



AI Helps Financial Institutions Comply with Emerging Regulations

The United Nations estimates that criminals worldwide launder between \$800 billion and \$2 *trillion* each year, representing anywhere from 2% to 5% of the world economy.¹ The money stems from, and funds, the most heinous types of crimes: terrorism, slavery, weapons trafficking, child exploitation, and the drug trade among them. Legislators believe that when the flow of money stops, instances of these crimes plummet. That's why nations worldwide have implemented stringent anti-money laundering (AML) laws.

Evolving AML mandates create an increasingly complex regulatory environment for financial institutions (FIs). Yet some of these institutions still haven't optimized the one technology that can help them thrive in the current marketplace: artificial intelligence (AI). This e-book examines the compliance challenges FIs face, and the AI solutions available to meet new and emerging regulations. It also discusses the business value that the right AI solutions can bring to the financial sector.

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Navigating the compliance labyrinth

AML mandates vary from country to country. In the United States, comparing names of potential and existing customers against entities appearing on the [Office of Foreign Assets Control's](#) (OFAC's) Specially Designated Nationals and Blocked Persons (SDN) list is a significant aspect of this work.² Banks that fail to comply risk heavy fines. Consider TD Bank. In late 2024, the federal Financial Crimes Enforcement Network (FinCEN) levied a \$1.3 billion fine against this institution for failure to report *trillions* of dollars in suspicious transactions.³ Associated penalties raised TD Bank's total price tag to \$3 billion.⁴ In announcing the fines, FinCEN Director Andrea Gacki noted that, "For over a decade, TD Bank allowed its AML program to languish, making TD Bank a target for illicit actors."⁵

To comply with regulations and avoid the threat of fines, financial institutions strive to follow stringent know your customer (KYC) requirements — mandatory processes for verifying a customer's identity at account opening and periodically thereafter. (These activities are

also often referred to as "customer due diligence" or "enhanced due diligence.") Still, FIs are caught in a vicious cycle of new crimes begetting new laws leading to ever-more-demanding KYC requirements.

Why are there so many new regulations? Governments worldwide want to combat new money laundering methods. Technology is quickly advancing, and each advancement seems to promote new opportunities to launder money.

Anti-money laundering statutes: a brief history

The history of modern compliance in the United States dates to the 1970 Bank Secrecy Act. Its goal was to halt financial crime — most notably, money laundering. The Patriot Act of 2001, the Anti-Money Laundering Act of 2020, and other statutes augmented this effort.

Governments across the globe have passed similar types of legislation. For example, the European Union's Sixth Anti Money Laundering Directive expanded the definition of money laundering and increased penalties for offenders. A Seventh Directive will close regulatory gaps and broaden the pool of businesses that must follow AML mandates. And in Asia, the 42 member states of the Asia/Pacific Group on Money Laundering strive to implement international AML standards.



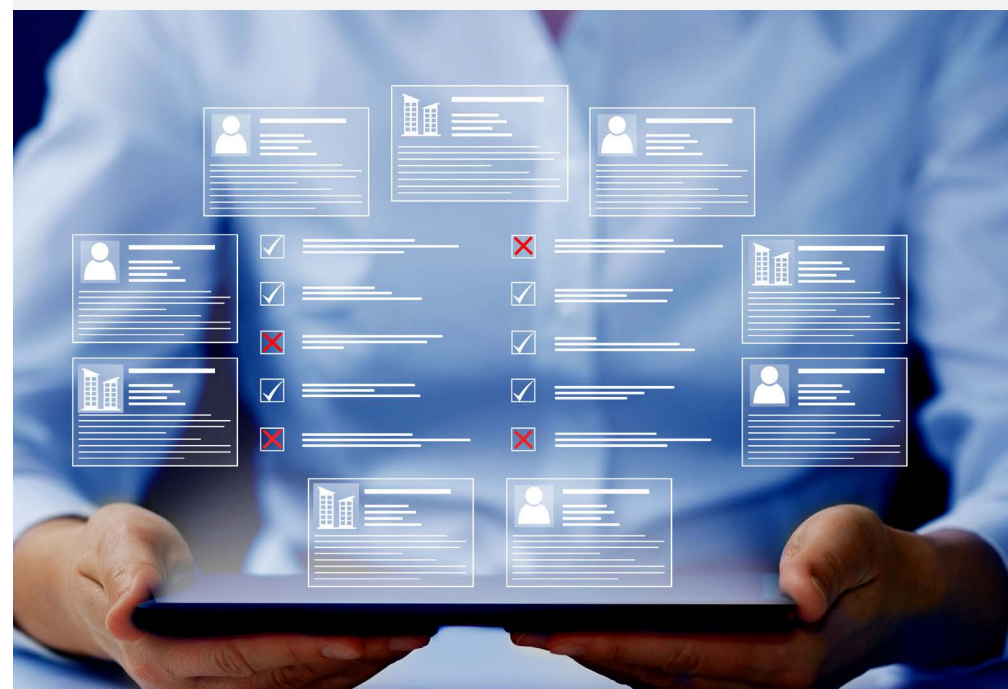
On marketplace platforms, for example, money launderers over-invoice goods sold. These transactions mask money laundering as legitimate international trade. On video game platforms, criminals use in-game currencies to transfer value anonymously. Launderers also increasingly use cryptocurrencies to wash money. New and pending regulations strive to combat these and other newer forms of money laundering. This regulation cycle shows no sign of easing, and new AML compliance processes must be undertaken to meet each new mandate.

