

# 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

# 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.

3

**Identify** challenges and ethical considerations in implementing AI solutions.

2

**Examine** case studies of AI applications in contract negotiations and compliance.

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**



**Sam Altman**  

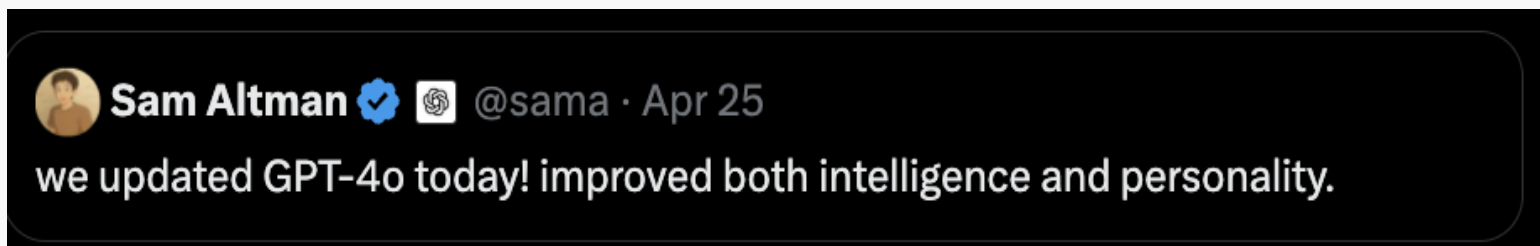
@sama



if you are not skillsmaxxing with o3 at minimum 3 hours every day, ngmi

1:51 PM · Apr 25, 2025 · **4.3M** Views

QUOTE FROM  
**CEO of OpenAI**



**He gets shown up too (April 25)**

QUOTE FROM  
**CEO of OpenAI**



**Sam Altman**    
@sama



the last couple of GPT-4o updates have made the personality too sycophant-y and annoying (even though there are some very good parts of it), and we are working on fixes asap, some today and some this week.

at some point will share our learnings from this, it's been interesting.

6:49 PM · Apr 27, 2025 · **1M** Views

## 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

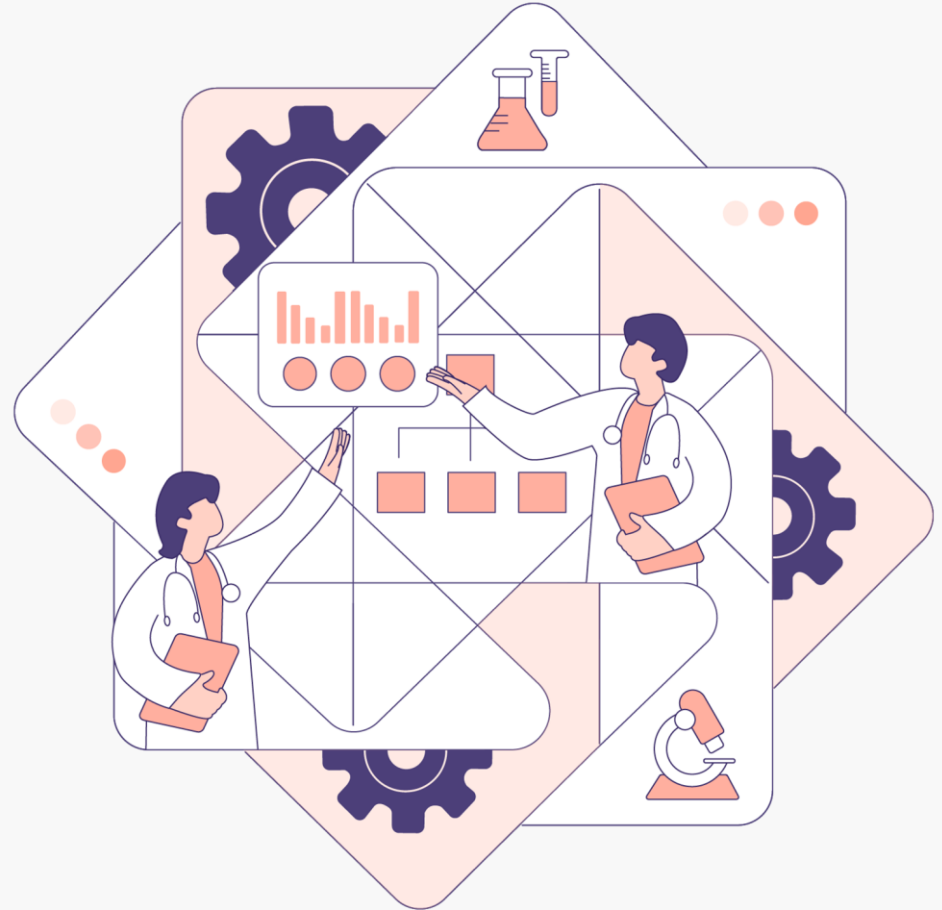
Contract cycles are a top cause of **delays**

