



AI-Based Contract Intelligence

In a nutshell:

- Automated data extraction from contracts
- High precision and recall
- Lower costs than with manual extraction
- Real-time contract processing
- Insight mining
- Learning driven by subject matter experts
- Based on neuroscience



cortical.io



Leverage a wealth of data from contracts with precise, automated extraction

Extract key information from thousands of complex contracts that use disparate and diverse language. Quickly generate consistent and comparable summary abstracts and spreadsheets, and fill your company's contract management software with automatically extracted data. Also search through associated documents such as amendments, certificates, approval notes, and letters. The Cortical.io Contract Intelligence engine vastly outperforms other AI-based extraction technologies by delivering extremely high levels of data precision and recall.



Manage contracts in real time with fast extraction speeds

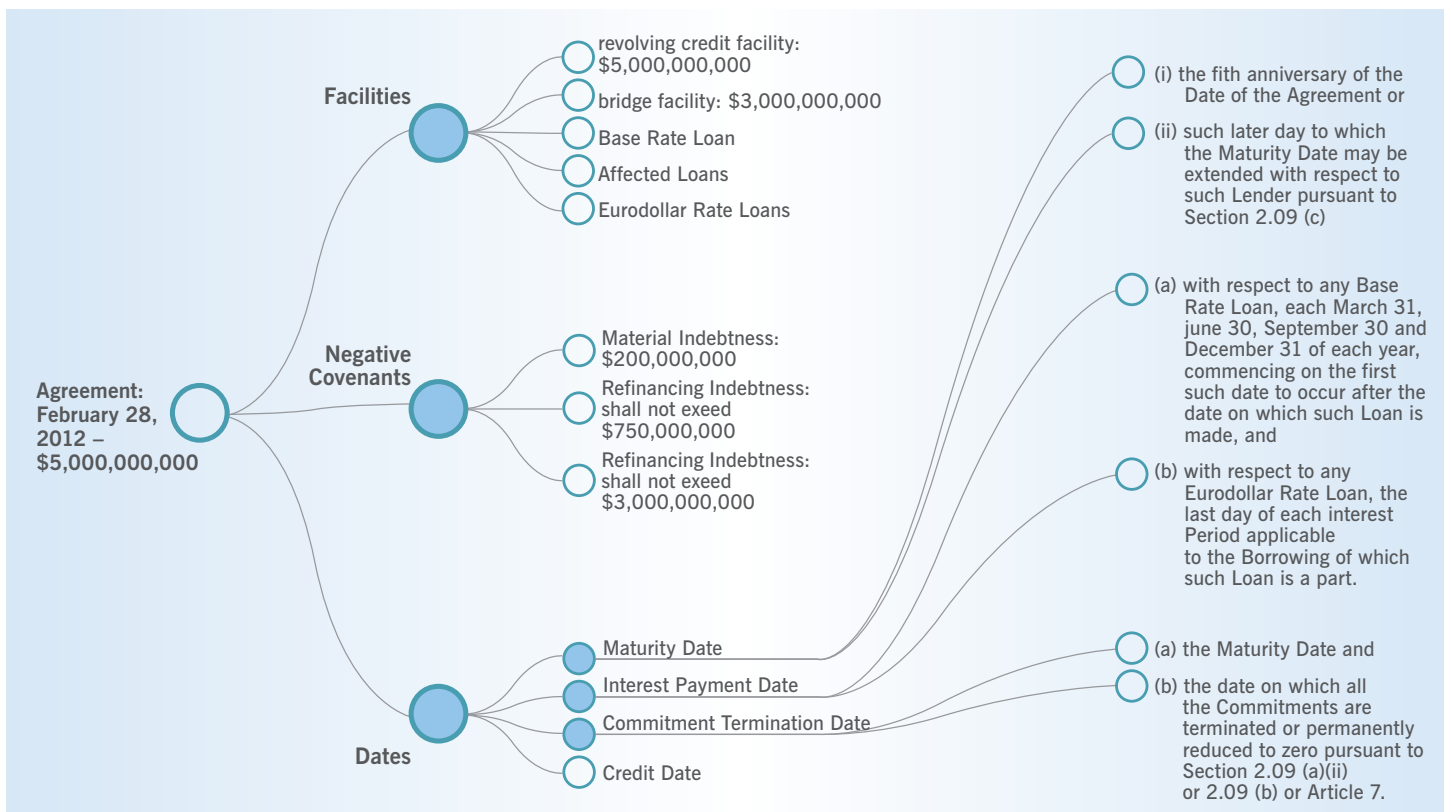
The management of contract lifecycles by keeping track of key information has traditionally been a labor-intensive activity, tying up huge resources. With the high data-extraction speeds of the Cortical.io Contract Intelligence engine, you get to visualize key aspects of contracts in seconds. The system is easily integrated with your contract management software so that you can dynamically add and review information from complex contracts, on the fly, as part of your daily workflow. Over the lifecycle of contracts, quickly compare extracted information with incoming data from other sources, such as income reports and compliance certificates, to check whether terms, conditions, and covenants are adhered to.



