GENERATIVE ARTIFICIAL INTELLIGENCE: BENEFITS AND RISKS TO LAW FIRMS

FINANCIAL MANAGEMENT

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LEGAL INDUSTRY/ BUSINESS MANAGEMENT

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Generative Artificial Intelligence: Benefits and Risks to Law Firms

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INTRODUCTION

Artificial intelligence (AI) in general and the now popular "generative AI" (GEN-AI) in particular, such as Open AI's ChatGPT and DALL-E, are receiving increasing coverage in the media and escalating interest from the general public. While interest in AI continues to grow, the reality today is that many individuals do not fully understand or have familiarity with the fundamental concepts and working principles of AI or GEN-AI.[2]

The recent advances in AI and GEN-AI will change how law is practiced. GEN-AI has the potential to provide significant benefits to lawyers and their clients. As a commentator recently wrote:

> AI is poised to fundamentally reshape the practice of law. While there is a long history of technology-driven changes in how attorneys work, the recent introduction of large language model-based systems such as GPT-3 and GPT-4 marks the first time that widely available technology can perform sophisticated writing and research tasks with a proficiency that previously required highly trained people.
>
> Law firms that effectively leverage emerging AI technologies will be able to offer services at lower cost, higher efficiency and with higher odds of favorable outcomes in litigation. Law firms that fail to capitalize on the power of AI will be unable to remain cost-competitive, losing clients and undermining their ability to attract and retain talent.[3]

GEN-AI can provide many benefits to law firms; however, it also can create risks. This white paper's objectives are to:

1. Provide the reader with a fundamental, nontechnical, informative discussion of AI and GEN-AI concepts.
2. Investigate the relationship between ethics and the rapidly (and sometimes unchecked) evolving world of GEN-AI.
3. Identify specific GEN-AI benefits and risks relevant to law firms when using GEN-AI in their activities.
4. Improve and elevate the reader's overall AI literacy.
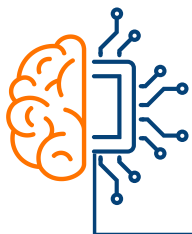
INFORMATION TECHNOLOGY, AI
AND **GEN-AI** IN THE PRACTICE OF LAW

Computers have assisted the practice of law for decades. One of the earliest uses of computerized technology in the practice of law was using search and retrieval services to find and extract relevant cases, articles and statutes. Today, advances in natural language processing have made it possible to automate the process of analyzing and scanning documents for **content,** such as keywords and specific phrases. This significantly improved the quality and speed of many routine legal tasks, such as reviewing documents produced through discovery, court and deposition transcripts, and contracts.

However, this software could not analyze documents for the **context** of the text, nor did it understand **semantics,** i.e., the meaning of words, phrases and sentences. Different words and phrases can mean essentially the same thing in a given context. Unless software can recognize meaning and context, it will miss many relevant parts in documents. This was the problem with using computers to search for keywords in legal databases like Westlaw and Lexis. Only the keywords, not related concepts and words, were located.

None of these programs could **generate** content or insights by analyzing and summarizing data. In contrast, GEN-AI can generate new content, such as documents, images, sound and video, based on its analysis of large amounts of data. GEN-AI also recognizes how words and sentences relate to each other, which can make it look like the computer understands semantics and context.

GEN-AI can assist law firms in many other ways, including:

» Conducting legal research, including searching for relevant case opinions and citation checking

» Drafting documents, such as pleadings, motions and briefs, contracts and other types of documents, including email and text message responses

» Searching, analyzing and summarizing the contents of documents, as well as written transcripts *(Note: Computerized analysis of deposition and court transcripts has been done for years without GEN-AI. But GEN-AI can provide more valuable insights into the information and can be done in real-time during a trial or deposition.)*[4]

» Comparing documents and suggesting changes or additions

» Helping to stimulate or develop innovative legal strategies

» Analyzing and summarizing audio and video recordings

» Analyzing pictures and other types of images

» Analyzing and summarizing financial documents, such as financial statements and accounting data

» Analyzing and summarizing financial and business news

» Assisting in legal and financial due diligence investigations

» Assisting clients with their regulatory compliance and their suppliers' compliance, including reporting on environmental, social and governance (ESG) compliance and activities[5]

» Identifying intellectual property rights, such as searching for copyrights, patents and trademarks

» Creating and/or filling out standardized forms automatically, including governmental forms

» Predicting the probability of litigation success and the size of judgments or settlements

» Analyzing internal law firm operations, such as productivity, revenues and expenses in real-time

AI, if not currently part of the law firm's operations and business model, will be within the next three to five years.
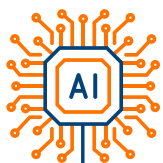
WHAT IS
ARTIFICIAL INTELLIGENCE?

The concept of artificial intelligence has been around since the 1950s but has been continually evolving in terms of application and ease of use. See Figure 1.
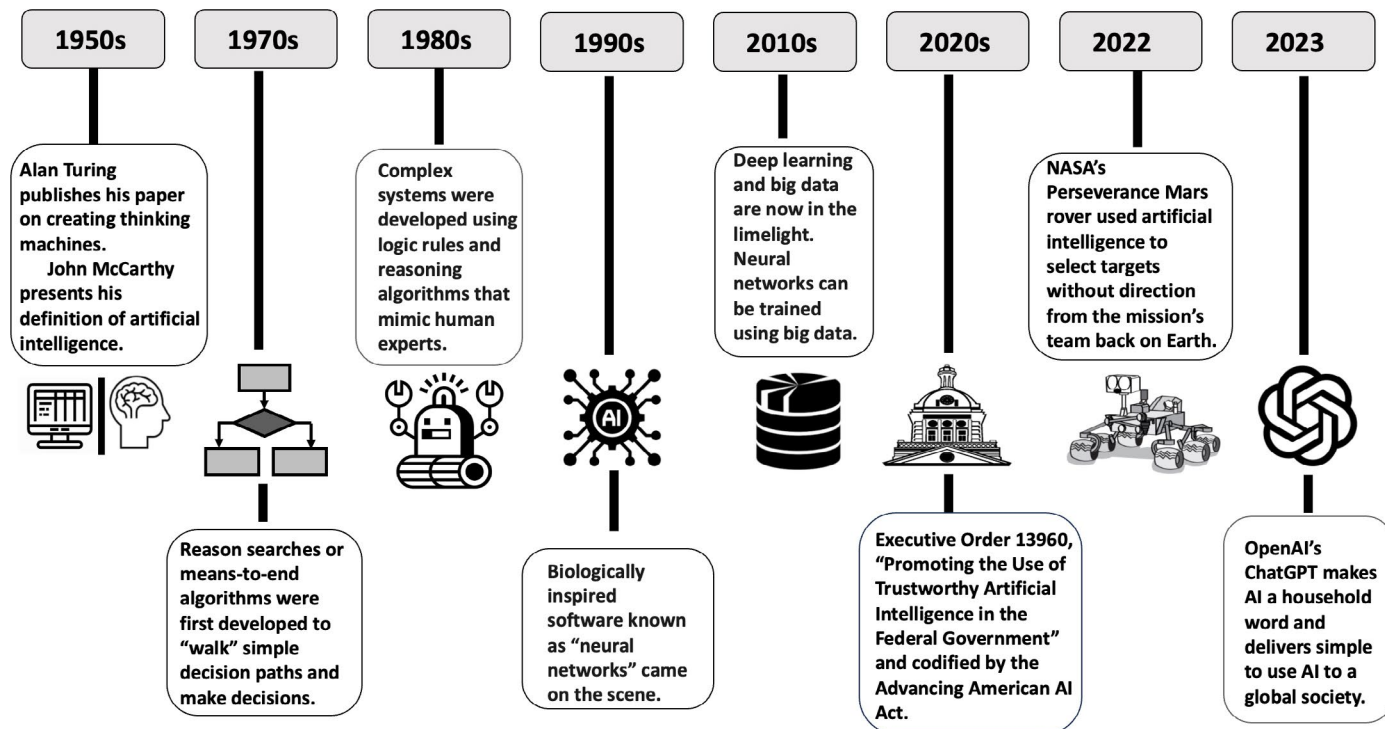
1950s	1970s	1980s	1990s	2010s	2020s	2022	2023

1950s: Alan Turing publishes his paper on creating thinking machines. John McCarthy presents his definition of artificial intelligence.

