

Enabling Digital Transformation for Large Farm Credit Bank in the U.S.

Client Overview

Created more than 100 years ago, the client is the largest agricultural lending organization in the United States, playing a critical role in the nationwide Farm Credit System. It provides funding and business services to local farm credit Associations throughout 18 eastern states, and Puerto Rico.

The Business Situation

As a federated cooperative funding 20+ affiliated associations operating across 18 states, the bank is largely dependent on the associations for business growth and success. Therefore, a robust loan system addressing agricultural lending challenges, and supporting customized products in Farm Credit are critical for success. Adopting technology-led solutions was imperative to provide customized products and services, improve efficiencies, and deliver competitive advantage for its associations.

The Solution

A leading-edge solution based on Service Oriented Architecture (SOA)/Microservices, with several major components - Domain Services, Core Framework, Service Management, Loan Origination, Master Data Management, etc. - to be implemented in a multi-phased model was proposed. The key architectural baselines for references were - Service Domain Model for effective management of service assets; Service Classification for right tech choices; Platform Capability Model for operationalizing enterprise-class SOA; and Patterns and Guidelines for standardization in development of services. 'Farm Credit Express' was customized and integrated with 'Credit Delivery', with several functionalities automated, to eliminate manual intervention and errors. Document generation and management was completely revamped as a cloud service.

A highly automated, unified loan processing system with rich user interface was implemented with domain microservices, and an Enterprise Service Bus to integrate channels and vendor products. This enabled credit delivery in a futuristic platform with seamless visual and backend integration.

Challenges

- Inefficiencies due to manual processes and errors
- High loan processing time due to overall inefficiencies
- Rigid loan processing system, not flexible or scalable
- Inability to deliver customized products and services

Solution Highlights

- Customization and integration of 'Farm Credit Express' with 'Credit Delivery'
- Automated, unified solution using reusable, decoupled domain-based microservices
- Enterprise Service Bus integrating channels and vendor products
- Cloud delivered service for on-demand document generation, distribution, approvals, archival
- Major areas of loan processing automation:
 - Credit bureau score/decision
 - Collateral and document management
 - Loan retail rate and fee management
 - Payment scheduling for loan applications

Solution Outcomes

- Highly efficient Farm Credit System
 - Loan processing in < 5 days from 85-90 days
 - Manual effort optimization and reduction in errors
 - Efficient document management
- Scalable, modular, flexible architecture aligned with business
 - Minimal development effort for new requirements
 - Seamless integration of new business systems
- Rich user experience driven by intuitive interfaces
 - Smooth transition for users to new systems
- Cost-effective solution based on GS Lab | GAVS' SOA adoption principles
 - Effective use of technology capability, governance, processes
 - Complete alignment to standards and reusability
- 95% reduction in loan disbursement (disclosure) cycle time through integration of e-signature functionality
- Improved customer experience