AI Summit

Wednesday, January 29, 2025

- 11:00 a.m. - 2:00 p.m. ET
- 10:00 a.m. - 1:00 p.m. CT
- 9:00 a.m. - 12:00 p.m. MT
- 8:00 a.m. - 11:00 a.m. PT

Thursday, January 30, 2025

- 11:00 a.m. - 1:00 p.m. ET
- 10:00 a.m. - 12:00 p.m. CT
- 9:00 a.m. - 11:00 a.m. MT
- 8:00 a.m. - 10:00 a.m. PT

AI SUMMIT
TOP TECH

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- A link to the program evaluation will be emailed to you after tomorrows program.
- To receive CEU's, you must correctly answer 80% of the questions.

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Today's Moderator

Tracy Warner, PE

Deputy Director of Development Services

Pima County

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Polls

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Session Three Speakers:

Eryn Stone, PE
Urban Engineer
Iowa DOT-Local Systems

Joseph Dib, PE, PMP
Senior Civil Engineer
Applied Research Associates

Ömer Bozok , PE
Founder
Phoenix iO

Addressing the Ethical and Legal Considerations of AI

Day 1 – Session 3

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Speakers:
Eryn Stone, P.E. – Iowa DOT
Ömer Bozok, P.E. – Phoenix iO
Joseph Dib, P.E. – Applied Research Associates, Inc

Learning Objectives

- Identify key ethical issues
- Understand the current legal landscape
- Explore strategies to prevent unethical AI uses
- Discuss the educational needs

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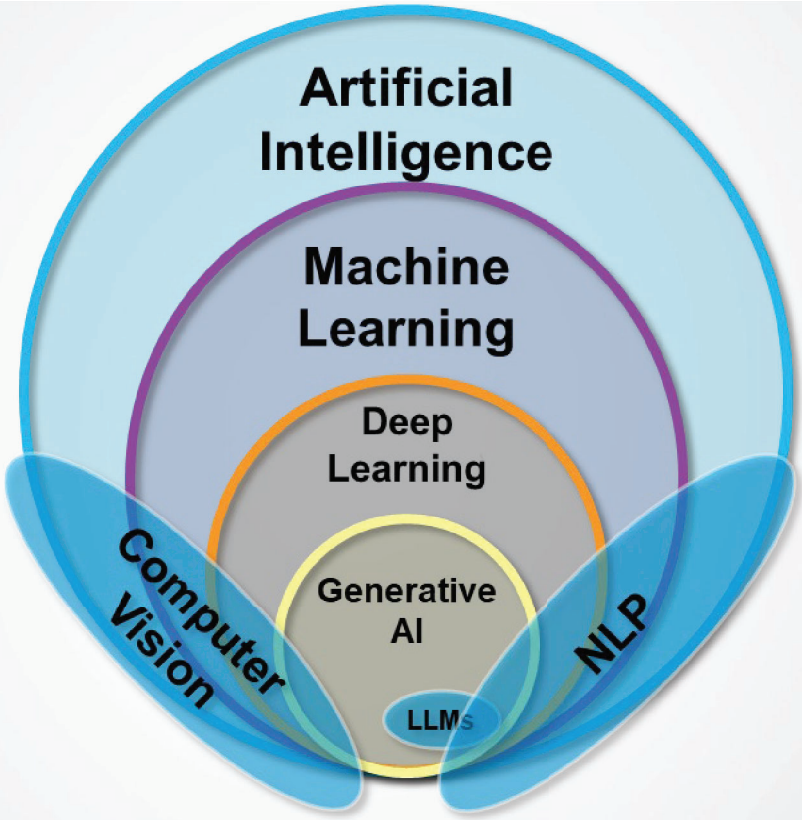

Source: Esri, Inc.

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What is Ethics in Public Works?

Public Safety/welfare → Transparency and Honesty → Integrity and Accountability → Fairness and Equity → Privacy

Professional Competence → Sustainability/ Environmental Stewardship → Innovation with Responsibility → Collaboration and Inclusivity → Professional leadership

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Key Ethical Concerns for AI in Public Works

Real Risks

- Data Breaches
- Algorithmic Bias
- Environmental Impact

Perceived Risks

- Job loss Fears
- Intentional misuse of AI

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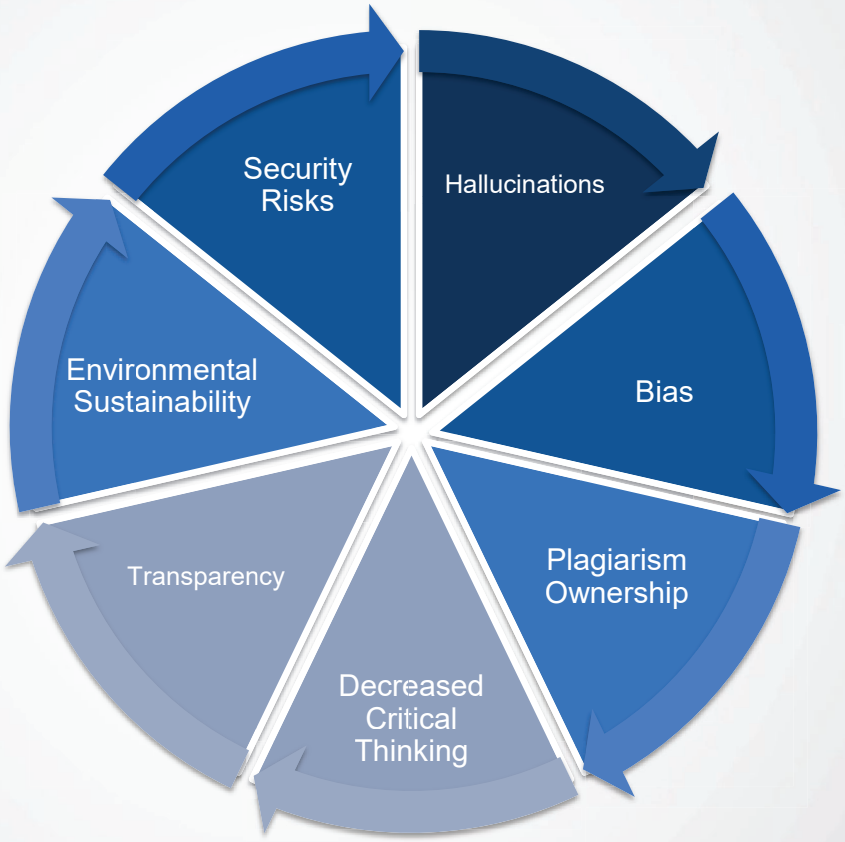

