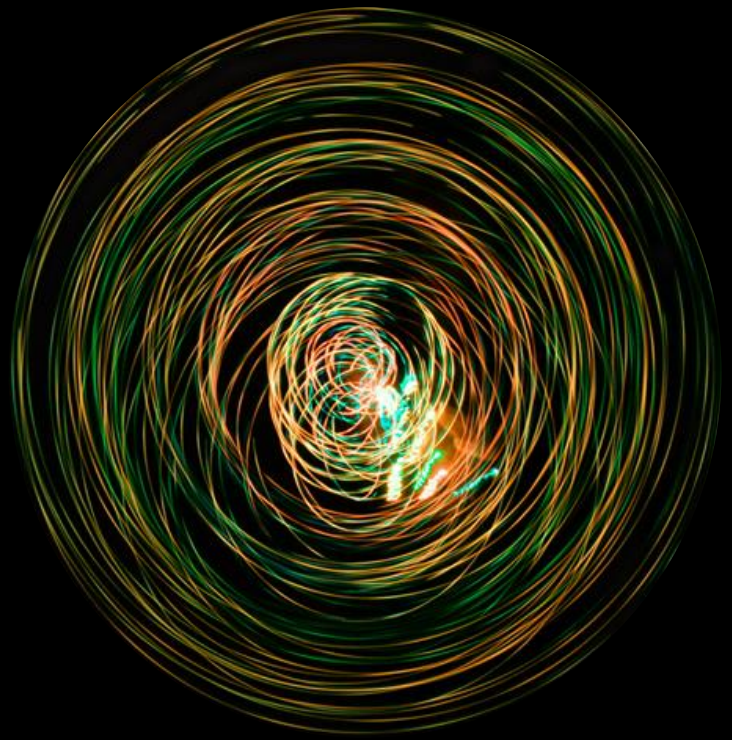
coursera & Deloitte.



Workforce of the Future: The Government AI Reskilling Imperative

A Virtual Roundtable

Wednesday, May 15, 2024

10:00 AM – 11:00 AM PT / 1:00 PM – 2:00 PM ET

Who's Who: Our Guests on Today's Roundtable

Moderators

Jeff Maggioncalda
CEO, Coursera

Joe Mariani
Leader of Emerging Technology in Government Research Program, Deloitte Center for Government Insights