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.**



# 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

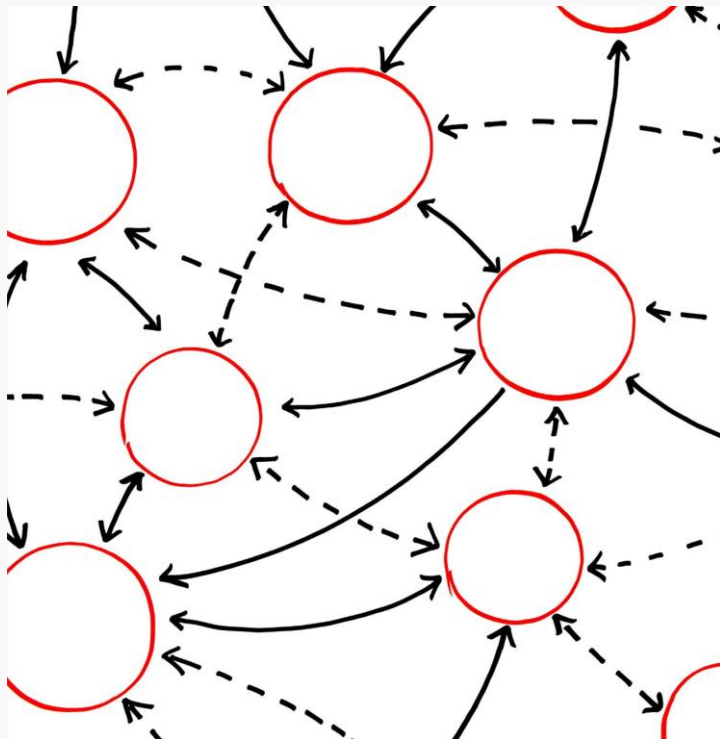
These timelines and SLAs are likely to suffer as a result of HHS cuts

# 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**

### You've done this before!

Compare the new agreement to a previous agreement in your Repository.

Counterparty ▾

Agreement Type ▾

Status ▾

Clear all

COUNTERPARTY NAME ▾	AGREEMENT NAME ▾	AGREEMENT TYPE ▾	SIMILARITY ▾	STATUS ▾	LAST MODIFIED ▾	ACTIONS
HealUPharma	HealUPharma - Calcium College CDA (Profile Only)	Confidential Disclosure Agreement - Unilateral (CDA)	100.00	NEGOTIATION ROUND 1	April 30, 2025	<div>Compare</div>

# Align the agreement to your standards

View profile

PROFILE

Institution – Unilateral DUA

Q Search

TOPICS ↕

ai ALIGNMENT ↕

ai ALIGNMENT INSIGHTS

Contract Construction   Statutory Reference Interpretation	<div><div></div><div></div><div></div></div> ALIGNED	<ul style="list-style-type: none"><li>Aligned with Required: The agreement properly states that references to the HIPAA Regulations include all amendments, fully aligning with the requirement that statutory references incorporate amendments.</li></ul>
Representations and Warranties   Due Authorization	<div><div></div><div></div><div></div></div> NOT ALIGNED	<ul style="list-style-type: none"><li>Not Aligned: The agreement does not explicitly state that the persons signing have the right and authority to execute the agreement for their respective entities, as required. It also omits a statement that no further approvals are necessary to create a binding agreement. Both required representations are missing from the execution clause.</li></ul>
Waiver   Form and Procedure	<div><div></div><div></div><div></div></div> ALIGNED	<ul style="list-style-type: none"><li>Aligned with Required: The agreement requires that waivers be in a signed, written instrument and clarifies that a waiver of one term does not constitute a waiver of any other term, fully aligning with the profile's requirements for waiver form and non-precedential effect.</li></ul>
Amendment   Form and Procedure	<div><div></div><div></div><div></div></div> ALIGNED	<ul style="list-style-type: none"><li>Aligned with Required: The agreement requires that any amendment, alteration, or modification must be made by a written agreement signed by both parties, fully aligning with</li></ul>

