QUANTIPLY®

Transforming Financial Risk and Compliance with Explainable AI

Leverage artificial intelligence (AI) and machine learning to more efficiently and accurately identify suspicious actors and activities and reduce risk while lowering costs.

Vamsi Koduru

VP of Products, Quantiply

QUANTIPLY®

INDEX

TABLE OF CONTENTS

01. Introduction 03

A growing worldwide problem.

02. Challenge 06

Costly, inefficient approaches lead to poor performance

03. Solution 09

Quantiply's AI-based solution combines machine learning and subject-matter expertise for better results 09

Introducing Quantiply Sensemaker: a platform for large-scale cognitiveintelligence and reasoning 11

Off-the-shelf Pulse agents 12

Configurable rules-based and algorithm-based scoring 14

04. Benefits 17

Deeply understand customers and their potential risk patterns—simply, efficiently and in real time 17

Improved case intelligence and guided resolution 17

Creating intelligent customer risk profiles for more accurate assessment 18

Meeting regulatory requirements while reducing costs and financial penalties 18

How Explainable AI enables users to identify and understand otherwise hidden patterns and insights within their data 19

Reducing false positives to lower overall costs and resource dependency in alert triaging 19

Benefiting compliance officers, caseworkers and regulators 20

05. Conclusion 21

06. References 22

A growing worldwide problem

Compliance and regulatory (CoRe) risk has become one of the greatest challenges for financial institution executives and boards of directors. There are a growing number of overarching risks in today's financial services environment: globalization and its impact on political, economic and operations processes; financial practices with significant built-in risk, such as sophisticated, just-in-time treasury and cash management; online banking and the risk of exposing customer information and accounts to unauthorized parties; risks created by outsourcing selected functions and tasks to third and fourth parties; and more.

The financial services industry is highly regulated. The sheer number of regulatory bodies and continually expanding volume of regulations make it difficult for financial institutions to keep up with the threats and level of risk exposure. Until now, many banks have responded by building fiefdoms and creating labor-intensive processes to address these risks. In many instances, this has only served to magnify the problems. Costs are escalating. Training challenges persist. Reporting burdens are growing rapidly.

Compliance activities are largely isolated, with knowledge isolated in silos and no clear link to broader risk-management objectives and activities. At the same time, fines and other sanctions for failing to meet regulators' requirements or identify high-risk activities or suspicious actors are reaching record levels—in some cases, into the billions of dollars.

One of the most pressing areas of risk management for financial institutions is anti-money laundering (AML), including know your customer (KYC) requirements. Money laundering (ML) is a highly sophisticated process that's used to take "dirty" money from illicit activities and by introducing it into the financial system, moving it around and employing a series of bookkeeping tricks, making it ultimately appear to be from legitimate or "clean" activities. The process is often used to conceal the source of money earned in the drug trade, through market manipulation or other securities fraud, or money that's involved in terrorist funding.

A growing worldwide problem

The UN office on Drugs and Crimes has estimated that between two and five percent of the global gross domestic product (GDP) is laundered annually.[1] Considering that global GDP stood at $75.6 trillion in 2016[2], that means as much as $3.78 trillion may be illegally gained proceeds that are manipulated through ML efforts annually. While the precise figure is not known because of how effective criminal interests are in concealing their illegal practices, ML is obviously an enormous problem that continues to grow around the globe.

To address this, the world's regulatory authorities have enlisted the help of financial institutions to enforce laws designed to combat ML. For example, in the U.S., the Department of the Treasury has established the Financial Crimes Enforcement Network (FinCEN) to oversee AML and KYC efforts. Other regulators, including the Office of the Comptroller of the Currency (OCC), U.S. Securities and Exchange Commission (SEC), Financial Industry Regulatory Authority (FINRA), and Financial Action Task Force (FATF) are also actively involved. These agencies are charged with enforcing a number of laws, including the Bank Secrecy Act (BSA) of 1970, the Money Laundering Control Act of 1986, the Anti-Drug Abuse Act of 1988, the Money Laundering and Financial Crimes Strategy Act of 1998, and the USA PATRIOT Act of 2001.