Panelists

Dan Kuba
Deputy Secretary of Workforce Development

Department of Labor & Industry

Commonwealth of Pennsylvania

Jim Daugherty
Chief Information Officer

Department of Children and Family Services

State of Illinois

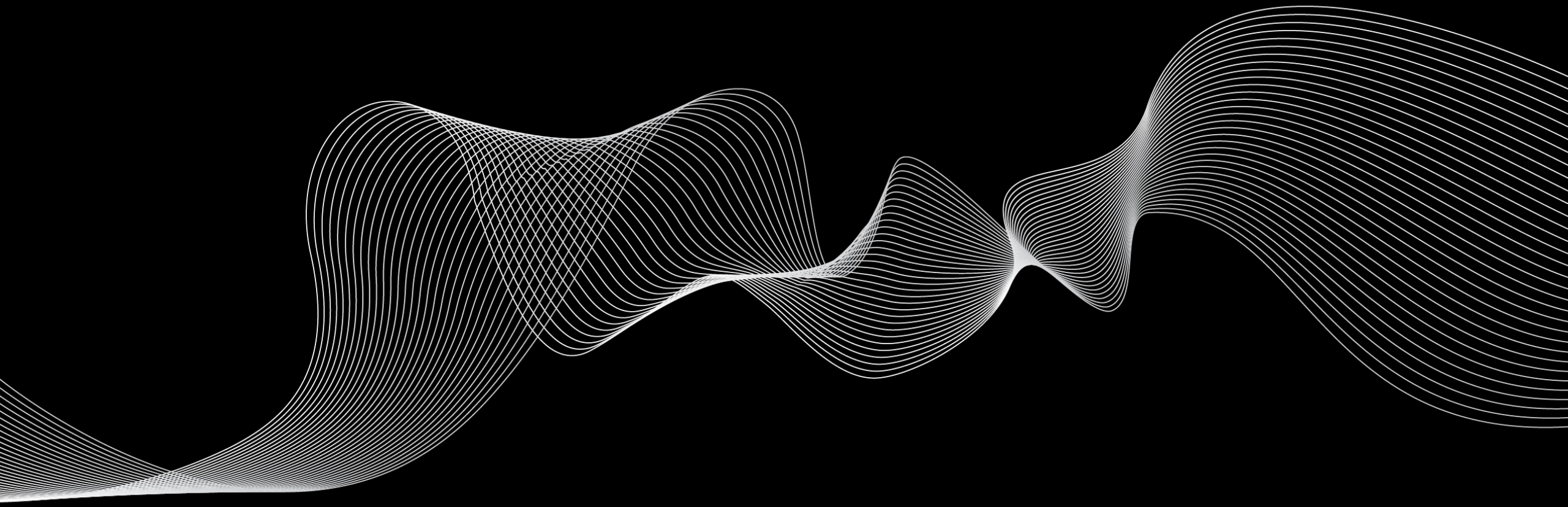
Objectives for today

1. Understand the **current state of AI in government**
2. Discuss **how AI changes what the workforce does** and how work is completed
3. Discuss **how states are preparing their workforces** for this type of evolution despite the wide variety of readiness
4. Learn **what other state government leaders are doing to prepare** the workforce for these changes

Agenda

	Act I: Current State Understanding
20 min	Understand how AI is being used in government and how these tools impact the work and the workforce
	Act II: Panel Discussion
30 min	Discuss how states are preparing their workforces despite varying readiness
10 min	**Open Q&A**

Act 1: Current State Understanding



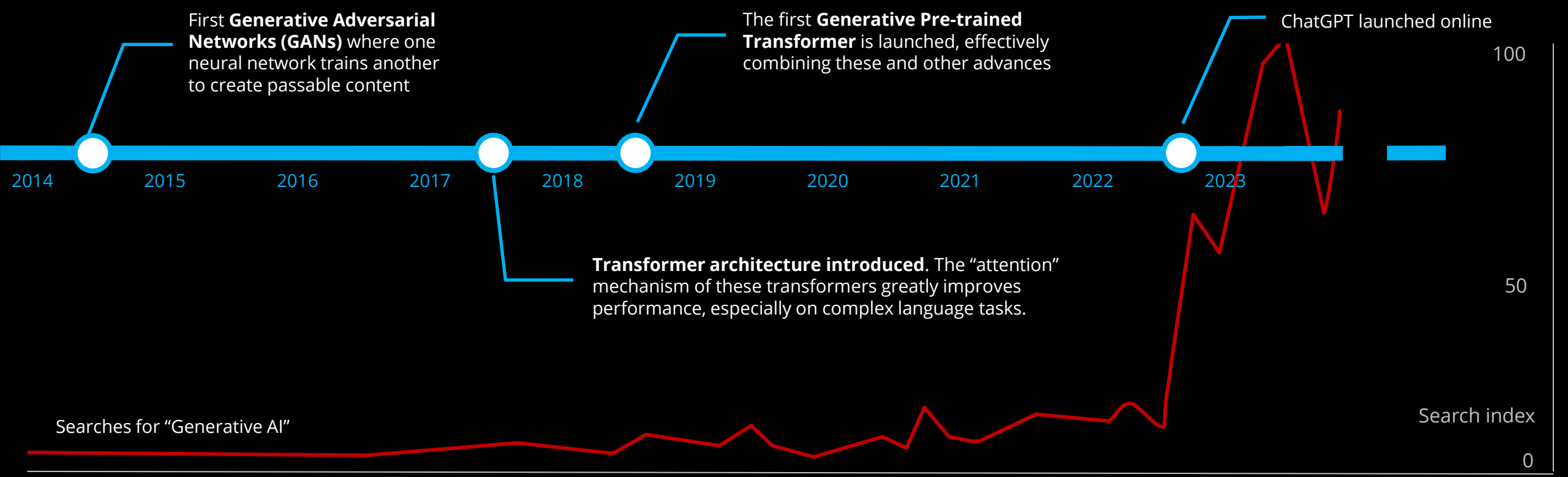
Today feels different...and it is.

