## Financial Services Leadership Summit

August 2023



# The risks and opportunities AI presents for financial services

Since OpenAl launched ChatGPT in late 2022, many prominent figures have opined on the implications of Al for society. Bill Gates stated that ChatGPT was "revolutionary" and "the most important advance in technology since the graphical user interface." Google CEO Sundar Pichai surmised that the rapid development of Al was "going to impact every product across every company" and said "we need to adapt as a society for it." <sup>2</sup>

Not everyone believes the outlook is positive, however. In March, a group of technologists, academics, and business leaders, including Elon Musk and Apple cofounder Steve Wozniak, signed a letter calling for a six-month pause in training some of the world's most advanced Al models. The signatories argued that advanced Al required very careful planning and collaboration. "Unfortunately," they wrote, "this level of planning and management is not happening, even though recent months have seen Al labs locked in an out-of-control race to develop and deploy ever more powerful digital minds that no one—not even their creators—can understand, predict, or reliably control."<sup>3</sup>

The debate about AI has captured the attention of senior financial services leaders, who see the potential for the technology to create new opportunities, but also to introduce new risks for their institutions and for society. One director commented, "The discussions about AI are so invigorating and frightening at the same time."

On June 13–14, directors and senior executives from among the largest banks, insurance companies, asset managers, and financial technology companies, along with regulators and subject matter experts, came together for the 2023 Financial Services Leadership Summit. Participants addressed Al's evolution, applications, and the challenges it poses to large firms. This *ViewPoints* synthesizes the summit discussion and related conversations, focusing on the following themes:

- Al takes a big step forward
- New applications for Al in financial services are emerging
- Generative AI presents additional risks

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• Firms are in the early stages of adapting governance and oversight

## AI takes a big step forward

Cutting through the hype surrounding emerging technologies can be daunting for senior business leaders, but doing so is critical if the technology presents material risks or opportunities, as appears to be the case with Al. While large banks and insurers have used Al for certain functions for some time, some participants believe Al has taken a significant leap forward with the advent of ChatGPT and similar generative Al tools. They noted potentially transformative implications: "We're experiencing the trajectory of exponential growth and that is difficult for humanity to process ... We are at an inflection point, and that is now becoming more apparent to society," one participant said.

But others question whether Al is any different from past technological developments: "Since the dawn of computing, the irrelevance of people has been a constant threat. Look at the trading floor: 30 years ago, we had 100 equity traders. Now we have 99 algo programmers and one trader. It didn't get rid of people. We went from a bunch of people who shout to a bunch of people who code. Why is this tech different?" asked one director.

Financial services firms are starting to experiment with generative AI, and many are impressed with the early results. One executive stated, "When we heard about generative AI, we decided to take a look. We've been using these large language models in the background and looking at their capabilities. Pretty soon we realized those capabilities are impressive and that the jump has been massive." Another participant predicted the pace of development would continue: "We will crack cognition within the next five years."

Al's advance has created optimism about its promise, but also a deep sense of unease across society. A participant reflected, "This tech will benefit humanity in that it will be widespread and along many dimensions. It's not just going to be about wellness, but the ability to enjoy life into many years ... We will have knowledge significantly improved because of machine learning. Its broad applicability is greatly valuable." A participant who described himself as a "frightened optimist" sees some trepidation as a "reasonable response to progress," but cautioned against pausing model development, given the potential benefits the technology presents and the infeasibility of any efforts to stop it. Instead, this participant suggested, firms should continue to experiment with these new tools because "the more you engage with the tech, the less fearful and the more excited you become." Another executive



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- Executive

agreed: "I feel that the train has left the station. This is not reversible; the impact is so pervasive. With this we have far less time to adapt than with the internet. It will accelerate. It's going to have a transformative impact."

## New applications for AI in financial services are emerging

Large financial services firms have historically used Al to enhance operational efficiency, improve customer experiences, mitigate risks, and drive innovation within their organizations. Since ChatGPT emerged, the models have grown more powerful and can be deployed more quickly. "We have been in the research stage for generative Al," a participant noted. "We are now in the development stage. We have pilots out in the world, interfaces available to all." Financial institutions are still testing the tools to better understand their capabilities, but early use cases are emerging. An executive observed, "Banks are currently piloting; they're trying to figure it out. We all see value and potential cost savings."