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Profile topics not aligned with agreement

# Generate AI markups in minutes

The image displays two overlapping screenshots of a document review interface. The interface has a header with a status bar (yellow, orange, grey) and the text 'PARTIALLY ALIGNED'. Below the header is a title 'Audits and Inspections | Regulatory Audits | Institution Responses' and a dropdown menu showing 'Showing relevant text (1 of 1)'. The main content area is divided into sections. The first section is 'SUGGESTED CHANGES' with an 'ai' icon. The second section is 'PROFILE ALIGNMENT' with an 'ai' icon. It contains a list of items: 'Not Aligned: The profile prefers that Sponsor agrees not to alter or interfere with any documentation or practice of Institution during the audit or investigation. The agreement not address this issue, resulting in a misalignment with the preferred position.', 'Not Aligned: The profile prefers that Sponsor agrees not to alter or interfere with any documentation or practice of Institution during the audit or investigation. The agreement not address this issue, resulting in a misalignment with the preferred position.', 'Aligned with Preferred: The profile allows Institution to legally prohibited. T', 'Aligned with Permit: any audit or investigation. FDA/regulatory authority upon receiving notification from the FDA or other governmental or regulatory authority.', and 'Aligned with Permit: formal response or agreement states that documentation received from or sent to the FDA or any other regulatory authority. This aligns with the preferred position of the Institution.' The third section is 'SUBSTANTIVE GUIDANCE' with a 'p' icon. The fourth section is 'SUGGESTED CHANGES' with an 'ai' icon. It contains a list of items: 'Add language stating that Sponsor agrees not to alter or interfere with any documentation or practice of Institution during the audit or investigation.', and 'Add language explicitly stating that Institution is free to respond to any regulatory agency inquiries.' The fifth section is '8.2. Regulatory Inspections. Institution and Investigator will notify Sponsor immediately upon receiving notice of, and will reasonably cooperate with Sponsor on, any impending inspection or other action related to the Study by the FDA or other governmental or regulatory authority. If not legally prohibited, Institution will allow Sponsor's representatives to attend any such inspection. Sponsor agrees not to alter or interfere with any documentation or practice of Institution during the audit or investigation. Institution is free to respond to any regulatory agency inquiries and will promptly provide Sponsor with a copy of any documentation received from or sent to the FDA or any other regulatory authority.' A black box with white text 'Added by AI Markup, last week' is overlaid on the bottom right of the text.

**8.2. Regulatory Inspections.** Institution and Investigator will notify Sponsor immediately upon receiving notice of, and will reasonably cooperate with Sponsor on, any impending inspection or other action related to the Study by the FDA or other governmental or regulatory authority. If not legally prohibited, Institution will allow Sponsor's representatives to attend any such inspection. Sponsor agrees not to alter or interfere with any documentation or practice of Institution during the audit or investigation. Institution is free to respond to any regulatory agency inquiries and will promptly provide Sponsor with a copy of any documentation received from or sent to the FDA or any other regulatory authority.