But it's not just the technology that is different, it's us.

Building on foundations that stretch back to the first generations of AI in the 60s and 70s, today's Generative AI tools are not fundamentally new. **They are steady improvements of capabilities that have existed since 2014.**

But with the launch of ChatGPT in November 2022, those impressive capabilities were **available directly to millions of consumers for the first time**. That sparked a wave of re-thinking what was possible with AI.

With the power of GenAI, much is possible.



How can AI help organizations?

Organizations don't often request AI solutions by name, instead they want...

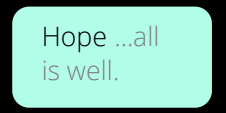
Cheaper Solutions
Inefficient use of capital and non-optimal decision-making wastes resources

Faster Workflows
Mundane, repetitive tasks take away from mission-critical work. Speed to action is stalled in manual review and analysis

Better Insights
Outcomes are difficult to understand and test; data is large, non-integrated, and complex

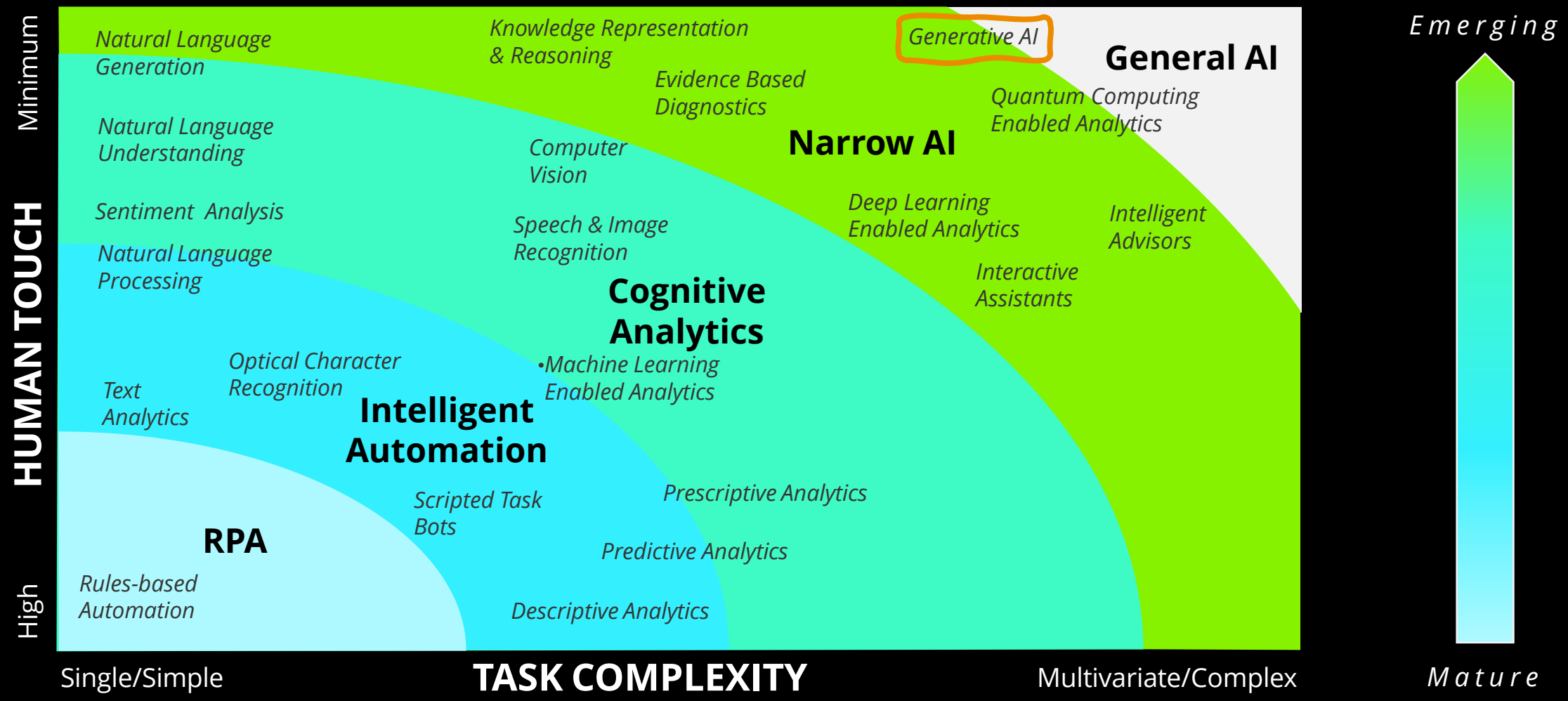
...but AI capabilities are broad and can address a large array of challenges.