Artificial intelligence — particularly the natural language processing (NLP) capabilities used for name matching, entity resolution, sentiment analysis, adverse media screening, and social media monitoring — can help FIs meet evolving regulations while providing new business value.

FIs know this. That's why, as Statista notes, "The finance sector finds itself at the forefront of AI integration, exhibiting one of the highest adoption rates across industries."⁶ In fact, in 2023, the financial services industry invested roughly \$35 billion in AI technology.⁷

What is the SDN list?

The Specially Designated Nationals and Blocked Persons (SDN) list names people, groups, businesses, countries, governments, and other entities who have been identified by the United States government as posing a threat to national security, foreign policy, or economic policy. OFAC uses the SDN list to keep these groups from accessing the United States financial system. The sanctions covered by the SDN list are extensive; entities listed appear in a multitude of languages; and the list is continually updated. OFAC compliance means financial institutions may not onboard customers whose names appear on the list and must stop doing business with existing customers should their names ever appear on that list.



AI solutions ease regulatory compliance

Artificial intelligence forges a path through the KYC jungle. Its multilingual name matching, entity resolution and relationship-discovering capabilities can rapidly identify people, companies, and organizations — and map connections among them. From mainstream government-generated lists to social media sites, the best AI applications scour structured and unstructured data in a broad array of languages; create reports; generate detailed relationship visualizations; and tell FIs how confident the system feels in the matches it has made. These solutions can automate compliance with sanctions lists (including those published by OFAC and the European Union) by screening transactions and customer data linked to high-risk regions or individuals, and flagging for live review only as necessary. In doing so, AI slashes KYC costs and times; reduces the chance of fines; and speeds customer onboarding.

The process starts with name matching. Is John Smith the same person as John Smyth, John Andrew Smith, or J.A. Smith? These determinations are the cornerstone of AML/KYC processes. But without AI, name matching is a complicated, needlessly time consuming and needlessly expensive task. Why? Binary match/no match technologies still used by too many FIs return a plethora of false positives — each of which requires investigative time and expense to resolve.

Using AI-powered fuzzy name matching technologies helps FIs more easily recognize names in all their varieties and, by appending identifying information to those names, helps organizations match them more quickly and confidently. In short, AI can automatically tell you that the John Smith applying for a checking account and listing his profession as “high school principal” probably matches to “high school teacher” J.A. Smith: they have related professions, and they both list their home address as being in Princeton, N.J. Conversely, AI can tell you that these names probably do not match with John Andrew Smith, landscaper of Raleigh, N.C. This capability reduces alerts and, therefore, the staff time required to investigate those alerts.

Case study: DOKS

DOKS, a fintech based in Finland, collects and stores data for its clients’ KYC/AML needs. It then verifies IDs and matches names for organizations screening against sanctions lists. But DOKS’ existing, in-house name-matching tool couldn’t handle the personal and corporate name variations coming into its system, or the increasing volumes of screening required. Its name-matching technology also produced too many false positives.

DOKS decided to work with Babel Street Match in large part because of Match’s scoring system and explainability. Because DOKS is under continuous audit by third parties, these capabilities are vital to the company. As is Match’s ability to reduce false positives: working with Match, DOKS has decreased instances of false positives by up to 75%.

Similar capabilities help FIs more quickly develop customer risk profiles and improve enhanced due-diligence (EDD) processes for higher-risk clients. As with name matching, too often these processes rely on rules-based systems. In rules-based systems for EDD, an AML specialist may compile and codify a set of conditions that, if met by a particular transaction or other activity, cause the system to alert to potential money laundering. While a small fraction of these alerts may indicate criminal activity, it is generally believed that between 90% and 95% of all alerts sounded are false positives.⁸ Using AI for AML can help FIs stop money launderers while saving untold millions in false-positive investigations.

