



Evolving Contract Lifecycle Management with Agentic AI

A human-centered approach



01

Executive summary

Artificial Intelligence (AI) is revolutionizing Contract Lifecycle Management (CLM) to help enhance contract processing and compliance efficiency, among other areas. That wasn't always the case. Early AI systems encountered significant challenges with the intricacies of legal language, which led to widespread skepticism for using AI to write and negotiate contracts in their entirety.

Agentic AI represents a new wave of AI innovation. Current agents can anticipate needs and autonomously initiate actions, while providing contract redlines and approval routing based on pathways and logic that is codified into the system. Yet despite these advancements, Large Language Models (LLMs)—which Agentic AI agents are built on—continue to falter when faced with lengthy contracts and they also introduce substantial risk when relied on to autonomously negotiate and execute agreements.

For those reasons, human oversight remains indispensable for reducing risk and providing the necessary strategic reasoning required in contract negotiation.

As Agentic AI continues to grow in the market, it is critical to help ensure that sensitive decisions are scrutinized by qualified individuals and that they align with the organization's ever-changing requirements. The key to successfully integrate Agentic AI into the contract lifecycle process, therefore, is balancing AI efficiency with human expertise, ensuring robust strategic oversight and continued technological progress.

02 | What is CLM?

CLM is a foundational yet often underleveraged function in enterprise operations. Traditionally viewed as a digital filing cabinet, CLM systems were designed to store executed agreements and ensure basic compliance.

But in today's environment - defined by regulatory complexity, globalized supply chains, and rising expectations for speed and transparency - this repository role has been expanded to encapsulate much more.

Modern CLM platforms are more sophisticated in how they support the entire contract lifecycle: from request and authoring to negotiation, execution, post-award management and renewal. These tools are driving innovation in procurement and legal technology, driven by the demand for new features that allow teams to save time and work more strategically. Key advancements include

clause libraries, automated metadata extraction, predefined clause construction, risk scoring, and seamless integration with e-signature and ERP systems.

Advanced technology, including AI, will continue to serve as a foundational component in modern CLM systems for procurement, sales, and legal teams. Effective CLM software will address operational inefficiency, risk exposure, and blind spots, transforming it from a mere legal tool into a strategic enabler of business agility.

In this way, the tool that originally was an electronic repository is now an AI-backed system that optimizes contracting cycle times, helps maximize compliance, and unlocks insights from contract data that were previously buried in PDFs.

03 | The role – and limits – of “Early AI” in CLM

Over the past decade, “Early AI” has been introduced into CLM to automate routine tasks. This early form of AI is essentially a complex machine learning model trained to extract key terms, flag deviations from standard clauses, and recommend fallback language.

At this stage, the technology allows contracts to virtually write themselves with minimal human input. However, incorporating these features requires advanced configuration based on algorithmic input that is inflexible once implemented. This necessitates continuous retraining of algorithms and updates to rules as circumstances and policies evolve.

These rule-based models improve throughput and consistency, but they have clear limitations. Early AI models struggle with ambiguity, lack contextual understanding, and require constant retraining when contract templates change. If an input does not match with what is programmed in the model, for example, the system will not function correctly. For this reason, adoption rates have plateaued: while early AI could assist, it could not replace human judgement, especially in high-risk negotiations.

“Current AI Market intelligence tools for contracting are quite limited and don't factor the Nigerian Market and niche sectors such as the Energy space. There is a need for sophisticated AI solutions to address the gap. Furthermore, there is a need for AI tools which can bridge the knowledge gap between Business owners and Contract Advisors — being able to translate business needs to clearly defined contract scope — this should be the next frontier for AI adoption in the Nigerian Energy space for contracting.”

- Procurement Contract Advisor in the Nigerian Oil & Gas Industry.



04 | Enter agentic AI: A new paradigm

Agentic AI represents the third wave of AI innovation. Unlike traditional AI, which analyzes and recommends, Agentic AI can initiate actions, adapt to changing conditions, and collaborate with other parties to achieve goals. In the context of CLM, this means agents can:

- // Draft low-risk contracts based on predefined playbooks.
- // Simulate negotiation scenarios and escalate when thresholds are breached.
- // Monitor contract performance and trigger renewals or alerts based on real-time data.