Gain valuable insights with large-scale contract analysis

Getting insights into the financial situation of companies or the correlation between contract clauses and return on investment can be a lengthy and complex process that requires the analysis of multiple pieces of collateral. The Cortical.io Contract Intelligence engine can mine large quantities of documents to extract and classify relevant information quickly and at a precision level that is difficult to achieve at scale with manual labor.

Facebook Credit-Agreement Relation Graph





How Cortical.io succeeds where others have failed

No other data-extraction solution on the market can achieve the same combined levels of high precision and high recall or can extract such complicated conditional terms from complex contracts as the Cortical.io Contract Intelligence engine can. Many companies have turned to Cortical.io after they achieved unsatisfactory results with other AI-based data extraction technologies.

So, what makes the difference with Cortical.io?

Analysis of meaning

One of the secrets to the success of the Cortical.io Contract Intelligence engine lies in a unique, meaning-based algorithm that draws from neuroscientific research into how the human brain processes information. Natural Language Understanding (NLU) is the ability to understand the meaning of text. The Cortical.io Contract Intelligence engine uses NLU to analyze the meaning of not just keywords but of whole sentences, paragraphs, and long text so that the problems of language ambiguity and vocabulary mismatch within and across documents are overcome. For example, the phrases “we closed the deal” and “the contract was signed” have similar meanings but use completely different words; The Cortical.io Contract Intelligence engine recognizes that similarity.

Quick, interactive learning process

With the Cortical.io Contract Intelligence engine, you can extract information from new contract types quickly, based on how the requested information is written in **only three to ten sample contracts**. The technology amplifies company intelligence and increases accuracy through an iterative fine-tuning process involving your subject matter experts who are knowledgeable in the business domain.

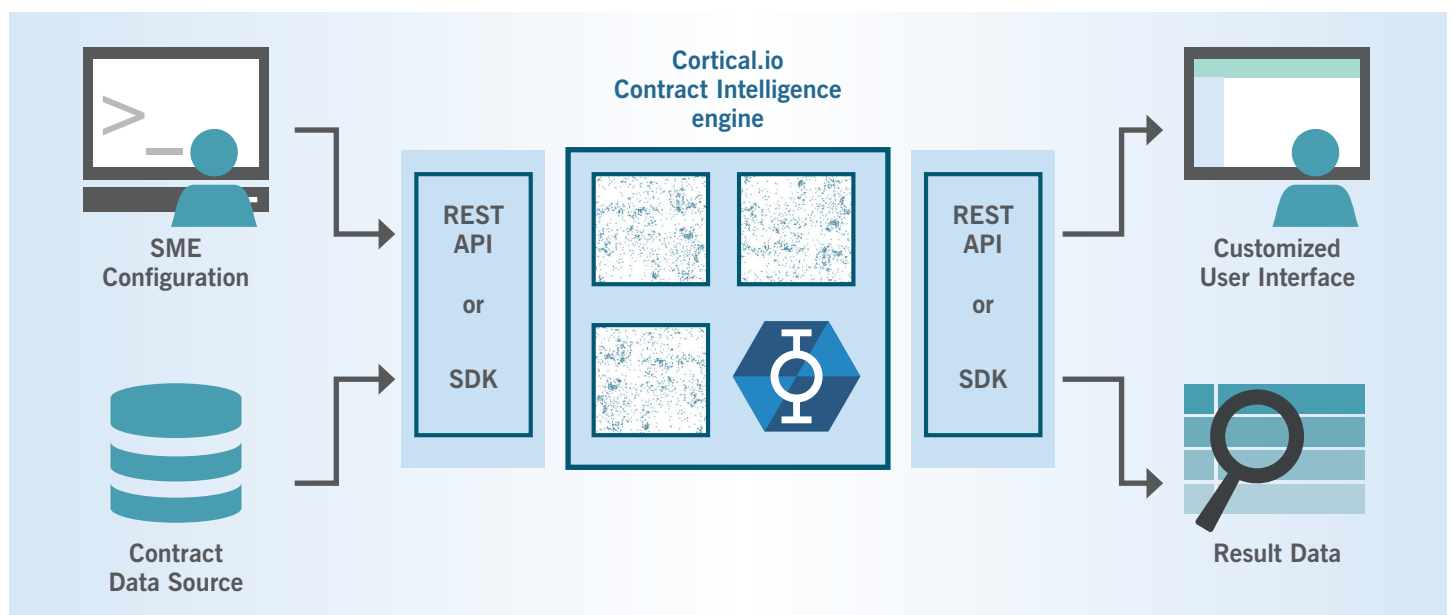
Banking use case

Lower your firm’s credit risk and meet legal requirements

To reduce regulatory capital surcharges, systematically important financial institutions strive to lower the risk associated with new credit agreements. The detection and classification of covenants from past contracts, and the correlation of covenant types with past defaults or successes, facilitate better risk assessment of new contracts. Classification of contract clauses can also be used to determine whether contracts meet banking regulations.

