# THE AI REVOLUTION HAS ARRIVED... ARE YOU READY?

Welcome to the world of Artificial Intelligence, where science fiction becomes reality.





From self-driving cars to personalized virtual assistants, Artificial Intelligence (AI) has revolutionized countless industries and transformed the way we live, work and interact with technology. In this e-book, we will cover what you should know about generative AI, how to leverage it, key legal issues for associations, how AI is transforming the construction industry and more.

AI is no longer a mere concept confined to the imaginations of visionaries; it has become an integral part of our daily lives. It has the potential to enhance our capabilities, automate tasks and generate unprecedented insights from vast amounts of data. With each passing day, AI algorithms grow smarter, more sophisticated, and increasingly adept at performing complex tasks that were once exclusive to human intelligence. At the same time, the importance of responsible development and unbiased decision-making are crucial to ensuring AI serves our best interests—as are understanding and avoiding the inherent risks.

There have been groundbreaking advancements achieved by AI researchers, leading to innovative solutions and paradigm shifts. Read on as we unravel the mysteries of AI and discover the immense potential it holds for the future.

(Editor's note: this introduction was generated by ChatGPT, with revisions by the editor.)



# What You Should Know about Generative AI

"By far, the greatest danger of Artificial Intelligence is that people conclude too early that they understand it."

Eliezer Yudkowsky

We've all heard plenty about artificial intelligence (AI) in recent months, yet it's not new. Over the years, AI technologies were considered remarkable when they first appeared. Today, they are so much a part of our everyday lives that we don't even think of them as AI. They are just normal tools that we use (e.g., "Hey, Alexa"). These technologies were certainly innovative but this next level, known as generative AI, takes things a step further—into freeform intelligent behavior. Let's face it, new technology is exciting, leading to many jumping on board without fully understanding the implications. Even the "experts" are challenged to be able to identify all the pros and cons of generative AI.

#### What is Generative AI?

It is a type of artificial intelligence that can create new content, including text, images, videos and music. It is powered by machine learning models that are trained on massive amounts of data.

Generative AI is a powerful new technology with the potential to change the world. It is still in its early stages of development, but it has the potential to revolutionize many industries. As generative AI continues to develop, we can expect to see even more amazing and innovative applications of this technology.

#### Yes, But...

With any new technology, there is usually a "yes, but..." Generative AI is no exception. Yes, it is transformational, but there are risks. Yes, it can take the burden off staff, freeing them up to do more things that only humans can do. But can we trust it to provide real content and real data? Yes, generative AI is amazing. But it is not infallible.

An outstanding webinar hosted by the <u>American</u> <u>Society of Association Executives</u> (ASAE) on Critical Considerations Surrounding ChatGPT and generative AI, included a publisher and attorney for associations and a research professor of robotics as panelists. These experts provided some great insights into both the benefits and risks of generative AI.





#### First, the Benefits

Generative AI can automate tasks that are currently done by humans, freeing up time for more creative and strategic work.

It can analyze large amounts of data to identify patterns and trends that would be difficult for humans to spot. This information can be used to make better decisions about business operations, product development, and marketing campaigns.

Generative AI can be used to create new ideas and concepts that would not have been possible without the help of a machine. This can lead to new products, services and experiences that can disrupt existing markets and industries.

In addition, it has the potential to connect users across different functions within an association, providing great opportunities for collaboration.

These are all great benefits; however, with them come some risks.

#### Risky Business?

As with most anything that is considered "groundbreaking," generative AI should come with a warning label. The primary concern is the influx of fake content or data.

There is a tendency to see generative AI as intelligent. However, it's just a statistical model built from hundreds of thousands of pages of text. It doesn't comprehend the information it processes but has learned to correlate the information it aggregates and use those correlations to provide desired content with amazing speed. In essence, it doesn't "know" if the information it has gathered is true or false.

Misinformation is a major issue these days and these generative AI systems aren't helping. In fact, in a <u>recent</u> <u>court case</u>, attorneys are facing possible sanctions for citing past legal cases that helped strengthen a lawsuit filed on behalf of their client against an airline. One of the attorneys had found these cases using ChatGPT. The problem was that several of the cases were not real. <u>In essence, ChatGPT made them up.</u>









So, what can we do to ensure the accuracy of the information we're disseminating? One of the attorneys in the case referenced above offered a simple solution—one that he wished he had used himself.

