eBook

AI-Powered Contract Lifecycle Management

How Generative AI and prompt engineering are changing the playing field for contract management professionals, and what you should keep in mind as you begin evaluating solutions.

contracts³⁶⁵®

Introduction

Since the release of ChatGPT by Open AI in November 2022, it seems that Artificial Intelligence and Machine Learning (AI/ML), Generative AI, and Large Language Models (LLM) have been dominating headlines and technology conversations.

The world of Contract Lifecycle Management (CLM) is certainly no different. And for good reason. For contract-intensive organizations, the prospect of accelerating contract reviews, decreasing workloads, and improving efficiencies with the help of AI is an exciting prospect.

As more and more organizations begin to explore things like ChatGPT and generative AI, it's helpful to understand the landscape of these new tools and to begin to evaluate where they might best be applied in the world of contract management.

In this brief, we'll define some basic terminology, look at potential use cases, and discuss some of the best opportunities—and potential pitfalls—of AI-powered contract lifecycle management, and how you can get started.

AI, Neural Networks, and Chatbots, defined.

As a concept, Artificial Intelligence is far from new. Ideas of artificial (non-human) cognition are as old as antiquity, and notions of "intelligent" computers have been discussed ever since the very first electromechanical computers emerged in the 1940s.

Over the last two to three decades, work in AI slowly gained steam. But recent developments have proven highly disruptive and, quite suddenly, what was once the realm of science fiction now has everyone scrambling to catch up.

If you're just getting your feet wet, don't worry. You're not alone.

Some terms and definitions to help you get grounded.

Artificial Intelligence

Simply put, **Artificial Intelligence (AI)** is when a machine simulates the kinds of processes often associated with intelligent beings. Work in Artificial Intelligence began in the 1950s.

Machine Learning (ML)

You'll often hear the term **Machine Learning (ML)** used as a synonym of, or in conjunction with, AI. Machine Learning is about teaching a machine to perform specific tasks and then identifying patterns to provide ever more accurate results. The two are closely related, so many people say **"AI/ML"** to simplify conversations without getting hung up on the technical differences.

Algorithms & Neural Networks

In the 2010s, a new idea emerged in the wake of the Big Data revolution, where **algorithms**—mathematical systems run on powerful computers—were used to recognize statistical patterns. These advances were called **neural network**s and are the technology that underlies Amazon's Alexa, Apple's Siri, and Google's personal assistant.

Large Language Models (LLM)

Rapid development in speech and image recognition, and technology advances that benefited from huge amounts of data and input, led to the development of **Large Language Models (LLM)**, which drew learning from the text of the internet and just about everything on it.

Transformers

Another big leap was **Transformers** (that's the "T" in GPT, BTW), which allows the neural networks that were studying this vast amount of text to evaluate entire sentences, rather than individual words—a.k.a. context recognition. Now, AI chatbots could "understand" the meaning of words, and do more with them.

Generative AI

If you think of all of this collectively as AI, it basically got really smart, really fast. Soon (and in what was kind of a byproduct of its intended work) AI was able to create seemingly unique responses to questions, write computer code and poetry, generate contracts and clauses, and create new kinds of images and art. These tools are often referred to as **Generative AI**.

OpenAI & ChatGPT

One of the big players in this space is a company called **OpenAI**, who released its chatbot, **ChatGPT**, in 2022, with significant material backing from Microsoft. What made **ChatGPT** so revolutionary, one could argue, was that its query and response model is so easy to use. Here, non-technical people can explore how powerful generative AI is. Just ask a question in a command prompt (a chatbot's input field), and ChatGPT will perform feats that seem like magic, right before your eyes.

Suddenly, we're standing at the threshold of a whole new world of possibility. Ready to jump in?

AI-Powered Contract Management

10 Key Areas for Implementation

Contract Lifecycle Management software is a powerful set of tools and technologies that enable companies to manage their contracts more effectively and efficiently, at every stage of the contract lifecycle—from negotiation and assembly to execution and obligation management, all the way through auto-renewal and expiration.

Here are **ten key areas** where there is exciting potential to leverage new AI capabilities in the contract management process. Whether it's extracting data, comparing terms, negotiating with their vendors, summarizing complex documents, or better identifying your organization's potential exposure and obligations. But—and this is a very big but—it's critically important to consider both the relative value of these activities and the current level of AI maturity in each area. (Though that's a larger discussion.)

1

Metadata Extraction
Extract metadata with simplified visualization and data placement

One of the most popular use cases for AI in contract management is around extracting data from a contract, typically a third-party agreement: vendor agreements, procurement agreements, etc. AI can help quickly identify the contract type and extract pertinent information—who's the supplier, what's the start date, what are the details within that contract—to help get this value data into the CLM system for processing.