Deloitte's Classifications of Artificial Intelligence

AUTOMATE – *Intelligent Automation*	*Having a bot execute processes that require little human judgement*	Gmail Autocomplete 
SIMULATE – *Agent-Based Simulation*	*Using large volumes to data to create a visual model or representation of predicted outcomes in the form of a digital twin*	'Try On At Home' AR (e.g., L'Oréal's Style My Hair app.) 
INTERACT – *Virtual Assistants*	*Machines engaging with humans in real-time, two-way dialog and learn human intent to provide advanced recommendations*	Smart Assistants (e.g., Amazon Echo) 
PREDICT – *Predictive Analytics*	*Using large volumes of data to enable machines to generate a series of predicted or possible outcomes*	Movie recommendations 
DETECT – *Computer Vision*	*Identifying objects and patterns through analysis of documents, pictures and video streams*	Airport Security using Eye Scanner 
INTERPRET – *Natural Language & Speech Recognition*	*Training machines to read documents, convert text and speech to data and derive insights from data*	Auto-generated News Stories 
CREATE – *Generative AI*	*Algorithms that can create new content, including audio, code, images, text, simulations, and videos*	Generated art (e.g., Lensa.ai) 

The Artificial Intelligence (AI) Spectrum

AI encompasses a wide range of technologies that use inputs of varying complexities to generate human-like outcomes.



How is AI currently being used in state government?

AI tools such as “Policy Engines” and “Mock Interview Engines” are currently being deployed across state government operations.

Example: Policy Engine

What it is:

Answers complex policy, operational procedure, and system questions by analyzing existing policy manuals, system documents, and process maps.

Business Case:

Caseworkers often face overburdened caseloads, limited resources, complex challenges, steep learning curve, and frequent policy changes that can be thousands of pages making it inefficient and ineffective for government staff to search for an answer. Policy engines **identify which policies, procedures, and systems contain information relevant to the question and can analyze those products to form a timely and accurate answer**.

What states are using it:

- Colorado
- Illinois
- Oregon
- Tennessee

IMPACT

- Improves timeliness and operational throughput
- Reduces human-prone errors
- Improves worker productivity and efficiency
- Reduces caseworker burden


“AI is the new electricity.”
– Andrew Ng, May 2016

Market Challenge

Low skilled and high skilled jobs are at risk for automation.

“…up to 49% of workers could have half or more of their tasks exposed to large language models.”

“…higher wages are associated with increased exposure to GPT.”

