Headquarters U.S. Air Force

Operational Training Infrastructure (OTI)

Augmented Intelligence to support OTI Ecosystem
Must Transform
We can’t get there from here!

Some challenges/areas to consider:

• Aging workforce; GS civilian leaders need updated competencies for the future
• Obsolescence; Different underlying hardware/software configurations
• Baselines managed individually by platform
• Attrition Workforce – subjective succession planning
• Current fleet of simulators were never designed to work together


“The United States has a persistent and dramatic shortage of STEM workers—a problem that worsened considerably during the first half of the decade.”
What can be accomplished with Augmented Intelligence?

- Using Deep Learning Technologies

Initial focus is on “smart automation” that demonstrates the “art of the possible”

Data Architecture

- AF Chief Data Officer symposium
  - Data Lake
    - Kylo
  - AF Chief Data Officer Data Service Strategy
    - Set-up data service
    - Set-up deep learning
Initial Use Case: Augment Data Engineering Job function

- Facilitate Loading the Data from Pilot Training Next Program (PTN)
  - Establish heuristics that facilitate automation
  - Smart Automation
    - Sense
    - Neural Networks (AI Agent)
    - Act

Potential Use Cases

- ETL (Extract-Transform-Load) that collect metadata
- Smoke test to facilitate regression testing of simulation capabilities to ensure Composability and Interoperability
Conclusion

- Use Augmented Intelligence to address STEM shortage in AF M&S
- Focus on Smart Automation Demo
- Utilize the AF Chief Data Officer data lake architecture
- Follow the AF Chief Data Officer Data Services Strategy
References


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https://dod.defense.gov/News/Article/Article/1755942/dod-unveils-its-artificial-intelligence-strategy/

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