



# Achieving AI Standardization in the DoD

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# About NERDS



## Team Background

Emerged in 2017 with 2 data scientists to apply data science techniques to condition-based maintenance in NAVAIR. Currently at 27 team members



## Ideally Located

Located in Orlando Florida at the Naval Air Warfare Center Training Systems Division, the NERDS team has access to a large talent pool with a lower cost of living



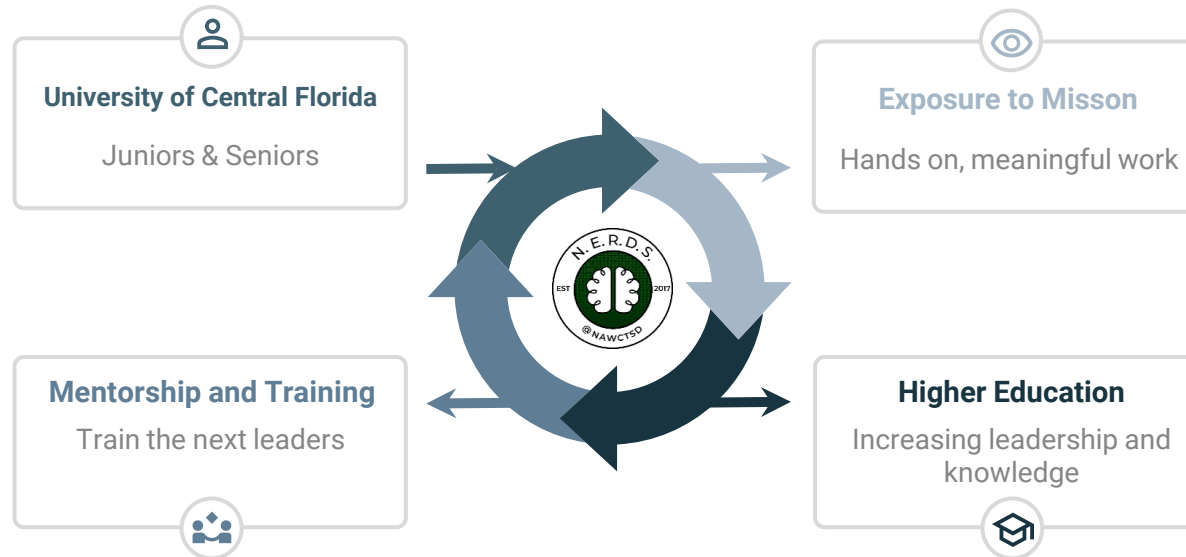
## Government Team

Streamlines data rights and ensures unbiased analysis while maintaining government ownership over all outputs



## High Performance Computer

Custom in-house high-performance computer enables processing of massive data sets or large-scale computations



# Government, Industry, and Academia in AI



## Academia

- Research state of the art in AI
- Explore trade space
- Develop experts
- Take risks



## Industry

- Match technologies to requirements
- Mature new technologies
- Deliver and maintain solutions
- Internal research and development



## Government

- Define requirements / standards
- Stand up and maintain AI infrastructure
- Collect, curate, and serve data
- Verify and Validate solutions
- Ensure best value for taxpayers



# Challenges for AI Standards



## AI Complexity

AI is rapidly evolving, requires broad knowledge base, heavy in statistics, limited workforce



## AI Security

Compartmentalization limits collaboration; cyber threat limits innovation; data and standards can reveal capabilities



