



## **AI Insight Forum Remarks**

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November 1, 2023**

On behalf of Capital One, I want to thank Leader Schumer, Senators Rounds, Heinrich, and Young, and Members of the U.S. Senate for the opportunity to join this important dialogue on supporting and advancing a robust and dynamic national artificial intelligence (AI) ecosystem that benefits everyone, including in high impact sectors like financial services. These bipartisan forums are critical to advance innovation and strategically inform bipartisan AI legislation that fosters a responsible and thoughtful approach to capitalizing on the potential of this transformative technology.

As Chief Scientist and Head of Enterprise AI for Capital One, this is important to me because I believe a multidisciplinary, multi-stakeholder effort to responsibly advance the frontiers of AI can support and strengthen a nationwide network to pursue transformational advances in a range of economic sectors, industries, academia, and society broadly.

In high impact areas of our society and economy, such as financial services, it is critically important to further advance an understanding of AI, including state-of-the-art capabilities as well as aspects of transparency, security, and control. As with any emerging technology, it is essential to balance excitement about potential benefits of AI with a clear-eyed view of associated consequences and risks. Achieving that balance will require thoughtful, responsible, and nuanced approaches to development and deployment of AI through multidisciplinary partnerships and initiatives with a long-term horizon. Approaching this overall effort will require key initiatives including, but not limited to: workforce training and skills building, partnerships to advance research and development, risk management frameworks and best practices, and the participation and inclusion of traditionally underrepresented groups. Throughout our history as a mission-driven technology innovator in financial services, Capital One has made significant advances in these areas. We have a wide range of tools for managing risk relating to AI, including model risk management, compliance, and governance best practices, which helps us use machine learning and AI responsibly. We look forward to sharing these insights from our technology journey while continuing to learn from and contribute to wider efforts during this forum and beyond.

### **AI's Transformational Potential for Customers**

At Capital One, we are driven by our mission to change banking for good by helping improve the financial lives of millions of customers. Our founding as a company was based on using technology, data, and analytics to tailor products and services to customers' needs and democratize access to credit. Throughout our history, we have taken a rigorous and thoughtful approach to technology development to help us unlock insights, make decisions, and drive innovation and value for customers. As part of this journey, we became the first U.S. bank to go all in on the cloud, enabling us to leverage data and technology more nimbly and effectively than

ever before. Whether helping customers shop more safely online or providing new insights into their finances through our award-winning mobile app, we're constantly finding ways to use technology to make things easier and better for our customers. That foundation is critical to our ability to leverage the next frontier of AI to drive innovation with impact at scale.

Today we leverage AI to look out for our customers' financial well-being, help them become more financially empowered, and better manage their spending. We believe the evolving capabilities of AI in combination with our mission-driven focus presents a tremendous opportunity to deliver value to customers in ways never possible before — from offering more seamless, personalized products to enhancing privacy and protection of their financial information. The fact that we can apply data, machine learning, and AI in real time to better understand our customers' needs, goals, and pain points means we're in an unprecedented position to deliver the right help at the right time — and to continue to deliver value to people in all different spheres of their lives. With more than 100 million customers, we have an incredibly exciting opportunity to deliver everyday convenience and value through more real-time, personalized financial solutions and services for millions of Americans.

Looking to the future, applying AI to the customer experience in financial services can continue to create a virtuous flywheel that can deliver even further positive impact. High-quality data that is well managed and well governed powers our ability to use that data and apply AI to solving challenging problems for our customers. Our application of AI powers exceptional customer experiences, which in turn enhances customer engagement and interactions with us. When customers engage with our experiences, it provides insights into how satisfying the experiences are. These insights help us continually enhance the delivery of customer experiences, which leads to more engagement and continued refinement of the experiences we provide. AI helps us supercharge this flywheel. For example, our ability to leverage real-time data at scale enables us to better protect and serve customers in areas like fraud, where we can identify and mitigate suspicious activity in the time it takes a customer to swipe their credit card. Through this cycle of innovation, we're able to apply even more customized, real-time solutions to unlock greater value and drive more positive impact for our customers.

### **Inclusively Empowering the Next Generation of Technologists Through Skills Development**

Advances in machine learning and AI are changing society, the global economy, and the workforce. Rather than ignore this shift, we believe we must embrace and prepare for it. We are focused on ensuring our advances in technology like AI continue to augment, complement, and elevate the capabilities of our associates, enabling them to focus on work that delivers maximum value to our customers. For example, today we leverage machine learning and AI to help our associates better detect fraud and suspicious activity on behalf of our customers, to enhance the quality and speed of service in our call centers, and to continue to identify new ways to enhance the customer experience.

Given the fast pace with which technology evolves, we recognize the need to invest in and support our associates with continuous learning. As we advance our technology stack and

integrate new technologies into our products and our business, we are in turn investing in training and reskilling our associates to remain on the forefront of AI and tech skills. As part of these efforts, we launched an innovative learning hub, called Tech College, to help us continually train, reskill, and upskill employees to remain on the leading edge of technology. Tech College offers courses and programs of learning in technology disciplines such as cloud computing, AI, and cybersecurity, and tens of thousands of our associates have already leveraged the learning platform to enhance their skills.

