AI & Automation in Research Contracting

Recorded Webinar | June 10, 2025 | 2:00-3:30 PM Eastern

Presenters

Tara Rabe, Operations Administrator, Mayo Clinic

Jim Wagner, Co-founder & CEO, The Contract Network

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Meet our speakers

Tara Rabe

Operations Administrator Mayo Clinic

Jim Wagner

CEO
The Contract Network

Session Agenda

1. **Welcome and Framing (5 min):** Introduction to the session and goals; why this matters now.
2. **The State of Research Contracting (15 min):** Overview of current challenges, including agreement cycle times, stakeholder alignment, and systemic inefficiencies.
3. **Understanding AI's Role (15 min):** Clarifying what AI can and cannot do in contracts today—distinguishing between hype and practical tools.
4. **Case Study: Mayo Clinic AI Implementation (15 min):** Real-world example of implementing AI for clinical trial agreements—what worked, what didn't, and lessons learned.
5. **Automation – AI's Best Friend (15 min):** The opportunity and potential impact of incorporating process automation in research contracting workflows.
6. **Collaboration Skills for the AI Era (15 min):** Exploring the human-AI interface: task allocation, prompting strategies, and maintaining trust in automation.
7. **Q&A and Wrap-Up (10 min):** Open discussion with attendees; address questions and next steps.

Learning Objectives

1. **Understand** the role of AI in modernizing clinical trial contract management.
2. **Examine** case studies of AI applications in contract negotiations and compliance.
3. **Identify** challenges and ethical considerations in implementing AI solutions.
4. **Learn** strategies for integrating AI tools to enhance contract workflow efficiency.

Polling Question

Multiple choice - multiple responses allowed

What is your principal responsibility in the context of clinical research?

- Oversight of Clinical Operations
- Contract Negotiator
- Clinical Trial Coordinator
- Legal Counsel
- Regulatory Affairs and Compliance
- Other

Polling Question

Word Cloud

What would most like AI to do for your clinical trial agreement processes?

Polling Question

Multiple choice - single response

Which do you believe is more complex?

- Negotiating a clinical trial agreement
- Providing a clinical diagnosis

Polling Question

Multiple choice - single response

How often do you use AI in your day-to-day job?

- Never
- Rarely
- Sometimes
- Often
- Very frequently

Polling Question

Multiple choice - single response

How often do you use AI in your personal life?

- Never
- Rarely
- Sometimes
- Often
- Very frequently

Three Leading Voices on AI

QUOTE FROM

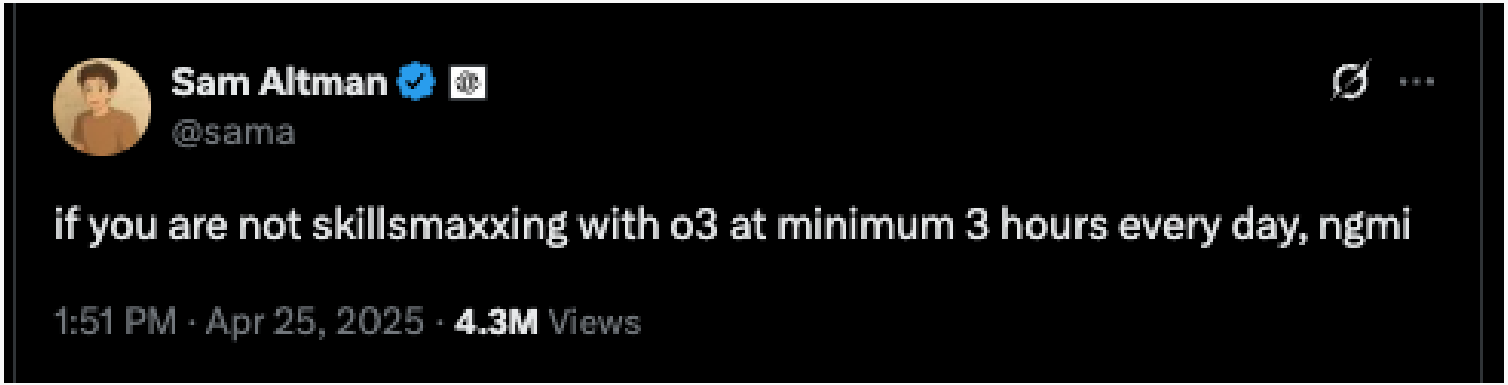
CEO of Anthropic

As our CEO Dario Amodei writes in 'Machines of Loving Grace', we expect powerful AI systems will emerge in late 2026 or early 2027. Powerful AI systems will have the following properties:

- Intellectual capabilities matching or exceeding that of Nobel Prize winners across most disciplines—including biology, computer science, mathematics, and engineering.
- The ability to navigate all interfaces available to a human doing digital work today, including the ability to process and generate text, audio, and video, the ability to autonomously control technology instruments like mice and keyboards, and the ability to access and browse the internet.
- The ability to autonomously reason through complex tasks over extended periods—hours, days, or even weeks—seeking clarification and feedback when needed, much like a highly capable employee would.
- The ability to interface with the physical world; controlling laboratory equipment, robotic systems, and manufacturing tools through digital connections.

