ARTIFICIAL INTELLIGENCE

Accelerate Adoption of Artificial Intelligence to Discover Insights at Machine Speed

The Artificial Intelligence (AI) CoE enables agencies to develop AI solutions to meet unique business challenges by incorporating machine learning, neural networks, intelligent process design, and robotic process automation (RPA) across the organization. The team provides strategic tools and infrastructure support to rapidly discover use cases, identify applicable artificial intelligence methods, and deploy scalable solutions across the enterprise.

The AI CoE leverages a customer-centric, lean innovation model to rapidly evaluate emerging AI techniques, build and test prototype applications, and deploy solutions at enterprise scale. Lean innovation provides the speed necessary to experiment and iterate, while quickly identifying important use cases within an agency. The team establishes institutional enablers to support innovation, which creates pathways for successful pilots to sustainably transition to the enterprise in the following areas of expertise:

- Artificial Intelligence
- Machine Learning
- RPA
- Natural Language Processing
- Computer Vision
- Intelligent Process Design
- Intelligent Data Discovery, Access, & Use

The AI CoE generates the following benefits through mature AI programs across the federal government:

- **Increase the agility of acquisition processes** to accelerate adoption of AI solutions across the federal government.
- Understand the **true cost of ownership** for AI solutions.
- Establish a **customer-centric approach** to implementing solutions.
- **Identify previously unknown trends and patterns** in data across enterprise systems.
- Transition from performing low-value to high-value work through **process automation and intelligent systems integration**.
- Increase overall labor hour capacity.
- Develop a deep understanding of user workflows and a **library of reusable tools** to operate at machine speed.
- **Reduce time to task completion** and overall process error rates.
- Collect and **promote AI and RPA best practices.**

Artificial Intelligence CoE Service Catalog

SERVICE	DESCRIPTION	SAMPLE DELIVERABLES
AI Assessment of Governance & Enablers	Assess agency's preparedness to explore AI solutions to organizational challenges, establish a governance model for innovating with AI, and create organizational support structures to grow and scale a mature AI program.	• AI Maturity Assessment • AI Governance • KPI Development • AI Model Change Management • System Configuration Management & Version Control • Path-to-ATO Report • Agile/Technical Training
Use Case Discovery & Selection	Identify opportunities to leverage AI to address operations within the organization. Develop methods to intake, prioritize, and select candidate use cases for AI development efforts.	• Value-Based Strategy Evaluation • Use Case Intake & Evaluation Process • AI Readiness Survey • Use Case Prioritization Models
Workflow Mapping & Process Automation	Define as-is business process to understand human and machine touch points across workflows. Implement process automation to shift from low-value to high-value work. Leverage intelligent processes to collect more accurate and reliable data.	• Current and Future State Workflow Diagrams • Business Process Improvement Report • Technical Solution Proposal • Critical Dependency & Critical Path Identification • RPA Bots • Intelligent Process Automation • Training and Reference Guides
Lean Innovation Process Design	Business processes and acquisition tools to promote innovation from within. Techniques to develop and scale AI initiatives from pilot to enterprise solutions.	• Organizational Innovation Strategy • Innovation Pilot Business Model • Agile Acquisition Tools • Technology Transition Process • Transition Cost Calculator
AI Solutions Identification & Implementation	Identify and implement technical solutions to address challenges by using AI techniques like predictive analytics, machine learning, deep learning, RPA, natural language processing, computer vision, and recommendation engines.	• AI Suitability Assessment • AI Technology Evaluation • Rapid Prototyping • Training Data Sourcing • Data & Technology Acquisition Support • Explainable AI Report • Model Test, Validation, Verification & Deconfliction • Training and Reference Guides