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Full Committee Hearing on AI Innovation Explored:

Insights into Al Applications in Financial Services and Housing

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Thank you, Chairman McHenry and Ranking Member Waters. On behalf of Nasdaq, I appreciate the opportunity to testify on Nasdaq's use and governance of Artificial Intelligence technology.

Since our founding 50 years ago, when we became the world's first electronic exchange, we have provided our clients with innovative solutions to help them navigate the complexity of the financial system and solve their toughest challenges.

We build leading indexes and provide cutting-edge technology that enables more than 130 markets around the world. We support the banking community with regulatory compliance technology, and we help them address financial crime. We were the first company to move trading markets to the cloud and the first exchange to release an AI-powered order type.

At Nasdaq our vision is to be the trusted fabric of the world's financial system, and our purpose is to advance economic progress for all. Through the work we do every day, we power stronger economies, create more equitable opportunities and contribute to a more sustainable world.

Our solutions are focused on supporting our clients in three important ways:

- Enhancing Liquidity Providing the technology and solutions to power the world's most robust markets.
- Ensuring Transparency Providing a robust data and analytics environment to connect corporates and investors with the data they need to make decisions.
- <u>Protecting Integrity</u> Providing the wider financial system with the technology and solutions to manage risk, protect markets, comply with regulations and fight crime.

As a leading global technology provider *and* an operator of exchanges and other regulated businesses in the US, Canada and Europe, we understand the power of innovation to solve society's toughest challenges, as well the importance of appropriate regulation to ensure we create and protect a system that works for all. We are committed to driving resilient growth, across our company and the clients we serve.



Our Approach and Journey to Al

We appreciate the opportunity to share our perspective on the potential impact and implications of Artificial Intelligence (AI) on the financial system and the regulatory approach to govern it.

In the 1990s, Nasdaq had a slogan: "Nasdaq, the Stock Market for the next 100 years". Today, we take the same long-term approach to technology adoption to ensure we embrace growth and innovation in a responsible manner. We have a robust, coordinated process to govern the implementation of AI in our services and business operations to ensure that we scale our capabilities with proper security, oversight and governance. We believe this is foundational to ethically and securely unlock the power of AI to benefit society.

While recent developments regarding generative AI have brought AI into the forefront of public consciousness, this technology has been integral to our services for years. We are already using AI technology to enhance transparency, liquidity and integrity in the system. So, while the calls for caution about AI's development are appropriate, so are the calls for optimism. Right now - in our products and across our markets - AI applications are enabling a fairer, more efficient and more resilient financial system.

How Nasdaq Uses Al

Today, I wanted to share just a few examples of how we are harnessing Al's potential at Nasdag.

• In protecting the integrity of our financial system, our anti-financial crime business is leveraging AI to fight criminal organizations involved in smuggling, drugs, terrorism and money laundering, more effectively than ever before. Financial crime is a multitrillion-dollar problem. According to Nasdaq findings, an estimated \$3.1 trillion in illicit funds flowed through the global financial system in 2023 and last year alone, losses from fraud totaled \$485.6 billion globally. To address this massive problem, our cloud-based platform is used by thousands of financial institutions of all asset sizes to dramatically improve the effectiveness and efficiency of their financial crime risk management programs.

Unlike conventional systems, this approach integrates multiple data sources and factors to determine the probability of fraud or money laundering, just as an investigator would. Our vast, decentralized source of unbiased training data provides the big data set necessary to effectively deploy machine learning and identify the financial crimes that underpin society's most insidious crimes. After all, there is a money trail behind every act of terrorism or human trafficking. Financial crimes are not victimless crimes. That is why we work to improve this technology every day to out-innovate the criminals, who are also using AI to develop new more sophisticated financial crime strategies.

To further protect the integrity of our markets, in our Market Surveillance business, we use
machine learning to detect and prevent market abuse, such as insider trading, market
manipulation, and fraud. Al makes it possible for us to analyze billions of transactions and
events every day to make it easier for our internal teams and our external clients, such as
exchanges, regulators, and brokers, to thwart fraud and manipulation.



- In using AI to drive improved liquidity in our markets, we recently introduced *Dynamic M-ELO*, the first exchange AI-powered order type. The technology is designed to deliver optimal outcomes by adapting to real-time market conditions and improving overall execution quality and fill rates.
- To bring more transparency to the financial system, in our data business, we use AI and
 machine learning to extract insights and value from large and complex data sets, such as
 market data, alternative data, and proprietary data to better serve corporates and investors.
 For example, we offer a product called Market Intelligence Desk, which uses AI to provide
 real-time market commentary and analysis for our listed companies, based on various data
 sources, such as news, social media, and trading activity.
- To further support this kind of transparency, in our governance business we are piloting new
 functionality within our Boardvantage service, which helps our clients manage their board
 meetings, documents, and communications, and uses AI to make it easier for board
 members to extract the most important information they need to oversee the risks and
 opportunities of the companies they govern.

