# Diffeo Accelerates Discovery with AI-driven Research Assistant

When researching complicated subjects, it can be difficult to create a query that makes sense to a standard search tool. Instead of writing complex queries, Diffeo was founded to help researchers by automatically creating and altering queries to get to the most pivotal bits of information.

Diffeo's automated assistant helps humans discover connections by recommending information the analyst hasn't yet seen. It continuously improves its recommendations by tracking what users add to working notes or highlight in a browser. With computer speed, Diffeo uncovers surprising and vital information that would otherwise go undiscovered.

## The Challenge

Diffeo began as a conversation among cofounders John Frank, Max Kleiman-Weiner, and Dan Roberts about how to use technology to help write Wikipedia articles faster. The reliance on public participation fueled Wikipedia's rapid growth and continues to enable its adaptability, however it simultaneously means that the creation of new pages is haphazard rather than strategic. The trio started to think about a computer-human collaboration that would help Wikipedia contributors produce better content more quickly.

The Diffeo team wanted to create a tool that would understand and mimic how people behave when performing research. The human brain makes connections constantly, sifting through vast amounts of data, drawing conclusions, and connecting that information to related and tangential concepts. The goal was to combine that abstract thinking with the power and speed of artificial intelligence to create an automated research assistant that allowed researchers to access more sources and produce better analyses, faster.

As the Diffeo founders built their AI-powered research agent, they knew that entity extraction would be a foundational component. It needed to be highly accurate, fast, comprehensive, and cover many languages.

## The Solution

Luckily, Diffeo knew exactly which commercial entity extractor was the best as it had already done comparisons between commercial and open-source tools for identity resolution and entity co-referencing. Diffeo concluded that Babel Street Text Analytics was the most usable tool with the broadest language coverage and most consistent quality across languages — a priority for any global analysis projects.

"We trust Text Analytics to be responsible for certain difficult language categories," says Diffeo CEO and co-founder, John Frank. "With ready access to a slew of languages, we can accelerate adding new languages to Diffeo for greater competitive advantage."

With Text Analytics, Diffeo was able to create a search agent that does the following:

• Perform gap analysis to find information the user hasn't yet seen in their research. Instead of supplying more-of-the-same types of articles, the Diffeo agent attempts to provide surprising information about the research topic.
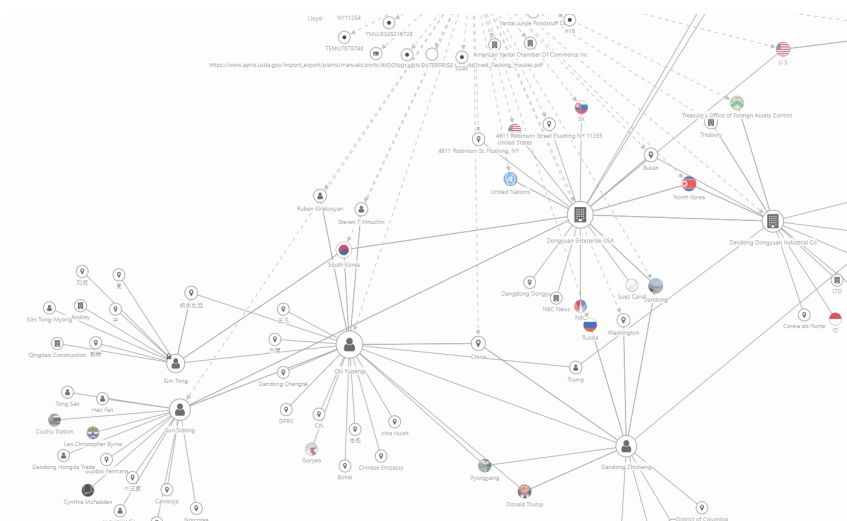
• Surface key data in any language. The Diffeo agent matches entities across languages, automatically formulating multilingual queries for the researcher and returning all relevant results regardless of the researcher's language ability.

## The Impact: Powerful Financial and Intelligence Analysis

Diffeo found a ready market for their AI-research agent in the financial and government intelligence industries where sophisticated analysts are constantly updating research. Like Wikipedians, they work from hundreds of pieces of OSINT (open source intelligence) data and want access to historical and real-time documents.

In fact, Diffeo was so successful that it was acquired by a large enterprise software provider in 2019.[1]

1 https://en.wikipedia.org/wiki/Diffeo,_Inc.

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.**

BABELSTREET