

**GUIDELINES ON THE USE OF AI BY DESIGN PROFESSIONAL FIRMS
ACEC RISK MANAGEMENT COMMITTEE – AI RISK SUBCOMMITTEE
ACEC TECHNOLOGY COMMITTEE
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Guideline Usage: The suggested Guidelines set forth below have been drafted by the Artificial Intelligence (AI) Risk Subcommittee of the ACEC Risk Management Committee with input from the ACEC Technology Committee to serve as information for design professional firms in their evaluation of AI. Neither these Guidelines nor anything set forth herein constitute requirements, mandates, or an establishment of any facet of a design professional’s standard of care. This information is not a statement by ACEC, its Risk Management Committee, this Subcommittee, the Technology Committee, or anyone affiliated with ACEC or any Member Firm regarding any legal, professional, or other standard or requirement in connection with a design professional’s use or consideration of AI. Readers of these Guidelines are free to adopt or otherwise use as inspiration the information set forth below as they see fit (including not at all), as best suits their firms and their businesses. To reiterate, nothing herein is intended by this Subcommittee to constitute, nor shall it be interpreted as constituting, a standard of care when it comes to design professionals’ use of AI or adoption or non-adoption of any of these Guidelines.

What is AI: Generally, Artificial Intelligence is conceived of as the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages. It encompasses the sub-fields of Machine Learning, Deep Learning, and Generative AI. Machine Learning is a form of artificial intelligence based on algorithms that are trained on data. Deep Learning is a subset of Machine Learning that uses artificial neural networks to mimic the learning process of the human brain. Generative AI generates content in response to a prompt, such as ChatGPT or DALL-E. Machine Learning is focused on analyzing data to find patterns and make accurate predictions whereas GenAI is focused on creating new data that resembles training data. Refer to the Lexicon in the Attachment for more information.

PURPOSE AND OVERVIEW

Purpose of Guidelines: Consistent with the preamble statement of Guideline Usage above, the purpose of these Guidelines is to provide information that design professionals may take into account in order to promote responsible, professional, and ethical behavior with respect to the adoption and usage of AI in their businesses, including the design professional firm’s policies, culture, confidentiality requirements, and contracts with clients.

Overview:

- **Generated Content:** Anything generated in an open AI system is susceptible to finding its way into the public domain. Firms should be aware that, in general, purely AI-generated content cannot be copyrighted.
- **Caveats When Using Generated Content:** AI has the potential to make mistakes, use, misuse, or misappropriate copyrighted data, or invent facts and sources. Human review and revisions of generated content may reduce or eliminate publishing of mistakes or intellectual property (“IP”) owned by others.

Creative Use of AI: Firms will likely recognize the value in the creative use of AI by their employees as well as the need to obtain **required permissions** before any such use and to **comply with these standards of practice** for any use.

GOVERNANCE

Firms’ AI Policies: Firms that choose to implement formal AI policies may wish to attain board-level authorization for implementation. Policies for a firm’s use of AI might be reviewed by the firm’s Board of Directors (or board-level committee), senior managing body, a specifically-established AI Governance oversight group, risk management committee, or a senior compliance officer.

AI Governance Procedure: Firms may establish policies for the use of AI, including its privacy safeguards, compliance measures, workability, and installation on company computers, and assign responsibility individually or collectively to senior member(s) to effectively allow for oversight and how much oversight will be implemented.

Authorization of Use of AI: AI tools may be authorized in accordance with the firm’s AI Governance Procedure (see above). Approved links to the approved software may be maintained.

Scope of AI Policies: A firm’s AI policy will likely apply to all employees who may use or generate AI for business purposes, and will likely complement the firm’s overall employment and personnel policies (e.g., actions taken outside the scope of an employee’s employment, unauthorized use or publication of AI, grounds for discipline and termination, etc.).

SOURCES AND TOOLS

Sourcing Generated Content: Consider documenting the sources and identifying the holder of relevant IP rights of generated content, whether it be Open Source AI, Closed Source AI, Multi-Sourced AI, Generative AI, or other sources.

