

DPRCG Convocation 2023

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# AI: Use and Risk in the AE Environment

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## Learning Objectives

- Understand how AI is being used and viewed by individuals in the AEP industry
- Compare and distinguish the various components of AI and their applications
- Comprehend risks associated with the use of AI and latest cases relating to AI
- Acquire knowledge of possible elements of AI policy and use of AI disclaimers

# AI Survey



# AI Survey

- We asked our firms how they feel about AI and if / how they've used it in their workflow.

Create a new typeform

The image shows three options for creating a new typeform, each in a white rounded rectangle. The first option is 'Start from scratch' with a blue plus sign icon and the text 'Jump right in and build something beautiful'. The second option is 'Use a template' with a green and blue geometric icon and the text 'Pick a premade typeform and customize it as you please' and 'Or [import your questions](#)'. The third option is 'Create with AI' with a purple starburst icon and the text 'Save time and create forms faster—let AI handle the first draft'. A blue circle highlights the 'Create with AI' option, and a purple 'BETA' badge is in the top right corner of its box.

**Start from scratch**  
Jump right in and build something beautiful

**Use a template**  
Pick a premade typeform and customize it as you please  
Or [import your questions](#)

**Create with AI**  
Save time and create forms faster—let AI handle the first draft

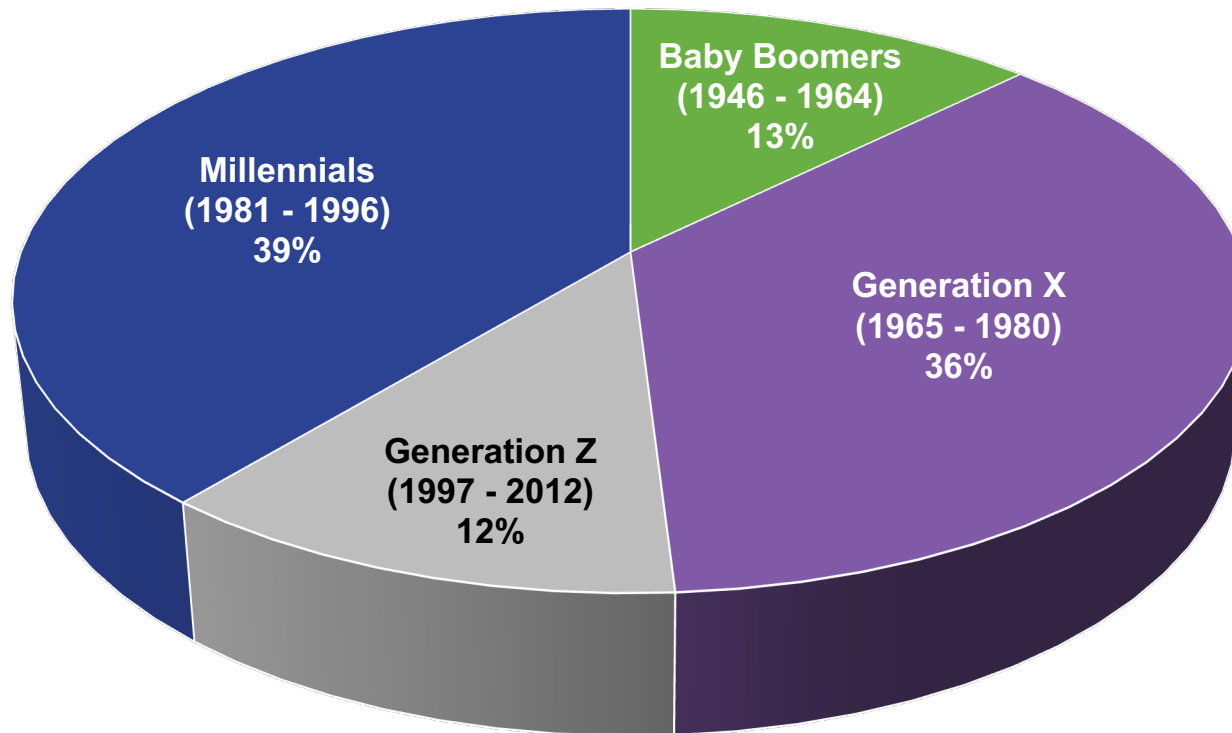
# AI Survey

## Survey Questions

1. What generation do you belong to?
2. What is your overall feeling of AI, specifically as it integrates into your workflow?
3. Have you used ChatGPT in your work environment?
4. Have you used AI tools to generate any of your work products/deliverables?
5. If you have incorporated AI in your work product, how have you done so? – Free response
6. Do you think AEP firms need to start integrating AI into their standard processes?
7. Do you have concerns about the ethical implications of using AI in the AEP profession?
8. How do you think AI can begin to be integrated into your work? Or if you don't believe it should be, why not? – Free response