Participants identified several areas where generative AI tools can help:

- Improving customer service. Large language models (LLMs) are expected to turbocharge digital customer service tools, leveraging customer information to provide more personalized, effective service. An executive commented, "AI makes them more powerful. Chatbots today can answer only what they know; no more and no less. Soon they'll be able to answer questions they don't know." More powerful digital assistants can help ease the strain on servicing staff while offering better customer experiences. Anecdotal evidence suggests preliminary pilots look promising. Palantir recently announced that it was getting "unprecedented" demand for an AI product that wasn't even officially on the market. Within a few days of being granted early access to the product, a customer in the insurance industry was able to create a "collaborative AI agent" to automate claims processing. Palantir reported that the customer said this put the tool "years ahead" of rival offerings. 6
- Expediting and improving document reviews and data analysis. Banks and insurers produce massive volumes of documents and data in their normal course of business. Navigating through individual policies, forms, and databases in search of specific information can be time consuming and tedious. Sophisticated LLMs can help expedite this process and yield new insights. An insurance executive explained, "Insurers have tons of expertise and information in documents and reports. [LLMs] can unleash insights from all of that information that was previously inaccessible." The



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same participant also said, "We focus on the language capabilities and wordings. When we underwrite and create policies, we have to translate across countries, languages, laws and regulations, policies, exclusions, etc. GPT-4 is doing a good job of finding differences in wording across contracts and policies and can do so across many different languages." Identifying these differences more quickly allows underwriters or data scientists to allocate their time to more meaningful work and may prevent "leakage or situations where we would pay out too much," translating into cost savings. Another executive commented, "You can take ChatGPT, point it at data, and it will provide better search results. It's transferable to equity research and other parts of the business."

- Streamlining and democratizing software development. A participant predicted that "GPT will completely revolutionize software and make programming accessible to virtually anyone." According to one executive, this will be done by adopting "prompt engineering," whereby software developers, acting in concert with their generative Al copilots, will be "using natural language instead of coding directly." This process should significantly reduce the amount of time engineers spend on software development. One executive foresees efficiency gains of up to 40%. While no one expects the demand for top tech talent to ease any time soon, prompt engineering may open up the development process to people with less technical backgrounds, easing talent supply constraints. A participant forecast "the return of the English major" because of the need for people with the ability to "express nuance to direct and teach these models."
- Managing legacy platforms. Participants see opportunities to leverage generative AI tools to help them to manage legacy systems more effectively before ultimately migrating to more modern platforms. An executive said, "Any bank or insurance company has constant systems in legacy. Nobody understands those systems. Even if you leave the system as is, the generative AI will tell you what it is doing. It can help you understand those systems and prepare for transformation."

Despite some enthusiasm around preliminary use cases for generative AI, participants suggested there are still areas they are reluctant to explore at this point in the technology's maturity cycle. For example, some are limiting its use to proprietary data: "We don't want to touch any outside data at all. We don't touch the outside world," said one executive, noting, "It does limit the effectiveness." Another participant said that they are only using these tools internally: "We are not yet having it interact with customers; that is not on our priority list yet."



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- Participant

## Generative AI presents additional risks

As large financial institutions contemplate how to use AI, they will need to mitigate risks that the technology presents. Some of these risks are not new; others are emerging as generative AI adoption grows. Participants identified some of the concerns they have as they look to deploy these tools:

- **Keeping up with the pace of change.** Al's rapid evolution is raising profound questions even among people with technical backgrounds. One longtime industry veteran acknowledged, "I have been in transformative technology for over 40 years ... This is the first time I have felt that changes are moving faster than our ability to absorb and manage them." Another noted, "The jumps from GPT-1, 2 to 3.5 and 4 are massive." Trying to process everything that is happening, separate the hype surrounding Al from the reality, and then make informed decisions on a timely basis is difficult. A participant asserted, "The challenge will be the pace of change ... It could become a daunting enterprise to train a new discipline."
- Separating fact from fiction. Generative Al tools have become notorious for producing results that sound compelling but are sometimes categorically false. Participants see these "hallucinations" as endemic to the models. A participant remarked "ChatGPT is a probabilistic model. It's very different from human cognition. There are issues that come with that. It has a hallucination problem and makes misstatements and untrue claims. "Interpreting results that are probabilistic as a statement of fact can lead people astray in the same way as seeking a peer's opinion can. Another participant commented, "You shouldn't trust them, just like you shouldn't trust anyone when you are walking down the street. You'd look at the distribution of answers."
- Monitoring the potential for bias and unintended consequences. Further complicating efforts to apply AI is the potential for bias. One participant said, "Most algorithms reflect the bias of the people who make them, most of whom are white men on the west coast of the United States. We've already seen delivery apps give speedier delivery to white upper-class postcodes." Similar issues have surfaced within financial services. A director said that when a bank tested using AI as part of the credit application process, they were horrified to discover that "within two weeks, it was awarding loans entirely on the basis of postal code. It can't do that."