1970s: Reason searches or means-to-end algorithms were first developed to "walk" simple decision paths and make decisions.

1980s: Complex systems were developed using logic rules and reasoning algorithms that mimic human experts.

1990s: Biologically inspired software known as "neural networks" came on the scene.

2010s: Deep learning and big data are now in the limelight. Neural networks can be trained using big data.

2020s: Executive Order 13960, "Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government" and codified by the Advancing American AI Act.

2022: NASA's Perseverance Mars rover used artificial intelligence to select targets without direction from the mission's team back on Earth.

2023: OpenAI's ChatGPT makes AI a household word and delivers simple to use AI to a global society.

Figure: 1 Timeline of Select Artificial Intelligence Milestones[6]

AI is part of the larger field of data science, which combines domain expertise, programming skills, and knowledge of mathematics and statistics to extract meaningful insights from data. There are two main subsets of AI: Natural Language Processing (NLP) and Machine Learning (ML).

This content is effective as of September 2023.
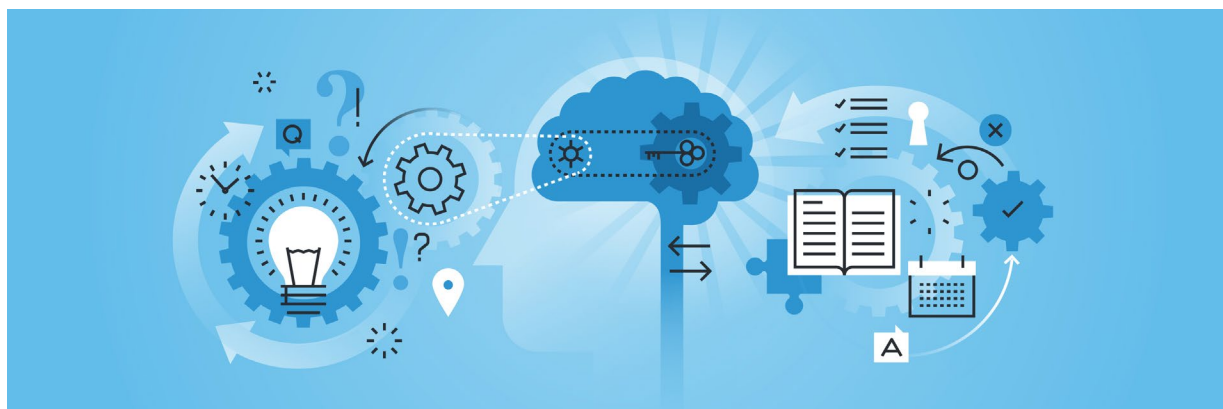
NLP provides AI with the capability to read, interpret and understand human language. NLP's focus is on computer-human language interactions, specifically how to program computers to process and analyze large amounts of natural language data. The goal of NLP is for computers to eventually be able to recognize and process text and languages in the same way humans do. Machine learning, as the name suggests, is when computers "learn" by looking for patterns in very large amounts of data and then make predictions based on those "learned" observed patterns. A subset of machine learning is Deep Learning (DL). At the heart of Deep Learning are Artificial Neural Networks (ANNs) that are based on the way neurons function in brains, mimicking the way that biological neurons signal to one another.

We use these types of artificial intelligence many times throughout the day and never realize it. For example, if you ask Siri about traffic conditions before heading out for your morning commute to work or use Google Assistant to access information from your calendars and other personal information, you are using AI technology.

Figure 2 shows the relationship between AI, NLP, ML, DL and ANNs.
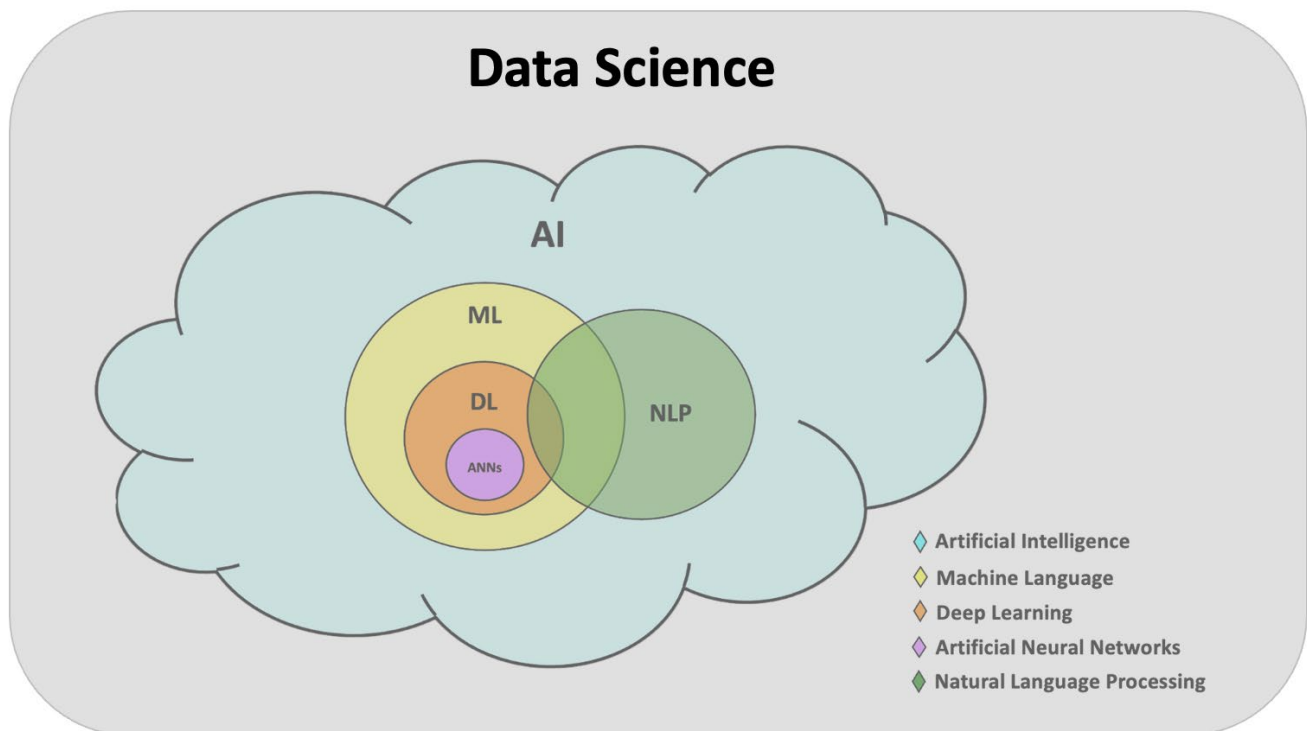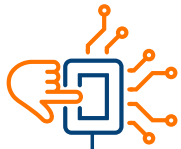
In its midyear briefing on the global risks landscape, the World Economic Council's survey of leading chief risk officers from both the public and private sectors reported the following:

> " More than half of chief risk officers surveyed indicated that their organization plans to conduct an AI audit within the next six months to ensure the safety, legality and ethical soundness of the algorithms being used. Respondents noted the importance of following responsible AI principles, flagging risks related to the inadvertent sharing of personal data and bias in algorithmic decision-making.[7] "

The potential for GEN-AI models to increase efficiency and productivity, make better decisions, improve the "speed" of business, reduce human error, and improve services comes with tradeoffs in terms of ethical concerns and risk. Making an ethically correct decision oftentimes involves some level of risk. Decisions involving an element of risk may also have ethical implications and ramifications.