## AI Survey Results: 308 Survey Participants



■ Baby Boomers (1946 - 1964) ■ Generation X (1965 - 1980) ■ Generation Z (1997 - 2012) ■ Millennials (1981 - 1996)

## AI Survey Results

- How do you think AI can begin to be integrated into our work?
- Or, if you don't believe it should be, why not?

## AI Survey Results

“Too much technology can be bad. We’ve all seen *The Terminator*.” - *Generation X (1965-1980)*





## AI Survey Results

“AI could be used to generate initial renderings and ideas, but I don't think it should be relied on for final concepts. And clients / partners should be informed that AI is being used in these instances.”

- *Generation Z (1997-2012)*

## AI Survey Results

“I am concerned about its use overall as it will diminish human knowledge and education. Similar to the introduction of the calculator - you had the Baby Boomer generation that generally can do mental math well, but the Millennial / Gen-Z generation struggles with it greatly since the calculator is an integral part of their education. In other words, how will society create great A&E professionals in which the education sphere and the workplace has tools as powerful as AI? AI tools that diminish the human capacity to do so.” -  
*Millennial (1981 – 1996)*

## AI Survey Results

“I think AI is going to quickly make its way into ALL facets of life, including our work. **We must be as prepared as possible to integrate it or get left behind.**” - *Baby Boomer (1946 – 1964)*



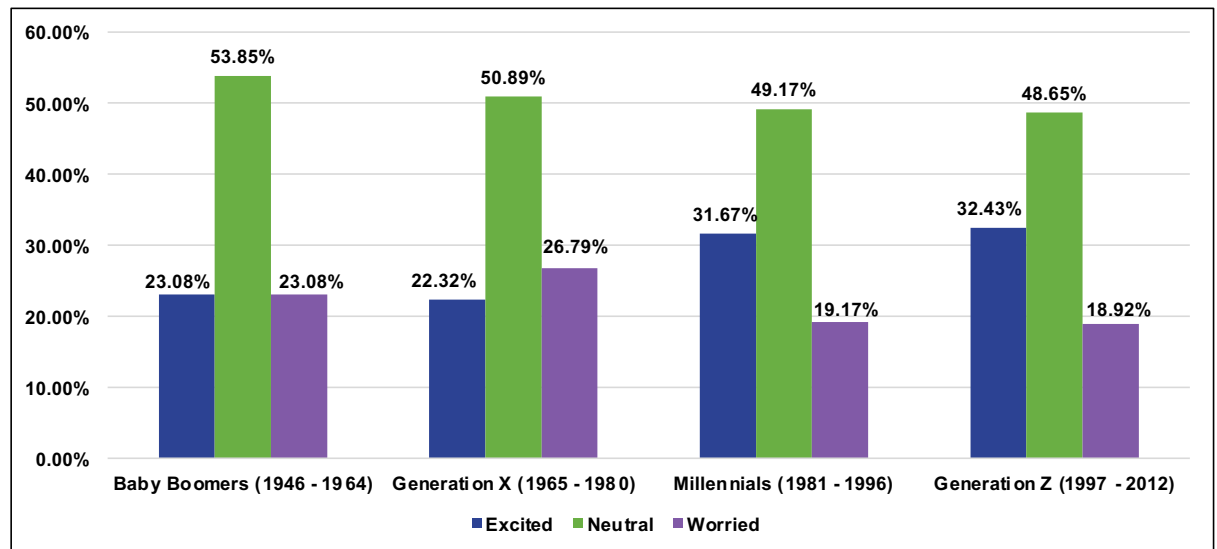
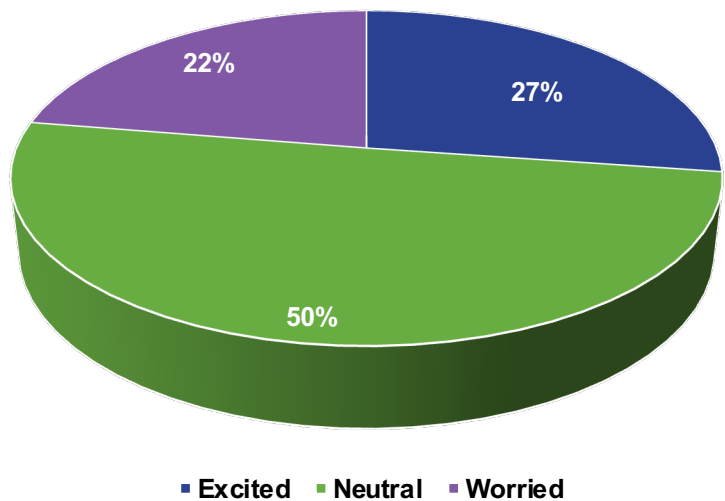
## AI Survey Results