While AML and KYC compliance requirements are vital to successfully fighting financial crime, they have created extraordinary challenges for the financial institutions charged with implementing them. LexisNexis Risk Solutions recently completed a study of the cost of AML compliance among European financial institutions in five key markets including France, Germany, Italy, Switzerland, and The Netherlands. The cost was estimated at a staggering €70.1 billion ($83.5 billion)[3] annually. AML compliance officers reported that these costs have risen 21 percent over the past two years, with another 17 percent increase expected in 2017.

A growing worldwide problem

Compliance and regulatory (CoRe) platform

Know Your Customer (KYC)

AI powered automation tools help verify the identity of clients or personnel part of the AML and Financial Crimes.

Transaction Monitoring/AML

Address anti-money laundering (AML) requirements, which prevent banks from being used, intentionally or unintentionally, by criminal elements for money laundering activities.

Operations Risk Intelligence

Tools to manage the day-to-day operational risks of a financial services organization.

Enterprise Risk Intelligence and Management

Provides tools and applications to address broader risk types that impact more than one area of the enterprise, such as fraud risk.

Reporting

Provide a mix of software and tools to incorporate data analytics into reporting, automate regular and ad-hoc reporting, and centrally maintain information for future reporting requests.

A growing worldwide problem

Today, bank AML departments rely on two types of analytical solutions to comply with AML and KYC requirements and manage risk within their institutions.

Analyst-driven solutions

These include solutions such as KYC screening tools and AML transaction-monitoring systems. All of these solutions require numerous AML analysts, and in many cases, the support of external specialists to create rules that identify and trigger alerts for suspicious activities and transactions. Unfortunately, keeping the rules up to date can be a time-consuming challenge that may take three to six months to complete, and yet still results in an unacceptably high rate of false positives. In addition, the rules that are created apply only to what's already known, so they can't detect emerging patterns, insights or anomalies that lead to added risk exposure for a bank. Another problem is that the rules-based systems that trigger alerts remain inadequate, requiring two to three hours to investigate a case and fewer than 15 percent complete customer due diligence in under one hour.[6]

Anomaly-driven solutions

These solutions focus on using machine learning to discover anomalies or transactions that stand out from the norm, which the human eye might not be able to detect as easily or quickly. This new class of solutions based on machine learning holds promise, but still falls short in critical areas, as many banks can attest after conducting their own experiments. While they can more easily detect new attacks, they still generate far too many false positives. In addition, training the systems, labeling the events and getting the systems to run at scale in production with the desired uptime requires specialized skills provided by highly trained (and highly paid) personnel. In addition, the typical approach for this type of machine-learning-based solution renders decisions in a 'black box' fashion with no visibility into a system's internal workings. This simply isn't acceptable to regulators, who require decisions driven by machine-learning-based systems to be easily explainable—ultimately leading to a need to invest in more resources with costly, specialized machine learning skills.

A growing worldwide problem

These two types of solutions are proving to be inadequate for several reasons:

An inherent inability to detect ML schemes for smaller amounts under a defined threshold limit
For instance, in investigating the financing behind 9/11 events, it was discovered that the terrorists had made frequent transactions of small sums that were below the usual cash transaction reporting thresholds. These transactions were not detectable by traditional analyst-driven and anomaly-driven solutions.

High percentage of false positives
Too many transactions over a specific limit are marked as suspicious when in fact they don't present any identifiable risk to the institution.

No learning or generalization abilities
Although fixed rule-based systems have some pattern recognition capabilities, they can't learn or generalize new patterns and can only match patterns that are already known. As new ML schemes are devised, many of these solutions have been unable to adapt to uncover them—providing criminals with new avenues to circumvent detection and the law.

Insufficient and inconsistent checking
Transaction volumes in the financial industry are enormous and growing every year. Existing systems don't have the capability of checking every transaction in a comprehensive and consistent manner. Too few checks can be costly in terms of undetected ML activities.

Lack of a strong network analysis
One of the greatest advantages of having a large corpus of data today is the ability to discover hidden relationships between entities. Unfortunately neither of these approaches offers an effective way of analyzing these relationships, so this still needs to be done manually for both solutions today.

A growing worldwide problem

In addition, current script-driven extract, transform and load (ETL) methods are exceptionally labor intensive and result in poor data quality. In a 2015 study[4], more than half (51 percent) of all financial institutions reported that they rely on manual spreadsheets or other documents to track AML risk assessment.