Figure 3 illustrates the various types of risk categories that users will encounter across the broad field of artificial intelligence.

Accountability
Accuracy
Algorithmic Discrimination
Auditability
Availability
Compliance
Copyright & Legal Exposure
Cybersecurity
Data Biasness
Data Protection
Data Provenance
Deepfakes
Distribution of Harmful Content
Explainability

RISK
Artificial Intelligence
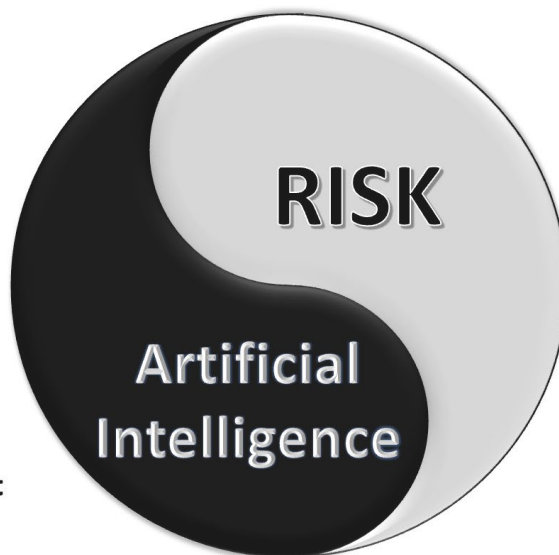
Interpretability
Misuse Use of AI
Privacy
Reliability
Resiliency
Responsible Use
Robustness
Safe and Effective Systems
Security
Social Impact on Workforce
Traceability
Transparency
Trust
Unauthorized Use of AI

Figure 3: Artificial Intelligence and Risk

The following sections discuss critical GEN-AI issues and the associated risks inherent in using GEN-AI tools.

Trust

In the field of AI, trust refers to the level of confidence, reliability and belief that users and stakeholders have in an AI system's capabilities, performance and ethical behavior. Trust is crucial for the successful adoption and acceptance of AI, as users must feel comfortable relying on AI-driven decisions and outputs. The critical question when using GEN-AI tools is very basic: "Can you believe GEN-AI results?"

For additional recommendations on fostering trust in AI, see the sidebar "Six Recommendations to Foster Trust in AI."

Data Quality

A risk associated with GEN-AI is exactly what makes GEN-AI "intelligent" — the use of extremely large amounts of data (so-called "big data"). Data quality and trustworthiness are paramount concerns when using GEN-AI because the quality of the data used to train and implement AI determines the quality of the output. "Garbage in, garbage out" is a simple way to express this concern.

The accuracy and value of GEN-AI results depend on the quality, quantity and relevance of the data used for training the GEN-AI software/tool. Biased or incomplete data can lead to biased decisions and unreliable outcomes, so data quality and ethical considerations are critical when deploying AI systems. If GEN-AI is going to be accurate and useful, the firm must use due diligence to validate the quality, accuracy, completeness, reliability, ownership and timeliness of the data used to "train" the GEN-AI tool.

Data Provenance

Data provenance refers to the history and origin of data, including its creation, ownership, transformation and movement throughout its lifecycle. An inability to substantiate the data's source and accuracy can be problematic and may lead to uncertain recommendations. In the context of artificial intelligence, data provenance becomes crucial as AI systems rely heavily on high-quality and trustworthy data.

Establishing and substantiating data provenance is critically important to all aspects of GEN-AI models, as data provenance helps to establish transparency and

accountability. Without reliable data provenance, it becomes challenging to verify the authenticity of the data used for training AI models, which is essential to understanding and addressing data bias, an indispensable requirement in building ethical and unbiased AI systems.

Risk of Misinformation in GEN-AI Results

GEN-AI may generate misinformation, sometimes called "hallucinations," and make other errors. Hallucination is a form of misinformation where GEN-AI produces plausible, but factually incorrect output. In 2022, a lawyer in New York filed a legal brief that was created in part with OpenAI's ChatGPT. Unfortunately, the brief was filled with misinformation and errors, including fictitious case citations and court opinions. The trial court judge found the errors and imposed sanctions on the lawyer because Rule 11 of the Federal Rules of Civil Procedure (FRCP) requires lawyers to certify the accuracy and integrity of all documents filed with a court.[8] A lawyer in Colorado Springs made a similar error.[9] In a blog, Paul Daly wrote that in February 2023 he asked ChatGPT to generate a list of law review articles on administrative monetary penalties. ChatGPT dutifully generated a list of 15 law review articles — none of which existed![10]

The lawyers' problems occurred because the data used to train ChatGPT and used in searches for information included nonlegal, general information found on the internet and in sources of public documents. To avoid misinformation and hallucination problems in legal documents, the data used by the GEN-AI tool must be high-quality relevant data, such as data from Westlaw, LexisNexis, or other well-established sources of legal documents and data. In addition, GEN-AI can limit its searches to specific databases, such as a client's internal databases, law firm databases, or specialized domain-specific databases. Misinformation is rare when using high-quality, legal databases, but errors have occurred. DLA Piper's chief data scientist reported 1 mistake in about 10,000 prompts.[11]

Another factor that can cause misinformation and errors in GEN-AI results is the prompt given to GEN-AI tools. Detailed prompts and sequential "chains" of prompts often produce better, more accurate results than short, general prompts. A Casetext blog post on CoCounsel shows good examples of errors made by GPT-4 and how different types of prompts can help prevent making those errors (e.g., retrieval-augmented generation and

few-shot prompting).[12] Few-shot prompting refers to a technique where a model is trained to perform tasks or generate responses with only a small number of examples or prompts, typically a handful, rather than relying on extensive training data. This approach demonstrates the model's ability to generalize and adapt quickly to new tasks or questions based on very limited input.

Accordingly, users of GEN-AI should be trained in "prompt engineering" to improve the quality of the GEN-AI output. Some AI products help users develop high-quality prompts, such as CoCounsel by Casetext.[13]

Because of the misinformation and errors made by GEN-AI, and even just AI, some judges have implemented local court orders requiring attorneys to disclose whether they used AI or GEN-AI to conduct legal research or draft documents submitted to the court.[14] Other judges require attorneys to certify that they have checked all GEN-AI or AI-generated citations and quotes for relevancy and accuracy. Other judges require attorneys to disclose which parts of documents were written by GEN-AI. Still, other judges require attorneys to affirm that client confidentiality was maintained if the attorney used GEN-AI.[15]

For example, Magistrate Judge Gabriel Fuentes of the United States District Court for the Northern District of Illinois has a standing order that says in part:

> Any party using any generative AI tool to conduct legal research or to draft documents for filing with the Court must disclose in the filing that AI was used, with the disclosure including the specific AI tool and the manner in which it was used.[16]

Similarly, Judge Brantley Starr of the United States District Court for the Northern District of Texas has the following requirement regarding GEN-AI (but not AI in general):

> 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.[17]

Biases, Fairness and Algorithmic Discrimination

AI is prone to bias! That probably is not news to the reader. The media has been reporting on biases in AI results, some of which could be illegal, for years. There is extensive evidence showing that automated systems can produce inequitable outcomes and amplify existing inequities.[18] On the other hand, using AI to make decisions can eliminate **human** biases, intentional or unintentional, from decision-making.