“I think AI in the AEP world is an inevitability. I don't think it matters where we start, **but we should start giving people exposure now so that we're not surprised when it becomes an expectation in the industry.**” - *Millennial (1981 – 1996)*

# AI Survey Results

Question: What is your overall feeling of AI, specifically as it integrates into our workflow?

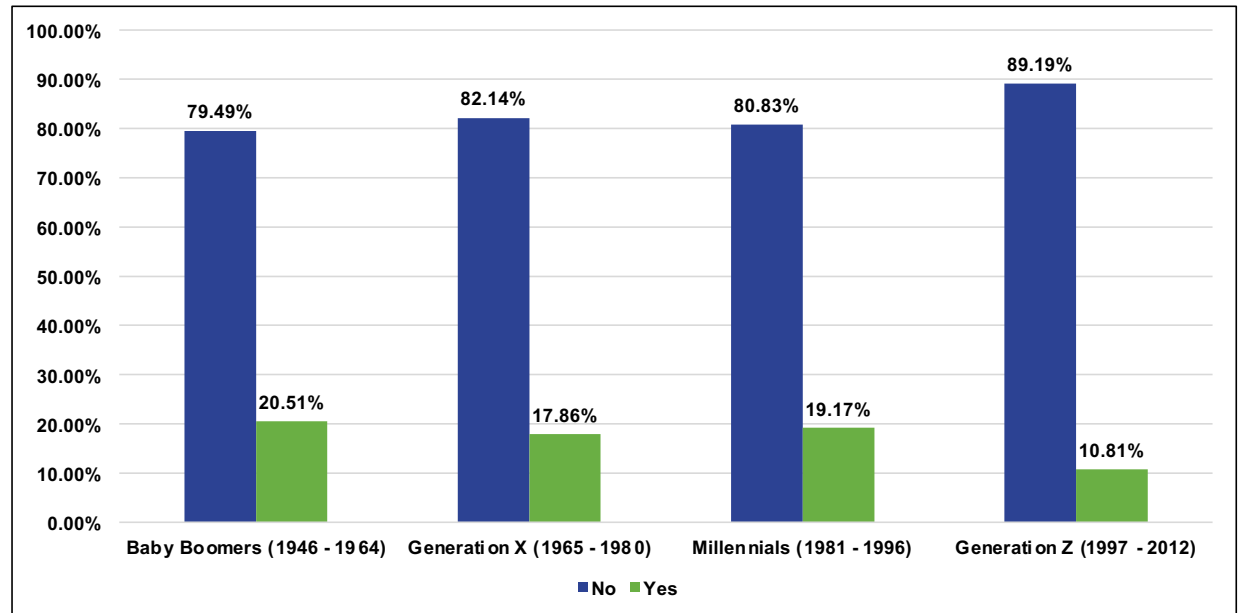
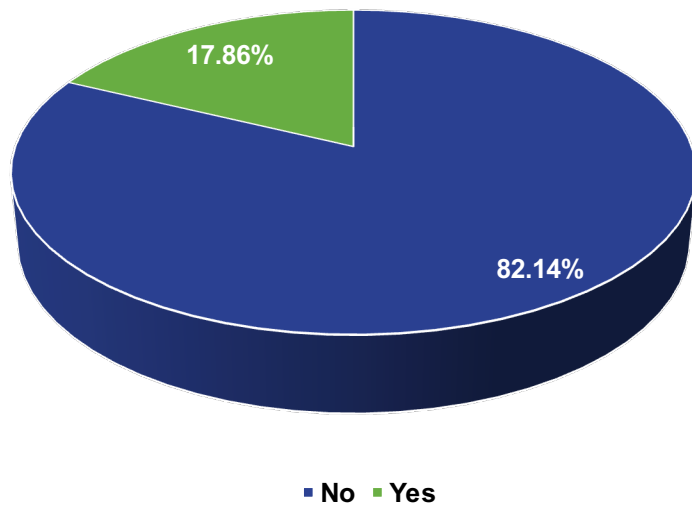
- Most survey participants feel neutral about AI
- A close split between the participants that are excited vs. worried about AI
- Millennials and Generation Z are generally more excited than worried about AI