2

Clause Comparison & Risk Rating
Prose and concept-based comparison of third-party contracts versus standard clauses with risk rating

Third-party contracts often have language that deviates from an organization's standard, approved language. AI can help identify and compare the "riskiness" of a contract relative to your company's standard language and then adjust the workflow and approval cycle based upon what it finds: alerting reviewers in the organization, tracking the approval process, and routing it to the appropriate people for approval.

3

Clause Extraction
Clause extraction for variant analysis, memorialization and processing

Adjacent to Clause Comparison is Clause Extraction. It's important to be able to pull pertinent sections out of larger contracts for analysis, to maintain accurate records of what changed, and to ensure that the clause was properly vetted and approved.

4

Obligation Extraction
Obligation extraction with standard attribution, jeopardy management, and reporting

AI can be helpful in identifying obligations within a contract. These are lengthier sections of contract language that define what an organization is required to perform, standards it must meet, service levels it must maintain, and more. Being able to identify obligations automatically is critical to helping organizations plan, allocate resources, maintain compliance, and stay out of legal trouble.

5

Contract Summarization
Generate document or metadata-based summaries for workflow and executive review

Contracts can be lengthy documents and they often need to be concisely and accurately summarized for approval by key executives, and to help speed workflows in the contract execution process. This was once considered the Holy Grail of AI-powered contract management but now, with chatbots like ChatGPT, it seems astonishingly simple to arrive at meaningful and accurate summaries of the most complicated contractual agreements.

6

Contract Language Translation
Translate and save documents into alternative languages with auto-detection

Converting contracts from one language to another can be a labor-intensive and highly specialized process. AI's natural language processing capability has been heralded for years (think Google Translate) and can now be effectively incorporated into sophisticated CLM processes.

7

Portfolio Analytics & Automation
Next-gen, AI-based search for private and public repositories and process automation

Any effective contract software includes analytics and reporting capabilities. The development of Large Language Models and Transformers has supercharged search, and analysis capabilities along with it. Now, companies like Microsoft are enabling organizations to focus ChatGPT to their own private cloud of data (as compared to just publicly available data we've seen up to now). This will enable organizations to comb through hundreds and thousands of contracts to understand risk exposure as laws change, to gauge organizational health and performance more effectively, and to generate better contracts over time.

8

AI-Influenced Workflow
Dynamically detect workflow patterns and adjust approval processes accordingly

As mentioned in Clause Analysis, AI can be helpful in adjusting the workflow—the approval process and chain-of-command reviews—that often consumes the vast majority of the contracting process. Effective CLM software can help stop backlogs and, coupled with AI, identify patterns that allow contract professionals to adjust or alter the flow, or simply be more vigilant about what's going on.

9

Contract & Clause Generation
Generative AI coupled with appropriate security, IP, and ethics protections

On the flip-side of Contract Analysis is Contract Generation. Powerful CLM software already helps organizations automatically create contracts based on approved language and past precedents. Generative AI will speed this process even further. However, it is critical to understand where chatbots are pulling their training information from to maintain privacy, security, and contract accuracy—while being ever mindful of IP and ethics implications (a topic being hotly debated in virtually every AI community).

10

Correspondence & Negotiations
Generate correspondence and negotiation strategies via memorializing and approvals

More and more, people are looking to AI to help manage follow-on tasks that relate to labor-intensive contracting work. Drafting emails and official correspondence related to the contract, and suggesting strategies for more effective contract negotiations, are just a few of the ways Generative AI can help organizations utilize employees' time more effectively.

Whoa!
Not so fast, there.

Trust, validate, and stay vigilant

AI sounds amazing, right?! Except, it turns out that chatbots lie, hallucinate, and just plain make stuff up. (Although, they're getting much better, very quickly.) How can this be? Well, remember that Large Language Models were trained on information pulled from the internet itself. And we're sorry to say that not everything you read on the internet is true. So, studying erroneous information can lead to AI returning erroneous results. Remember, AI doesn't actually think—it draws from what it has been trained on.

Now, this doesn't mean we should throw out AI altogether. Instead, it's wise to Trust & Validate what you get back from your chatbot. Think of it as proofreading, fact-checking, and verifying your work. Contracting is often related to Lawyering, so this shouldn't be too much of an issue.

But there are key issues to be mindful of.

Intellectual Property

There are currently a number of high-profile lawsuits being tried where artists and individuals are claiming that AI trained using their work (studying their songs, drawing from their art and photography, etc.) are violating IP laws.