The average time needed to perform a complete risk assessment was approximately ten weeks. But even with this tremendous investment of time and effort, there's been an ongoing "lack of confidence in the quality of the data collected from or provided by the end-customer during onboarding",[5] according to survey respondents.

Adding further to the cost and complexity of the process is that the pace of business in the banking world continues to accelerate. Where, in the past, checking and stopping suspicious transactions in overnight batches would have been acceptable, today many countries process transactions in real time. This means alerts must be generated in real time as well. According to a recent survey of major financial institutions by PwC, 90 to 95 percent of AML alerts generated by transaction-monitoring systems are false positives. With large banks receiving millions of alerts annually and each false positive costing as much as $30 to handle[7], the expense can be enormous.

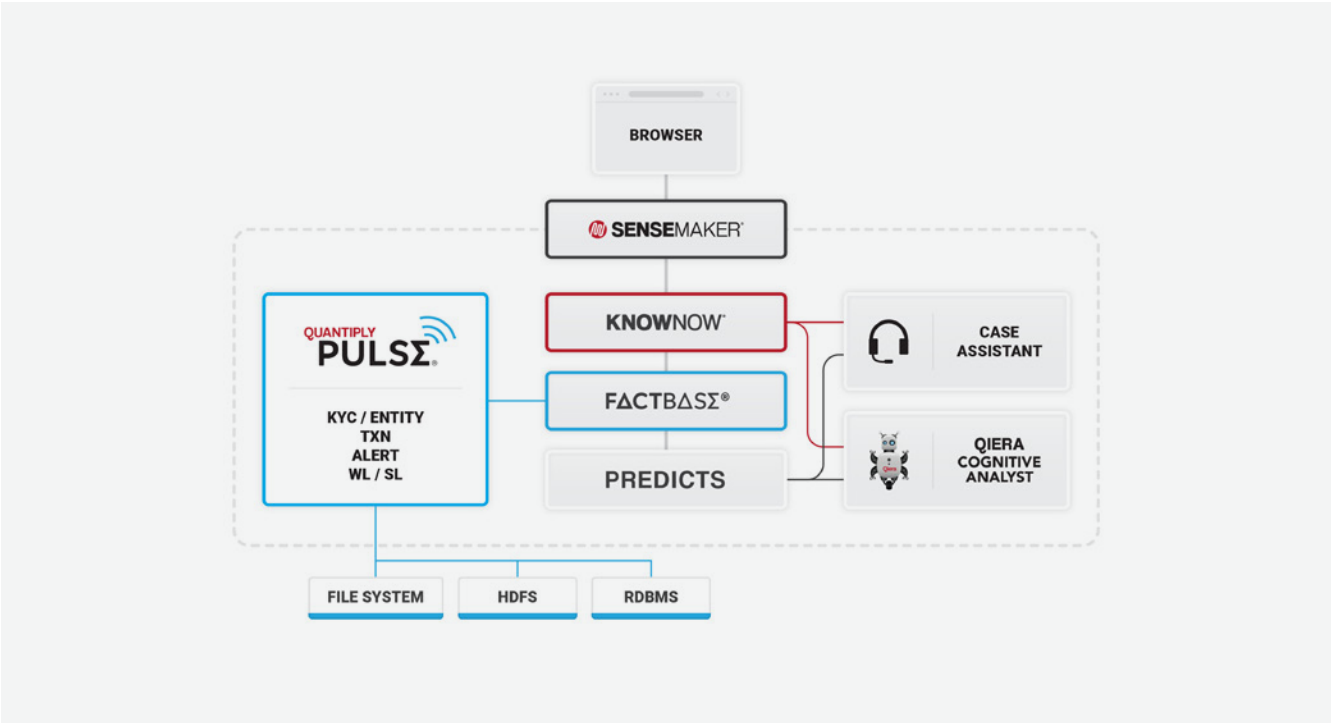
Quantiply's AI-based solution combines machine learning and subject matter expertise for better results

Quantiply is a cognitive intelligence company founded in 2014 whose focus is on providing AI-based systems and tools to simplify and enhance the process of meeting compliance and regulatory challenges. Quantiply's impressive team of industry veterans is able to leverage decades of experience in AI and machine learning, applying proven analytics methods and transformative technologies to AML processes to turn data into actionable knowledge. This allows financial institutions to identify suspicious actors, interactions and activities and address financial crime more successfully than ever before.