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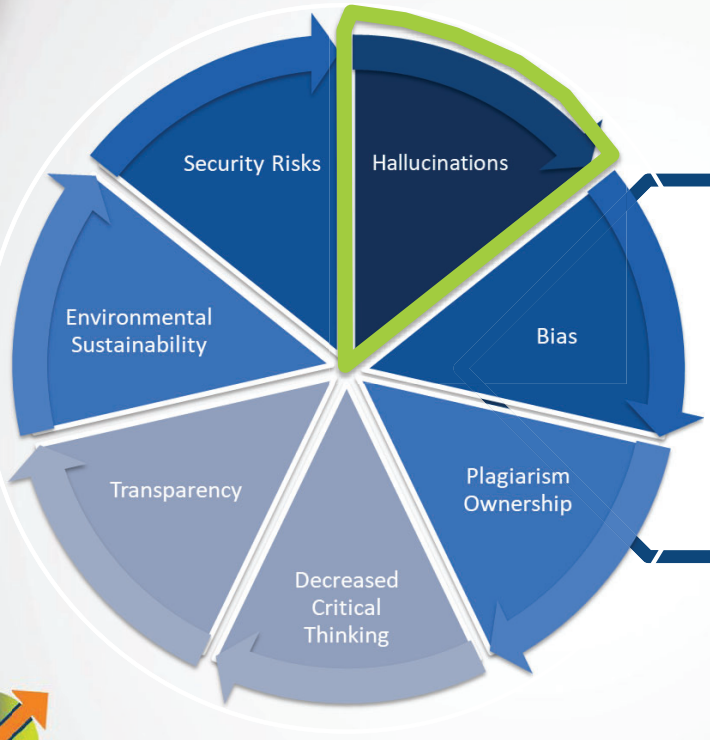

Hallucinations

- Convincing, non-sensical AI outputs
- Example

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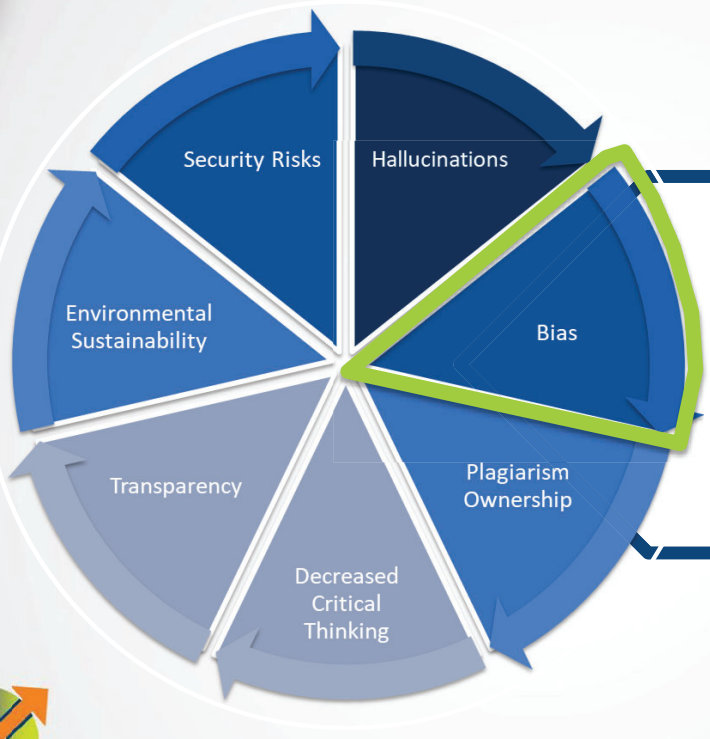

Bias

- Data makes unfair decisions or results that discriminate
- Example

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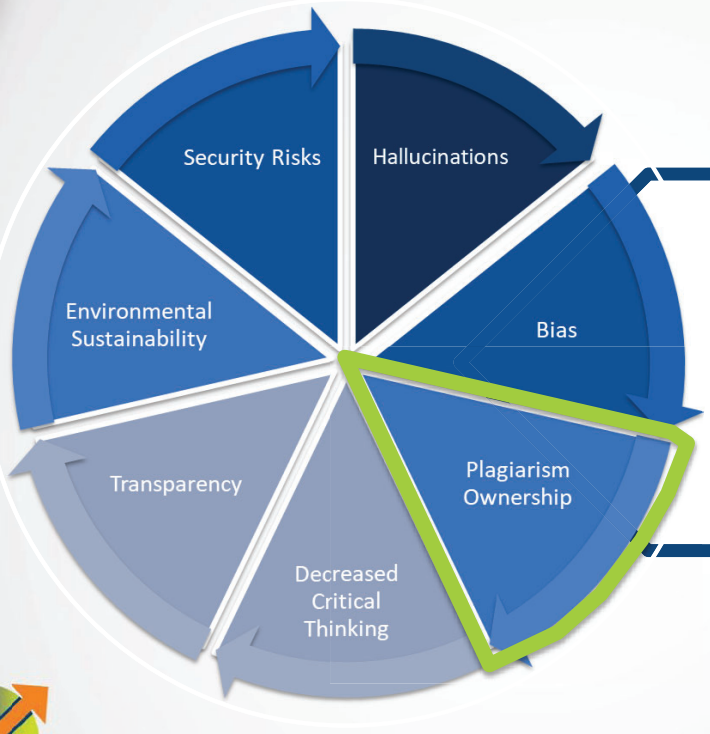

Plagiarism/Ownership

- Who owns the results?
- Ship of Theseus

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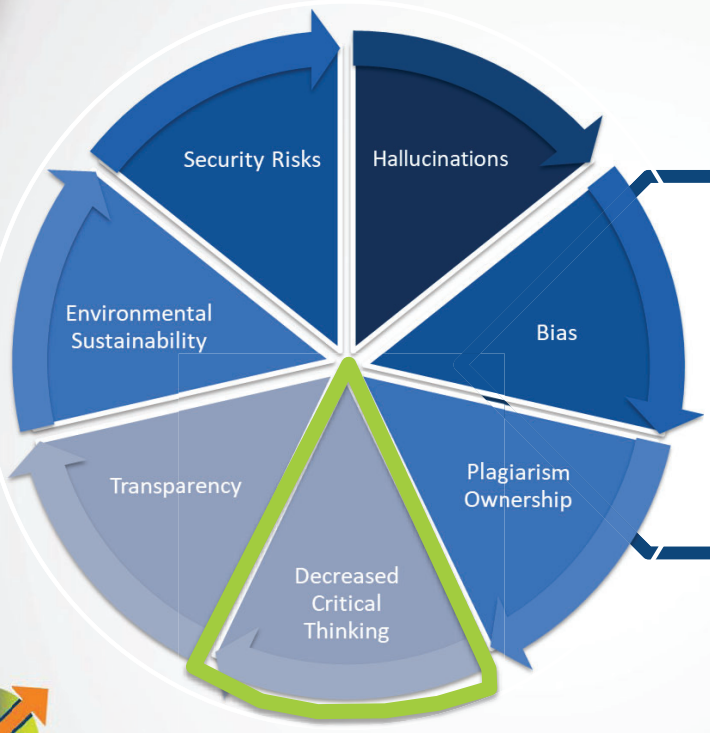