Fairness is a big concern when using AI to make decisions, especially decisions that have important consequences, such as hiring, firing, promoting, approving loans and being admitted to universities. The AI user must be sensitive to the possibility of unfair biases in AI output. However, it is impossible to eliminate the risk of unfair bias in an AI system. Adding to the complexity of this issue, people do not agree on what constitutes "fairness."[19]

Another term used to describe biased AI results is "algorithmic discrimination." The Biden administration's Blueprint for an AI Bill of Rights defines algorithmic discrimination:

> Algorithmic discrimination occurs when automated systems contribute to unjustified different treatment or impacts disfavoring people based on their race, color, ethnicity, sex (including pregnancy, childbirth, and related medical conditions, gender identity, intersex status, and sexual orientation), religion, age, national origin, disability, veteran status, genetic information or any other classification protected by law. Depending on the specific circumstances, such algorithmic discrimination may violate legal protections.[20]

The Blueprint also asserts that users of AI systems, as well as developers and designers, should be proactive in avoiding algorithmic discrimination.

Bias can result from the AI algorithms, the data and the prompts used in AI decision-making models. AI output may be biased if the data used were biased or incomplete, intentionally or unintentionally, or if the search prompt is somehow biased. For example, if the data do not include many women, minorities, older or

disabled people, then those omissions may bias the AI output. The data used in AI may reflect biases existing in society. As a result, the AI output may incorporate those biases. A poor prompt may also exclude certain classes of people. Certain AI algorithms may produce more biased outputs than other types of AI algorithms.[21] AI decision-making biases may be illegal even if unintentional, if they have a disparate impact on protected classes under various civil rights laws.[22] Unfair, biased decisions are unethical, even if not always illegal. Unethical behavior always increases the risk for organizations.

Confidentiality and Privacy Risks

Confidentiality and privacy rights are critical considerations when dealing with data. Given the increasingly massive amounts of data required to train the newest, continually advancing GEN-AI models, there is a very real possibility that valuable personal identifiable information (PII) will make its way into AI training data sets. Ethically, and often legally, PII and other confidential data must be protected to ensure that individuals' privacy and security are respected. Without limitations on the type of data collected and adequate technical and policy safeguards, there could be unauthorized access, data breaches and misuse of personal information. Therefore, protecting data privacy and ensuring compliance with data protection regulations are vitally important in AI and GEN-AI applications.

Law firms must pay particularly close attention to maintaining the confidentiality of client data when using AI or GEN-AI to analyze and report on the data. Client data may include trade secrets, intellectual property, confidential information that could affect securities trading (e.g., insider information), corporate strategies and competitive intelligence. Because of privacy and security concerns, clients may be reluctant to have their confidential information uploaded into third-party databases, including a law firm's databases.[23] In addition, the attorney-client privilege may be damaged if disclosure of a client's confidential data results in a waiver of the privilege. For example, inadvertent disclosure may occur if confidential client data is used to train the GEN-AI tool.

Law firms must be especially careful to avoid disclosure of confidential and/or privileged client information when it is stored in third-party databases and/or used by third parties to conduct AI work for the law firm. Law firms have a legal responsibility to ensure that third parties have sufficient security to protect confidential data and do not combine

clients' data with training data used for other organizations or clients. Law firms must have and exercise control over all client data, including the ownership and usage of client information given to a third-party AI provider or external database provider.

Law firms must also ensure the security and privacy of data in their systems. How do you ensure that your AI tools do not commingle clients' data? How your firm's data and your client's data are used in GEN-AI and stored are critical issues as well. Are data encrypted while being sent over the internet (i.e., "in transit")? Are data encrypted when stored (i.e., "at rest")? Are your clients' data isolated from other persons' or organizations' data while the GEN-AI or AI tools are working on the client's data? These are critical issues for any organization and especially for law firms dealing with valuable, confidential data.

Prompts used in GEN-AI may also disclose privileged, private or confidential information. An example of disclosing confidential information when using GEN-AI occurred when some Samsung employees accidentally disclosed confidential company information in their ChatGPT prompts. In one case, employees put confidential source code into a ChatGPT prompt and asked ChatGPT to look for errors and ways to optimize the code. In another case, a Samsung employee put a recording of a confidential meeting into a ChatGPT prompt so that ChatGPT would create notes about the meeting. These prompts became part of ChatGPT's database and were available to anyone using ChatGPT. In response to these disclosures, in May 2023, Samsung temporarily banned the use of ChatGPT and other GEN-AI tools, like Microsoft's Bing and Google's Bard, on company-owned devices and any personal devices running on Samsung's internal network.[24]

Similarly, law firms should warn their employees about the risks of unauthorized data disclosure. In March 2023, over 11,700 professionals responding to a Fishbowl app survey[25] disclosed that out of the 43% of professionals who use GEN-AI for work, around 70% reported using ChatGPT and other tools without disclosing it to their organization. Employees who misuse technology or use technology (especially the emerging plethora of GEN-AI models) without first obtaining authorization to do so place the law firm or legal department at risk for potential financial losses, including possible legal liability. Additionally, such actions by employees may result in reputational damage to the law firm. The risk of using unlicensed third-party intellectual property or copyrighted data is highly probable, especially if the user is unable to substantiate GEN-AI's data provenance.[26]

Intellectual Property and AI Errors

GEN-AI's ability to "learn" is rooted in analyzing massive amounts of data. However, there may be legal issues associated with using some data for GEN-AI training. For example, data providers may illegally use data — such as text, paintings, music and audio, video and images, and patents — that are protected by copyright or other intellectual property rights without the owner's permission or license. This can lead to lawsuits, legal liability and perhaps substantial monetary damage awards. In addition, a firm's reputation may be damaged if the firm uses another organization's intellectual property without a clear right to do so.

Class action lawsuits have been recently filed where copyright holders have asserted there were copyright violations when organizations used their content to train GEN-AI products. For example, the Joseph Saveri Law Firm has filed lawsuits against GitHub's Copilot for allegedly illegally using copyrighted source code written by programmers. Another class action suit was filed in January 2023 by the Saveri law firm against Stability AI, DeviantArt, and Midjourney for Stable Diffusion's use of copyrighted images as training data without the consent of the artists.[27] These cases have not been resolved as of the writing of this paper.