Implementation of these capabilities is vitally important if FIs are to efficiently and effectively comply with new AML/KYC regulations. Let's look at some of these regulations, and how the right AI solutions can help meet them.

Digital Operational Resilience Act

Implemented in early 2025, the Digital Operational Resilience Act (DORA) is a European Union law that seeks to improve the resilience of the financial sector by addressing risks arising from digital operations.⁹ It applies to both European Union-based FIs and to any FI doing business in that region.

DORA seeks to address the risks posed through use of third-party technology providers and the resilience of their respective software stacks. It has set new regulations for vendor management in fields including cloud computing services, cybersecurity, and software.

DORA compliance requires proven processes for "vendor vetting." Vendor vetting is the act of examining a vendor's ownership, financial health, geopolitical ties, cybersecurity standards, regulatory compliance, and

overall risk profile to ensure it does not pose hidden threats to either an individual FI or a nation's banking system.

To obtain this insight, organizations must partner with a data and analytics provider that can leverage insights from a massive array of diverse data sources. AI systems should employ advanced analytics and a proprietary risk rubric to automatically identify and evaluate potential risks. Since new risks are continuously arising, any solution should provide for continuous monitoring and vetting of vendors — providing a near real-time view of evolving risk profiles, alerting FIs to change, and helping investigators stay ahead of emerging threats. The automated nature of superior AI solutions can also reduce manual research time, thereby accelerating vendor approval processes and clearing backlogs that would otherwise delay critical procurements.

FinCEN Proposed Rule

In mid 2024, FinCEN issued a notice of proposed rulemaking that would amend existing AML/countering the financing of terrorism (AML/CFT) mandates.¹⁰ FinCEN anticipates finalization in late 2025. The rule will promote modernization of FIs' risk and compliance ecosystems and will likely require the implementation of new technologies to enhance risk-based decisions. Pivotal to compliance will be the name matching technologies discussed above, along with entity resolution capabilities.

Like name-matching, AI-powered entity resolution technologies intelligently match names in incoming data to known identities in both FI's knowledge bases and commercial knowledge bases. Entity resolution technologies link incoming information to real-world people, places, and organizations. They accomplish this in part by matching entities to identifiers including dates and places of birth, known relatives, social media screen names, and more.

Adverse media screening and social media monitoring are also important for meeting the proposed FinCEN rule.

Adverse media screening (AMS) is the process of querying publicly and commercially available data sources (such as news reports) for indications that clients or prospects may have committed predicate offenses for money laundering. Social media monitoring — searches of social media platforms, chats, comments left on message boards, and other information sources — provides similar insight. Conducted at client onboarding and periodically thereafter, these processes are a vital part of financial sector customer due diligence.

Anti-Money Laundering Directive 7

The European Union has thus far implemented six Anti-Money Laundering Directives (AMLDs) and is actively working on a seventh.¹¹ While a date for implementation has not yet been set, the seventh directive will likely strive to close regulatory gaps and address evolving financial crime threats. These include the threats posed by cryptocurrency and NFT laundering. AMLD 7 will also list a wider range of business types obliged to follow anti-money laundering regulations. These will almost certainly include virtual asset services providers — or businesses that facilitate the exchange, transfer, and management of

virtual assets, including cryptocurrencies. The name matching, entity resolution, and adverse media screening capabilities discussed previously will all be vital to compliance.

Economic Crime and Corporate Transparency Act

The United Kingdom's Economic Crime and Corporate Transparency Act (ECCTA) was enacted in 2023, with full implementation slated by the end of 2025.¹² Two key provisions are new identity verification requirements and new "failure to prevent fraud" penalties. Identity verification requirements apply to company directors and others exerting significant control over a business, along with those charged with filing information on a company's behalf. The "failure to prevent fraud" provisions introduce new corporate criminal offenses for large organizations — including FIs — that fail to prevent fraud committed by employees or agents if that malfeasance benefits the offending organization. For example, a private bank that turns a blind eye to the origination of funds from a new client who stands to provide the bank with significant advisory fees may be subject to this provision.