Decreased Critical Thinking

- Overreliance on technology
- Example

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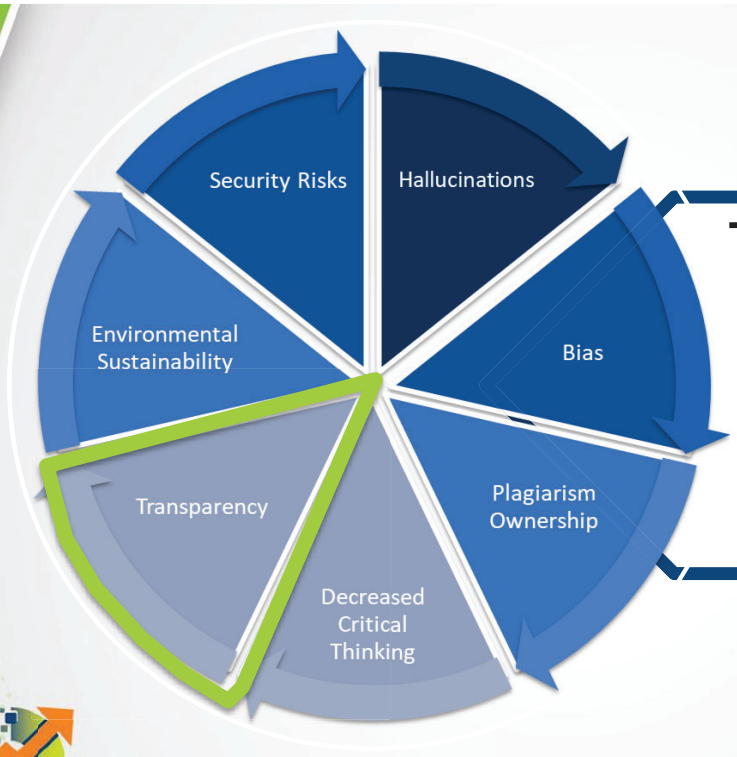

Transparency

- Accountability of how tools function
- Example

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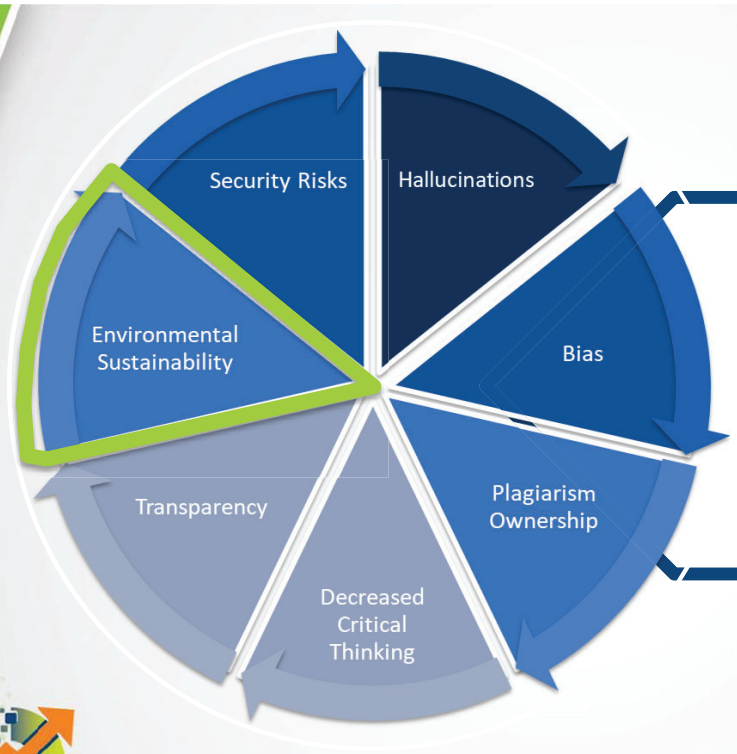

Environmental Sustainability

- Takes many resources to power
- Example

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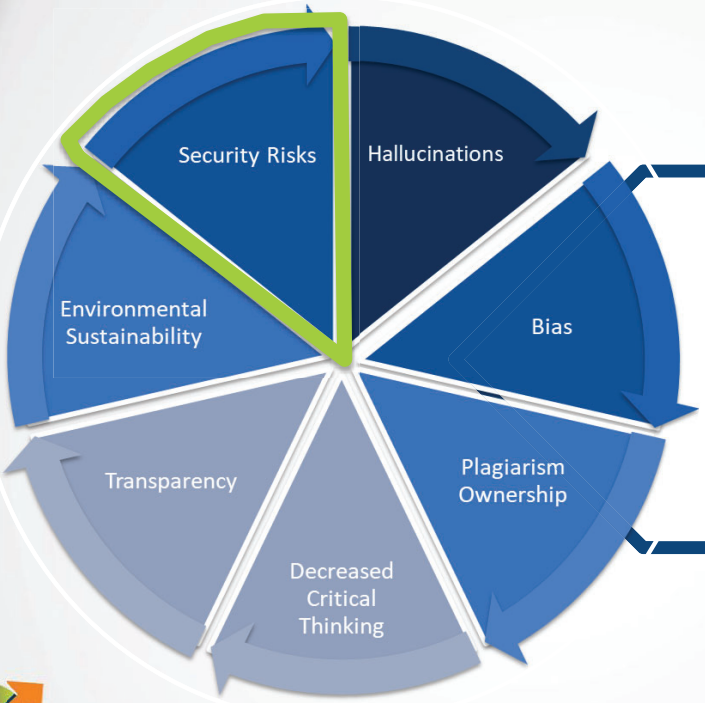