Besides potential copyright and other intellectual property issues, who is responsible for erroneous AI output that causes some type of harm to a person or organization? Who has responsibility and potential legal liability for GEN-AI "gone wrong?" Developers? Designers? Users? Cloud services providers? Joint and several liability for all of them? Currently, there are no clear answers. There are few laws and regulations governing AI liability issues, although there is a push for greater regulation and clarity on this issue. Even GEN-AI developers like OpenAI have been calling for more laws and regulations to increase the clarity on legal issues involving GEN-AI.[28]

Recently, the World Economic Forum Centre for the Fourth Industrial Revolution had a meeting of experts to discuss the technical, ethical and societal implications of GEN-AI. Whether the organizations, governments and regulators can agree on such laws is uncertain. However, Stanford University's 2023 AI Index shows that 37 laws were passed in 2022 across the globe. Nine laws were passed in the United States.[29]
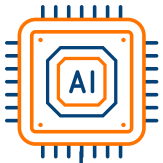
EXAMPLE OF GENERAL-USE GEN-AI:
MICROSOFT 365 COPILOT

Law firms can use GEN-AI products that are not specifically focused on lawyers and the law but will provide extensive operational and administrative support. There are many existing or forthcoming general-use GEN-AI products, including OpenAI's well-known ChatGPT. These GEN-AI products can be valuable to law firm operations but must be used with caution. OpenAI's ChatGPT has a disclaimer stating that ChatGPT may produce inaccurate results. Even Sam Altman, a Co-Founder of OpenAI, urged caution when using ChatGPT:

> ChatGPT is incredibly limited but good enough at some things to create a misleading impression of greatness. It's a mistake to be relying on it for anything important right now. It's a preview of progress; we have lots of work to do on robustness and truthfulness.

The following section will discuss a newly announced GEN-AI product from Microsoft that incorporates GPT-4 into Microsoft's Office 365 products.

In March 2023, Microsoft announced that it was developing a general-use GEN-AI product called Microsoft 365 Copilot that would improve office productivity by integrating with Microsoft's Office 365 suite of products.[30] Copilot was released for enterprises in November 2023, with additional features rolling out in the following months.[31] Because Copilot is in its infancy and has not been widely reviewed yet, this discussion of its capabilities is based on its advertised capabilities on Microsoft's websites and commentators' posts.[32]

According to Microsoft, 365 Copilot can analyze text and data to generate Word documents, create PowerPoint presentations (it will be able to use DALL-E GEN-AI to create images), analyze Excel spreadsheets and graphics, write emails in Outlook, create content in Teams, and summarize information in OneNote, as well as other less known Microsoft products.[33] Videos explaining the features and benefits of using Microsoft 365 Copilot with different Office 365 applications can be found on Microsoft's YouTube page.

Microsoft's 365 Copilot GEN-AI product is designed to use OpenAI's GPT-4 power to search, analyze and create outputs using **your own data**, not data "scraped" from the internet or other public sources of data. This search specificity will improve data security and the relevancy of the GEN-AI outputs, plus hopefully reduce hallucinations and misinformation. If the user wants, in addition to using the organization's data, Copilot can also integrate with other external data sources, such as customer relationship management (CRM) and enterprise resource planning (ERP) systems using Microsoft's Dynamics 365 Copilot. To help increase sales productivity, Microsoft also created Microsoft Sales Copilot.[34]

Having the flexibility to access data sources both inside and outside the law firm creates additional risks. If data access is not controlled well, confidential client information, such as nondisclosure agreements and privileged client information, may be accidentally used to train Copilot on a firm's internal data, resulting in so-called data leakage.[35] Although generally speaking AI and GEN-AI should have access to all relevant data to improve output, there are also times when "siloes" that restrict access to data can be valuable if certain information must remain confidential and/or privileged. However, according to Microsoft's claims about "confidential computing" and data security, this ability to use both external and internal data in Copilot will not compromise data security.[36]

At the end of the day, until 365 Copilot is fully functional, it will be difficult to evaluate Microsoft's claims about its capabilities. If a firm does not use Microsoft Office 365, then it probably will have less use for 365Copilot. However, some of its employees may use Office 365 for their work, even if the firm has not adopted Office 365 as its suite of office productivity tools. Microsoft's 365 Copilot will not substitute for legal GEN-AI products, because it is designed for general GEN-AI use. However, Thomson Reuters says its legal GEN-AI will use 365 Copilot for some functions.

Law-Focused Gen-AI Products

This section will give readers a sense of what GEN-AI is currently capable of doing, or may be capable of doing in the future, to help lawyers practice law. Several GEN-AI products that focus on legal research and drafting legal documents are either presently available or are being tested before being released at the time of writing this paper. This general discussion of the different GEN-AI products is based on information found on the companies' websites and blog posts discussing the products.

Casetext has released its law-related GEN-AI tool called "CoCounsel." CoCounsel's website says that the product can extract data from legal databases, draft legal research documents and perform other law-related tasks in response to users' prompts. Thomson Reuters and LexisNexis have both said they have GEN-AI products that are currently being developed and are being tested by a few large law firms.[37] Both Lexis+ AI® and Thompson Reuters' GEN-AI products appear to have similar features and can draft contracts and other types of legal transaction-related documents.

A key advancement in law-related GEN-AI products is that they are not limited to old-fashioned keyword searches. In addition to being able to conduct traditional database searching using keywords, GEN-AI can respond to natural language questions ("prompts") by searching for both the words used in the prompt and for semantically and contextually related concepts. As a result, advanced GEN-AI like CoCounsel can locate legal opinions and statutes that are conceptually and semantically related to the prompt or query, even if some keywords are missing. This is an important feature, because old-fashioned keyword searches can produce false positives, i.e., produce irrelevant results that contain a search term; and false negatives, i.e., omit relevant results because they do not contain a search term.[38] In addition to "understanding" natural language, conversational prompts, GEN-AI will generate responses using natural language, such as creating memos or briefs. These capabilities may make GEN-AI products look like they "understand" the law. However, the capabilities are simply the result of GEN-AI models and algorithms, not comprehension or understanding.

CoCounsel

CoCounsel has many features (called "skills") that are valuable for transactional and litigation lawyers. There are three "universal" or "general" skills (review documents, summarize documents, and search a database), two

"transactional" skills (extract contract data and contract policy compliance), and two "litigation" skills (legal research memo and deposition preparation).[39] CoCounsel uses OpenAI's GPT-4 to power its processes but does not search the internet for information. CoCounsel is a specific-use AI that reads and "understands" domain-specific content. This means CoCounsel only searches specific databases to find relevant legal information. In addition to using legal databases, CoCounsel can also use data in other types of databases, such as law firm databases or clients' databases. This allows CoCounsel to search, analyze and summarize documents produced through discovery and transcripts. Limiting the searches to specified databases should help minimize hallucinations and other types of misinformation.

Casetext wrote the following descriptions of how CoCounsel works for lawyers to submit to judges who require lawyers to explain how AI and GEN-AI were used in a case:[40]

》 CoCounsel is an AI legal assistant that can understand and complete delegated tasks.

》 CoCounsel uses GPT-4, the most advanced large language model from OpenAI and other, proprietary, LLM AI developed by Casetext.

》 CoCounsel accesses GPT-4 through private, dedicated servers and through a zero-retention API. This means OpenAI cannot view any of that data, store it longer than required to process the request, or use any of it to train the AI model.

》 Users retain ownership of and control over their data and can remove it completely from the CoCounsel platform at any time.

》 All data are encrypted in transit and at rest in our systems.

》 CoCounsel uses specific applications called "skills" to complete a range of substantive legal tasks, like conducting legal research, performing document reviews, searching large databases, or analyzing and redlining contracts.

》 CoCounsel's responses are anchored in real, current information.

  o For legal research, the source of information is Casetext's daily-updated database of primary law for all 50 U.S. state and federal jurisdictions.

  o For other skills, CoCounsel uses the information specified by the user.