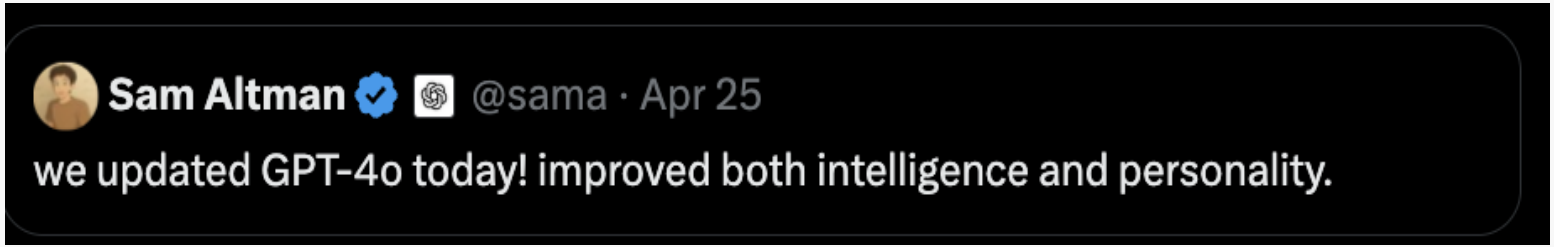
QUOTE FROM

CEO of OpenAI



QUOTE FROM

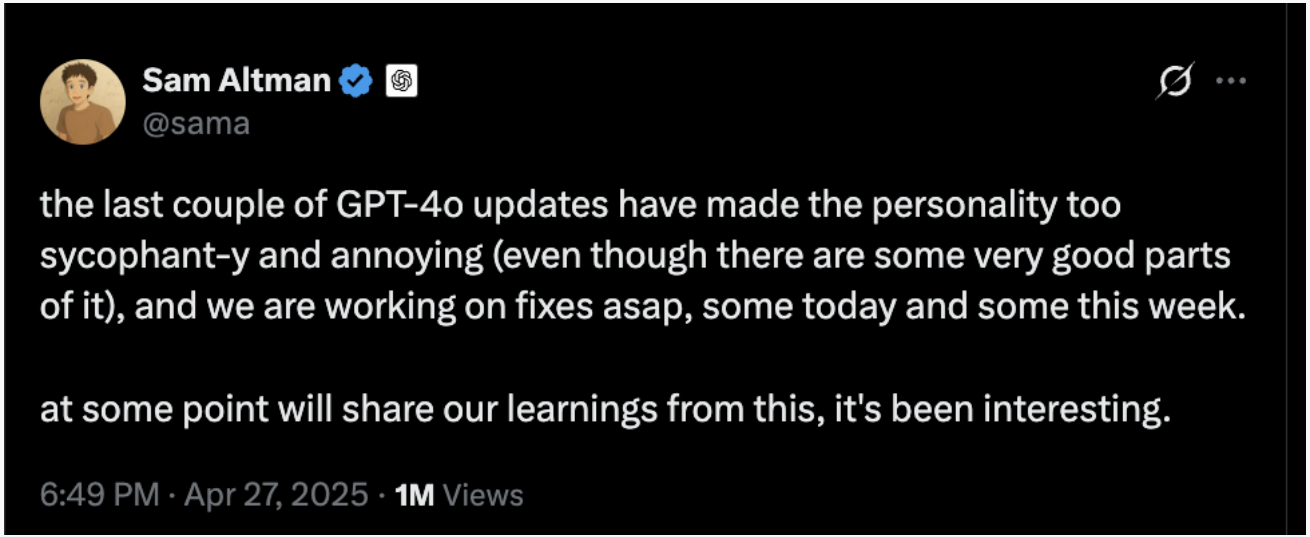
CEO of OpenAI



He gets shown up too (April 25)

QUOTE FROM

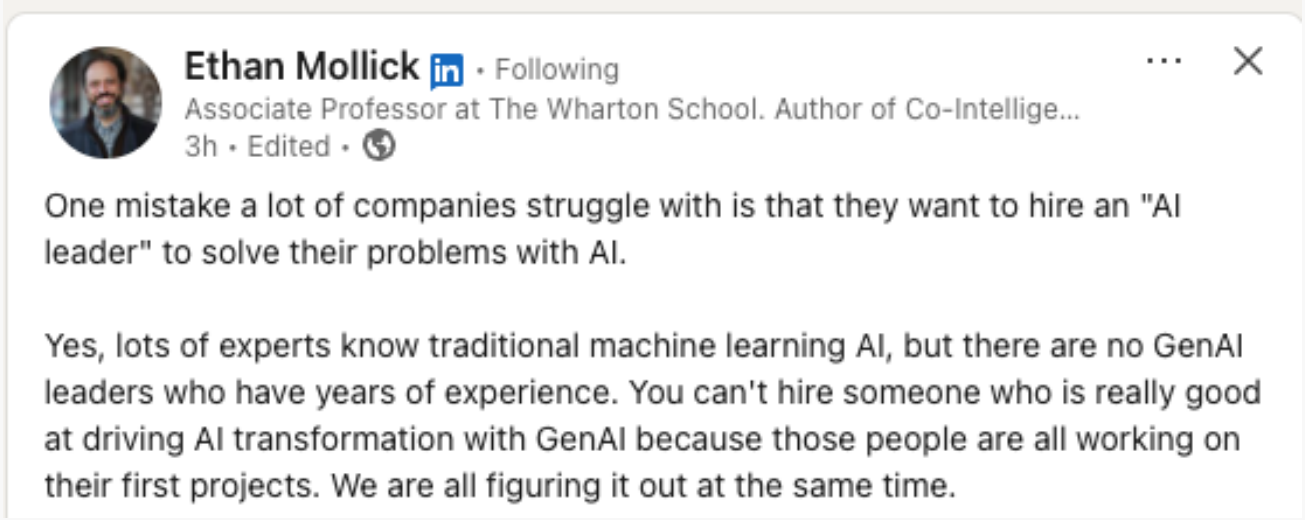
CEO of OpenAI



He gets shown up too (April 27)

QUOTE FROM

Professor of Management at Wharton



Ethan Mollick • Following

Associate Professor at The Wharton School. Author of Co-Intellige...

