BABELSTREET

CASE STUDY

The AI That Powers LSEG World-Check® One

How LSEG brought intelligent name matching from Babel Street to the world's largest firms

Numerous financial institutions and regulated businesses rely on LSEG World-Check® One for highly curated information from trusted sources and for entity screening capabilities to help them evaluate risk, remain compliant, and make informed decisions.

The challenge

Name searches are an essential component of know your customer (KYC) checks, to identify politically exposed persons (PEPs) or sanctioned entities, and detect anti-money laundering (AML) risks. Understanding that person and organization name matching is its own discipline, LSEG looked for an expert to add high accuracy and flexibility to the product to keep pace with rapidly changing regulations.

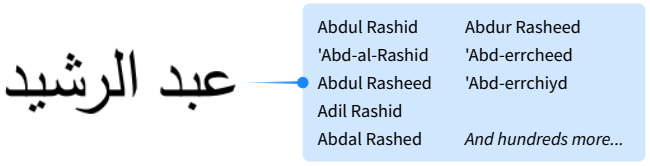
"Every false positive, or worse, false negative, amplifies the pain points of our customers. That's why we integrated Babel Street Match. We were impressed with its global language coverage and a level of accuracy that enables our customers to take full advantage of LSEG World-Check One data," said Maxime Petit, Product Manager at LSEG.

When LSEG World-Check One partnered with Babel Street, the name matching technology was already being deployed in mission-critical applications such as high-volume ecommerce sites and high-stakes government intelligence and border security systems.

The solution

LSEG World-Check One chose Babel Street Match because unlike simplistic search tools, Match has multiple layers of name-centric knowledge built into its algorithms. Match recognizes common nicknames in 20+ languages, and it can phonetically search in and across those languages. Like a human, Match can tell when a name is out-of-order, or has been shortened. Match even knows that John is a common name and Dweezil is rare.

And, although multi-part Arabic names can be spelled thousands of ways in English, Match maps transliterated names back to their single, original Arabic script spelling, from which to more accurately match queried names.



This Arabic male given name or modern surname alone has hundreds of possible spellings in English due to the ambiguities of transliterating Arabic to English.

All of this name intelligence is funneled into a name match scoring algorithm that is both consistent and explainable. Match applies an array of machine and deep learning models working in concert with other techniques (phonetics, rules, dictionaries, indexing strategies, and tuning parameters) in a pragmatic and transparent manner.

Match applies different techniques for entity searches of people versus organizations. For example, a name match search for an individual named "Tony Charles Johnson" would return "Anthony C. Johnson" but not "Charles Johnson and Associates."

The impact

LSEG World-Check One is an essential screening platform designed to support, simplify, and accelerate its customers' KYC and due diligence screening needs. Powered by world-leading risk intelligence data, with an average of 50,000 records added to its database every month, it delivers accurate and reliable information to more than 10,000 customers across the globe.

Match brings semi-automation to what is an otherwise difficult, laborious, and subjective task for humans. Within the powerful LSEG World-Check One platform, Match delivers intelligent matching that is accurate, consistent, and auditable at critical stages of the due diligence and KYC screening process.

[1] US Department of the Treasury, Sanctions List Search Tool

Why isn't simple search enough?

Multidimensional name search enables semi-automation of a complex task

Simple search looks at how many characters differ between two names (edit-distance). Other methods formulaically generate as many name variations as possible (the "brute force" method), or rely on complex Boolean queries that still miss matches.

The danger of simple search is that while it may return too many false positives, it doesn't protect you from missing true hits for which regulators will penalize you. Multidimensional name search better covers true positives while decreasing false positives. How?

The search capability provided by the Office of Foreign Assets Control (OFAC) only indicates whether names might be matches.[1] By contrast, Match numerically scores the confidence it has in each match. This makes it possible to set a threshold match score such as 80%, so that all matches greater than 80% trigger an investigation, while those below are safely passed through. Match can help you to automate or semi-automate a previously highly manual name matching task.

When it comes to financial compliance screening, nuanced information and controls are powerful tools to reduce reputational risk and increase efficiency that is impossible with simple search.

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.

Learn more at **babelstreet.com**

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