MULTIPLIED SOLUTIONS

Transforming Quality Assurance in Financial Services



How a Leading US Digital Bank

Exited Offshore Chaos · Embraced AI-Driven Nearshore Engineering · Secured a Mission-Critical Product Launch

The Challenge: The Cost of Traditional Offshoring

Prior to partnering with Multiplied, the financial institution relied on an offshore vendor in Vietnam. While the hourly rates appeared attractive on paper, the true cost of execution paralyzed software delivery.

The 14-Hour Timezone Void: Zero real-time overlap between US engineering managers and offshore testers led to 24-hour communication delays, stalling agile development cycles.

Passive "Black-Box" Testing: Offshore resources acted strictly as mechanical script executors. They blindly clicked through interfaces without understanding backend business logic, complex data fields, or database dependencies.

Legacy Data Chaos: The outgoing team left behind highly disorganized spreadsheets, fragmented test records, and incomplete technical maps.

Unexpected Leadership Gaps: Shortly after onboarding Multiplied, the client experienced internal restructuring that resulted in the loss of key software architects. Internal product teams were left heavily overextended and in critical need of structured, self-driven QA direction.

The Approach: Elevating QA Beyond Test Execution

Multiplied provided a team of Nearshore QA Engineers working in timezone alignment with the client's teams.

Instead of just running tests, Multiplied embedded themselves as engineering and process consultants, completely auditing and rebuilding the bank's testing ecosystem.

Deep Backend Verification

The team took full technical ownership of the **Fort Knox Banking Platform**, a highly sensitive digital banking application enabling users to open checking accounts, clear real-time funds, and link external bank accounts.

- Security & Fraud Auditing: Validated complex backend response parameters and international risk-scoring models.
- Infrastructure Testing: Queried non-relational environments and audited data packages across **Azure Blob Storage** to guarantee seamless KYC and anti-fraud validation prior to the MVP launch

Credit Bureau Interconnection

Multiplied also supported the **CreditStrong** business unit, responsible for regulated exchanges of consumer credit information.

- Integration Testing: Validated live, multi-layered data feeds and API connections with major credit bureaus like **Experian.**
- Data Integrity: Testing focused on ensuring information remained consistent between backend systems and customer-facing interfaces.

Full-Stack Quality Infrastructure

- API Dominance: Executed advanced schema validations, payload integrity checks, and error-code testing using **Postman** and **Swagger.**
- Database Validation: Using **SQL Server**, engineers performed direct data validation to verify financial transaction logic.
- Knowledge Engineering: Formulated exhaustive architectural guides, user journeys, and system flows directly inside **Confluence**, building a permanent knowledge asset for the client's engineering teams.



THE PARADIGM SHIFT: REDEFINING PRODUCTIVITY WITH AI

A key component of the engagement was the adoption of TestMu AI, an AI-assisted automation platform. This completely transformed how engineering output was measured within the bank:

Traditional Process

Productivity was historically measured by the number of test cases created manually.

The Multiplied Metric (AI-Powered, High-Value)

By utilizing TestMu AI's intelligent prompt engine, Multiplied engineers instantly generated **15 to 20 robust test scenarios with a single prompt.**

This allowed the team to dedicate more time to:

- Reviewing business logic
- Identifying edge cases
- Aligning tests with Jira acceptance criteria
- Expanding automation coverage



Measurable Impact & Quantitative Triumphs

RISK MITIGATION BEFORE LAUNCH

122 

HIGH BUGS BLOCKED

Fort Knox Banking Platform

Stopped system-crashing account creation errors and incorrect fraud-flag anomalies before product launch.

33 

VULNERABILITIES INTERCEPTED

CreditStrong

Caught severe bureau data-parsing faults and schema mismatches in staging environments.

TEST AUTOMATION MATURATION

 **751**

FORMAL TEST CASES CREATED

551 Fort Knox | 200 CreditStrong

Engineered an extensive, organized testing framework across both platforms.

 **51%**

AI-POWERED REGRESSION COVERAGE

TestMu AI

Accelerated the automated test suite for Fort Knox core onboarding and financial transaction pipelines to achieve 51%.

PROCESS OPTIMIZATION & SCALING

STREAMLINED DEFECT GOVERNANCE

Transitioned the client from a disorganized bug-creation habit to a strict, clean **"Reopened Defect" workflow.** This minimized context-switching for developers and sharply cut down the time required to patch bugs.

AUTONOMOUS SCALING

Impressed by the team's proactive execution, the bank expanded the original engineering squad by

50%

mid-project to scale QA coverage across multiple business divisions.

The Legacy

While the engagement concluded as the financial institution strategically shifted toward localized, in-house permanent US headcount, Multiplied didn't just leave behind a checklist, **they left behind a modernized engineering culture.**

The high-velocity **TestMu AI automation models, clean Jira governance standards, and extensive Confluence knowledge bases** remain deeply embedded in the bank's core systems. Through proactive execution, engineering autonomy, and cutting-edge AI orchestration, Multiplied successfully transformed a lagging manual operation into a world-class, risk-mitigated software delivery machine.

Get In Touch With Us

READY TO MODERNIZE YOUR QA ECOSYSTEM?

Stop paying for passive testers. Partner with proactive nearshore engineers.

Contact us today to schedule an architectural assessment and learn how our AI-driven nearshore models can secure your next product launch.



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