3h • Edited •

One mistake a lot of companies struggle with is that they want to hire an "AI leader" to solve their problems with AI.

Yes, lots of experts know traditional machine learning AI, but there are no GenAI leaders who have years of experience. You can't hire someone who is really good at driving AI transformation with GenAI because those people are all working on their first projects. We are all figuring it out at the same time.

We're all learning together

The Takeaway

This is an area that is moving fast

This is an area where the more time that you spend, the better you will become

This is an opportunity to learn, enrich, improve for yourself and others

This is one of the most active areas for AI and innovation

Contracts admin should not be left behind

The Research Agreement Problem

THE BOTTLENECK HOLDING BACK RESEARCH

Contract negotiation delay is often the most cited cause for slowing study start-up

Sites are under **pressure** to do more with fewer resources

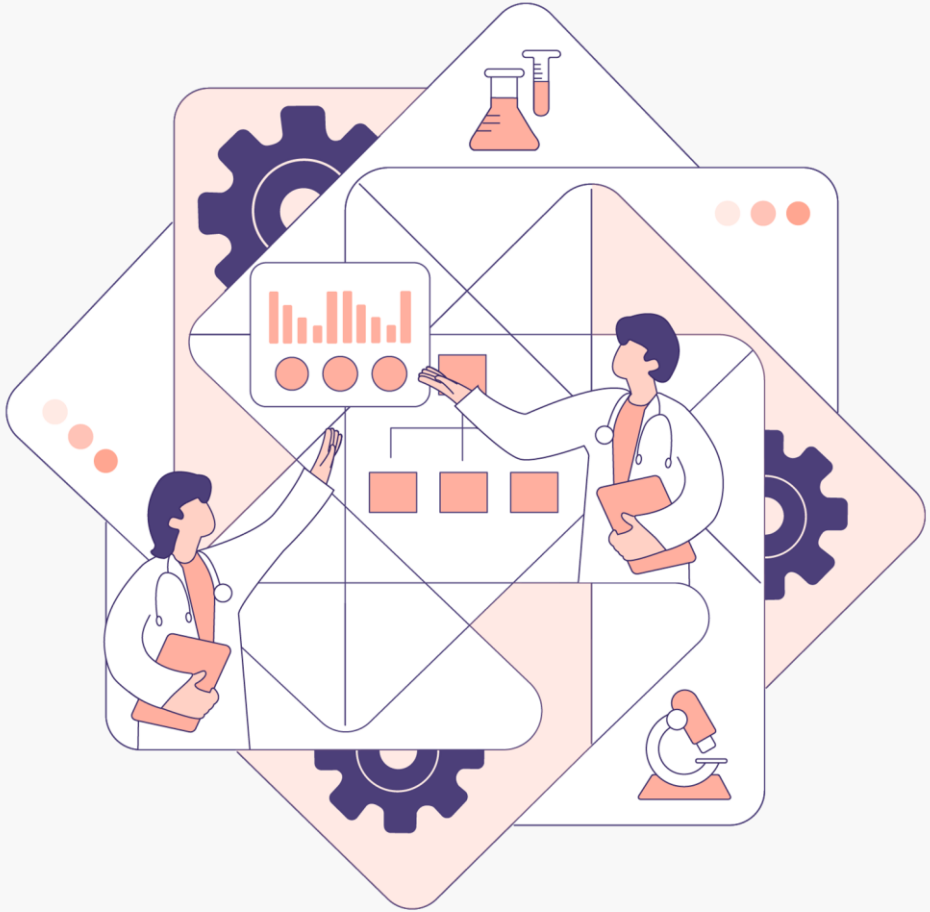
Contract cycles are a top cause of **delays**

Manual reviews and repetitive redlines waste valuable **time**

THE CLINICAL TRIAL AGREEMENTS PROBLEM

Longest average contract negotiation time in the world.

Impacts hundreds of thousands of agreements annually.



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No Contracts
No Cures

THE BOTTLENECK HOLDING BACK RESEARCH

Some Fast Facts

90+ days to negotiate (industry average)

Initial CTA review and redline takes 5 -15 hours

Site SLAs for turnaround range from weeks to a month

These timelines and SLAs are likely to suffer as a result of HHS cuts

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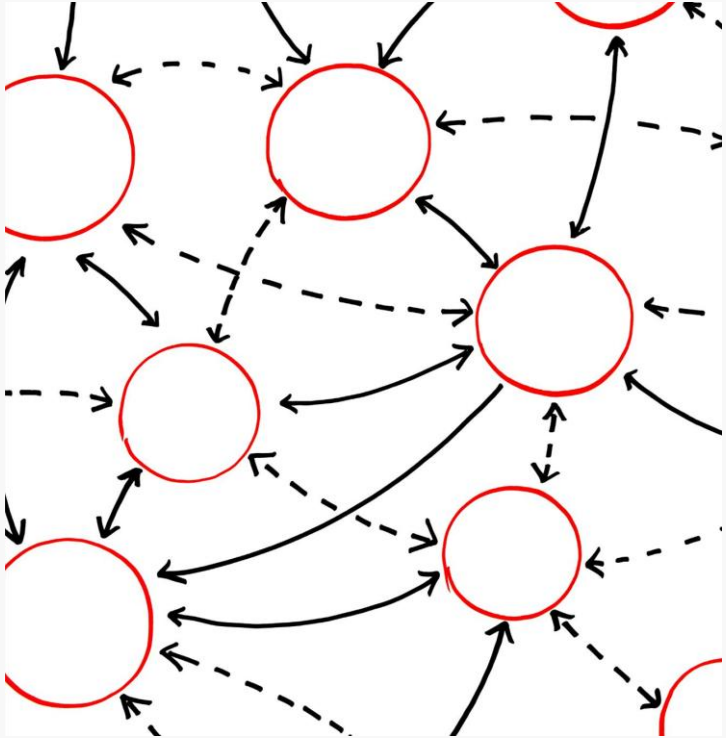
Real World Example

Urgent need for improvement

When working in a siloed environment with no process optimization it would take Mayo 6-9 months to negotiate a Clinical Trial Agreement.



