

Castellum.AI



How Lead Bank Cut False Positives in Half with Castellum.AI

Client: Lead Bank

Industry: BaaS Sponsor Banking

Use case: Payment Screening, KYC Onboarding Screening

50%

Reduction in false positives



Castellum.AI is one of the most nimble vendors I've ever worked with, and they care about your ideas. Unlike other providers where you submit a ticket and wait weeks for a response, the team is always readily available for assistance and technical support. They put out a great product that allows us to truly own the risk and the process."

15 Hours

Saved weekly on screening reviews



Daniel Schneider

Director of Financial Crimes, SVP, Lead Bank

Client Overview

Based in Kansas City, Lead Bank is a premier Banking-as-a-Service (BaaS) sponsor bank providing banking infrastructure and payments connectivity to major fintech partners across payments companies and BNPL (buy-now-pay-later). Its platform integrates with major payment networks like FedWire and ACH, enabling real-time reconciliation and operational oversight. Lead Bank is known for delivering a scalable banking foundation that supports complex fintech programs while maintaining strong regulatory and risk controls.

Introduction

Lead Bank is an FDIC-regulated institution and sponsor bank serving both community banking clients and high-growth fintech partners. As the bank expanded its operations and BaaS programs, its legacy screening solution could not keep pace with the increased complexity of its customer base or payment flows. Inaccurate payment screening alerts, workflow inefficiency and limited control over screening logic became operational bottlenecks.

To address these needs, Lead Bank implemented Castellum.AI's screening solution for its customizability, real-time data updates and direct access to domain experts during and after deployment. Castellum.AI enabled the team to align screening parameters with its risk methodology and operational exposure.

The impact was immediate. False positives dropped by more than 50 percent, and the payments monitoring team saved 15 hours per week through reduced manual reviews. These improvements strengthened compliance controls, improved confidence of their fintech partners and supported the bank's growth across international payments and BaaS partnerships.

“Castellum.AI has given us the ability to perform all best-practice screening in house for ourselves and on behalf of our fintech partners at a high level, with little overhead in terms of ongoing monitoring and integration.”

Daniel Schneider

Director of Financial Crimes, SVP, Lead Bank

Challenges

As Lead Bank's operations expanded, its existing screening solution could no longer meet the demands of the business.

- 1 **Lack of customization:** The legacy solution offered no ability to adjust list coverage, tune matching logic or build waterfalls to reduce noise. This limited the bank's ability to align screening performance with its risk posture.
- 2 **Scalability constraints:** As the bank expanded its BaaS program to cover digital assets and international payments, existing controls could not support the increased operational complexity. The team needed screening capabilities that could scale with new client types and payment activities, and provide greater visibility and control over how results were generated.
- 3 **Operational burden:** These constraints created significant manual workload. False positives were above 99 percent, with each alert requiring at least 5 minutes of manual review. Constrained by a rigid system and no path to optimize accuracy, the compliance team's workload increased dramatically with each new BaaS partner onboarded.

Challenges and requirements: Rising compliance needs and manual workload highlighted the need for a more flexible, modern solution with more control over both data and decisioning.

Solution: Advanced customization capabilities and precise screening that removes compliance bottlenecks to growth.

Solution

Lead Bank needed a screening solution that could adapt to its growing business needs, support API-based workflows and reduce the manual work generated by its previous system.

Requirements and vendor evaluation

The evaluation focused on finding a solution that could be configured to Lead Bank's risk profile and scaled across a growing set of use cases to support a growing fintech partnership program. The team needed control over list source selection, risk thresholds and matching logic, supported by a vendor with the expertise to guide calibration. Rapid implementation and hands-on support from technical and compliance SMEs were essential. While cost was reviewed, the primary decision drivers were flexibility, screening accuracy and scalability.

Why Lead Bank chose Castellum.AI

- **Tunable screening parameters** aligned to Lead Bank's risk appetite
- **Extensive data coverage**, including global PEPs, 2,000+ watchlists and multilingual sources
- **Real-time data** updates to instantly identify changes in risk exposure
- **Automated data enrichment** and **advanced matching algorithm** that led to fewer false positives
- **Direct access to subject matter experts** for integration, tuning and ongoing support
- **A responsive, nimble vendor experience** that contrasted sharply with their previous solution



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Implementation and ramp up

Implementation was completed within a month, supported by dedicated Castellum.AI subject matter experts. The team described onboarding as “industry leading,” with technical ease, proactive guidance and no unexpected issues.

The rollout began with payment flows, including screening for incoming and outgoing wires and international ACHs. The bank initially aligned threshold with its previous system, then recalibrated after confirming higher match quality from Castellum.AI’s Jgram screening algorithm. Analysts reported a noticeable increase in efficiency once the API integrations were fully deployed into the payments platform.

Results

-  **Fewer alert volumes and false positives:** Screening accuracy improved sharply, cutting false positives by more than 50 percent. Daily alert volumes also normalized to roughly 100 alerts across payment decisioning and database screening, giving analysts a more manageable and predictable workload compared to their previous system.
-  **Increased operational efficiency:** Higher customizability and ease of use strengthened internal controls and reduced manual efforts. The payments monitoring team now saves an estimated 15 hours per week through lower alert volume and fewer reviews. Annual review activities are also faster with Castellum.AI. These gains have supported Lead Bank’s expansion into international payments and increased confidence in scaling its BaaS programs.
-  **Improved customer experience:** Customers now have greater confidence in the bank’s monitoring practices, particularly around the handling of suspicious or high-risk transactions.
-  **Stronger regulatory readiness:** Castellum.AI’s Knowledge Base materials, fast turnaround on questions and on-demand process walkthroughs have reduced audit prep time and strengthened confidence during regulatory reviews for Lead Bank.

About Castellum.AI

Castellum.AI is an end-to-end financial crime compliance platform that offers proprietary risk data, AML and KYC screening and explainable AI agents trained by former regulators. Our data covers sanctions, PEPs, adverse media and more, with real-time updates.

Castellum AI agents automate routine AML/KYC alert adjudication, enabling compliance teams to review risk faster while maintaining oversight and auditability. Castellum.AI's advanced Jgram matching algorithm delivers high-precision screening and real-time monitoring.

Castellum.AI is trusted by banks, credit unions, fintechs, crypto exchanges and financial services firms that need to scale compliance operations without compromising accuracy or regulatory rigor.

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