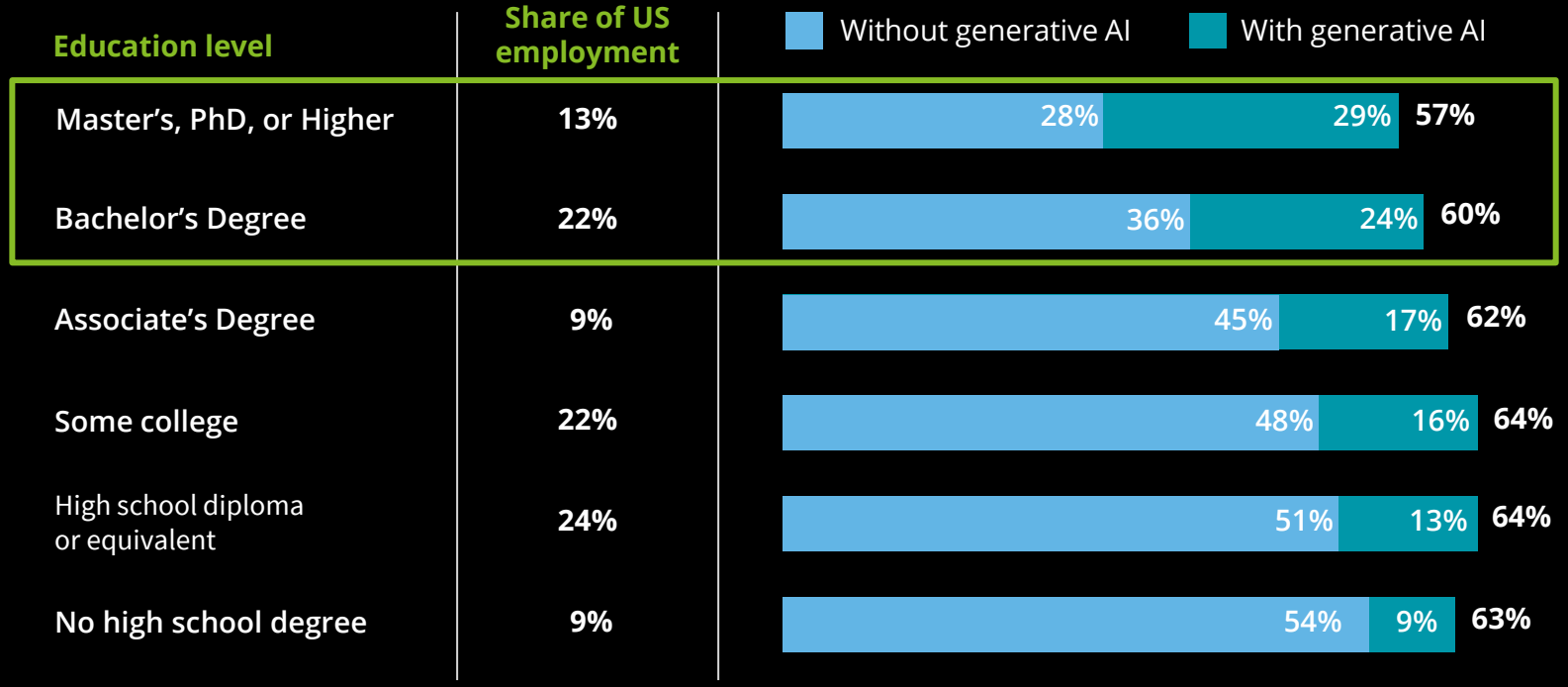
GPTs are GPTs: An Early Look at the Labor Market Impact
Potential of Large Language Models, University of Pennsylvania, March 27, 2023

Source: Bloomberg, 2017 based on Oxford University & the Bureau of Labor Statistics