Siloed Processes and Lack of Optimization

Siloed Processes

Sites often work in silos, which hinders collaboration and efficiency across different departments (ie. IRB, budgets, contracts).

High Volume of Contracts

Mayo handles approximately 6,500 clinical-trial related contracts annually, leading to overwhelmed systems and processes

Lack of Optimization

Master Service Agreements (MSAs) can simplify processes and provide a more efficient framework for contract management.

Study Kick off process should be used to set expectations for all parties prior to budget or contract negotiations starting.

Goal of using AI-powered Contracting Tool

Goal: To achieve a 25% reduction in Clinical Trial Agreement (CTA) review time by end of Q2 2025 and a 50% reduction by end of 2025 to accelerate study start-up timelines.

This goal is crucial for operational success.

Enhancing Operational Efficiency

Reducing the time it takes to review CTA's will enhance operational efficiency, leading to improved productivity and resource utilization.

Impact on Clinical Trials

Achieving this reduction will speed up clinical trial activation, allowing for faster results and will bring cures to patients faster.

New Average Time to Sign
25 Days!

Introducing AI to the Conversation

People Plus AI is a Proven Win

Research shows consistently better outcomes

- Speed
- Quality
- Rate of completion
- Scalability

Most importantly … satisfaction of team members / users

Benefits of AI in Contracting

Speed

Faster contract reviews and approvals.

Compliance

Ensures adherence to regulations and policies.

Risk Reduction

Identifies contractual risks early.

Efficiency

Reduces manual review time.

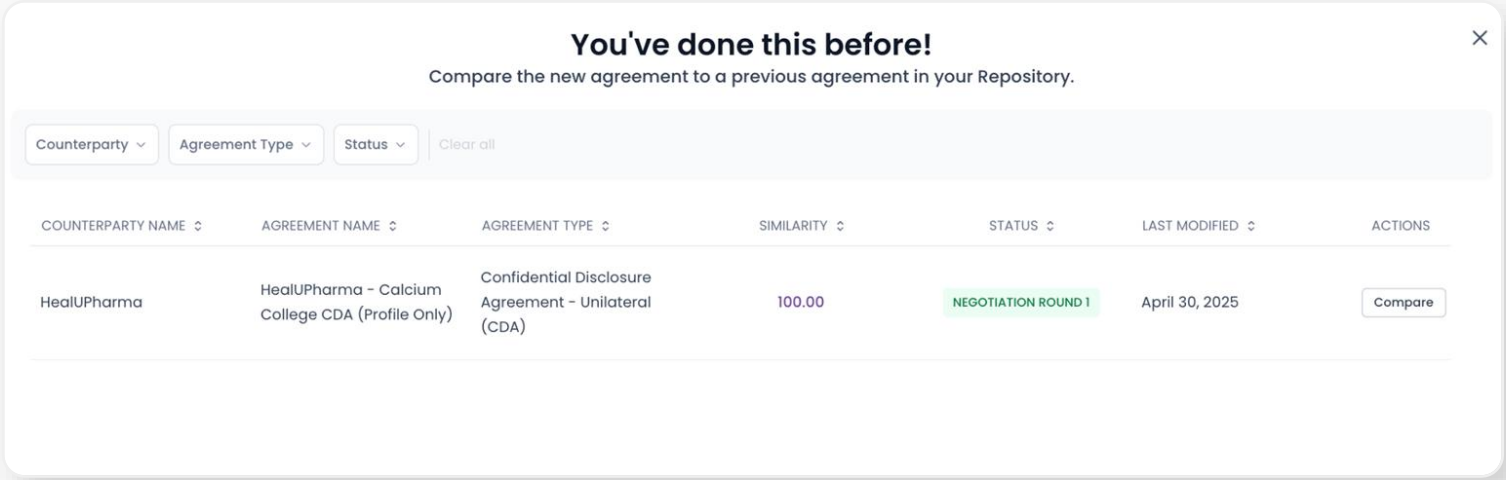
Cost Savings

Automates repetitive tasks, reducing legal costs.