The chart below illustrates the differences between Large Language Models (LLMs), agents, and humans. Each group has very different strengths and limitations, which makes a strong case for implementing AI more extensively in the procurement and contracting functions. This symbiosis will increase productivity, improve contract quality, and mitigate risk.

	Role	Primary Function	Strength	Limitation
	LLM	Reactive text generation	Language fluency, speed	Lacks goals, limited context
	Agent	Task initiator with goals + context	Proactivity, context awareness	Still learning to handle ambiguity
	Human	Strategic reasoning + accountability	Judgment, negotiation, oversight	Time-intensive, cognitive bandwidth

This shift towards an AI empowered legal and procurement function is not just technical—it’s philosophical. Agentic AI introduces a model of shared control, where machines handle the routine, and humans intervene only when strategic guidance or interpersonal communication is necessitated. With this advancement, a “human-in-the-loop” approach to Agentic AI is essential for trust and accountability.

05 | Agentic AI glitters, but is it gold?

The promise of Agentic AI lies in its ability to scale expertise, reduce legal bottlenecks, and make contracting more proactive. Based on these promises it has the potential to be transformative. However, its success depends on thoughtful and careful design. Escalation pathways must be built in. Agents must be transparent and auditable, and organizations must resist the temptation to over-automate sensitive decisions, as AI still has significant limitations.

Research shows that LLM accuracy can drop by 10–20 percentage points when processing prompts exceeding 1,000 characters—an issue for contracts that routinely span more than 30 pages and 100,000 characters. If agents are utilizing this LLM output as a basis to negotiate new terms,

this will lead to faulty decision-making and additional work that must be reviewed by a human post-negotiation.

As additional agents across the company provide input on the contract from their respective functions, these errors will increase as agents currently lack the ability to collaborate to drive to a common outcome. A breakdown in efficiency and effectiveness will follow.

Therefore, while generative AI can support drafting and risk analysis, and agents can be utilized to contribute to negotiations on a small scale, AI cannot yet replace human oversight in high-stakes agreements and data backed negotiations.

06 | The role of human oversight and escalation

Consider a simple scenario where two AI agents negotiate a contract. One operates on behalf of the selling party and has a programmed floor of \$50.00 per unit, while the other agent aggressively pursues financial optimization and has a programmed ceiling of \$45.00 per unit. When these agents inevitably reach a stalemate over key terms in the contract due to their programmed boundaries, human input becomes essential, and a true negotiation will be required to determine how to flex various terms to stretch past these initial boundaries.

This constraint is compounded when negotiation teams seek value other than price. When that happens, Agentic AI must shift to a support role to let humans have bigger picture discussions and identify other value levers in the contract.

Developing well-designed escalation pathways in Agentic AI systems ensure that sensitive decisions are reviewed by people with the context and authority to intervene. This is the essence of an agentic AI centric strategy with a human-in-the-loop: empowering machines to act autonomously, while ensuring critical issues are elevated appropriately.

"Even with the advent of sophisticated AI, human beings will continue to play strategic roles in major activities. For example, key tasks such as relationship building will remain primarily the responsibility of humans — with AI serving as an enabler. The contracting function involves bringing multiple stakeholders together to achieve a goal. Humans will always serve as the conductors of these complex interactions, with AI supporting and enhancing the process."

- Head of Contracting for an upstream player in the Nigerian Oil and Gas Sector.

07 | Corporate confidence in AI

There is growing confidence that once negotiated terms are input, Agentic AI can efficiently draft contracts and manage routine documentation. Tests show AI demonstrates more than 95% accuracy on drafting long-form legal texts and can provide transparent, auditable decisions.

However, trust in fully autonomous AI agents to negotiate or draft contracts without human oversight remains limited; today, only 25–30% of executives express confidence in allowing AI to make independent legal or financial decisions. Few legal teams will trust AI to write custom contract language on behalf of the company, and it is not possible for AI to execute an entire negotiation involving complex terms. Yet, as AI becomes more advanced, legal teams are expected to increasingly trust it to generate a first draft, flag anomalies, and route contracts for review.

Although new technology and agents are being developed at a rapid pace, market intelligence says that the general business community is still reluctant to introduce a single agent to their operations; and is even less likely to introduce agents to act on behalf of the legal and contracting function, as it remains ineffective.

As AI advances, Agentic AI is still not expected to replace legal teams. Instead, it will augment them and make them more effective. In a world where legal talent is scarce and expensive, that augmentation could be transformative.



