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Fraud detection case study

HSBC, short for Hongkong and Shanghai Banking Corporation, is a British universal bank and financial services group headquartered in London, England, that also has business ties in East Asia and numerous foreign operations. HSBS wanted to "enhance operational efficiency in the anti-money laundering domain by 3%, with an ambitious target of 5%."[1] Generally, thousands of workers were responsible for analyzing data and monitoring transactions. Because they relied on manual rules, their efforts often result in numerous false positives and overall inefficiency.

HSBC worked in partnership with Ayasdi, a machine learning software company, to build a solution for combating money laundering. HSBC provided transactional data such as type, direction and value; customer data such as geographical and chronological; and risk data. The goal was to create models that would recognize suspicious activity and patterns previously associated with money laundering. Once the software recognized the suspicious activity and "a payment was made," the software would alert the staff to block the payment. "Importantly, Ayasdi did not increase the number of groups; instead, it created more intelligent, defensible, and consistent groups using entirely different features compared to those used by the bank."[2] The integration of the software into HSBC daily operations, resulted in a 20% decrease in false positives, and helped discover new risk segments that had previously gone unnoticed.

Later HSBC partnered with Google Cloud to test the Anti-Money Laundering AI (AMI AI), advanced technology developed to enhance the detection and prevention of money laundering activities. This lead to a 60% decrease in false positives and an increase in true positive alerts by two to four times The primary concern with integrating an AI software with our financial institutions is the regulatory and risk concerns. To tackle this issue, Google Cloud developed AML AI. This solution offers secure deployment within the customers cloud environment flexibility and adaptability to the customers' needs. To ease the customers' concerns, they will also install a feature that allows detailed explanation of the alert.

An issue remained, will the bank depend completely on the AI software, or will it still continue to use a rules-based system? They did not provide a straight answer but Richard May, global head of complex investigations and group head of risk assessment at HBSC, stated they still had some areas to test the software with but "ultimately, the outcomes it achieved—successfully finding more financial crime—created reason enough to deploy this emerging technology to combat a decades-old problem."[3]

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[1] AI Business
[2] AI Business
[3] Moorhead

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References

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