. 24-01, *supra* note 34.

³⁶ Magesh et al. *supra* note 14, at 23 (describing some of the GAI tools available to lawyers as "difficult for lawyers to assess when it is safe to trust them. Official documentation does not clearly illustrate what they can do for lawyers and in which areas lawyers should exercise caution.")

³⁷ Stephanie Pacheco, *Three Considerations for Attorneys Using Generative AI*, BLOOMBERG LAW ANALYSIS (June 16, 2023, 4:00 pm), <https://news.bloomberglaw.com/bloomberg-law-analysis/analysis-three-considerations-for-attorneys-using-generative-ai?context=search&index=7>.

C. Communication

Where Model Rule 1.6 does not require disclosure and informed consent, the lawyer must separately consider whether other Model Rules, particularly Model Rule 1.4, require disclosing the use of a GAI tool in the representation.

Model Rule 1.4, which addresses lawyers' duty to communicate with their clients, builds on lawyers' legal obligations as fiduciaries, which include "the duty of an attorney to advise the client promptly whenever he has any information to give which it is important the client should receive."³⁸ Of particular relevance, Model Rule 1.4(a)(2) states that a lawyer shall "reasonably consult with the client about the means by which the client's objectives are to be accomplished." Additionally, Model Rule 1.4(b) obligates lawyers to explain matters "to the extent reasonably necessary to permit a client to make an informed decision regarding the representation." Comment [5] to Rule 1.4 explains, "the lawyer should fulfill reasonable client expectations for information consistent with the duty to act in the client's best interests, and the client's overall requirements as to the character of representation." Considering these underlying principles, questions arise regarding whether and when lawyers might be required to disclose their use of GAI tools to clients pursuant to Rule 1.4.

The facts of each case will determine whether Model Rule 1.4 requires lawyers to disclose their GAI practices to clients or obtain their informed consent to use a particular GAI tool. Depending on the circumstances, client disclosure may be unnecessary.

Of course, lawyers must disclose their GAI practices if asked by a client how they conducted their work, or whether GAI technologies were employed in doing so, or if the client expressly requires disclosure under the terms of the engagement agreement or the client's outside counsel guidelines.³⁹ There are also situations where Model Rule 1.4 requires lawyers to discuss their use of GAI tools unprompted by the client.⁴⁰ For example, as discussed in the previous section, clients would need to be informed in advance, and to give informed consent, if the lawyer proposes to input information relating to the representation into the GAI tool.⁴¹ Lawyers must also consult clients when the use of a GAI tool is relevant to the basis or reasonableness of a lawyer's fee.⁴²

Client consultation about the use of a GAI tool is also necessary when its output will influence a significant decision in the representation,⁴³ such as when a lawyer relies on GAI

³⁸ *Baker v. Humphrey*, 101 U.S. 494, 500 (1879).

³⁹ *See, e.g.*, MODEL RULES R. 1.4(a)(4) ("A lawyer shall . . . promptly comply with reasonable requests for information[.]").

⁴⁰ *See* MODEL RULES R. 1.4(a)(1) (requiring lawyers to "promptly inform the client of any decision or circumstance with respect to which the client's informed consent" is required by the rules of professional conduct).

⁴¹ *See* section B for a discussion of confidentiality issues under Rule 1.6.

⁴² *See* section F for a discussion of fee issues under Rule 1.5.

⁴³ Guidance may be found in ethics opinions requiring lawyers to disclose their use of temporary lawyers whose involvement is significant or otherwise material to the representation. *See, e.g.*, Va. State Bar Legal Ethics Op. 1850, 2010 WL 5545407, at *5 (2010) (acknowledging that "[t]here is little purpose to informing a client every time a lawyer outsources legal support services that are truly tangential, clerical, or administrative in nature, or even when basic legal research or writing is outsourced without any client confidences being revealed"); Cal. State Bar, Standing Comm. on Prof'l Resp. & Conduct Op. 2004-165, 2004 WL 3079030, at *2-3 (2004) (opining that a

technology to evaluate potential litigation outcomes or jury selection. A client would reasonably want to know whether, in providing advice or making important decisions about how to carry out the representation, the lawyer is exercising independent judgment or, in the alternative, is deferring to the output of a GAI tool. Or there may be situations where a client retains a lawyer based on the lawyer's particular skill and judgment, when the use of a GAI tool, without the client's knowledge, would violate the terms of the engagement agreement or the client's reasonable expectations regarding how the lawyer intends to accomplish the objectives of the representation.

It is not possible to catalogue every situation in which lawyers must inform clients about their use of GAI. Again, lawyers should consider whether the specific circumstances warrant client consultation about the use of a GAI tool, including the client's needs and expectations, the scope of the representation, and the sensitivity of the information involved. Potentially relevant considerations include the GAI tool's importance to a particular task, the significance of that task to the overall representation, how the GAI tool will process the client's information, and the extent to which knowledge of the lawyer's use of the GAI tool would affect the client's evaluation of or confidence in the lawyer's work.

Even when Rule 1.6 does not require informed consent and Rule 1.4 does not require a disclosure regarding the use of GAI, lawyers may tell clients how they employ GAI tools to assist in the delivery of legal services. Explaining this may serve the interest of effective client communication. The engagement agreement is a logical place to make such disclosures and to identify any client instructions on the use of GAI in the representation.⁴⁴

D. Meritorious Claims and Contentions and Candor Toward the Tribunal

Lawyers using GAI in litigation have ethical responsibilities to the courts as well as to clients. Model Rules 3.1, 3.3, and 8.4(c) may be implicated by certain uses. Rule 3.1 states, in part, that "[a] lawyer shall not bring or defend a proceeding, or assert or controvert and issue therein, unless there is a basis in law or fact for doing so that is not frivolous." Rule 3.3 makes it clear that lawyers cannot knowingly make any false statement of law or fact to a tribunal or fail to correct a material false statement of law or fact previously made to a tribunal.⁴⁵ Rule 8.4(c) provides that a

lawyer must disclose the use of a temporary lawyer to a client where the temporary lawyer's use constitutes a "significant development" in the matter and listing relevant considerations); N.Y. State Bar Ass'n, Comm on Prof'l Ethics 715, at 7 (1999) (opining that "whether a law firm needs to disclose to the client and obtain client consent for the participation of a Contract lawyer depends upon whether client confidences will be disclosed to the lawyer, the degree of involvement of the lawyer in the matter, and the significance of the work done by the lawyer"); D.C. Bar Op. 284, at 4 (1988) (recommending client disclosure "whenever the proposed use of a temporary lawyer to perform work on the client's matter appears reasonably likely to be material to the representation or to affect the client's reasonable expectations"); Fla. State Bar Ass'n, Comm. on Prof'l Ethics Op. 88-12, 1988 WL 281590, at *2 (1988) (stating that disclosure of a temporary lawyer depends "on whether the client would likely consider the information material");

⁴⁴ For a discussion of what client notice and informed consent under Rule 1.6 may require, see section B.

⁴⁵ MODEL RULES R. 3.3(a) reads: "A lawyer shall not knowingly: (1) make a false statement of fact or law to a tribunal or fail to correct a false statement of material fact or law previously made to the tribunal by the lawyer; (2) fail to disclose to the tribunal legal authority in the controlling jurisdiction known to the lawyer to be directly adverse to the position of the client and not disclosed by opposing counsel; or (3) offer evidence that the lawyer knows to be false. If a lawyer, the lawyer's client, or a witness called by the lawyer, has offered material evidence and the lawyer comes to know of its falsity, the lawyer shall take reasonable remedial measures, including, if

lawyer shall not engage in “conduct involving dishonesty, fraud, deceit or misrepresentation.” Even an unintentional misstatement to a court can involve a misrepresentation under Rule 8.4(c). Therefore, output from a GAI tool must be carefully reviewed to ensure that the assertions made to the court are not false.

Issues that have arisen to date with lawyers’ use of GAI outputs include citations to nonexistent opinions, inaccurate analysis of authority, and use of misleading arguments.⁴⁶

Some courts have responded by requiring lawyers to disclose their use of GAI.⁴⁷ As a matter of competence, as previously discussed, lawyers should review for accuracy all GAI outputs. In judicial proceedings, duties to the tribunal likewise require lawyers, before submitting materials to a court, to review these outputs, including analysis and citations to authority, and to correct errors, including misstatements of law and fact, a failure to include controlling legal authority, and misleading arguments.

E. Supervisory Responsibilities

Model Rules 5.1 and 5.3 address the ethical duties of lawyers charged with managerial and supervisory responsibilities and set forth those lawyers’ responsibilities with regard to the firm, subordinate lawyers, and nonlawyers. Managerial lawyers must create effective measures to ensure that all lawyers in the firm conform to the rules of professional conduct,⁴⁸ and supervisory lawyers must supervise subordinate lawyers and nonlawyer assistants to ensure that subordinate lawyers and nonlawyer assistants conform to the rules.⁴⁹ These responsibilities have implications for the use of GAI tools by lawyers and nonlawyers.

Managerial lawyers must establish clear policies regarding the law firm’s permissible use of GAI, and supervisory lawyers must make reasonable efforts to ensure that the firm’s lawyers and nonlawyers comply with their professional obligations when using GAI tools.⁵⁰ Supervisory obligations also include ensuring that subordinate lawyers and nonlawyers are trained,⁵¹ including in the ethical and practical use of the GAI tools relevant to their work as well as on risks associated with relevant GAI use.⁵² Training could include the basics of GAI technology, the capabilities and limitations of the tools, ethical issues in use of GAI and best practices for secure data handling, privacy, and confidentiality.

necessary, disclosure to the tribunal. A lawyer may refuse to offer evidence, other than the testimony of a defendant in a criminal matter, that the lawyer reasonably believes is false.”

⁴⁶ See DC Bar Op. 388 (2024).

⁴⁷ Lawyers should consult with the applicable court’s local rules to ensure that they comply with those rules with respect to AI use. As noted in footnote 4, no one opinion could address every ethics issue presented when a lawyer uses GAI. For example, depending on the facts, issues relating to Model Rule 3.4(c) could be presented.

⁴⁸ See MODEL RULES R. 1.0(c) for the definition of firm.

⁴⁹ ABA Formal Op. 08-451, *supra* note 15.

⁵⁰ MODEL RULES R. 5.1.

⁵¹ See ABA Comm. on Ethics & Prof’l Responsibility, Formal Op. 467 (2014).

⁵² See *generally*, MODEL RULES R. 1.1, cmt. [8]. One training suggestion is that all materials produced by GAI tools be marked as such when stored in any client or firm file so future users understand potential fallibility of the work.

Lawyers have additional supervisory obligations insofar as they rely on others outside the law firm to employ GAI tools in connection with the legal representation. Model Rule 5.3(b) imposes a duty on lawyers with direct supervisory authority over a nonlawyer to make “reasonable efforts to ensure that” the nonlawyer’s conduct conforms with the professional obligations of the lawyer. Earlier opinions recognize that when outsourcing legal and nonlegal services to third-party providers, lawyers must ensure, for example, that the third party will do the work capably and protect the confidentiality of information relating to the representation.⁵³ These opinions note the importance of: reference checks and vendor credentials; understanding vendor’s security policies and protocols; familiarity with vendor’s hiring practices; using confidentiality agreements; understanding the vendor’s conflicts check system to screen for adversity among firm clients; and the availability and accessibility of a legal forum for legal relief for violations of the vendor agreement. These concepts also apply to GAI providers and tools.

Earlier opinions regarding technological innovations and other innovations in legal practice are instructive when considering a lawyer’s use of a GAI tool that requires the disclosure and storage of information relating to the representation.⁵⁴ In particular, opinions developed to address cloud computing and outsourcing of legal and nonlegal services suggest that lawyers should:

- ensure that the [GAI tool] is configured to preserve the confidentiality and security of information, that the obligation is enforceable, and that the lawyer will be notified in the event of a breach or service of process regarding production of client information;⁵⁵
- investigate the [GAI tool’s] reliability, security measures, and policies, including limitations on the [the tool’s] liability;⁵⁶
- determine whether the [GAI tool] retains information submitted by the lawyer before and after the discontinuation of services or asserts proprietary rights to the information;⁵⁷ and
- understand the risk that [GAI tool servers] are subject to their own failures and may be an attractive target of cyber-attacks.⁵⁸

F. Fees

Model Rule 1.5, which governs lawyers’ fees and expenses, applies to representations in which a lawyer charges the client for the use of GAI. Rule 1.5(a) requires a lawyer’s fees and expenses to be reasonable and includes a non-exclusive list of criteria for evaluating whether a fee

⁵³ ABA Formal Op. 08-451, *supra* note 15; ABA Formal. Op. 477R, *supra* note 6.

⁵⁴ See ABA Formal Op. 08-451, *supra* note 15.

⁵⁵ Fla. Bar Advisory Op. 12-3 (2013).

⁵⁶ *Id.* citing Iowa State Bar Ass’n Comm. on Ethics & Practice Guidelines Op. 11-01 (2011) [hereinafter Iowa Ethics Opinion 11-01].

⁵⁷ Fla. Bar Advisory Op. 24-1, *supra* note 4; Fla. Bar Advisory Op. 12-3, *supra* note 55; Iowa Ethics Opinion 11-01, *supra* note 56.

⁵⁸ Fla. Bar Advisory Op. 12-3, *supra* note 55; See generally Melissa Heikkila, *Three Ways AI Chatbots are a Security Disaster*, MIT TECHNOLOGY REVIEW (Apr. 3, 2023),

www.technologyreview.com/2023/04/03/1070893/three-ways-ai-chatbots-are-a-security-disaster/.

or expense is reasonable.⁵⁹ Rule 1.5(b) requires a lawyer to communicate to a client the basis on which the lawyer will charge for fees and expenses unless the client is a regularly represented client and the terms are not changing. The required information must be communicated before or within a reasonable time of commencing the representation, preferably in writing. Therefore, before charging the client for the use of the GAI tools or services, the lawyer must explain the basis for the charge, preferably in writing.

GAI tools may provide lawyers with a faster and more efficient way to render legal services to their clients, but lawyers who bill clients an hourly rate for time spent on a matter must bill for their actual time. ABA Formal Ethics Opinion 93-379 explained, “the lawyer who has agreed to bill on the basis of hours expended does not fulfill her ethical duty if she bills the client for more time than she has actually expended on the client’s behalf.”⁶⁰ If a lawyer uses a GAI tool to draft a pleading and expends 15 minutes to input the relevant information into the GAI program, the lawyer may charge for the 15 minutes as well as for the time the lawyer expends to review the resulting draft for accuracy and completeness. As further explained in Opinion 93-379, “If a lawyer has agreed to charge the client on [an hourly] basis and it turns out that the lawyer is particularly efficient in accomplishing a given result, it nonetheless will not be permissible to charge the client for more hours than were actually expended on the matter,”⁶¹ because “[t]he client should only be charged a reasonable fee for the legal services performed.”⁶² The “goal should be solely to compensate the lawyer fully for time reasonably expended, an approach that if followed will not take advantage of the client.”⁶³

The factors set forth in Rule 1.5(a) also apply when evaluating the reasonableness of charges for GAI tools when the lawyer and client agree on a flat or contingent fee.⁶⁴ For example, if using a GAI tool enables a lawyer to complete tasks much more quickly than without the tool, it may be unreasonable under Rule 1.5 for the lawyer to charge the same flat fee when using the GAI tool as when not using it. “A fee charged for which little or no work was performed is an unreasonable fee.”⁶⁵

The principles set forth in ABA Formal Opinion 93-379 also apply when a lawyer charges GAI work as an expense. Rule 1.5(a) requires that disbursements, out-of-pocket expenses, or additional charges be reasonable. Formal Opinion 93-379 explained that a lawyer may charge the

⁵⁹ The listed considerations are (1) the time and labor required, the novelty and difficulty of the questions involved, and the skill requisite to perform the legal service properly; (2) the likelihood, if apparent to the client, that the acceptance of the particular employment will preclude other employment by the lawyer; (3) the fee customarily charged in the locality for similar legal services; (4) the amount involved and the results obtained; (5) the time limitations imposed by the client or by the circumstances; (6) the nature and length of the professional relationship with the client; (7) the experience, reputation, and ability of the lawyer or lawyers performing the services; and (8) whether the fee is fixed or contingent.

⁶⁰ ABA Comm. on Ethics & Prof’l Responsibility, Formal Op. 93-379, at 6 (1993) [hereinafter ABA Formal Op. 93-379].

⁶¹ *Id.*

⁶² *Id.* at 5.

⁶³ *Id.*

⁶⁴ See, e.g., *Williams Cos. v. Energy Transfer LP*, 2022 Del. Ch. LEXIS 207, 2022 WL 3650176 (Del. Ch. Aug. 25, 2022) (applying same principles to contingency fee).

⁶⁵ Att’y Grievance Comm’n v. Monfried, 794 A.2d 92, 103 (Md. 2002) (finding that a lawyer violated Rule 1.5 by charging a flat fee of \$1,000 for which the lawyer did little or no work).

client for disbursements incurred in providing legal services to the client. For example, a lawyer typically may bill to the client the actual cost incurred in paying a court reporter to transcribe a deposition or the actual cost to travel to an out-of-town hearing.⁶⁶ Absent contrary disclosure to the client, the lawyer should not add a surcharge to the actual cost of such expenses and should pass along to the client any discounts the lawyer receives from a third-party provider.⁶⁷ At the same time, lawyers may not bill clients for general office overhead expenses including the routine costs of “maintaining a library, securing malpractice insurance, renting of office space, purchasing utilities, and the like.”⁶⁸ Formal Opinion 93-379 noted, “[i]n the absence of disclosure to a client in advance of the engagement to the contrary,” such overhead should be “subsumed within” the lawyer’s charges for professional services.⁶⁹

In applying the principles set out in ABA Formal Ethics Opinion 93-379 to a lawyer’s use of a GAI tool, lawyers should analyze the characteristics and uses of each GAI tool, because the types, uses, and cost of GAI tools and services vary significantly. To the extent a particular tool or service functions similarly to equipping and maintaining a legal practice, a lawyer should consider its cost to be overhead and not charge the client for its cost absent a contrary disclosure to the client in advance. For example, when a lawyer uses a GAI tool embedded in or added to the lawyer’s word processing software to check grammar in documents the lawyer drafts, the cost of the tool should be considered to be overhead. In contrast, when a lawyer uses a third-party provider’s GAI service to review thousands of voluminous contracts for a particular client and the provider charges the lawyer for using the tool on a per-use basis, it would ordinarily be reasonable for the lawyer to bill the client as an expense for the actual out-of-pocket expense incurred for using that tool.

As acknowledged in ABA Formal Opinion 93-379, perhaps the most difficult issue is determining how to charge clients for providing in-house services that are not required to be included in general office overhead and for which the lawyer seeks reimbursement. The opinion concluded that lawyers may pass on reasonable charges for “photocopying, computer research, . . . and similar items” rather than absorbing these expenses as part of the lawyers’ overhead as many lawyers would do.⁷⁰ For example, a lawyer may agree with the client in advance on the specific rate for photocopying, such as \$0.15 per page. Absent an advance agreement, the lawyer “is obliged to charge the client no more than the direct cost associated with the service (i.e., the actual cost of making a copy on the photocopy machine) plus a reasonable allocation of overhead expenses directly associated with the provision of the service (e.g., the salary of the photocopy machine operator).”⁷¹

⁶⁶ ABA Formal Op. 93-379 at 7.

⁶⁷ *Id.* at 8.

⁶⁸ *Id.* at 7.

⁶⁹ *Id.*

⁷⁰ *Id.* at 8.

⁷¹ *Id.* Opinion 93-379 also explained, “It is not appropriate for the Committee, in addressing ethical standards, to opine on the various accounting issues as to how one calculates direct cost and what may or may not be included in allocated overhead. These are questions which properly should be reserved for our colleagues in the accounting profession. Rather, it is the responsibility of the Committee to explain the principles it draws from the mandate of Model Rule 1.5’s injunction that fees be reasonable. Any reasonable calculation of direct costs as well as any reasonable allocation of related overhead should pass ethical muster. On the other hand, in the absence of an agreement to the contrary, it is impermissible for a lawyer to create an additional source of profit for the law firm beyond that which is contained in the provision of professional services themselves. The lawyer’s stock in trade is the sale of legal services, not photocopy paper, tuna fish sandwiches, computer time or messenger services.” *Id.*

These same principles apply when a lawyer uses a proprietary, in-house GAI tool in rendering legal services to a client. A firm may have made a substantial investment in developing a GAI tool that is relatively unique and that enables the firm to perform certain work more quickly or effectively. The firm may agree in advance with the client about the specific rates to be charged for using a GAI tool, just as it would agree in advance on its legal fees. But not all in-house GAI tools are likely to be so special or costly to develop, and the firm may opt not to seek the client's agreement on expenses for using the technology. Absent an agreement, the firm may charge the client no more than the direct cost associated with the tool (if any) plus a reasonable allocation of expenses directly associated with providing the GAI tool, while providing appropriate disclosures to the client consistent with Formal Opinion 93-379. The lawyer must ensure that the amount charged is not duplicative of other charges to this or other clients.

Finally, on the issue of reasonable fees, in addition to the time lawyers spend using various GAI tools and services, lawyers also will expend time to gain knowledge about those tools and services. Rule 1.1 recognizes that “[c]ompetent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.” Comment [8] explains that “[t]o maintain the requisite knowledge and skill [to be competent], a lawyer should keep abreast of changes in the law and its practice, *including the benefits and risks associated with relevant technology*, engaging in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.”⁷² Lawyers must remember that they may not charge clients for time necessitated by their own inexperience.⁷³ Therefore, a lawyer may not charge a client to learn about how to use a GAI tool or service that the lawyer will regularly use for clients because lawyers must maintain competence in the tools they use, including but not limited to GAI technology. However, if a client explicitly requests that a specific GAI tool be used in furtherance of the matter and the lawyer is not knowledgeable in using that tool, it may be appropriate for the lawyer to bill the client to gain the knowledge to use the tool effectively. Before billing the client, the lawyer and the client should agree upon any new billing practices or billing terms relating to the GAI tool and, preferably, memorialize the new agreement.

III. Conclusion

Lawyers using GAI tools have a duty of competence, including maintaining relevant technological competence, which requires an understanding of the evolving nature of GAI. In

⁷² MODEL RULES R. 1.1, cmt. [8] (emphasis added); *see also* ABA Comm. on Ethics & Prof'l Responsibility, Formal Op. 498 (2021).

⁷³ *Heavener v. Meyers*, 158 F. Supp. 2d 1278 (E.D. Okla. 2001) (five hundred hours for straightforward Fourth Amendment excessive-force claim and nineteen hours for research on Eleventh Amendment defense indicated excessive billing due to counsel's inexperience); *In re Poseidon Pools of Am., Inc.*, 180 B.R. 718 (Bankr. E.D.N.Y. 1995) (denying compensation for various document revisions; “we note that given the numerous times throughout the Final Application that Applicant requests fees for revising various documents, Applicant fails to negate the obvious possibility that such a plethora of revisions was necessitated by a level of competency less than that reflected by the Applicant's billing rates”); *Att'y Grievance Comm'n v. Manger*, 913 A.2d 1 (Md. 2006) (“While it may be appropriate to charge a client for case-specific research or familiarization with a unique issue involved in a case, general education or background research should not be charged to the client.”); *In re Hellerud*, 714 N.W.2d 38 (N.D. 2006) (reduction in hours, fee refund of \$5,651.24, and reprimand for lawyer unfamiliar with North Dakota probate work who charged too many hours at too high a rate for simple administration of cash estate; “it is counterintuitive to charge a higher hourly rate for knowing less about North Dakota law”).

using GAI tools, lawyers also have other relevant ethical duties, such as those relating to confidentiality, communication with a client, meritorious claims and contentions, candor toward the tribunal, supervisory responsibilities regarding others in the law office using the technology and those outside the law office providing GAI services, and charging reasonable fees. With the ever-evolving use of technology by lawyers and courts, lawyers must be vigilant in complying with the Rules of Professional Conduct to ensure that lawyers are adhering to their ethical responsibilities and that clients are protected.

**AMERICAN BAR ASSOCIATION STANDING COMMITTEE ON
ETHICS AND PROFESSIONAL RESPONSIBILITY**

321 N. Clark Street, Chicago, Illinois 60654-4714 Telephone (312) 988-5328
CHAIR: Bruce Green, New York, NY ■ Mark A. Armitage, Detroit, MI ■ Matthew Corbin,
Olathe, KS ■ Robinjit Kaur Eagleson, Lansing, MI ■ Brian Shannon Faughnan, Memphis,
TN ■ Hilary P. Gerzhoy, Washington, D.C. ■ Wendy Muchman, Chicago, IL ■ Tim Pierce,
Madison, WI ■ Hon. Jennifer A. Rymell, Fort Worth, TX ■ Charles Vigil, Albuquerque, NM

CENTER FOR PROFESSIONAL RESPONSIBILITY: Mary McDermott, Lead Senior
Counsel

©2024 by the American Bar Association. All rights reserved.