Machines can process massive amounts of data and extract complex patterns. Humans excel at concepts such as context, nuance and understanding the implications of specific actions.

It's this notion that humans and computers each have different—yet highly complementary—strengths that separates Quantiply's solution from the rest.

Quantiply utilizes a unique combination of machine learning and advanced AI algorithms, working seamlessly and powerfully together to deliver far superior results. The Quantiply platform can be easily and quickly deployed—without having to completely replace or disrupt a bank's existing infrastructure—to deliver meaningful benefits sooner rather than later.



Introducing Quantiply Sensemaker: A platform for large-scale cognitive intelligence and reasoning

Quantiply's Sensemaker® compliance and regulatory (CoRe) platform accepts structured, semi-structured and unstructured information as input, automatically extracts entities and relies on strong semantic relationship analysis to generate truly actionable data. Not relying on predefined rules-based models, Sensemaker leverages unsupervised learning to derive patterns and relationships from the data itself — eliminating the need to manually create models for every new type of data or analytical problem. Sensemaker is able to build and optimize its models as it learns from the data it analyzes.

For AML and KYC, Sensemaker learns from each financial transaction which behaviors involving bank customers have the potential to be malicious or fraudulent and which are likely to be benign. The solution sifts through huge volumes of structured and unstructured data and can explore hundreds of thousands of potential hypotheses at scale to devise the best predictive models. As the data changes over time, these models seamlessly adapt using machine learning algorithms.

The model has a number of core components:

Introducing Quantiply Sensemaker: a platform for large-scale cognitive intelligence and reasoning

Quantiply Pulse®

Pulse is a continuously learning software agent that is used to rapidly onboard data from various sources and data streams into the Quantiply system, replacing the manual data collection that has been done in the past. This data can include transactions and banking records such as international and domestic wires, ACH transfers, credit card payments, loan payments, cash statements, and other reports regarding a customer's risk profile.

Pulse continuously senses and learns as it ingests data from internal and external sources and lists about transactions, entities, sanctions and watch lists, third-party activities, and even texts and other unstructured data, such as social media posts or news stories. The data can include compilations of politically exposed persons (PEPs), specially designated nationals (SDNs), adverse media collected from social media or the press, available financial statements, and more.

Pulse agents employ network-based reasoning, using machine learning and AI techniques to capture human intelligence and identify hidden patterns—automatically transforming this in real time into intelligent data about behaviors and intents for highly effective predictive models. The process is repeated every time there's new data or an AML analyst creates a new label. In addition, because Pulse is highly specialized and can be deployed right at the data source, banks can filter noise and extraneous data to more efficiently capture the precise information they need. Quantiply Pulse is available right out of the box in three flavors of machine learning-based AI agents—KYC Pulse™, Transaction Pulse™ and Sanctions Pulse™—to monitor potential ML schemes on a client-by-client, transaction-by-transaction basis. In addition, Pulse's template-based modeling makes it easy to configure intelligent agents to capture any type of data desired. All Pulse agents comply with globally accepted core policies for effective ML control: KYC (Know Your Customer), Know Your Customer's Customer (KYCC), Know Your Network (KYN), and Know Your Third Party (KYTP).

Introducing Quantiply Sensemaker: a platform for large-scale cognitive intelligence and reasoning

Off-the-shelf Pulse agents

Pulse is delivered with three pre-configured intelligent agents for capturing data regarding KYC data sources, AML transactions and sanctions lists:

KYC Pulse intelligent agent assesses a wide variety of detailed information related to a client's account, typically collected at the time the account is opened. KYC Pulse provides a single view of a client's profile, incorporating all of the various financial relationships with which an account may be affiliated. The types of analytical activities that are part of KYC Pulse client profiling may include: screening watch list names, providing high-risk country alerts, assessing financial sources or channels, reviewing business relationships, analyzing political affiliations, and more. Clients are classified under various levels of risk profiles and these profiles guide the frequency and intensity of the monitoring required.