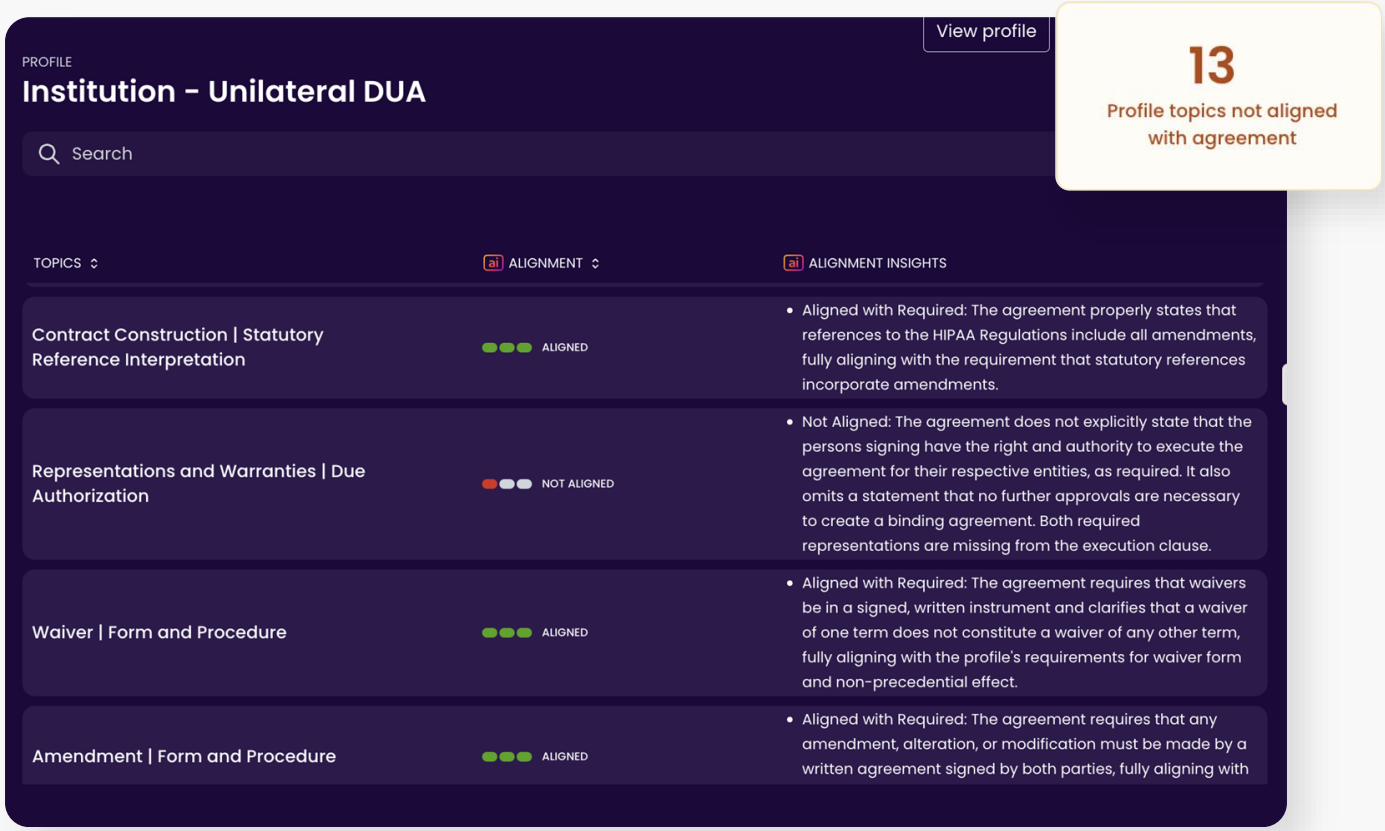
Data-Driven Insights

AI-powered contract analysis for informed decision-making.

Don’t redline what you’ve **already signed**



Align the agreement to your **standards**



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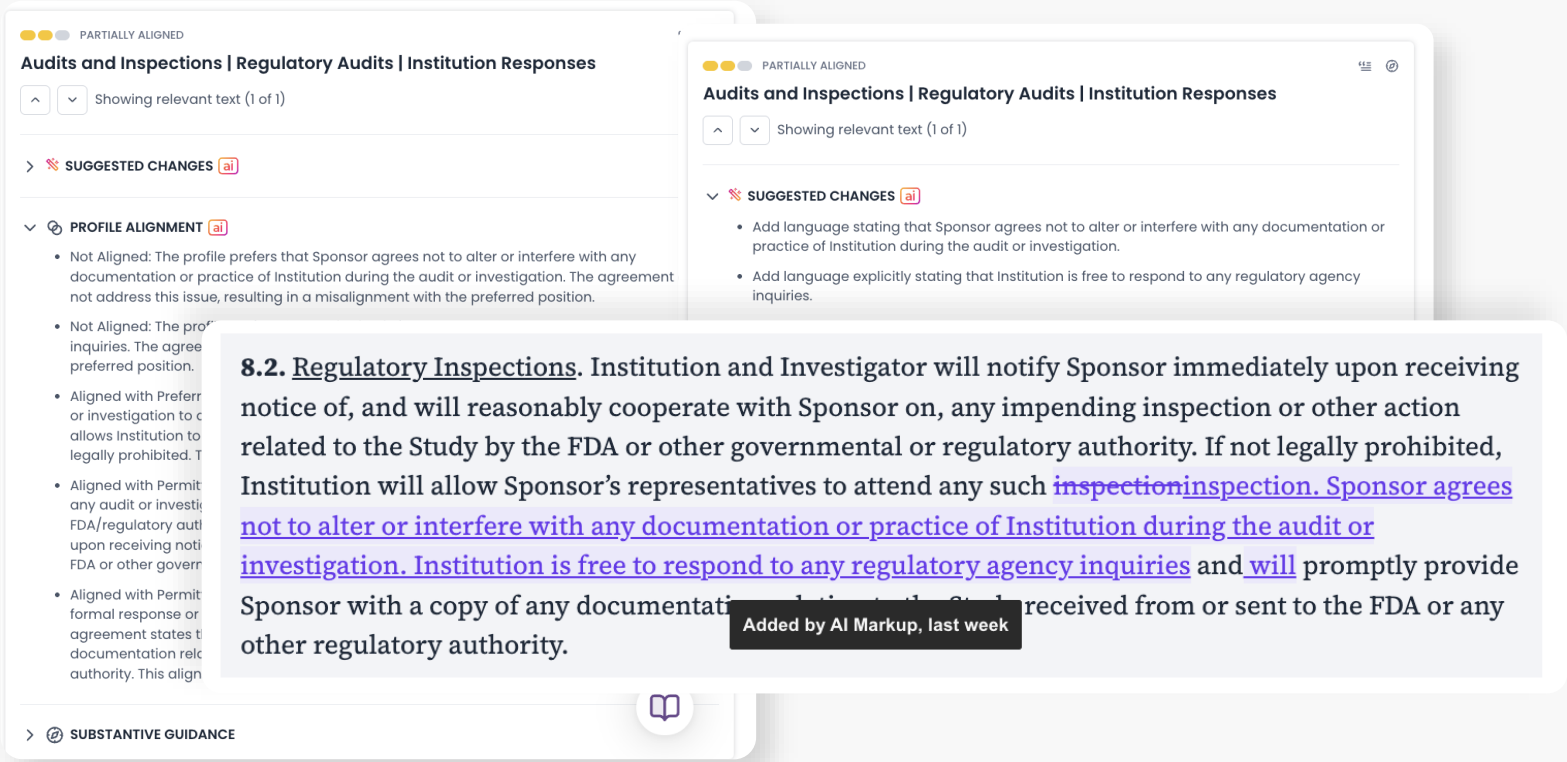
Generate AI markups **in minutes**