# AI Survey Results

Question: Have you used ChatGPT in your work environment?

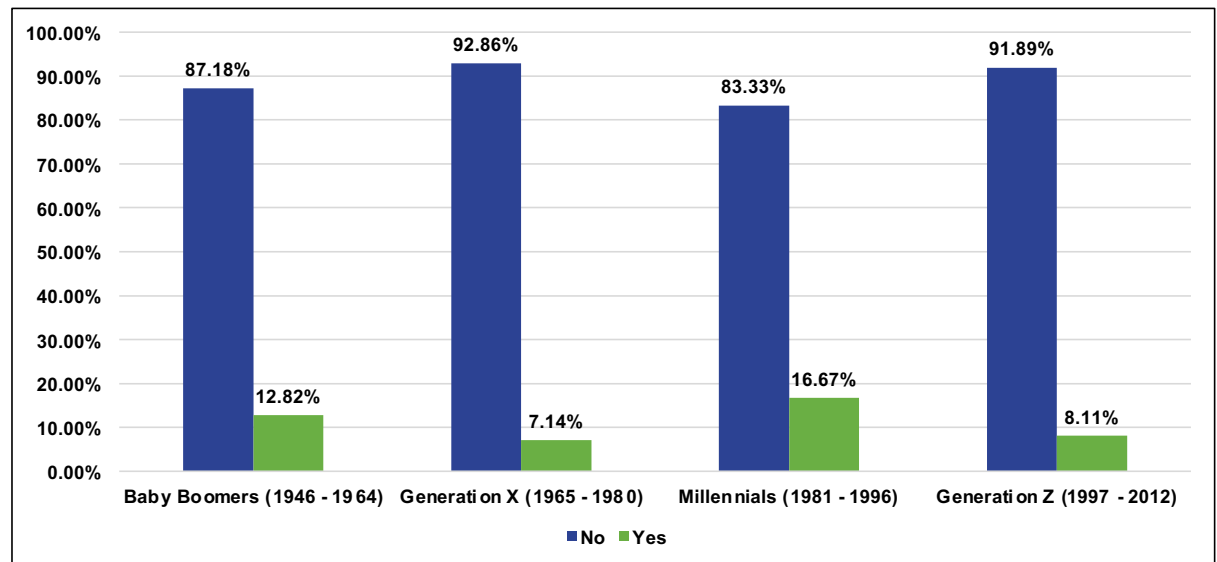
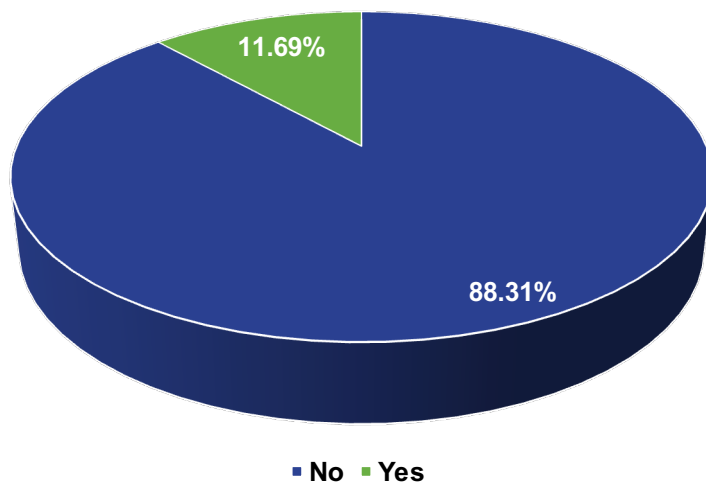
- Less than 20% of the participants have utilized ChatGPT in their work environment
- Surprisingly, Generation Z participants had the lowest reporting of using ChatGPT in their work environment



# AI Survey Results

Question: Have you used other AI Tools to generate any of your work products/deliverables?

