

**Driving Large-Scale  
Reduction in QA cost  
through AI-Driven  
Maintenance for a  
Leading Indian Bank**

# Overview

One of India's **largest private-sector banks** operates a digital ecosystem of 5,000+ APIs spanning retail banking, credit cards, lending, deposits, payments, merchant commerce, and risk systems.

To support these mission-critical workflows, the bank relied heavily on manual test scripting and a traditional code-based testing tool, which created rising maintenance cost, long regression cycles, and inconsistent coverage across business units.

The bank deployed **KushoAI's on-premise autonomous testing and maintenance platform** to modernize quality engineering, reduce cost, and establish a scalable foundation for API reliability.

## The Challenge

### 1.

A large QA team manually wrote and maintained API tests in a legacy tool, leading to slower throughput and inadequate coverage.

### 2.

Frequent API changes across business lines made manual test upkeep increasingly expensive.

### 3.

Existing coverage gaps introduced operational, customer, and compliance risk.

### 4.

Regression cycles delayed releases across payments, onboarding, lending, and credit-card journeys.

### 5

Security testing required decryption of internal encrypted payloads, which legacy tools did not support, leading to more manual effort in testing.

## Why They Chose KushoAI

Autonomous test creation with self-healing capabilities, eliminating the need for manual scripting.

Custom on-premise security integration, including a module that securely decrypts internal payloads before executing tests

Ability to phase out large portions of the legacy test-scripting while improving comprehensiveness of tests

Non-disruptive rollout into existing CI/CD pipeline and release processes

Enterprise-grade deployment built to meet strict financial-services compliance

## The Solution

KushoAI was deployed entirely within the bank's infrastructure and integrated with internal API specifications, CI systems, authentication flows, and secure data pipelines. The platform autonomously delivered:

Full functional and security test suites generated in minutes

Self-healing tests that automatically adjust to contract or logic changes

A secure workflow to decrypt → test → re-encrypt for internal payloads

Automated test runs on every commit, with clear governance and release reporting

This allowed QA teams to move from manual script authoring toward higher-value analysis and release-readiness functions.

# Impact

## Cost Savings

For one business application consisting of approximately 2,000 APIs, KushoAI delivered:

**80-90%**

reduction in annual QA + maintenance cost

**₹9-11+ Cr**

Equivalent to ₹9-11+ Cr in yearly savings, driven by avoided manual effort and lowered cost for defects remediation

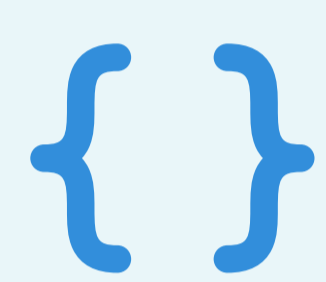
**1 Month**

Payback in under 1 month, with savings compounding every quarter

**Support**

Ability to scale with growing API infrastructure without hiring additional QA headcount

## Efficiency Gains



Replacing code-heavy manual scripts with modernized AI-authored test suites



Significantly faster regression cycles, supporting more frequent releases



Consistent, standardized test coverage across all business-critical APIs



Removal of repetitive QA workload, enabling teams to focus on edge cases & governance

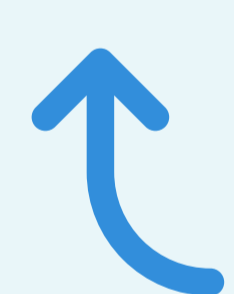


Automated security testing uplift via decrypted payload handling

## Quality & Reliability



Reduction in escaped defects across customer-facing and regulatory workflows



Higher stability and predictability in release cycles



Stronger governance and auditability aligned with BFSI requirements

# Business Outcomes Enabled

KushoAI provided the bank with a scalable, cost-efficient foundation for quality engineering across thousands of APIs. The deployment enabled:

Modernization of QA workflows previously dependent on manual scripting

Significant cost reduction without compromising coverage or release velocity

A secure, compliant AI testing layer tailored to BFSI requirements

Automated, standardized test quality across business lines

A more predictable, reliable release process as API ecosystems expand