Follow-up research to ensure the information provided by ChatGPT was legitimate would have saved him and his colleague a whole lot of pain and embarrassment.

There is no doubt that generative AI is a powerful new technology with the potential to change the world and revolutionize many industries. It is transformational, to be sure, but without considering the associated risks, it can create significant problems for you and your organization. Read on as we dive into the key legal issues associations should consider when it comes to generative AI.

### WHAT HAPPENS WHEN YOU ASK A GENERATIVE AI PLATFORM LIKE CHATGPT FOR THE SOURCE OF THE INFORMATION THEY PROVIDED?



#### **Our request:**

"Identify the source of this statistic: 90% of construction industry respondents believe that a shift toward environmental sustainability is imminent."

#### ChatGPT's answer:

"As an AI language model, I don't have real-time access to current news or statistics beyond my last training cutoff in September 2021. Therefore, I cannot provide the specific source of the statistic you mentioned. It's possible that this statistic was sourced from a survey or study conducted by a research organization, consulting firm, or industry association. To determine the exact source, I recommend conducting a search using relevant keywords or contacting industry-specific organizations that might have conducted the survey."



# We're Entering the Age of the AI Chatbot

### What does this mean for Marketers?

"I am ChatGPT, a large language model developed by OpenAI. I have been trained on a vast corpus of text data and use natural language processing algorithms to understand and generate human-like responses to a wide range of questions and prompts. As an AI language model, my aim is to assist and provide information to users in a conversational and intuitive way, helping to enhance their productivity and knowledge."

Source: chat.openai.com/chat

By now, you've likely heard some buzz about ChatGPT, the chatbot powered by artificial intelligence (AI). Using short prompts and questions, you can have a conversation with it and ask it to provide information on nearly any topic as well as write essays, mimic famous authors and more.

Whether the idea of a content-creating "bot" excites you, terrifies you or confuses you, there is no denying that this technology is making its way into all industries, including ours.

#### What is ChatGPT?

Created by OpenAI, ChatGPT is an advanced AI language model that burst onto the scene November 2022. Microsoft quickly invested \$10 billion into the company in January 2023. The idea of AI-generated content isn't new, but something was different about ChatGPT. Its ability to create meaningful, coherent, human-like copy was unmatched by previous chatbot technology.

The AI tool uses natural language processing algorithms and GPT-3 technology to create large amounts of content at a fraction of the cost and time it would take

human employees; a development that comes at a time when many companies are minimizing their staff and budgets. Companies like BuzzFeed, Mint Mobile and Avocados from Mexico have been open about their adoption of ChatGPT for content creation and ad campaigns.

#### Using AI tools to generate content

As we mentioned, AI-generated content isn't new, but it certainly seems to be taking off in a big way. ChatGPT is inspiring competitors from key players like Google, who introduced their conversational AI service Bard, and Bing, whose AI Chat Mode can now be previewed. You also may have seen different AI art filters on TikTok or noticed people sharing their AI avatars via a software called Lensa. Users upload a few pictures of themselves to the program and it spits out dozens of "self portraits" in different art styles inspired by the images.

What does this mean for marketers? To find out, we went straight to the source and asked ChatGPT. Here's what it said:





**OUR QUESTION:** How will AI chatbots impact the marketing industry?

**CHATGPT'S ANSWER:** AI chatbots have the potential to revolutionize the marketing industry by providing more personalized, efficient, and effective customer engagement. Here are some ways in which AI chatbots can impact the marketing industry:

- **1. 24/7 customer support:** AI chatbots can provide round-the-clock customer support, answering common questions and resolving issues quickly and efficiently.
- **2. Personalized recommendations:** AI chatbots can use data analysis and machine learning to understand customers' preferences and make personalized product or service recommendations.
- **3. Increased efficiency:** AI chatbots can handle a large volume of customer inquiries simultaneously, freeing up human customer support staff to focus on more complex tasks.
- **4. Improved customer experience:** AI chatbots can provide a more seamless and convenient customer experience by automating routine tasks and reducing response times.
- **5. Cost-effective marketing:** AI chatbots can help businesses save money by automating tasks that would otherwise require human labor, such as customer support and lead generation.