- Less than 12% of the participants have utilized other AI tools in their workplace
- Participants reported using ChatGPT more than other AI tools
- Millennials have the highest percentage of “Yes”



## AI Survey Results

**Question: How have you incorporated AI in your work product?**

Top Answers:

- Reword / wordsmithing / writing
- Research
- Outlines for presentations, work plans, cover letters
- Image generation
- Code writing
- Meeting minutes

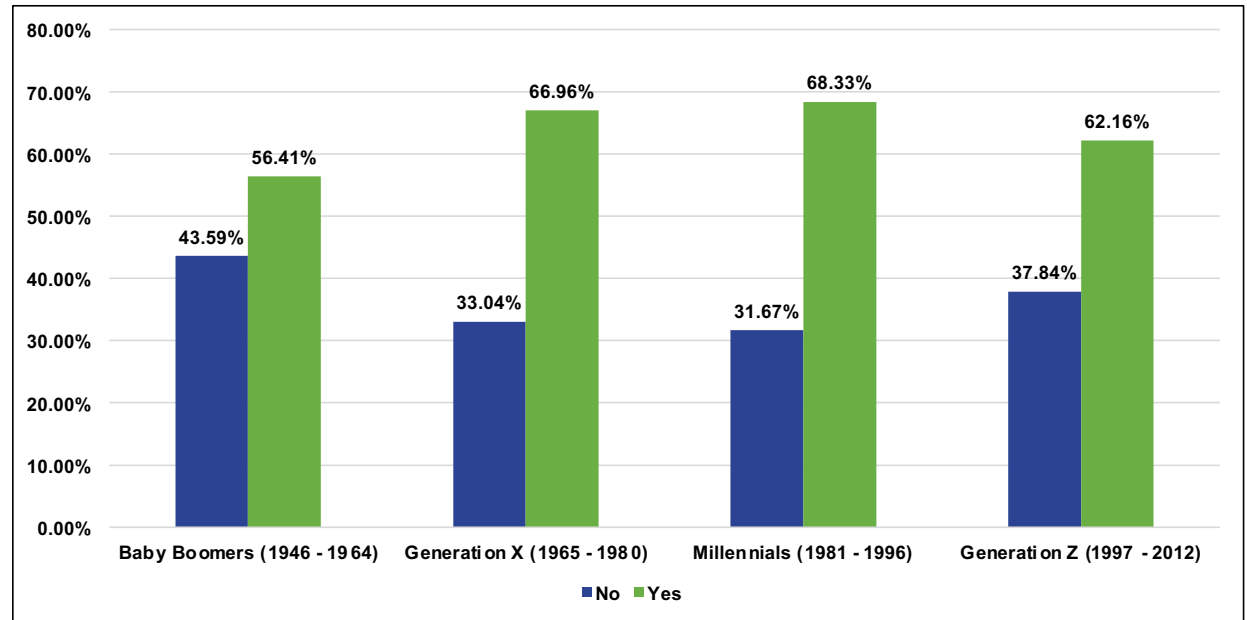
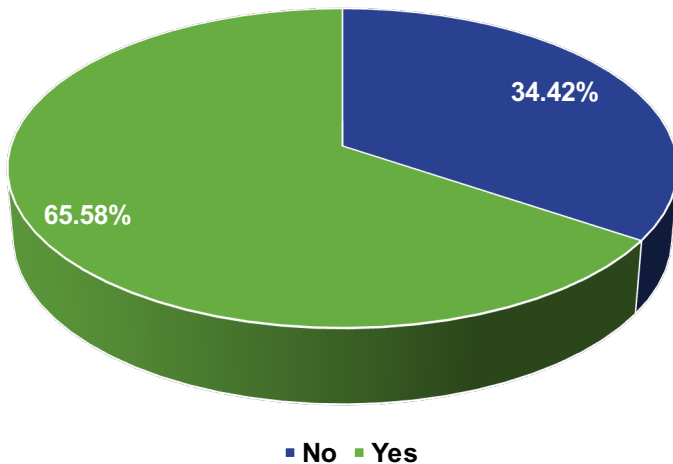




# AI Survey Results

Question: Do you think AEP firms need to start integrating AI into their standard processes?