With ChatGPT-4, jobs at all education levels are exposed

Impact of Generative AI on task automation potential, 2023

Comparison in midpoint scenarios, % in the United States in 2023



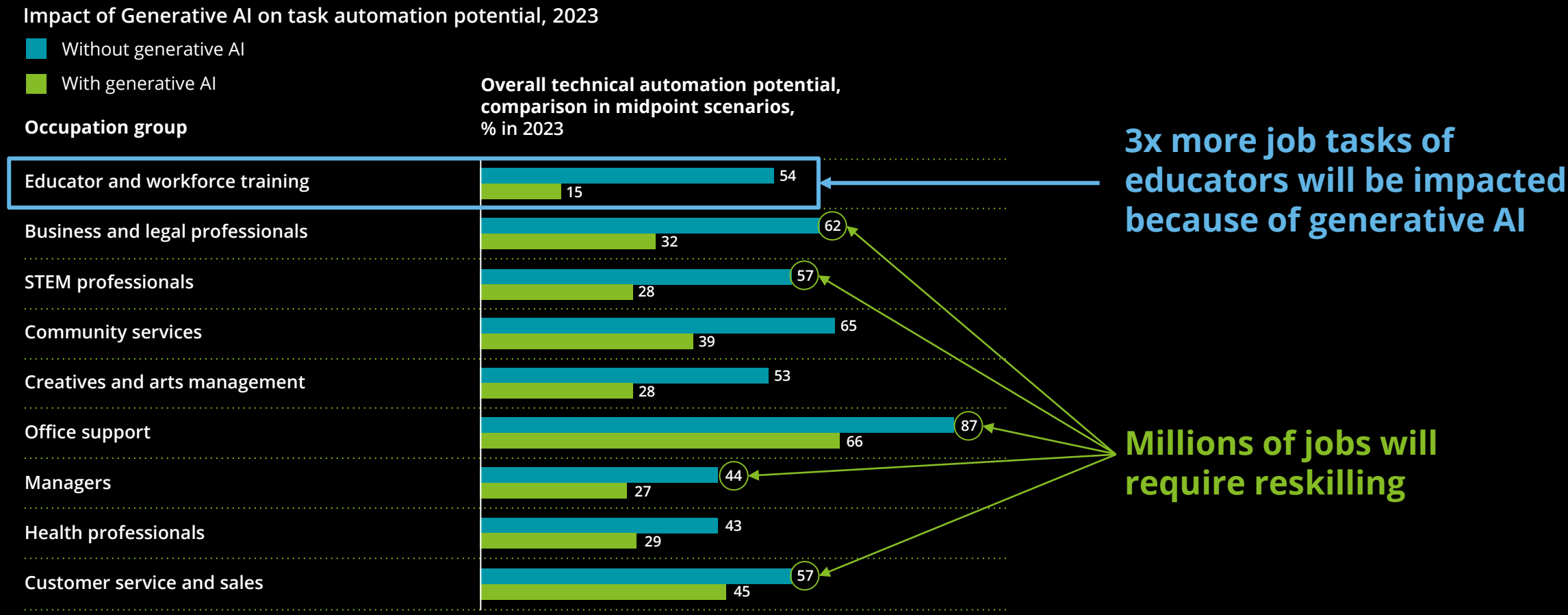
Women are **1.5x** more likely to need to move into new occupations than men.

Source: McKinsey & Company, July 2023, Generative AI and the future of work in America

