

ThetaRay Significantly Reduces False Positive Alerts in POC Transaction Monitoring Case Study

Executive Summary

A leading commercial North American bank (~\$60 billion in assets) with more than 200 branches and commercial offices identified a need to improve their transaction monitoring. Their current system was flagging a significant amount of false positives (95%+ on 3k monthly alerts) requiring heavy investigation from their 25 FTE analyst team, which impacted not only their alert remediation SLAs but resulted in increased workload and heavy costs. The additional impact to this team was staff augmentation of 6 more resources to manage the barrage of L1 alerts being generated each month. The bank had an incumbent rules-based solution in place, which management did not currently wish to fully replace.

Project Scope: Proof Of Concept (POC)

To perform a POC on the bank's existing old data using ThetaRay Transaction Monitoring machine learning solution. The dataset would be fully unlabelled and existing rules/typologies would be provided but with no additional context or risk discovery permitted. Bank mandate was for ThetaRay to produce results within a 4-week period.

Objectives

To demonstrate how adding ThetaRay's ML-first, risk-based solution on top of the existing transaction monitoring platform could significantly reduce the number of false positive alerts generated.

The bank was looking to:

- Quickly identify L1 alerts with high accuracy
- Increase hibernation to 35% or greater
- Add auto-escalation capability (not available with current solution provider)
- Create a feedback loop based on high priority investigations
- Reduce hours spent investigating alerts and instead focus resources on revenue generating activities
- Identify any new typologies and events
- Train the machine learning model to catch these new signals ongoing

Results

Over the course of 3 weeks ThetaRay allowed the institution to quickly and easily deploy multiple types of machine learning on top of the alerts produced by their existing transaction monitoring solution.



90% True Positive Capture

ThetaRay AI matched 90% of true positives in unlabeled dataset.



\$800K Cost Saving

ThetaRay hibernation rate achieved (in POC) would eliminate the current alert hibernation tool at a cost of \$150K. Additional savings apply to analysts time spent on alert investigation and remediation.



77% Hibernation Rate

ThetaRay significantly increased auto-closure / auto-hibernation of false positives from 15.5% to 77%. The goal was 35% or higher.



2,789 Time Reduction (Hours)

The financial institution estimates that the ThetaRay project reduced investigation time by thousands of hours; the estimated monthly reduction in alerts is nearly 1,000.



2.6x Alert Reduction

The increased rate of hibernated alerts which ThetaRay identified was in excess of the bank's numbers.



3 Weeks Project Turn Around

ThetaRay delivered initial results in 3 weeks after the project kickoff meeting. The estimated implementation time for full integration is expected to be 2-3 months

If you're interested in learning more about our machine learning Transaction Monitoring solution or how ThetaRay can assist with your AML requirements, visit:

thetaray.com or email info@thetaray.com