

Babel Street Match Supports Regional Financial Institutions with Increased AML/CFT Effectiveness

BABEL STREET ANALYTICS

The threat of financial crimes is steadily increasing, so is the urgency of financial institutions' reinforcing anti-money laundering and combating the financing of terrorism (AML/CFT) initiatives.

Nomura Research Institute (NRI) began offering AML/CFT services for financial institutions in 2017. However, AML/CFT initiatives in Japan face numerous challenges. Atsuo Takada, chief strategist in NRI's Financial GRCS Solutions Business Division, explains the current situation.

"One of the issues is that Japan has no consolidated anti-money laundering regulations like the U.S. Anti-Money Laundering Act of 2020. Although financial crimes are constantly growing more sophisticated, such as through the use of AI, they must be dealt with by utilizing existing laws and guidelines. One lawyer involved in combating financial crimes compared it to trying to chase a speeding car while obeying all normal traffic rules, and I think that's an excellent metaphor. Another factor that makes things difficult is that AML/CFT measures must also produce cost reductions. For regional financial institutions with limited resources, it's a constant game of catch-up."

The Challenge

The recent developments in financial crime led NRI to create a new service to support their clients' AML/CFT efforts, but the road was not an easy one.

"Initially, we were thinking of introducing AML/CFT services that were in wide use in the U.S., but there was a fairly large gap between this global service and the needs of Japanese financial institutions," said Mr. Takada. One clear example was the pressing issue of fraud. Although the actual mechanism of laundering money by transferring funds between accounts is the same, the amounts and the way funds are moved made it difficult for existing AML/CFT services to address the type of online banking fraud that occurs in Japan. Of course, there are specialized tools for dealing with fraud, but they have the opposite problem of having difficulty addressing AML/CFT. This is why we decided to develop our own in-house AML/CFT service."

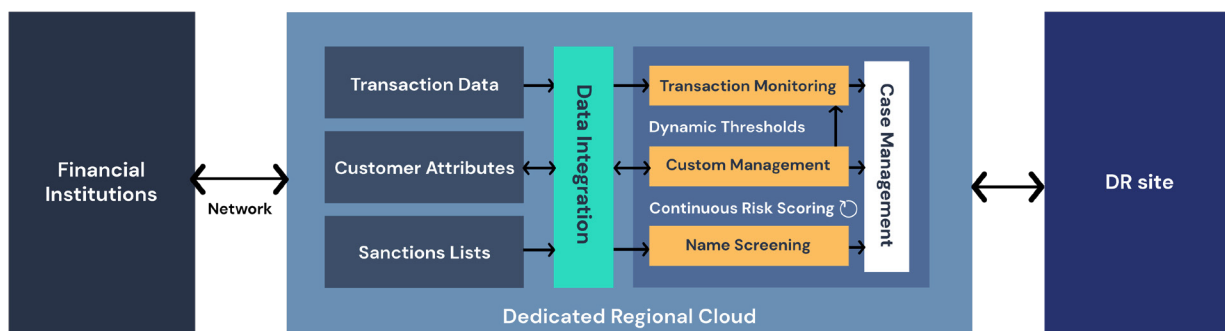
When Nomura Research Institute was developing this new service, GPLEX, it struggled with supporting increasingly international financial transactions. GPLEX uses transaction data, customer data, and sanctions lists supplied by financial institutions to verify whether the person initiating a transaction is the actual account holder along with the validity of the transaction itself. GPLEX does this three ways:

- Transaction monitoring: The product follows the flow of transactions and identifies anomalies
- Customer Risk Assessment: GPLEX verifies risks for each customer based on their attributes and past transaction history
- Name Screening: It compares customer names against sanctioned person data provided by authorities in Japan and overseas

NRI developed its own system for transaction monitoring and Customer Risk Assessment. The problem was name screening. Hidehiko Kawauchi, the head of the Financial GRCS Solutions Business Division which led the development of the service, recalls the development process.

