CASE STUDY

POSITIVELY TACKLING FALSE POSITIVES TO DELIVER $9 MN SAVINGS

Abstract

Robert Anderson, Vice President at a large American bank and responsible for its enterprise fraud management activities, was concerned about the high number of false positive cases pertaining to check frauds. With the bank’s check review processes being undertaken manually, the resulting lack of efficiencies led to unavoidable delays in check processing. This case details how Infosys BPM helped enhance the bank’s rule engine for fraud alerts to deliver over $9 Mn in savings.
A high percentage of false positives

Robert Anderson is a Vice President for an American banking giant, responsible for managing its enterprise fraud management activities. In recent months, Robert had noticed a high number of false positive cases being thrown up by the bank’s check fraud detection process, which was hurting the overall business efficiency of the bank.

There were three major issues that Robert had identified. Firstly, the issue was consuming valuable resources of the bank, with every check transaction that involved a false positive needing to be manually checked by the bank. Secondly, the offshore capacity to review fraud cases was limited to 7800 per day. Any cases above this limit were not being reviewed either onshore or offshore. In this scenario, the bank was running a major risk of letting a fraud transaction slip through its control mechanisms. Pritam also noted that the bank’s fraud alert ratio stood at over 13%, a high figure considering the huge volume of daily transactions being processed at the bank. These false positives were being caused by a system glitch that needed urgent attention.

Lastly, the manual check reviewing mechanisms were causing major delays, resulting in avoidable losses of millions of dollars. The longer turnaround times to process checks also meant that customers had to wait longer for their money to arrive. Robert was worried with the situation and needed to tackle down these issues.

Fine tuning the alerts system

The bank had partnered with Infosys BPM for the past 18 years using an offshoring model, with a growing team of Infosys BPM’s financial experts managing business processes of the bank relating to cheques, deposits, kiting, as well as retail and online activities. Robert discussed his issues with Pritam Sinha, who headed Infosys BPM’s offshore team and mandated him with investigating and undertaking the necessary steps to resolve the underlying issues in the process.

Approach summary

- Conducting comprehensive data analysis
- Amending check fraud alert parameters
- Implementing enhanced controls
- Setting up performance monitoring system

To tackle the issue, Robert and Pritam conducted a thorough data analysis of the existing fraud extraction reports being generated by the bank. Their team went through the data sets and mapped all the alerts to their fraud cases. The team also conducted a review of the bank’s rule engine which involved a thorough assessment of its check control parameters used to validate transactions and trigger fraud alerts. Once the review was completed, the team identified that a total of 15 such control parameters needed to be modified. These included parameters like signature suspect, stock suspect, and serial range.
Pritam then implemented the needed modifications to the rule engine and once these application enhancements had been carried out, the fraud extraction ratio of the bank dropped significantly from 13% to 4%. Further, Pritam and his team conducted regular sample monitoring of non-fraud trigger cases to ensure the changes made to the parameters did not result in actual fraud cases slipping through the net. As Pritam reported to Robert, the monitoring exercise indicated that the new system was working well, and no audit cases were missed by the new parameters. Finally, they also set up an effective rule engine performance monitoring system using a Power BI dashboards model.

Only positive gains

Robert was extremely pleased with the sharp drop in fraud alerts, a testament to the fact that Pritam’s team had successfully managed to fine tune the check fraud detection processes. In sum, their thorough scrutiny of the fraud alert rules engine helped the bank in realising savings of over $9 Mn. The solution helped Robert in collaborating with other bank stakeholders in a more effective manner. Furthermore, the enhanced monitoring also helped him in gaining valuable data insights pertaining to check frauds and their corresponding alerts.

Key benefits

- Delivered savings of over $9 Mn
- Timely check fraud detection increased from 95% to 100%
- Fraud alert ratio extraction dropped from 13% to 4%
- Insights on frauds and alerts
Additionally, the alert to fraud ratio, which is a key indicator of the bank's efficiency in terms of tackling check fraud, remained static at under 2% even after the fine tuning undertaken by the Infosys BPM team. This ratio was testament to the fact that the team managed to deliver tangible efficiencies in terms of reducing false fraud alerts without negatively impacting the quantum of check fraud detected by the bank. Moreover, the percentage of timely closures of the check fraud detection reviews moved from 95% to 100%, improving the bank's check processing efficiency and leaving customers far more satisfied with timely clearances.

The success of the project resulted in numerous internal accolades for Robert and highlights the fact that it is not always necessary to reinvent the wheel, continuous process improvement can also deliver major value.

*Names have been altered to preserve the identities of the people involved.*