Privacy

When you use certain chatbots, you are allowing them to learn from your work. You are the training data, too. Does this mean your company's contract data—its clauses, its standard language, its IP—is now part of the public domain? How can you use AI but keep your data safe?

Ethics

Do you need to inform a client, customer, vendor, or supplier that the contract they're signing has been written by an Artificial Intelligence? Is it wrong to pass off an AI's work as your own? Do you have the right to claim ownership or authorship of work derived from training data that used someone else's IP? These are thorny ethical, and potentially legal, questions that will continue to evolve as the world adapts to its new AI friends.

The critical importance of CLM infrastructure

So, what are you going to do with all this AI-extracted metadata and clauses and summary language and correspondence? It is true, many organizations are still getting by using highly manual processes to manage their contracts. But, for contract-intensive organizations that have to handle high volumes of NDAs, CDAs, MSAs, and the like, contract management software is a mission-critical business application.

On a recent podcast, Zach Abramowitz, a legal industry consultant who has been exploring AI for years, noted that, before ChatGPT, AI was like a boat moving along as fast as a boat can go. With the advent of ChatGPT, it was transformed into a jet plane.

Russ Edelman, founder of Contracts 365®, took the analogy even further. In an article he wrote for the World Commerce and Contracting Association, Russ compared AI being used for contracting to a jet plane flying without any infrastructure to support it—no air traffic control, no airports, no TSA, no baggage handlers, no airlines. (Please keep your tray tables in the upright and locked position.)

Luckily, in the world of contract management, CLM software provides the necessary infrastructure that AI needs to be put to its most effective use. From central document repositories and automatic contract assembly, to instant alerting, notifications and one-click approvals, to obligation management and end-to-end contract lifecycle visibility. AI and CLM working together can be an incredibly potent combination.

Microsoft & Contracts 365

At the intersection of AI & CLM

When thinking about AI-powered Contract Lifecycle Management, there are contract software vendors who have been using AI for 20+ years. But this is where the boat–jet plane analogy is critical. ChatGPT revolutionized AI overnight. Anyone who was building AI contracting capabilities before that is suddenly way behind, paddling furiously as the ChatGPT jet streams overhead.

ChatGPT was created by OpenAI, and one of OpenAI's early and most significant backers was Microsoft. Today, Microsoft has thousands of engineers working to leverage AI across their technology stack from Bing, SharePoint, Teams, and Dynamics 365 to virtually every other product that they offer (check out Microsoft Copilot). And while Microsoft's influence is substantial both in terms of OpenAI and Microsoft's Azure Open AI offerings, they set the stage for competitive organizations to leverage OpenAI capabilities by eliminating many of the barriers to entry.

Meanwhile, at Contracts 365, Inc., we realized long ago that, for a huge number of organizations, Microsoft was the technology provider of choice. That's why Contracts 365 is purpose-built for organizations that run Microsoft. Contracts 365 leverages the technology investments customers already have in Microsoft—security protocols, identity management, cloud resources, productivity tools—to streamline the contracting process. And today, Microsoft and Contracts 365 are partnering to advance AI-powered contract management, end to end.

At Contracts 365, we grew up in the world of legal document management, so privacy and security is of paramount concern. Azure OpenAI is critically different because it takes the best parts of AI contracting but allows you to work in your private instance of Azure. That means the AI processing occurs in a private data repository as compared to the publicly available information on the internet. And for us, this is another game changer.

Conclusion

A brave, new world. A fascinating future.

We hope this brief introduction to AI-Powered Contract Management helps you get a sense of the power of AI and the incredible opportunity it presents for contract management. As the world gets accustomed to the new paradigm of AI/ML, LLMs, and chatbots, we think there's going to be a lot to learn, and a lot to Trust & Validate as we proceed. But advances like Microsoft's Azure OpenAI seem to provide important guardrails and assurances that AI can work in enterprise environments, especially when it comes to contracting.

If you'd like to learn more about **AI-Powered Contract Lifecycle Management** or explore Contracts 365, please checkout our website at **contracts365.com**—or feel free to reach out to us today. It's a fascinating time for contract professionals and we'd love to hear what you think!

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Contracts 365 is powerful contract lifecycle management software purpose-built for Microsoft 365 customers. Our intuitive, cloud-based CLM software leverages our customers' strategic investment in Microsoft applications, architecture, and security to give them unparalleled control of their private contracts and data. With world-class implementation and support of industry-specific contract management solutions, Contracts 365 helps you discover the power of your contracts, every day.

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