NEW YORK STATE
BAR ASSOCIATION

Report and Recommendations of the New York State Bar Association Task Force on Artificial Intelligence

April 2024

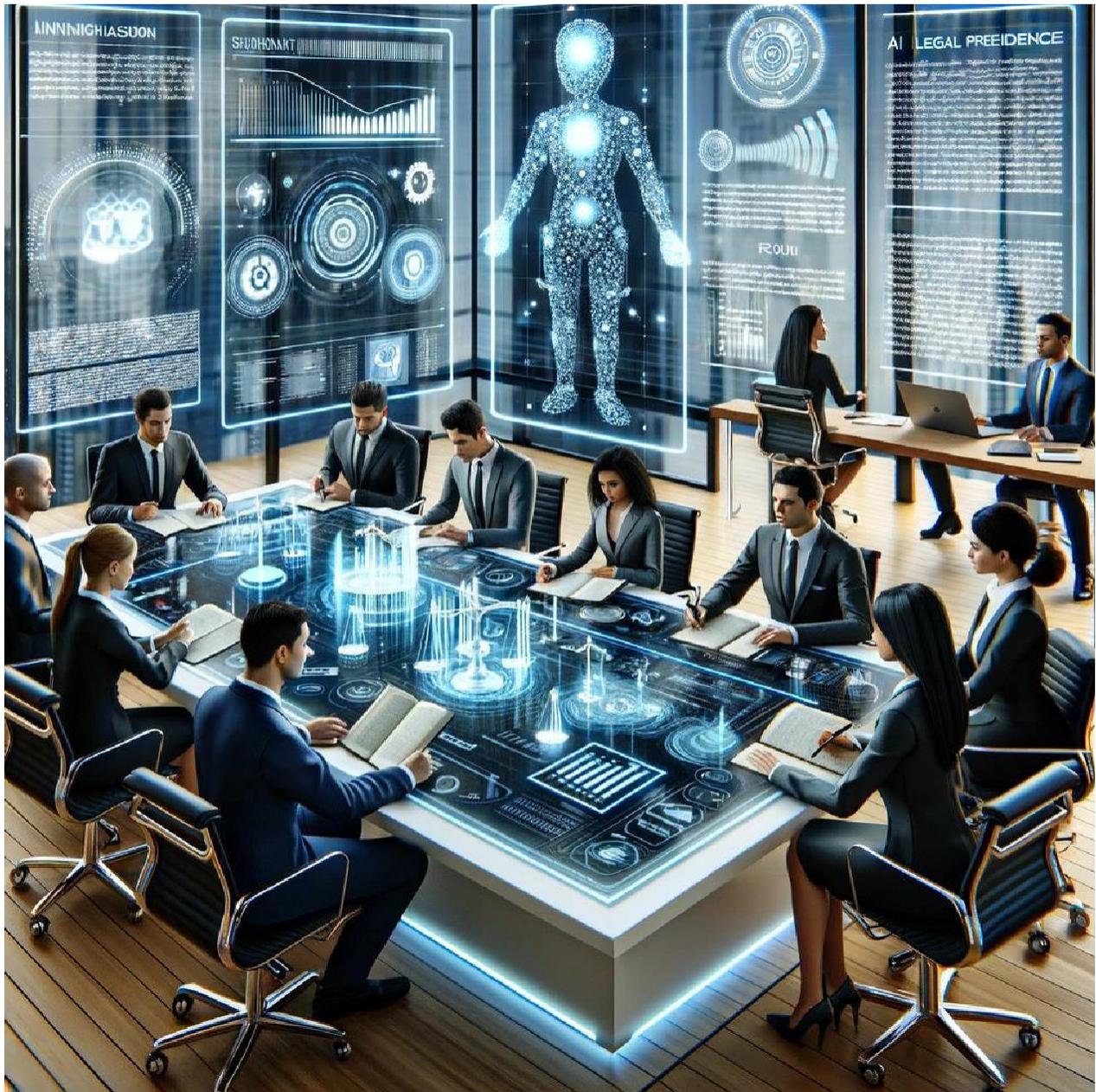
Approved by the House of Delegates April 6, 2024.



NYSBA TASK FORCE ON ARTIFICIAL INTELLIGENCE

REPORT AND RECOMMENDATIONS TO NYSBA HOUSE OF DELEGATES

APRIL 6, 2024



Generated by DALL-E

Members of the Task Force on Artificial Intelligence

Vivian D. Wesson, Esq., Chair
Jonathan P. Armstrong, Esq.
Catherine Casey
Dessislav Dobrev, Esq.
Hon. Timothy S. Driscoll
Sarah E. Gold, Esq.
Ignatius A. Grande, Esq.
Ronald J. Hedges, Esq.
Dean Elena B. Langan
Luca CM Melchionna, Esq.
Marissa Janel Moran, Esq.
Norman J. Resnicow, Esq.
Rebecca Roiphe, Esq.
Sudha Setty, Esq.
Prof. Roy D. Simon
Brooke Erdos Singer, Esq.

Richard C. Lewis, Esq.,
President, New York State Bar Association

Katherine Suchocki, NYSBA Staff Liaison

NYSBA Government Relations Team
Hilary F. Jochmans, Jochmans Consulting, LLC

<u>Acknowledgements</u>	6
<u>Introduction</u>	7
<u>Executive Summary</u>	9
<u>Evolution of AI and Generative AI</u>	11
I. <u>Introduction</u>	11
II. <u>AI Defined and Explained</u>	12
A. <u>AI and Its Applications</u>	12
B. <u>What it does</u>	12
III. <u>Types of AI</u>	12
IV. <u>The Founding Fathers/Mothers of AI</u>	13
V. <u>AI Through the Years: The AI Timeline</u>	13
A. <u>Mythology</u>	13
B. <u>Programmable digital computer (1940s)</u>	14
C. <u>Theseus: remote-controlled mouse (1950)</u>	14
D. <u>Dartmouth College Workshop (summer of 1956)</u>	14
E. <u>Perceptron Mark I: artificial neural network (1958)</u>	15
F. <u>AI Winter (1970s)</u>	15
G. <u>AI Second Winter (1980s)</u>	15
H. <u>Machine Learning Development (1990s and 2000s)</u>	15
I. <u>AlexNet: Deep Learning System (2012)</u>	16
J. <u>Introduction of Generative Adversarial Networks (2014)</u>	16
K. <u>Language and Image Recognition Capabilities (2015)</u>	16
L. <u>Chatbots</u>	18
<u>Benefits and Risks of AI and Generative AI Use</u>	20
I. <u>Benefits</u>	20
A. <u>General Benefits</u>	21
B. <u>Healthcare Advancement and Human Longevity</u>	22
C. <u>Ethical AI Development</u>	23
D. <u>Health & Public Safety</u>	23
E. <u>Quality of Life</u>	23
F. <u>Scientific Advancement, Space & Exploration</u>	24
G. <u>Global Environmental Impact</u>	24
H. <u>Education Optimization</u>	24
I. <u>Economic Development</u>	25

<u>II.</u>	<u>Risks</u>	25
	<u>A.</u> <u>Widening Justice Gap</u>	25
	<u>B.</u> <u>Data Privacy & Surveillance</u>	26
	<u>C.</u> <u>Security</u>	26
	<u>D.</u> <u>Social and Ethical Issues</u>	26
	<u>E.</u> <u>Misinformation</u>	27
	<u>F.</u> <u>Economic Impact and Disruption</u>	27
	<u>G.</u> <u>Safety</u>	27
	<u>H.</u> <u>Legal & Regulatory Challenges</u>	28
	<u>I.</u> <u>Loss of Human Centricity and Control</u>	28
	<u>Legal Profession Impact</u>	29
<u>I.</u>	<u>Ethical Impact</u>	29
	<u>A.</u> <u>Duty of Competency/Techno-solutionism</u>	29
	<u>B.</u> <u>Duty of Confidentiality & Privacy</u>	30
	<u>C.</u> <u>Duty of Supervision</u>	30
	<u>D.</u> <u>Unauthorized Practice of Law</u>	30
	<u>E.</u> <u>Attorney-Client Privilege and Attorney-Work Product</u>	32
	<u>F.</u> <u>Candor to the Court</u>	36
	<u>G.</u> <u>Judges' Ethical Obligations</u>	39
<u>II.</u>	<u>Access to Justice</u>	40
	<u>A.</u> <u>Introduction</u>	40
	<u>B.</u> <u>Pro Bono Organizations Using Generative AI</u>	41
	<u>C.</u> <u>Will Generative AI Tools Prove to Be Too Expensive?</u>	43
	<u>D.</u> <u>Use of AI by Non-Attorneys</u>	44
	<u>E.</u> <u>Implications of AI Judges or Robo Courts</u>	46
<u>III.</u>	<u>Judicial Reaction/Responses to Generative AI</u>	47
	<u>A.</u> <u>Introduction</u>	47
	<u>B.</u> <u>Uses of AI and Generative AI</u>	48
	<u>C.</u> <u>Causes of Action Arising out of AI and Generative AI</u>	49
	<u>D.</u> <u>Discovery</u>	50
	<u>E.</u> <u>Avianca and Judicial Reactions to Generative AI</u>	50
	<u>Legislative Overview and Recommendations</u>	53
<u>I.</u>	<u>Legislative Overview</u>	53

<u>II. Recommendations</u>	53
<u>AI & Generative AI Guidelines</u>	57
<u>Conclusion</u>	61
<u>Appendix A: Legislation Reviewed</u>	63
<u>I. Assemblyman Clyde Vanel’s proposed statutes on AI</u>	63
<u>II. Federal and New York State proposals regarding use of AI-generated or compiled information in judicial proceedings</u>	67
<u>III. New York City’s local law regarding use of AI in hiring and promotion</u>	69
<u>IV. The White House’s October 30, 2023 Executive Order regarding AI</u>	70
<u>V. Summary of the EU AI Act</u>	71
<u>Appendix B: Resources</u>	76
<u>Appendix C: Sample Engagement Letter Provision</u>	78
<u>Endnotes</u>	79

ACKNOWLEDGEMENTS

The Task Force on Artificial Intelligence would like to thank those who generously donated their time and thoughtful discussions about AI, including Assemblyman Clyde Vanel and his Legislative Director, Tyler Fritzhand, and Ellie Jurado-Nieves, a Government and Regulatory Affairs Executive in charge of AI Public Policy & Emerging Technologies at Guardian Life.

Thanks also to the following NYSBA sections and members for their helpful contributions to this report:

- Dispute Resolution Section and its Technology Committee
- Trusts and Estates Law Section and its Executive and Technology Committees
- Albert Feuer, Esq.
- James B. Kobak, Jr., Esq.
- Immediate Past President Sherry Levin Wallach, Esq.

INTRODUCTION

The NYSBA Task Force on Artificial Intelligence, chaired by Vivian Wesson, respectfully presents this Report to the NYSBA House of Delegates. This Report, to be presented to the House of Delegates on April 6, 2024, examines the legal, social and ethical impact of artificial intelligence (AI) and generative AI on the legal profession. This Report also reviews AI-based software, generative AI technology and other machine learning tools that may enhance the profession but also poses risks for individual attorneys' understanding of new, unfamiliar technology, as well as courts concerned about the integrity of the judicial process. Further, this Report makes recommendations for NYSBA adoption, including proposed guidelines for responsible AI use. A copy of the Task Force's Mission Statement is attached as Exhibit A.

Why Now?

As NYSBA's President Richard Lewis has noted, AI's rapid growth and sophistication have, and will continue to have, a monumental impact on all professions – including lawyers, law firms and their clients. NYSBA seeks to proactively address how AI may best assist those who interact with the legal system while evaluating how tightly it needs to be regulated and what protections we should institute safeguard against misuse or abuse. From self-driving cars to ChatGPT to 3-D printed guns, AI has transformed our world. If this is our Promethean moment in AI evolution, now is the time to better understand, embrace, utilize and scrutinize this technology.

Who Is Involved?

For this Task Force, NYSBA has gathered legal professions across a range of subject matter expertise. We have deans of law schools seeking clarity on educating legal minds in this digital age. We have practitioners in the technology space advising clients on AI use. There are those who

enthusiastically deploy AI-based tools and those who are wary about the risks. The Task Force also has an international perspective, understanding that AI will have a global, not just a regional, effect.

What We Learned

We have organized this Report into five parts: (1) the evolution of AI and generative AI; (2) the benefits and risks of AI and generative AI use; (3) the impact of the technology to the legal profession; (4) legislative overview and recommendations; and (5) proposed guidelines.

EXECUTIVE SUMMARY

Artificial intelligence, particularly generative AI, has had a profound impact across multiple sectors of our society, revolutionizing how we approach creativity, problem-solving and automation. From art and entertainment to healthcare and education, AI is reshaping industries, creativity and society in multifaceted ways. While AI and generative AI offer immense potential for innovation and efficiency, the technology also presents challenges that require careful management, including ethical considerations, privacy concerns and labor impact. The ongoing evolution of generative AI promises to continue influencing the world in unprecedented ways.

Considering the continued revolutionary impact of the technology, this Task Force undertook the challenge to assess its evolution, benefits and risks, and impact on the legal profession. Here, we summarize our four principal recommendations for adoption by NYSBA.

Task Force Recommendations

- 1. Adopt Guidelines:* The Task Force recommends that NYSBA adopt the AI/Generative AI guidelines outlined in this report and commission a standing section or committee to oversee periodic updates to those guidelines.
- 2. Focus on Education:* The Task Force recommends that NYSBA prioritize education in addition to legislation, focusing on educating judges, lawyers, law students and regulators to understand the technology so that they can apply existing law to regulate it.
- 3. Identify Risks for New Regulation:* Legislatures and regulators should identify risks associated with the technology that are not addressed by existing laws, which will likely involve extensive hearings and studies involving experts in AI, and as needed, adopt regulations and legislation to address those risks.
- 4. Examine the Function of the Law in AI Governance:* The rapid advancement of AI prompts us to examine the function of the law as a governance tool. Some of the key functions of

the law in the AI context are: (i) expressing social values and reinforcing fundamental principles; (ii) protecting against risks to such values and principles; and (iii) stabilizing society and increasing legal certainty.

EVOLUTION OF AI AND GENERATIVE AI

“For more than 250 years the fundamental drivers of economic growth have been technological innovations. The most important of these are what economists call general-purpose technologies – a category that includes the steam engine, electricity, and the internal combustion engine. The most important general-purpose technology of our era is artificial intelligence, particularly machine learning.” ~ Erik Brynjolfsson and Andrew McAfee¹

I. Introduction

To begin a discussion of artificial intelligence, it may be helpful to first define “intelligence.” Intelligence is “the capacity to acquire knowledge and apply it to achieve an outcome; the action taken is related to the particulars of the situation rather than done by rote. The ability to have a machine perform in this manner is what is generally meant by artificial intelligence.”² Artificial intelligence means “computers doing intelligent things – performing cognitive tasks, such as thinking, reasoning, and predicting – that were once thought to be the sole province of humans. It’s not a single technology or function.”³

According to the Merriam Webster dictionary, artificial intelligence is “the capability of a machine to imitate intelligent human behavior.”⁴ At a basic level, artificial intelligence programming focuses on three cognitive skills - learning, reasoning and self-correction:⁵

- The learning aspect of artificial intelligence programming focuses on acquiring data and creating rules for how to turn data into actionable information. The rules, called algorithms, provide computing systems with step-by-step instructions on how to complete a specific task.
- Reasoning focuses on the capability of artificial intelligence to choose the most appropriate algorithm, among a set of algorithms, to use in a particular context.
- Self-correction involves the capability of artificial intelligence to progressively tune and improve a result until it achieves the desired goal.

II. AI Defined and Explained

“AI is a branch of computer science and often involves technical knowledge outside of most lawyers’ expertise, understanding how AI programs operate may be difficult for lawyers.”⁶

A. AI and Its Applications⁷

- **AI** is the term used to describe how computers can perform tasks normally viewed as requiring human intelligence, such as recognizing speech and objects, making decisions based on data and translating languages. AI mimics certain operations of the human mind.
- **Machine Learning** is an application of AI in which computers use algorithms (rules) embodied in software to learn from data and adapt with experience.
- A **Neural Network** is a computer that classifies information – putting things into “buckets” based on their characteristics.

B. What It Does

In general, AI involves algorithms (a set of rules to solve a problem or perform a task), machine learning and natural language processing.

Why do similar but varied definitions of AI exist?

“What qualifies as an intelligent machine is a moving target: A problem that is considered to require AI quickly becomes regarded as ‘routine data processing’ once it is solved.”⁸

“One result of AI’s failure to produce a satisfactory criterion of intelligence is that, whenever researchers achieve one of AI’s goals – for example, a program that can summarize newspaper articles or beat the world chess champion – critics are able to say, ‘That’s not intelligence!’”⁹

“Marvin Minsky’s response to the problem of defining intelligence is to maintain – like Alan Turing before him – that intelligence is simply our name for any problem-solving mental process that we do not yet understand. Minsky likens intelligence to the concept of “unexplored regions of Africa”: it disappears as soon as we discover it.”¹⁰

III. Types of AI

- **Narrow or Weak:** This kind of AI does some tasks at least as well as, if not better than, a human. For example, in law, there is TAR, or technology-assisted review – AI that can find legal evidence more quickly and accurately than a lawyer can; AI technology

that can read an MRI more accurately than a radiologist can. Other examples are programs that play chess or AlphaGo better than top players.

- **General or Strong AI:** This kind of AI would do most if not all things better than a human could. This kind of AI does not yet exist and there's debate about whether we'll ever have strong AI.
- **Super Intelligent AI** of the science fiction realm. This type of AI would far outperform anything humans could do across many areas. It's controversial, and some see it as an upcoming existential threat.¹¹

IV. The Founding Fathers/Mothers of AI

Credited as the “father of artificial intelligence,” Alan Turing was the wartime codebreaker at Bletchley Park and founder of computer science. Turing was one of the first people to take seriously the idea that computers could think.¹² Credited as the “father of deep learning,” Frank Rosenblatt was a psychologist whose brainchild was the Perceptron.¹³ The rise of the modern computer is often traced to 1836 when Charles Babbage and Augusta Ada Byron, Countess of Lovelace, invented the first design for a programmable machine.¹⁴

V. AI Through the Years: The AI Timeline

A. Mythology

Efforts to understand and describe the human thought process “as symbols – the foundation for AI concepts such as general knowledge representation – include the Greek philosopher Aristotle, the Persian mathematician Muḥammad ibn Mūsā al-Khwārizmī, 13th-century Spanish theologian Ramon Llull, 17th-century French philosopher and mathematician René Descartes, and the 18th-century clergyman and mathematician Thomas Bayes.”¹⁵

B. Programmable Digital Computer (1940s)

In the 1940s, Princeton mathematician John von Neumann conceived the architecture for the stored program computer. This was the idea that a computer's program and the data it processes can be kept in the computer's memory.¹⁶ The first mathematical model of a neural network, arguably the basis for today's biggest advances in AI, was published in 1943 by the computational neuroscientists Warren McCulloch and Walter Pitts in their landmark paper, "A Logical Calculus of Ideas Immanent in Nervous Activity."¹⁷

C. Theseus: Remote-Controlled Mouse (1950)

"It is customary to offer a grain of comfort, in the form of a statement that some peculiarly human characteristic could never be imitated by a machine. I cannot offer any such comfort, for I believe that no such bounds can be set." ~ Alan Turing, 1951

Developed by Alan Turing in 1950, the Turing Test focused on the computer's ability to fool interrogators into believing its responses to their questions were made by a human being.¹⁸ The first step in the direction of machine learning was provided by the Turing Test (also known as the "imitation game") in which an interrogator had to discover whether they were interrogating a human or a machine and, therefore, whether a machine can show human-like intelligence.¹⁹

D. Dartmouth College Workshop (Summer of 1956)

The term "artificial intelligence" was first used in 1955 when John McCarthy, a computer scientist at Dartmouth College, in New Hampshire, used the phrase in a proposal for a summer school.²⁰ The 1956 summer conference at Dartmouth, sponsored by the Defense Advanced Research Projects Agency, or DARPA, included AI pioneers Marvin Minsky, Oliver Selfridge and John McCarthy. In addition, Allen Newell, a computer scientist, and Herbert A. Simon, an economist, political scientist, and cognitive psychologist, "presented their groundbreaking Logic Theorist – a computer program capable of proving certain mathematical theorems and referred to as the first AI program."²¹

With the promise of great advancement in AI, the Dartmouth conference garnered both government and industry support. Some significant advances in AI at that time include the General Problem Solver (GPS) algorithm published in the late 1950s, which laid the foundations for developing more sophisticated cognitive architectures; Lisp, a language for AI programming that is still used today; and ELIZA, an early natural language processing (NLP) program that laid the foundation for today's chatbots.²²

E. Perceptron Mark I: Artificial Neural Network (1958)

The Perceptron was the first neural network, a rudimentary version of the more complex “deep” neural networks behind much of modern AI.²³

F. AI Winter (1970s)

Eventually, when the promise of developing AI systems equivalent to the human brain proved elusive, government and corporations diminished their support of AI research. This led to what has been termed the “AI winter,” which lasted from 1974 to 1980.²⁴

G. AI Second Winter (1980s)

“In the literal sense, the programmed computer understands what the car or the adding machine understand: namely, exactly nothing.” ~ John Searle, 1980

In the 1980s, there was renewed AI interest due in part to research on deep learning techniques and industry adoption of Edward Feigenbaum's expert systems. Yet, lack of funding and support led to the “second AI winter,” which lasted until the mid-1990s.²⁵

H. Machine Learning Development (1990s and 2000s)

During the 1990s and 2000s, many of the landmark goals of AI were achieved.²⁶ Groundbreaking work on neural networks and the advent of big data propelled the current renaissance of AI.²⁷ For example, in 1997, IBM's Deep Blue beat the chess grandmaster Garry Kasparov. The contest made global headlines, with Newsweek announcing, “The Brain's Last

Stand.” Also, in 1997, speech recognition software, developed by Dragon Systems, was implemented on Microsoft® Windows®.²⁸ In 2007, AI was defined as the “science and engineering of making intelligent machines, especially intelligent computer programs.”²⁹ In 2018, Microsoft defined AI as “a set of technologies that enable computers to perceive, learn, reason and assist in decision-making to solve problems in ways that are similar to what people do.”³⁰

I. AlexNet: Deep Learning System (2012)

Professor Mirella Lapata, an expert on natural language processing at the University of Edinburgh, stated that “AlexNet was the first lesson that scale really matters.” “People used to think that if we could put the knowledge we know about a task into a computer, the computer would be able to do that task. But the thinking has shifted. Computation and scale are much more important than human knowledge.”³¹

J. Introduction of Generative Adversarial Networks (2014)

OpenAI’s GPT – an acronym meaning “generative pre-trained transformer” – and similar large language models (LLMs) can churn out lengthy and fluent, if not always wholly reliable, passages of text. Trained on enormous amounts of data, including most of the text on the internet, they learn features of language that eluded previous algorithms.³² Once the transformer has learned the features of the data it is fed – music, video, images and speech – it can be prompted to create more. The transformer – not different neural networks – is relied upon to process different media.³³

K. Language and Image Recognition Capabilities (2015)

An LLM is a machine-learning neuro network trained through data input/output sets; frequently, the text is unlabeled or uncategorized, and the model is using self-supervised or semi-supervised learning methodology. Information is ingested, or content entered, into the LLM, and the output is what that algorithm predicts the next word will be. The input can be proprietary corporate data or, as in the case of ChatGPT, whatever data it is fed or scraped directly from the

internet.³⁴ LLMs do not recreate the way human brains work. The basic structure of these models consists of nodes and connections.³⁵ Simply put, LLMs are “next word prediction engines.”³⁶

Examples of Open Model LLMs include:³⁷

- OpenAI’s GPT-3 and GPT-4 LLMs
- Google’s LaMDA and PaLM LLMs
- HuggingFace’s BLOOM and XLM-RoBERTa
- Nvidia’s NeMO LLM
- XLNet
- Co:here
- GLM-130B

According to Jonathan Siddharth, CEO of Turing, a Palo Alto company, “Hallucinations happen because LLMs, in their most vanilla form, don’t have an internal state representation of the world. There’s no concept of fact. They’re predicting the next word based on what they’ve seen so far – it’s a statistical estimate.”³⁸

If the information an LLM has ingested is biased, incomplete or otherwise undesirable, then the response it gives could be equally unreliable, bizarre or even offensive. When a response goes off the rails, data analysts refer to it as “hallucinations” because they can be so far off track.³⁹ Further, since some LLMs also train themselves on internet-based data, they can move well beyond what their initial developers created them to do. For example, Microsoft’s Bing uses GPT-3 as its basis, but it’s also querying a search engine and analyzing the first 20 results or so. It uses both an LLM and the internet to offer responses.⁴⁰

CEO Siddharth further explains, “We see things like a model being trained on one programming language and these models then automatically generate code in another programming language it has never seen. Even natural language; it’s not trained on French, but

it's able to generate sentences in French. It's almost like there's some emergent behavior. We don't know quite how these neural networks work.....It's both scary and exciting at the same time.”⁴¹

L. Chatbots

“The foundation of the chatbot is the GPT LLM, a computer algorithm that processes natural language inputs and predicts the next word based on what it's already seen.⁴² So, LLMs are the fundamental architecture behind chatbots like Open AI's ChatGPT or Google's Bard. A question typed in to ChatGPT [or Bard], for example, has to be processed by an LLM in order to produce an answer or response.”⁴³

Another way to think about ChatGPT is that it is a computer program that can understand and respond to human language. It accomplishes this by learning from a large amount of text (such as books, articles and websites) and uses that knowledge to predict what word or phrase might come next in a conversation or text.

Because it is “generative,” each response to a question will be generated on the spot and will be unique. Because it can remember earlier parts of a conversation, it can change its original output in response to further feedback. Because it is pre-trained, it is limited – for better or worse – to what is in its training materials. And because it works by being predictive, it generates text that seems plausible, but not necessarily accurate.⁴⁴

According to Assistant Professor Yoon Kim at MIT, prompt engineering is about deciding what we feed this algorithm so that it says what we want it to. The LLM is a system that just babbles without any text context. In some sense of the term, an LLM is already a chatbot.⁴⁵ Thus, “prompt engineering is the process of crafting and optimizing text prompts for an LLM to achieve desired outcomes. Prompt Engineering by a user trains the model for specific industry or organizational.”⁴⁶ “Prompt Engineering is said to be a vital skill for IT and business professionals,”⁴⁷ thus, a new job potential in this field.

BENEFITS AND RISKS OF AI AND GENERATIVE AI USE

Artificial intelligence continues to transform the globe in a manner not seen since the advent of the written word. Aspects of how each of the over 8 billion humans on planet earth live, work and play are increasingly impacted by AI. As with every transformative technology, there are an array of potential benefits and risks.

If the media and pop culture are to be believed, the world is facing an existential crisis that promises both utopia and global destruction. This section unpacks the reality of AI through a cost benefit analysis that goes beyond the media hype.

I. Benefits

AI has proliferated a wide array of human tasks and experiences over the last 70 years. Since the advent of the term in 1956 by John McCarthy, the concept of artificial intelligence has evolved from replicating and replacing human cognition to one of “augmented intelligence,” which amplifies and optimizes human intellect. If used for such purposes (i.e., to amplify and optimize human intelligence), machine learning and AI help bring order to the chaotic wealth of information facing individuals today. In theory, this allows humans to spend more time on high-value and creative endeavors.

Today, nearly all aspects of human existence are touched in some manner by machine learning or AI. From the way we shop or interact as humans to medical treatment and supply chain logistics, the breadth of AI’s impact on human existence, which may be hidden in plain sight, is hard to overstate.

A large portion of the proliferation is being driven forward by the wealth of benefits in terms of accuracy, speed and capability offered by AI powered technology. Some key examples of benefits derived from the application of AI include:

A. General Benefits

There are a substantial number of overall AI benefits, with the list growing daily. In general, AI: (i) efficiently performs repetitive tasks; (ii) reduces human error; (iii) increases efficiency; and (iv) augments human intelligence. Specific to the legal industry, AI has the potential to facilitate greater access to justice.