Whether FIs want to improve fraud detection as a sound loss-prevention practice or to protect themselves from the criminal provisions of ECCTA, AI solutions can help. AI excels at pattern recognition, a vital capability for

Case study: Societe Generale

Societe Generale was overwhelmed by the number of false positives triggered by its existing system for monitoring regulated communications. It received tens of thousands of alerts daily, making proper follow-up impossible. For more effective tracking and analysis, the bank used Babel Street technology in rebuilding its communication-monitoring system. Multilingual capability was a requirement for this international bank, as was the ability to monitor a wide variety of communication sources. The result was a platform that ingests all regulated communications, then uses AI and NLP to analyze questionable interactions. The platform has reduced alerts to only a few hundred each day.

fraud detection. The right AI systems can identify patterns human analysts would not have found on their own. Speed of detection is also dramatically improved: Machine learning algorithms can analyze petabytes of information in hours, more quickly and accurately detecting patterns that indicate fraud.

Payment Services Directive

Revisions to the European Union's Payment Services Directive (PSD3) will enhance both the availability and security of digital payments and transfers. It will accomplish this, in part, through tighter fraud prevention measures and more stringent customer authentication processes.¹³ The revisions are expected to be approved no later than 2026 and implemented no later than 2027. Of particular interest to FIs is the PSD3's Instant Payments Regulation, which requires secure, near-instant approval of payments and transfers. European Union banks will be required to

approve payments initiated or received in the EU (and remitted in Euros) 24 hours a day, 365 days each year — regardless of whether the bank is actually open.

The regulation's due diligence requirement mandates that FIs screen instant-payment users against sanction lists and other documents naming people and organizations subject to restrictive financial measures. These screenings must be performed at least once each day. To demonstrate compliance, FIs must maintain comprehensive documentation of their instant payment operations, policies, and procedures.

Clearly, the PSD3 will require FIs to implement faster, more accurate name-matching and entity resolution capabilities. As discussed above, AI solutions can help in this effort.



Finding business value in AI

FIs play a significant role in safeguarding world financial systems from corruption. That's the reason for ever-more-stringent AML/KYC regulations. But FIs don't exist solely to keep criminals from laundering funds. Like businesses everywhere, they want to increase profitability.

Typically, FIs initially invest in AI solutions to help meet regulatory and compliance mandates. However, once these solutions are installed, banks find the right AI can bring business value to the organization. Already used to improve marketing and customer acquisition/retention efforts, next-gen uses of AI include predicting market trends in real time, analyzing geopolitical risks, and providing deeper insights into sustainability programs.

Sentiment analysis for real-time market trends

AI-powered sentiment analysis and adverse media screening can help FIs predict stock prices and improve investment strategies. It accomplishes this by examining customer opinion and public opinion expressed on a vast array of online forums, popular social media platforms (including video and short-form platforms), customer support chat transcripts, customer surveys, news articles and financial reports, and other data. With this insight, FIs can better judge market mood and its effect on stock prices, enabling them and their investors to better understand investment risk and opportunity — and act accordingly.

Advanced analysis of geopolitical risks

AI can help FIs integrate climate information, geopolitical risks, and macroeconomic trends into their risk frameworks, enabling them to better assess risk in markets across the world. AI solutions accomplish this by analyzing news reports, government reports, social media, and additional data to detect geopolitical trends — including emerging sanctions, trade conflicts, economic downturns, threats of war or other political instability, potential for supply chain disruption, currency fluctuation, and other factors that contribute to market volatility. AI solutions can predict the impact of these issues on banking operations and investments. This capability aids FIs in evaluating risk before investing in organizations or countries potentially affected by instability.

Case study: Uphold

Uphold is a large foreign-exchange platform providing for remittances of more than 80 crypto and traditional currencies originating in roughly 185 countries. Its screening system produced too many false positives, slowing down onboarding of new customers. Working with Babel Street Match, the company improved the efficiency, speed, and accuracy of its screening processes — better spotting potential money launderers while speeding onboarding for legitimate customers.

Obtaining ESG insights for better reporting

In the European Union, the United Kingdom, Canada, parts of Asia, and other regions, Environmental, Social, and Governance (ESG) programs — conducted to align with the United Nations Sustainable Development Goals¹⁴ — are significant activities for FIs. But FIs find it's not enough to phase out loans to coal mining operations and float bonds to fund wind farms. Rather, regulators and investors pressure firms for precise reporting on their ESG activities, goals, and impact.

This pressure takes on new weight with the introduction of regulations such as the European Union's Corporate Sustainability Reporting Directive.¹⁵ Beginning in 2025, the directive requires large and publicly

held companies to disclose information on their sustainability performance. AI's ability to process tremendous amounts of information from massive, diverse datasets — including satellite images, environmental impact reports, and information available from NOAA, NASA Earth Science, the Copernicus Climate Change Service, the World Meteorological Information database, and other agencies — aids in reporting compliance and contributes to ecologically friendly investments. Similar capabilities assist FIs and others meet governance reporting requirements. These cover board composition and diversity, sustainability-related risk management, stakeholder engagement, executive remuneration, and other topics.