## AI Data Rights

Data is power, nobody wants to give up control



## AI Requirements

DoD lacks the experience decomposing AI requirements

240,000

2022 AI Research Papers

\$67.2 B

2023 US AI Investments

1,812

2023 New AI Companies

56.3%

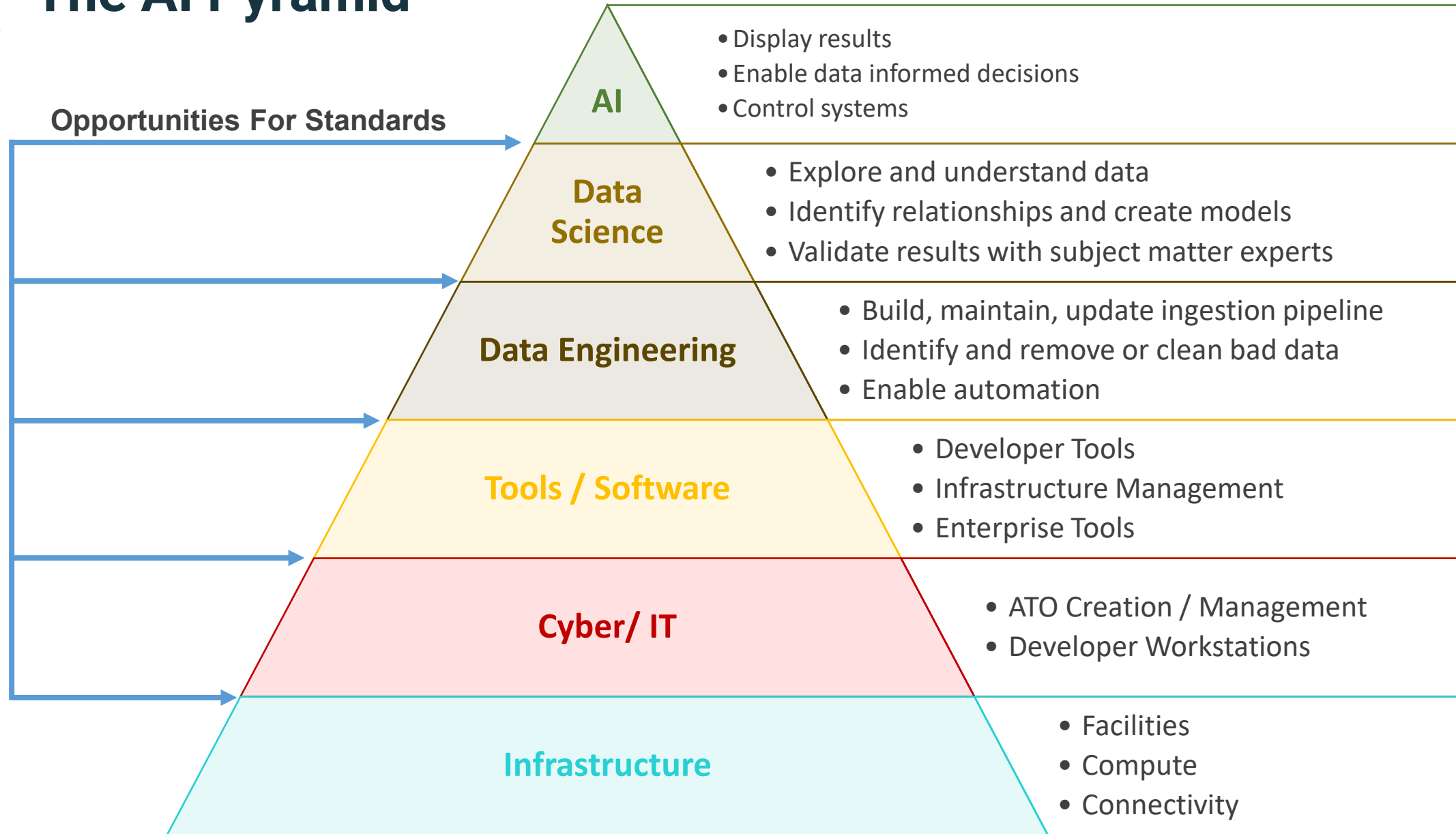
2023 AI Regulation Growth

\$191m

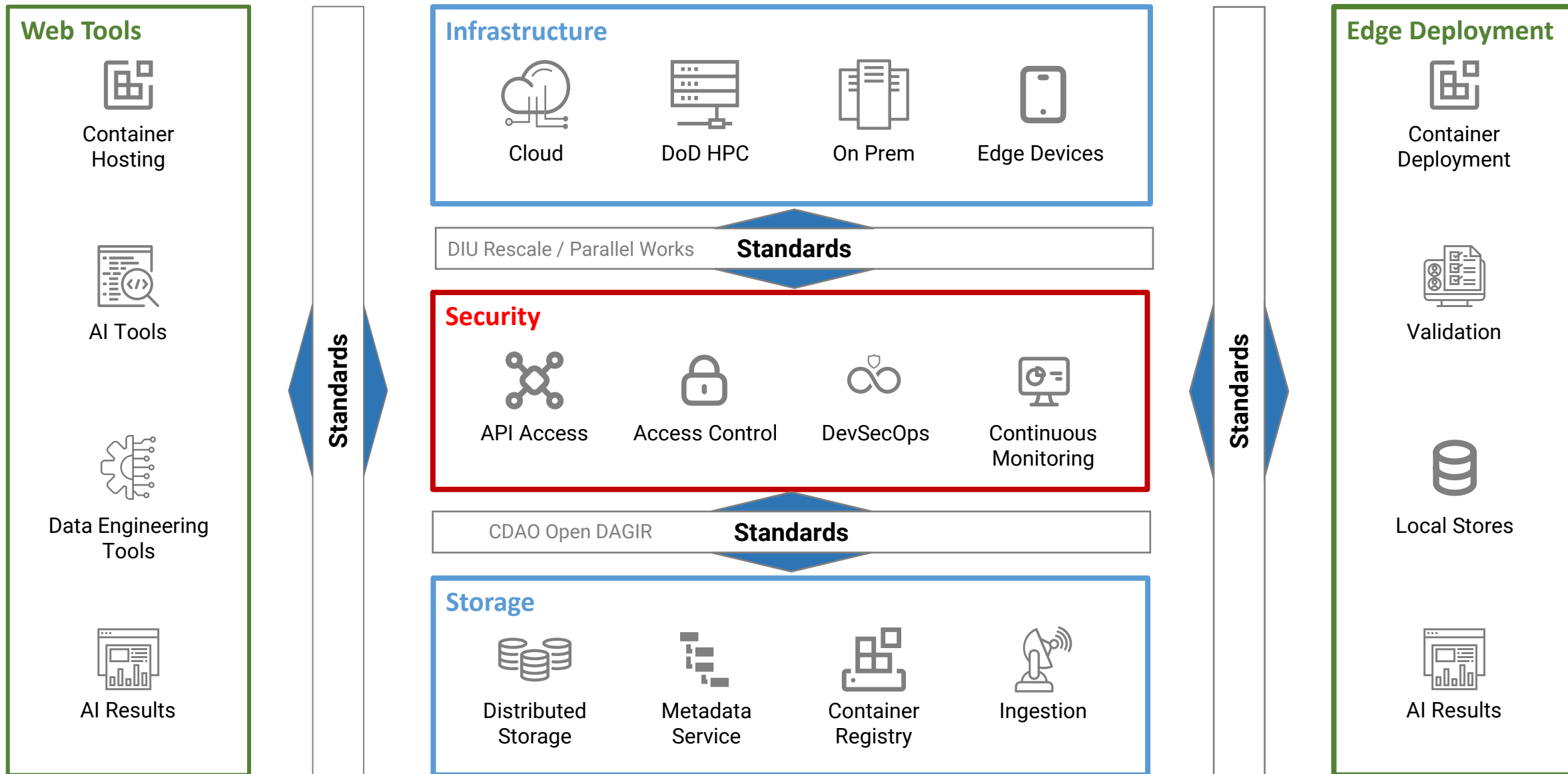
Cost to Train Gemini Ultra LLM Model

Source: Stanford University's 2024 Artificial Intelligence Report

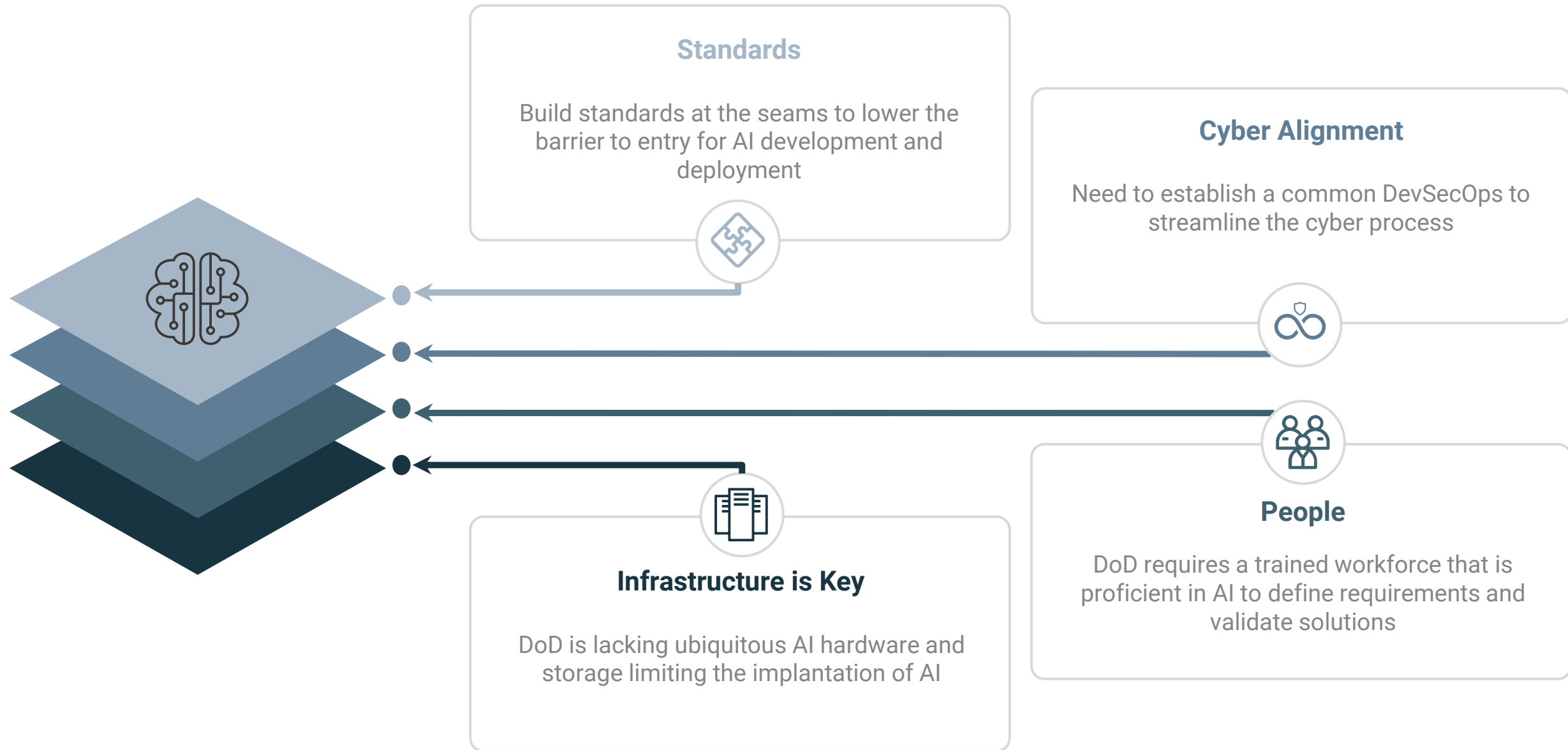
# The AI Pyramid



# Standards In AI Infrastructure



# AI Standards Building Blocks





# Questions



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CDAO – Open DAGIR [\[Link\]](#)

DIU Rescale / Parallel Works [\[Link\]](#)

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