Accelerating Digital Bill Payments with AI-Assisted Cloud-Native Engineering

Eight months from manual paper checks to a **scalable, event-driven digital payments platform** — built with AI-assisted engineering, delivered without disrupting End-of-Day workflows.

A leading S&P 500 fintech serving community and regional financial institutions partnered with GlobalLogic to replace a manual, paper-based bill payment process with a cloud-native digital workflow integrated to a tier-1 U.S. bank's processing API.

The result: lower operational cost, faster reconciliation, stronger data integrity, and an architecture built to scale into B2B payments and external integrations next.

"I'm incredibly proud of what we've accomplished together — from the deployment of key features to the seamless transition of support. These milestones reflect the dedication, coordination, and expertise that GlobalLogic brought to the table."

Director of Software Engineering, Payments Platforms

GlobalLogic
A Hitachi Group Company

The Architecture

- Cloud-native .NET API on AWS — SQS for messaging, Kubernetes (EKS) for orchestration, Grafana and CloudWatch for full observability
- Pre-submission validation + automated retry with DLQ — catches failures before they hit the bank API, handles the rest gracefully without losing transactions
- Daily lockbox eligibility synchronization — keeps payment data accurate across systems
- AI-assisted code and test generation — accelerated delivery without compromising reliability

Impact

8 months end-to-end delivery · Eliminated check printing, shipping, and handling cost · **Faster processing** and reconciliation · Decoupled, observable **cloud-native architecture** built for uptime · Architecture **extensible to B2B payments** and external integrations