

Can AI be trusted to make investment decisions?

We can't ignore the impact of AI (Artificial Intelligence) on investments any longer. AI is here to stay, and brings with it a whole new way of doing business. The World Economic Forum 2019 was dominated by AI, and our industry has not been left unaffected.

Some of the things we need to consider, include how to integrate AI into the investment process, whether to use Full or Partial AI, and the future role AI plays in the investment process when conducting a due diligence on asset managers. In short, we need to have an understanding of its impact on the industry as a whole.

What is AI and how does it work?

AI is broadly defined as the use of machines to perform tasks that would normally be done by humans. Ultimately, AI seeks to create systems that can function intelligently and independently of humans. Many people use AI on a daily basis without even realising it. Examples include Google searches and using a smartphone to obtain directions.

AI works in two ways:

- Symbolic (symbol-based) Learning, mimics human movement, e.g. robotics, or computer vision that replicates human sight.
- Machine (data-based) Learning – a subset of AI – is where our industry's focus is, and comprises Narrow AI and Deep AI. Narrow AI or statistical learning involves recognising patterns of data, whereas Deep AI involves deep learning through neural networks that attempt to replicate the human brain and nervous system.

Asset managers, for the most part, are currently operating in the Narrow AI space, but are increasingly moving towards Deep AI, and to a future where machines have self-awareness.

In a world of big data, where we create up to 2.5 quintillion bytes of data everyday (that's 25 and 20 zeros), AI is no longer a nice-to-have. Humans learn in 2 or 3D, whereas machines are able to learn in 100 or even 1000D. Having mastered pattern recognition (seeing patterns that humans can never see), the next steps in Machine Learning are categorising information and making predictions (that humans can never make).

AI and its relevance to investing

AI plays a valuable role in reducing a number of key risks in the investment process. It eliminates human bias and emotion, reduces key man risk, fills the gap in under-resourced investment teams, and smooths out any inconsistencies in the investment process – all while dealing with huge volumes of existing data and the rapid growth of new data.

Big data

AI processes many different categories of big data, including web searches, sentiment, social media commentary (categorised as unstructured information) and macroeconomic data, asset process and financial statements (categorised as structured information). Over time, structured and particularly unstructured data grows exponentially, while the level of human concentration and processing capability remains largely constant – hence the need for AI and Machine Learning to be able to make investment predictions based on large amounts of data.

How are asset managers using AI predictions?

- AI can be used to support investment decision making (often referred to as Partial AI). This involves humans using AI to enhance their decisions, however the ultimate decision remains a human call. Most asset managers are currently using AI to support their investment decision making.
- Full AI is using AI to actually make the investment decision, i.e. the entire investment process from start to finish is machine driven, with no human involvement. The Glacier AI Flexible Fund of Funds is one of the very few funds worldwide that employs a Full AI strategy using learning algorithms to run the entire investment process – from idea generation right through to making the final investment decision. This engine only focusses on structured data to make its investment predictions.

We are of the belief that when using only structured data, Full AI engines perform best. And when using both structured and unstructured data, Partial AI will more than likely do better than Full AI.

It's not easy to equate Full AI with any particular investment style – value, growth, momentum or quality – as Full AI is adaptive to different market environments. A core investment style is potentially the closest style comparable to Full AI.

What is the role of Full AI in the Glacier AI Flexible Fund of Funds?

In summary, Full AI offers the following diversification benefits in an investment portfolio:

- *Eliminates human risk* – AI removes human emotion and bias, inconsistency, as well as key-man risk.

- *Style* – AI uses a core investment style that is flexible and adaptive to changing environments throughout the investment cycle.
- *Passive & Active* – AI can be said to incorporate both.
- *Dynamic asset allocation* – AI allows for quick reaction times.

[Warren Buffett](#) once said: “*You don’t need a lot of brains to be in this business. What you do need is emotional stability. You have to be able to think independently.*”

That could prove, although unintentionally, to be the best endorsement yet for the inclusion of AI in an investment portfolio.

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