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HARNESSING THE POWER OF DATA WITH AI



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A variety of financial services companies have started to incorporate artificial intelligence (AI) into their operations—ranging from quantitative asset managers that use machine learning (ML) models to predict price movements in securities to roboadvisor systems that use AI to help investors decide on their asset allocation. More broadly, companies are increasingly using AI to both analyze structured data, (e.g., asset flows, performance) and extract information from unstructured/alternative data (e.g., images, documents, social media posts) through image recognition and natural language understanding capabilities.

The greater volume of data, along with AI and ML tools that can provide automated insights and analytics, offers significant opportunities for asset owners and asset managers to increase operational productivity, improve cybersecurity and manage risk, among other benefits.

Currently, more than half of asset managers are in the early stages of AI initiatives, according to a Sapien Global Markets survey.¹ And almost one-quarter of asset owners who invest in hedge funds use alternative data and big data analytics/AI to support their investment processes, according to an EY/Greenwich Associates survey.²

However, as AI becomes more prevalent, organizations need to be mindful of getting caught up in the hype around AI and seeing it as a panacea. Instead, organizations need to think strategically and carefully about where AI can be implemented to improve their customer experience and grow their businesses.

CREATING A FOCUSED DATA STRATEGY

Data sits at the heart of AI, as it is the oil that fuels these systems' ability to make predictions and find solutions. Thus finance organizations considering AI need to first look at how they're managing their data and determine the best ways to deploy that data to meet their goals.

Yet within many management teams, "a chief data officer [CDO] job doesn't exist, which suggests no one is pulling a strategy together," says Martin Haering, chief marketing officer at financial software company Finastra.

Only about half of asset managers have appointed an AI leader. In many cases, this role is undertaken by the CIO or COO, according to a survey by Deloitte.³ Since these roles often have other operational responsibilities, the lack of a CDO suggests that data and AI are not always getting the full focus that they need. AI projects often require ongoing oversight to ensure that they are helping the business meet their goals. An AI data-learned model might need to be continually trained or retrained, for instance, to meet a new objective. Thus having a leader dedicated to these responsibilities, such as a CDO, is critical.

Bhagwan Chowdhry, professor of finance at UCLA Anderson School of Management, says there is a danger that—without clear direction—financial

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services firms may fail to collect, analyze and understand data effectively. “For centuries humankind looked at the sky and tried to find patterns to explain human behavior. The same is true of data. We have so much of it now that if we look hard enough we will find patterns even though they might not exist,” he says.

Instead, the key to a meaningful strategy is to focus on the needs of the business and the wishes of clients.

AI IN ACTION

The breadth of areas with which AI can help is expanding at pace. For example, at IBM, the Watson Financial Services technology offers organizations an automated way through the regulatory maze, keeping them up to date with changes and ensuring compliance.

“Regulatory compliance and risk management is the top challenge our customers wanted help with. It is a huge area of expense and the risks of not doing it well are significant,” says Alistair Rennie, general manager at IBM Watson Financial Services.

Watson’s AI capability is such that it can analyze reams of unstructured data, such as regulatory text, and identify where the institution needs to act. It is then up to a human expert to make a decision, the outcome of which is fed back into Watson, allowing it to learn and improve.

This cycle exemplifies the positive relationship between data and AI. Quality data feeds into AI systems, which can then produce solutions that include new data, which then gets fed back into the AI system to improve the capabilities of the solution. Systems like Watson will continually learn and improve by incorporating a data feedback mechanism.

Beyond compliance, another use case example involves improving customer experience. In this area, IBM, Finastra and others are building systems that better analyze investor behaviors, which in turn create tailored products and services.

Professor Chowdhry says it is this kind of AI usage—arguably a step technology companies such as Amazon took a few years ago—that will make the most difference to end users.

“The way data has been used so far has been static. Investment advice might have been based on my age or income; which is a crude approach. AI is now informing the investment side on whether my kids are in college, or if I am getting divorced. There is more foresight and it is dynamic,” he says.

To benefit from these capabilities, firms need to develop a clear strategy for how they will collect and manage this structured and unstructured data in a way that does not infringe upon data privacy while allowing companies to recommend more relevant offerings.

Asset owners are also on the AI journey and using it to improve the experience of their underlying investors and stakeholders. For example, Rest—an AUS\$50bn Australian super fund with two million members—uses an online virtual assistant, known as Roger.

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Introduced in 2017, the technology initially supported members through the web and a smartphone app. In April 2018 Roger was integrated into Google Home, which uses voice recognition technology.

“The integration of Roger with Google Home gives us new ways to connect with our members at times convenient to them, and in ways that are relevant to their lifestyles,” says Beth Parkin, general manager, customer service at Rest.

She adds that Roger can already respond to 96% of questions posed to it online, a success rate Rest expects to be replicated when using Google Home.

AI'S POTENTIAL

Potential use of AI in financial services is vast and will likely impact all facets of the industry. And collaboration among asset owners, asset managers and technology firms can help provide a smooth experience for those who are increasingly using AI and other new technologies to improve their business processes.

Asset owners, asset managers and technology firms can also share best practices and develop industry standards to overcome potential pitfalls of using AI and managing more data, such as cybersecurity and data privacy risks. Ultimately, AI implementation should not outpace the industry's ability to use these capabilities effectively.

But when used properly and in ways that address clear business needs, AI can help asset managers and asset owners meet their goals. The companies that will benefit the most are those that are thoughtful about how AI can improve their organizations, rather than implementing AI for the sake of it.

AI can help model future earnings, create budgets, track spending habits, suggest withdrawal amounts and rebalance accounts based on the participant's income needs.

END NOTES

- 1 <https://www.sapientglobalmarkets.com/blog/ai-in-asset-management>
- 2 [https://www.ey.com/Publication/vwLUAssets/ey-how-will-you-embrace-innovation/\\$File/ey-how-will-you-embrace-innovation.pdf](https://www.ey.com/Publication/vwLUAssets/ey-how-will-you-embrace-innovation/$File/ey-how-will-you-embrace-innovation.pdf)
- 3 <https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/technology/deloitte-cn-tech-ai-and-you-en-170801.pdf>

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