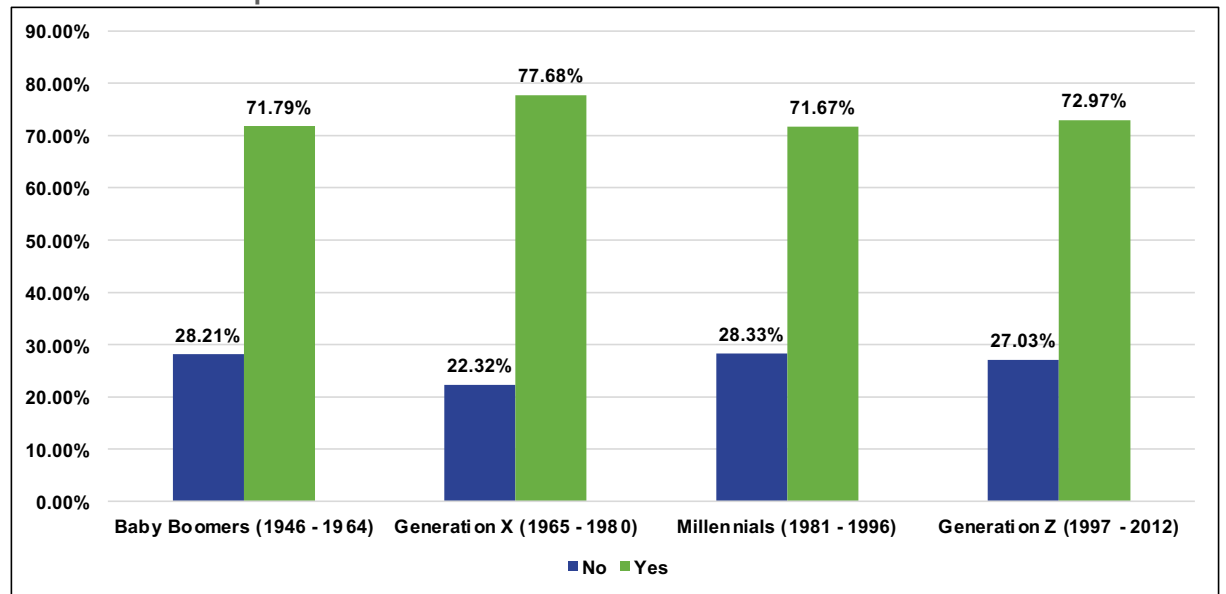
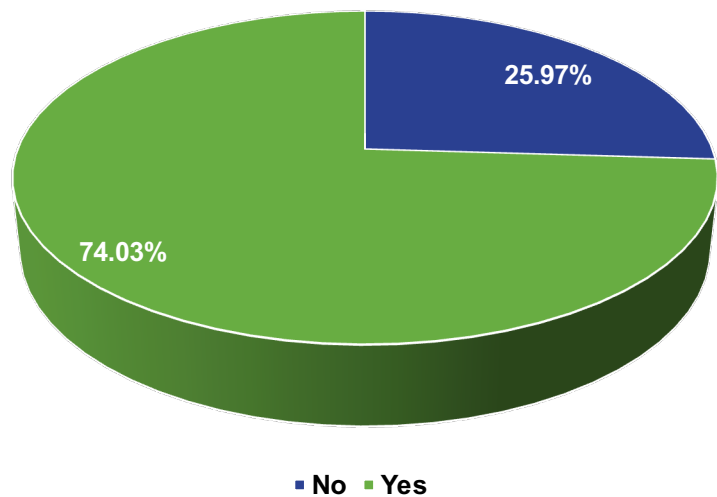
- Over 65% of participants believe AI should be integrated into their standard processes
- Generation X and Millennials have the strongest opinion that AI should be integrated into standard processes



# AI Survey Results

Question: Do you have concerns about the ethical implications of using AI in the AEP profession?