Added by AI Markup, last week

# Substantial Time Savings

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

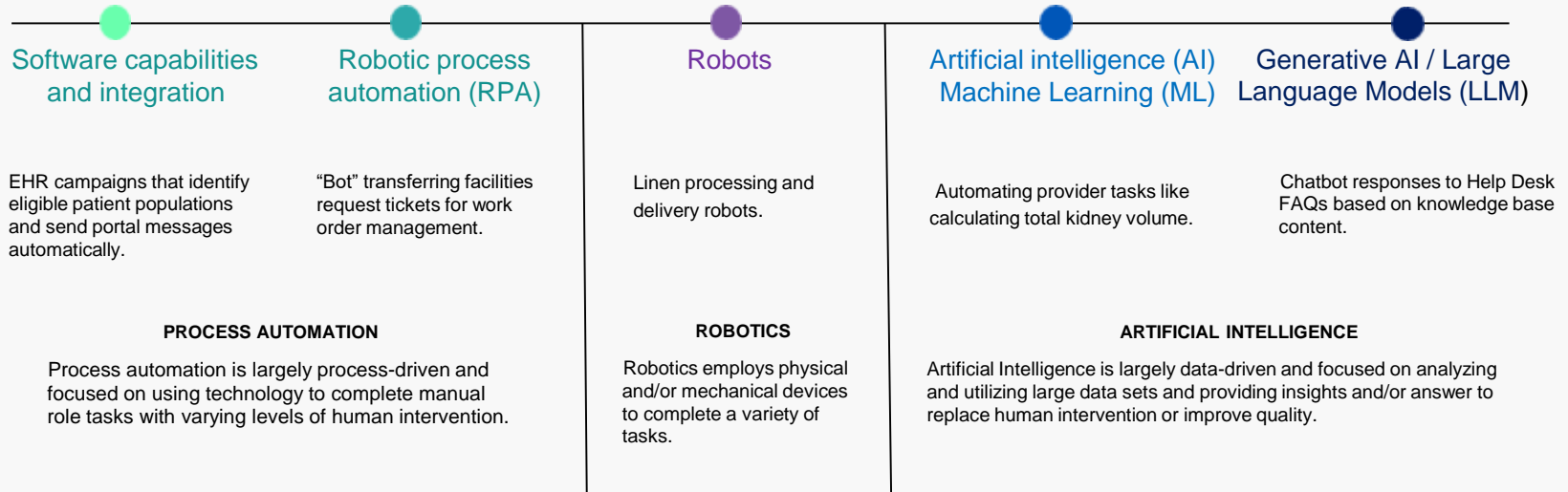
**71% of staff** have reported **1-3 hours** of time savings per agreement within **4 months** of adoption of AI-powered contracting tool.