Substantial Time Savings

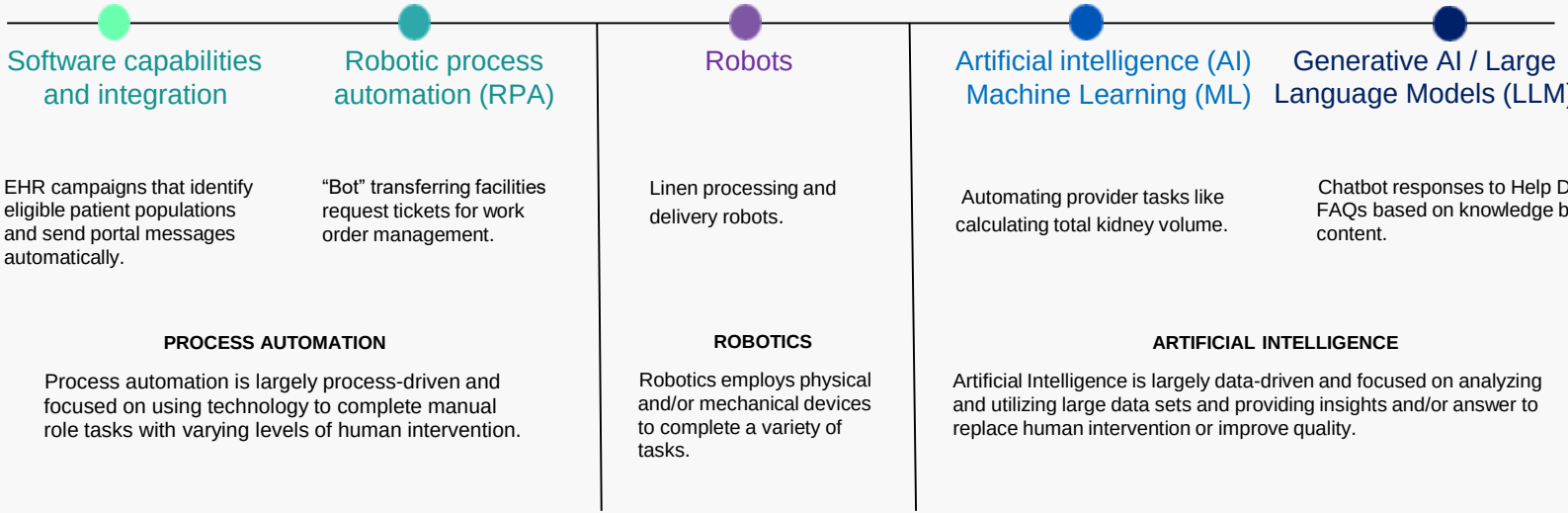
The adoption of AI-powered contracting has led to significant improvements in managing agreements efficiently.

71% of staff have reported **1-3 hours** of time savings per agreement within **4 months** of adoption of AI-powered contracting tool.