Legal representation in a civil matter is beyond the reach of 92% of the 50 million Americans below 125% of the poverty line.⁴⁸ Globally, there are an estimated 5 billion people with unmet justice needs.⁴⁹ The justice gap between access to legal services and unmet legal needs constitutes two-thirds of the global population, and these justice needs extend from minor legal matters to more grave injustices.⁵⁰

AI-powered technology has lowered the bar for many underserved communities to access legal guidance. Further, AI has been heralded as a solution for the closing the “justice gap.” Increased efficiency, accuracy and the ability for underserved populations to leverage self-service legal resources all contribute to this benefit. Technologies powered by AI may allow the underserved population with internet access or individuals with limited funds to access guides at little or no cost to navigate the complexities of the judicial system.⁵¹ Generative AI-powered chat bots now hover on the line of unauthorized practice of law,⁵² offering high volume, low-cost legal services absent human input in areas such as traffic court⁵³ and immigration,⁵⁴ among others. But the early uses of generic AI chatbots (as opposed to specific legal applications) in this area have had mixed results. According to a January 2024 study by researchers from Stanford University,⁵⁵ popular AI chatbots, such as Open AI’s ChatGPT3.5, Google’s PaLM 2 and Meta’s Llama 2, are inaccurate in the majority of cases when answering legal questions, posing special risks for people relying on the technology because they can’t afford a human lawyer. The study found that LLMs

get their results wrong at least 75% of the time when answering questions about a law court's core ruling.⁵⁶

In December 2023, the courts in England and Wales produced Judicial Guidance on AI, which highlighted why these errors may appear.

Public AI chatbots do not provide answers from authoritative databases. They generate new text using an algorithm based on the prompts they receive and the data they have been trained upon. This means the output which AI chatbots generate is what the model predicts to be the most likely combination of words (based on the documents and data that it holds as source information). It is not necessarily the most accurate answer.⁵⁷

There are also limits with the training data provided to these tools. Currently available LLMs appear to have been trained on limited material published on the internet.⁵⁸ Their view of the law can be limited to the material included in the training data, which could include the opinions in chat rooms of individuals without any legal qualifications. Here, the Judicial Guidance in England and Wales looks at specific risks:

AI tools may:

- make up fictitious cases, citations or quotes, or refer to legislation, articles or legal texts that do not exist
- provide incorrect or misleading information regarding the law or how it might apply, and
- make factual errors.⁵⁹

B. Healthcare Advancement and Human Longevity

The healthcare industry has similarly witnessed significant advances owing to AI-powered tools. AI has aided in new drug discoveries,⁶⁰ improved image analysis, robotic surgery and gene editing. Further, AI algorithms can predict diseases based on medical imaging, genetic information, and patient data.⁶¹ AI-powered wearable technology allows physicians to continuously monitor patients remotely.⁶² AI has been deployed for personalized medicine, providing patients with

tailored treatments and medication.⁶³ Finally, AI has supported mental health by providing early diagnostics and therapeutic assistance.⁶⁴

C. Ethical AI Development

In the ethics field, AI has helped to identify and correct human biases in data and decision-making.⁶⁵ AI tools can also be designed with mechanisms to ensure ethical considerations are integrated into AI systems.⁶⁶ Additionally, AI can be employed to create frameworks that ensure equitable outcomes.⁶⁷

D. Health & Public Safety

In the health and public safety sector, AI advances have revolutionized a broad swath of areas from infrastructure to cybersecurity. AI has been used to manage traffic signals, thereby reducing congestion and optimizing traffic flow.⁶⁸ The technology has utilized crime pattern analysis to predict and prevent future incidents.⁶⁹ AI algorithms optimize rescue and relief operations during natural disasters.⁷⁰ Engineers deploy AI-based sensors that predict when maintenance on bridges and buildings is required.⁷¹ Finally, AI systems are used to detect and respond to cyber threats in real time.⁷²

E. Quality of Life

Where AI has had the most visible societal impact involves quality-of-life products. AI has transformed our living spaces into “smart homes”⁷³ that can improve convenience and energy efficiency. AI has helped people with disabilities gain more independence. Technology companies capitalize on AI to enhance gaming and virtual reality experiences.⁷⁴ In marketing, chatbots that handle customer inquiries without human intervention have become a staple.⁷⁵

People have become familiar with using AI to personalize recommendations on platforms, such as Netflix and Spotify. AI has been used to restore and preserve historical documents and artworks.⁷⁶ It can also facilitate the sharing and understanding of diverse cultural expressions.⁷⁷

Artists use AI-based tools to explore new forms of creative expression. Lastly, AI has enhanced the personalized shopping experience.⁷⁸

F. Scientific Advancement, Space & Exploration

AI's reach extends beyond the boundaries of Earth. Scientists use AI to process data from space missions and to operate rovers on Mars.⁷⁹ Aquatically, autonomous submarines are used to map the ocean floor and study marine life.⁸⁰ Because AI can analyze vast datasets faster than the human mind, it has sped up scientific discoveries. For example, DeepMind's AlphaFold program predicts the 3D structure of proteins,⁸¹ which accelerates researchers' understanding of diseases and developing new treatments. AI has improved complex problem-solving in fields such as quantum physics and materials science. Lastly, AI enhances collaboration by connecting researchers across the globe and facilitating cross-disciplinary work.⁸²

G. Global Environmental Impact

Environmentally, AI holds promises to combat climate change. Governments are deploying AI in the creation of "smart cities"⁸³ that optimize energy consumption in homes and businesses. AI-powered drones and image recognition technology have been used to monitor endangered species.⁸⁴ There are AI models that simulate and predict climate change impacts.⁸⁵ Some municipalities deploy sensors and AI systems to monitor and predict air and water quality.⁸⁶

In the area of water conservation, AI has been used to predict water usage patterns and improve water conservation techniques.⁸⁷ In the quest for clean energy, AI can streamline the development and management of renewable energy sources.⁸⁸ Lastly, logistics managers find improved fuel efficiency through AI tools that optimize routes for freight and package delivery.⁸⁹

H. Education Optimization

In the field of education, developers have created adaptive learning platforms that adjust in real time to the learning style and pace of students⁹⁰. Educators can use AI systems to automate

grading and provide immediate student feedback.⁹¹ Voice-to-text and text-to-voice AI services have assisted learners with disabilities.⁹²

I. Economic Development

The economy has seen material changes in how the world conducts business. Precision farming techniques use AI to increase yield, reduce resource consumption and waste, and optimize food distribution.⁹³ The use of biometrics is one of the most significant current uses of AI. PricewaterhouseCoopers reports that 6 in 10 companies use biometric authentication (BitDefender), the use of which has tripled since 2019.⁹⁴ AI has been utilized to analyze market trends, providing businesses with strategic insights. By automating routine tasks, employees turned their focus to more high-value work. Lastly, high paying new jobs relating to AI have been developed.⁹⁵

II. **Risks**

A counterpoint to the transformative benefit of AI is an equally dramatic deluge from the press and media that AI poses substantial economic, ethical and existential risks. Some key examples of risks posed from the application of AI are described below.

A. Widening Justice Gap

While many proclaim that AI is the solution to democratization of justice, an equally powerful contingent claim AI may create a “two-tiered legal system.”⁹⁶ Some anticipate that individuals in underserved communities or with limited financial means will be relegated to inferior AI-powered technology.⁹⁷

Additionally, development of such technology should acknowledge that many populations currently underserved by legal representation may have compounded obstacles in accessing the benefits that AI may bring to others, including:

- Lack of access to computers/internet

- Limited facility/literacy in how to use AI
- A high level of distrust in government institutions, law as a tool that operates to protect them, law enforcement as a positive influence and/or legal professionals as people who are available to help.

The specific layer of concern here goes beyond the “haves” with better access to counsel than the “have nots.” For example, in a landlord-tenant dispute, AI would likely be used by landlords to increase enforcement actions against tenants. However, the tenants would not likely have access to AI in preparing their response. In that sense, AI could be viewed as broadening the availability of legal services to the “haves,” leaving the “have nots” worse off than they are now. Compounding this is the fact that most legal services organizations have little to no resources to prepare for these changes in access to AI now.⁹⁸

B. Data Privacy & Surveillance

Protectors of civil liberties and data privacy have raised alarms about the potential of AI to corrupt both. As most AI systems are capable of aggregating vast amounts of personal data, this could lead to privacy invasions. Currently, governments and corporations use AI for comprehensive surveillance and social control.⁹⁹ Hackers have utilized AI tools to synthesize personal data for the purpose of impersonating individuals (think “deepfakes”) and committing cyber theft.¹⁰⁰ Concerns also circle around the lack of transparency in training data,¹⁰¹ biases built into models¹⁰² and ownership of intellectual property.¹⁰³

C. Security

In addition to the cyber threats mentioned above, general security concerns accompany AI use. Security concerns are amplified when AI is used in high-risk applications, such as in conjunction with biometric data and infrastructure systems. For instance, AI systems in military applications that lack adequate human control can lead to unintended engagements.¹⁰⁴ Through

social media, AI has been used to weaponize information, leading to an explosion in misinformation and potential erosion of democracy.¹⁰⁵ Cyber criminals have deployed AI to target critical infrastructure, such as power grids and water systems.¹⁰⁶

D. Social and Ethical Issues

AI algorithms have been utilized to perpetuate and amplify societal biases. Given concerns about privacy and surveillance, the impact of all types of societal biases – including a significant number of instances of gender and racial bias that have already been identified – is compounded.¹⁰⁷ We have also witnessed a disquieting increase in adverse psychological issues related to AI (e.g., AI chatbot suicide¹⁰⁸). We will also need to address the assignment-of-liability when decisions are made by AI systems.¹⁰⁹ As noted above, the disparity in AI access has exacerbated inequality issues. Furthermore, AI can exacerbate ideological bias, especially when used in conjunction with social media. AI can create its own echo chamber, generating spurious content to use as future training data, leading to ideologically based “hallucinations” and inaccuracies.¹¹⁰

E. Misinformation

As referenced earlier, bad actors have used “deepfakes” to disseminate misinformation. A deepfake is AI-generated content that is indistinguishable from real content. These “deepfakes” become more believable when combined with biometric data, such as voice prints and facial mapping. We are entering an age of information warfare in which AI systems can be used to create and spread misinformation at scale. We find this particularly troubling not only during political elections,¹¹¹ but also in the daily lives of our citizens, for example, through social engineering scams powered by AI that target vulnerable members of society, such as grandparents, who believe they are speaking with their grandchildren but instead become victims of fraud.¹¹²

F. Economic Impact and Disruption

The economic impact of AI is multilayered. There is the direct effect of job displacement where tasks are automated,¹¹³ leading to unemployment in various sectors and the indirect effect of devaluing services traditionally offered by a human (e.g., legal services). Further, AI advancements tend to benefit those with access to technology, thus widening the wealth gap.

Our financial markets face manipulation. AI systems could perform high-frequency trading to influence financial market activity.¹¹⁴ We face possible skill erosion; humans will no longer retain the knowledge to perform certain tasks.¹¹⁵ Lastly, the resources required to power certain AI systems rely on materials that are derived from exploitation.¹¹⁶

G. Safety

Expanding on the general societal issues noted above, there are several safety concerns involving AI. How do we respond when AI systems that operate in critical roles fail and cause harm? We noted above AI's potential to manipulate emotions that could lead to psychological harm, but there is also the overdependence on AI that could lead to loss of human skills and abilities. Lastly, AI has been shown to behave unpredictably, which may result in harmful or unintended consequences.¹¹⁷

H. Legal and Regulatory Challenges

The area in which the law struggles now involves assignment of liability when AI causes damage or harm. The courts are also grappling with issues involving intellectual property, including copyright (e.g., training data protections),¹¹⁸ ownership of output and invention patenting. Current laws and regulations have failed to keep pace with AI development. We will also encounter difficulty enforcing laws across borders as most technology companies offer global AI systems.

I. Loss of Human Centricity and Control

We mentioned earlier the concern that AI develops autonomously without a human in the loop. The existential threat where AI systems operate beyond human understanding and control has been the subject of science fiction but has surfaced more as a probable fact.¹¹⁹ We encounter the risk that AI may make critical decisions without human oversight or ethical considerations. Further, AI decisions may not value human life nor human generated output.¹²⁰ We are imperiled by AI that makes moral decisions without human empathy or understanding.¹²¹

LEGAL PROFESSION IMPACT

I. Ethical Impact

In the previous portion of this report, we explored the varying benefits and risks of AI and AI-based tools. When using any technology in legal practice, attorneys must remain compliant with the Rules of Professional Conduct. With generative AI tools, the number of rules implicated may be surprising.¹²²

A. Duty of Competency/Techno-solutionism

“A refusal to use technology that makes legal work more accurate and efficient may be considered a refusal to provide competent legal representation to clients.”¹²³

Rule 1.1 of the Rules of Professional Conduct (RPC) requires that a lawyer provide competent representation to a client. Comment 8 to RPC Rule 1.1 asserts that keeping abreast of “the benefits and risks associated with technology the lawyer uses to provide services to clients” is an element of competency. However, a recent LexisNexis survey found that only 43% of U.S. attorneys use (or plan to use) these tools professionally.¹²⁴ The need for more education, training and proficiency with the technology is apparent.

In addition to competence, attorneys must resist viewing these tools through a techno-solutionism lens. “Techno-solutionism”¹²⁵ is the belief that every social, political and access problem has a solution based in development of new technology. In this case, some view generative AI as the solution to the access to justice problem. As infamously demonstrated in the *Avianca* case,¹²⁶ in which an attorney utilized ChatGPT (a generative AI tool) to write a brief that contained fictitious legal precedent, attorneys cannot rely on technology without verification. RPC Rule 5.3 imposes a supervisory obligation on attorneys with respect to nonlawyer work. In the *Avianca* case, the “nonlawyer” was the tool itself.

B. Duty of Confidentiality & Privacy

RPC Rule 1.6 states, in part, that “[a] lawyer shall not reveal information relating to the representation of a client unless the client gives informed consent.” This duty of confidentiality also extends to what client information a lawyer may share when using certain generative AI tools. Because AI models depend on data to deliver salient results, privacy protection must become an integral part of their design.¹²⁷ Confidentiality concerns arise when entering information into AI engines, such as chatbots, and when such entries are then added to the training set for the AI. Such uses may violate protective orders for prior and future cases involving different parties. These concerns are compounded when chatbot results are analyzed by evaluative AI. For example, if biometrics data is analyzed by a chatbot to assist a mediator in preparing a mediator’s proposal, multiple levels of confidentiality concerns arise. Such issues are especially important when some or all data that the AI “learns” is used for training the AI for work on future cases. Lawyers should cautiously use these tools, being mindful of a client’s privacy.

In fact, the California bar association¹²⁸ recommends that lawyers inform their clients if generative AI tools will be used as part of their representation. The Florida bar association¹²⁹ takes its recommendation a step further, suggesting that lawyers obtain informed consent before utilizing such tools. Whether an attorney informs the client or obtains formal consent, the ethical obligation to protect client data remains unchanged from the introduction of generative AI tools.

C. Duty of Supervision

As noted earlier, RPC Rule 5.3 imposes a duty to supervise non-lawyers involved in client representation. In 2012, the American Bar Association amended Model Rule 5.3 to clarify that the term “non-lawyers” includes non-human entities, such as artificial intelligence technologies.¹³⁰ Despite the cautionary tale set by the *Avianca* case, a prominent California law firm has submitted hallucinated cases in its legal briefs.¹³¹ Dennis P. Block and Associates, which handles tenant

evictions, was fined \$999 for its ethical violation – a paltry sum considering the societal impact of wrongful evictions.

D. Unauthorized Practice of Law

To begin a discussion about what constitutes the unauthorized practice of law (UPL) and specifically how use of generative AI, including LLMs, such as ChatGPT, Claude, Bard, and Mid-journey, may be considered UPL, we first examine what is the practice of law.

While there is no nationally agreed definition of what constitutes the practice of law, the ABA Model Rules provides one (discussed below). Some states have also fashioned their own definitions of the practice of law. Yet, without a uniform definition and precise meaning of the practice of law, we fall upon the adage: “You know it when you see it.”

The ABA defines the practice of law as the application of legal principles and judgment regarding the circumstances or objectives of a person that require the knowledge and skill of a person trained in the law. However, New York State does not offer a precise definition of the term. ABA Model Rule 5.5 forbids lawyers from engaging in the unauthorized practice of law. Section (b) of the rule states:

A lawyer who is not admitted to practice in this jurisdiction shall not: (1) except as authorized by these Rules or other law, establish an office or other systematic and continuous presence in this jurisdiction for the practice of law; or (2) hold out to the public or otherwise represent that the lawyer is admitted to practice law in this jurisdiction.

Similarly, Rule 5.5 of the New York RPC defines the unauthorized practice of law in this manner:

(a) A lawyer shall not practice law in a jurisdiction in violation of the regulation of the legal profession in that jurisdiction. (b) A lawyer shall not aid a nonlawyer in the unauthorized practice of law.

Based on these rules, AI programs that do not involve a human-lawyer in the loop in providing legal advice arguably violate the rules and may be considered UPL. Thus, “AI programs

cannot give legal advice unless a human lawyer is involved. In the age of AI, legal ethics preserves a human element in the practice of law.”¹³²

Case Law: Lawsuits Against AI Developers & UPL

Lola v. Skadden, Arps, Slate, Meagher & Flom LLP, 620 Fed. Appx. 37, 45 (2nd Cir. 2015). “According to the Lola decision, if a lawyer is performing a particular task [like document review] that can be done by a machine, then that work is not practicing law.”¹³³ The court also interpreted North Carolina’s law to imply, however, that the practice of law requires “at least a modicum of independent legal judgment.”¹³⁴

Janson v. LegalZoom.com, Inc., 802 F. Supp. 2d 1053, 1064 (W.D. Mo. 2011). The court held that filling out blank forms like the ones provided on LegalZoom’s website “does not constitute the unauthorized practice of law.” -Further, in a settlement between LegalZoom and the North Carolina Bar Association, LegalZoom agreed to have a licensed attorney review blank templates offered to customers in North Carolina and to clearly indicate to customers that the templates do not replace the advice of an attorney to ensure LegalZoom would not engage in the unauthorized practice of law.¹³⁵

Based on current case law, AI programs can direct clients to the forms they need to fill out. However, these programs may not give any advice as to the substance of the client’s answers because that would be replacing the work of a human lawyer.¹³⁶

E. Attorney-Client Privilege and Attorney-Work Product

“There’s not a lot of thought given to whether the information that’s provided [to the chatbot] is covered by attorney client privilege.” ~ Jay Edelson, CEO and founder of Edelson PC

One of the oldest recognized privileges regarding confidential information, the attorney-client privilege, “shields from disclosure any confidential communications between an attorney and his or her client made for the purpose of obtaining or facilitating legal advice during a

professional relationship” so long as the communication is “primarily or predominantly of a legal character.”¹³⁷

The overarching purpose of this privilege is to allow for full and frank communications or discussions between attorneys and their clients. The attorney-client privilege has been defined as:

a legal privilege that works to keep confidential communications between an attorney and their client private. Communications made to and by a lawyer in the presence of a third party may not be entitled to this privilege on grounds that they are not confidential. The privilege can be affirmatively raised in the face of a legal demand for the communications, such as a discovery request or a demand that the lawyer testify under oath. A client, but not a lawyer, who wishes not to raise attorney-client privilege as a defense is free to do so, thereby waiving the privilege. This privilege exists only when there is an attorney-client relationship (Cornell University Law School, Legal Information Institute/LII, posting by the Wex Definitions Team).

The statutory attorney-client privilege in the State of New York is found in Civil Procedure Law and Rules 4503(A)(1), which states:

Unless the client waives the privilege, an attorney or his or her employee, or any person who obtains without the knowledge of the client evidence of a confidential communication made between the attorney or his or her employee and the client in the course of professional employment, shall not disclose, or be allowed to disclose such communication, nor shall the client be compelled to disclose such communication, in any action, disciplinary trial or hearing, or administrative action, proceeding or hearing conducted by or on behalf of any state, municipal or local government or by the legislature or any committee or body thereof.

While discovery requests for privileged information may reveal attorney-client privileged information, so too may the use of generative AI tools such as ChatGPT or GPT-4.

Model Rules of Professional Conduct 1.6(a) and (c):

(a) A lawyer shall not reveal information relating to the representation of a client unless the client gives informed consent, the disclosure is impliedly authorized in order to carry out the representation or the disclosure is permitted by paragraph (b).

(c) A lawyer shall make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client.

New York RPC Rule 1.6:

(a) A lawyer shall not knowingly reveal confidential information, as defined in this Rule, or use such information to the disadvantage of a client or for the advantage of the lawyer or a third person.

(c) A lawyer shall make reasonable efforts to prevent the inadvertent or unauthorized disclosure or use of, or unauthorized access to, information protected.

Comment to New York Rules of Professional Conduct 1.6(c):

- An attorney must “make reasonable efforts to safeguard confidential information against unauthorized access by third parties and against inadvertent or unauthorized disclosure by the lawyer or other persons who are participating in the representation of the client or who are otherwise subject to the lawyer’s supervision.”
- “Unauthorized access to, or the inadvertent or unauthorized disclosure of, information protected . . . does not constitute a violation of paragraph (c) if the lawyer has made reasonable efforts to prevent the unauthorized access or disclosure.”

Focusing on the language in the Cornell University Law School LII definition of attorney-client privilege – “communications made to and by a lawyer in the presence of a third party may not be entitled to this privilege on grounds that they are not confidential” – how then may attorney-client privileged information or attorney-work product be revealed when directly and indirectly using generative AI tools such as ChatGPT or GPT-4.¹³⁸

For example, through:

- Direct Use of ChatGPT as an app (the user directly enters a prompt that contains your private or confidential information, which then goes into ChatGPT)

- Indirect Use of GPT-4 that is embedded in search engines such as Microsoft Bing (the user enters a prompt that contains private or confidential information, which then goes into the generative AI app)
- Use of Application Programming Interface/API (using some other application that connects to ChatGPT via the API, private or confidential information is inputted into ChatGPT)
- ChatGPT plugins (accessing other applications from within ChatGPT via plugins, which conveys your private or confidential information further into ChatGPT and other places too. With plugins, other users/persons can see/view your private or confidential information).

Key Points for attorneys to be aware of and consider when utilizing ChatGPT and other similar generative AI tools include:

- Licensing Information
- Terms of Use
- Privacy Policies
- Frequently Asked Questions/FAQs list
- Data that is supplied to or inputted into ChatGPT may be used for training purposes or to refine/improve the AI model (For example, ChatGPT developers may view the input and conversation history of its users and users' personal information, including log/usage data, to analyze/improve/and develop ChatGPT services).
- Data that is supplied to or inputted into ChatGPT may be viewed by and disclosed to third parties/vendors in the training of the AI model.

- Data output by ChatGPT may be viewed by third parties, including opponents and adversaries.

Pursuant to the Model Rules of Professional Conduct and New York RPC, lawyers must take reasonable efforts to prevent inadvertent and unauthorized disclosure of or access to client information. When utilizing generative AI tools such as ChatGPT, attorneys need to be knowledgeable about the technology they are using and/or ask for assistance from those lawyers or trusted technology experts who do understand its use and limitations, including IT personnel. If none of these options is possible, then the attorney should not utilize such technologies until they are competent to do so per the duty of competency.¹³⁹

AI and Cybersecurity Risks

Open AI/ChatGPT may raise both ethical violations and cybersecurity issues. For example, “if there is a cyber intrusion [into OpenAI or ChatGPT], not only will that data potentially be lost to threat actors, but they could conceivably also obtain the firm’s searches... [gaining] access into the mind of a lawyer and the arguments they might be raising.”¹⁴⁰

Preservation of Data

Data preservation and litigation hold obligations may present similar challenges for attorneys and the court. If the data that is inputted into the AI application is temporary/ephemeral, but also relevant and responsive to the litigation, parties have the duty to preserve this electronically stored information. Yet, how do you preserve what may no longer exist?

F. Candor to the Court

When using ChatGPT or other similar AI tools, attorneys must verify the accuracy of the information and legal authority produced by such tools. Attorneys’ signatures and attestations appear on legal documents submitted to the court, documents which make representations about case law and other authorities relied upon in support of the attorney’s case. Regardless of the use

of and reliance upon new and emerging technologies like generative AI tools, as officers of the court and in the interest of justice, attorneys must identify, acknowledge and correct mistakes made or represented to the court.

The following ABA Model Rules of Professional Conduct and New York RPC guide attorneys in their use and reliance on information obtained from AI tools:

M.R.P.C. 3.3 (Candor to the Tribunal):

“(a) A lawyer shall not knowingly:

(1) make a false statement of fact or law to a tribunal or fail to correct a false statement of material fact or law previously made to the tribunal by the lawyer;

(3) offer evidence that the lawyer knows to be false. If a lawyer, the lawyer’s client, or a witness called by the lawyer, has offered material evidence and the lawyer comes to know of its falsity, the lawyer shall take reasonable remedial measures, including, if necessary, disclosure to the tribunal. A lawyer may refuse to offer evidence, other than the testimony of a defendant in a criminal matter, that the lawyer reasonably believes is false.”

Comment [2] to *M.R.P.C. 3.3*:

“although a lawyer in an adversary proceeding is not required to present an impartial exposition of the law or to vouch for the evidence submitted in a cause, the lawyer must not allow the tribunal to be misled by false statements of law or fact or evidence that the lawyer knows to be false.”

Rule 3.3(a) (1) of the New York Rules of Professional Conduct prohibits lawyers from making false statements of fact or law to a court and requires correction of any false statements previously made during the case.

AI Hallucinations: What Are Hallucinations, and Why Do They Occur?

Hallucinations are incorrect/unreliable information produced by an LLM or generative AI chatbot, such as ChatGPT. In simplest terms, a hallucination is a euphemism for a lie. As an LLM, ChatGPT is trained on a vast amount of data to recognize patterns in language and then produce/generate a response it predicts is relevant and responsive to the user’s input or prompt.¹⁴¹

AI hallucination is a phenomenon wherein a large language model, often a generative AI chatbot or computer vision tool, perceives patterns or objects that are nonexistent or imperceptible to human observers, creating outputs that are nonsensical or altogether inaccurate.” “Generally, if a user makes a request of a generative AI tool, they desire an

*output that appropriately addresses the prompt (i.e., a correct answer to a question). However, sometimes AI algorithms produce outputs that are not based on training data, are incorrectly decoded by the transformer or do not follow any identifiable pattern. It “hallucinates” the response.*¹⁴²

Case Law and Hallucinations

U.S. v. Prakazrel Michel, No. 1:19-cr-00148-1 (CKK)(D.D.C.) (motion filed Oct. 16, 2023). Defendant, convicted of money laundering and corrupt political influencing, alleges that his attorney’s reliance on AI for his closing argument constituted ineffective assistance of counsel. Defendant argues that his attorney’s “closing argument made frivolous arguments, misapprehended the required elements, conflated the schemes and ignored critical weaknesses in the government’s case.”