Overall, AI chatbots have the potential to transform the marketing industry by improving customer engagement, increasing efficiency, and driving business growth.

#### So, are we out of a job... or could AI be helpful to us, making our jobs easier and our content richer? Let's ask.



**OUR QUESTION:** How can ChatGPT help marketers create copy?

**CHATGPT'S ANSWER:** ChatGPT can help marketers create copy by providing suggestions and ideas for content, as well as helping to refine and optimize existing copy. Here are some ways in which ChatGPT can assist with copywriting:

- Generating new ideas: ChatGPT can generate ideas for blog posts, social media content, ad copy, and other types of marketing material based on keywords or topics provided by the marketer.
- 2. Improving grammar and syntax: ChatGPT can help to identify and correct grammar and syntax errors in marketing copy, ensuring that the content is clear and easy to read.
- **3. Enhancing readability:** ChatGPT can suggest ways to improve the readability of marketing copy, such as breaking up long paragraphs, using bullet points, and using simpler language.
- **4. Optimizing for SEO:** ChatGPT can provide suggestions for optimizing marketing copy for search engines by identifying relevant keywords and phrases, and recommending changes to the content to improve its ranking in search engine results pages.
- **5. Generating headlines and taglines:** ChatGPT can suggest catchy and attention-grabbing headlines and taglines for marketing content, based on the content of the copy and the target audience.

Overall, ChatGPT can help marketers create effective and engaging copy by providing suggestions and recommendations for content, as well as helping to refine and optimize existing copy.





#### Challenges of AI-generated content

Though AI chatbots may have the ability to create great content, many doubt that there will ever come a time when that information can go unchecked by human eyes. At least, not anytime soon. AI may be able to give us a low-cost, fast option for churning out content, but it isn't a match for humanity. Things like thought leadership, humor and style just aren't quite there.

The AI tools can compile information from all the little corners of the internet that already exist and regurgitate that information in a new way, but it can't come up with new ideas. It knows the materials it has been given, but does not consistently provide sources or attribution, which are critical elements for research

documents. Information gathered by ChatGPT also may not necessarily be factual. According to the site's FAQ section, the tool has <u>limited knowledge</u> of world events after 2021 and may occasionally produce harmful instructions or biased content. It also warns that the tool will occasionally "hallucinate" and provide answers unrelated to the question it was asked.

In its current state, AI-generated content is a good tool for first drafts, but it is in an organization's best interest to have a human overseeing content before it is distributed. Curious? **Try it for yourself here.** You can ask ChatGPT questions or prompt it to write something for you.



# Leveraging AI and Analytics to Future-Proof Your ESG Strategy

Environmental, Social and Governance (ESG) practices have become increasingly important for businesses in today's world. To stay ahead and ensure sustainable growth, organizations must leverage emerging technologies like artificial intelligence (AI) and analytics. These powerful tools offer immense potential to enhance ESG strategies by providing valuable insights, improving decision-making and fostering accountability.

<u>AdAge</u> provides tips on how to enhance and leverage AI and analytics to future-proof your ESG strategy and drive positive environmental, social and governance outcomes.

#### Enhancing ESG with AI

- Environmental Impact Assessment: AI's ability to analyze vast amounts of data enables organizations to effectively assess their environmental impact. By identifying patterns, monitoring emissions and optimizing resource usage, AI-powered sensors and algorithms facilitate proactive sustainability measures. From monitoring air and water quality to managing energy consumption and waste, AI empowers organizations to make data-driven decisions to minimize their environmental footprint.
- **Energy Efficiency:** AI algorithms can optimize energy usage in buildings and industrial processes. By analyzing data from sensors and adjusting systems, AI enhances energy efficiency, reduces carbon footprints and lowers operational costs. This not only contributes to sustainability but also improves the bottom line for businesses.
- Sustainable Supply Chain Management: AI enhances
  supply chain transparency and traceability—crucial aspects
  of ESG. By leveraging techniques like blockchain and data
  analytics, businesses can track and verify sustainable
  practices at each stage of the supply chain. This helps identify
  areas for improvement, mitigate risks and ensure compliance
  with ESG standards.
- Social Impact and Diversity: While not infallible, AI can play a pivotal role in promoting diversity and inclusion. By removing biases from hiring processes and promoting equal opportunities, AI tools support efforts to create a diverse workforce. Natural Language Processing (NLP) algorithms can analyze employee sentiment, identify potential issues, and aid employee well-being initiatives.





