

Natural Language Processing with Watson

IBM Watson speaks the language of your business better than ever.

The Problem

Language is constantly evolving. New idioms and industry-specific vernacular are born every day.

This is far too much data for a person to read, process and synthesize. But it is not too much for AI that can comprehend the language of your business.

When it's time to make a critical business decision, you want to access all the information.

Valuable information often exists in forms of language that can be hard for computers to understand: PDFs. Charts. Tables. Call logs. Handwritten documents. Blog posts. News articles. Tweets.

Enter NLP

With Natural Language Processing (NLP), disparate, unstructured data can be brought together and processed so you can understand what it all means and make more informed decisions.

NLP in action

IBM Researchers are constantly working on frontier of linguistics and AI. So now, Watson can better comprehend human language, the language of your industry, and even jargon that's specific to your company.

An energy company was struggling to retain institutional knowledge and built a knowledge base that could be accessed by Watson using NLP.

The results?

60K

documents ingested, making actionable insights easily accessible¹

75%

reduction in employee time spent researching¹

\$10M

worth of time saved and employees kept safer¹

What Watson can do with NLP

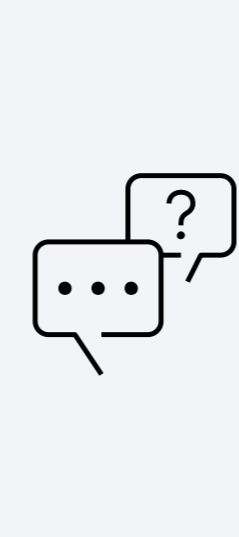
Content mining



What's my data saying?

Digs through your data looking for hidden patterns, trends, and relationships between different pieces of content. A leading automaker used content mining to analyze over 1 million documents, like customer surveys and vehicle sensor data, in 10 minutes, resulting in saved costs.

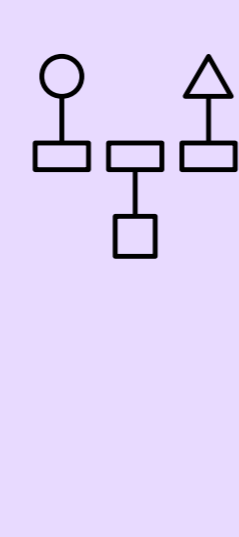
Passage retrieval



Cite your sources.

When you ask a question, you get more than an answer. Sales representatives for a global materials wholesaler were struggling to respond quickly to customer queries on its sprawling product catalog of over 300,000 items. Passage retrieval allows the representatives to quickly look up relevant information, resulting in average training time being cut by half.

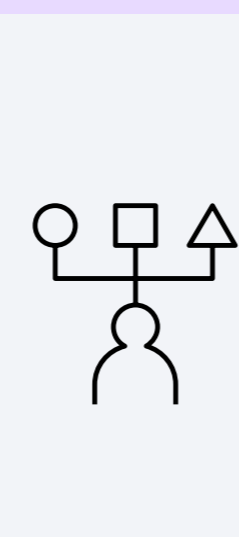
Topic clustering



Organize it for me.

Groups lots of similar data from many places together for analysis. In a large retail customer service call-center, agents can easily collect and cross-reference call logs that reference problems regarding a specific product issue, allowing them to both improve their customer service and feed higher quality information back to manufacturers.

Summarization



What's the takeaway?

Reads huge amounts of information, across documents, identifies the most important bits, and produces a smart and concise paragraph. Investment banking firms acquire lots of data to drive decision-making. But financial analysts can't read everything. Summarization allows these analysts to get just the top-level relevant news so they can make better investment decisions.

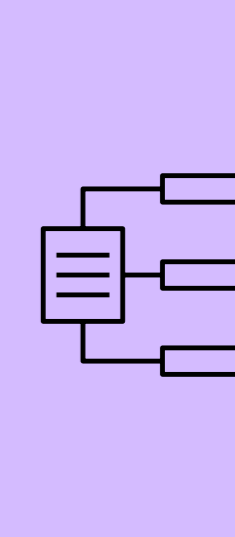
Smart document understanding



Explore what's relevant.

Understand the structure of your documents and evaluate sections that likely hold the most relevant information to you in order of importance. A large bank used smart document understanding to break down complex billing statements in order to generate more optimized pricing proposals. What took 10 days now takes two minutes, freeing up sales representatives for higher level tasks.

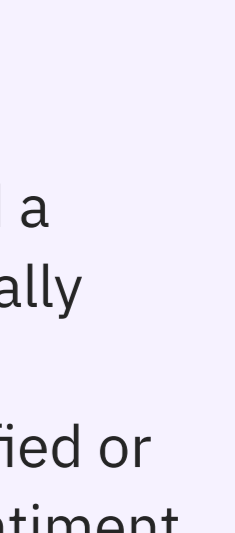
Sentiment analysis



How does it feel?

Interprets and classifies the response behind a piece of text, so you can know how people really feel. An airline call center can use sentiment analysis to determine whether a flyer is satisfied or upset, pinpoint the reason behind a given sentiment, and ascertain specific moments in an interaction where sentiment changed. This information can be used as an emotional bellwether, letting the airline know what customers at large are feeling about their flying experience.

Key point analysis



Give me the highlights.

The next generation of summarization will comprehend data quality and relevancy, ranking bits of information and presenting key information to you in order of importance. Financial analysts that are using summarization could use key point analysis to rank financial data points from documents, news, and press releases, allowing them to spot higher-quality market signals amid the chatter.

Learn more

Watson NLP is simple to integrate into your existing workflows and data infrastructure, and can be used behind your firewall or on any cloud with safety and security. Ready to talk to an expert about how you can deploy NLP in your business?

[Schedule a consultation →](#)



Take a deeper dive into the technical capabilities. Watson Discovery scours your data, surfacing the most relevant insights with NLP.

[Explore Watson Discovery →](#)

¹. Preserving institutional wisdom, IBM, August 2021