Fintech & Compliance · Case Study

AML Screening Fast Enough to Feel *Invisible*

How 10Decoders engineered a real-time, multi-source anti-money-laundering screening system for a cross-border payments platform — clearing every transaction before funds settle.

200/sec
Screening requests processed in real time

4 Sources
Sanctions · PEP · watchlists · adverse media

0 Delay
Screening completes before funds settle

ENGAGEMENT SNAPSHOT

Client / Engagement	**A Cross-Border Payments Platform**
Completed By	**10Decoders**
Domain	**Fintech — cross-border remittance, digital payments, e-wallet & currency exchange**
Team Size	**8 engineers**
Project Duration	**12 months**
What We Delivered	**A production AML screening application**

OVERVIEW

Compliance That Keeps Up With the Payment

Every transaction carries a hidden question: is this payment connected to a sanctioned entity, a politically exposed person, a watchlisted individual, or a party named in adverse media? Regulators expect that answered before funds move; customers expect it answered instantly.

10Decoders engineered a screening layer that sits directly in the transaction path, checking every payment against sanctions, PEP, watchlist, and adverse media data in one automated pass — sustaining 200 screening requests per second.

CHALLENGE & APPROACH

Speed Versus Scrutiny

THE CHALLENGE

- ✕ Sanctions, PEP, watchlist, and adverse media checks ran as separate, sequential lookups.
- ✕ Batch and overnight reconciliation delayed legitimate payments by hours or days.
- ✕ Instant payment rails left no time budget for screening at all.
- ✕ Rigid list-matching buried genuine alerts under false positives.

OUR APPROACH

- ✓ Unified all four sources into a single automated screening pass.
- ✓ Moved screening in-line with the transaction, eliminating batch runs.
- ✓ Returned decisions inside the payment's live processing window.
- ✓ Added fuzzy matching and risk scoring to cut false positives.

HOW IT WORKS

From Transaction to Decision

Every payment or onboarding event moves through a single, automated screening pass before it's allowed to proceed.

1. A transaction or customer record enters the live payment workflow.
2. It's screened **in parallel** against sanctions lists, PEP registries, global watchlists, and adverse media.
3. **Fuzzy name-matching** and transliteration handling normalize and compare identity data.
4. **Risk-based scoring** ranks any hits so analysts focus on genuine risk, not noise.
5. A **clear, flag, or block** decision returns before the payment settles.

WHY IT WORKS

Built for Speed and Scrutiny

→

Single Unified Pass

Runs all four data sources together instead of as separate lookups.

→

In-Line, Not Batch

Screening sits directly in the transaction path, not after the fact.

→

Fuzzy Name Matching

Handles name variation and transliteration so real matches aren't missed.

→

Risk-Based Alerting

Prioritizes alerts by actual risk instead of flooding analysts with noise.

→

In-Memory Reference Data

Keeps lookups fast enough to fit inside the payment's processing window.

→

Built to Scale

Throughput scales with volume without a proportional rise in headcount.

BUILT FOR EVERY STAKEHOLDER

Impact Across the Business

Real-time screening changes the experience for everyone touching the transaction — not just the compliance team.

COMPLIANCE TEAMS

Fewer False Positives, More Signal

Risk-scored, fuzzy-matched alerts let analysts focus on genuine risk instead of chasing noise.

CUSTOMERS

Payments That Feel Instant

Screening completes before settlement, so legitimate transactions move without added delay.

LEADERSHIP

Compliance as a Differentiator

Real-time, auditable screening turns a regulatory obligation into a competitive advantage.

RESULTS

Proven in Production

200/sec
Sustained screening throughput

4 Sources
Screened in a single automated pass

12 Months
From engagement start to production

✓ Deployed in production

✓ First-of-kind build for 10Decoders

✓ Reusable across future fintech engagements

DELIVERY, COST & IP

What This Engagement Delivered

Delivery Quality

- Deployed and operating in the client's production environment.
- Sustains 200 screening requests per second under live load.
- 10Decoders' first engagement of this kind.

Cost & ROI

- Risk scoring reduces false positives and manual review load.
- Throughput scales with volume without proportional headcount growth.
- Replaces batch reconciliation with continuous real-time processing.

IP & Security

- Not patentable, but designed to be reusable across future fintech builds.
- Built as a core, reusable 10Decoders capability.
- Produces a defensible, auditable screening trail for regulators.