Transaction Pulse identifies transactions that pose the greatest risk for potential ML activities. Transactions determined to be of a higher risk can vary from one organization to another based upon specific product lines and types of business. For instance, the risk associated with transactions from a bank would likely be different from those associated with an insurance agency or securities firm. Transaction risk behaviors monitored by the Transaction Pulse agent might include: rapid movement of funds into or out of accounts, sudden activity occurring in a previously dormant account, frequent account changes, certain types of recurring transactions, hidden account relationships, offsetting trades, settlement and/or standing instructions for accounts, movement of funds without a corresponding trade, depositing of excess collateral into an account, and so on.

Many high-risk individuals today are already being tracked by various third-party sources and it's critical that these sources are also leveraged in any AML process. Sanctions Pulse connects to various third-party sources such as LexisNexis, terrorist watch lists, the US Treasury's Office of Foreign Assets Control (OFAC) lists, and PEP lists to integrate any relevant risk information into Factbase. This enables real-time tracking and risk mitigation from transactions involving high-risk individuals or organizations.

Introducing Quantiply Sensemaker: a platform for large-scale cognitive intelligence and reasoning

Configurable rules-based and algorithm-based scoring.

Today, most risk-management systems used by banks are fixed rules-based solutions. These rules can be updated or changed over time, but while they're in force, they're applied the same way to each case. The Quantiply platform takes advantage of both configurable rules to associate risk with specific individuals and algorithmic models to continuously learn from customer behaviors over time—to assess an individual's compliance and regulatory risks to the bank and mitigate them over time.

With compliance and regulatory rules changing almost daily, financial institutions don't have to wait for a solution provider to update its rules to address changing scoring requirements. Rather, data scientists have the flexibility to tweak the algorithms to reflect the evolving landscape and update their models as needed.

Introducing Quantiply Sensemaker: a platform for large-scale cognitive intelligence and reasoning

Qiera™

Once the Pulse intelligent agents have collected all of this data, it's fed into Qiera, the cognitive intelligence application—embedded with advanced machine learning and artificial intelligence—that acts as the brains of the system. Using Quantiply's patent-pending Enterprise Digital Genome® technology, Qiera maps the myriad of events, entities (people or organizations), activities, overt and hidden relationships, associations, desired paths, and previously unidentified patterns of cause or concern. The solution then creates unique models that enable truly actionable insights into suspicious activity reports (SARs).

For example, Qiera can examine a particular transaction of $10,000, $100,000 or millions of dollars between two entities and quickly analyze all the possible connections and relationships by sorting through all the data that's been collected. Qiera can then classify that transaction as suspicious—so a case can be opened and passed along to law enforcement—or classify it as non-suspicious and provide an explanation for the regulatory bodies.

Introducing Quantiply Sensemaker: a platform for large-scale cognitive intelligence and reasoning

Factbase®

This component is an immutable global intelligence service that provides integrated, real-time financial intelligence (FININT) to identify and verify individuals and organizations to meet institutions' KYC and KYCC requirements. Factbase supports the long-term memory of facts that Sensemaker gathers through a machine learning-based continuing learning process. The component has been built using the fundamentals of blockchain technology so that collected data about bad actors and activities can't be altered.

When the Pulse agents glean data from published or newly discovered data sources, it automatically routes that data through out-of-box data analysis and enrichment pipelines. Users can easily define and customize these pipelines to tailor them to specialized needs and processing requirements. This can be used to proactively provide banks and financial intelligence units (FIUs) more sophisticated intelligence about customers and ML schemes.

A powerful tool called Enterprise Knowledge Graph helps investigators uncover hidden connections or parties using the PEP list, SDNs or by simply identifying other transactions, business associations or ownership status that may apply to a particular interaction—to identify and prevent ML before it occurs. Quantiply's sophisticated network-based analysis helps banks discover the intent beyond a given transaction. Who is a particular customer connected to? What relationships does he or she have? Are there risks beyond that initial transaction with third or fourth parties that must be assessed? The Quantiply platform lets banks look at as big a picture as possible—to drive more insights. This leads to better results, with more accurate predictions regarding suspicious behavior or potentially risky actors.