Concerns relating to bias make many senior leaders hesitant to apply AI in areas like credit and underwriting processes where institutions may need to explain to clients and regulators why they made specific decisions. An



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- executive stated, "We've got to be very careful about drawing the line between pulling information and presenting it to a policyholder or broker versus actually making a recommendation. Otherwise, we're going to fall afoul of God-knows-how-many rules."
- Tightening cyber and other security defenses. A director said, "I'm really concerned about state actors, cyber threats, fraud, phishing. You can see how fraudsters will use AI to improve the efficiency of their business models." Another participant validated these concerns: "The nature of generative AI is to generate new text, pictures, and audio, so it's a given that fraud and cyberattacks will increase." Another cautioned, "You can manipulate data lakes, poison the data in order to manipulate the algorithms." But one participant was more sanguine: "Yes, it is a given that we will face more enhanced fraud and cyberattacks. But the defenses will also become increasingly advanced in response. So, how do we put AI-driven tools behind the defenses?"

As financial institutions confront these risks, they will need to be mindful of an evolving regulatory environment, which could present them with new challenges as well. A participant noted, "Sam Altman is frightened of the technology he has helped create. He is asking regulators and policymakers around the world to regulate Al." The same participant warned, "We saw social media grow, and with it came things like election manipulation, the abuse of children's data, and mental health issues. It was a social experiment of deploying tech without regulation in place." Leaders of financial institutions expect policymakers to be more proactive in overseeing the development of Al. One participant observed, "We typically regulate things when the genie is already out of the bottle, when something goes wrong."

But policymakers are acting. The Biden administration has already announced a series of initiatives to guide its approach to Al. Europe, however, may lead the way in regulating the technology. The Al Act, which includes proposed rules that would classify Al systems according to their risk, with higher-risk systems subject to greater regulatory requirements and some activities banned outright, is currently working its way through the EU Parliament. If passed, the legislation will impose additional costs of compliance on large financial services firms as it covers credit scoring, HR processes, and even spreadsheets. A participant stated, "It focuses on anything that impacts your customers or impacts your employees."



"If we told our customers that our technology was making decisions about them in this way, with this information, how would they respond?"

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## Firms are in the early stages of adapting governance and oversight

Senior leaders of large banks and insurers are still assessing what changes to governance and oversight may be required to responsibly deploy these more powerful models. The technology has evolved so quickly that standards and best practices have yet to be defined. Participants identified some preliminary approaches to consider:

• Establish guiding principles and multidisciplinary teams to oversee Al.

Seasoned leaders with different backgrounds and perspectives should be engaged to set guidelines and vet potential Al applications. A participant shared that one organization created a team and set of principals "analogous to a supreme court and constitution." The team consisted of "a group of individuals from all different disciplines [who debated] whether a research initiative would generate greater benefits than the risks to make it worth pursuing." Like any group, however, advisory groups and interdisciplinary oversight teams are subject to their own biases. One participant reported that "Google's Al ethics board disbanded after some of them were found to have questionable views that suggested significant bias against certain populations."

Participants offered some examples of guiding principles that can help. For example, a participant recommended starting with use cases that are "assistant, not agentic," that is, those that help people act as opposed to those that take action independently. Another said leaders should ask, "If we told our customers that our technology was making decisions about them in this way, with this information, how would they respond?"