How Babel Street can help

Through our AI and natural language processing solutions, Babel Street delivers all the capabilities discussed in this e-book. We help FIs worldwide fight money laundering, more easily comply with evolving regulatory mandates, and find new business value.

Banks, other financial institutions, and fintech OEMs choose our name-screening technology, Babel Street Match, to increase accuracy, reduce risk, and remain compliant. Our solution is tailored to financial institutions' need for fast, accurate, multilingual name matching at scale. It works across more than 25 languages and a variety of different scripts — including Arabic, Russian, Chinese ideographs, and Japanese Kanji — to compare, match, and score the names of individuals and organizations. In doing so, it dramatically reduces false positives and the concurrent need for manual investigation.

How?

Match's parameters are highly tunable to fit any risk profile. Users can weight different scoring penalties — such as those for missing name components, out-of-order names, initials, and gender mismatch. Babel Street Match also enables significant automation. An FI may choose to automatically reject any potential match with a score of, for example, less than 75% accuracy. It may choose to automatically accept any match with a score of 83% accuracy or higher. This means live investigators only need to spend their time studying potential matches that score between 75% and 82% — saving an untold number of hours.

Similar efficiencies are obtained through entity resolution, adverse media screening, and social media monitoring capabilities found in Babel Street Insights. Insights is an advanced AI and data analytics platform that

provides FIs with a persistent search of thousands of sources of publicly available information and commercially available information (PAI/CAI). Our technology scours data sources published in more than 200 languages and translates results into your language of choice. Information sources include more than a billion top-level domains; commercially available sources; and real-world interactions generated on chats, social media posts, online comments, and message boards. Searches of the deep web and dark web enable investigators to quickly and efficiently find information they wouldn't otherwise be able to access.

Finally, the nature of money laundering means that it is often a multi-person crime. Babel Street Insights Synthesis can help rapidly map key relationships within social media networks, precisely identifying those who wield the most influence. It accomplishes this by automatically examining hundreds or thousands of relationships within a specific social network or discussion group, uncovering previously unknown or hidden relationships. Once influencers are identified, Synthesis empowers users to delve deeper into those influencers' publicly available online profiles and activities — providing valuable AML/KYC insight.

Choosing right-sized AI

In working with third-party vendors, it is vitally important that FIs choose an AI partner who can provide fit-for-purpose solutions. Babel Street makes it easy to choose the right technology for the right task. The modular components of the Babel Street Ecosystem can be melded to develop a solution that meets the specific needs of your FI — from a stand-alone name matching program to a suite of programs that can match names, resolve entities, match those entities to real-world people, search those people in traditional and social media, and chart an

individual's business and social circles. Additional capabilities provide the type of broader insight needed to analyze geopolitical risks, track sentiment for real-time market insight, and perform other tasks that provide business value.

To satisfy regulators/ desire for transparency, FIs must also choose a vendor that offers "explainable AI." Babel Street provides this capability.

Consider this. An FI wants AI technology to dramatically reduce false positives. Any solution can reject a slew of names. But can the AI justify those rejections? Can the FI show regulators the factors AI uses to make its decisions? Because if it can't, for all the FIs and regulators know the AI technology is indiscriminately excluding potential matches that merit live investigation.

Explainable AI is a set of methods and processes that enables users to better understand what AI is doing, and on what data it's basing its decisions. It can illustrate, for example, how changing different parameters (such as increasing or decreasing the penalty for a missing name component) affects scoring. This type of insight makes regulators more confident in the decisions made by AI solutions.

FIs benefit from the Babel Street Ecosystem of AI-powered solutions. They are fit-for-purpose, modular, transparent, and proven. More than 700 million daily watchlists and sanctions screening checks are conducted with Babel Street Match. Insights streamlines AML/KYC compliance while bringing new business value to AIs.

Try it for yourself with our interactive demos for [Babel Street Match](#) and [Babel Street Text Analytics](#).



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Babel Street is the trusted technology partner for the world's most advanced identity intelligence and risk operations. The Babel Street Insights platform delivers advanced AI and data analytics solutions to close the Risk-Confidence Gap.

Babel Street provides unmatched, analysis-ready data regardless of language, proactive risk identification, 360-degree insights, high-speed automation, and seamless integration into existing systems. We empower government and commercial organizations to transform high-stakes identity and risk operations into a strategic advantage.

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