Factbase accommodates a variety of data models to ensure optimal processing of information and to gain insights that enable Sensemaker to readily answer questions or predict future actions, including the reason why they're likely to happen. The component continually builds its global memory of entities, events, trends, and interactions through continuous learning and enrichment—and makes this vital information available to case managers as they work to confirm or eliminate potential criminal cases.

Deeply understand customers and their potential risk patterns–simply, efficiently and in real time

Quantiply Sensemaker is designed to help financial institutions understand their customers at a significantly deeper level, recognize individual risk patterns in real time and efficiently filter good customers and their transactions from bad actors and illicit activities. Quantiply's innovative Explainable AI simplifies compliance requirements and delivers a number of benefits to banks as well as to the regulatory agencies themselves.

Improved case intelligence and guided resolution

Sensemaker can accelerate, by an order of magnitude, the resolution of SARs through improved case intelligence. Today, large financial institutions employ thousands or even tens of thousands of ACAMS-certified AML analysts and AML investigators at a substantial cost. Working from transaction data and information contained in spreadsheets, these people must laboriously investigate flagged transactions, a process that often includes lengthy data gathering through telephone calls to various parties as well as laborious research using other information sources.

Investigations may need hours spread over days or weeks to complete customer due diligence (CDD) and clear a case, often delaying customer access to the funds in question. The secure data centers in which these investigations are conducted are costly, as is the compensation paid to the large workforces required. In addition, holds placed on funds can cause friction with customers, jeopardizing high-value accounts.

By automatically gathering much of the needed financial intelligence on the front end and creating and assessing unique models for each case on the back end, Quantiply Sensemaker enables cases to be resolved within minutes, with much less human involvement.

Creating intelligent customer risk profiles for more accurate assessment

With Sensemaker, the solution is continually updating customer risk profiles with the help of powerful algorithmic models that take into consideration a variety of criteria. Risk scores are assigned based on whether a party has ever appeared on the sanctions list, is wiring funds to a country on the SDN list or perhaps is doing business with individuals who are on the PEP list or some other watch list.

Sensemaker computes an intelligent customer risk profile (CRISP) score, which factors into the decision of whether a specific activity should be flagged for investigation or requires additional data before an assessment can be made.

Deeply understand customers and their potential risk patterns–simply, efficiently and in real time

Meeting regulatory requirements while reducing costs and financial penalties

One of the biggest challenges with machine learning-based systems in AML and KYC applications is inadequate feature extraction capabilities. Today, financial institutions pay mid-six figure salaries to highly skilled data scientists to build these feature extraction models, and banks are lucky if they can keep these scientists on staff for six months or a year. Then, they have to start the process all over again.

With Quantiply's platform, the solution automatically generates feature extraction models as needed, scores them according to the data flowing into the system and optimizes the models based on feedback received from AML analysts and AML investigators. As a result, the system is continuously learning, essentially mimicking the process followed by human investigators. This can save financial institutions millions of dollars—while meeting regulators' key performance indicators (KPIs) to ensure compliance and avoid financial penalties—and stay ahead of the fraudsters and other criminals.

In time, Sensemaker and Qiera will be able to pinpoint financial crime as well as—or even better than—human investigators. Qiera can be set up to auto-close cases and identify false positives, reporting any alerts or exceptions to AML investigators for follow-up.

The system is also able to track all cases and activities over many years. And while human investigators typically must wait for multiple cases to occur before they can spot a pattern, the Sensemaker platform can identify suspicious behaviors and spot potential patterns as they emerge, long before an investigator could. This enables financial institutions to address fraud and criminal activity much sooner—reducing their risks and managing losses.

How Explainable AI enables users to identify and understand otherwise hidden patterns and insights within their data

A common challenge that many machine learning or AI-based platforms face is that they tend to be "black box" solutions. This means that it isn't easy for users to understand how the solutions arrive at their conclusions or make their predictions. The result is that it's extremely difficult to build confidence in the platforms or make needed adjustments without a highly skilled workforce. Relying on Explainable AI, Quantiply offers welcome visibility into how recommendations and predictions are made, while enabling users to interact directly to fine tune the system and correct

Deeply understand customers and their potential risk patterns–simply, efficiently and in real time

any errors that may be detected. Explainable AI also serves to empower case analysts to not only achieve faster resolution times, but it also delivers increased confidence and insights in the process.

