



LegalTech and NLP

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01 LegalTech Companies are Now Leveraging NLP to Rise to the Top

Law and language go hand in hand. Because of this, natural language processing (NLP) has been applied in the legal world since the 1960s, when people first started using search functions to trawl through legal content online. In the last few years, though, NLP and LegalTech have both picked up pace in a big way. There has been a surge in LegalTech firms applying deep learning and machine learning techniques for legal applications. In 2016, Deloitte stated that [39% of jobs in the legal sector stood to be automated in the next ten years](#). The firms that are rising to the top are those that are adopting AI and NLP technologies and building high performance models that drive innovation.

02 NLP Data Labeling and the LegalTech Landscape

NLP can analyze and convert language with the help of machine learning. The success of the resulting model, though, depends on the quality of the training data. This is where data labeling is key. Whether you're extracting information or are training a model to identify things like force majeure clauses, you need a robust, configurable labeling tool. With the right NLP data labeling tool, LegalTech firms can accelerate the entire NLP labeling project lifecycle. This goes much further than eliminating the headache that training data can be. It lets you create models that have genuine business impact, and allows you to take on more clients at a time while finishing work faster.

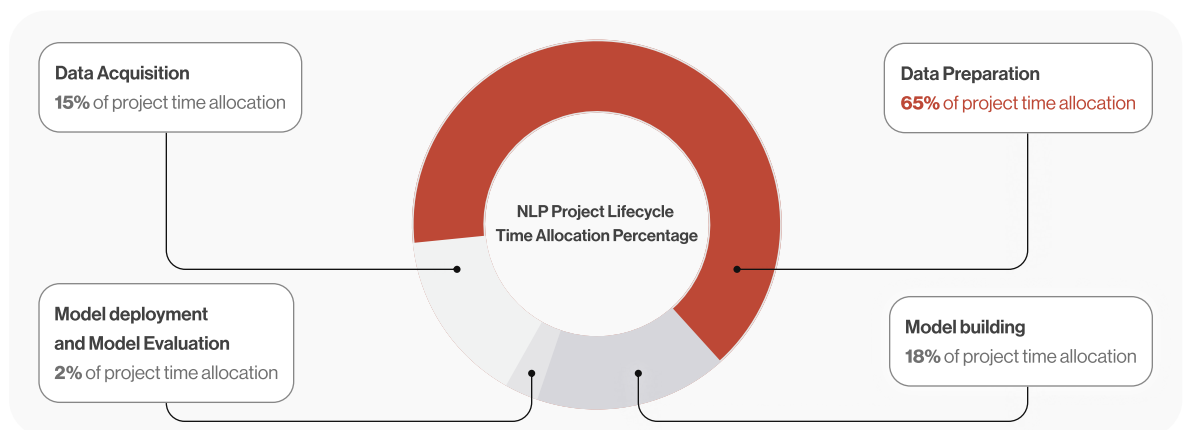


Fig. 1: NLP Project Lifecycle Image



03 5 Ways LegalTech and NLP Come Together

- 1. Legal Research:** Traditionally legal research relied on manually sifting through tomes, books, and libraries of information. This has long been replaced by electronic searches and retrieval mechanisms, and now the big players in LegalTech have launched their own AI and NLP-powered solutions (like LexisNexis' Lexis Analytics). Advancements like natural language query interfaces make it easier to quickly track down relevant information in a fraction of the time it has taken before, without needing detailed search queries.
- 2. eDiscovery:** The biggest challenge that eDiscovery technology has faced is determining which content is “relevant”, and determining that as quickly and efficiently as possible. NLP and machine learning are at the forefront, and more and more NLP providers are moving into the space as we speak. There's also a movement towards democratizing access to this information, particularly around enabling access to foreign language case-related content via translation.
- 3. Contract Lifecycle Management (CLM):** Contract review can be simple—such as non-disclosure agreements (NDAs)—or large and complex, stretching to many hundreds of pages. Companies are tracking all sorts of different clauses, dates, force majeure details, and more that are in these long contracts. Manual tracking is cumbersome and NLP is a great way to identify entities worth tracking to make sure nothing slips.
- 4. Document Automation:** This involves generating routine legal documents based on fill-in-the-blanks mechanisms or question and answer dialogs. Companies gather relevant data from the user and then input that to generate the document needed. NLP is at the core, and being able to accurately label the data defines the success of the model on the other side. “Garbage in, garbage out” is fitting here.
- 5. Online Legal Advice:** Legal advisors are interactive systems which produce tailored advice for a user based on a set of questions posed by the system. This usually involves question and answer dialogs that result in advice. For example, DoNotPay helps users navigate parking tickets, overdraft fees, and more. Much like with chatbots and IoT devices like Alexa, the more quality data these models have, the more relevant and human their responses can be. Again, NLP is the lynchpin here.