- Responsible Investing: AI-powered algorithms assist investors in incorporating ESG factors into their
  decision-making. By analyzing vast amounts of financial and non-financial data, AI assesses a company's
  ESG performance and risks. This enables investors to make informed and sustainable investment choices
  aligned with their values.
- Climate Risk Assessment: AI aids in assessing and managing climate-related risks. Machine learning
  models analyze historical and real-time data to identify climate risks such as extreme weather events
  or supply chain disruptions. Armed with this information, businesses can plan and implement resilience
  strategies to mitigate potential damages.
- Natural Resource Management: AI assists in sustainable natural resource management across sectors such as conservation, forestry, agriculture and water management. Through satellite imagery analysis, predictive modeling and data-driven insights, AI supports better resource allocation and preservation.
- **ESG Reporting and Compliance:** AI automates and streamlines ESG reporting processes. Natural language processing and machine learning algorithms extract relevant information from various sources, enabling efficient ESG reporting. AI can also help identify areas of non-compliance and potential risks.

It should be noted, particularly regarding reporting and compliance, that it's important to recognize that AI can (and does!) make mistakes. **Any information provided by AI should be verified by an independent source.** 

#### Leveraging Analytics for ESG Strategy Improvement

- **Define Key Performance Indicators (KPIs):** Identify ESG metrics that align with your organization's goals and values. Define measurable KPIs such as carbon emissions, energy consumption, waste generation, diversity ratios, employee satisfaction and community impact.
- **Data Collection and Integration:** Gather relevant data from internal and external sources, ensuring accuracy and reliability. Integrate disparate data sources to create a unified view of your ESG performance.



- Data Analysis and Visualization: Utilize analytics tools
  to analyze and visualize your ESG data. Apply statistical
  techniques, data mining and machine learning algorithms
  to uncover patterns, correlations and trends. Generate
  meaningful insights for decision-making and identify areas for
  improvement.
- positive opportunities and Risks: Analytics helps identify positive opportunities and potential risks within your ESG strategy. Enhance sustainability, efficiency and social impact while mitigating risks related to compliance, reputation management and stakeholder expectations.
- Benchmarking and Comparison: Compare your ESG
  performance against industry peers, competitors or established
  benchmarks. Analytics provide insights into best practices and
  set realistic improvement targets.
- Predictive Modeling: Leverage predictive analytics to forecast the impact of different scenarios on your ESG performance. Plan and implement proactive strategies by modeling changes in policies, market trends or strategic decisions.





- **Stakeholder Engagement:** Analytics facilitate effective stakeholder engagement by providing data-backed insights and evidence. Create interactive dashboards and reports that present ESG performance clearly, fostering transparency, accountability and trust.
- Continuous Monitoring and Reporting: Implement a system for ongoing monitoring of ESG metrics, establish reporting cycles and automate alerts. Continuously track progress towards ESG goals and communicate achievements through comprehensive and accurate reports.
- **Iterative Improvement:** Use analytics insights to drive iterative improvements in your ESG strategy. Regularly review data, metrics and analysis processes, and refine your strategy based on analytic feedback.

By combining AI and analytics, organizations can future proof their ESG strategies and achieve positive environmental, social and governance outcomes. These technologies enable environmental impact assessment, energy efficiency, sustainable supply chain management, social impact and diversity promotion, responsible investing, climate risk assessment, natural resource management, ESG reporting, compliance automation and much more.

However, it's essential to remember that AI and analytics should be used alongside human expertise, ethical considerations and transparency to ensure responsible and accountable use. And, as mentioned above, AI is not infallible.

