Headquarters U.S. Air Force

Integrity - Service - Excellence

Operational Training Infrastructure (OTI)

Augmented Intelligence to support OTI Ecosystem

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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**

https://research.newamericaneconomy.org/report/sizing-up-the-gap-in-our-supply-of-stem-workers/

"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**

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- **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**

- **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**

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