These products are a result of our strong technology and product organizations, but also a reflection of a robust governance framework that analyzes the opportunities and risks of all new product introductions, with particular attention to products that embrace new technology, such as AI.

Our Al Governance Program

As part of my remarks today, I want to give an overview of our AI governance program, which is a key part of our product development program. Our program addresses the new and unique risks that AI technology presents, while enabling us to explore new emerging opportunities. It is centrally managed and administered eliminating the "AI sprawl" that plagues many companies.

Leading this effort is an executive steering committee that includes our CEO and senior members of our leadership team. Execution and risk are overseen by a cross-functional AI governance committee that is co-chaired by our *Chief Risk Officer* and our *Senior Vice President, Head of AI and Emerging Technologies*. The program is supported by company-wide policies, procedures and controls and our usage framework is aligned with the U.S. National Institute of Standards and Technology AI Risk Management Framework.

We knew years ago that AI technology needed to be pursued ethically, based on our core values which are the foundation of how we operate our business. As part of that effort, we adopted a set of Responsible AI Principles that reflect core tenets of ethical AI usage tailored to our business. These principles include a commitment to transparency, fairness, accessibility, efficiency, reliability, responsible data management, privacy, security, accountability and oversight.

And, in addition to serving as the foundation of our AI strategy, these principles also guide our approach to collaboration with policy makers, regulators, law enforcement and our colleagues in the private sector.



Considerations and Recommendations for the Regulation of Al

We recognize that AI poses significant challenges and risks that require careful oversight. We appreciate the efforts of the Committee and regulators to foster a supportive and balanced regulatory environment for AI innovation in the financial sector, while addressing the potential risks and harms that AI may pose.

We also believe that AI is a promising technology that can bring significant benefit to our industry and the wider economy, and that the environment for AI innovation in the United States is a foundational differentiator to our ability to compete globally.

As Congress and agencies look to develop AI-related laws and regulations, we believe that such actions should consider the following:

- Existing regulations and regulatory structures should be leveraged wherever possible.
 Current laws and regulations already set the framework for how the financial sector operates and regulators understand how companies they cover operate. Like prior technological innovations, the adoption of AI technology does not necessarily demand sweeping regulatory changes many of the top concerns about AI can be addressed by existing laws and enforceable by agencies.
- New regulation should be risk-based and proportionate, meaning that it should focus on the potential outcomes in terms of benefits, risks and harms of the AI applications, rather than on the specific technologies or methods. For example, the regulation applied to the use of an AI tool to detect drug trafficking or protect senior citizens from check fraud should not be the same as the regulation applied to use of the same AI tool to approve apartment rental applications.
- The regulatory environment should endeavor to be flexible and adaptive, meaning that it should allow for experimentation and innovation and should be able to evolve, as the AI applications and the market conditions change. We support the development and adoption of industry standards that provide practical guidance and benchmarks for industry and regulators.
- Al-specific regulation should be consistent and harmonized, meaning that it should avoid creating gaps, overlaps, or inconsistencies among different regulators, jurisdictions, or sectors, and that it should promote coordination and cooperation, among the regulators, the industry, and the international community. Within the federal government, while we oppose the creation of central regulator, we support leveraging NIST or another body to provide coordination across government to ensure consistent regulatory standards and development of the federal workforce knowledge of Al. We also believe that Congress should consider appropriate action to avoid the creation of a patchwork of differing state laws governing Al as this could stifle innovation and harm the competitiveness of the United States globally.



• The regulatory environment should be transparent and accountable, meaning that it should provide clear and timely guidance and feedback to the industry, as well as to the public, on the expectations and requirements for the AI applications. We support creating and promoting safe platforms, such as sandboxes, pilots, and labs, where industry and regulators can test and learn from the AI applications, in a controlled and supervised environment, and where industry and regulators can share and exchange their experiences. To promote this, we encourage Congress and regulators to enhance their capability to oversee AI, by investing in their own AI tools, systems and collaborating with industry and academia.

Conclusion

Thank you for your attention and interest in this important and timely topic. Nasdaq is committed to using AI in a responsible, ethical, and transparent manner, and to contributing to the development of AI in the financial sector and the economy. We look forward to working with the Committee and regulators to foster a supportive and balanced regulatory environment for AI, while addressing the potential risks and harms that AI may pose. I would be happy to answer any questions that you may have.