» CoCounsel shows its work. For example, CoCounsel's results include clickable citations so overseeing lawyers can immediately access the full text of relevant cases, statutes and regulations during legal research, or the full text and page number for relevant portions of underlying documents, contracts or databases used in other skills.

» Because CoCounsel was developed in the ways described above by engineers and attorneys with years of experience applying LLM AI to the law, lawyers using CoCounsel can practice law responsibly. For example, they can effectively manage nonlawyer legal assistance (e.g., Rule 5.3), maintain confidentiality (e.g., Rule 1.6), and meet filing requirements (e.g., FRCP Rule 11), just to name a few.

Below is Casetext's explanation to courts explaining how CoCounsel conducts legal research and drafts memos:[41]

When CoCounsel's "Legal Research Memo" skill is used to conduct legal research, CoCounsel's underlying AI technology does the following in this order:

1. Interprets the legal research request, in its own words, and confirms that results should conform to relevant jurisdiction, date range, and publication status filters from the request. *The user must correct or confirm CoCounsel's interpretation and filters before proceeding.*

2. Divides the original legal research request into multiple, relevant legal research requests that use keywords, Boolean operators, and natural-language queries to complete the original request.

3. Uses Casetext's proprietary LLM AI technology, Parallel Search, to identify primary law that is conceptually similar to the research request, even when exact keywords are not used.

4. Runs these queries through Casetext's daily updated database of primary law for all 50 U.S. state and federal jurisdictions.

5. Creates a list of relevant authorities.

6. Analyzes *only* this list of relevant authorities.

7. Writes a memo *from this analysis* that includes short summaries, highlighted quotes, and clickable citations to the full text of each authority.

Lexis+ AI

In May 2023, LexisNexis announced that it would be releasing its own law-focused GEN-AI product called Lexis+ AI®, which was being beta-tested at that time. Although the Lexis+ AI product is new, it builds on LexisNexis' Lexis+ suite of applications that were introduced in 2020.

The existing Lexis+ applications will be supplemented with the GEN-AI tool in Lexis+ AI. The new GEN-AI product will be able to respond to natural language prompts, summarize documents and even draft documents, such as contracts. LexisNexis has also developed Lexis for Microsoft Office 365 that provides Lexis or Lexis+ AI features in the Microsoft Word toolbar.[42] LexisNexis also has a suite of intellectual property-focused AI applications called Intellectual Property Solutions that law firms and legal departments can use. This video discusses these IP products.

LexisNexis says it used its own high-quality law and news databases to train Lexis+ AI. Therefore, hallucination errors should be minimized as should concerns with the ownership and provenance of the data. In terms of privacy, LexisNexis says users' prompts, activities and information will be completely confidential and not shared with any third parties nor retained as data to train its GEN-AI.[43] To address ethical and fairness concerns, LexisNexis says its Lexis+ AI product will comply with "Responsible Artificial Intelligence Principles" developed by its parent company, RELX (formerly Reed Elsevier).[44]
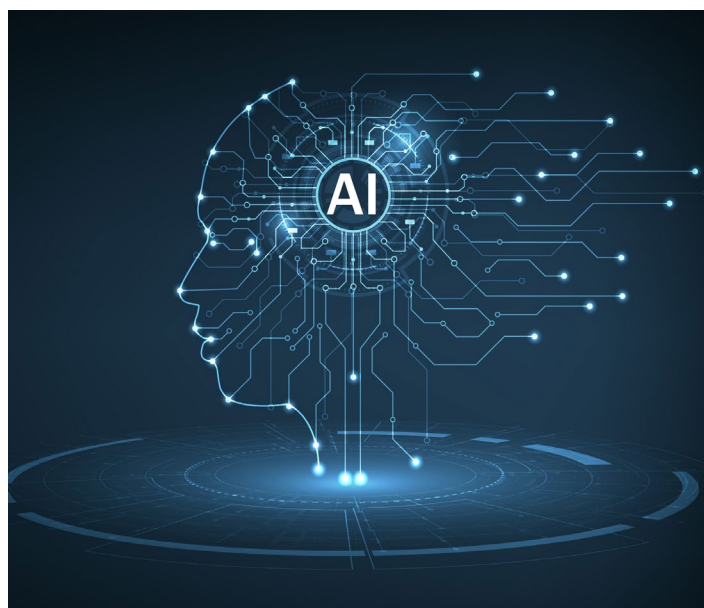
## Thomson Reuters' Generative Artificial Intelligence

In May 2023, Thomson Reuters announced it would be releasing its own law-related GEN-AI product. Thomson Reuters says the product will add GEN-AI capabilities to the following existing Thomson Reuters law products:[45]

» **Westlaw Precision:** With generative AI, customers can find answers to complex legal questions in seconds, based on proprietary, expert content.

» **Practical Law:** Smarter, faster access to the expertise of more than 650 attorney editors combined with the power of generative AI.

» **Checkpoint Edge:** Providing fast, reliable answers to complex tax and accounting questions.

» **Legal Document Review and Summary:** With generative AI reading through hundreds or even thousands of relevant documents in just seconds, customers can spot key risks, resolve questions, execute tasks and generate powerful work product. Powered by HighQ, Practical Law and Document Intelligence.

» **Legal Drafting:** Bringing together Thomson Reuters trusted content and intelligence from across Westlaw, Practical Law and Document Intelligence to surface key insights, legal knowledge and answers to complex questions.

Thomson Reuters' proposed legal GEN-AI will be trained on and access Westlaw's high-quality legal data (Westlaw is owned by Thomson Reuters). As is the case with Lexis+ AI, using high-quality legal data should minimize hallucination and errors, as well as minimize concerns with the ownership and provenance of the datasets.

Thomson Reuters also announced in May 2023 that it is working with Microsoft to create a new "intelligent drafting" plugin to Microsoft's GEN-AI called "365 Copilot."[46] Thomson Reuters wrote, "The intelligent drafting solution will enable users to draft working documents and access TR's content within Microsoft Word, building the final document with integrated access to Thomson Reuters knowledge, content and AI technology."[47] Thomson Reuters has a video (*thomsonreuters.com/en/artificial-intelligence/thomson-reuters-microsoft-copilot.html*) briefly showing how legal drafting can be done using its GEN-AI and Microsoft's 365 Copilot.