Security Risks

- Vulnerable to hacking
- Example

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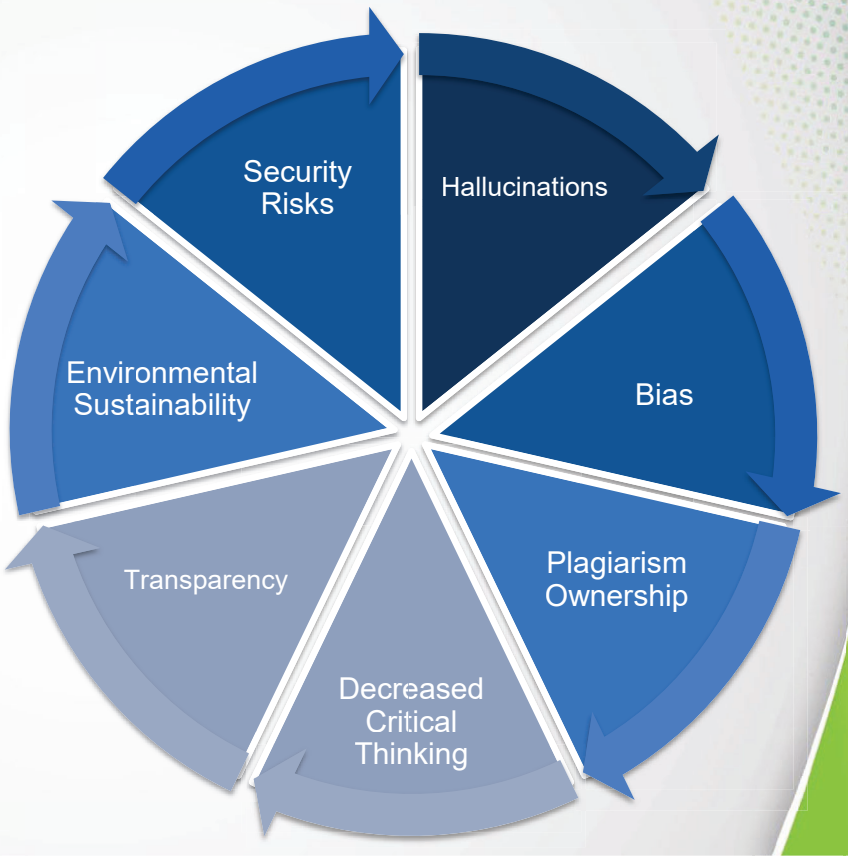
Poll Time!

Which of these do you think is the biggest risk for AI in your organization?



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Legal Landscape

Addressing Unethical Use

AI Legal Landscape

AI Legal Landscape - USA

- No enacted federal regulations
  - AI Bill of Rights (Oct., 2022)
- 40+ State have AI bill
  - Colorado AI Act (May, 2024)

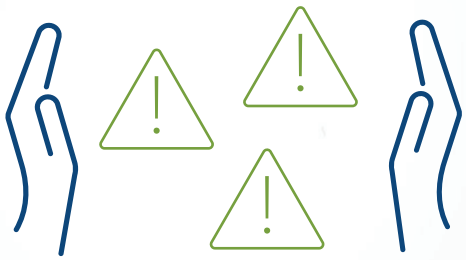
AI Legal Landscape - Canada

- No enacted federal regulations
  - Artificial Intelligence and Data Act (AIDA), Jun. 2022
- The Enhancing Digital Security and Trust Act, Nov. 2024 (EDSTA) – Ontario

