



Improving Anti-Money Laundering Detection in Correspondent Banking

One of the world's largest, most geographically diverse financial institutions addressed existing inefficient AML operations by implementing Ayasdi AML

The bank engaged Symphony AyasdiAI to deploy state-of-the-art machine learning to analyze existing transaction data and identify anomalous behaviors in its correspondent banking operations. Ayasdi AML ensured bank investigators could effectively focus on actual suspicious behavior and minimize needless investigations. After the successful conclusion of an eight-week pilot program that reduced investigative volume by 20%, the bank deployed Ayasdi AML globally.

Challenge

Because banking regulation evolves rapidly, banks face considerable pressure to achieve a target of “zero failure.” The approach banks have employed in response to enhanced regulatory scrutiny is fundamentally adding more investigators to the organization. The complexity of the AML challenge, however, is not well suited to the manual approach on which most banks have relied. In this case, the global bank's existing AML efforts relied on sorting static account information using pre-determined rules. This process resulted in poor identification of suspicious activity, wasted investigator efforts, and overall low efficiency.

The bank set a goal to improve operational efficiency of its AML investigation volumes by 3%, with a stretch goal of 5%. Risk officials determined that using advanced machine learning on top of the bank's existing data and systems would provide better insights and lead to more effective investigation efforts.

Approach

Ayasdi AML's state-of-the-art capabilities addressed this mission-critical regulatory function by ingesting the greatest volume and variety of data available—about customers and transactions—and then applied objective machine learning to create the most refined and up-to-date segments possible. The crucial difference is that Ayasdi AML assigns—and reassigns—customers to segments based on their actual behavior, revealed in their real transactions and true inter-relationships, over time.

CHALLENGE

To improve AML investigation efforts at one of the world's largest most geographically diverse financial institution.

RESULTS

Ayasdi AML reduced investigative volume by more than 20%

BENEFITS

- Use more features in Swift message data to segment customers.
- Lowering regulatory exposure by discovering new risk segments that had previously gone unnoticed.

ABOUT THE BANK

One of the top 10 banks in the world with over \$2 Trillion in assets under management

Ayasdi AML uses smart segmentation as a crucial first step to accurately detect suspicious patterns from events coming from existing transaction monitoring systems (TMS). Intelligent segmentation correctly identifies similar patterns of behaviors and groups them together, allowing for effective monitoring.

With the bank, Ayasdi AML first analyzed available Swift message data. Unlike the bank's existing AML efforts, Ayasdi AML uses more data features including transactional data (type, direction, value, originator, date), customer data (geographical, chronological), and risk data to create segments for analysis.

Ayasdi AML ingests multiple types of data from the bank to perform feature engineering (to increase the number of features) on the data set.

Subsequently the application automatically creates a series of prospective segment groups using a subset of the data and giving the user the ability to set the number of segments it needs. Because Ayasdi AML uses unsupervised machine learning to analyze data, it selected the appropriate algorithms on its own to create candidate groups and tune the scenario thresholds within those groups until the optimal ones were identified. Ayasdi AML created more intelligent, defensible, and uniform groups using features different from the bank-constructed groups (usually static and based on course filtering).

Once Ayasdi AML identifies the optimal group structure, it creates a decision tree model, and then evaluates the distribution of customers within these groups— independently validate the results—and deploys them against the bank's existing TMS.

Results

Using Ayasdi AML smart segmentation, the bank achieved reductions in investigative volume of more than 20% while lowering regulatory exposure by discovering new risk segments that had previously gone unnoticed.

The entire project lasted eight weeks, staffed by two data scientists and a project manager from Ayasdi working with two domain experts from the. Following a review by the bank's internal model review board and the regulatory agency, the bank has now deployed Ayasdi AML globally.

About Symphony AyasdiAI

Symphony AyasdiAI, part of the SymphonyAI Group, is the world's most advanced artificial intelligence software company. Symphony AyasdiAI helps organizations discover new and valuable insights in enterprise data, with unprecedented accuracy, transparency, and speed. Built upon over a decade of research and experience, Symphony AyasdiAI delivers insights to Fortune 500 companies and public sector organizations to capture growth, avoid risks, and manage inefficiencies. www.ayasdi.com.

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