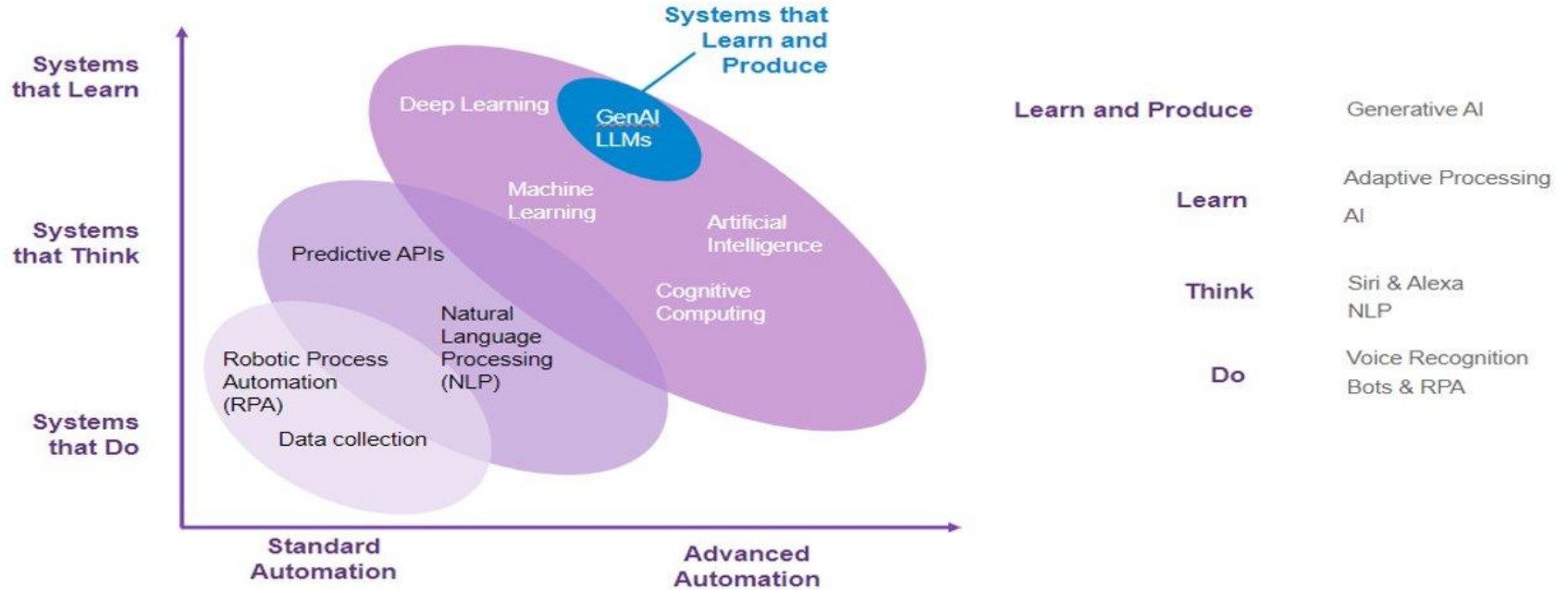
# Automation

# 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.



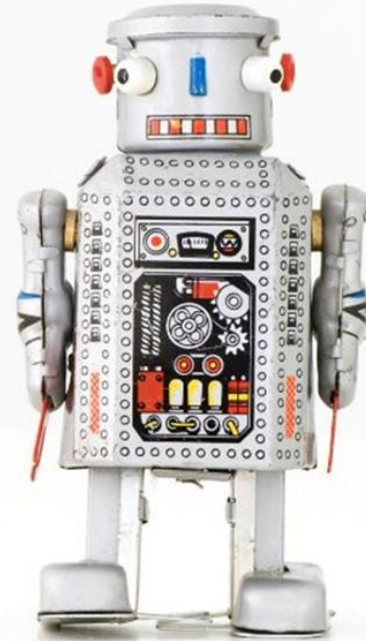
# Automation Continuum



*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



**Contraxx**

1 / 16 112%

### FDP Foreign Fixed Amount Subaward

**Federal Awarding Agency:** National Institutes of Health (NIH)

**Pass-Through Entity (PTE):** Mayo Clinic

**Subrecipient:** ABC Test Company, Inc.

**PTE PI:**

**Sub PI:** Julie A. Hanson

**PTE Federal Award No:** 2R01NS076491-11

**Subaward No:** ABC-306578; PO#123456

**Project Title:**

**Subaward Budget Period:**  
 Start: 12/05/2022 End: 12/04/2024

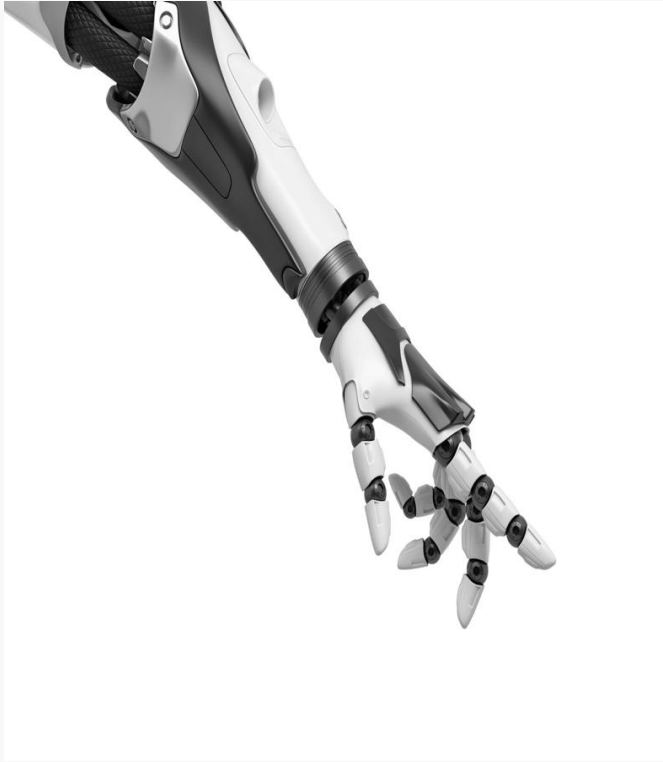
**Estimated Period of Performance:**  
 Start: 12/15/2021 End: 11/30/2024

**Action (USD):** \$0.00

**Estimated Total (USD):** \$0.00

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- PTE hereby awards a fixed amount Subaward budget for this Subaward are as shown independent entity and not an employee or agent of PTE. No Party has the authority to bind any other Party in contract or to incur any debts or obligations on behalf of any other Party, and no Party (including an employee or other representative of such Party) shall take any action that attempts or purports to bind any other Party in contract or to incur any debt or obligations on behalf of any other Party, without the affected party's prior written approval.
- PTE shall provide funding in accordance with the Payment Schedule shown in Attachment 5. All invoices shall be submitted using Subrecipient's standard invoice, but at a minimum shall include the deliverable completed and milestone payment amount, Subaward number, and certification, as required in 2 CFR 200.415 (a). Invoices that do not reference PTE Subaward number shall be returned to Subrecipient. Invoices and questions concerning invoice receipt or payments shall be directed to



## 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



# 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

# 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.