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IBM Expert Demystifies Artificial Intelligence, Touts Its Value for Asset Management

Forget what you've heard about artificial intelligence (AI), Tom Eck, chief technology officer for IBM industry platforms, told the crowd at ICI's 60th annual General Membership Meeting, held last month in Washington, DC. Despite its depiction sometimes in popular culture as a malevolent force, he said, there is nothing to fear from the technology, which happens to hold great potential for the registered fund industry.

This Isn't Skynet

"I know many people are scared of AI, but there's nothing scary about it. We're not going to see Skynet anytime soon," Eck said, referencing the man-made AI system that ultimately battles the human race in the *Terminator* movie franchise. "AI is essentially based on probabilities," he explained—that is, it uses evidence to determine the likelihood of a future outcome.

Machine learning is an aspect of AI that often is just as feared, Eck explained, thanks to the idea that machines could become smarter than humans and ultimately pose a danger to them. But he clarified that machine learning simply means that "an AI algorithm's predictive ability gets better over time."

He further explained that there are many types of machine learning, including supervised learning, where a researcher gives an AI algorithm a set of information and a set of answers. "For example, [a researcher] shows a picture of a banana and tells the algorithm it's a banana, or she does the same with an automobile. And she'll continue this way with millions of images and labels." Self-driving cars are a great example of supervised learning at work, Eck pointed out, because "self-driving is all about image recognition."

The Perfect Storm

Though AI has been around since the 1950s, Eck noted, we're hearing about it now more than ever because of advancements in areas like data, algorithms, and hardware. "Consider the amount of data that we have online—the volume of images, video, and text, which has enabled better image recognition and supervised learning. Or think about the hardware that is available today versus 20 years ago," he added. The advancements in these two areas—as well as the tremendous improvement in algorithms—has driven "a quantum leap in AI within the last decade."

"We have a perfect storm happening—in a good way," Eck said. More people can develop

and use algorithms thanks to greater access to education and open-source platforms, he explained, while algorithms are becoming more powerful, faster, accurate, and easier to use. “Every dimension of AI is improving, and the complexity of implementing AI is decreasing. So, it’s easier and more viable for different industries to take advantage of AI’s potential,” he concluded.

Potential Value for Asset Management

So, how can funds and asset managers put AI to work for them? “I wouldn’t suggest setting up your own AI shop,” Eck told the audience. “It would be easier to leverage existing AI services by having your IT team integrate them into your systems.” Numerous services offer AI models that provide speech, text, or image recognition, or that can make predictions based off a given data set, he explained.

For example, Eck said, “perhaps a portfolio manager wants to set up a daily report that runs overnight and shows all the regulatory and business insights that the manager will need to act on the next day.” Or maybe an analyst wants to “predict the price of a certain equity, or whether crude oil will go up or down.” AI could perform either of those tasks, and could bring a lot of value to the fund industry, Eck concluded. “Firms just have to remember that it’s not scary.”

To learn more about AI and how it applies to mutual fund operations, please read “[Artificial Intelligence Offers Opportunity for Funds and Investors](https://www.ici.org/viewpoints/view_18_gmm_ai).”

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