

# Capitalizing on the Potential of Artificial Intelligence

## Private Roundtable at the Wharton Future of Finance Forum

October 18, 2023

### Moderators:

- Christopher Geczy, Academic Director of the Jacobs Levy Equity Management Center for Quantitative Financial Research at the Wharton School of the University of Pennsylvania
- Cary Coglianese, Edward B. Shils Professor of Law and Professor of Political Science, Director of the Penn Program on Regulation at the Wharton School of the University of Pennsylvania

### Speakers:

- Shanker Trivedi, Senior Vice President, Enterprise Business at NVIDIA
- Sameer Gupta, Head of Data Solutions for Point72 and Head of Data Solutions at the New York Mets
- Kai Zenner, Office of Member of European Parliament, Negotiator on the EU AI Act
- Kate Griffin, Director of Programs at the Aspen Institute Financial Security Program
- Dietrich Chen, EY-Parthenon Managing Director and Member of the Task Force on Generative AI, Commercial Strategy at Ernst & Young LLP
- Nimrod Barak, Managing Director, and Global Head of Citi's Innovation Labs & Emerging Technologies Centers of Excellence
- Philipp Hacker, LL.M., Chair for Law and Ethics of the Digital Society at European University Viadrina in Frankfurt

- Bill Hinman, Senior Advisor to Simpson Thacher & Bartlett LLP and Advisory Partner of Andreessen Horowitz, Former Director of the Division of Corporation Finance of the U.S. Securities and Exchange Commission
- Juan M. Lavista Ferres, Vice President, Chief Scientist and Lab Director at Microsoft AI for Good Research Lab

## **Experimentation and Ethical Implications in AI Utilization**

- The financial sector recognizes the transformative potential of AI, with pioneering institutions adopting AI and blockchain technologies to optimize client services. However, a critical aspect of AI integration is understanding and explaining decision-making processes to minimize bias and ensure ethical use. Several institutions have taken proactive steps, establishing principles for ethical AI usage, recognizing the technology's profound impact on client relationships and market dynamics.

## **Strategic Collaborations and Efficiency Optimization**

- AI's integration in the financial domain isn't just a technological shift but a strategic enhancement, offering substantial efficiency gains and enhanced client services. The excitement surrounding AI is backed by substantial investments, including collaborations with startups and strategic academic partnerships. These relationships are vital in harnessing AI's full potential, contributing to both internal optimizations and enhanced client services, pointing to a future where AI's strategic importance might rival that of core financial products.

## **Innovative Use Cases and Liquidity Management**

- Financial institutions are leveraging AI to analyze vast trade volumes, providing actionable insights into trade probabilities and enhancing market participation strategies. Another revolutionary application is AI-assisted liquidity management, enabling precise forecasting of cash positions,

essential for operational stability, and strategic planning. These innovations indicate a trend where AI's role extends beyond task automation, providing insights that can alter fundamental business strategies and market interactions.

## **AI Driving Financial Inclusion and Identity Verification**

- AI's societal impact, particularly in promoting financial inclusion, emerged as a pivotal discussion point. Current financial systems often exclude lower-income households, and AI's efficiency gains could be instrumental in addressing this disparity. However, using existing data sets poses a risk of perpetuating biases. Innovative solutions like digital identity technologies offer seamless financial system integration, and open finance ecosystems could provide crucial data, driving more inclusive AI algorithms. National strategies fostering inclusive financial systems and leveraging technology for auto-enrollment and consumer decision support are under exploration.

## **Addressing Bias and Enhancing Algorithmic Fairness**

- AI's potential in identifying and correcting data biases was a significant theme, emphasizing the technology's role in overcoming human limitations. By making mathematical adjustments, AI can help in recognizing implicit biases, a foundational step in developing fairer financial systems. This corrective capability is particularly crucial, given the extensive historical data financial systems rely on, often riddled with historical prejudices that could perpetuate inequality.

## **Challenges in AI Adoption and the Importance of Decentralization**

- Despite the enthusiasm, practical AI integration faces hurdles, including identifying suitable use cases and managing associated risks. The concept of decentralization gained attention, discussing how 'citizen AI experts' could democratize AI expertise. The selection of AI use cases

must also consider risk-reward dynamics, focusing on areas where AI's advantages are clear. Moreover, foundational models and benchmarking emerged as primary areas for responsibility assumption, indicating an industry trend towards shared accountability in AI implementation.

## **AI's Disruptive Nature in Financial Markets and Regulation**

- The centralizing tendency of AI contrasts with decentralized financial trends like cryptocurrencies, presenting regulatory challenges. AI's novel applications strain existing legal frameworks, often leading to delays in consensus building around new rules. This lag results in potential compliance and operational risks, especially for novel financial products and services. Furthermore, the natural risk aversion of regulatory bodies contrasts with the private sector's agility, necessitating a more nuanced approach to fostering innovation while mitigating risks.

## **Environmental and Sustainability Considerations**

- AI's environmental impact, particularly the significant carbon footprint associated with running large AI models, is an emerging concern. Discussions pointed towards integrating sustainability impact assessments in AI deployments, highlighting the need for regulatory bodies and companies to address AI's environmental implications proactively.

## **Navigating International AI Regulations**

- The EU's initiatives to regulate AI were a focal point, discussing the ambition to create a legal framework that balances innovation and consumer protection. The complexity of AI systems necessitates a broad approach, with debates around specific prohibitions and national sovereignty in AI regulation. Concerns were raised about the AI Act's broad scope, potentially leading to conflicts with existing laws and creating

operational challenges for businesses. Safe harbors and technical standards could offer 'green zones' for compliant operations, though their sufficiency remains in question.

## **Democratizing AI and Ensuring Responsible Usage**

- Efforts to democratize AI, particularly through empowering academic institutions and startups, signify the technology's perceived importance. Major service providers envisage a future where foundational AI models are widely accessible, promoting a democratized ecosystem of safe and compliant AI services. This vision acknowledges the pivotal role of large players in establishing robust AI foundations, with an ecosystem of service providers contributing to a diverse, innovative, and responsible AI landscape.