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DEPLOYING AI

At CFA Institute Asia-Pacific FinTech Month 2022, Larry Cao, senior director of industry research at CFA Institute, explored the deployment of artificial intelligence (AI) in the investment industry, assessing its initial emergence and speed of adoption. He also touched on developments that may affect the future of the financial profession.

Subsequently, Dr. Alan Lok, director of ethics education at CFA Institute, moderated a panel discussion. The contributors included Aaron Low, CEO of Lumiq; Carlos Queiroz, managing director, global head, Data Science Engineering, Standard Chartered Bank; Laurel Teo, board member of CFA Society Singapore; and Ming Zheng, senior financial business architect at Alibaba Cloud.

THE EMERGENCE OF ARTIFICIAL INTELLIGENCE

Initially, technology-based solutions were complementary to existing services offered by the financial industry. These included peer-to-peer lending, mobile payments, and robo-advice. Significant progress was made with "narrow" AI techniques, with natural language processing being among the most successful. AI has been applied, for example, to technical analysis and trading based on simple logic. Since these developments, the industry has reached a more advanced stage with the advent of AI and Big Data, blockchain, and decentralised finance.

AN EVOLVING REGULATORY BACKDROP

Governments have tended to support these developments, taking a regulatory sandbox approach to encourage experimentation and exploration within a loose legal framework. More recently, the authorities have focused on areas such as data privacy, improving transparency, and "explainability," as well as ethical issues, such as eliminating bias and discrimination. "Regulators not only want to understand how AI models work, but they are also pushing for responsible AI," says Queiroz. Teo also highlights differences in the way individual markets approach ethical issues. In the Western hemisphere, the focus seems to be on fairness, non-discrimination, and privacy, whereas China appears to be more concerned with data security and safety. Meanwhile, Singapore's regulators prioritise transparency and explainability.

THE HUMAN TOUCH IS STILL REQUIRED

Although regulators worry about data privacy, data collection, and cyber security, "individual investors are more concerned with trust and fairness," says Teo. She explains that AI could be trusted to perform tasks with integrity, but it fails to score on empathy and an ability to care for a person's well-being. But in fairness to AI, individuals also may feel it is challenging to plead their case before an unfeeling (human) arbiter.

A COHERENT BUSINESS APPROACH

While the benefits of AI are apparent, some challenges exist. Chief among these is the ability to seamlessly integrate the new technology across a broad range of business processes. Also, staff must be trained and armed with the necessary skills to understand and exploit emerging opportunities. Teo observes that because of their inherent differences, it is sometimes hard for tech and investment professionals to work together. A new breed of employees flexible enough to coexist between these two worlds is necessary to bind the different parts of a business and to make the most of artificial and human intelligence.

On a separate note, Teo says that in the future, whether a client is serviced by a human being or a robo-adviser would depend on that individual's wealth. For instance, the investments of high-net-worth clients often carry greater risk, so a human may be required to assist in the decision-making process. In contrast, the broader market could be serviced by a robo-adviser, given that the banking services needed are less complex.