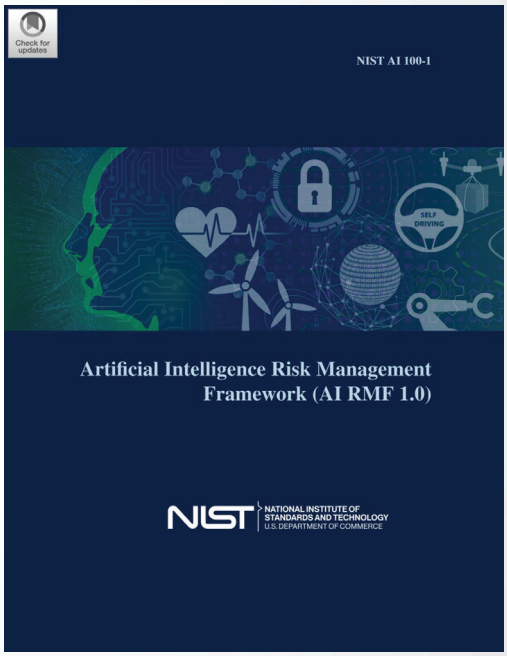
Goal of Regulations

1. Safety and security of the people
2. Responsible innovation
3. Protection of privacy and civil liberties

Addressing Unethical Use



Policy & Governance



Policy & Governance

U.S. Department Intelligence Community

Principles of
Artificial Intelligence Ethics for the
Intelligence Community

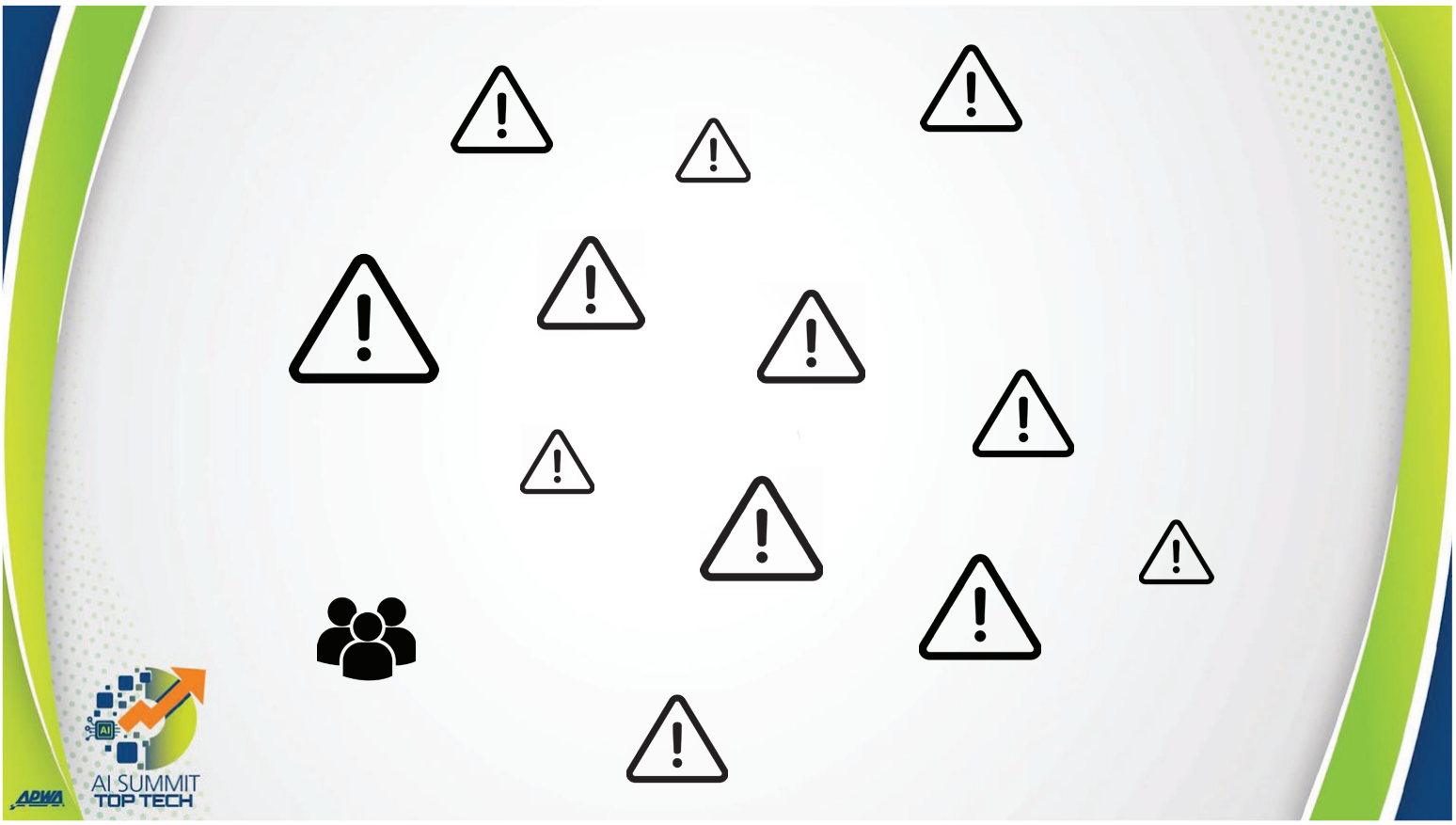
Ethical AI

Responsible Equitable

Fair: *Just, unbiased, satisfactory, suitable, appropriate, acceptable, good enough, reasonable*

Ethical AI

Responsible Equitable Traceable Reliable Governable Aligns w/ Values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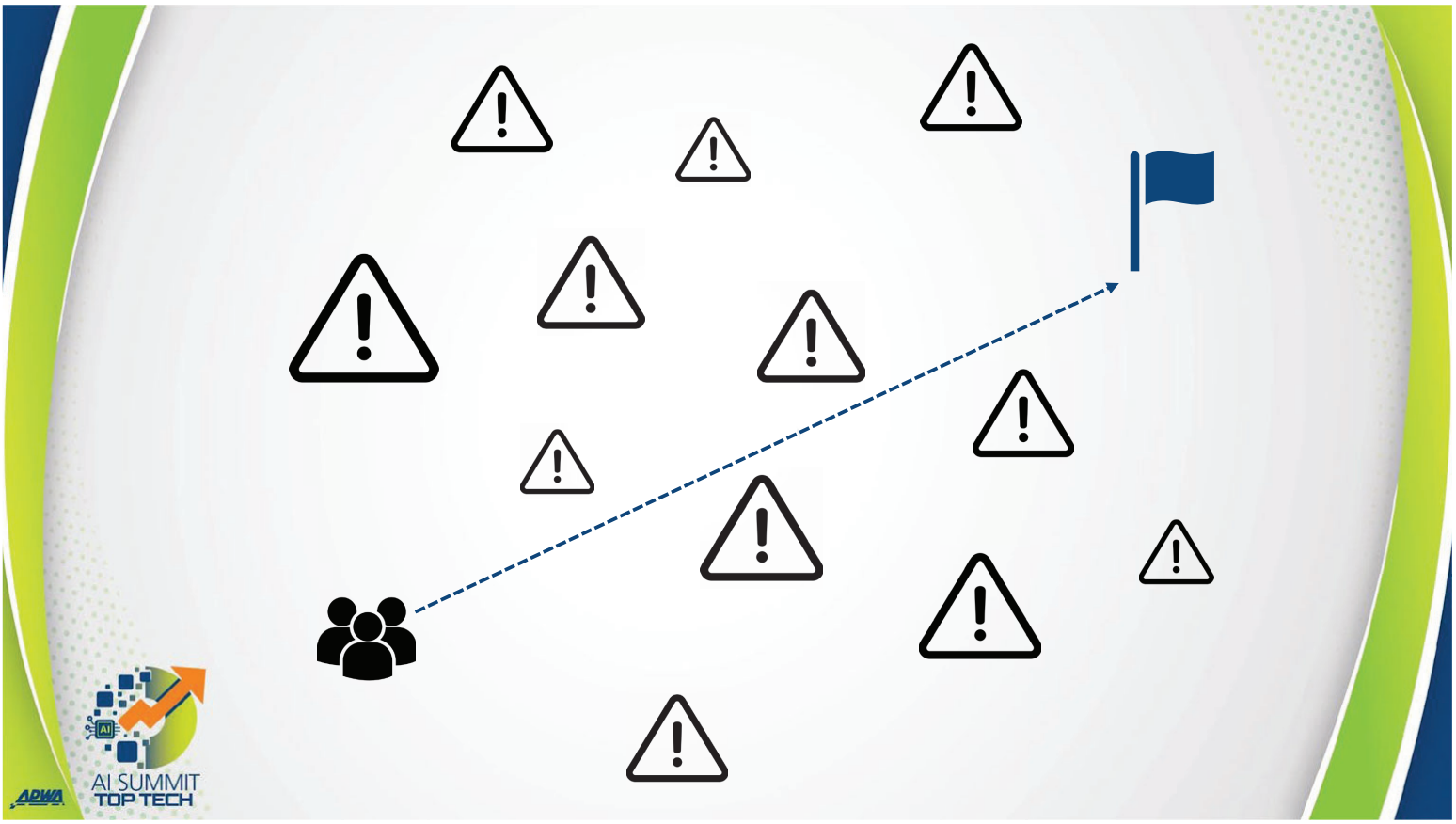
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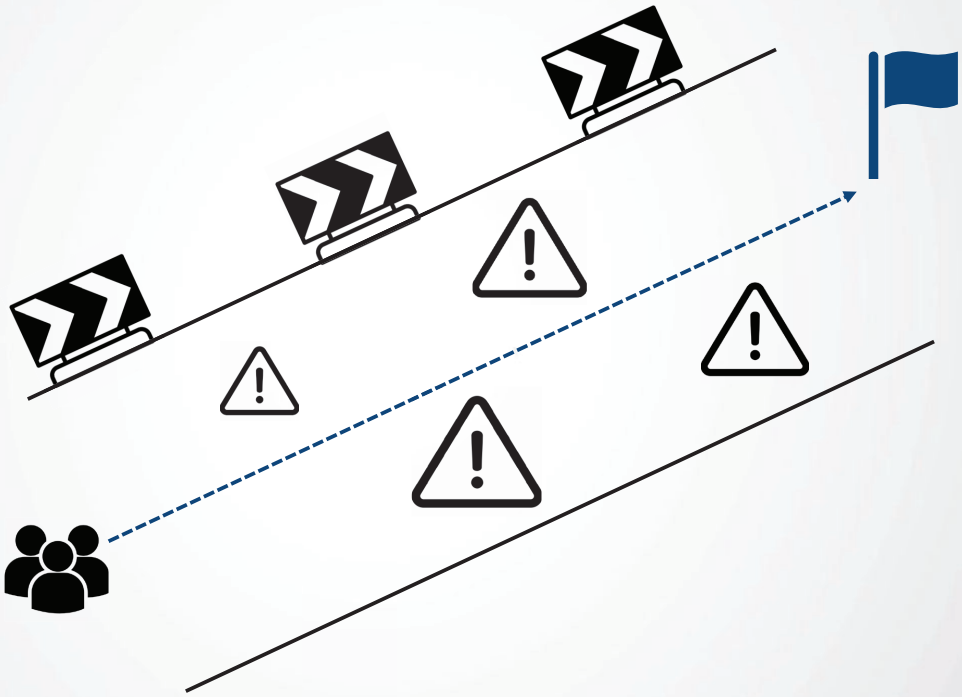

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What are the Goals?