On August 17, 2023, Thomson Reuters announced that it had acquired Casetext for $650 million.[48] As discussed above, Casetext has released its own GEN-AI for law firms called "CoCounsel." It is unclear how the two companies will integrate these GEN-AI products.
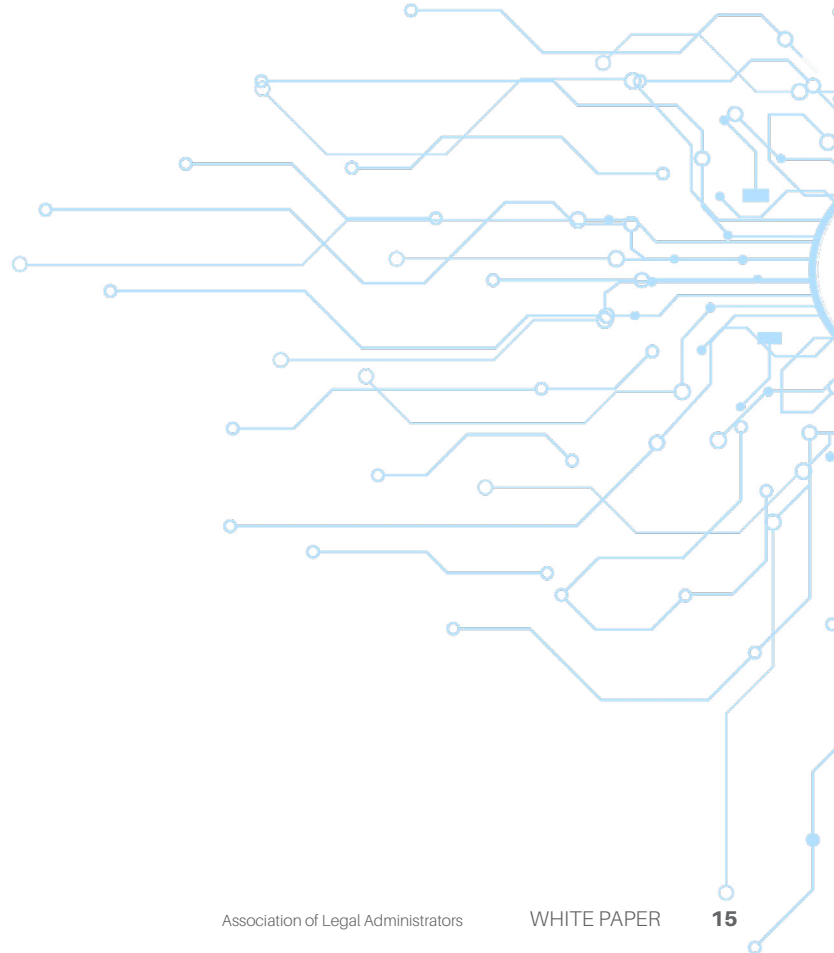
THE IMPACT OF AI ON **LAW FIRMS' BUSINESS MODELS** AND **HUMAN RESOURCES**

Many commentators contend that law firms' (among others) business models will need to change in response to the rapid improvements in GEN-AI. For example, Jordan Furlong has written that legal GEN-AI may lead to the end of the "time-based" billable hours business model:

> [T]here's reason to believe a boatload of tasks could be replaced by AI — about 44% of legal tasks within the U.S., according to Goldman Sachs' report on generative AI. If that comes to pass, "the next thing that happens is GCs saying we're not paying $900 an hour for associates to do something a machine can do for 2% of the cost," Cemenska said. "If 44% of the work goes away, about 85-90% of junior associate work goes away and a significant portion of senior associate and non-equity partner work is going to be partially eroded.[49]

The Wall Street Journal also wrote that productivity gains from using GEN-AI may reduce billable hours and thus reduce firm revenues for law firms relying on a traditional time-based billing business model. Although law firms may generate fewer billable hours using GEN-AI, this will benefit the clients. Satisfied clients refer new clients. However, reducing the cost of routine, low-value legal tasks may allow attorneys to focus on high-value activities for which they can charge clients more per hour.

Even if the traditional time-based, billable hour model is the most common way of charging clients, there are alternative billing models or fee arrangements. For example, there are "value-based" fee arrangements such as flat fees, contingency billing, success fees and capped fee billing arrangements. In these alternative billing arrangements, the increased productivity (or efficiency) gained by using AI and GEN-AI may increase profits, even if total revenues are reduced.[50] Plus, firms using alternative billing models might spend less time and money processing billable hours, invoicing and tracking client-related expenses.

If GEN-AI is used effectively to reduce fees, clients may use lawyers more often for services previously considered too costly to hire a lawyer. The revenues from the increased volume of business will help offset the reduced fees.

On the other hand, potential clients may decide to use law-related GEN-AI to do their own legal work instead of hiring a lawyer. For example, public radio recently reported that a logistics firm needed to quickly learn the laws regarding importing plants from overseas. The firm used AI to look up the relevant laws without using an attorney.[51] In all likelihood, however, most clients will probably prefer to get legal advice from their lawyers, not from GEN-AI, even if they want their lawyers to use GEN-AI to reduce their legal costs.[52]

Ben Algrove, a Partner and Chief Innovation Officer at Baker McKenzie, said that the impact of GEN-AI …

> Will be to force everyone in the profession, from paralegals to $1,000-an-hour partners, to move up the skills ladder to stay ahead of the technology. The work of humans, he said, will increasingly be to focus on developing industry expertise, exercising judgment in complex legal matters, and offering strategic guidance and building trusted relationships with clients.[53]

In terms of human resources management issues, GEN-AI will undoubtedly change the nature of some legal jobs and the knowledge and skills needed to perform jobs. The law firm DLA Piper has a "chief data scientist."[54] Today there are jobs in "prompt engineering" or "prompt design" that may be required in law firms in the future to help lawyers with prompts.

Lawyers will need to become somewhat knowledgeable about basic AI and GEN-AI (i.e., become "AI literate"), because they are expected to stay current with developments affecting the practice of law.[55] Paralegals and legal secretaries will also need to be trained to use GEN-AI in their duties. For example, a critical determinant of the quality of GEN-AI output is the prompt given to the GEN-AI tool. Inaccurate or vague prompts to GEN-AI tools could result in misinformation or errors. Fortunately, some GEN-AI products work with users to help generate high-quality prompts, such as Microsoft's Semantic Kernel.[56]

Lawyers will need to be trained not only to use GEN-AI proficiently, but also to understand what GEN-AI can and cannot do. Lawyers will need to understand the risks associated with using GEN-AI in their practice and understand how to mitigate those risks, such as hallucinations and client confidentiality. According to Thomson Reuters, 15% of law firms have issued warnings to their lawyers about risks associated with using ChatGPT or other GEN-AI.[57]

MANAGING **GEN-AI RISK**

Risk management refers to the techniques designed to cease, prevent or mitigate problems identified during the assessment of an AI system, considering the likelihood and impact of each risk. Managing AI risk involves proactively assessing the implementation and use of artificial intelligence by the firm to ensure the safe and ethical application of the AI technology. The time and money spent managing risks should be commensurate to their potential adverse impacts.

Risks can be more or less effectively managed if law firms understand them and implement appropriate risk mitigation measures. For example, law firms should consider training their lawyers and other staff in "digital literacy" (also called "AI literacy"). Law firms should select qualified third-party providers of AI services and products and monitor their activities to limit exposure to external risks. Ensuring the ethical use of GEN-AI in the practice of law is essential as well. Unethical activities will increase the risks associated with using GEN-AI.

Whether the firm is at the embryonic stages of incorporating AI into its overall business operations or if the firm has fully embraced AI, the following questions will aid management in assessing and mitigating the risks associated with AI.

These questions will assist firm management in assessing whether the AI software tool that the firm is considering aligns with responsible AI practices and minimizes potential risks. It's important to engage in a comprehensive assessment before adopting any AI tool to ensure that it's not only technically capable but also ethically and socially responsible:

1. Can firm personnel override the AI's decisions when necessary?
2. Can the AI system's decision-making process be explained to nonexperts within the firm, clearly and understandably?
3. Does the AI tool align with the firm's core values and ethical standards?
4. Does the AI tool comply with relevant data privacy and protection regulations (domestically and internationally)?
5. Have key personnel within the firm been engaged in providing input and feedback regarding the AI tool(s) acquisition and deployment decision?

6. Have potential ethical implications of the AI tool(s) been thoroughly evaluated, including biases, discrimination and potential societal impacts, across different demographic groups? If not, what is the potential impact on the firm? To the firm's clients?

7. How are sensitive client and firm data managed by the AI tools used by the firm?

8. What evidence does the firm have that the data used by the AI tool(s) is being used ethically and with proper permissions?