Ex Parte Allen Michael Lee, 673 S.W.3d 755 (Tex. App. Jul. 19, 2023). In denying the petitioner’s motion for a new bail hearing, the court found that petitioner’s moving brief, prepared by counsel, contained citations that did not exist and arguments that appeared to be generated by generative AI.

Mata v. Avianca, Inc., No. 22-cv-1461 (PKC), 2023 WL 4114965 (S.D.N.Y. June 22, 2023) (referenced in other portions of this report).

Donovan James Gates v. Christopher Omar, et al., No. 2022 cv 31345 (Col. Sup. Ct.). A lawyer used ChatGPT for research in connection with a motion to set aside summary judgment in a breach of contract matter, and the cases cited in the motion were nonexistent. The lawyer, who had been practicing in Colorado for 1.5 years and in civil litigation for 3 months, said he turned to ChatGPT because it was his first civil litigation and he wanted to save his client money by relying on the technology to conduct the research. As of June 2023, the Court was considering sanctions.

Attorneys cannot solely rely upon information provided by generative AI. Attorneys may instead use generative AI as a starting point and must independently review case citations, arguments and any other information/output produced by generative AI.

Deepfakes – Synthetic Media as Evidence in Court

With the understanding that the fundamental purpose of a trial is its truth seeking function, for “the very nature of a trial [i]s a search for truth,”¹⁴³ evidentiary issues surrounding Deepfakes – a form of AI called deep learning that makes images of fake events¹⁴⁴ – may also implicate the Duty of Candor to the Court. Deciding issues of relevance, reliability, admissibility and authenticity may still not prevent deepfake evidence from being presented in court and to a jury. “One of the fundamental tenets of the American legal system is that the trier of fact—either the judge or the jury—is best equipped to find the truth based on the evidence presented. But individuals cannot consistently determine truth from lies as they confront deepfakes.”¹⁴⁵

G. Judges’ Ethical Obligations

The Model Code of Judicial Conduct mandates: “A judge shall uphold and promote the independence, integrity and impartiality of the judiciary.” ABA Model Code of Judicial Conduct, Canon 1.¹⁴⁶ How does Canon 1 of the Model Code of Judicial Conduct align with judicial use of generative AI, such as ChatGPT?

“The human aspect of intelligence that cannot be artificially constructed is that of ‘judgment.’” While AI can and does assist judges in a variety of ways, judges will always have the responsibility of exercising their own judgment: the human trait of independent judgment.¹⁴⁷

According to New York Rules of Professional Conduct Rule 5.4: Professional Independence of a Lawyer:

(c) Unless authorized by law, a lawyer shall not permit a person who recommends, employs or pays the lawyer to render legal service for another to direct or regulate the lawyer’s professional judgment in rendering such legal services or to cause the lawyer to

compromise the lawyer's duty to maintain the confidential information of the client under Rule 1.6.

Comment [2]

This Rule also expresses traditional limitations on permitting a third party to direct or regulate the lawyer's professional judgment in rendering legal services to another. See also Rule 1.8(f), providing that a lawyer may accept compensation from a third party as long as there is no interference with the lawyer's professional judgment and the client gives informed consent.

How does this rule and comments to the rule align with attorneys' use of generative AI such as ChatGPT? Attributed to the 16th U.S. President and attorney Abraham Lincoln: "A lawyer's time and advice are his stock in trade." It follows then that an attorney's time, advice and professional judgment are what clients expect and rely upon when retaining a lawyer/law firm for representation in a matter. While AI can and does assist lawyers in a variety of ways, attorneys do not shed their professional responsibility of exercising their own "independent judgment" in client matters.

II. Access to Justice

A. Introduction

The rapid development of AI has the potential to have a significant impact on access to justice in the American legal system. While AI and especially generative AI is generally causing disruption in the market for legal services, this impact is likely to be even greater when discussing access to justice.

For some time, there has been an enormous gap in access to legal services. A recent survey found that 66% of the U.S. population experienced at least one legal issue in the past four years, with just 49% of those problems having been completely resolved. In the United States, it is well documented that there are many geographical regions that do not have enough human lawyers. A recent survey found that low-income Americans did not receive any or enough legal help for 92% of their civil legal problems.

Generative AI tools such as ChatGPT have the potential to enhance the accessibility, efficiency and affordability of pro bono legal services. Generative AI could truly transform the way in which legal services are provided, and the tremendous opportunities and challenges of this technology are magnified when addressing pro bono services to clients. But there are clearly risks too as highlighted above. As we have already discussed, early generative AI tools have been unable to consistently provide accurate legal advice to their users. While more accurate tools may be developed, given the reach of the corporations promoting existing generative AI tools, new market entrants may not come to the attention of those most in need. Where generative AI may make it easier for those without a lawyer to find an answer to a legal issue, it may make it harder for them to find the correct answer.

We cannot underestimate the additional cost in terms of court resources to research, verify and challenge incorrect AI-generated legal opinions and arguments. Coming at a time when many courts are already stretched thin with unacceptably long waiting times in some jurisdictions for a hearing, adding to this strain could lead to more injustice.

B. Pro Bono Organizations Using Generative AI

Pro bono organizations often have faced challenges in meeting the needs of their clients and in hiring sufficient attorneys and staff to support the many matters that they take on. Staff and attorneys working for legal aid organizations are perpetually understaffed and overworked. AI has the potential to transform the way in which some pro bono organizations serve their clients.

Legal services organizations have limited resources and are unable to serve all the individuals who seek their assistance. Generative AI can help organizations put in place a triage process for pro bono clients that can help to analyze many potential matters and can enable these organizations to serve many more clients than they currently serve. Many organizations spend large amounts of time screening potential clients, but an AI chatbot could effortlessly screen

potential clients and gather basic information about their legal issues. Several organizations have started building tools to access basic legal information and they have found that generative AI is a game-changer when it comes to client intake.

Pro bono attorneys have found that generative AI tools are excellent at summarizing and extracting relevant information from documents, translating legalese into plain English and helping to quickly analyze thousands of existing court forms. In addition, ChatGPT and other similar generative AI tools can identify potential clients' legal needs and build out and maintain legal navigators.

Pro bono organizations are seeing how generative AI can even assist them in putting together navigator-type tools that can help guide clients seeking legal services. For example, a site powered by generative AI technology could provide a step-by-step guide to getting divorced, explain how to file a claim against an unlawful landlord or provide legal and other support options for domestic violence survivors. This is not a hypothetical scenario, as such systems have already been put into place by some legal services organizations, and these tools will only become more powerful, intelligent and accurate as generative AI becomes more and more sophisticated.

In addition, language is often a barrier to justice. Members of some communities may struggle to understand English, and that struggle can be magnified when faced with the formal legal language that is often used in court documents and agreements. Generative AI tools can be utilized to simplify, summarize and translate documents.

Legal services organizations are often challenged by the research and writing that they must perform in order to properly support a matter. Generative AI can help with legal research and document preparation, which in turn can help to resolve cases more quickly. It could also help to draft legal documents, such as contracts or pleadings by providing template language and helping

users to fill in necessary information. While drafting a complaint would have taken many hours in the past, with the help of generative AI, a complaint could be drafted in minutes.

If accurately and properly used, these tools may have the potential to bring legal services to those who cannot afford it and to make legal services organizations run more efficiently.

C. Will Generative AI Tools Prove to Be Too Expensive?

While generative AI has the potential to greatly benefit access to justice, there are some who believe that this technology could potentially hinder, and not help, access to justice.

It has been noted that while this technology is developing at a fast pace, the industry is not currently structured to serve the interests of underserved populations and pro bono organizations. While there is potential for pro bono organizations and low-income individuals to take advantage of this technology, there is a risk that this technology could further exacerbate existing inequities.

While it might appear that the application of this technology will help to even the playing field, it remains to be seen how expensive it will be to properly utilize this technology in the practice of law. The development of AI technology is unregulated, and the companies developing and applying this technology to the legal profession have an interest in making a product that is attractive to those who are willing to pay for it. Many law firms are investing millions of dollars to implement AI solutions. Pro bono organizations run the risk of falling even further behind the big law firms.

Additionally, when one addresses assisting non-lawyers with justice problems it is possible that new generative AI tools may not make a significant difference in improving access to justice for low-income and minority communities. Those who need legal services from this constituency are less likely to be able to use AI tools due to fees to use these tools, limited internet access and literacy and language barriers.

Since this technology really does have the potential to improve access to justice, it is crucial that pro bono organizations and low-income individuals be given access to these tools. While this may be difficult, it is imperative that this technology be available to all who are in need of legal services.

D. Use of AI by Non-Attorneys

In its first year of widespread use by the public, Chat GPT and generative AI have been used by the general public for a wide range of uses. Non-lawyers will be able to readily interact with generative AI to ask a variety of legal questions. These uses of generative AI will present challenges for bar associations, courts and the legal community as a whole.

What one must realize when looking at this issue is that currently the majority of the parties in civil cases in state and local courts lack legal representation. Therefore, the question becomes: Are the people, who otherwise would not have legal counsel, better served by at least having a chatbot to assist them?

One of the challenges with non-attorneys using generative AI to assist with legal issues is the possibility of receiving misleading information. In its current iterations, generative AI is likely to provide an answer to a legal question, but it might do so without providing an indication that the confident answer is without a proper legal foundation. Some AI companies have included warnings in their user agreements about using their tools to provide legal advice. For example, OpenAI's online usage provisions state the following:

Prohibited use – “Engaging in the unauthorized practice of law, or offering tailored legal advice without a qualified person reviewing the information.”

It is questionable whether individuals and new tools will abide by such prohibitions. Even if some tools include such warnings there is nothing to stop someone from asking a chatbot for legal advice or drafting papers for them. If a non-lawyer has a chatbot draft a brief or complaint,

they are not in as good a position as an actual lawyer to know if the filing contains falsehoods, biases, incorrect cases or other AI hallucinations.

In addition, even though individuals who cannot afford an attorney will potentially benefit from generative AI tools, there will be some barriers to access, including more limited access to the internet and computers by the people experiencing homelessness or those living in poverty. Asking such tools the right questions also requires some skill. While a person may download advice on how to frame a question (i.e., developing a “prompt”) correctly, some non-lawyers, particularly in those sections of society that have been traditionally underserved by the law, may struggle to design the correct prompt. In addition, much of the information that one would need to develop a system that provides accurate legal information would require access to databases that are generally behind a paywall (i.e., Westlaw, Lexis, Law360), which could potentially result in a cost to users.

Another potential issue stems from the fact that generative AI tools might not account for multiple, interrelated issues, which could include family, criminal, housing, employment, etc. It is possible that an answer from a chatbot could be correct for one issue but harmful in the context of the other issues. It is in this situation where a chatbot likely will never be able to fully replace a human. Generative AI will never have the same level of empathy as a human, and when individuals are seeking legal services, they often need someone to “hold their hand” and that simply is not possible with a chatbot (at least for the time being).

It should be noted that non-lawyers are already able to gather the same kind of advice or information that a chatbot provides by searching online for legal materials and legal information.¹⁴⁸ While some information found online may be correct, other information may be outdated, suspect or simply incorrect. Generative AI is basically a new interface to this online information that has

the advantage of being an interactive conversational tool. If this can make information more accessible and let people know if they even have a legal issue, this will prove to be a positive development.

In addition, generative AI solutions are available 24/7. It could take days, weeks or months for a low-income plaintiff to find an attorney to meet with them or represent them for a matter. Generative AI is generally efficient and is scalable, allowing it to provide information to many people at once. While it's true that generative AI may be challenged when dealing with multiple overlapping issues, it will surely be a positive development for individuals who are unable to afford an attorney.

The reality of the situation is that generative AI is here, and it is not going away but will rather become more advanced and more available to the general public as time goes on. It should be noted that the challenges facing the legal profession are not unique. The medical profession also is addressing the challenges presented by patients who have consulted with generative AI and arrive at an appointment with opinions on what is the correct medical advice. Lawyers will similarly be challenged by clients who have compiled information and learned about their legal options using generative AI.

We believe it is important not to dismiss innovation, and to allow vendors and companies to develop programs that will help guide the general public. It is just as important for attorneys to educate themselves on AI so they can utilize it and understand how their clients may be using it as well.

E. Implications of AI Judges or Robo Courts

One other area where AI may have a great impact on access to justice relates to the utilization of AI by judges and courts. At the time of this Report, there are only a few examples of robo courts or AI judges being utilized to resolve disputes, and those trials have had mixed results.

For example, in 2019, Estonia planned to use robo judges for small claims procedures. The Estonian government said that those reports were misleading.¹⁴⁹ In Australia, a system designed to use technology to assess government payments has already failed.¹⁵⁰ But as generative AI becomes more sophisticated, it will become more feasible to have AI arbiters decide small claims courts matters or arbitration matters where both parties consent to an AI arbiter.

It is not clear at this time how widespread this practice will become and how it will impact access to justice. In some ways, it may make it more likely for those with little knowledge of the law and courts and those who have little financial means to have their day in court. An AI judge may also be less likely to be influenced by a prominent attorney or big-name firm. However, most people will generally not want their disputes to be decided by a computer or algorithm.

We are not quite yet to the point of AI judges replacing some portion of the judiciary, and that may never happen, but it is likely to be raised as a possibility in the future. We are already at a point where AI is being used to mediate matters, where both parties agree to the use of AI. While we have not quite arrived in a sci-fi world populated by robo judges, we do need to be wary of AI being used in lieu of judges, and we need to be well positioned to gauge the potential benefits and risks of using AI judges in certain situations.

III. Judicial Reaction/Responses to Generative AI

A. Introduction

Artificial intelligence has been in use by the legal profession and its clients for a long time. In November 2022, generative AI burst onto the scene through one program, launched by Open AI, known as ChatGPT. Since then, the use and varieties of generative AI platforms has expanded on a seemingly daily basis, and attorneys and clients are evaluating generative AI technology and how it could be used – and abused – in litigation. This section of the Task Force Report will introduce the reader to those uses and abuses.

B. Uses of AI and Generative AI

Other sections of this Report have discussed the technologies. For now, we consider some uses of AI and generative AI. Focusing on AI in general, it is in widespread use for:

- Identification (for example, airports and workplaces)
- Security (for example, to access cell phones and bank accounts)
- Law enforcement (for example, to identify suspects)
- Retail (for example, to identify shoppers)
- Human resources (for example, to interview and hire employees)

And, in addition to these uses, AI is used extensively for collection, review and production of ESI.

Generative AI takes AI to a new level. As we know, generative AI ingests data and, in response to “prompts,” generates an answer. Generative AI is being used by the legal profession and other entities to, among other things:

- Draft and edit documents
- Conduct legal research
- Contract review
- Predictive analytics
- Chatbots for legal advice
- Brainstorming
- Summarize legal narratives
- Convert “legalese” into plain language

C. Causes of Action Arising out of AI and Generative AI

We are at the tip of the proverbial iceberg when thinking about causes of action (and we are only speaking of civil litigation here – there are uses of AI and generative AI that could give rise to criminal proceedings, including, for example, “deepfakes” that might be prosecuted under federal or state criminal laws). Here are examples of causes of action:

- Breach of privacy
- Discrimination
- Copyright infringement
- Malicious uses such as defamation
- Cyber breach
- Employment-related

These causes of action might derive from common law. However, statutes or regulations might also give rise to litigation as well as regulatory proceedings. Examples include:

- Section 5 of the Federal Trade Commission Act
- Discrimination actionable under the Equal Employment Opportunity Act and state equivalents
- The Illinois Artificial Intelligence Video Interview Act
- Illinois Biometric Information Privacy Act
- New York City Local Law Int. 1894-A
- New York City Local Law Int. 1170-A

Attorneys and clients should expect to see legislation at the state and federal levels to address AI and generative AI, particularly with regards to employment, insurance, medical services, elections, housing and AI generated media.

It may also be useful to note that overseas laws attempting to govern AI may have extra-territorial effects. For example, the EU AI Act (summarized in [Appendix A](#)) was agreed in principle at an EU level in 2023. While there is still some way to go before this will become law, the EU AI Act is designed to also regulate the use of AI by the U.S. and other entities outside the EU. Coupled with this, the EU has introduced an EU AI Pact, which could lead to some U.S. corporations agreeing to be bound by the EU AI Act's provisions as early as this year.

D. Discovery

Prior sections of this Report have described the technology behind AI and generative AI. Bearing in mind how technology might make mistakes and lead to injury, economic or personal, it is expected that regulatory requests for information and civil discovery demands that focus on, for example, alleged bias will be made. Discovery into bias might present questions about the nature of the data fed into the AI or generative AI and how algorithms used by the AI or generative AI “operated,” as well as questions related to the prompt used to generate something. Such questions will raise other questions about the need for non-testifying or testifying experts. Moreover, as already outlined in this Report, the competence of attorneys to deal with this technology might present ethical questions.

E. Avianca and Judicial Reactions to Generative AI

Not only is generative AI now mainstream, but it has featured in judicial decisions and in “prophylactic” orders. The first of the decisions is *Avianca*, which is discussed below.

In *Mata v. Avianca, Inc.*,¹⁵¹ the plaintiff's attorneys “submitted non-existent judicial opinions with fake quotes and citations created by *** ChatGPT, then continued to stand by the fake opinions after judicial orders called their existence into question.” The court held that:

- The attorneys acted with subjective bad faith and violated Federal Rule of Civil Procedure 11.

- The plaintiff’s firm was jointly and severally liable for the attorneys’ Rule 11 violation.
- Sanctions under U.S.C. 1927 could not be imposed because, “[r]eliance on fake cases has caused several harms but dilatory tactics and delay were not among them.”
- “Alternatively,” to Rule 11, sanctions were imposed under the inherent power of the court.
- \$5,000.00 penalty imposed jointly and severally.

The court also required the attorneys “to inform their client and the judges whose names were wrongfully invoked of the sanctions imposed.”

Since *Avianca* was decided, other courts have addressed generative AI in decisions (discussed earlier in this Report). However, and of particular interest to the Task Force, individual judges (and one United States bankruptcy court) have directed attorneys who appear before them and who use generative AI to take certain actions. Here is a “sampler:”

United States District Judge Brantly Starr of the Northern District of Texas has imposed a certification requirement:

All attorneys and pro se litigants . . . must, file on the docket a certificate attesting either that no portion of any filing will be drafted by generative artificial intelligence (such as ChatGPT, Harvey.AI, or Google Bard) or that any language drafted by generative artificial intelligence will be checked for accuracy, using print reporters or traditional legal data bases, by a human being.

United States District Court Judge Michael Baylson of the Eastern District of Pennsylvania has issued a Standing Order for all actions assigned to him:

If any attorney for a party, or a pro se party, has used artificial intelligence (‘AI’) in the preparation of any complaint, answer, motion, brief, or other paper, filed with the Court, and assigned to Judge Michael M. Baylson, MUST, in a clear and plain factual statement, disclose that AI has been used in any way in the preparation of the filing, and CERTIFY,

that each and every citation to the law or the record in the paper, has been verified as accurate.

These and other orders are problematic for several reasons, including:

- Might attorney work product be implicated?
- Might the use of the term “artificial intelligence” (rather than generative AI) sweep into a disclosure obligation much more than generative AI? (For example, if an attorney uses computer-assisted review to cull and make a production of ESI, would the order encompass that use?).

Judges issue local rules for court management and in reaction to or to get ahead of issues that may arise or have the potential to arise in their courtrooms (in real time), regardless of existing rules which address the same concerns!

In time, with better understanding of the new and emerging technologies, and with more precision in language when referencing these emerging technologies, the language in the local rules will more precisely match and address the concerns of the court and so, achieve what these judges’ orders were designed to do.

LEGISLATIVE OVERVIEW AND RECOMMENDATIONS

I. Legislative Overview

While the Task Force reviewed several pieces of proposed and passed legislation (summarized in [Appendix A](#) hereto), we do not endorse any specific pending legislation. However, as the recommendations below reflect, we do recommend certain changes to the RPC that will help clarify lawyers' ethical duties when using AI and generative AI tools.

II. Recommendations

The Task Force recommends the following for NYSBA adoption:

First, the Task Force recommends that NYSBA adopt the AI/Generative AI guidelines outlined in this report and commission a standing section or committee to oversee periodic updates to those guidelines. Daily, we learn more about the capability of the technology to transform society. As the impacts are continual, so should the updates to these guidelines be as well.

Second, we recommend a focus on educating judges, lawyers, law students and regulators to understand the technology so that they may apply existing law to regulate it. Many of the risks posed by AI are more sophisticated versions of problems that already exist and are already addressed by court rules, professional conduct rules and other law and regulations. Furthermore, many risks are mitigated through understanding the technology and how AI will utilize data input into the AI system. For example, concerns related to client privacy and confidentiality can be alleviated by utilizing a "closed system" AI, which provides for anonymous queries that are not incorporated into the AI training data.

In addition to legislation, if and when determined to be necessary, the Task Force suggests that we create a comprehensive education plan for judges, lawyers, law students and regulators so they can address the risks associated with AI using existing laws and regulations, such as providing

education on how the technology works and determining if an AI system will save and utilize prompts as training data. This approach has already been adopted effectively in other jurisdictions. For example, the Italian Data Protection Authority, the Guarante per la Protezione dei Dati Personali, has already effectively used GDPR in a number of AI-related cases, including to modify or restrict the operations of the ChatGPT and Replika AI chatbots.¹⁵² This approach will allow the law to develop in a fact-based way along with the rapidly changing technology.

Comments to the rules of professional conduct, best practices, continuing education programs and state bar opinions can also aid in this process. For instance, in the Preamble to the RPC, we recommend including a general statement about the importance of competence with technology by adding “including . . . artificial intelligence” therein. Further, we would expand Comment [8] to Rule 1.1 to add that the duty of competence obligates lawyers to: (a) keep abreast of and be able to identify technology (including AI and generative AI) that is generally available to improve effective client representation and enhance the quality of legal services; (b) determine whether the use of AI will in fact augment the legal service to a specific client; and (c) attain a basic understanding of how AI-based tools operate to achieve the results and outputs sought.

Third, the Task Force recommends that legislatures and regulators seek to identify risks associated with the technology that are not addressed by existing law. This may involve extensive hearings, studies involving experts in AI and increased costs. Once such risks are identified, new laws and regulations should be crafted to address those risks.

Fourth, the rapid advancement of AI prompts us to examine the function of the law as a governance tool. Some of the key functions of the law in the AI context are: (i) expressing social values and reinforcing fundamental principles; (ii) protecting against risks to such values and

principles; and (iii) stabilizing society and increasing legal certainty. Recommendations here involve:

a. AI as a General-Purpose and Dual-Impact Technology: The governance of AI should consider AI's nature as a classic dual-impact phenomenon. AI can improve many aspects of society but also has the potential to cause harm if left unchecked. Regulation should consider focusing on the effects of the technology on individuals and society, rather than the technical aspects of the technology itself (such as the algorithms or databases).

b. Regulatory Spectrum: The governance of AI should be tailored to the risks posed by AI applications. It can adopt varying degrees of regulatory intrusiveness, with the spectrum potentially extending from detailed legal regulation at one end of the spectrum to self-regulation on the other end of the spectrum, with a principles-based approach in the middle of the spectrum. The approach chosen to address a particular risk or problem should consider:

- the sector involved (e.g., law enforcement or health care)
- the importance of the social activity at hand (e.g., hiring applicants or making loans)
- the rights affected (e.g., due process or privacy)
- the risks associated with the use and impact of AI (e.g., job loss or misinformation)

c. Comprehensive vs. Specific Regulation: Foundationally, legislators should determine if regulations entail a comprehensive approach (i.e., an overarching framework governing diverse AI applications and their social implications) or a sector-by-sector or industry-by-industry approach (i.e., considering the particular and often unique issues posed by AI in each sector or industry). Regulators should determine which approach is best, or develop some mix or combination of these approaches, depending on the sectors and problems at hand.

d. Global Cooperation: Another consideration in the regulatory approach involves jurisdictional reach. Can AI be effectively governed at the local, state or federal level, or does its governance necessarily require some degree of international or even global cooperation? We believe in local, state and federal regulation where appropriate, but also propose that local, state and federal regulation is likely to prove inadequate without international and sometimes global cooperation, because AI is a cross-border phenomenon rather than a local one. The following four elements of AI may elude regulations if they are confined to a specific geographic area:

- i. Data, which is the input for AI, can move across borders (although data location is likely to enhance a jurisdiction's power to regulate AI);
- ii. Algorithms programmable anywhere in the world;
- iii. Algorithms exportable for use anywhere else in the world; and
- iv. Outputs from algorithms transmitted to and applied in different jurisdictions.

AI & GENERATIVE AI GUIDELINES

The chart below reflects the Task Force’s recommended guidelines when utilizing AI or generative AI tools (collectively, the “Tools”) in legal practice. We will update these guidelines periodically as the technology evolves.