- Approximately 74% of participants have ethical concerns about using AI
- Pretty even split between generations on their responses



# AI Perspective / Application



## What is AI?

### AI = Artificial Intelligence

- 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. - *Oxford*

# Major AI Subfields

**Machine Learning:** Improvement of computer task by building algorithms and statistical models – Ex. Targeted marketing, predictive text




**Natural Language Processing:** Computer understanding of human languages - Ex. Siri, Alexa, Teams Meeting Recording



**Computer Vision:** Machine interpretation and understanding of visual information – Ex. Facial recognition, Google translate



**Robotics:** Machines capable of performing tasks autonomously or semi-autonomously

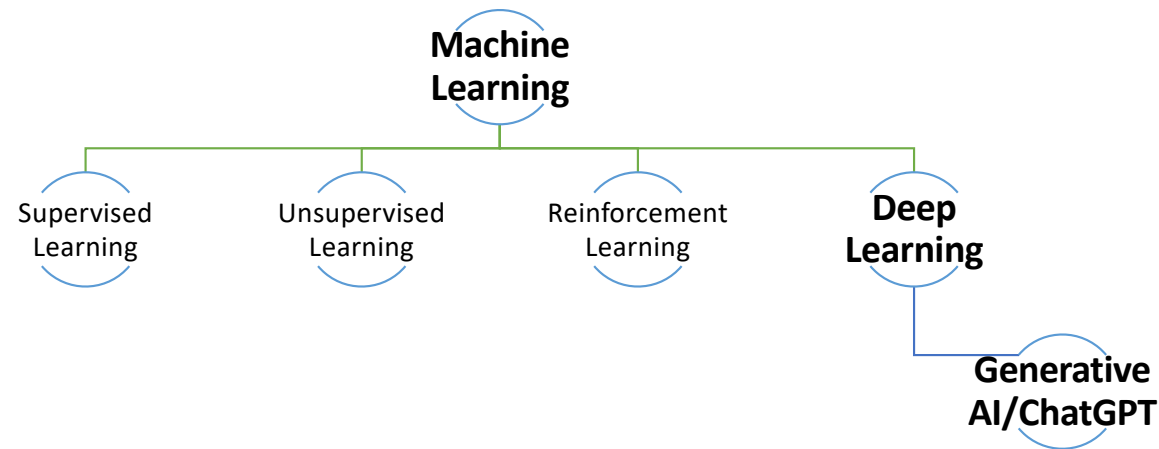


**Expert Systems:** Computer programs that mimic decision-making abilities of a human expert – Ex. IBM Watson, virtual health assistance

# ChatGPT

## Generative AI

- Refers to deep-learning models that can generate high-quality text, images, and other **content** based on the data they were trained on - IBM