Survey

AI Alignment

Motivation

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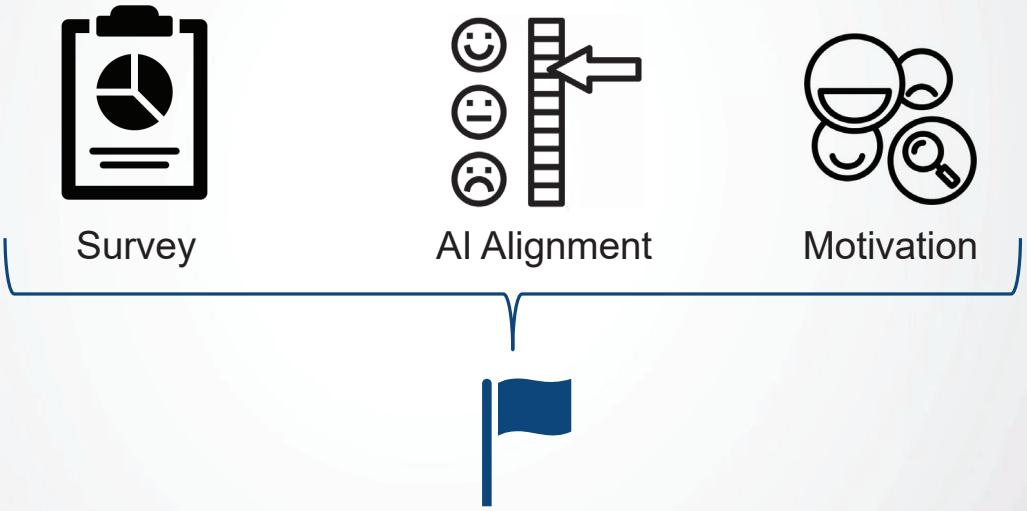
What are the Goals?



What are the Risks?

Open Forum

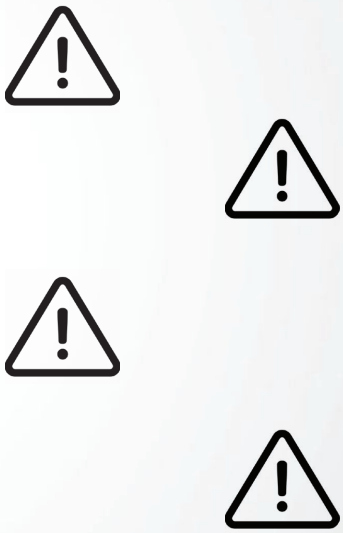
Leaders

Engineers

Operations

IT

Policy Makers



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AI-Augmented Bid Evaluation

- Recommending an under-qualified bidder (hallucination)
- Favoring certain bidders due to data bias
- Decreased critical thinking