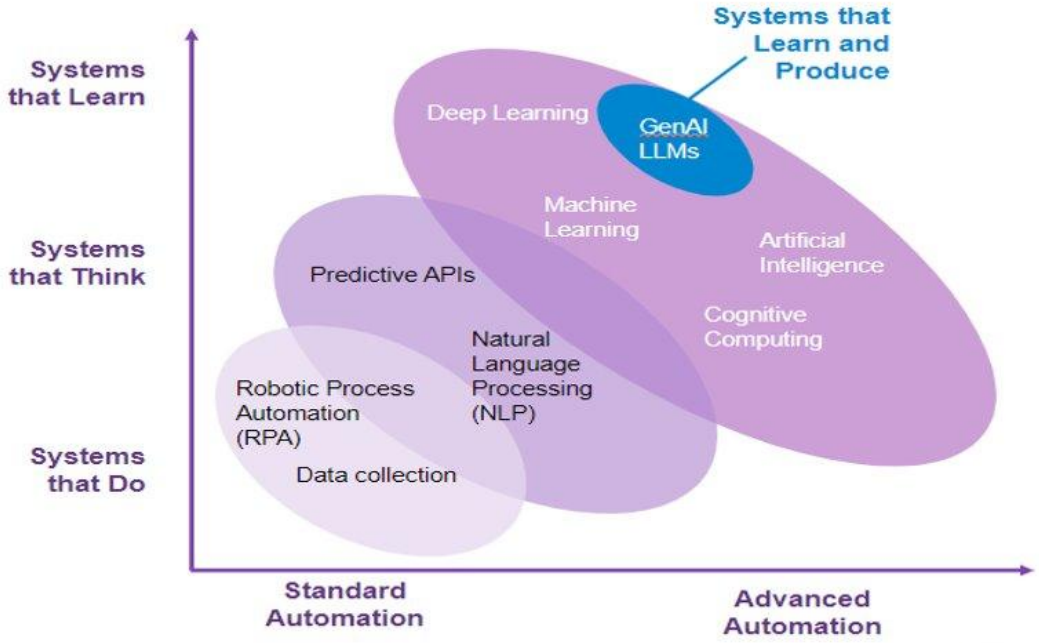
Automation

What is Automation?

Automation is applying technology, programs, robotics or processes appropriate to a task to achieve outcomes with minimal human intervention. It includes process automation, robotics and artificial intelligence.



Automation Continuum

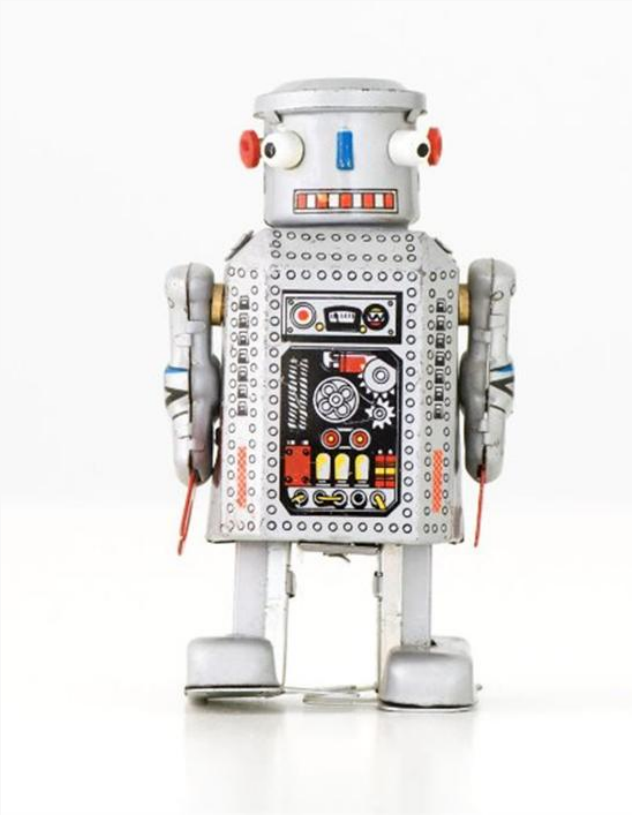


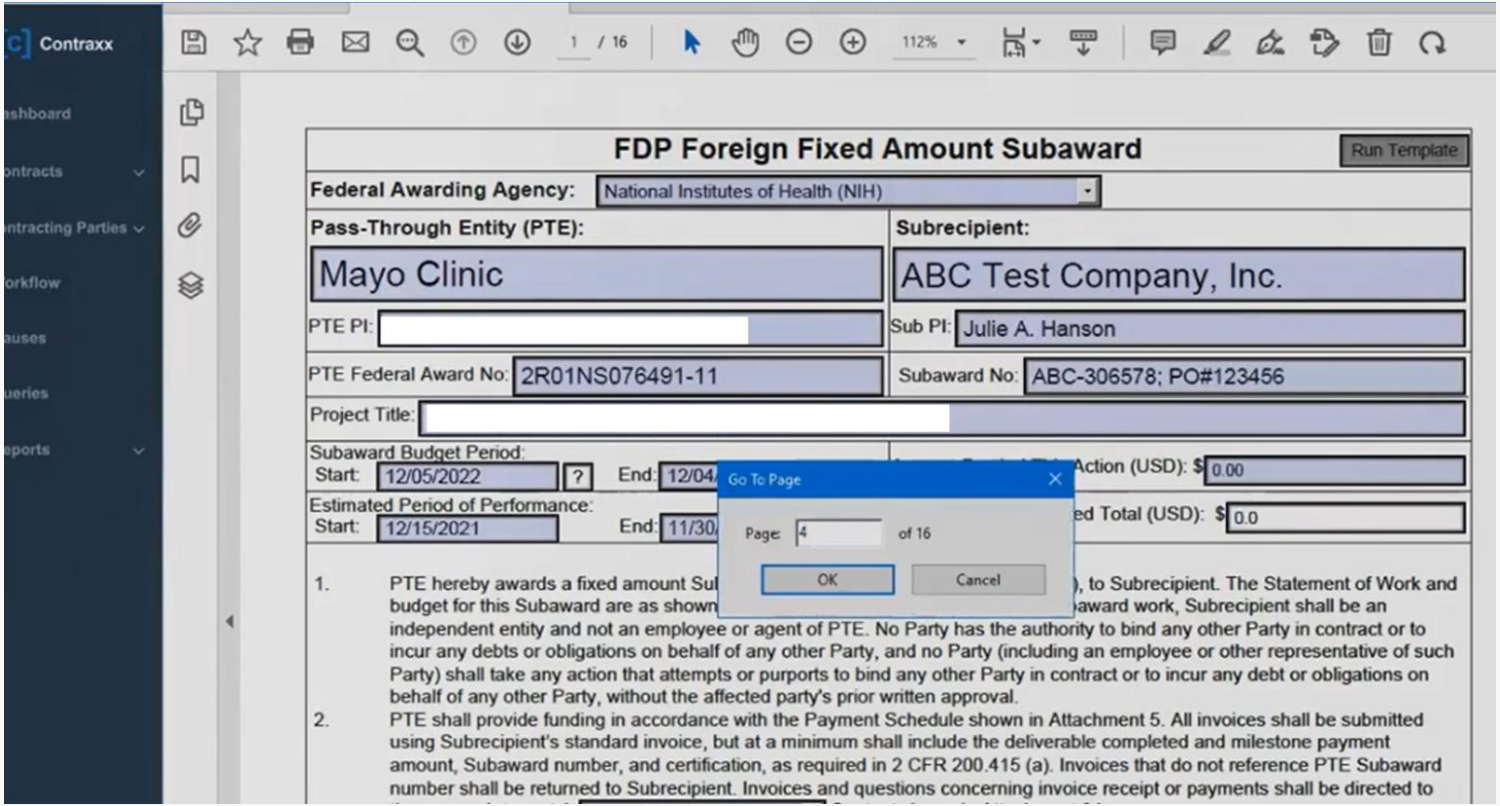
Learn and Produce	Generative AI
Learn	Adaptive Processing AI
Think	Siri & Alexa NLP
Do	Voice Recognition Bots & RPA

