

## CLOUD ADOPTION

# Enable the Adoption of Digital Business Capabilities Using Cloud-based Technologies

The Cloud Adoption (CA) Center of Excellence facilitates successful integration of cloud services by helping agencies select, and fashion, the right migration path to implement by an industry partner. The Cloud Adoption team developed a set of services based on best practices, both in the commercial and government sectors, to help agencies successfully implement cloud strategies.

There is no one-size-fits-all cloud migration strategy. With the right plan, agencies can reduce risk and execute a cloud migration program with the ability to better manage the time and cost. The CA CoE provides cloud adoption and migration planning services to meet business specific challenges and requirements. Deliverables include a customized cloud migration strategy that allows for the integration of cloud-based solutions into the existing enterprise environment.

The CA CoE has developed a set of services based on best practices in both the commercial and government sectors to help agencies successfully migrate to the cloud and integration new cloud-based capabilities.

The CA CoE has supported improvements across the federal government:

- Established a USDA enterprise level cloud organization, **Cloud Platform Service**; centralizing core cloud capabilities to provide consultative and technical services to stakeholders across USDA.
- Designed a cloud and artificial intelligence/machine learning (AI/ML) enabled **Intelligent Data Extraction** solution for agency partner to extract structured data from paper case binders, comprised of over 120 million pages annually.
- Conducted an cloud-based **Electronic Records Management (ERM)** pilot within agency partner to provide an enterprise ERM capability for compliance with NARA's Federal Electronic Records Modernization Initiative (FERMI).
- Updated the USDA **Cloud Policy & Strategy**, incorporated Cloud Smart and modern software delivery and strategy best practices.
- Established **DevSecOps** best practices, reference architecture, and requirements for pipelines that can be shared with USDA agencies.

# Cloud Adoption CoE Service Catalog

SERVICE	DESCRIPTION	SAMPLE DELIVERABLES
<b>Migration Planning Support</b>	Define a project plan with validated business, technical, cybersecurity requirements. Develop comprehensive and sequenced migration roadmap, and migration strategies and guardrails to minimize risk, cost, and time to completion.	<ul style="list-style-type: none"> <li>• Application Rationalization</li> <li>• Reporting Workshop</li> <li>• Inventory Analysis</li> <li>• Dependency Analysis</li> <li>• Technical Feasibility</li> <li>• Cost estimation and sizing</li> </ul>
<b>Cloud Solution Architecture Support</b>	Align cloud strategy with agency enterprise architecture, design patterns, and other standards.	<ul style="list-style-type: none"> <li>• Cloud Architecture</li> <li>• Access to Cloud Environment(s)</li> <li>• Identity and Access Management</li> <li>• TIC/Networking</li> </ul>
<b>Business Applications and Digital Capabilities</b>	Implement modern capabilities such as Forms-as-a-Service, Intelligent Data Extraction, and Electronic Records Management to provide effective and efficient business tools.	<ul style="list-style-type: none"> <li>• Cloud-based PaaS and SaaS capability Implementation</li> <li>• Integration with existing applications and legacy systems</li> <li>• Compliance with 21st Century IDEA, ESIGN Act, and NARA</li> </ul>
<b>Cloud Security</b>	Review agency cloud security and architecture needs across several dimensions: rogue elements, data characteristics, privacy and confidentiality, data controls, access policies, and governance.	<ul style="list-style-type: none"> <li>• FedRAMP and NIST Compliance</li> <li>• Authority to Operate (ATO)</li> <li>• Identity, Credential, and Access Management (ICAM)</li> <li>• Security Assessments, Plans, and Reports</li> <li>• Compliance Reporting</li> <li>• Security Impact Analysis</li> </ul>
<b>Cloud Governance</b>	Bring approaches from successful cloud governing models to establish oversight of the program by leveraging automation, establishing strategic vision, and creating a sustainable cloud operating model.	<ul style="list-style-type: none"> <li>• Cloud Management Platform</li> <li>• Cloud Operating Model</li> <li>• Compliance Automation</li> <li>• Provisioning/Orchestration</li> <li>• Budget Enforcement</li> <li>• Architectural Standards</li> <li>• Cloud Vision and Strategy</li> </ul>
<b>Cloud Acquisition Support</b>	Develop innovative solutions to assist with cloud acquisition strategy to develop and manage cloud-based contracts, SOW, and best practices.	<ul style="list-style-type: none"> <li>• Acquisition Strategy</li> <li>• Statement of Work Development</li> <li>• Contract Vehicles Analysis</li> <li>• Bid Evaluation Support</li> </ul>