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Risk Assessment

Risk Assessment

4 – Very Likely

3 – Likely

2 – Somewhat Likely

1 – Unlikely

Risk Assessment

Outcome Of Event

4 – Catastrophic

3 – Severe

2 – Moderate

1 – Minimal

Risk Rating

Outcome Of Event

4	8	12	16
3	6	9	12
2	4	6	8
1	2	3	4

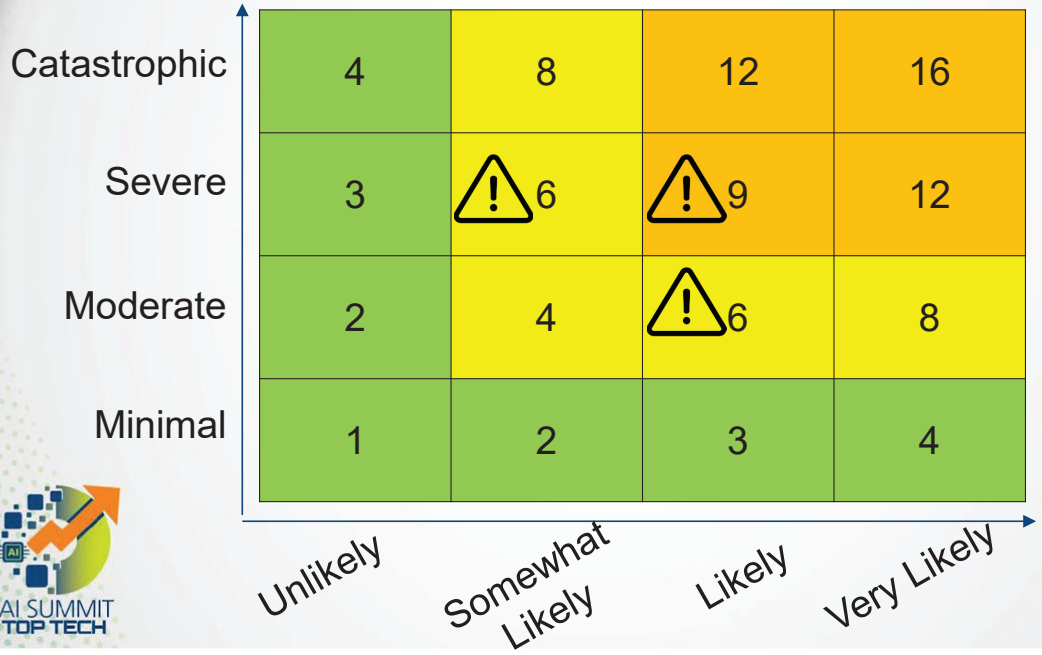
Likelihood of Event

Low Risk

Medium Risk

High Risk

Risk Rating



Low Risk

Medium Risk

High Risk

Open Forum

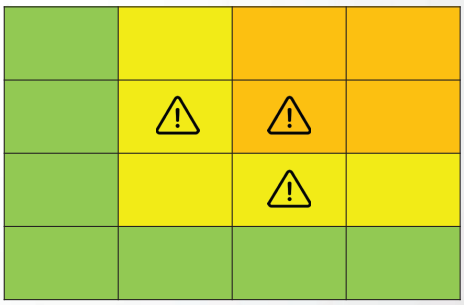
Leaders

Engineers

- Show of Hands
- Keep meeting minutes
- Develop action items

Operations

IT



Policy Makers

Open Forum

Leaders

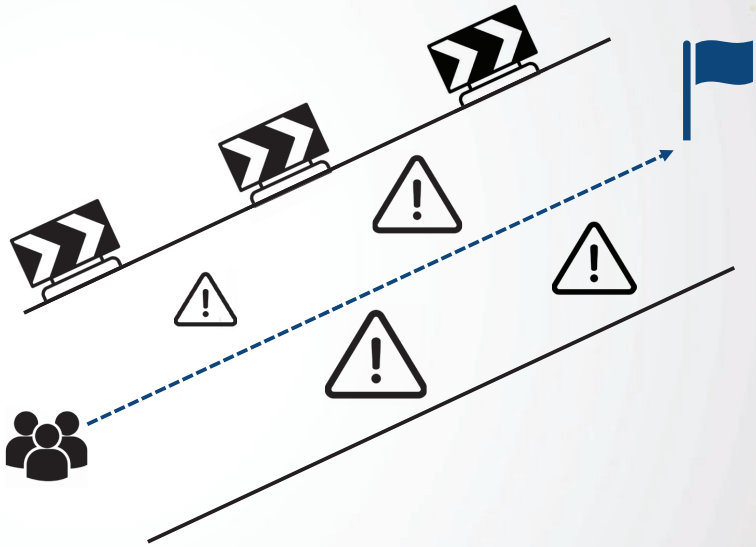
Engineers

Operations

IT

Policy Makers

- Show of Hands
- Keep meeting minutes
- Develop action items



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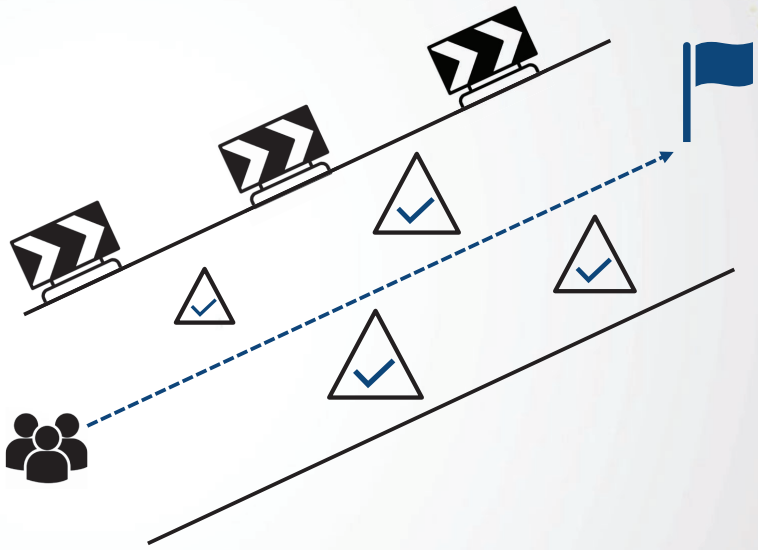
Guardrails

- Security
- Privacy
- I.P.
- Compliance
- Performance



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Education Requirements for Ethical AI

Public Technology Institute (PTI)

More than 50% of local government IT Executive are Developing AI Governance Frameworks

38% of Executives Are Unprepared to Safely and Effectively Implement AI Tools

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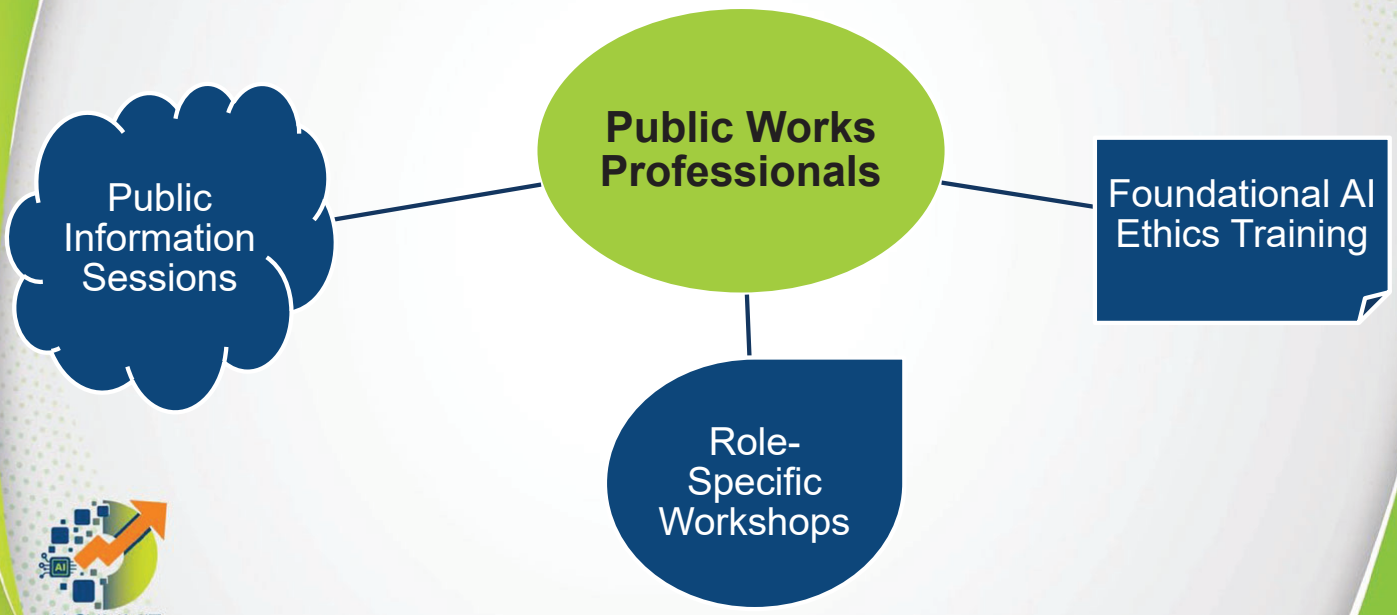
Education Requirements for Ethical AI