Leveraging these tools effectively and carefully can empower organizations to gain deeper insights, identify improvement areas and make informed decisions that drive sustainable growth and positive societal impact.



## **Key Legal Issues**

# Associations Should Consider when it Comes to Generative AI

Because generative artificial intelligence (AI) is new to most of us, knowing all the benefits and risks can be challenging. Of the risks, legal issues can be among the most detrimental (and most costly).

All associations should consider the legal ramifications of implementing AI technology as they contemplate how it might affect their members, other volunteers and staff in terms of data privacy, intellectual property, insurance, discrimination and tort liability. ASAE offers associations <u>five legal issues</u> to consider when using generative AI.

- 1. Data privacy. One of the primary legal issues associated with the use of AI by associations is data privacy. AI systems rely on vast amounts of data to train and improve their algorithms, and associations must ensure that the data they collect is used in accordance with applicable federal, state, and international privacy laws and regulations. Associations must be transparent with their members about how their data will be collected, used and protected, and must obtain the necessary member consent to use and share sensitive data.
- 2. Intellectual property. Intellectual property is a key legal issue that associations must consider when using AI. AI systems can generate new works of authorship, such as software programs, artistic works, articles and white papers. That means associations must ensure that they have the necessary rights and licenses to use and distribute these works, as well as be transparent about who or what created such works.
- **3. Discrimination.** AI systems can inadvertently perpetuate bias and discrimination, particularly if they are trained on data that reflects historic biases or inequalities.
- 4. Tort liability. Associations must consider the potential tort liability issues that may arise from their use of AI. If an AI system produces inaccurate, negligent or biased results that harm members or other end users, the association could potentially be held liable for any resulting damages. Associations must therefore ensure that their AI systems are reliable and accurate and the resulting work product (such as industry or professional standards set by an association) is carefully vetted for accuracy, veracity, completeness and efficacy.
- 5. Insurance. Associations need to ensure that they have appropriate insurance coverage in place to protect against potential liability claims in all these areas of legal risk.





## **AI in Construction**

By Phil Ledent, Executive Director of MIM

(Editor's note: MIM is an AOE client)

When the topic of artificial intelligence (AI) enters the conversation, visions emerge of mass unemployment, intelligent machines turning against us and other fears. Yet, AI is all around us—have you asked Siri or Alexa a question? Or did your smart thermostat adjust the temperature in your house as you woke up this morning? These are just two examples of AI in action.

Just as AI is becoming an integral part of our daily routines, it's turning up more often on the job, too. A recent **ForConstructionPros.com article** shares ways AI is being used today to improve construction change orders, jobsite safety, equipment maintenance and reduce labor demand including:

- Creating virtual project duplicates. Many building information modeling (BIM) systems use AI to convert information from designers, architects and engineers into a virtual duplicate of the site or building under construction. Time and costs are reduced and timeline creation, costs estimations and building sustainability predictions can be determined more accurately.
- Monitoring site security and safety. AI can recognize a person on camera and alert authorities to investigate, preventing damage and theft of equipment and materials. AI can also identify hazardous conditions from videos and photos and report them so you can tailor safety briefings and trainings to address any concerns.
- Directing traffic in real time. Not only can onboard AI systems alert equipment operators to potential collisions with structures or other equipment, but they can even learn how people move around on-site over time. You can use that information to optimize scheduling and reduce congestion, leading to greater efficiency and fewer accidents.
- Predicting maintenance. AI-enabled predictive maintenance uses sensors and performance data to determine the most optimal schedule. That means no piece of equipment gets unnecessary servicing or waits until it breaks down to receive upkeep.

These are just a few of the many ways AI can work in construction, delivering significant advantages in production, safety, cost-efficiency and more. If you would like to learn more about how architects and engineers are using technology to take masonry to a new level, please **contact Phil Ledent**.



With careful planning and attention to these issues, associations can leverage the constantly evolving AI technology to improve their operations, programs and activities, and better serve their members. **Contact AOE** to learn how we can help you navigate the complexities of generative AI.

The world is rapidly changing, with AI leading the technology revolution. It is truly a game-changer. Are you ready? Reach out to AOE. We will work with you to harness its power and ensure your organization is well-positioned for the future.