Adapted from: The Intelligent Automation Continuum, P. Gupta

Meet Beatrice…

- Processes Federal Demonstration Partnership (FDP) Subawards
- Operates as an unattended BOT
- Integrates with multiple systems
- Saves Agreement and Exhibits to Contract Management System
- Flags incomplete submissions for review
- Sends alerts to the Contract Manager





Automation Impact Overview

- Initiated: Q1 2023
- Efficiency Gains:
  - Before – manual effort (30 min)
  - Now – BOT run time (4 min)
- Results:
  - 760 subawards processed
  - 1 FTE repurposed to higher level work

Implementation Best Practices

What is a Prompt?

A prompt is the input you provide to an AI system to get a specific outcome

Think of it as giving instructions to a detail-oriented assistant who takes your words literally

The quality of your prompt directly determines the usefulness of the AI's response

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DO's and DON'Ts - Basic Principles

DO
Be specific about which agreement sections you're focusing on

DO
Provide context about your institution's position and priorities

DO
Specify the level of detail needed in the response

DON'T
Ask vague questions like "Is this agreement good?"

DON'T
Assume the AI knows your organization's specific policies

DON'T
Leave it to the AI to determine how comprehensive to be

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Examples of BAD vs. GOOD Prompts

BAD

"Review this CTA."

vs.

GOOD

"Review the indemnification and subject injury sections in this CTA from [Sponsor]. Compare them to our institutional template and identify key differences. Flag any terms that conflict with our policy of requiring full sponsor indemnification for protocol-driven injuries."

WHY IT'S BAD
No specific focus areas, context, or output parameters

WHY IT'S GOOD
Specifies sections, comparison points, and institutional requirements

Providing Essential Context

Elements to Include:

- Agreement type and purpose (CTA, CDA, DUA, etc.)
- Parties involved (industry sponsor, government, academic)
- Your institution's role (site, lead institution, data provider)
- Key institutional policies or non-negotiable positions
- Previous negotiation history if applicable

EXAMPLE

"This is a multi-site clinical trial agreement where we are one of 20 participating institutions. The sponsor has already finalized agreements with 15 other sites."

Key Takeaways

Be Specific: Focus on particular clauses or issues

Provide Context: Include institutional policies and priorities

Request Alternatives: Ask for suggested language, not just problem identification

Maintain Oversight: Always review AI suggestions before implementation

Iterate as Needed: Refine prompts based on initial responses

Challenges & Ethical Considerations

Data Privacy & Security

How AI handles sensitive information.

Transparency and Oversight

Ensuring AI decisions are explainable and humans remain responsible.

Regulatory Compliance

Adhering to legal frameworks.

Bias in AI

Addressing potential biases in contract automation.

AI & Institutional Policy Alignment

Ensuring compliance with university guidelines.

Best Practices for AI Adoption in Contracting

1. Start with small-scale AI integrations.
2. Train contract managers on AI-assisted workflows.
3. Monitor AI outputs for consistency & accuracy.
4. Develop policies on AI usage in contracting.
5. Evaluate AI tool security & compliance with institutional IT policies.

The Final Payoff

My “Why”

“[We] sit down with men and women with this awful cancer every day, often after others have told them that it's incurable and is going to kill them. I have seen this disease rob people I love of decades of life. The point of this trial—and, really, everything [We] do—is to offer cures to people who would otherwise not get that chance. Because of you and your hard work in getting this trial open at "warp speed" (that's the term used by our patient I just talked to on the phone who is joining the trial tomorrow), these patients have a shot at living longer and better lives. From the bottom of our hearts, thank you again for giving our patients this chance to live. Thank you for putting the needs of our patients first. You may never get to meet them, but our patients love and thank you.”

*Anonymous grateful PI’s and Research Subject at Mayo Clinic

Conclusion & Call to Action

KEY TAKEAWAYS

AI improves efficiency, compliance, and collaboration.

NEXT STEPS

Explore AI tools for your institution.

CONNECT WITH US

Contact info & Q&A session.