

How a Miami Bank Modernized Retail Banking AML with ThetaRay AI

Executive summary

As retail banking digitalizes and transaction volumes skyrocket, traditional rule-based anti-money laundering (AML) systems are increasingly unable to keep pace. A leading institution headquartered in Florida, dedicated to managing financial crime risk without aggressively de-risking valuable customer segments, faced a common industry dilemma: compliance teams were bogged down by operational noise, threatening both efficiency and regulatory trust.

By partnering with ThetaRay to replace legacy infrastructure with **AI Transaction Monitoring**, the bank achieved dramatic operational improvements, significantly driving down false positives while sharpening its risk detection capabilities.

The Challenge: Legacy Noise in Retail Banking

Monitoring retail accounts requires balancing high transaction velocity with highly nuanced customer behavior. The bank's legacy AML systems relied on rigid, static rules that generated an overwhelming volume of low-quality alerts.

- **The “De-Risking” Dilemma:** Rather than arbitrarily shutting down accounts to minimize risk—a practice that stifles business growth—the institution aimed to maintain a robust, precise compliance posture that protected legitimate customers while exposing true bad actors.
- **Alert Fatigue:** Analysts spent critical hours manually investigating false alarms, resulting in high operational costs and a reactive compliance culture.
- **Risk Exposure:** Rule-based architectures completely missed complex, evolving financial crime typologies, leaving the bank exposed to sophisticated bad actors who knew exactly how to circumvent standard system thresholds.

The Solution: AI Detection at the Core

The bank implemented ThetaRay's Transaction Monitoring AI solution to introduce multi-dimensional, risk-based monitoring. Moving away from basic mathematical thresholds, the platform utilizes dozens of weighted risk indicators to map normal human behavior and immediately spot anomalies.

Every alert delivered to the bank's analysts now provides a holistic view of the transaction, complete with automated context, visual lineage paths, and clear rationales for why the activity was flagged. This effectively shifts the compliance team's focus from manual “data mining” to high-value, strategic investigations.

The Impact: Measurable Operational Excellence

Within months of deployment, the compliance team realized substantial, quantifiable improvements across its retail banking compliance framework:

45% Total Alert Reduction

- Reduced operational noise and eliminated large volumes of redundant alerts annually.

70% Reduction in False Positives

- Drastically decreased the noise ratio, ensuring investigators spent time only on highly suspicious, “detection-worthy” activity.

Accelerated Time-to-Resolution

- Rich contextual insights and clear visual data paths reduced investigation times from hours to minutes.

Protected Revenue & Growth

- Allowed the bank to safely scale its retail portfolio and avoid blanket account de-risking.

Ready to scale AML compliance the smart way?

Talk to an expert

And discover how ThetaRay's AI-powered transaction monitoring reduce alert fatigue, improve compliance performance, and stay ahead of risk.

Visit thetaray.com or email info@thetaray.com