“We could code our own rules to perform exact and partial matching of customer names and sanctioned person names in order to extract suspicious customers. However, with that approach, it’s difficult to handle vagueness or discrepancies in how names are transliterated, such as when converting names in Kanji or Kana into names written using the alphabet. The techniques used in financial crimes are becoming more sophisticated, so to deal with this issue thoroughly, we felt a strong need for technologies such as AI that could handle natural language processing.”

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| Customer Risk Assessment | <ul style="list-style-type: none"> ▪ Customer risk scoring based on their attributes ▪ Customer segmentation based on their risk scores ▪ Continuous risk scoring based on attribute changes and transactions |
| Name Screening | <ul style="list-style-type: none"> ▪ NLP (Natural Language Processing)-powered name matching ▪ Equipped with fuzzy matching, Levenshtein distance, and phonics ▪ Cross-lingual name matching among 22 languages |
| Transaction Monitoring | <ul style="list-style-type: none"> ▪ Monitoring with multiple customer attributes and transactions ▪ Dynamic thresholds based on customer risks ▪ Feedback loops to customer management function |





The Solution

Babel Street Match seamlessly manages diverse Asian language scripts, including Japanese Kanji, Chinese Hanzi, Korean Hangul, and Thai, among others, with near-native precision. Babel Street Match reduces false positives by up to 75%. NRI discovered Babel Street's solutions almost by chance.

Mr. Takada recalls: "Back when the pandemic was making it hard to meet with customers face-to-face, I took the opportunity to watch web seminars every day to keep an eye on the products and solutions that were being used around the world. That's when I first learned about Babel Street Match. The first feature that stood out to me was that it could identify, with a high degree of precision, when sanctioned persons' names and customers' names matched, even when they were written in different languages. At first, I was a bit skeptical, but I watched an actual demonstration, and it was apparent that Match was clearly superior to similar products from competing global vendors, so we made the decision to use it right then."

Before embedding Match in its own service, NRI conducted a proof of concept (PoC). The work went smoothly, with the assistance of Babel Street engineers.

The Impact

The GPLEX service began running in an NRI data center in December 2023. It is used by an AML/CFT joint venture consisting of NRI, a regional bank alliance, and other major banks. Toru Yagishita, head of the Financial Crime Countermeasure Solution Group, which provides the service, discussed the launch.

"Many of the financial institutions in which GPLEX was deployed already had similar services. When we compared Match with existing services, it was shocking to see just how many suspicious customer accounts had slipped through the cracks. That said, it's not realistic to investigate and report every customer that's even slightly suspicious. One of Match's advantages is that it uses the analysis results to score accounts based on their risk. The output can be tuned to match the risk profile of each individual bank."

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— Atsuo Takada, Chief Strategist, NRI



Another aspect of Match that NRI rated highly was the support it offers for actual operation. Mr. Takada explains, “One of our strengths and our points of pride is our comprehensive, agile handling of the issues faced by customers. Slow vendor support can produce a bottleneck. That’s why we’re extremely grateful to Babel Street for flexibly and quickly responding to our requests.”

NRI made requests regarding identically pronounced names with different characters, Japanese date notation, the rules that apply to Japanese addresses, and more, and these were all immediately addressed in the next system update. Japanese financial institutions have continued to seek an even greater level of ease of use following the deployment of the service, and user appraisals of GPLEX’s customer filtering have been extraordinarily positive. Some are even calling for that function to be offered solo.

NRI believes that there is more expansion possibilities for financial institutions. Mr. Takada said, “There is still a large gap between AML/CFT and fraud countermeasures. Going forward, I’d like to keep supporting Japanese financial institutions carefully. In doing so, I look forward to receiving further support from Babel Street.”

NRI aims to create a society where people can enjoy peace of mind by ensuring that financial transactions are secure and sound. It looks forward to Match continuing to play a major role in these initiatives.



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