04 Why Invest in Datasaur's Labeling Tools?

To build a highly performant NLP model, simple labeling functions are not enough. You need robust features that can handle the complexities of the LegalTech world with customizability.

Datasaur has built features specifically for your industry, for companies just like yours. In Datasaur, you can connect clauses and relate information to each other. Select single entities or multiple lines, label them, and draw connections without the UI becoming cluttered. Use hierarchical labels to call out different types of loans. There are so many ways to label the same data, and all with ease of use in mind.

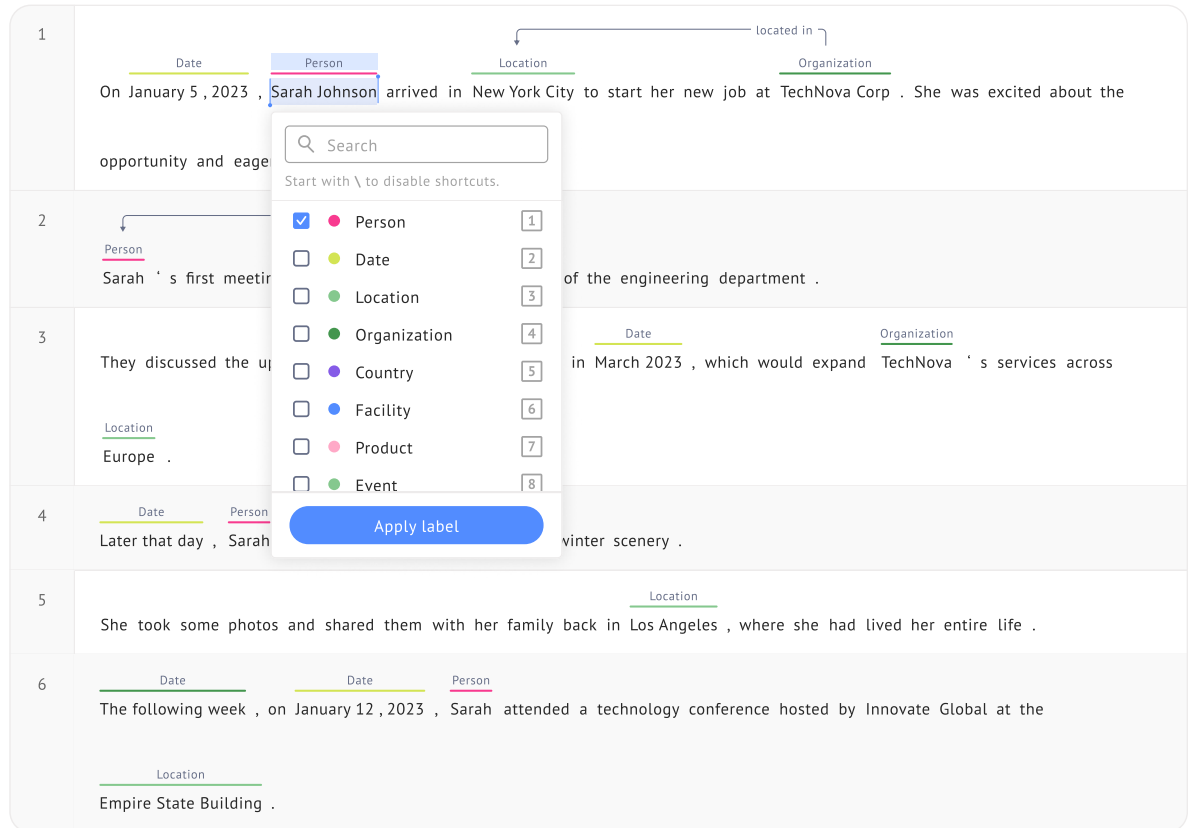


Fig. 2: Span labeling

05 Why Now?

It's never been more important to capitalize on NLP for LegalTech. Both LegalTech and NLP are advancing at a rapid pace, and driving the LegalTech industry forward. Unlock NLP's full potential and rise above the competition with a customizable tool built specifically for LegalTech data labeling.

About Datasaur

Datasaur is a private LLM provider and data labeling platform designed for companies to build their AI ecosystem with ease and efficiency. It assists organizations and universities in setting up custom LLMs and annotating data more efficiently and accurately through automation, quality control, and human-in-the-loop workflows. For more information, visit www.datasaur.ai.

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