## Data-driven analytics: enabling the financial services industry to fight financial crime

Regulators across jurisdictions are starting to view the adoption of innovative technological tools as vital factors to increase the effectiveness of their operations. Sachith Amarasekara reflects on how this is enabling banks to apply data led advanced analytics to their processes more aggressively.

The financial services industry—especially the banking sector—is evolving at an unprecedented pace. New entrants and ways of working are significantly challenging the status quo. Digitally led, these changes fundamentally alter how banks look at their operations and their financial crime compliance functions.

Banks are starting to use AI and ML capabilities to generate improved customer outcomes and achieve regulatory compliance. This is particularly relevant as some of the lowest levels of customer satisfaction ratings are due to services disrupted by compliance procedures.

## Addressing crucial concerns

Banks are looking to eventually increase customers' satisfaction with their services. For instance, this may include issues such as system updates and bank consolidation. Concerns in relation to data integrity and accessibility are common as it is typical for compliance personnel to access multiple systems when performing business-as-usual (BAU) processes such as closing alerts. In addition, banks are facing increased regulatory focus as regulators across the globe are putting them on the front line in the fight against financial crime.

Although regulatory requirements provide detailed guidance, they tend to increase the compliance burden. Rigorous compliance requirements for monitoring non-traditional customer profiles may also pose increased risk for banks. Banks struggle to comply with these increased regulatory expectations due to manual processes and legacy technologies.

Such technology limitations and legacy systems can no longer keep pace with the complexity of the global banking environment and huge volumes of data being produced.

Moreover, the financial crime landscape is constantly changing as criminals are finding new ways to commit crime via new technology, channels or products including digital currencies. Despite a variety of systems built to investigate financial crime alerts, there is a constant backlog of pending reviews. An instant response by banks in a dynamic regulatory environment is to invest more in manpower and ramp up manual efforts to quickly tackle the current demands.

Another major concern for banks is the operational challenges posed by the pandemic. With compliance teams still largely working remotely in many jurisdictions, updating systems and practices may be problematic. Given the large volumes of sensitive data involved in anti-money laundering (AML) compliance work, this may be particularly true in terms of knowledge transfer and onsite discussions.

## Adopting a data-driven approach

A data driven approach looks to address banks' major concerns in a systematic and automated way. On the contrary, traditional rule-based methodologies only cover the essence of regulatory requirements. Due to regulatory censure, operational efficiencies have not always been prioritized by banks. A data driven approach may enable banks to:

- augment traditional risk factors with statistically derived attributes created by a more meaningful combination of features and variables
- create a more dynamic risk assessment process by incorporating additional data points
- generate a scoring framework with a detailed web of risk factors

3 Evolving infrastructure capabilities

This looks to move away from the current rules-based approaches (RBA) which tend to incorrectly classify customers as high-risk. As a result, following the RBA often leads to customer resentment and eventually impedes the bank's relationships with clients. The data driven approach, on the other hand, depends on the maturity, confidence and availability of the bank's data. In any data driven approach, it is important to leverage dynamic risk factors, use a scientific approach through statistical analysis and continuously improve risk and data models.

## Applying data-led analytics

In addition to tackling the key challenges identified above, adopting a data led strategy can directly result in better accuracy, optimized operations, richer data and a better customer experience. Customer satisfaction increases exponentially as banks are able to ask the correct questions, avoid repetition and focus on the right transactions at the right time. Machine learning can also offer improved forecasting accuracy due to models' ability to capture non-linear effects between scenario variables and risk factors. On the other hand. traditional models such as linear regression do not adequately capture non-linear relationships between the macro economy and the financials of a business. This is especially true in the event of a stress scenario.

Meanwhile, optimizing operations involves a reduction in false positives and the addition of data-led insight. This allows the compliance function to operate efficiently and effectively. Business functions within banks are increasingly using compliance data stores to obtain a better understanding of their existing customers, providing banks with richer data sets and enabling better targeting of new customers.

Amid the increasing sophistication of money laundering schemes, transforming the compliance function is an ever-evolving process. Coping with regulatory requirements and fighting financial crime by deploying sophisticated techniques should be a top priority for banks. This can lead to an increased capture rate of bad customers, reduced compliance costs and an improved customer experience. Managing money laundering risk is a journey it is imperative that organizations exert every effort to use more advanced analytics to stay ahead of crime.



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