![DDC — DINÉ DEVELOPMENT CORPORATION]

*SOLUTION ACCELERATOR*

# Generative Optimization & Modernization Engine

*Redefining legacy modernization through advanced code conversion and refactoring*

## Overview

DDC's Generative Optimization and Modernization Engine (GENOME) leverages advanced Artificial Intelligence (AI) and Large Language Models (LLMs) to provide a scalable, reliable, risk-mitigated pathway for legacy modernization. Unlike traditional methods, GENOME uses contextual understanding to not only translate legacy code into modern programming languages, but also optimize it for future scalability and maintainability. This modernization approach preserves the functionality of the original system while enhancing readability, modularity, and alignment with contemporary development practices. GENOME significantly reduces manual burden, accelerates timelines, and ensures that the transformed codebase remains adaptable for future updates, integrations, and enhancements.

## Our Approach

GENOME employs a modular, AI-driven workflow enhanced by automated Test-Driven Development (TDD). By segmenting monolithic systems, it mitigates risk and accelerates timelines. Leveraging advanced LLMs, GENOME translates legacy languages into modern equivalents, while human-in-the-loop oversight ensures mission alignment and robust security.

GENOME reaches beyond superficial code translation by comprehending original developer intent, remediating embedded poor coding practices and drastically reducing technical debt. The result is a streamlined, future-ready codebase anchored in modern best practices.

## Features

- **AI-Driven Automation**
  Legacy code transformation through conversion and refactoring for enhanced performance

- **Chain-of-Thought Reasoning**
  Our LLMs interpret and refine code logic step-by-step, bridging gaps in business logic

- **Jenkins-Powered CI/CD Pipelines**
  Incremental, test-driven modernization, reducing risk and ensuring seamless integration

- **Test-Driven Development (TDD)**
  Comprehensive testing methodologies, ensuring functionality and reliability

- **Human-In-The-Loop (HITL) Integration**
  Expert oversight at key phases, aligning with mission-critical requirements

## Key Benefits

- **Accelerated Operational Timeline**
- **Cost Optimization**
- **Eradicated Technical Debt**
- **Future Ready & Scalable**
- **Improved Mission Effectiveness**

**DDC**

## Heritage-Inspired Accountability. Mission-Driven Impact.

As a wholly owned instrumentality of the Navajo Nation, DDC operates with a purpose beyond profit. Unlike traditional firms beholden to Wall Street or equity partners, our commitment is to the sustainable prosperity of the Navajo Nation and its People. Our Heritage-Inspired Accountability Model allows us to take a different approach—one that prioritizes long-term value, trust, and innovation.

Through our Solution Accelerator Model, we bring proven capabilities that empower delivery teams and accelerate digital transformation for our customers. By investing in open, scalable solutions and fostering true partnership, we don't merely deliver services —we build lasting relationships grounded in trust, integrity, and mission success.

## Corporate Snapshot

- Navajo Nation tribally owned family of companies
- SBA certified 8(a) and Small Disadv. Businesses
- 700+ employees
- 130+ CONUS and OCONUS operating locations
- Federal, state, and tribal government markets
- 20-year history of proven performance

## Innovation in Acquisition

- ☑ **Non-protestable awards**
- ☑ **Streamlined procurement process**
- ☑ **Increased contract capacity**
- ☑ **SDB contracting credit**
- ☑ **Advanced mission priorities**

## Customer Success Story — *DFAS MOCAS*

The Mechanization of Contract Administration Services (MOCAS) mainframe underpins the Defense Finance and Accounting Service's (DFAS) management of billions of dollars in contract payments annually. DDC has employed GENOME to become the first generative AI solution to implement MOCAS modernization. Handling 150,000 lines of COBOL and JCL, GENOME systematically converts and optimizes the legacy codebase, preserving complex payment workflows. Through its implementation, GENOME has drastically improved operational timelines while reducing risk across the enterprise. DDC's solution has powered efficiency and reliability for critical mission needs, positioning DFAS to meet both current and future requirements.

## Contact Us

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