Unapproved AI: Firms may manage employees’ posting or other publication of any Personally Identifiable Information (PII), IP, firm data, or client information on any public and/or unapproved AI service when generating company communications, policies, other documentation. Uploading content to unapproved AI (including content that shares copyrighted material, confidential information, or the intellectual property of others) may violate privacy or confidentiality rights.

Software Tools with Embedded AI: As AI is currently being integrated into various software vendor tools, member firms may be unaware of the usage of AI in packages that they currently have access to and utilize. The integration of AI into applications or tools will continue to increase, which

could result in challenges to: i) informing clients about the use of AI in work product and deliverables; ii) complying with bid requirements that prohibit the use of AI; and iii) responding to regulatory disclosure requests (pursuits, use transparency, etc.).

GUIDELINES FOR PRACTICE

Confidential Information: Firms may purge AI output of confidential information, validate AI output by a qualified employee or consultant, and provide human input into AI output so that the final deliverable is not purely the product of AI.

Reliance on AI: While AI can be an effective and time-saving tool for firms in their proposal-writing, research, searching for ideas, and other business purposes, firms will likely want to include human editing (e.g., quality control; independent review by the person in responsible charge) to avoid relying wholly on AI as the final output of the firm's deliverables. Firms will also likely want to bear in mind their professional obligations regarding fields and disciplines in which they are qualified; firms may want to avoid the temptation of relying on AI to practice in areas in which they do not have experience or proficiency.

Keeping the Client in the AI Loop: Firms may wish to consider whether their use of AI-generated output must be disclosed to their clients.

Manageable Limits of AI Output: Firms may wish to manage AI-generated outputs so as to prevent them from becoming so large or complex that employees cannot understand and review them thoroughly.

QA/QC: As mentioned above, firms may desire to include their AI-generated content in their existing QA/QC processes.

ISSUES TO KEEP IN MIND

Misuse of AI tools, like the misuse of any other tool, may result in legal, regulatory, technical, or other issues for the firm. Firms may want to keep the following precepts in mind when incorporating AI into their business practices.

- **Ethical Use:** Misleading, malicious, or inappropriate content can create liability for firms, as can personal use of AI by employees.
- **Accuracy or Lack Thereof:** AI is known to make mistakes; firms may wish to apply their existing QA/QC processes before substantive AI-generated content is incorporated into their work product. AI is frequently used to record or summarize project and other meetings. A firm's QA/QC will likely include checking AI-generated minutes for accuracy the same way conventional, analog minutes are reviewed.
- **Intellectual Property:**
 - To protect privacy, firms may consider securing prompt inputs against being trained and used by external entities (where possible, adjust the account settings, or procure a premium version of the chatbot account that allows such adjustment to exclude external collection of prompt inputs).

- Firms may want to consider and obtain legal advice on whether describing a design to an AI “chatbot” can be deemed a public disclosure that forfeits patent rights, triggers the clock to initiate the applicable grace period for patent filing, or jeopardizes copyrights.
 - Firms may want to communicate to employees the potential risks associated with using AI on devices not owned by the company (e.g., “bring-your-own-devices”); such devices may not have company-installed AI bot controls or other security measures. Firms will likely want to augment their existing information technology policies to account for the emergence and proliferation of AI.
- **Limitations:** AI may have unpredictable limitations.
 - **Bias:** It has been shown that biases in AI algorithms can lead to skewed and discriminatory results.
 - **Cross-Border Implications:** There are concerns that still need to be addressed regarding the flow of AI-generated data across national borders.

Additional Considerations:

- How to enhance QA/QC for AI-generated content
- Guidelines for writing effective AI engineering prompts
- More in-depth study of legal and insurance implications
- The last bullet under “Intellectual Property” suggests that employees may use AI on devices not owned by the company due to the lack of corporate-level security. Should use of AI on devices that are not on company IT systems be prohibited?
- See the Federal [Copyright Registration Guidance: Works Containing Material Generated By Artificial Intelligence](#)

Open Source AI: AI that is available for public use under specific terms that is based on algorithms, models, and training datasets.

Closed Source AI: AI that is not publicly available and is restricted to private use by the company that owns it. Sometimes referred to as proprietary AI.

Generative AI: Machine learning that uses AI to create new content that can include a broad range of types including text, images and code that closely simulate human-created content.

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