Reducing false positives to lower overall costs and resource dependency in alert triaging

With rules-based solutions, a relatively large percentage of alerts tend to be false positives. Such solutions don't "learn" effectively from past events or feedback from cases that have been successfully resolved. Quantiply minimizes false positives by uncovering hidden relationships, tying entities together through network analysis, and leveraging valuable feedback from subject matter experts to ensure that the system continues to improve over time.

Benefiting compliance officers, caseworkers and regulators

The power of the Quantiply platform benefits everyone who plays a role in mitigating compliance and regulatory risk in today's financial industry environment.

For **compliance officers**, Quantiply helps them remain compliant and avoid costly sanctions. The platform's ability to continuously learn means that banks retain critical knowledge, regardless of how much turnover they may experience among their caseworkers and fraud investigators. False positives can be greatly reduced and costs are reduced, while meeting all the compliance and reporting requirements imposed by regulators.

For **individual caseworkers**, the platform enables them to do their jobs more efficiently and confidently. Automation ensures that the process is endlessly repeatable, with each caseworker following the necessary steps to achieve best practices. Caseworkers feel more empowered, while reducing their exposure to fines or personal prosecution if a case is improperly handled.

Finally, regulators receive the reports they need addressing the myriad of ever-changing requirements. AI and continuous learning ensures that banks can efficiently keep up with the latest requirements and rules changes, and again, avoid potential sanctions and fines.

05. Conclusion

More accurate insights for AML Analysts, investigators and auditors

Today's methods of addressing compliance and regulatory challenges, including fighting financial crime and money laundering (ML), can't keep pace with the increasing sophistication of the schemes that are being employed. For many financial institutions, the largely manual process is inefficient and slow, far too costly and error-prone—creating numerous false positives, and exposing the banks to unnecessary risks and financial penalties from regulatory authorities.

Quantiply's AI-based Sensemaker platform for anti-money laundering (AML) and know your customer (KYC) applications relies on Explainable AI that learns and adapts based on individual transactions and behaviors among specific entities and their subsequent relationships. This approach not only reduces the total number of alerts over time, but it also improves the ability to detect and prevent financial crime by modeling risk based on behaviors and actions rather than rigid, predetermined rules.

By providing more accurate insights in real time for AML analysts, AML investigators and auditors, false positives can be reduced, suspicious activity reports and compliance reports can be filed with less effort, and financial institutions will have greater success combatting ML and fraudulent activities within their institutions.

06. References

[1] United Nations Office on Drugs and Crime, “Estimating illicit financial flows resulting from drug trafficking and other transnational organized crimes,” October 2011, https://www.unodc.org/documents/data-and-analysis/Studies/Illicit_financial_flows_2011_web.pdf

[2] World Development Indicators database, World Bank, April 17, 2017, http://data.worldbank.org/data-catalog/world-development-indicators

[3] “European Financial Services Providers face overall Anti-Money Laundering Compliance costs of $83.5 billion a year, September 19, 2017, PR Newswire

[4] “Current Industry Perspectives into Anti-Money Laundering Risk Management and Due Diligence,” December 2015, https://www.lexisnexis.com/risk/downloads/whitepaper/Acams-Survey-2015.pdf

[5] “Current Industry Perspectives into Anti-Money Laundering Risk Management and Due Diligence,” December 2015, https://www.lexisnexis.com/risk/downloads/whitepaper/Acams-Survey-2015.pdf

[6] “Uncover the True Cost of Anti-Money Laundering and KYC Compliance: A LexisNexis Risk Solutions report study on Financial Institutions across six markets in Asia,” 2016, https://www.lexisnexis.com/risk/intl/en/resources/research/true-cost-of-aml-compliance-apac-survey-report.pdf

[7] “Current Challenges in Fighting Financial Crime,” October 2014, https://www.cgi.com/sites/default/files/SIBOS2016/br_financialcrime_rr_v1_14_oct.pdf

QUANTIPLY®

Contact us

333 W San Carlos St.
Suite 1650, San Jose, CA 95110

Phone. +1 408 560-4000
New York. +1 646 846-3600
London. +44 20 3872 2000

Follow us