We also recognize the need to invest in building a dynamic technology workforce for the future, both in the immediate term and for the long term, including a focus on STEM education. In 2014, we launched Capital One Coders, a program that aims to inspire more middle school students to pursue technology careers and learn how to build software. Over the last seven years, more than 25,000 U.S. students have gone through hands-on exploration of mobile app development, web design, and other emerging technologies, while learning computational thinking, a critical element in designing software.

To help support those over 25,000 young people in their STEM journey, 6,000 Capital One associates have volunteered more than 150,000 hours of mentorship and training time. This is an investment we are making in the future of American technology and competitiveness, as well as our own continued ability to drive best-in-class innovations. We also strive to fuel more innovation, greater responsibility, and more powerful outcomes for both our business and society through our hiring strategy. This includes a comprehensive workforce development strategy focused on recruiting, hiring, and building a talent pipeline for Capital One that brings underrepresented talent into the business, including veterans — many of whom bring the technology prowess acquired during their time in America's Armed Forces into our business. We are also focused on improving internal mobility programs within Capital One, and investing in career pathways for local communities. As part of these efforts, we have forged partnerships with organizations such as the National Society of Black Engineers, the Hispanic IT Executive Council, and ReWriting the Code to bring more talented technologists of all backgrounds into the industry.

### **Cultivating Networks and Partnerships to Advanced Applied Academic Research**

Leveraging the potential high impact and opportunities of AI will also require significant, multidisciplinary work within the institutions building AI solutions. This includes but is not limited to experts in data science and AI, model risk officers, legal, design, data engineering, policy, academia, government, customer and community advocacy. We have a particularly strong belief in partnerships between industry, academia, and government to ensure diverse perspectives and equities when developing, testing, and deploying AI capabilities.

Capital One works with a network of leading academic institutions to advance research and theory in applied state of the art AI and machine learning, which will continue to enable us to stay on the leading edge of well managed applications of AI to better serve our customers. Our applied research partners include University of Maryland - Center for Machine Learning; New York University - Tandon School of Engineering & Center for Data Science; Columbia University - Data Science Institute; Massachusetts Institute of Technology - Computer Science & Artificial

Intelligence Laboratory; University of Virginia - School of Data Science, including funding for the UVA Data Justice Academy to support underrepresented groups' advancement into the field of data science; and University of Illinois Urbana-Champaign - Research Park.

We also have multidisciplinary, multi-stakeholder initiatives and partnership models to advance the frontier of AI research and related large-scale challenges, such as our recent National Sciences Foundation partnership with the National Artificial Intelligence Research Institutes. In helping create and advise on this partnership, we have committed to provide one million dollars per year for five years, starting in 2025, to facilitate research and strengthen our national capabilities in AI in areas such as advancing the grounding, instructibility, and alignment of future AI development. This partnership is intended to facilitate broad, societally relevant and positive outcomes through the development of scientific knowledge and initiatives, and a nationwide network to pursue transformational advances in AI. The vision for this effort includes: the full participation of underrepresented groups in STEM; improved STEM education and training for educators; development of a diverse, globally competitive STEM workforce; increased public scientific literacy and public engagement with science and technology; improved access to AI and technology broadly for all individuals in society, including those in rural areas across the country; increased partnerships between academia, industry, and others; enhanced national security; increased American economic competitiveness; and enhanced infrastructure for research and education that will ensure the U.S. maintains its global leadership in AI.

### **Developing and Evolving Risk Management Best Practices**

Throughout Capital One's AI and machine learning development, we're guided by a mission to build and deploy this technology in a responsible, well managed way that puts people first. Developing AI requires an inclusive approach right from the outset. Responsibility and thoughtfulness need to pervade the entire development process, from research and experimentation to design, building, testing, and refining, through the whole development lifecycle.

It is always a best practice to conduct extensive testing and implement human-centered guardrails before introducing AI systems or models into any customer or business setting. This should include a Model Risk Management framework to evaluate, assess, validate, and govern models to effectively manage and mitigate risks associated with AI. Banks like Capital One have the robust risk management infrastructure, oversight mechanisms, and governance capabilities that are required to deploy and scale AI appropriately. We believe this risk management framework serves the industry and our customers well, and provides a robust and flexible foundation that will enable banks to meet the unique opportunities and risks of emerging technology advances.

More specifically, Capital One maintains a strong track record of robust and effective oversight of machine learning and AI, in large part due to efforts we've made over the last decade of our technology journey – such as going all in on the cloud – that enable responsible choices about the technology we use to best benefit our customers. Furthermore, we have a wide range of tools for managing risk relating to AI, including model risk management, credit risk, strategic

risk, third party risk, data management, compliance risk. Our associates stay closely aware of best practices identified by government, academia, and many industries for bias mitigation. We use this information to inform the way we build and monitor models. This includes established fair lending and data privacy governance processes to ensure we approach each use case in a responsible, well managed way. Capital One is constantly evolving those frameworks to adapt to the state-of-the-art in AI, and we're sharing our approach with regulators.

The present moment is an important juncture where AI remains new enough that society can still ensure that it progresses with positive momentum and the appropriate safeguards. Ultimately, we believe that when harnessed responsibly and inclusively, AI has the potential to democratize a broader suite of services, capabilities, and resources across the entire social spectrum than ever before in history. As a society, we need to come together to actively work towards that future. With intentional, well-resourced strategic partnership models to advance national networks of AI research and development, there is great potential for high impact leverage of this technology across the U.S., not least in critical sectors like financial services.

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