A DVANCED ALGORITHMS AND MACHINE learning have long been important tools in the global financial network. With the sudden advent of ChatGPT and large language models, AI's impact on finance suddenly seems almost limitless.

Side by side with optimism, however, are concerns over how the new technology could be used in "greenwashing," that is, representing climate goals and actions that mask a lack of commitment. An outgrowth of those concerns is the threat of "techwashing," misleading stakeholders with claims about the ability of technology to address specific problems in an organization.

We spoke with Helen Krause, Managing Director and Head of Global Data Insights at Citi, a bank with over 10,000 employees, about her perspective on these trends, their future in a fast-changing industry and the implications for society. Krause has 25 years of experience in finance. Prior to her current role, she was a Senior Quant Researcher in Citi Research.

How is AI being used in financial services and what is the outlook for the future?

In a recent AI in Finance report, we highlighted six categories of AI applications in financial services— coding and software, transaction monitoring and compliance, customer services and chatbot 2.0, credit risk and underwriting, investment research, and asset and portfolio management.

Broadly speaking, current use cases center around operational efficiency and productivity gains, such as filling out RFPs (request for proposals) or due diligence questionnaires. Some have been cautiously exploring investment research summarization, while future-use cases focus on searching for investment signals.

What are the potential risks and guardrails that protect users and employees?

It is widely acknowledged that AI or GenAI outputs could have inherent biases present in the data used to train the models. These need to be tackled before one can trust and use the AI tools. Additionally, there might be legal issues associated with the data, involving copyright infringement and consent. This is why so far the use cases tend to be internal and quite restricted as compliance, risk and legal teams grapple with instigating appropriate controls.

Our AI Regulations report shows AI regulatory developments across major markets over the last six years, with the EU AI Act being the latest addition. It is clear that many initiatives are taking shape across

The Scope of AI in Finance

the globe. As regulations continue to evolve, financial institutions need to stay vigilant and make sure they are aligned with the requirements.

How are digital finance and technology, like AI, blockchain and fintech, being used to address sustainability and social challenges? Do you see these playing a role to enhance transparency?

Data availability has long been cited as the major issue when it comes to ascertaining companies' performance in terms of sustainability. It is true that the percentage of companies that disclose is still far from ideal; there are alternative sources, technologies and providers that can help to address the data gap.

For example, remote sensing allows us to gather more frequent reading of carbon emissions or deterioration of soil health of certain sites. There are also providers in the fintech space who use blockchains to lock in records of impact observations as the "ground truths." This applies to the social side also—for example, using GIS [Geographic Information System] combined with facilities data, we can see whether companies and their suppliers operate

HELEN KRAUSE, Managing Director, Head of Global Data Insights at Citi, talks to Brunswick's **STACEY CHOW** about fintech collaborations and using AI to foster transparency.

in areas that are prone to child labor or forced labor risks. These can help to provide external validations to companies' claims.

As we try to solve greenwashing through technology, how do we avoid "techwashing," that is, viewing AI as a panacea and ignoring any risks?

My role involves a lot of exploratory conversations with fintech providers. We perform thorough due diligence on the technology they offer. It is easy to gloss over the details or fall for marketing tactics around the hype. Ultimately, we need to have a clear objective as to what we are looking for from the tech solutions and whether realistically AI could solve the issues at hand. The best practice we have learned from our conversations with C-suites on the asset management side is to start small: conduct a well-defined proof of concept and investigate the pros and cons of AI solutions.

Are you concerned about the expectations of stakeholder groups for these new technologies?

Many of our reports touch on the expectations. While there is undoubtedly a lot of enthusiasm about how GenAI could revolutionize the way we work, views on the technology are not universal, with many questioning how to quantify the return on investment. Productivity gains and operational efficiency are about money or time saved, but how to show results—that is a key question to answer.

Also, the talent aspect is a major challenge. We need to have highly skilled data scientists or AI specialists who can mitigate the biases and deliver credible outcomes. Currently there is a real battle for talent out there, seeking people with these skills.

We are tackling two dynamic changes—spearheading innovation and tackling sustainability. Both require significant change management and culture change within organizations. What are some challenges in this process?

Change management was highlighted as one of the key challenges when we interviewed the C-suite for our AI report last year, especially cultural change. Some of the best practices we heard on the culture side were: 1) create upskilling and educational programs; 2) increase awareness and accountability; 3) encourage responsible use of AI; and 4) cultivate friendly environments for people and AI collaboration. Starting with a small use case, build nimble tech stacks to test out capabilities while navigating the governance, compliance and risk aspects to set appropriate guardrails.

> *"As regulations continue to evolve, financial institutions need to stay vigilant and make sure they are aligned with the requirements."*

Helen Krause

STACEY CHOW, based in Hong Kong, is a Partner in Brunswick's Sustainable Business Practice. She was previously at the World Economic Forum and the World Bank, with nearly 20 years of experience in sustainable development and stakeholder engagement.

What are the emerging tech solutions, globally and locally, that we should be aware of?

A key consideration for investors as well as corporates has been an increased focus on supply chain resilience due to geopolitical tensions and extreme climate events. More geospatial solutions have been made available in the market to facilitate location-specific analytics to assist in impact assessments.

In terms of other AI trends, we recently published a report on AI in Robots—robots that can now see, learn, move, talk, turn instructions into code and then act. All these elements are able to fit together as a result of the multimodal AI.

Agentic AI is also regarded as the next wave of AI advancement where the "agent" is autonomous, whereas GenAI needs to be prompted to receive a response. Potentially, these autonomous agents could become virtual employees, working alongside the human workforce.

What are some of the collaboration opportunities that you see? What are the lessons learned from your partnerships and initiatives?

In our AI in Investment Management report, there is a section where we discuss buy versus build in length. Companies need to weigh carefully their strengths versus time and cost to build something in-house. Partnerships might come at a cost of lack of transparency, as vendors tend to have proprietary models, the details of which would understandably be guarded carefully.

A collaboration my team has done is with Earth-Blox, which provides the compute power we need in order to process geospatial data for our nature impact analysis. The project won a grant from the UK Space Agency as we look to develop a market-leading geospatial data tool. Once the satellite data is analyzed and transformed, it is taken in-house where we can overlay our proprietary data to derive further insights.

What is the one myth that you want to bust around fintech/sustainability?

That myth would be that we don't have enough data. While it is true that company disclosures still need to improve, there are other sources of data available to help with assessments. They are not necessarily in a readily usable format, but technological advancements have made it possible to obtain information required or come up with good proxies. Oftentimes we just need to find the right datasets and combine those with the help of AI tools and technology. ◆