9. What measures are in place to mitigate the unauthorized access or use of the AI tool(s) and its data?

10. When incorporating an AI tool(s) into decision-making processes, how is the firm's compliance with ethical guidelines (internal and external) and legal requirements (domestic and international) ensured?

Recommendations Toward Successfully Implementing and Using Gen-AI

Listed below are 10 recommendations for management's consideration, presented to assist the firm in navigating the path to successful AI implementation and utilization.

1. Assure that any deficiencies, limitations and biases of the GEN-AI model used by the firm are (a) identified and documented before the use of the GEN-AI model and (b) have been communicated to firm management so that any deficiencies, limitations and biases are considered in decision-making processes.

2. Champion AI as a strategic priority for the entire organization, with full sponsorship from firm senior leadership.

3. Designate a data protection officer with the responsibility to weigh in on decisions to use or acquire data from outside the firm.

4. Develop a plan to collect information over time and monitor the performance of the GEN-AI model(s) used by the firm.

5. Develop an internal AI ethics policy and ensure that the policy is regularly reviewed to ensure it's working as intended.

6. Obtain senior management support for and establish an AI ethics council.

7. Obtain substantiating evidence that both the legal and ethical explainability requirements have been addressed before acquiring the GEN-AI model.

8. Prioritize long- and short-term AI investments.

9. Review the firm's requirements for an AI system. Perform a cost-benefit analysis of the GEN-AI software system and compare this analysis with the status quo or with the use of other decision-making or decision-support strategies. Is a GEN-AI tool justified (at this time), considering other possible solutions that do not require the use of client and firm data and automated decisions?

10. Use AI responsibly, from the start.
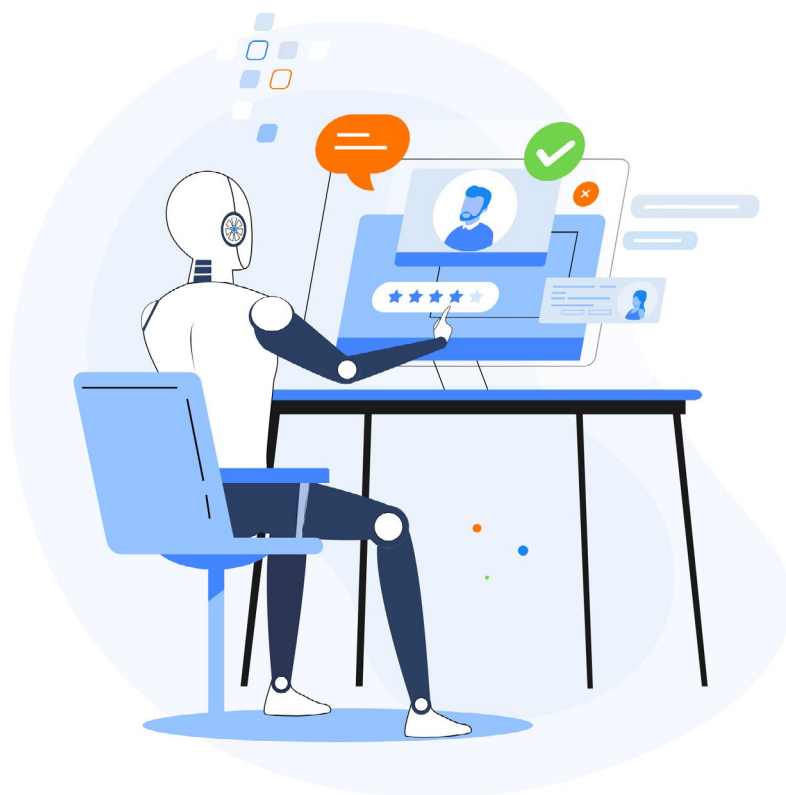
SUMMARY

Law firms can leverage recent advances in GEN-AI to improve their productivity and effectiveness. However, using GEN-AI in the practice of law also creates risks and ethical issues. The benefits of using AI and GEN-AI in the practice of law outweigh the costs and risks as long as firms understand how to maximize the benefits and manage the risks.

As a practical matter, understanding how GEN-AI can improve the practice of law does not mean it will be easy to implement GEN-AI. Change may be more difficult to make in firms with long-established operational processes and business models, which increases resistance to change.

Small to midsized firms may also find it difficult to incorporate GEN-AI because they are busy simply doing business and often do not have people who focus on and champion innovative ideas like GEN-AI.[58]

Although this paper does not discuss managing change, the reader should consider whether the firm is ready to incorporate GEN-AI into its operations and how this process will be managed and implemented.
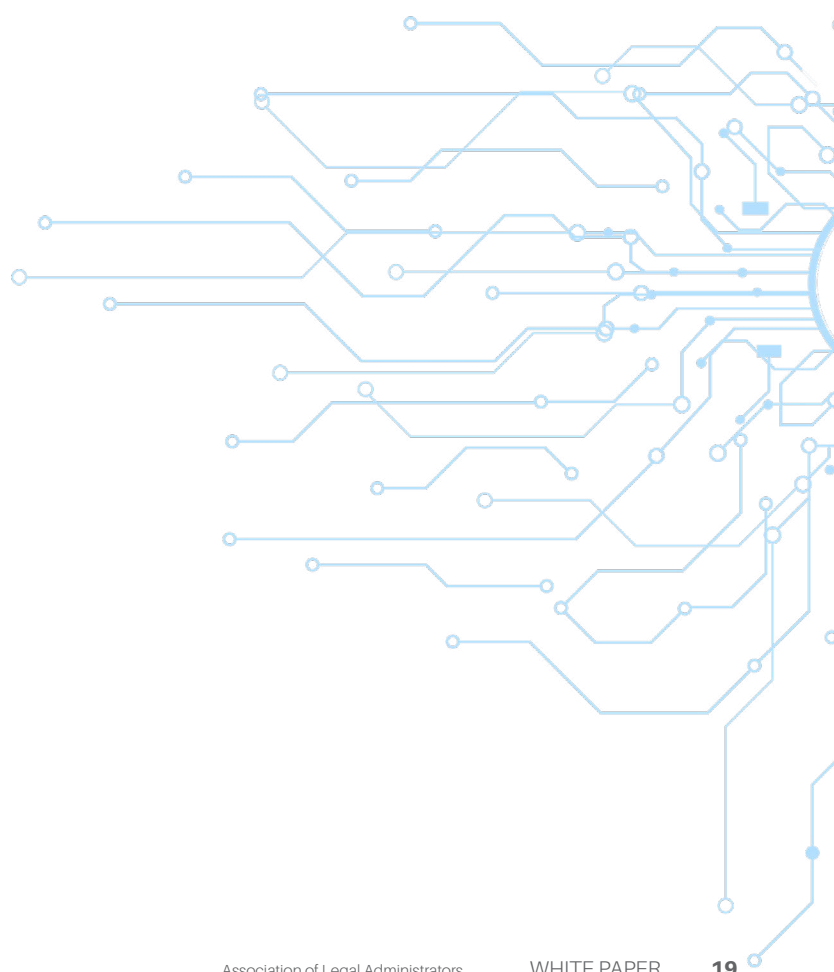
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2. The reader should note that the identification and discussion of products and vendors in this white paper is solely intended to provide informative content and does not constitute an endorsement or promotion of any specific product, brand or vendor by the authors. The authors have received no compensation, financial or otherwise, from any vendor identified in this white paper. When acquiring any software product, readers are encouraged to conduct their own research and make informed decisions based on their firm's individual needs and preferences.

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