- **Develop an assurance framework.** One participant described a framework for thinking about and managing risks related to Al: "First, we have to consider which risks are bound to the technology itself—things like the potential for bias, etc. Then, what are the risks related to human agency, the people using the tool? Then, what are the use cases? That allows us to consider the controls, accountability, transparency required."
- Leverage technology to fact check the technology. Firms will need to put in place processes "for observing the AI, how it's going right, and how it's going wrong." Participants see opportunities to use the same tools to manage issues like hallucinations and unintended consequences. "Explainability," one commented, "is a recognized problem. It can be built into the architecture, with a rationale linked to a taxonomy that humans can understand."



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Participant

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- Director

These participants suggested using AI technology to monitor, control, and reduce the risks in other AI models. One executive explained, "We monitor all prompts going into the system. It enables us to track and identify the source of information." Another stated that because generative AI tools are probabilistic in nature, firms could "have systems assess the degree of confidence in the output relative to others in the distributions," or alternatively, "have another model, or many models, check the output of the model, like a person has a peer check work."

- Invest in education. Educating senior leaders, but also employees more generally, about potential use cases and the risks they pose is critical. A participant stated, "It starts with educating people. Ask them, In what context are you using the model? Some think it's a search engine, some think it's used to predict. You have to understand the context in which you use the technology." As the technology becomes more widely adopted, some suggested much earlier interventions will be required in the education system. One participant opined, "In UK last year, only one out of 10 people studying computer science was a woman. It creates the issue of bias. If we don't start to fix that from a young age and change that systemic issue, we won't be able to fix these problems." Another said, "This is the billion-dollar question: how do we ensure society at large has a different set of skills to contribute in the future?"
- Elevate the board conversation. Boards and executive teams are still grappling with how to get their heads around Al and what governance changes it may require. Many boards are actively discussing Al, and some have brought in outside experts to help guide them. More work is required. One director admitted, "I don't think anybody I've talked to has the answer, because it really just began seven or eight months ago. And so every one of the boards that I'm on and every director that I speak with from other boards feels the same way, which is we don't have the answers yet. We don't know what the governance model is yet. Where does it sit? How do we get to it?"

Structures are evolving. An executive reported, "We have a task force reporting to the executive committee and to the board to help them get up to speed." For one participant, oversight starts by asking the right questions. A good test would be to simply ask, "If we told our customers we are using tech in this way, would they be happy about this?"



## **Appendix**

The following individuals participated in these discussions:

#### **Participants**

- Andrew Bailey, Governor, Bank of England
- Laura Barlow, Group Head of Sustainability, Barclays
- Colin Bell, Chief Executive Officer, HSBC Bank plc and HSBC Europe
- Zelda Bentham, Group Head of Sustainability, Aviva
- Matthew Brewis, Director, General Insurance and Conduct Specialists, Financial Conduct Authority
- Megan Butler, Audit Committee Chair, Morgan Stanley International
- Jan Carendi, Non-Executive Director, Lombard International Assurance
- Michael Cole-Fontayn, Non-Executive Director, JPMorgan Securities
- Diane Côté, Non-Executive Director, Société Générale
- Martha Cummings, Non-Executive Director, Margeta
- Ron Dembo, Chief Executive Officer, riskthinking.Al
- Terri Duhon, Risk Committee Chair, Morgan Stanley International
- Tim Flynn, Audit Committee Chair, JPMorgan Chase
- Charlotte Gerken, Executive Director, Insurance Supervision, Prudential Regulation Authority, Bank of England
- Tom Glocer, Lead Director, Morgan Stanley
- Danuta Gray, Chair of the Board, Direct Line
- Tobias Guldimann, Audit and Risk Committee Chair, Edmond de Rothschild

- Mark Hughes, Risk Committee Chair, UBS
- Daniel Hurl, Head of Insurance Market Analysis and Policy, Financial Conduct Authority
- Shonaid Jemmett-Page, Non-Executive Director, Aviva and ClearBank
- Janet Johnstone, Chief Administrative Officer International, BNY Mellon
- Matthew Jones, Chief Strategy Officer, Cowbell
- Alan Keir, Risk Committee Chair, Nationwide Building Society
- Phil Kenworthy, Non-Executive Director, ClearBank
- Jonathan Kewley, Partner, Co-Head, Tech Group, Clifford Chance
- Stuart Lewis, Non-Executive Director, NatWest Group
- Elisabeth Ling, Non-Executive Director, Esure
- John Lister, Risk Committee Chair, Old Mutual, Pacific Life Re, and Phoenix Life
- John Liver, Non-Executive Director, Barclays UK
- Roger Marshall, Senior Independent Director and Audit Committee Chair, Pension Insurance Corporation
- Edward Ocampo, Risk Committee Chair, JPMorgan Securities
- Kevin Parry, Chair of the Board and Nominations Committee Chair, Royal London; Chair of the Board, Nationwide Building Society
- David Roberts, Chair of Court, Bank of England