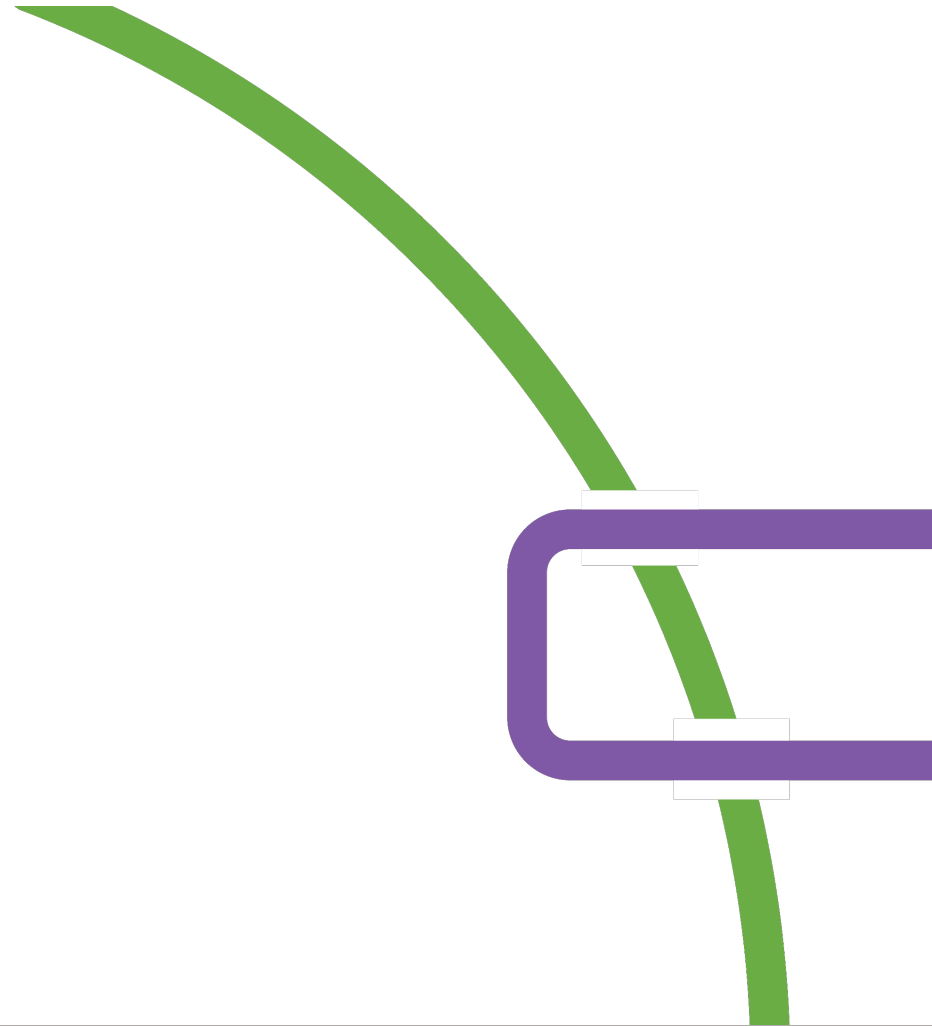


## Architecture / Engineering / Planning

- Smart Water & Sewer Technology
  - Pipeline condition inspection / coding – visual diagnostics
  - Demand management
  - Leak detection
  - Sewer overflow prevention
  - Lead pipe detection
- Drone Technology
  - Bridge inspection
- Candidate Selection

## Other Applications

- Contract Review and Analysis
- Contract Generation
- E-Discovery
- Due Diligence
- Compliance Monitoring



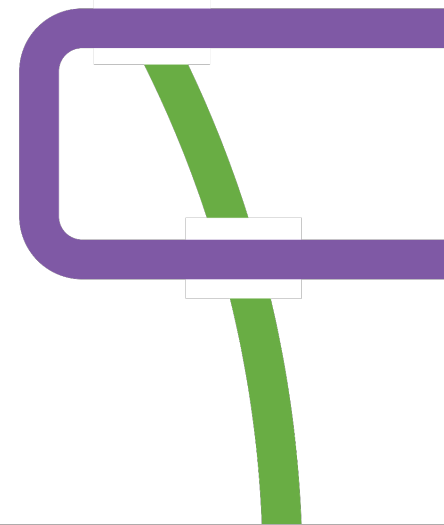


## IT and Corporate Risks

- Privacy / confidentiality
- Accuracy of results:
  - Errors / hallucinations
  - Bias
  - Not up-to-date
  - Ability of staff to catch errors?
- Security
- Reputation and relationships
- Reliance on vendors
- Costs



# AI Best Practices in the AEP World



## AI Best Practices: We asked ChatGPT

### Data Privacy and Security

1. Implement measures to protect sensitive data, especially when dealing with client's information.
2. Comply with relevant data privacy regulations and industry standards.

## AI Best Practices: We asked ChatGPT

### Continuous Learning and Improvement

1. Encourage continuous learning and skill development among the team to keep up with AI advancements.
2. Stay informed about the latest AI technologies and trends.

# Legal

## Do's and Don'ts regarding use

- **Don't** input any data into an open-source AI model (such as ChatGPT) that is Confidential or Proprietary
- **Don't** input any data into an open-source AI model (such as ChatGPT) that you do not wish disclosed
- **Do** verify all AI results
- **Do**, for your internal business purposes, use / develop an AI model that is not available to other consumers

## Legal: AI Use Policy

- **Purpose:** Define what AI is / educate on risks and concerns / why issuing policy (objective)
- **Definitions / Glossary:** Establish universal understanding of terms
- **Implementation:** Define 5W's of policy application
- **Policy Statement:** Set forth regulations, requirements, guidelines or organizational behavior standards / parameters to control application and use / set forth best practices
- **Effective Date**

## Legal: State of the Law

- **US:** No comprehensive federal legislation dedicated solely to AI regulation
- **CAN:** Bill C-17, *Artificial Intelligence Data Act* (AIDA) is currently under consideration by Parliament
- **US / CAN:** Existing laws and regulations touch upon certain **aspects** of AI such as privacy, security and anti-discrimination
- **Internationally:** Global Partnership on AI (GPAI) Summit 2023 (Dec 2023)

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