TOPIC	GUIDANCE
ATTORNEY COMPETENCE (RULE 1.1)	<p><i>A lawyer should provide competent representation to a client.</i></p> <p>You have a duty to understand the benefits, risks and ethical implications associated with the Tools, including their use for communication, advertising, research, legal writing and investigation. Refer to Appendix B for resources to better understand the Tools.</p>
SCOPE OF REPRESENTATION (RULE 1.2)	<p><i>A lawyer shall abide by a client’s decisions concerning the objectives of representation and, as required by Rule 1.4, shall consult with the client as to the means by which they are to be pursued.</i></p> <p>Consider including in your client engagement letter a statement that the Tools may be utilized in your representation of the client and seek the client’s acknowledgement. Refer to Appendix C for a sample language to include.</p>
DILIGENCE (RULE 1.3)	<p><i>A lawyer should act with reasonable diligence and promptness in representing a client.</i></p> <p>Consider whether use of the Tools will aid your effectiveness in representing your client.</p>
COMMUNICATION (RULE 1.4)	<p><i>A lawyer shall explain a matter to the extent reasonably necessary to permit the client to make informed decisions regarding the representation.</i></p> <p>While the Tools can aid in generating documents or responses, you must ensure that you maintain direct and effective communication with your client and not rely solely on content generated from the Tools.</p>

TOPIC	GUIDANCE
FEES (RULE 1.5)	<p><i>A lawyer shall not make an agreement for, charge, or collect an excessive or illegal fee or expense.</i></p> <p>If the Tools would make your work on behalf of a client substantially more efficient, then your use of (or failure to use) such Tools may be considered as a factor in determining whether the fees you charged for a given task or matter were reasonable. If you will add a “surcharge” (i.e., an amount above actual cost) when using specific Tools, then you should clearly state such charges in your engagement letter, <u>provided</u> that the total charge remains reasonable.</p>
CONFIDENTIALITY (RULE 1.6)	<p><i>A lawyer shall not knowingly reveal confidential information.</i></p> <p>When using the Tools, you must take precautions to protect sensitive client data and ensure that no Tool compromises confidentiality. Even if your client gives informed consent for you to input confidential information into a Tool, you should obtain assurance that the Tool provider will protect your client’s confidential information and will keep each of your client’s confidential information segregated. Further, you should periodically monitor the Tool provider to learn about any changes that might compromise confidential information.</p>
CONFLICTS OF INTEREST (RULE 1.7)	<p><i>A lawyer shall not represent a client if a reasonable lawyer would conclude that the representation will involve the lawyer in representing differing interests.</i></p> <p>Your use of the Tools in a particular case may potentially compromise your duty of loyalty under Rule 1.7, by creating a conflict of interest with another client. Rule 1.7 imposes a duty on you to identify, address and, if necessary, seek informed client consent for conflicts of interest that may result from your use of the Tools.</p>

TOPIC	GUIDANCE
SUPERVISORY RESPONSIBILITIES (RULE 5.1)	<p><i>A lawyer with direct supervisory authority over another lawyer shall make reasonable efforts to ensure that the supervised lawyer conforms to the ethical rules.</i></p> <p>As a supervising lawyer, you have a duty to ensure that the lawyers for whom you have oversight observe the ethical rules when utilizing the Tools.</p>
SUBORDINATE LAWYERS (RULE 5.2)	<p><i>A lawyer is bound by the ethical rules notwithstanding that the lawyer acted at the direction of another person.</i></p> <p>If you as the subordinate lawyer utilize the Tools as directed by your supervising attorney, you are independently required to observe the ethical rules. All rules described in these guidelines apply equally to your conduct.</p>
RESPONSIBILITY FOR NON-LAWYERS (RULE 5.3)	<p><i>A law firm shall ensure that the work of nonlawyers who work for the firm is adequately supervised, as appropriate.</i></p> <p>If the Tools are used by non-lawyers or paralegals (or the Tools themselves are interpreted to be “non-lawyers”), you must supervise their use to ensure compliance with the ethical rules. Further, you must ensure that the work produced by the Tools is accurate and complete and does not disclose or create a risk of disclosing client confidential information without your client’s informed consent.</p>
PROFESSIONAL INDEPENDENCE (RULE 5.4)	<p><i>A lawyer shall not permit a person to direct or regulate the lawyer’s professional judgment in rendering legal services.</i></p> <p>While the Tools are not a “person,” you should refrain from relying exclusively on them or the output derived from them when providing legal advice and maintain your independent judgment on a matter.</p>
UNAUTHORIZED PRACTICE OF LAW (UPL) (RULE 5.5)	<p><i>A lawyer shall not aid a nonlawyer in the unauthorized practice of law.</i></p> <p>Understand that human oversight is necessary to avoid UPL issues when using the Tools, which should augment but not replace your legal work.</p>

TOPIC	GUIDANCE
VOLUNTARY PRO BONO SERVICE (RULE 6.1)	<p><i>Lawyers are strongly encouraged to provide pro bono legal services to benefit poor persons.</i></p> <p>The Tools may enable you to substantially increase the amount and scope of the pro bono legal services that you can offer. Considering Rule 6.1, you are encouraged to use the Tools to enhance your pro bono work.</p>
ADVERTISING (RULE 7.1)	<p><i>A lawyer or law firm shall not use or disseminate or participate in the use or dissemination of any advertisement that: (1) contains statements or claims that are false, deceptive or misleading; or (2) violates an ethical rule.</i></p> <p>You are responsible for all content that you post publicly, including content generated by the Tools. Further, you must be cautious when using the Tools for advertising or solicitation purposes to ensure that you comply with ethical guidelines regarding truthful and non-deceptive communication.</p>
SOLICITATION AND RECOMMENDATION OF PROFESSIONAL EMPLOYMENT (RULE 7.3)	<p><i>A lawyer shall not engage in solicitation by in-person or telephone contact, or by real-time or interactive computer-accessed communication . . .</i></p> <p>You may not use the Tools to automatically generate phone calls, chat board posts or other forms of solicitation, nor may you contract with another person to use the Tools for such purposes, as Rule 8.4 (Misconduct) prohibits you from using others to engage in conduct in which you personally could not engage.</p>

CONCLUSION

This report offers no “conclusions.” As AI continues to evolve, so will the work of NYSBA and the groups tasked with ongoing monitoring. As a profession, we must continue to refine the initial guidelines suggested in this report and audit the efficacy of proposed rules and regulations. We liken this journey to the mindset of ancient explorers: be cautious, be curious, be vigilant and be brave.

Exhibit A

Task Force Mission Statement

The Task Force on AI will examine the legal, social and ethical impact of artificial intelligence (AI) on the legal profession. The Task Force will review AI-based software, generative AI technology and other machine-learning tools that may enhance the profession and that pose risks for individual attorneys dealing with new, unfamiliar technology and courts concerned about the integrity of the judicial process. Also, the Task Force will explore the positive and negative implications of AI use by the legal community and the general public, including effects on access to justice, legal regulations and privacy preservation. As it engages in its work, the Task Force will consult and ensure alignment of approaches, where appropriate, with other entities within the Association, including but not limited to the Committee on Technology and the Legal Profession, the Task Force on Emerging Digital Finance and Currency, the Working Group on Facial Recognition Technology and Access to Legal Representation and relevant sections. Lastly, the Task Force will develop policies for bar association adoption and suggest legislation to govern effective and responsible AI use.

APPENDIX A: LEGISLATION REVIEWED

I. Assemblyman Clyde Vanel's proposed statutes on AI:

- *Evidence created or processed by artificial intelligence.* An Act to amend New York's Criminal Procedure Law (CPL) and Civil Practice Law and Rules (CPLR) to address "the admissibility of evidence created or processed by artificial intelligence"

The essence of the evidence bill, which would amend the CPL and CPLR, is as follows:

§ 60.80 Rules of evidence; admissibility of evidence created or processed by artificial intelligence.

1. Evidence *created, in whole or in part, by artificial intelligence* shall not be received into evidence in a criminal proceeding unless the evidence is substantially supported by independent and admissible evidence and the proponent of the evidence establishes the reliability and accuracy of the specific use of the artificial intelligence in creating the evidence.

2. Evidence *processed, in whole or in part, by artificial intelligence* shall not be received into evidence in a criminal proceeding unless the proponent of the evidence establishes the reliability and accuracy of the specific use of the artificial intelligence in processing the evidence (emphasis added).

- *Political communications using artificial intelligence.* An Act to amend New York Election Law by requiring disclosure of "the use of artificial intelligence in political communications."

This bill would amend New York Election Law by requiring disclosure of "the use of artificial intelligence in political communications." The bill has separate sections to cover visual and non-visual communications. The heart of the bill provides as follows:

5. (a) Any political communication, regardless of whether such communication is considered a substantial or nominal expenditure, that uses *an image or video footage that was generated in whole or in part with the use of artificial intelligence*, as defined by the state board of elections, *shall be required to disclose that artificial intelligence was used* in such communication in accordance with paragraphs (b), (c), and (d) of this subdivision (emphasis added).

Paragraphs (b), (c), and (d) require specific disclaimers for "printed or digital political communications," "non-printed and non-digital political communications," and political communications that are "not visual, such as radio or automated telephone calls."

- Political communications created by synthetic media. An Act to amend New York Election Law, by “prohibiting the creation of synthetic media with intent to influence the outcome of an election.”

This bill would amend New York Election Law, by “prohibiting the creation of synthetic media with intent to influence the outcome of an election.” Specifically, the bill would add a new § 17-172 that would provide as follows:

§ 17-172. Creating synthetic media with intent to unduly influence the 4 outcome of an election.

1. A person who, with intent to injure a candidate or unduly influence the outcome of an election, creates or causes to be created a *fabricated photographic, videographic, or audio record* and causes such fabricated photographic, videographic, or audio record to be disseminated or published within sixty days of an election shall be guilty of a class E felony (emphasis added).

- Artificial intelligence bill of rights. An Act to amend New York’s Technology Law by “enacting the New York artificial intelligence bill of rights.”

This bill would amend New York’s Technology Law by “enacting the New York artificial intelligence bill of rights.” The section on legislative intent says, in part:

[T]he legislature declares that any New York resident affected by any *system making decisions without human intervention* be entitled to certain rights and protections to ensure that the system impacting their lives do so lawfully, properly, and with meaningful oversight.

Among these rights and protections are (i) the right to safe and effective systems; (ii) protections against algorithmic discrimination; (iii) protections against abusive data practices; (iv) the right to have agency over one’s data; (v) the right to know when an automated system is being used; (vi) the right to understand how and why an automated system contributed to outcomes that impact one; (vii) the right to opt out of an automated system; and (viii) the right to work with a human in the place of an automated system.

The next part of the bill defines various terms. For example:

4. “Algorithmic discrimination” means circumstances where an automated system contributes to an unjustified different treatment or impact which disfavors people based on their age, color, creed, disability, domestic violence victim status, gender identity or expression, familial status, marital status, military status, national origin, predisposing genetic characteristics, pregnancy-related condition, prior arrest or conviction record, race, sex, sexual orientation, or veteran status or any other classification protected by law.

The next part of the bill imposes various requirements. For example:

§ 404. *Safe and effective systems.*

2. *Automated systems shall undergo pre-deployment testing, risk identification and mitigation*, and shall also be subjected to ongoing monitoring that demonstrates they are safe and effective based on their intended use, mitigation of unsafe outcomes including those beyond the intended use, and adherence to domain-specific standards.

3. If an automated system fails to meet the requirements of this section, it shall not be deployed or, if already in use, shall be removed. *No automated system shall be designed with the intent or a reasonably foreseeable possibility of endangering the safety of any New York resident or New York communities* (emphasis added).

- *New York Penal Law – Fabricated photos, video, or audio.* An Act to amend the penal law by addressing “unlawful dissemination or publication of a fabricated photographic, videographic, or audio record.”

This bill would amend New York’s Penal Law by addressing “unlawful dissemination or publication of a fabricated photographic, videographic, or audio record.” The essence of the bill is as follows:

1. A person is guilty of unlawful dissemination or publication of a fabricated photographic, videographic, or audio record when, with intent to cause harm to the liberty or emotional, social, financial or physical welfare of an identifiable person or persons, he or she intentionally creates or causes to be created a fabricated record of such person or persons and disseminates or publishes such record of such person or persons without such person or persons’ consent.

The bill contains many exceptions. For example, the bill says:

This section shall not apply to the following:

- (a) Dissemination or publication of a fabricated record by *a person who did not create the fabricated record*, whether or not such person is aware of the authenticity of the record;
- (b) Dissemination or publication of a fabricated record that was created during the lawful and *common practices of law enforcement, legal proceedings or medical treatment* where the record is not disseminated or published with the intent to misrepresent its authenticity;
- (c) Dissemination or publication of a fabricated record that was created for the purpose of *political or social commentary, parody, satire, or artistic expression* that is not disseminated or published with the intent to misrepresent its authenticity . . . (emphasis added)

- Advanced Artificial Intelligence Licensing Act. An Act to amend the state Technology Law to require registration and licensing of “high-risk advanced artificial intelligence systems.”

An Act to amend the state Technology Law to address “advanced artificial intelligence systems” and to require registration and licensing of “high-risk advanced artificial intelligence systems.” The bill defines these as follows:

1. “Advanced artificial intelligence system” shall mean any digital application or software, whether or not integrated with physical hardware, that *autonomously performs functions traditionally requiring human intelligence*. This includes, but is not limited to the system:

(a) Having the ability to learn from and adapt to new data or situations autonomously;
or

(b) Having the ability to perform functions that require cognitive processes such as understanding, learning or decision-making for each specific task.

2. “High-risk advanced artificial intelligence system” shall mean any advanced artificial intelligence system that possesses *capabilities that can cause significant harm to the liberty, emotional, psychological, financial, physical, or privacy interests of an individual or groups of individuals, or which have significant implications on governance, infrastructure, or the environment*. The director shall assess any such public or private system in determining whether such system requires registration (emphasis added).

After a long series of definitions, the bill provides that the New York Department of State shall have “discretion to issue or refuse to issue any license provided for in this article” and to “revoke, cancel or suspend” any such license.

- General Business Law – Oaths of responsible use of advanced AI. An Act to amend New York’s General Business Law by “requiring the collection of oaths of responsible use from users of certain high-impact advanced artificial intelligence systems.”

This bill would amend New York’s General Business Law by “requiring the collection of oaths of responsible use from users of certain high-impact advanced artificial intelligence systems.” Here is a sample of the operative language of the oath:

I, _____ residing at _____, do affirm under penalty of perjury that I have not used, am not using, do not intend to use, and will not use the services provided by this advanced artificial intelligence system in a manner that violated or violates any of the following affirmations:

1. I will not use the platform to create or disseminate content that can foreseeably cause injury to another in violation of applicable laws;

2. I will not use the platform to aid, encourage, or in any way promote any form of illegal activity in violation of applicable laws;

3. I will not use the platform to disseminate content that is defamatory, offensive, harassing, violent, discriminatory, or otherwise harmful in violation of applicable laws;

4. I will not use the platform to create and disseminate content related to an individual, group of individuals, organization, or current, past, or future events that are of the public interest which I know to be false and which I intend to use for the purpose of misleading the public or causing panic.”

II. Federal and New York State proposals regarding use of AI-generated or compiled information in judicial proceedings

Judges face challenges in evaluating the admissibility of AI-generated or compiled evidence. Concerns include the reliability, transparency, interpretability and bias in such evidence. These challenges become even more pronounced with the use of generative AI systems. A discussion follows regarding two recent proposals to address these challenges.

Federal Law – A proposal to amend Fed. R. Evid. 901(b)(9)

As a general matter, Rule 901 of the Federal Rules of Evidence requires the proponent of a given item of evidence to authenticate that evidence. That is, the proponent “must produce evidence sufficient to support a finding that the item is what the proponent claims it is.” Subsection (b) of that rule provides a non-exhaustive list of examples of how the proponent may satisfy the authentication requirement. As currently written, Fed. R. Evid. 901(b)(9), which applies to “evidence about a process or system” states that such evidence is “accurate” if the proponent shows that the process or system “produces an accurate result.”

The Advisory Committee for the Federal Rules of Evidence is considering a proposal by former U.S. District Judge Paul Grimm and Dr. Maura R. Grossman of the University of Waterloo to amend Fed. R. Evid. 901(b)(9). That proposal initially changes the “accurate” standard as currently exists for any evidence about a process or system and replaces it with a requirement that

the proponent provide evidence that shows that the process or system produces a “reliable” result. For evidence generated by AI, the proponent must also (a) describe the software or program that was used and (b) show that it has produced reliable results in the proposed evidence.

New York: Proposed amendments to the Criminal Procedure Law and CPLR

New York State Assemblyman Clyde Vanel has introduced a bill, A 8110, which amends both the Criminal Procedure Law and the Civil Practice Law and Rules regarding the admissibility of evidence created or processed by artificial intelligence. As stated in the bill, evidence is “created” by AI when AI produces new information from existing information. Evidence is “processed” by AI when AI produces a conclusion based on existing information.

Simplified greatly, the bill requires that evidence “created” by AI would not be received at trial unless independent admissible evidence establishes the reliability and accuracy of the AI used to create the evidence. Evidence “processed” by AI similarly requires the proponent of the evidence to establish the reliability and accuracy of the AI used. This bill does not yet have a co-sponsor in the Assembly and does not have a sponsor in the Senate.

The goals of both the proposal to amend Fed. R. Evid. 901 and the Vanel bill are laudable. The “black box” problem of AI is of great concern to lawyers and judges and has significant due process concerns in the criminal justice area. These proposals thus attempt to address AI-generated “deepfakes” that could be passed off as authentic evidence. Nevertheless, given the intricacies and time involved in the legislative and rule-amending processes, it may well be that the common law at the trial court level provides at least an interim roadmap for how judges should consider these issues. Indeed, this approach was largely employed to develop the law regarding discovery and admissibility of social media evidence when those issues first took hold.

III. New York City’s local law regarding use of AI in hiring and promotion

As of this writing, there are no statewide laws or regulations in New York regarding commercial use of AI. Notably, Governor Hochul vetoed a bill in November 2023 (A.4969), initially proposed by Assemblyman Vanel, that would have created a statewide commission to study AI. But it appears that Assemblyman Vanel, and perhaps many of his colleagues, are undeterred in their attempts to keep the conversation moving. One such attempt is a bill actually drafted by an AI program, and introduced by Vanel, that permits tenants in New York state to have the right to be able to request a copy of their lease. That bill, A.6896, is awaiting sponsorship in the New York State Senate.

New York City has, however, entered the regulatory space regarding AI-based hiring decisions. As of July 5, 2023, New York City’s Automated Employment Decision Tool (AEDT) law, Local Law 144 of 2021, or “NYC 144,” requires New York City employers who use AI and other machine-learning technology as part of their hiring process to annually audit their recruitment technology. NYC 144 defines AEDT as (1) any computational process, derived from machine learning, statistical modeling, data analytics or artificial intelligence, (2) that issues a simplified output, including a score, classification or recommendation, which is used to substantially assist or replace discretionary decision making for employment decisions that impact natural persons. A third party must perform these audits, and the audit results must be available on the company’s website. The audit itself must check for biases, whether intentional or unintentional, that are built into these systems. Failure to comply could result in fines starting at \$500, with a maximum penalty of \$1,500 per instance.

At the outset, NYC 144’s focus on “employment decisions” appears to cover only hiring and promotion. Conversely, it appears that decisions regarding compensation, termination, benefits, workforce monitoring and perhaps even performance evaluations are beyond the reach

of the law. Moreover, NYC 144 applies only to those who actually apply for a job. Thus, the statute does not apply to any AI-based tools that might identify potential candidates who ultimately do not apply for a position.

Due to the recency of the NYC 144's implementation, there is no data as of this writing to determine its effectiveness, including whether and when any third-party audits have actually taken place. Even to the extent such audits have taken place, questions may remain as to the standards used for such audits and the company's data that was used for the audits.

IV. The White House's October 30, 2023 Executive Order regarding AI

On October 30, 2023, President Biden issued an Executive Order setting forth various standards for AI safety and security. It is one of the lengthier Executive Orders in recent history on any topic. The Order charges various executive agencies to develop guidelines, propose regulations or compile reports that will shape the AI landscape. The highlights of the Order include:

a. Establishment of the AI Safety and Security Board, under the auspices of the Department of Homeland Security, to address any threats posed by AI systems to infrastructure and cybersecurity.

b. Requiring the Department of Commerce to provide guidance for content authentication and watermarking to clearly label AI-generated content on government communications. In turn, federal agencies using AI-generated content are to highlight these authentication tools to assist recipients of government communications to know that these communications are authentic.

c. Federal agencies are to develop rules and guidelines to address algorithmic discrimination, both through training and technical assistance in areas including criminal justice, federal benefits and contracting programs, civil rights, and workplace equity, health and safety.

The question remains how these directives will be enforced. There is no requirement that any non-governmental entities involved in the creation or marketing of AI tools adhere to the directives that the various agencies will issue. Additionally, the Order does not provide, or even suggest, any recourse for individuals harmed by discriminatory AI systems. On these points (and perhaps many others), Congress may well have to provide guidance to federal agencies. Nevertheless, the Executive Order does provide a framework for both the government and the private sector to think about AI issues. It also invests the federal government, at least under the current administration, in AI security.

V. Summary of the EU AI Act

On December 9, 2023, the EU Parliament and Council negotiators reached a provisional agreement on the EU Artificial Intelligence Act (the “EU AI Act”). The agreed text will now proceed towards formal adoption by both the EU Parliament and Council to become EU law. While it is expected that the EU Parliament will adopt the EU AI Act, the law itself will not come into force for at least another two years after that vote.

As an overarching objective, the EU AI Act aims to ensure that fundamental rights, democracy, the rule of law and environmental sustainability are protected from high-risk AI, while boosting innovation and making the EU a leader in the field. The rules establish obligations for AI based on its potential risks and level of impact.

The following is a summary of the key aspects of the EU AI Act:

- **General Regulatory Approach:** The EU AI Act generally opts for a risk-based approach. Some applications are specifically prohibited (e.g., social scoring), some high-risk areas are strictly regulated (e.g., employment and worker management), and some areas of low risk are based on self-regulation. The EU AI Act strives to

mitigate harm in areas where using AI poses “unacceptable” risk to fundamental rights, such as health care, education, border surveillance and public services.

- Territorial Scope: The EU AI Act has extraterritorial scope. It applies to: (a) providers placing on the EU market AI systems, whether those providers are established within the EU or in a third country; (b) users of AI systems located within the EU; (c) providers and users of AI systems that are located in a third country, where the output produced by the system is used in the EU. In practice this is likely to mean significant regulatory impact for U.S.-based organizations. The majority of the GDPR fines levied to date have been on U.S.-owned organizations. This extraterritorial reach is likely to be a feature of the EU AI Act as well.
- Prohibited AI applications: Recognizing the potential threat to individuals’ rights and democracy posed by certain applications of AI, the EU AI Act specifically prohibits the following applications:
 - biometric categorization systems that use sensitive characteristics (e.g., political, religious, philosophical beliefs, sexual orientation, race);
 - untargeted scraping of facial images from the internet or CCTV footage to create facial recognition databases;
 - emotion recognition in the workplace and educational institutions;
 - social scoring based on social behavior or personal characteristics;
 - AI systems that manipulate human behavior to circumvent their free will;
 - AI used to exploit the vulnerabilities of people due to their age, disability, social or economic situation.

- High-Risk AI Applications: The EU AI Act delineates the applications and activities designated as “high risk” and adopts certain requirements for their development, deployment and use. These uses are not prohibited but strictly regulated.
 - Categories of High-Risk AI Applications: Certain specific-use cases are designated as “high risk” irrespective of which industry or product the use case is deployed in, for instance, the use of AI in biometric identification systems, critical infrastructure, credit-worthiness evaluation, human resources contexts and law enforcement. In addition, this category includes the use of AI in relation to certain products, for example, machinery, radio equipment, medical devices and in vitro diagnostic medical devices, as well as AI used in certain products in civil aviation (security) and automotive industries. AI systems used to influence the outcome of elections and voter behavior are also classified as high risk.
 - Requirements for High-Risk AI Applications: Pursuant to the EU AI Act, high-risk AI must comply with various requirements such as conformity assessments, post-market surveillance, data governance and quality measures, mandatory registration, incident reporting and fundamental rights impact assessments. For example, in respect of AI systems classified as high risk (due to their significant potential harm to health, safety, fundamental rights, environment, democracy and the rule of law), the EU AI Act provides for a mandatory fundamental rights impact assessment applicable to, among other areas, the insurance and banking sectors. In addition, individuals will have a right to launch complaints about AI systems and receive explanations about decisions based on high-risk AI systems

that impact their rights. AI providers must build in human oversight, incorporating human-machine interface tools to ensure systems can be effectively overseen by natural persons.

- Law Enforcement: Predictive policing may only be employed under strict rules, such as clear human assessment and objective facts, not deferring the decision of investigating an individual to an algorithm. The EU AI Act stipulates a range of safeguards and narrow exceptions for the use of biometric identification systems (RBI) in publicly accessible spaces for law enforcement purposes, subject to prior judicial authorization and for strictly defined lists of crime. “Post-remote” RBI would be used strictly in the targeted search of a person convicted or suspected of having committed a serious crime. “Real-time” RBI would have to comply with strict conditions and its use would be limited in time and location, for the purposes of:
 - targeted searches of victims (abduction, trafficking, sexual exploitation),
 - prevention of a specific and present terrorist threat, or
 - the localization or identification of a person suspected of having committed one of the specific crimes mentioned in the EU AI Act (e.g., terrorism, trafficking, sexual exploitation, murder, kidnapping, rape, armed robbery, participation in a criminal organization, environmental crime).
- General-Purpose AI: In order to reflect the broad range of tasks that AI systems can accomplish and the rapid expansion of their capabilities, under the EU AI Act general-purpose AI (GPAI) systems, and the GPAI models they are based on, will need to adhere to certain transparency requirements. These include presenting

technical documentation, complying with EU copyright law and disseminating detailed summaries about the content used for training. GPAI is defined in the EU AI Act as “an AI system that can be used in and adapted to a wide range of applications for which it was not intentionally and specifically designed.” In this regard, the legislative text does not seem to distinguish between foundation AI, generative AI or GPAI regulation based on use cases. However, with respect to high-impact GPAI models with systemic risk, the EU AI Act stipulates more stringent obligations. High-impact GPAI models (in essence, those that were trained using a total computing power above a certain threshold) will be subject to more onerous requirements due to the presumption that they carry systemic risk. If these models meet certain criteria, they will need to conduct model evaluations, assess and mitigate systemic risks, conduct adversarial testing, report to the European Commission on serious incidents, ensure cybersecurity and report on their energy efficiency.

APPENDIX B: RESOURCES

Blogs & Podcasts

- [**OpenAI Blog**](#): Direct insights from one of the leading organizations in AI research. It covers breakthroughs, applications, and considerations around their technologies, including generative models like GPT and DALL-E.
- [**Distill**](#): Though not exclusively focused on generative AI, Distill publishes detailed, interactive research articles on machine learning that often touch on generative models. Its visual and intuitive approach makes complex topics accessible.
- [**The Gradient**](#): A place for deep technical and theoretical discussions on AI, including generative models. The Gradient offers perspectives on the latest research trends, ethical considerations, and practical applications.
- [**AI Weirdness**](#): Authored by Janelle Shane, this blog explores the quirky and humorous side of AI, including many experiments with generative models. It's an entertaining way to see the creative potential and limitations of AI.
- [**DeepMind Blog**](#): While DeepMind's research encompasses a wide range of AI technologies, their work on generative models and their applications is frequently featured, providing insights into cutting-edge developments.
- [**The AI Alignment Podcast**](#): Hosted by the Future of Life Institute, this podcast covers broader topics in AI, including the development and implications of generative AI technologies. Discussions often revolve around safety, ethics, and future prospects.
- [**TWIML AI Podcast**](#) (This Week in Machine Learning & AI): Offers a wide range of interviews with AI researchers, practitioners, and industry leaders, including episodes focused on generative AI technologies and their applications.
- [**The Gradient Podcast**](#): An extension of The Gradient blog, this podcast dives into discussions with AI researchers and industry professionals, shedding light on their work, the future of AI, and occasionally focusing on generative models.
- [**AI in Business**](#): While more focused on the application of AI in industry, this podcast sometimes explores generative AI applications in business, offering insights into how companies are leveraging this technology.