- Aaron Rosenberg, Partner, Radical Ventures
- Sabahat Salahuddin, Director, Investment Stewardship, BlackRock
- Simon Samuels, Founding Partner, Veritum Partners
- Mohit Sarvaiya, International Chief Information Officer, BNY Mellon
- Nick Silitch, Former Chief Risk Officer, Prudential Financial
- Gregor Stewart, Audit Committee Chair, Direct Line
- Paul Taylor, Non-Executive Director, Morgan Stanley International
- Simon Toms, Partner, Mergers and Acquisitions; Corporate Governance, Skadden
- Tim Tookey, Audit Committee Chair, Royal London

- Nick Turner, Group Chief Executive, NFU Mutual
- Kevin Walsh, Deputy Comptroller for Market Risk, Office of the Comptroller of the Currency
- Lewis Webber, Head of Division for RegTech, Data and Innovation, Prudential Regulation Authority, Bank of England
- Christian Westermann, Head of Al and Data Transformation, Zurich Insurance Group
- James Wilde, Chief Sustainability
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- Alejandro Latorre, Principal, Financial Services Risk Management Advisory
- Gillian Lofts, Global Sustainable
   Finance Leader

Dennis Andrade, Partner

- Eric Baldwin, Principal
- Jonathan Day, Chief Executive

- Peter Manchester, EMEIA Insurance Leader and Global Insurance Consulting Leader
- Nigel Moden, EMEIA Financial Services Banking and Capital Markets Leader
- Isabelle Santenac, Global Insurance Leader
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- Tucker Nielsen, Partner
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### About this document

This *ViewPoints* document is the output of Tapestry Networks' convening of financial services board members, executives, and stakeholders, together with other subject matter experts, with the goal of addressing pressing problems and enhancing trust in financial markets. The meeting was organized and led by Tapestry Networks with the support of EY as part of its continuing commitment to board effectiveness and good governance.

*ViewPoints* is produced by Tapestry Networks to stimulate timely, substantive board discussions about the choices confronting audit committee members, management, and their advisers as they endeavor to fulfill their respective responsibilities to the investing public. The ultimate value of *ViewPoints* lies in its power to help all constituencies develop their own informed points of view on these important issues. Those who receive *ViewPoints* are encouraged to share it with others in their own networks. The more board members, members of management, and advisers who become systematically engaged in this dialogue, the more value will be created for all.

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### **Endnotes**

<sup>&</sup>lt;sup>1</sup> Bill Gates, "The Age of Al Has Begun," GatesNotes (blog), March 21, 2023.

<sup>&</sup>lt;sup>2</sup> Jennifer Elias, "Google CEO Sundar Pichai Warns Society to Brace for Impact of A.I. Acceleration," CNBC, April 17, 2023.

<sup>&</sup>lt;sup>3</sup> Samantha Murphy Kelly, "<u>Elon Musk and Other Tech Leaders Call for Pause in 'Out of Control' Al Race</u>," *CNN Business*, March 29, 2023.

<sup>&</sup>lt;sup>4</sup> *ViewPoints* reflects the network's use of a modified version of the Chatham House Rule whereby comments are not attributed to individuals or corporations. Quotations in italics are drawn from conversations with participants in connection with the meeting.

<sup>&</sup>lt;sup>5</sup> Jake Rudnitsky, "Palantir Sees Record Demand for Its New Al Tool. Here's What It Does," Bloomberg, May 9, 2023.

<sup>&</sup>lt;sup>6</sup> Rudnitsky, "Palantir Sees Record Demand for Its New Al Tool. Here's What It Does."

<sup>&</sup>lt;sup>7</sup> Ryan Browne, <u>"Europe Takes Aim at ChatGPT with What Might Soon Be the West's First A.I. Law. Here's What It Means,"</u> CNBC, May 15, 2023.