Source: McKinsey & Company, 2023 The economic potential of generative AI

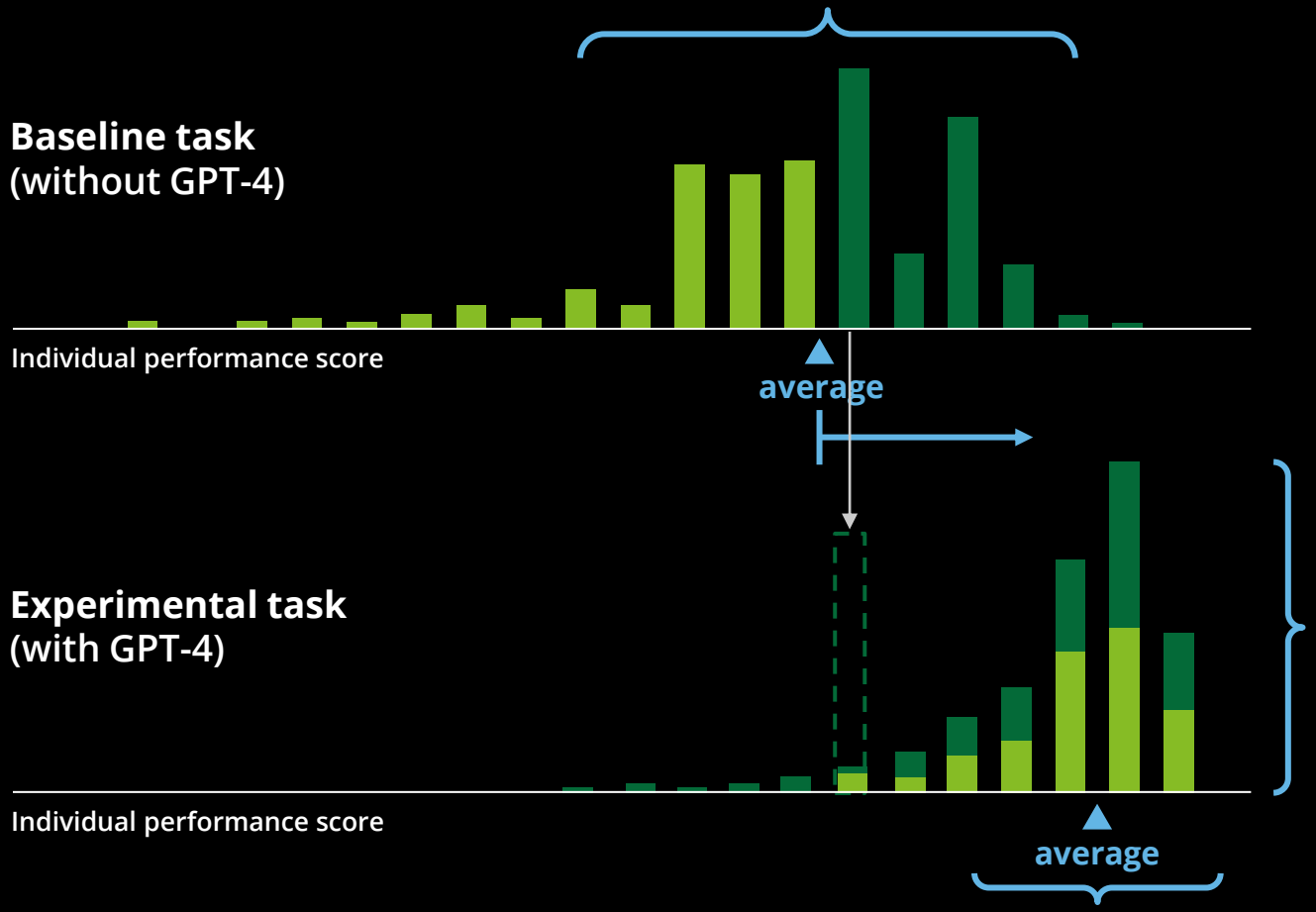
GenAI will disrupt nearly every occupation

Advances in technical capabilities could have the most impact on activities performed by **educators, professionals, and creatives**.