Newsletters

- ❖ [**The Batch by DeepLearning.ai**](#): Curated by Andrew Ng and his team, The Batch brings the most important AI news and perspectives, including topics on generative AI, to your inbox. It's great for professionals, researchers, and anyone interested in AI.
- ❖ [**Import AI by Jack Clark**](#): Jack Clark, co-founder of Anthropic and former policy director at OpenAI, shares weekly insights on AI developments, policy implications, and research breakthroughs. While not exclusively focused on generative AI, the newsletter often covers significant advancements and considerations in the field.

- ❖ [Data Elixir](#): While broader than just generative AI, Data Elixir covers data science and machine learning trends, tools, and resources, including topics on generative models and AI-generated content.
- ❖ [The Algorithm by MIT Technology Review](#): Offers insightful commentary on the latest AI developments, including ethical considerations, policy, and groundbreaking research in generative AI.
- ❖ [The Sequence](#): A deep-tech AI newsletter that offers cutting-edge perspectives on AI technologies, including generative AI. It's structured in a unique format that includes a brief overview, a deep dive, and a summary of the latest AI research.

Subscriptions

- [AI Weekly](#): A roundup of the best content in AI, including research papers, articles, and news. It frequently features content related to generative AI technologies and their applications.
- [Last Week in AI](#): This newsletter gives a concise overview of the latest AI news, research, and applications with occasional deep dives into generative AI technologies and their societal impacts.
- [Orbit](#): Focused on machine learning and AI, Orbit provides updates on the latest research, applications, and trends, including insightful discussions on generative AI.
- [MIT Technology Review](#): Their subscription gives access to in-depth reporting on emerging technologies, including detailed articles on developments in AI and machine learning. Their coverage on generative AI technologies, implications, and ethical considerations is among the best.
- [AI Business](#): Provides insights, analysis, and news on the application of AI in the business world, including generative AI. The subscription is aimed at professionals looking to understand how AI can be leveraged in various industries.
- [Inside AI](#): Offers premium content on the latest AI news, research, and trends, with some focus on generative AI. The paid subscription includes additional insights and analysis not available in the free version.
- [Benedict Evans' Newsletter](#): While not exclusively about AI, Benedict Evans provides high-level analysis and insights on the tech industry, including AI's impact on different sectors. His annual presentation includes significant trends in AI and machine learning.
- [Stratechery by Ben Thompson](#): Offers in-depth analysis on the strategy and business side of technology, including AI. While the focus is broader, Thompson occasionally dives into topics related to generative AI and its impact on industries.
- [Datanami](#): Focused on data science and big data news, Datanami covers the technological advancements and applications in AI and machine learning. Their subscription service provides in-depth analysis and exclusive content.

APPENDIX C: SAMPLE ENGAGEMENT LETTER PROVISION

Use of Generative AI: While representing you, we may use generative AI tools and technology to assist in legal research, document drafting and other legal tasks. This technology enables us to provide more efficient and cost-effective legal services. However, it is important to note that while generative AI can enhance our work, it is not a substitute for the expertise and judgment of our attorneys. We will exercise professional judgment in using AI-generated content and ensure its accuracy and appropriateness in your specific case.

ENDNOTES

-
- ¹ Erik Brynjolfsson and Andrew McAfee, *The Business of Artificial Intelligence*, Harvard Business Review, July 18, 2017, <https://hbr.org/2017/07/the-business-of-artificial-intelligence>.
- ² Linda Tucci, *A Guide to Artificial Intelligence in the Enterprise*, Enterprise AI, Jan. 25, 2024, <https://www.techtarget.com/searchenterpriseai/Ultimate-guide-to-artificial-intelligence-in-the-enterprise>.
- ³ *Q and A With Maura Grossman: The Ethics of Artificial Intelligence*, University of Waterloo, Oct. 26, 2021, <https://uwaterloo.ca/news/maura-grossman-ethics-artificial-intelligence>.
- ⁴ *Artificial Intelligence*, Merriam-Webster, <https://www.merriam-webster.com/dictionary/artificial%20intelligence>.
- ⁵ Tucci, *supra* note 1.
- ⁶ Jason Tashea & Nicholas Economou, *Be Competent in AI Before Adopting, Integrating It into Your Practice*, ABA J. (Apr. 23, 2019), <http://www.abajournal.com/lawscribbler/article/before-lawyers-can-ethically-adopt-and-integrate-ai-into-their-practices-they-must-first-be-competent> [<https://perma.cc/45P6-B72G>] (“Governed by computer science and statistics, these are complex academic disciplines in which lawyers are generally untrained and cannot become experts on the fly.”).
- ⁷ *Id.* See also Lauri Donahue, *A Primer on Using Artificial Intelligence in the Legal Profession*, HARV. J. L. & TECH. (Jan. 3, 2018), <http://jolt.law.harvard.edu/digest/a-primer-on-using-artificial-intelligence-in-the-legal-profession> [<https://perma.cc/H65H-6A5A>].
- ⁸ L. Tucci, *A Guide to Artificial Intelligence in the Enterprise*, Enterprise AI (Sept. 9, 2023), <https://www.techtarget.com/searchenterpriseai/Ultimate-guide-to-artificial-intelligence-in-the-enterprise>.
- ⁹ *Nouvelle AI, Artificial Intelligence*, Britannica, <https://www.britannica.com/technology/artificial-intelligence/Nouvelle-AI>, Encyclopædia Britannica, inc. (n.d.-a), *Is Artificial General Intelligence (AGI) possible?*, Encyclopædia Britannica, <https://www.britannica.com/technology/artificial-intelligence/Is-artificial-general-intelligence-AGI-possible>.
- ¹⁰ *Id.*
- ¹¹ *Q and A With Maura Grossman*, *supra* note 2.
- ¹² Ian Sample, *Race to AI: The Origins of Artificial Intelligence, From Turing to ChatGPT*, Guardian, Oct. 28, 2023, <https://www.theguardian.com/technology/2023/oct/28/artificial-intelligence-origins-turing-to-chatgpt>.
- ¹³ *Id.*
- ¹⁴ *Id.*
- ¹⁵ Tucci, *supra* note 1.
- ¹⁶ *Id.*
- ¹⁷ *Id.*
- ¹⁸ *Id.*
- ¹⁹ Alan M. Turing, *Computing Machinery and Intelligence* 49 *Mind* 433–60 (1950).
- ²⁰ Sample, *supra* note 10.
- ²¹ Tucci, *supra* note 1.
- ²² *Id.*
- ²³ *Id.*
- ²⁴ *Id.*
- ²⁵ *Id.*
- ²⁶ Rockwell Anyoha, *The History of Artificial Intelligence*, Harvard Univ.: Science in the News, Aug. 28, 2017, <https://sitn.hms.harvard.edu/flash/2017/history-artificial-intelligence/>
- ²⁷ *Id.*
- ²⁸ *Id.*
- ²⁹ John McCarthy, *What is Artificial Intelligence?*, Stanford Univ., Nov. 12, 2007, <https://www-formal.stanford.edu/jmc/whatisai.pdf>.
- ³⁰ *The Future Computed: Artificial Intelligence and its Role in Society*, Microsoft, 2018, https://blogs.microsoft.com/uploads/2018/02/The-Future-Computed_2.8.18.pdf
- ³¹ *Id.*
- ³² *Id.*
- ³³ *Id.*

³⁴ Lucas Mearian, *What Are LLMs, and How Are They Used in Generative AI?*, Computerworld, May 30, 2023, <https://www.computerworld.com/article/3697649/what-are-large-language-models-and-how-are-they-used-in-generative-ai.html>.

³⁵ Sean Clarke, Dan Milmo, and Garry Blight, *How AI Chatbots Like ChatGPT or Bard Work – Visual Explainer*, Guardian, Nov. 1, 2023, <https://www.theguardian.com/technology/ng-interactive/2023/nov/01/how-ai-chatbots-like-chatgpt-or-bard-work-visual-explainer>.

³⁶ Mearian, *supra* note 32.

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ Visual Storytelling Team and Madhumita Murgia, *Generative AI exists because of the transformer*, Financial Times (Sept. 12, 2023), <https://ig.ft.com/generative-ai>.

⁴⁵ Mearian, *supra* note 32.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ See Legal Services Corporation, *The Justice Gap Executive Summary*, <https://justicegap.lsc.gov/resource/executive-summary>.

⁴⁹ World Justice Project, *Measuring the Justice Gap* (2019), <https://worldjusticeproject.org/our-work/publications/special-reports/measuring-justice-gap>.

⁵⁰ *Id.*

⁵¹ See Raymond H. Brescia et al., *Embracing Disruption: How Technological Change in the Delivery of Legal Services Can Improve Access to Justice*, 78 Alb. L. Rev. 553, 563 (2015).

⁵² *MillerKing, LLC v. DoNotPay, Inc.*, No. 3:23-cv-863, 2023 U.S. Dist. LEXIS 209825 (S.D. Ill. Nov. 17, 2023).

⁵³ *DoNotPay Honored with ABA Brown Award for Access to Justice Efforts*, Am. Bar Assoc., Jan. 23, 2020, <https://www.americanbar.org/news/abanews/aba-news-archives/2020/01/donotpay-honored-with-aba-brown-award-for-access-to-justice-effo/>.

⁵⁴ Adele Peters, *There's Now a Chatbot to Give Refugees Instant Legal Aid*, Fast Company, Dec. 7, 2019, <https://www.fastcompany.com/90439271/when-refugees-need-legal-advice-theres-now-a-chatbot-to-help-them>.

⁵⁵ Matthew Dahl et al., *Hallucinating Law: Legal Mistakes With Large Language Models Are Pervasive*, Stanford Univ., Jan. 11, 2024, <https://hai.stanford.edu/news/hallucinating-law-legal-mistakes-large-language-models-are-pervasive>.

⁵⁶ *Id.*

⁵⁷ *Artificial Intelligence: Guidance for Judicial Office Holders*, Courts and Tribunals Judiciary, Dec. 12, 2023, p. 3, <https://www.judiciary.uk/wp-content/uploads/2023/12/AI-Judicial-Guidance.pdf>.

⁵⁸ Sunil Rajaraman, *Navigating Data With LLMs - Arguments For And Against Sharing*, Forbes (Feb 22, 2024, 4:44pm EST), <https://www.forbes.com/sites/sunilrajaraman/2024/02/22/navigating-data-with-llms-arguments-for-and-against-sharing/?sh=2dfc75671098>.

⁵⁹ *Id.*, p. 4.

⁶⁰ Atomwise recently received over a billion dollars in investment from Pharmaceutical giant Sanofi for its AtomNet platform, which researches small molecules aimed at up to five drug targets. This company uses AI to analyze the structure of molecules and predict how they might interact with targets in the body. Technology such as this can reduce drug development timelines by years.

⁶¹ Nafiseh Ghaffar Nia et. al, *Evaluation of artificial intelligence techniques in disease diagnosis and prediction*, Nat'l Library of Medicine (Jan. 30, 2023), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9885935>.

⁶² Alexander Muacevic and John R Adler, editors, *Harnessing the Power of AI: A Comprehensive Review of Its Impact and Challenges in Nursing Science and Healthcare*, Nat'l Library of Medicine (Nov. 22, 2023), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10744168/#:~:text=Patient%20monitoring%3A%20AI%2Ddriven%20patient,blood%20pressure%2C%20and%20oxygen%20levels>.

-
- ⁶³ Kevin B. Johnson et. al, *Precision Medicine, AI, and the Future of Personalized Health Care*, Nat'l Library of Medicine (Oct. 12, 2020), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7877825>.
- ⁶⁴ Cedar Sinai, Study: Mental Health Gets a Boost From Artificial Intelligence (Jan. 26, 2024), <https://www.cedars-sinai.org/newsroom/study-mental-health-gets-a-boost-from-artificial-intelligence/#:~:text=Findings%20Published%20in%20Nature%20Digital,to%20provide%20mental%20health%20support>.
- ⁶⁵ Fawn Fitter and Steven T. Hunt, *How AI Can End Bias*, SAP Insights, <https://www.sap.com/insights/viewpoints/how-ai-can-end-bias.html>.
- ⁶⁶ Capitol Technology University, Blog: The Ethical Considerations of Artificial Intelligence (May 30, 2023), <https://www.captechu.edu/blog/ethical-considerations-of-artificial-intelligence>.
- ⁶⁷ Kelly Fitzsimmons, *Advancing Equitable AI in the US Social Sector*, Stanford Social Innovation Review (Mar. 12, 2024), <https://ssir.org/articles/entry/advancing-equitable-ai-us-social-sector#:~:text=When%20designed%20and%20implemented%20with,AI%20in%20the%20social%20sector>.
- ⁶⁸ Pares Dave, *Google's AI Is Making Traffic Lights More Efficient and Less Annoying*, Wired (Oct. 10, 2023 7:00 am), <https://www.wired.com/story/googles-ai-traffic-lights-driving-annoying/#:~:text=7%3A00%20AM-,Google's%20AI%20Is%20Making%20Traffic%20Lights%20More%20Efficient%20and%20Less,cut%20wait%20times%20and%20emissions>.
- ⁶⁹ Matt Wood, *Algorithm predicts crime a week in advance, but reveals bias in police response*, The University of Chicago, Biological Sciences Division (June 30, 2022), <https://biologicalsciences.uchicago.edu/news/algorithm-predicts-crime-police-bias>.
- ⁷⁰ Lazima Faiah Bari et. al, *Potential Use of Artificial Intelligence (AI) in Disaster Risk and Emergency Health Management: A Critical Appraisal on Environmental Health*, Nat'l Library of Medicine (Dec. 10, 2023), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10712270/#:~:text=AI%20driven%20algorithms%20can%20optimize,and%20streamlining%20the%20recovery%20process>.
- ⁷¹ Orange: Hello Future, Sensors and AI ensure the good health of bridges (Jan. 27, 2023), <https://hellofuture.orange.com/en/sensors-and-ai-ensure-the-good-health-of-bridges>.
- ⁷² IBM, "AI to accelerate your security defenses," <https://www.ibm.com/ai-cybersecurity>.
- ⁷³ Kinza Yasar, "What is a smart home?," TechTarget, <https://www.techtarget.com/iotagenda/definition/smart-home-or-building>.
- ⁷⁴ Jared Thau, *Digital Renaissance: AI And VR In The Gaming And Tech Industry*, Forbes (Mar. 11, 2024), <https://www.forbes.com/sites/forbestechcouncil/2024/03/11/digital-renaissance-ai-and-vr-in-the-gaming-and-tech-industry/?sh=a65aa844ede1>.
- ⁷⁵ Craig Borowski, *32 Best AI Chatbots for Customer Service in 2024*, CX Lead (Jan. 26, 2024), <https://thecxlead.com/tools/best-ai-chatbot-for-customer-service>.
- ⁷⁶ Salvatore Raieli, *How AI Could Help Preserve Art*, Medium (Oct. 22, 2022), <https://towardsdatascience.com/how-ai-could-help-preserve-art-f40c8376781d>.
- ⁷⁷ *Id.*
- ⁷⁸ Olga Dogadkina, *How AI-Powered Personalization Is Reshaping Online Shopping And Beyond*, Forbes (Oct. 16, 2023 6:45am EDT), <https://www.forbes.com/sites/forbestechcouncil/2023/10/16/how-ai-powered-personalization-is-reshaping-online-shopping-and-beyond/?sh=6b7a115f24e7>.
- ⁷⁹ Owais Ali, *How is AI Being Used in Space Exploration?*, AZO Quantum (Dec. 4, 2023), <https://www.azoquantum.com/Article.aspx?ArticleID=474#:~:text=AI%20empowers%20robotic%20rovers%20on,onboard%20maps%20and%20sensor%20data>.
- ⁸⁰ NOAA (National Oceanic and Atmospheric Administration) Ocean Exploration, <https://oceanexplorer.noaa.gov/technology/subs/auvs/auvs.html>.
- U.S. Department of Commerce
- ⁸¹ <https://alphafold.ebi.ac.uk>.
- ⁸² U.S. Nat'l Science Foundation, NSF 23-610: National Artificial Intelligence (AI) Research Institutes (Aug. 1, 2023), <https://new.nsf.gov/funding/opportunities/national-artificial-intelligence-research/nsf23-610/solicitation>.
- ⁸³ David Ly, *On The Horizon For Smart Cities: How AI And IoT Are Transforming Urban Living*, Forbes (Apr 7, 2023 8:30am EDT), <https://www.forbes.com/sites/forbestechcouncil/2023/04/07/on-the-horizon-for-smart-cities-how-ai-and-iot-are-transforming-urban-living/?sh=25a2025e7145>.

-
- ⁸⁴ Tosin Thompson, *How AI can help to save endangered species*, Nature (Oct. 27, 2023), <https://www.nature.com/articles/d41586-023-03328-4>.
- ⁸⁵ Allen Institute for AI, “Climate Modeling for the future of the planet,” <https://allenai.org/climate-modeling>.
- ⁸⁶ Strategic Consortium of Intelligence Professionals, “AI for Clean Air and Water,” SCIP Insights (Aug. 28, 2023), <https://www.scip.org/news/650086/AI-for-Clean-Air-and-Water-.htm#:~:text=Air%20Quality%20Monitoring%20and%20Prediction,actions%20to%20mitigate%20pollution%20spikes>.
- ⁸⁷ Corgan, “AI in Indoor Water Conservation,” <https://www.corgan.com/news-insights/2023/ai-in-indoor-water-conservation#:~:text=By%20analyzing%20data%20on%20water,the%20environmental%20impact%20of%20buildings>.
- ⁸⁸ Zhengxuan Liu et. al, *Artificial intelligence powered large-scale renewable integrations in multi-energy systems for carbon neutrality transition: Challenges and future perspectives*, ScienceDirect (Nov. 2022), <https://www.sciencedirect.com/science/article/pii/S2666546822000428>.
- ⁸⁹ Emily Newton, *7 Novel Approaches Using AI to Reinvent Package Delivery*, Supply Chain Connect (Dec. 14, 2023), <https://www.supplychainconnect.com/supply-chain-technology/article/21278954/7-novel-approaches-using-ai-to-reinvent-package-delivery>.
- ⁹⁰ Tumaini Kabudi, *AI-enabled adaptive learning systems: A systematic mapping of the literature*, ScienceDirect (2021), <https://www.sciencedirect.com/science/article/pii/S2666920X21000114>.
- ⁹¹ The Princeton Review, “The Evolution of Education: How AI is Reshaping Grading,” <https://www.princetonreview.com/ai-education/how-ai-is-reshaping-grading>.
- ⁹² Alina Tugend, *How Robots Can Assist Students With Disabilities*, NY Times (Mar. 29, 2022), <https://www.nytimes.com/2022/03/29/technology/ai-robots-students-disabilities.html?auth=login-google1tap&login=google1tap>.
- ⁹³ Robert C. Brears, *Precision Agriculture, AI, and Water Efficiency: The Future of Farming*, Medium (May 3, 2023), <https://medium.com/mark-and-focus/precision-agriculture-ai-and-water-efficiency-the-future-of-farming-b959ac0b6017>.
- ⁹⁴ Alessandro Mascellino, *Biometric authentication use in US businesses tripled over 3 years to tackle cyber threats*, BiometricUpdate.com (Sept. 21, 2022), <https://www.biometricupdate.com/202209/biometric-authentication-use-in-us-businesses-tripled-over-3-years-to-tackle-cyber-threats#:~:text=The%20use%20of%20biometric%20authentication,report%20by%20software%20expert%20GetApp;see%20also%20chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.pwc.com/gx/en/information-security-survey/assets/gsis-report-cybersecurity-privacy-safeguards.pdf>.
- ⁹⁵ See, e.g., a Prompt Engineer, <https://www.ziprecruiter.com/Salaries/Prompt-Engineer-Salary>.
- ⁹⁶ InkSpire, *AI and the Legal Profession: Navigating the New Frontier* (Jan. 15, 2024), <https://inkspire.org/post/ai-and-the-legal-profession-navigating-the-new-frontier>.
- ⁹⁷ Drew Simshaw, *Access to A.I. Justice: Avoiding an Inequitable Two-Tiered System of Legal Services*, Yale J. Law & Tech’y (2022), https://yjolt.org/sites/default/files/simshaw_-_access_to_a.i._justice.pdf.
- ⁹⁸ Emily Cardona, *AI & PRO BONO*, Pro Bono Institute (Sept. 2023), <https://www.probonoinst.org/2023/09/25/ai-pro-bono>.
- ⁹⁹ Catarina Fontes et. al, *AI-powered public surveillance systems: why we (might) need them and how we want them*, ScienceDirect (Nov. 2022), <https://www.sciencedirect.com/science/article/pii/S0160791X22002780>.
- ¹⁰⁰ Steve Zurier, *Hackers ‘steal your face’ to create deepfakes that rob bank accounts*, SC Media (Feb. 15, 2024), <https://www.scmagazine.com/news/hackers-steal-your-face-to-create-deepfakes-that-rob-bank-accounts>.
- ¹⁰¹ Jack Hardinges et. al, *We Must Fix the Lack of Transparency Around the Data Used to Train Foundation Models*, Harvard Data Science Review (Dec. 13, 2023), <https://hdsr.mitpress.mit.edu/pub/xau9dza3/release/1>.
- ¹⁰² Chapman University, “Bias in AI,” <https://www.chapman.edu/ai/bias-in-ai.aspx>.
- ¹⁰³ Keegan Caldwell, *AI And Intellectual Property: Who Owns It, And What Does This Mean For The Future?*, Forbes (Oct 31, 2023 7:45am EDT), <https://www.forbes.com/sites/forbesbusinesscouncil/2023/10/31/ai-and-intellectual-property-who-owns-it-and-what-does-this-mean-for-the-future/?sh=635aef883e96>.
- ¹⁰⁴ Charles Cohen, *AI in Defense: Navigating Concerns, Seizing Opportunities*, Nat’l Defense Magazine (July 25, 2023), <https://www.nationaldefensemagazine.org/articles/2023/7/25/defense-department-needs-a-data-centric-digital-security-organization>.

-
- ¹⁰⁵ Ali Swenson and Kelvin Chan, *Election disinformation takes a big leap with AI being used to deceive worldwide*, AP News (Mar. 14, 2024 updated 3:46 AM EDT), <https://apnews.com/article/artificial-intelligence-elections-disinformation-chatgpt-bc283e7426402f0b4baa7df280a4c3fd>.
- ¹⁰⁶ Catherine Stupp, *AI Helps U.S. Intelligence Track Hackers Targeting Critical Infrastructure*, Wall Street J. (Jan. 10, 2024 5:30 am ET), <https://www.wsj.com/articles/ai-helps-u-s-intelligence-track-hackers-targeting-critical-infrastructure-944553fa>.
- ¹⁰⁷ Xingyu Chen et. al, *Exploring racial and gender disparities in voice biometrics*, Nat'l Library of Medicine (Mar. 8, 2022), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8904636>; Trevor Collins, *New Research Reveals Sexist Tendencies in Facial Recognition Tech*, Secplicity (July 8, 2020), <https://www.secplicity.org/2020/07/08/new-research-reveals-sexist-tendencies-in-facial-recognition-tech>; Thaddeus L. Johnson & Natasha N. Johnson, *Police Facial Recognition Technology Can't Tell Black People Apart*, Scientific American (May 18, 2023), <https://www.scientificamerican.com/article/police-facial-recognition-technology-cant-tell-black-people-apart>; and Honey Wyatt, *Uber Eats driver wins payout for racially biased AI checks*, HRMagazine.com (Mar. 27, 2024), <https://www.hrmagazine.co.uk/content/news/uber-eats-driver-wins-payout-for-racially-biased-ai-checks#:~:text=A%20black%20Uber%20eats%20driver,in%20Oxford%20from%20November%202019>.
- ¹⁰⁸ Imane El Atillah, *Man Ends His Life After an AI Chatbot 'Encouraged' Him to Sacrifice Himself to Stop Climate Change*, Euronews, Mar. 31, 2023, <https://www.euronews.com/next/2023/03/31/man-ends-his-life-after-an-ai-chatbot-encouraged-him-to-sacrifice-himself-to-stop-climate->.
- ¹⁰⁹ Miriam Buiten et. al, *The law and economics of AI liability*, ScienceDirect (Apr. 2023), <https://www.sciencedirect.com/science/article/pii/S0267364923000055#:~:text=It%20is%2C%20therefore%2C%20appropriate%20to,some%20of%20the%20associated%20costs>.
- ¹¹⁰ Erin Beck, *The AI Echo Chamber: Model Collapse & Synthetic Data Risks*, Deepgram (Sept. 6, 2023, updated Oct. 11, 2023), <https://deepgram.com/learn/the-ai-echo-chamber-model-collapse-synthetic-data-risks>.
- ¹¹¹ Shannon Bond, *AI fakes raise election risks as lawmakers and tech companies scramble to catch up*, NPR (Feb. 8, 2024 5:00 AM ET), <https://www.npr.org/2024/02/08/1229641751/ai-deepfakes-election-risks-lawmakers-tech-companies-artificial-intelligence>.
- ¹¹² Federal Communications Commission, “Grandparent’ Scams Get More Sophisticated,” <https://www.fcc.gov/grandparent-scams-get-more-sophisticated>.
- ¹¹³ Heather Wishart-Smith, *Not So Fast: Study Finds AI Job Displacement Likely Substantial, Yet Gradual*, Forbes (Feb 13, 2024 4:23pm EST), <https://www.forbes.com/sites/heatherwishartsmith/2024/02/13/not-so-fast-study-finds-ai-job-displacement-likely-substantial-yet-gradual/?sh=7f0b67ce1e9f>.
- ¹¹⁴ Manas Arora, *How AI is transforming the financial industry, from predicting market trends to automated trading strategies*, CXOtoday.com (Nov. 30, 2023 11:09 pm), <https://cxotoday.com/specials/how-ai-is-transforming-the-financial-industry-from-predicting-market-trends-to-automated-trading-strategies>.
Read more at: <https://cxotoday.com/specials/how-ai-is-transforming-the-financial-industry-from-predicting-market-trends-to-automated-trading-strategies/>
Read more at: <https://cxotoday.com/specials/how-ai-is-transforming-the-financial-industry-from-predicting-market-trends-to-automated-trading-strategies/>
- ¹¹⁵ Chris Stokel-Walker, *Will we lose certain skills and knowledge if we rely on AI too much?*, Cybernews (Dec. 09, 2023 3:00 PM), <https://cybernews.com/editorial/humans-lose-skills-knowledge-ai>.
- ¹¹⁶ Ladan Judge, *What Is Forced Labor in the Technology Industry Supply Chain?*, Z2Data, June 26, 2023, <https://www.z2data.com/insights/what-is-forced-labor-in-the-technology-industry-supply-chain>.
- ¹¹⁷ Nat'l Artificial Intelligence Advisory Committee, *Findings: The Potential Future Risks of AI* (Oct. 2023), https://ai.gov/wp-content/uploads/2023/11/Findings_The-Potential-Future-Risks-of-AI.pdf.
- ¹¹⁸ Cameron F. Kerry, *Protecting privacy in an AI-driven world*, Brookings (Feb. 10, 2020), <https://www.brookings.edu/articles/protecting-privacy-in-an-ai-driven-world>.
- ¹¹⁹ *Can We Trust Artificial Intelligence?*, CalTech, <https://scienceexchange.caltech.edu/topics/artificial-intelligence-research/trustworthy-ai>.
- ¹²⁰ Sayed Fayaz Ahmad et. al, *Impact of artificial intelligence on human loss in decision making, laziness and safety in education*, Nature (June 29, 2023), <https://www.nature.com/articles/s41599-023-01787-8>.
- ¹²¹ Dennis Hillemann, *Can AI Truly Experience Emotion and Should We Trust It in the Public Sector Decision-Making Process?*, Medium (June 29, 2023), <https://dhillemann.medium.com/can-ai-truly-experience-emotion-and-should-we-trust-it-in-the-public-sector-decision-making-process-9797211e9bcb>.