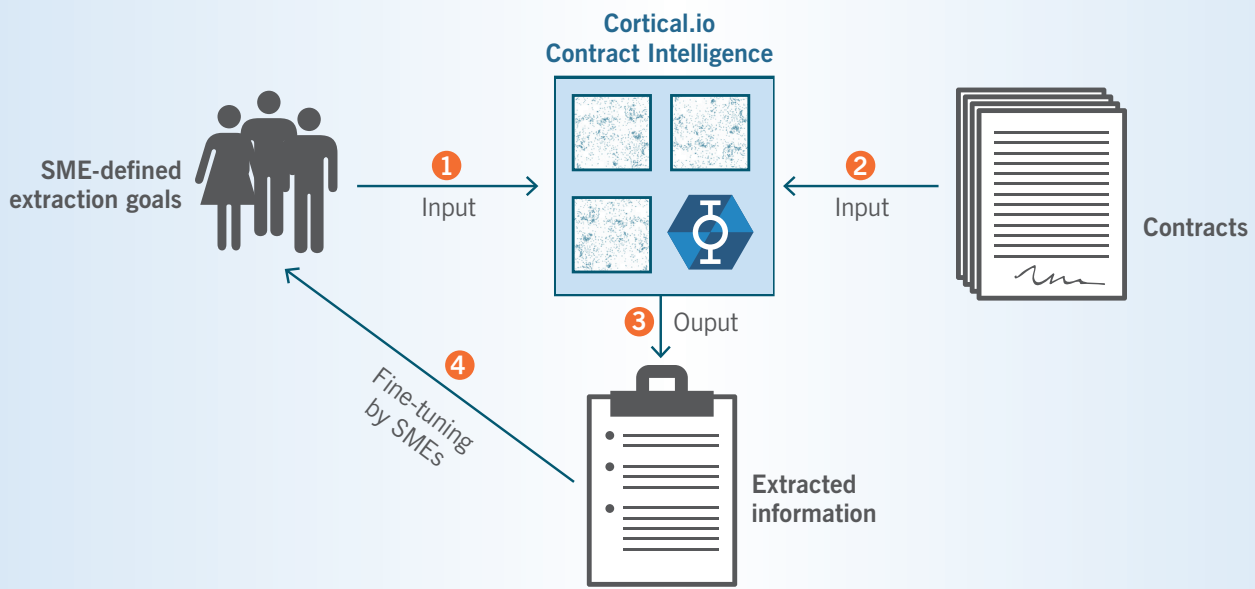
Banks can use the Cortical.io Contract Intelligence engine to extract information from thousands of complex contracts and to classify covenants and clauses in a fraction of the time it takes large teams of legal analysts to do, all at a lower cost and with extremely high precision.

The engine’s power is harnessed through an API or software development kit



How the Cortical.io Contract Intelligence engine learns

Your company's Subject Matter Experts (SMEs) go through a number of simple fine-tuning iterations (typically from five to ten), interacting with the Cortical.io Contract Intelligence engine to produce the best results.



- 1 SMEs define the type of information that they want to extract.
- 2 In an unsupervised learning phase, the Cortical.io Contract Intelligence engine learns to recognize contract vocabulary and concepts (for example, facilities, loans, variations of dates, and parties to an agreement) and forms relationships among the concepts.
- 3 Information is extracted from the contracts.
- 4 Based on the results of the extraction, SMEs fine-tune the system by adding to or modifying the type of information requested.

About Cortical.io:

Cortical.io offers NLU solutions based on Semantic Folding, a theory that opens a fundamentally new perspective on the handling of big text data. Inspired by the latest findings on how the brain processes information, the Cortical.io Retina engine converts language into semantic fingerprints, numerical representations that capture meaning explicitly.

The uniqueness of the Cortical.io algorithm makes it possible to solve many open NLU challenges, like meaning-based filtering of terabytes of unstructured text data, real-time topic detection in social media, and semantic searching through millions of documents across multiple languages.

Cortical.io was founded in 2011 in Vienna, Austria and holds a broad general license for Numenta's Hierarchical Temporal Memory technology.