Source: McKinsey & Company, 2023 The economic potential of generative AI

GenAI could reduce global inequality

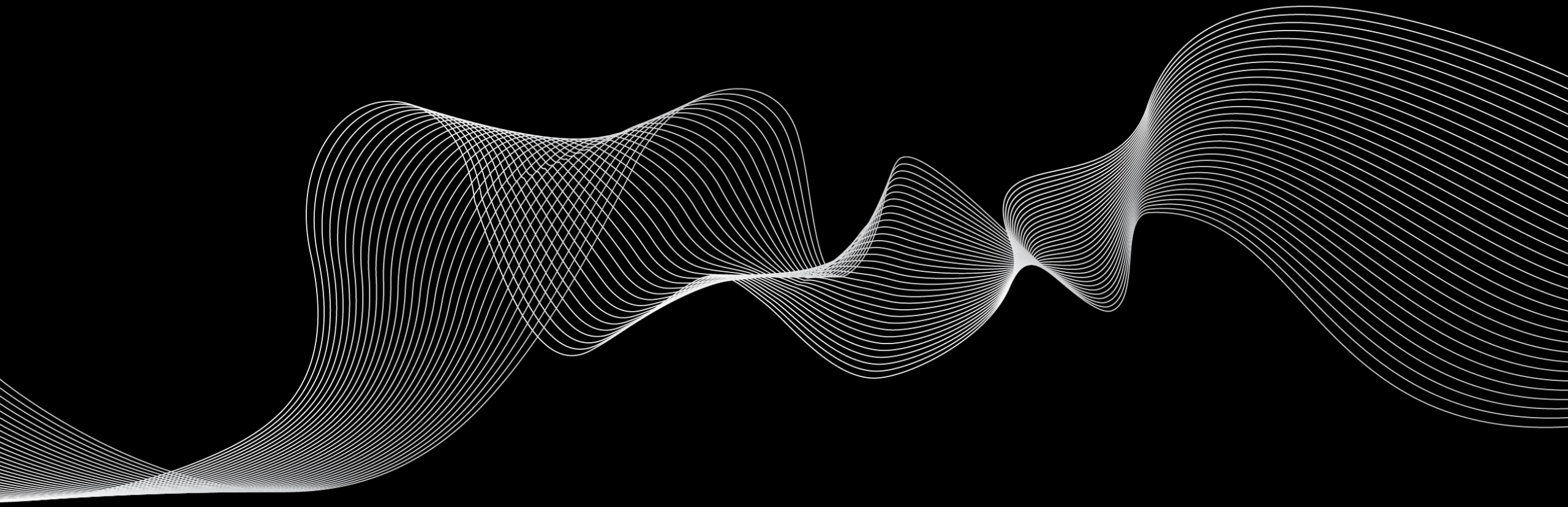


*"But to make this happen, we need... a **new generation of reskilling on a vast scale."***

Ravi Kumar
CEO, Cognizant

Source: Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality, Harvard Business School

Act 2: Panel Discussion



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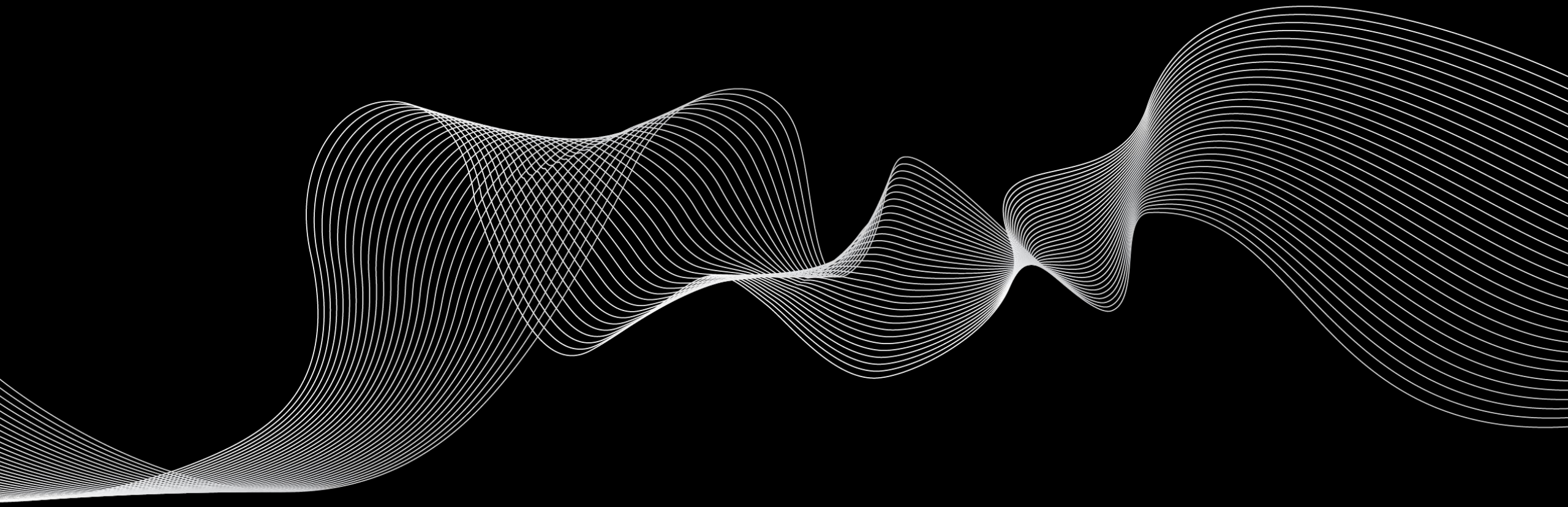

Thank you ***for joining today's virtual roundtable!***