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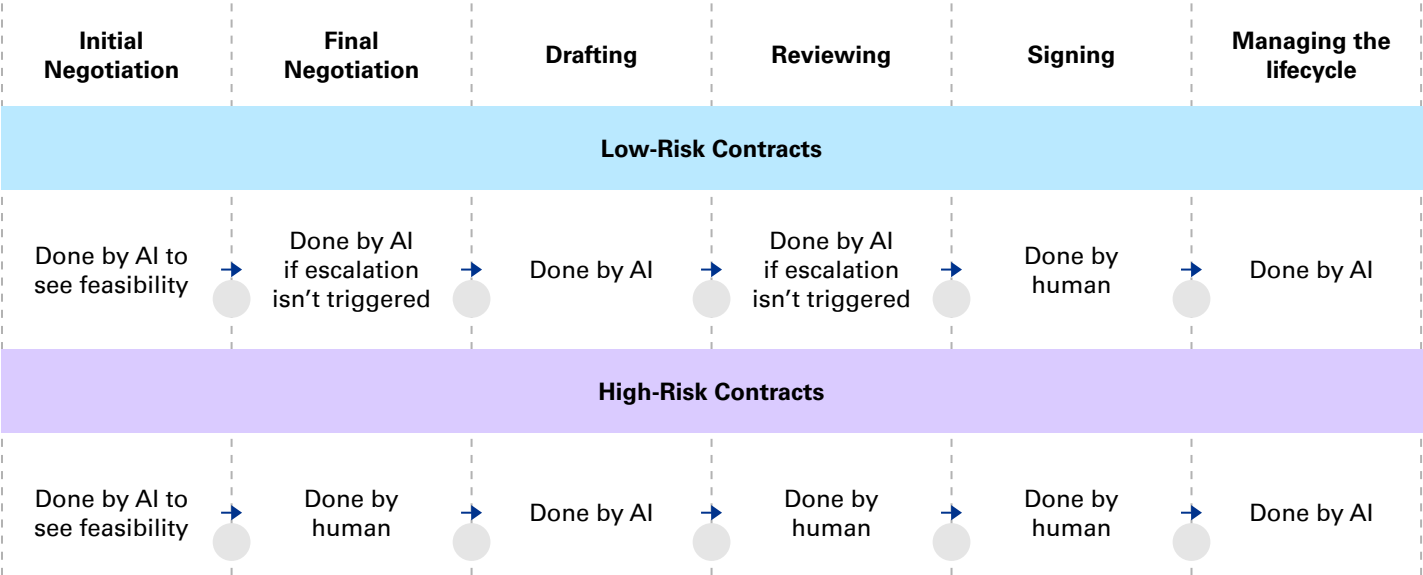
A five-year vision: The Rise of Agentic AI in Contracting

Over the next five years, the procurement function is expected to leverage Agentic AI to play distinct roles across the contract lifecycle.

Contract routing will be handled by agents that interpret deal intent, policy, and approval thresholds. CLM platforms will evolve to require minimal manual configuration, with metadata extraction and deal recall powered by memory-enabled agents. Agentic AI will fully transform contract workflows—but it won’t eliminate the need for human judgment or instruction. One or two agents may be

introduced to procurement or legal functions to assist with drafting and negotiation, but don’t expect to see multiple agents completing a negotiation together and fully drafting a contract, as coordinating agents is an aspiration that is many iterations away for most corporations.

As outlined in the chart below, low-risk contracts will be heavily managed by AI, with human intervention only for escalations. High-risk contracts will center on human-AI collaboration.



Procurement and contracting professionals over the next five years must be prepared to evolve into an orchestrator role: part negotiator, part data scientist, and part AI trainer. Ultimately, the organizations that will thrive coming out of this third wave of AI will be those achieving the strongest symbiosis between human expertise and machine intelligence, without over-relying on one or the other.

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How KPMG can support

KPMG supports procurement and contracting teams in unlocking the value of Artificial Intelligence—from identifying strategic opportunities to implementing intelligent solutions. Whether it's automating contract analysis, enhancing supplier risk management, or optimizing spend visibility, KPMG brings deep domain expertise and advanced AI capabilities to transform procurement operations. By aligning AI initiatives with business goals, KPMG helps organizations improve efficiency, reduce costs, and make smarter, data-driven decisions across the procurement and contracting lifecycle.

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