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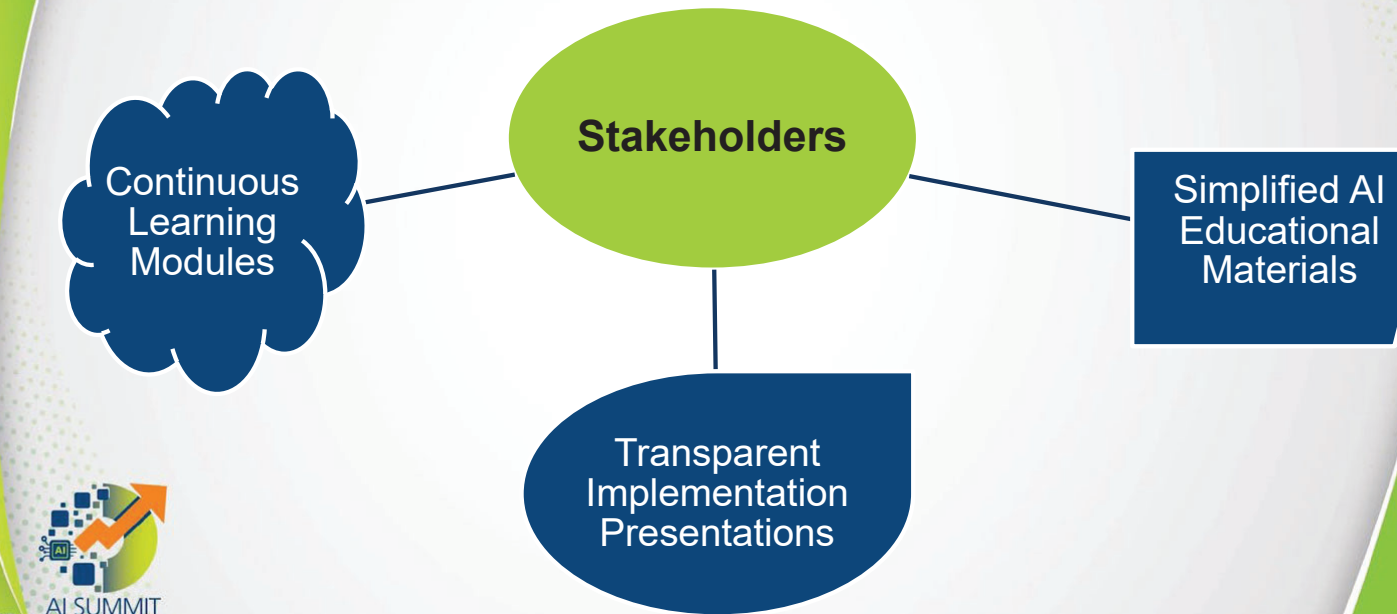
Education Requirements for Ethical AI



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Implementing Educational Strategies

Interactive Workshops and Seminars	Collaborative Policy Development	Feedback Mechanisms
Hands-on learning	Engage diverse stakeholders	Gather continuous input
Explore AI applications	Address ethical concerns	Improve privacy, accessibility
Build transparency, trust	Foster shared ownership	Align with expectations

POLL QUESTION

- Does your organization currently have educational training regarding the use of AI?
- **Answer Options:**

1. **Yes, we have comprehensive training programs.**
2. **Yes, but training is limited or in development.**
3. **No, but we are planning to implement training.**
4. **No, and there are no plans to implement training.**

Educational Resources

- AI Federal Leadership Program
- GovAI Coalition
- InnovateUS AI Training
- GSA AI Training Series
- AI Academy: American Infrastructure
- PMI AI and Project Management Trainings

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Balancing AI Innovation Responsibility

- Recognizing the Need for Responsible Innovation
- Aligning AI Adoption with Organizational Values
- Ensuring Continuous Alignment and Public Trust

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Recognizing the Need for Responsible Innovation

- Prioritize Ethical Standards
- Assess Societal Impact
- Mitigate Potential Risks

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Aligning AI Adoption with Organizational Values

- Define Core Values
- Integrate Values into AI Strategy
- Establish Ethical Governance

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Ensuring Continuous Alignment and Public Trust

- Regular Ethical Audits
- Stakeholder Engagement
- Transparent Communication

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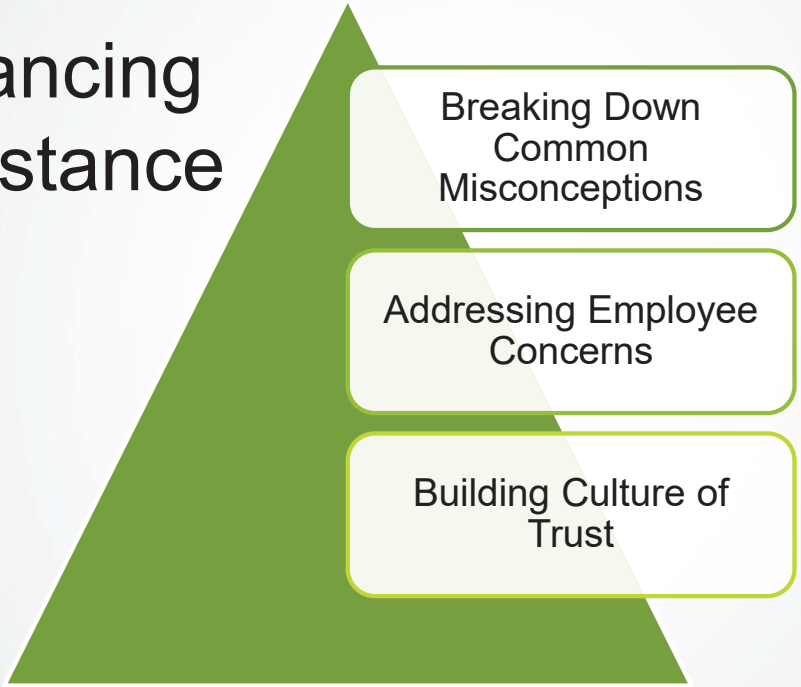
Balancing Resistance



Breaking Down Common Misconceptions

Fear of replacement
AI automates tasks
Explainable AI transparency

Addressing Employee Concerns

Reskilling and upskilling
AI as collaboration
Routine tasks handled

Building Culture of Trust

Employee pilot programs
Feedback through surveys
Tailored AI solutions

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Conclusion

Key takeaways

- Prioritize Ethical AI: Address ethical and legal considerations for responsible implementation
- Engage and Educate: Promote active involvement in education and policy development
- Foster Trust: Manage resistance with transparency and inclusion to build collaboration
- Collaborate and Adapt: Work across agencies and stay informed to integrate advancements

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Q&A

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- Iowa DOT
- Ames, Iowa
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Joseph Dib, P.E.
- Senior Civil Engineer
- Applied Research Associates, Inc.
- Ventura, CA
- jdib@ara.com

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We look forward to seeing you tomorrow at 10 am CT

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Chris Ewell
Assistant Public Works Director
Facilities Management
City of Phoenix