¹²² Natalie Pierce and Stephanie Goutos, *ChatGPT Doesn't Have Ethical Obligations, But Attorneys Do*, Bloomberg Law, July 11, 2023, <https://news.bloomberglaw.com/us-law-week/chatgpt-doesnt-have-ethical-obligations-but-attorneys-do>.

¹²³ Nicole Yamane, *Artificial Intelligence in the Legal Field and the Indispensable Human Element Legal Ethics Demands*, Sept. 24, 2020, Georgetown Univ. Law Center, <https://www.law.georgetown.edu/legal-ethics-journal/wp-content/uploads/sites/24/2020/09/GT-GJLE200038.pdf>

¹²⁴ *International Legal Generative AI Report*, LexisNexis, Aug. 22, 2023, <https://www.lexisnexis.com/pdf/lexisplus/international-legal-generative-ai-report.pdf>.

¹²⁵ *Technosolutionism*, Guide to Crypto and Web3, <https://web3.lifeitself.org/concepts/technosolutionism>; *see also* Shane Hastie, *Unraveling Techno-Solutionism: How I Fell Out of Love With "Ethical" Machine Learning*, InfoQ Nov. 7, 2022, <https://www.infoq.com/news/2022/11/unraveling-techno-solutionism>; *On the Use of AI - the Dependency Dilemma*, IEEE Technical Community Spotlight, Jan. 14, 2022, <https://technical-community-spotlight.ieee.org/ai-ethical-dilemma>.

¹²⁶ *Mata v. Avianca, Inc.*, 22-cv-1461, 2023 U.S. Dist. LEXIS 108263 (S.D.N.Y. June 22, 2023).

¹²⁷ Einaras von Gravrock, *Why Artificial Intelligence Design Must Prioritize Data Privacy*, World Economic Forum Mar. 31, 2022, <https://www.weforum.org/agenda/2022/03/designing-artificial-intelligence-for-privacy>.

¹²⁸ *Recommendations from Committee on Professional Responsibility and Conduct on Regulation of Use of Generative AI by Licensees*, The State Bar of California, Memorandum, p. 10, Nov. 16, 2023, <https://www.calbar.ca.gov/Portals/0/documents/ethics/Generative-AI-Practical-Guidance.pdf> (“The lawyer should consider disclosure to their client that they intend to use generative AI in the representation, including how the technology will be used, and the benefits and risks of such use. A lawyer should review any applicable client instructions or guidelines that may restrict or limit the use of generative AI.”).

¹²⁹ The Florida Bar Board of Governors’ Review Committee on Professional Ethics, Proposed Advisory Opinion 24-1, Nov. 13, 2023, (“it is recommended that a lawyer obtain the affected client’s informed consent prior to utilizing a third-party generative AI program if the utilization would involve the disclosure of any confidential information”), <https://www.floridabar.org/the-florida-bar-news/proposed-advisory-opinion-24-1-regarding-lawyers-use-of-generative-artificial-intelligence-official-notice>.

¹³⁰ American Bar Association, Resolution 112 (adopted Aug. 12-13, 2019), <https://www.americanbar.org/content/dam/aba/directories/policy/annual-2019/112-annual-2019.pdf>.

¹³¹ David Wagner, *This Prolific LA Eviction Law Firm Was Caught Faking Cases In Court. Did They Misuse AI?*, LAist, Oct. 12, 2023, <https://laist.com/news/housing-homelessness/dennis-block-chatgpt-artificial-intelligence-ai-eviction-court-los-angeles-lawyer-sanction-housing-tenant-landlord>.

¹³² *Artificial Intelligence in the legal field and the indispensable human*, <https://www.law.georgetown.edu/legal-ethics-journal/wp-content/uploads/sites/24/2020/09/GT-GJLE200038.pdf>.

¹³³ Michael Simon et. al, “Lola v. Skadden and the Automation of the Legal Profession,” 20 YALE J.L. & TECH. 234, 248 (2018) (“According to the Lola decision, if a lawyer is performing a particular task that can be done by a machine, then that work is not practicing law.”); *Lola v. Skadden, Arps, Slate, Meagher & Flom LLP*, 620 Fed. Appx. 37, 45 (2nd Cir. 2015).

¹³⁴ *Id.*, p. 888; *see also* Nicole Yamane, “Artificial Intelligence in the Legal Field and the Indispensable Human Element Legal Ethics Demands,” Georgetown Univ. Law Center (Sept. 24, 2020), <https://www.law.georgetown.edu/legal-ethics-journal/wp-content/uploads/sites/24/2020/09/GT-GJLE200038.pdf>.

¹³⁵ *LegalZoom.com, Inc. v. N.C. State B.*, 2015 NCBC 96, Consent J.; and D. Fisher, D., *LegalZoom settles fight with North Carolina Bar Over Online Law*, Forbes (Oct. 23, 2015), <https://www.forbes.com/sites/danielfisher/2015/10/22/legalzoom-settles-fight-with-north-carolina-bar-over-online-law/?sh=13b759e43eb2>.

¹³⁶ *See supra* note 69.

¹³⁷ *Wrubleski v. Mary Imogene Bassett Hosp.*, 163 A.D. 3d 1248, 1250–51 (3d Dept. 2018).

¹³⁸ L. Eliot, *Is generative AI such as CHATGPT going to undermine the famed attorney-client privilege, frets AI law and AI ethics*, Forbes (Oct. 5, 2023), <https://www.forbes.com/sites/lanceeliot/2023/03/30/is-generative-ai-such-as-chatgpt-going-to-undermine-the-famed-attorney-client-privilege-frets-ai-law-and-ai-ethics>.

¹³⁹ Rule 1.1 of the RPC requires that a lawyer provide competent representation to a client. Comment 8 to RPC Rule 1.1 asserts that this includes keeping abreast of “the benefits and risks associated with technology the lawyer uses to provide services to clients.”

-
- ¹⁴⁰ Doug Austin, *Insurer sent law firms a CHATGPT warning*, eDiscovery Today (April 14, 2023), https://ediscoverytoday.com/2023/04/14/insurer-sent-law-firms-a-chatgpt-warning-artificial-intelligence-trends/?int_ref=yrrp.
- ¹⁴¹ Tony Petruzzi and Helena Guye, “*The Perils of Dabbling*”: *AI and the Practice of Law*, Reuters, Sept. 11, 2023, <https://www.reuters.com/legal/legalindustry/perils-dabbling-ai-practice-law-2023-09-11>.
- ¹⁴² *What Are AI Hallucinations?*, IBM, <https://www.ibm.com/topics/ai-hallucinations>.
- ¹⁴³ *Nix v. Whiteside*, 475 U.S. 157, 166 (1986).
- ¹⁴⁴ Ian Sample, *What Are Deepfakes – and How Can You Spot Them?*, Guardian, Jan. 13, 2020, <https://www.theguardian.com/technology/2020/jan/13/what-are-deepfakes-and-how-can-you-spot-them>.
- ¹⁴⁵ Rebecca A. Delfino, *Deepfakes on Trial: A Call To Expand the Trial Judge’s Gatekeeping Role To Protect Legal Proceedings from Technological Fakery*, 74 Hastings L.J. 293 (2023), https://repository.uchastings.edu/hastings_law_journal/vol74/iss2/3.
- ¹⁴⁶ *Id.*
- ¹⁴⁷ Marla Greenstein, *AI and a Judge’s Ethical Obligations*, American Bar Assoc., Feb. 3, 2020, https://www.americanbar.org/groups/judicial/publications/judges_journal/2020/winter/ai-and-judges-ethical-obligations.
- ¹⁴⁸ See NYSBA Communications Department, “American Bar Association Adopts NYSBA-Advanced Resolution on Best Practice Guidelines for Online Legal Document Providers” (Aug. 12, 2019), <https://nysba.org/august-12-2019-american-bar-association-adopts-nysba-advanced-resolution-on-best-practice-guidelines-for-online-legal-document-providers>.
- ¹⁴⁹ *Estonia Does Not Develop AI Judge*, Republic of Estonia Ministry of Justice, Feb. 16, 2022, <https://www.just.ee/en/news/estonia-does-not-develop-ai-judge>.
- ¹⁵⁰ *Learning From the Failures of Robodebt – Building a Fairer, Client-Centred Social Security System*, Victoria Legal Aid, Nov. 13, 2023, <https://www.legalaid.vic.gov.au/learning-from-the-failures-of-robodebt>.
- ¹⁵¹ No. 22-cv-1461 (PKC), 2023 WL 4114965 (S.D.N.Y. June 22, 2023).
- ¹⁵² *Client Alert: Italian Data Protection Authority Bans Chatbot*, Cordery Legal Compliance, Feb. 7, 2023, <https://www.corderycompliance.com/italy-dpa-chatbot-0223>.

MEMORANDUM

TO: NYSBA House of Delegates
FROM: NYSBA Trusts and Estates Law Executive Committee
DATE: March 28, 2024
SUBJECT: NYSBA TASK FORCE ON ARTIFICIAL INTELLIGENCE REPORT

As prepared by the TELS Technology Committee and reviewed by the TELS Executive Committee, our comments to the report of the Task Force on Artificial Intelligence follow.

Comment on Recommendations:

1) Adopt Guidelines *“The Task Force recommends that NYSBA adopt the AI/GAI guidelines outlined in this report and commission a standing section or committee to oversee periodic updates to those guidelines. Daily, we learn more about the capability of the technology to transform society. As the impacts are continual, so should the updates to these guidelines be as well.”*

- a. Given the pace and development of AI/GAI technology, the Trusts and Estates Law Section (TELS) is concerned that frequent updates to adopted guidelines will present challenges to practitioners conforming their practice to the guidelines. The TELS believes that a reasoned interpretation of the applicable rules of Professional Conduct and current guidance and commentary is sufficient to guide most practitioners. In other words, less might be more. However, the Task Force’s proposed guidance is generally helpful and acceptable with the following comments/critiques which focus on the Task Force’s contemplation of AI/GAI as having personhood. The TELS does not believe that AI/GAI should be considered or contemplated as a person.

- i. Guidance on Rule 5.3: *A law firm shall ensure that the work of nonlawyers who work for the firm is adequately supervised, as appropriate.*

“If the Tools are used by non-lawyers or paralegals (or the Tools themselves are considered “non-lawyers”), you must supervise their use to ensure compliance with the ethical rules. Further, you must ensure that the work produced by the Tools is accurate and complete and does not disclose or create a risk of disclosing client confidential information without your client’s informed consent.”

The TELS opposes the parenthetical suggesting that the Tools may be considered “non-lawyers.”

- ii. Guidance on Rule 5.4: *A lawyer shall not permit a person to direct or regulate the lawyer’s professional judgment in rendering legal services.*

“While the Tools are technically not a “person,” you should refrain from relying exclusively on them when providing legal advice and maintain your independent judgment on a matter.”

The Tools are not a person in any sense, “technically” or practically. The TELS opposes implicating personhood with respect to a technological resource.

- iii. Guidance on Rule 5.5: *A lawyer shall not aid a nonlawyer in the unauthorized practice of law.*

“Understand that human oversight is necessary to avoid UPL issues when using the Tools, which should augment but not replace your legal work.”

The guidance contemplates that AI/GAI could be engaged in the unlicensed practice of law. The TELS opposes assigning personhood to AI/GAI in this respect.

- 2) Focus on Education: *“The Task Force recommends that NYSBA prioritize education over legislation, focusing on educating judges, lawyers and regulators to understand the technology so that they can apply existing law to regulate it.”*

The TELS strongly endorses this recommendation.

- 3) Identify Risks for New Regulation: *“Legislatures should identify risks associated with the technology that are not addressed by existing laws, which will likely involve extensive hearings and studies involving experts in AI.”*

The TELS endorses this recommendation. The TELS however, believes that applicable legislatures and administrative agencies engaged in rulemaking ought to focus on proper attribution to AI/GAI and disclosure of the use of AI/GAI in submissions to tribunals. We believe that the issue of whether and to what extent disclosure must be had when an attorney uses AI/GAI should be addressed immediately. For example, if an attorney relies on AI/GAI in a brief or memorandum of law submitted to a court, the court, the litigants, and the public in general might be better served if reliance and use of AI/GAI is disclosed by way of attribution and/or disclosure. Consideration should be afforded to the nature and extent of the attorney’s reliance on AI/GAI in this scenario, for example, is AI/GAI being utilized to help counsel of record spot flaws in a counterpart’s argument? to summarize cases? to generate wholesale prose then incorporated into a litigant’s brief/memorandum of law? to analyze technical data? to analyze and reach factual conclusions based on documentary evidence and testimony? The TELS believes that the guidance should be supplemented to require attorneys to disclose use of the Tools in instances where the attorney relies upon AI/GAI to generate an argument and employs that argument utilizing the prose generated by the Tools. However, where AI/GAI is used for less substantive tasks such as conducting research or summarizing case law, disclosure is less warranted.

The law is notoriously slow in addressing the much more rapid and frequent changes in technology. Deliberately considered legislation and rulemaking is a time-tested and valuable feature of the law. However, in this context, care must be exercised to avoid perpetually playing "catch-up" as a result of focusing on

specific technological features which may be subsumed or become obsolete in a very short period of time. A better approach would be to address technology globally, by focusing on the obligations of the attorney rather than the specific technology being employed at the moment. The legal profession, and the public as a whole, is far better served by making it clear that when a lawyer utilizes technology—any technology— as part of his or her practice, he or she is ultimately responsible for the content and quality of the work product thus generated.

Memo to: Patricia J. Shevy, Chair Trusts and Estates Law Section

From: Albert Feuer

Re: TELS Technology Committee March 26, 2024 memo regarding the NYSBA Task Force on Artificial Intelligence Report and Recommendations to NYSBA House of Delegate (April 6, 2024)

Date: March 28, 2024

The Task Force produced a very good and comprehensive discussion of the history and the significance of artificial intelligence (AI), its risks and benefits, the laws that govern AI and have been proposed to govern AI, and AI's implications for lawyers, the legal system, the access to justice, and for society.

Like the TELS Technology Committee I will focus only on the Task Force's four recommendations.

1) It is advisable to have a NYSBA standing committee or section to continue to examine the legal, social, and ethical impact of artificial intelligence. This entity could update the guidelines in a manner that balances the burdens and benefits of such updates.

As with all legal tools, including sample legal documents/templates, questions may arise whether (a) an attorney using such tools is exercising the attorney's legal judgment with respect to the proper use of such tools, or (b) the provider of such tools to lay persons is practicing law. I share the concern of the TELS committee about the anthropomorphizing of AI, although for a different reason. Such characterization may make it more difficult to correct AI errors because it may make it more difficult to hold the user and/or the provider/designer of AI responsible for those errors.

2) It is advisable for the NYSBA to "focus on educating judges, lawyers, law students and regulators to understand the technology so that they may apply existing law to regulate it." This may include explicitly mentioning AI in the Rules for Professional Conduct.

3) It is advisable for "legislatures seek to identify risks associated with the technology that are not addressed by existing law." I disagree with the TELS committee suggestion that this focus only on tribunal submissions. There also needs to be focus on the use of AI for the non-litigation responsibilities of attorneys: counseling, and the preparation of legal documents. Such usage also raises the issue of lay persons seeking to prepare documents using AI tools supplied by the same persons that now provide sample legal documents, such as wills.

4) It is advisable to consider how AI may be used in law as a governance tool, which recommendation the TELS committee did not discuss. For example, which principles should determine the appropriate regulation of AI tools, and who should regulate. Similarly, how may society/commercial benefits be weighed against risks to individuals or to different groups

PROPOSED COMMENTS BY THE DRS REGARDING THE REPORT AND
RECOMMENDATION FROM THE NYSBA TASK FORCE
ON ARTIFICIAL INTELLIGENCE

Paul R. Gupta

The DRS recommends to the Task Force that the following points should be added or discussed more fully. If it would be helpful to the Task Force, we can expand upon the points below, and draft fuller statements in a form that could be added to the Report.

1. Biometrics.
 - a. The use of biometrics is one of the most significant current uses of AI. Many businesses use biometrics for hiring, supervision, and termination. State Legislatures have established rules with regards to the use, collection and storage of biometrics, such as face recognition, fingerprints, iris maps and voice prints. Illinois has led the way with broad biometrics legislation that includes a private right of action. The legislation covers the use of biometrics information (including selling that information), consent to obtain that information, and storage of that information.. (See [IL Biometrics Information Privacy Act](#)). New York and Maryland also have biometrics laws regarding employment, and Texas and Washington have broad biometrics laws. See also the following illustrative cases: [Carpenter v. McDonald's Corp., 580 F. Supp. 3d 512 | Casetext Search + Citator](#), [In re Facebook Biometric Info. Privacy Litig., Case No. 15-cv-03747-JD | Casetext Search + Citator](#), and [Rivera v. Google, Inc., 366 F. Supp. 3d 998 | Casetext Search + Citator](#). Additionally, some municipalities, such as New York City, have biometrics laws that include a private right of action. (See [The New York City Council - File #: Int 1170-2018 \(nyc.gov\)](#)).
 - b. Biometrics raise PII and other privacy concerns.
2. Bias:
 - a. AI may create gender and racial bias, due to limited samples in databases used for comparisons (see: study exploring voice biometric disparities: [Exploring racial and gender disparities in voice biometrics - PMC \(nih.gov\)](#), [The racism of technology - and why driverless cars could be the most dangerous example yet | Motoring | The Guardian](#), Study claims that self-driving cars more likely to drive into black people | [Police Facial Recognition Technology Can't Tell Black People Apart | Scientific American](#))
 - b. Ideological bias – AI can exacerbate ideological bias especially when used in conjunction with social media. AI can create its own echo chamber, generating spurious content to use as future training data, leading to ideologically based “hallucinations” and inaccuracies (see: [Echo Chamber](#)

[of AI: Model Collapse Risks | Deepgram, Polarization of Autonomous Generative AI Agents Under Echo Chambers \(arxiv.org\)](#)

3. Confidentiality:

- a. Confidentiality concerns arise when entering information into AI engines (such as chatbots) and when such entries are then added to the training set for the AI. Such uses may violate Protective Orders for prior and future cases involving different parties. These concerns are compounded when chatbot results are analyzed by evaluative AI. For example, if biometrics data (see point 1 above) is analyzed by a chatbot to assist a mediator in preparing a mediator's proposal, multiple levels of confidentiality concerns arise. Such issues are especially important when some or all of the data that the AI "learns" is used for training the AI for work on future cases. These concerns can be alleviated by closed systems.
- b. Some AI providers allow for anonymous queries, while others explicitly state that they save inputs and prompts (see [ChatGPT privacy policy](#), section 1 regarding user content).



**PENNSYLVANIA BAR ASSOCIATION COMMITTEE
ON LEGAL ETHICS AND PROFESSIONAL RESPONSIBILITY
and
PHILADELPHIA BAR ASSOCIATION PROFESSIONAL GUIDANCE COMMITTEE
JOINT FORMAL OPINION 2024-200**

ETHICAL ISSUES REGARDING THE USE OF ARTIFICIAL INTELLIGENCE

Introduction

Artificial Intelligence (“AI”) has fundamentally transformed the practice of law by revolutionizing various aspects of legal work. AI-powered software can perform legal research, contract analysis, and document review tasks, saving time and increasing efficiency. AI can also help predict legal outcomes, manage cases, and automate routine tasks. AI technology has facilitated the automation of routine legal tasks, allowing legal professionals to focus on higher-value work requiring human expertise and judgment.

Generative AI has taken the advances of AI even further. It can assist lawyers by automating document drafting, preparing summaries, analyzing and synthesizing large volumes of documents and other information, optimizing efficiency, and allowing for more focused attention on legal strategy and client needs.

In short, the use of AI has gone from something in movies to an everyday tool in the practice of law. This technology has begun to revolutionize the way legal work is done, allowing lawyers to focus on more complex tasks and provide better service to their clients.

To attorneys, the thought of using AI to draft pleadings and briefs and review documents may seem unfamiliar and even intimidating because the technology is relatively new, and many attorneys have not used it. Now that it is here, attorneys need to know what it is and how (and if) to use it.

The use of AI has also raised ethical issues for attorneys. Topics such as client confidentiality and competence in the use of AI are at the forefront of our day-to-day legal practices. As outlined in more detail in the “Guidance & Best Practices for the Use of Artificial Intelligence” section below, this Joint Opinion is intended to educate attorneys on the benefits and pitfalls of using this type of technology, and provide ethical guidelines, including:

- Lawyers must ensure that AI-generated content, such as legal documents or advice, is truthful, accurate, and based on sound legal reasoning, upholding principles of honesty and integrity in their professional conduct.
- Lawyers must be competent in the use of AI technologies.
- Lawyers must ensure the accuracy and relevance of the citations they use in legal documents or arguments. When citing legal authorities such as case law, statutes, regulations, or scholarly articles, lawyers should verify that the citations accurately reflect the content they are referencing.
- Lawyers must safeguard information relating to the representation of a client and ensure that AI systems handling confidential data adhere to strict confidentiality measures.
- Lawyers must be vigilant in identifying and addressing potential conflicts of interest arising from using AI systems.
- Lawyers must communicate with clients about their use of AI technologies in their practices, providing clear and transparent explanations of how such tools are employed and their potential impact on case outcomes.
- Lawyers must ensure that AI-related expenses are reasonable and appropriately disclosed to clients.
- Lawyers must engage in continuing legal education and other training to stay informed about ethical issues and best practices for using AI in legal practice.

The rapid growth of AI is forcing the legal profession to confront and adapt to it. As with other forms of technology, from cloud computing to virtual offices, these new technologies implicate old ethical problems. This opinion will clarify how our existing ethical rules impact the proper use of this technology.

The Committees also emphasize that lawyers must be proficient in using technological tools to the same extent they are in employing traditional methods. Whether it is understanding how to navigate legal research databases, use e-discovery software, use their smartphones, use email, or otherwise safeguard client information in digital formats, lawyers are required to maintain competence across all technological means relevant to their practice.

Definitions of Artificial Intelligence

1. Artificial Intelligence

The *Oxford English Dictionary* defines “artificial intelligence” as “software used to perform tasks or produce output previously thought to require human intelligence, esp. by using machine learning to extrapolate from large collections of data.”¹

The National Artificial Intelligence Act of 2020 defines “artificial intelligence” as “a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments; abstract such perceptions into models through analysis in an automated manner; and use model inference to formulate options for information or action.”²

2. Generative Artificial Intelligence

Although artificial intelligence has been used for decades, generative AI represents a significant change and a dramatic step forward in legal applications, because instead of only analyzing content, it can also generate new content. McKinsey and Company explain that “Generative artificial intelligence (AI) describes algorithms (such as ChatGPT) that can be used to create new content, including audio, code, images, text, simulations, and videos.”³

Generative AI and large language models are like two peas in a pod. Generative AI is the brain behind creating new output, including text, images, and music, by learning from existing data. Of particular concern is the type of generative AI, which, unlike its predecessors, is used not only to analyze data but also to create novel content. Generative AI creates this content using large language models, in which a model is “trained” on vast amounts of data, rendering it able to generate new content by referring back to the data it has ingested. The release of OpenAI’s ChatGPT in November 2022 ushered in this new era of technological development.

Artificial Intelligence’s Application for Lawyers

AI has already been used for many years in various legal software applications including document review, legal research, and document assembly. Generative AI differs from non-generative AI because it creates content, and it is the creation of content that necessitates heightened awareness by lawyers.

For example, document review software has enabled Technology-Assisted Review (“TAR”) of large document collections, sometimes referred to as “predictive coding” or “computer-assisted review.” The Sedona Conference defines TAR as “A process for prioritizing or coding a collection of electronically stored information using a computerized system that harnesses human judgments of subject-matter experts on a smaller set of documents and then extrapolates those judgments to the remaining documents in the collection. ... TAR systems generally incorporate statistical

¹ https://www.oed.com/dictionary/artificial-intelligence_n

² 15 U.S.C. 9401(3).

³ <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai>

models and/or sampling techniques to guide the process and to measure overall system effectiveness.”⁴

Similarly, technology is deployed within legal research software to identify other authorities of interest to the researcher based on the authorities with which the researcher has engaged. Legal research software traditionally utilizes AI for document indexing and natural language processing, enabling it to categorize and index legal documents and efficiently retrieve relevant information. Because generative AI creates content, however, lawyers have an obligation to verify that the citations are correct and that they accurately summarize the cases or other information cited.

In legal applications, generative AI is like having an assistant who can create legal documents, analyze cases, and provide insight into potential outcomes of legal issues. It works by learning from legal data and examples and then using the knowledge to generate new legal documents or predictions. Thus, instead of spending hours drafting contracts or researching case law, lawyers can now use generative AI to speed up their work and make more informed decisions.

Hallucinations & Biases

Among the reasons that AI, particularly generative AI, is so controversial is that the software sometimes responds to queries with “hallucinations,” or “false answers.” IBM describes hallucinations as follows:

AI hallucination is a phenomenon wherein a large language model (LLM)—often a generative AI chatbot or computer vision tool—perceives patterns or objects that are nonexistent or imperceptible to human observers, creating outputs that are nonsensical or altogether inaccurate.

Generally, if a user makes a request of a generative AI tool, they desire an output that appropriately addresses the prompt (*i.e.*, a correct answer to a question). However, sometimes AI algorithms produce outputs that are not based on training data, are incorrectly decoded by the transformer or do not follow any identifiable pattern. In other words, it “hallucinates” the response.

