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FEDERAL CAPABILITY STATEMENT

Digital Modernization | Architecture | Engineering

Modernize the experience. Modernize the systems behind it.

Trefidian Systems helps federal organizations modernize digital services and mission systems by connecting human-centered design, software architecture, UI/UX, platform engineering, secure delivery, data integration, and technical governance.

We bring senior technical leadership from the interface users experience through the systems, platforms, integrations, and delivery machinery underneath it - using Agile, iterative delivery practices to reduce modernization risk and keep technical decisions connected to mission outcomes.

Core Competencies

Digital Experience & Product Modernization

UI/UX strategy, human-centered design, information architecture, responsive web applications, design systems, Section 508 accessibility implementation, usability improvement, frontend engineering, and modernization of public-facing and internal digital services.

Application & Legacy-System Modernization

Legacy decomposition, target-state architecture, API enablement, integration strategy, migration sequencing, technical-debt reduction, cloud modernization, and incremental modernization roadmaps that allow mission operations to continue while systems evolve.

Technical Governance & Delivery Assurance

Architecture and design review, technical risk assessment, requirements traceability, contractor and vendor oversight, build-versus-buy analysis, technical decision governance, and cross-team / cross-vendor delivery coordination.

Secure Platform & DevSecOps Engineering

CI/CD, infrastructure as code, Kubernetes and container platforms, automated testing, observability, reliability engineering, internal developer platforms, and security-conscious engineering in federal delivery environments.

Data, Integration & Automation

Data architecture, APIs, systems integration, workflow automation, data-quality improvement, enterprise knowledge systems, engineering automation, and pragmatic use of AI where it produces measurable operational value.

Embedded Senior Technical Leadership

Principal-level architecture and engineering leadership for modernization planning, technical direction, vendor alignment, delivery recovery, and hands-on support where senior technical judgment is the constraint.

Principal Federal Experience

Social Security Administration - Disability Case Processing System (DCPS2)

Senior software engineering and technical leadership supporting SSA's nationwide modernization of disability case processing following a reset of the original DCPS modernization effort.

DCPS2 was rebuilt using Agile methods and an iterative, incremental delivery model centered on close collaboration among developers, business experts, and users. The program replaced 52 independently operated Disability Determination Services (DDS) case-processing systems with a common national platform supporting core disability-processing workflows, including case assignment, claimant interaction, disability determinations, quality review, workload management, and related operational functions.

The modernization used modern technologies, cloud environments, and open-source products, with short planning cycles, frequent releases, and functionality expanded through regular user-informed product increments.

Principal experience included user-facing application development, workflow modernization, service and API architecture, systems integration, automated testing, CI/CD, secure delivery, and technical design within a mission-critical federal environment.

The engineering culture emphasized 100% unit-test coverage by convention, explicit automated testing of all logical application paths, rigorous peer review, and unusually strong technical documentation.

U.S. Department of Education / Federal Student Aid

Senior Platform Architect and Product & Platform Technical Advisor supporting modernization across five major systems, seven APIs, seven engineering teams, and three vendors.

Responsibilities included modernization strategy, architecture and design reviews, technical risk, requirements traceability, platform direction, engineering quality, CI/CD, observability, and cross-vendor architecture governance.

Differentiators

- Principal-led delivery with senior technical judgment close to the work.
- Full-stack modernization perspective from UI/UX through application, platform, data, integration, and operations.
- Federal experience across mission-critical systems, workflow-heavy applications, APIs, engineering teams, vendors, and governance.
- Strong bridge between technical architecture and actual software delivery.
- Hands-on experience delivering within a successful federal modernization reset built around Agile delivery, user collaboration, disciplined engineering, and strong technical governance.
- Small-business agility without juniorizing the work.
- Experience operating within federal security, privacy, accessibility, and governance constraints.

Engagement Models

- Digital Experience Assessment
- Modernization Architecture Assessment
- Embedded Technical Leadership
- Targeted Legacy-System Enhancements
- Independent Technical Oversight
- Platform / DevSecOps Engineering
- Subcontract / Teaming Support

Contracting Profile

BUSINESS STATUS
SBA Small Business

SAM.GOV
Registration in progress

NAICS

541511	Custom Computer Programming Services
541512	Computer Systems Design Services
541519	Other Computer Related Services
541611	Administrative & General Management Consulting
518210	Computing Infrastructure, Data Processing & Web Hosting
541330	Engineering Services

Contact

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