Generative AI is not a clean slate, free from prejudices and preconceptions. To the contrary, AI has biases that are the result of the data input into them. These biases can lead to discrimination, favoring certain groups or perspectives over others, and can manifest in areas like facial recognition and hiring decisions. Addressing AI biases is essential to obtaining the best results.

Lawyers have fallen victim to hallucinations and biases, signing their names to briefs authored entirely by or with the assistance of AI, which included some nonexistent cases. Some recent examples include:

⁴ The Sedona Conference Glossary: eDiscovery & Digital Information Management, Fifth Edition, 21 SEDONA CONF. J. 263 (2020) (definition adopted from Maura R. Grossman & Gordon V. Cormack, The Grossman-Cormack Glossary of Technology Assisted Review with Foreword by John M. Facciola, U.S. Magistrate Judge, 7 FED. CTS. L. REV. 1, 32 (2013)).

- A New York lawyer filed a brief citing fake cases generated by ChatGPT, stating in an affidavit that he consulted ChatGPT for legal research when preparing a response to a motion, and that ChatGPT provided the legal sources and assured him of the reliability of the opinions. The lawyer ultimately admitted that the source of the legal opinions had “revealed itself to be unreliable.”⁵
- A New York lawyer filed an appellate reply brief citing a nonexistent case, and was referred to the court’s Grievance Panel.⁶
- A Colorado lawyer submitted a brief that included false citations generated by ChatGPT. “Respondent provided example searches/results to explain his confidence in the technology. Based on the prior results, he explained, ‘it never dawned on me that this technology could be deceptive.’”⁷

An example of AI bias in legal applications can be found in the predictive algorithms for risk assessment in criminal justice systems. If the algorithm disproportionately flags individuals from marginalized communities as high-risk, it could lead to unjust outcomes such as harsher sentences, perpetuating systemic biases within the legal system.

These and similar incidents have caused much concern about AI, and generative AI in particular.

How Courts Are Reacting to AI

Courts have begun to create new rules or implement new policies relating to the use of AI in court submissions. Some Courts are mandating certain attorney disclosures and verifications when submitting any document to the Court that may be generated in whole or in part by some form of AI program or application.

For example, one federal judge in the Eastern District of Pennsylvania has issued a standing order requiring:

... that counsel (or a party representing himself or herself) disclose whether he or she has used generative Artificial Intelligence (“AI”) in the preparation of any complaint, answer, motion, brief, or other paper filed with the Court, including in correspondence with the Court. He or she must, in a clear and plain factual statement, disclose that generative AI has been used in any way in the preparation of the filing or correspondence and certify that each and every citation to the law or the record in the filing has been verified as authentic and accurate.⁸

A federal judge in Texas has a standing order requiring a Mandatory Certification Regarding Generative Artificial Intelligence. The Order identifies that generative AI “is the product of programming devised by humans who did not have to swear [an attorney’s] oath. As such, these systems hold no allegiance to any client, the rule of law, or the laws and Constitution of the United States (or, as addressed above, the truth). Unbound by any sense of duty, honor, or justice, such

⁵ *Mata v. Avianca, Inc.*, 2023 U.S. Dist. LEXIS 108263 (SDNY June 22, 2023).

⁶ *Park v. Kim*, No. 22-2057, 2024 WL 332478 (2d Cir, Jan. 30, 2024).1

⁷ 2023 Colo. Discipl. LEXIS 64 (Colo. O.P.D.J, Nov. 22, 2023).

⁸ https://www.paed.uscourts.gov/sites/paed/files/documents/procedures/praso1_0.pdf

programs act according to computer code rather than conviction, based on programming rather than principle.”⁹

Courts are also sanctioning lawyers and their firms for the misuse of AI.

For example, in *Mata*, the Southern District of New York sanctioned attorneys for writing a legal brief using ChatGPT. The Court determined that the lawyers “abandoned their responsibilities” when they submitted the AI-written brief and “then continued to stand by the fake opinions after the judicial orders called their existence into question.” Both the individual attorneys and their law firm were fined \$5,000 each.¹⁰

In *People v. Crabill*¹¹, an attorney was suspended for one year and one day for using cases created by ChatGPT that were not actual cases. The attorney did not cite or check any of the case references generated by ChatGPT, and he solely relied on the technology to create his brief without any review. The Colorado Supreme Court held that his conduct violated Colorado Rules of Professional Conduct 1.1, 1.3, 3.3(a)(1) and 8.4(c).

The Ninth Circuit struck a brief containing false authority drawn from generative AI.¹²

⁹ See <https://www.txnd.uscourts.gov/judge/judge-brantley-starr>, in which the Judge writes:

All attorneys and pro se litigants appearing before the Court must, together with their notice of appearance, file on the docket a certificate attesting either that no portion of any filing will be drafted by generative artificial intelligence (such as ChatGPT, Harvey.AI, or Google Bard) or that any language drafted by generative artificial intelligence will be checked for accuracy, using print reporters or traditional legal databases, by a human being. These platforms are incredibly powerful and have many uses in the law: form divorces, discovery requests, suggested errors in documents, anticipated questions at oral argument. But legal briefing is not one of them. Here’s why. These platforms in their current states are prone to hallucinations and bias. On hallucinations, they make stuff up—even quotes and citations. Another issue is reliability or bias. While attorneys swear an oath to set aside their personal prejudices, biases, and beliefs to faithfully uphold the law and represent their clients, generative artificial intelligence is the product of programming devised by humans who did not have to swear such an oath. As such, these systems hold no allegiance to any client, the rule of law, or the laws and Constitution of the United States (or, as addressed above, the truth). Unbound by any sense of duty, honor, or justice, such programs act according to computer code rather than conviction, based on programming rather than principle. Any party believing a platform has the requisite accuracy and reliability for legal briefing may move for leave and explain why. Accordingly, the Court will strike any filing from a party who fails to file a certificate on the docket attesting that they have read the Court’s judge-specific requirements and understand that they will be held responsible under Rule 11 for the contents of any filing that they sign and submit to the Court, regardless of whether generative artificial intelligence drafted any portion of that filing.

¹⁰ *Mata v. Avianca, Inc.*, Case No. 22-CV-1461, 2023 WL 4114965, 2023 U.S. Dist. LEXIS 108263 (S.D.N.Y., July 7, 2023).

¹¹ *People v. Zachariah C. Crabill*. 23PDJ067. November 22, 2023.

¹² <https://news.bloomberglaw.com/bloomberg-law-analysis/analysis-sanctions-for-fake-generative-ai-cites-harm-clients#:~:text=There%20are%20other%20ways%20to,appropriate%20bar%20or%20disciplinary%20committee.>

Lawyers are, therefore, facing disciplinary actions, both before judges and disciplinary authorities, for using AI technology without taking appropriate steps to ensure its accuracy and that their clients are receiving effective representation with its use.

What Other Jurisdictions Are Saying

In every jurisdiction that has issued guidance or made recommendations concerning the use of AI, there is one common theme: Lawyers must recognize the risks and benefits of AI technology. If they choose to use AI, particularly generative AI, they must understand its strengths and weaknesses and employ it consistent with their ethical obligations under the Rules of Professional Conduct.

Florida

The Florida State Bar, Ethics Opinion 24-1 (2024), concludes that lawyers may use generative AI in the practice of law but must (1) protect the confidentiality of client information, (2) provide accurate and competent services, (3) avoid improper billing practices, and (4) comply with applicable restrictions on lawyer advertising.

The Opinion points out that lawyers must also make reasonable efforts to prevent unauthorized access to client information and understand the risks associated with the use of technology. They also remain responsible for their work product and must verify the accuracy and sufficiency of research performed by generative AI. The Opinion concludes that lawyers must continue to develop competency in the use of generative AI and stay informed about the risks and benefits of new technologies.

New York

The New York State Bar Association Task Force on Artificial Intelligence issued a Report and Recommendations (2024) in which it offered “no conclusions.” Rather, the Task Force stated:

As a profession, we must continue to refine the initial guidelines suggested in this report and audit the efficacy of proposed rules and regulations. We liken this journey to the mindset of ancient explorers: be cautious, be curious, be vigilant and be brave.

The Report does, however, affirm that lawyers must comply with the Rules of Professional Conduct. In addition, the Report provides (1) an extensive history and analysis of the evolution of AI and generative AI, (2) the benefits and risks of AI and generative AI use, (3) the impact of AI on legal profession, (4) legislative overview and recommendations, (5) AI and generative AI guidelines under the Rules of Professional Conduct.

California

The State Bar of California Standing Committee on Professional Responsibility and Conduct issued “Practical Guidance For The Use Of Generative Artificial Intelligence In The Practice Of Law” (2023), explaining that:

Generative AI use presents unique challenges; it uses large volumes of data, there are many competing AI models and products, and, even for those who create generative AI products, there is a lack of clarity as to how it works. In addition, generative AI poses the risk of encouraging greater reliance and trust on its outputs because of its purpose to generate responses and its ability to do so in a manner that projects confidence and effectively emulates human responses. A lawyer should consider these and other risks before using generative AI in providing legal services.

New Jersey

The New Jersey Supreme Court Committee on Artificial Intelligence and the Courts issued “Preliminary Guidelines On New Jersey Lawyers’ Use of Artificial Intelligence” (2024). The Guidelines explain that AI does not change the fundamental duties of legal professionals to be aware of new applications and potential challenges in the discharge of such responsibilities. In particular, the report notes that “As with any disruptive technology, a lack of careful engagement with AI could lead to ethical violations, underscoring the need for lawyers to adapt their practices mindfully and ethically in this evolving landscape.”

The Guidelines further explain that the use of AI does not change the lawyer’s duty to (1) be accurate and truthful, (2) be honest and candid when communicating, (3) preserve confidentiality, (4) prevent misconduct, including discrimination, and (5) provide oversight to lawyers, nonlawyer staff and others.

Michigan

The State Bar of Michigan, in Ethics Opinion JI-155 (2023), addresses judicial competence and artificial intelligence, and concludes that judicial officers need to maintain competence with advancing technology, especially artificial intelligence, and how it affects their conduct and decisions. The Opinion provides examples of how AI can pose ethical dilemmas, such as bias, partiality, explainability, or accuracy, as well as how AI can assist judges in tasks like docket management, legal research, drafting documents, or answering questions.

The Opinion concludes that judicial officers have an ethical obligation to understand technology, including AI, and take reasonable steps to ensure that AI tools are used properly and within the confines of the law and court rules. The document also recommends that judges ask the right questions and place their analysis and application of AI on the record.

How the Pennsylvania Rules of Professional Conduct Apply to AI Use for Lawyers

Lawyers' use of artificial intelligence implicates the same ethical issues as other forms of technology. However, there is the additional caveat that lawyers must not only comply with the Rules of Professional Conduct but also ensure that AI adheres to the same requirements.

In particular, the use of AI applies to the lawyer's duties of (1) confidentiality, (2) competence, (3) candor, (4) truthfulness, (5) supervision, (6) communication, (7) conflicts of interest, and (8) the unauthorized practice of law, and implicates the following Rules of Professional Conduct:

1. Duty of Competence

Pennsylvania Rule of Professional Conduct 1.1(Competence) states:

A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.

In addition, Comment [8] states in relevant part:

To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.

Thus, if a lawyer chooses to use AI or any other technology, the lawyer has the responsibility to (1) understand the technology and how it works, (2) understand the benefits of the technology, (3) understand the risks of the technology, (4) check and verify all citations and the material cited, and (5) especially in cases where the benefits outweigh the risks, have an obligation to educate the client and seek their informed consent to use the technology. At their core, the obligations under all of the relevant Rules are subject to Rule 1.1.

2. Communication

Pennsylvania Rule of Professional Conduct 1.4 ("Communication") states:

- (a) A lawyer shall:
- (1) promptly inform the client of any decision or circumstance with respect to which the client's informed consent, as defined in Rule 1.0(e), is required by these Rules;
 - (2) reasonably consult with the client about the means by which the client's objectives are to be accomplished;
 - (3) keep the client reasonably informed about the status of the matter;
 - (4) promptly comply with reasonable requests for information; and

- (5) consult with the client about any relevant limitation on the lawyer's conduct when the lawyer knows that the client expects assistance not permitted by the Rules of Professional Conduct or other law.
- (b) A lawyer shall explain a matter to the extent reasonably necessary to permit the client to make informed decisions regarding the representation.

Rule 1.4 requires the lawyer to inform the client of the benefits, risks, and limits of the use of generative AI. In conjunction with the client, the lawyer must also determine whether the permissible use of generative AI would serve the client's objectives in the representation.

3. Duty of Confidentiality

Pennsylvania Rule of Professional Conduct 1.6 ("Confidentiality of Information") states in relevant part:

A lawyer shall not reveal information relating to representation of a client unless the clients give informed consent, except for disclosures that are impliedly authorized in order to carry out the representation

4. Conflicts

Pennsylvania Rules of Professional Conduct Rules 1.7 ("Conflict of Interest: Current Clients") and 1.9 ("Duties to Former Clients") preclude a lawyer from revealing information relating to a representation of a current or former client or from using that information to the disadvantage of the current or former client. Because the large language models used in generative AI continue to develop, some without safeguards similar to those already in use in law offices, such as ethical walls, they may run afoul of Rules 1.7 and 1.9 by using the information developed from one representation to inform another. Therefore, a lawyer must not input any confidential information of a client into AI that lacks adequate confidentiality and security protections.

5. Meritorious Claims and Contentions

Pennsylvania Rule of Professional Conduct 3.1 ("Meritorious Claims and Contentions") states:

A lawyer shall not bring or defend a proceeding, or assert or controvert an issue therein, unless there is a basis in law and fact for doing so that is not frivolous, which includes a good faith argument for an extension, modification or reversal of existing law. A lawyer for the defendant in a criminal proceeding, or the respondent in a proceeding that could result in incarceration, may nevertheless so defend the proceeding as to require that every element of the case be established.

In addition, Comment [4] states in relevant part:

Legal argument based on a knowingly false representation of law constitutes dishonesty toward the tribunal. A lawyer is not required to make a disinterested exposition of the law, but must recognize the existence of pertinent legal authorities... The underlying concept is

that legal argument is a discussion seeking to determine the legal premises properly applicable to the case.

The ability of AI tools to generate text opens a new frontier in our ethics guidance. Rather than focus on whether a lawyer's choice of specific legal arguments has merit, some lawyers have used Generative AI platforms without checking citations and legal arguments. In essence, the AI tool gives lawyers exactly what they were seeking, and the lawyers, having obtained positive results, fail to perform due diligence on those results. Regardless, whether a baseless argument is made with the assistance of AI or not is irrelevant; the lawyer is responsible.

6. Candor Toward the Tribunal

Pennsylvania Rule of Professional Conduct 3.3 ("Candor Toward the Tribunal") states in relevant part:

- (a) A lawyer shall not knowingly:
 - (1) make a false statement of material fact or law to a tribunal or fail to correct a false statement of material fact or law previously made to the tribunal by the lawyer;
 - (2) fail to disclose to the tribunal legal authority in the controlling jurisdiction known to the lawyer to be directly adverse to the position of the client and not disclosed by opposing counsel; or
 - (3) offer evidence that the lawyer knows to be false. If a lawyer, the lawyer's client, or a witness called by the lawyer, has offered material evidence before a tribunal or in an ancillary proceeding conducted pursuant to a tribunal's adjudicative authority, such as a deposition, and the lawyer comes to know of its falsity, the lawyer shall take reasonable remedial measures, including, if necessary, disclosure to the tribunal. A lawyer may refuse to offer evidence, other than the testimony of a defendant in a criminal matter, that the lawyer reasonably believes is false.
- (b) A lawyer who represents a client in an adjudicative proceeding and who knows that a person intends to engage, is engaging or has engaged in criminal or fraudulent conduct related to the proceeding shall take reasonable remedial measures, including, if necessary, disclosure to the tribunal.
- (c) The duties stated in paragraphs (a) and (b) continue to the conclusion of the proceeding, and apply even if compliance requires disclosure of information otherwise protected by Rule 1.6.

Further, Comment [10] to Rule 3.3 states in relevant part:

Having offered material evidence in the belief that it was true, a lawyer may subsequently come to know that the evidence is false... In such situations... the lawyer must take reasonable remedial measures. In such situations, the advocate's proper course is to remonstrate with the client confidentially, advise the client of the lawyer's duty of candor to the tribunal and seek the client's cooperation with respect to the withdrawal or correction of the false statements or evidence. If that fails, the advocate must take further remedial

action. If withdrawal from the representation is not permitted or will not undo the effect of the false evidence, the advocate must make such disclosure to the tribunal as is reasonably necessary to remedy the situation, even if doing so requires the lawyer to reveal information that otherwise would be protected by Rule 1.6. It is for the tribunal then to determine what should be done — making a statement about the matter to the trier of fact, ordering a mistrial or perhaps nothing.

The full version of this Comment is focused on a false statement by a *client*; however, a lawyer has an obligation to ensure that evidence has not been altered or invented from whole cloth by an AI tool. Upon learning of altered or invented evidence, the lawyer must take “reasonable remedial measures.”

Rule 3.3 imposes multiple obligations on lawyers. A lawyer must be both proactive and reactive in not presenting false statements or false evidence to a tribunal. This Rule goes hand in hand with Rule 1.1 (Competence); lawyers must be competent in their use of legal tools, including AI, which may reduce the risk of violating Rule 3.3.

7. Duty to Supervise

Pennsylvania Rule of Professional Conduct 5.1 (“Responsibilities of Partners, Managers and Supervisory Lawyers”) states:

- (a) A partner in a law firm, and a lawyer who individually or together with other lawyers possesses comparable managerial authority in a law firm, shall make reasonable efforts to ensure that the firm has in effect measures giving reasonable assurance that all lawyers in the firm conform to the Rules of Professional Conduct.
- (b) A lawyer having direct supervisory authority over another lawyer shall make reasonable efforts to ensure that the other lawyer conforms to the Rules of Professional Conduct.

Pennsylvania Rule of Professional Conduct 5.3 (“Responsibilities Regarding Nonlawyer Assistance”) states:

- With respect to a nonlawyer employed or retained by or associated with a lawyer:
- (a) a partner and a lawyer who individually or together with other lawyers possesses comparable managerial authority in a law firm shall make reasonable efforts to ensure that the firm has in effect measures giving reasonable assurance that the person’s conduct is compatible with the professional obligations of the lawyer.
 - (b) a lawyer having direct supervisory authority over the nonlawyer shall make reasonable efforts to ensure that the person’s conduct is compatible with the professional obligations of the lawyer; and,
 - (c) a lawyer shall be responsible for conduct of such a person that would be a violation of the Rules of Professional Conduct if engaged in by a lawyer if:
 - (1) the lawyer orders or, with the knowledge of the specific conduct, ratifies the conduct involved; or

- (2) the lawyer is a partner or has comparable managerial authority in the law firm in which the person is employed, or has direct supervisory authority over the person, and in either case knows of the conduct at a time when its consequences can be avoided or mitigated but fails to take reasonable remedial action.

The same ethical rules that apply to lawyers who employ or retain paralegals, junior associates, or outside consultants applies to lawyers who utilize AI. Rule 5.1 addresses the responsibilities of partners, managers, and supervisory lawyers at a law firm and requires that they “make reasonable efforts to ensure that the firm has in effect measures giving reasonable assurance that all lawyers in the firm conform to the Rules of Professional Conduct.”

While Rule 5.3 applies to “non-lawyers” and “persons,” where AI is able to function like a human, the Rule should apply with the same force. Thus, when contemplating the appropriate use of generative AI, lawyers should consider whether an AI tool can satisfy the Rules of Professional Conduct to the same extent as a human hired to complete the same tasks.

8. Unauthorized Practice of Law

Pennsylvania Rule of Professional Conduct 5.5 (“Unauthorized Practice of Law; Multijurisdictional Practice of Law”) states in relevant part:

- (a) A lawyer shall not practice law in a jurisdiction in violation of the regulation of the legal profession in that jurisdiction, or assist another in doing so.

In AI’s development, even in machine learning, where AI learns independently, humans initially program the technology, making AI essentially a creation of humans. To the extent that the AI programmer is not a lawyer, the programmer may violate Rule 5.5 regarding the unauthorized practice of law. To avoid the UPL, lawyers must ensure that AI does not give legal advice or engage in tasks that require legal judgment or expertise, without the involvement of a licensed attorney. There must always be a human element in the legal work product to ensure that lawyers are upholding their ethical obligations.

9. Duty of Truthfulness

Pennsylvania Rule of Professional Conduct 8.4 (“Misconduct”) provides in relevant part:

It is professional misconduct for a lawyer to:

- (c) engage in conduct involving dishonesty, fraud, deceit or misrepresentation.

Prior Committee Opinions

The Pennsylvania Bar Association Committee on Legal Ethics and Professional Responsibility in Formal Opinion 2011-200 (“Ethical Obligations For Attorneys Using Cloud Computing/Software As A Service While Fulfilling The Duties Of Confidentiality and Preservation Of Client Property”) describes the steps that a lawyer should take when dealing with “cloud” computing, including

detailed lists of required steps and descriptions of what other states have held on the issue. The same rationale applies to a lawyer's use of AI.

In that opinion, the Committee emphasizes that “lawyers must be conscientious about maintaining traditional confidentiality, competence, and supervisory standards.”

In PBA Formal Opinion 2022-400 (“Ethical Obligations For Lawyers Using Email And Transmitting Confidential Information”), the Committee stated:

Given the changes in technology and the rise of cyberattacks, this Formal Opinion concludes that the Rules of Professional Conduct require more. Rule 1.1 requires a lawyer to be competent, including understanding the benefits and risks associated with technology such as email. Rule 1.4 requires a lawyer to “reasonably consult with the client about the means by which the client’s objectives are to be accomplished.” Rule 1.6(d) requires a lawyer to “make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client.”

In PBA Formal Opinion 2022-500 (“Ethical Considerations For Lawyers Storing Information Relating To The Representation Of A Client On A Smartphone”), the Committee stated:

... if a lawyer’s smartphone contains information governed by Pa.R.P.C. 1.6, then the lawyer may not consent to share the information with a smartphone app unless the lawyer concludes that no human being will view that information, and that the information will not be sold or transferred to additional third parties, without the client’s consent.

Guidance Applicable to Technology Generally

A lawyer’s duty of competence requires them to possess the necessary knowledge and skills to represent their clients effectively. The Committee has previously stated and reaffirms that the obligation extends to the use of technology:

Lawyers must be proficient in using technological tools to the same extent they are in employing traditional methods. Whether it is understanding how to navigate legal research databases, use e-discovery software, use their smartphones, use email, or otherwise safeguard client information in digital formats, lawyers are required to maintain competence across all technological means relevant to their practice.

In sum, lawyers must act reasonably, and their duty of competence applies equally to technology as it does to any other aspect of legal representation.

Guidance & Best Practices for the Use of Artificial Intelligence:

When using AI, a lawyer must ensure that any client information and materials remain confidential and safeguard that information to ensure that it is protected from breaches, data loss, and other risks. Multiple Rules of Professional Conduct are implicated in a lawyer's use of AI because so many questions arise:

- Is the client's information being used when forming queries, and if so, is it kept confidential?
- Who has access to that information?
- Is the information secure or "out in the world" for all to see?

To address these concerns, for example, some firms are implementing internal policies on whether a lawyer can use AI (and programs such as ChatGPT) when creating pleadings or other documents that may contain sensitive client information. Additionally, some legal malpractice insurance carriers will not insure for AI's use, and many policies now limit firms that are covered by them from using AI to prepare any documents, especially those that are being filed with a Court.

Therefore, the Committees conclude as follows:

- **Being Truthful & Accurate:** Lawyers must ensure that AI-generated content, such as legal documents or advice, is truthful, accurate, and based on sound legal reasoning, upholding principles of honesty and integrity in their professional conduct.
- **Verifying All Citations & The Accuracy of Cited Materials:** Lawyers must ensure the accuracy and relevance of the citations they use in legal documents or arguments. When citing legal authorities such as case law, statutes, regulations, or scholarly articles, lawyers should verify that the citations accurately reflect the content they are referencing.
- **Assuring Competence:** Lawyers must be competent in using AI technologies.
- **Maintaining Confidentiality:** Lawyers must safeguard information relating to the representation of a client and ensure that AI systems handling confidential data (1) adhere to strict confidentiality measures, and (2) confidential data will not be shared with other clients or others not protected by the attorney-client privilege.
- **Identifying Conflicts of Interest:** Lawyers must be vigilant in identifying and addressing potential conflicts of interest arising from using AI systems.
- **Communicating with Clients:** Lawyers must communicate with clients about using AI technologies in their practices, providing clear and transparent explanations of how such tools are employed and their potential impact on case outcomes. If necessary, they should obtain client consent before using certain AI tools.
- **Assuring Information is Unbiased & Accurate:** Lawyers must ensure that the data used to train AI models is accurate, unbiased, and ethically sourced to prevent perpetuating biases or inaccuracies in AI-generated content.

- **Ensuring That AI Is Properly Used:** Lawyers must be vigilant against the misuse of AI-generated content, ensuring it is not used to deceive or manipulate legal processes, evidence, or outcomes.
- **Adhering to Ethical Standards:** Lawyers must stay informed about relevant regulations and guidelines governing the use of AI in legal practice to ensure compliance with legal and ethical standards.
- **Exercising Professional Judgment:** Lawyers must exercise their professional judgment in conjunction with AI-generated content, and recognize that AI is a tool that assists but does not replace legal expertise and analysis.
- **Utilizing Proper Billing Practices:** AI has tremendous time-saving capabilities. Lawyers must, therefore, ensure that AI-related expenses are reasonable and appropriately disclosed to clients.
- **Maintaining Transparency:** Lawyers should be transparent with clients, colleagues, and the courts about the use of AI tools in legal practice, including disclosing any limitations or uncertainties associated with AI-generated content.

Conclusion

Artificial intelligence and generative AI tools, like any tool in a lawyer’s arsenal, must be used with knowledge of their potential and an awareness of the risks and benefits the technology offers. They are to be used cautiously and in conjunction with a lawyer’s careful review of the “work product” that those types of tools create. These tools do not replace personal reviews of cases, statutes, and other legislative materials. Additionally, although AI may offer increased productivity, it must be accomplished by utilizing tools to protect and safeguard confidential client information.

The Committees believe that, with appropriate safeguards, lawyers can utilize artificial intelligence in accordance with the Pennsylvania Rules of Professional Conduct.

CAVEAT: The foregoing opinion is advisory only and is not binding on the Disciplinary Board of the Supreme Court of Pennsylvania or any other Court. This opinion carries only such weight as an appropriate reviewing authority may choose to give it.