

Consider This

M&G Global Equity Fund: AI meets human expertise

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As AI continues to transform the investment landscape, investors are eager to understand how this technology is impacting the decision-making process and reshaping the role of human investment professionals.

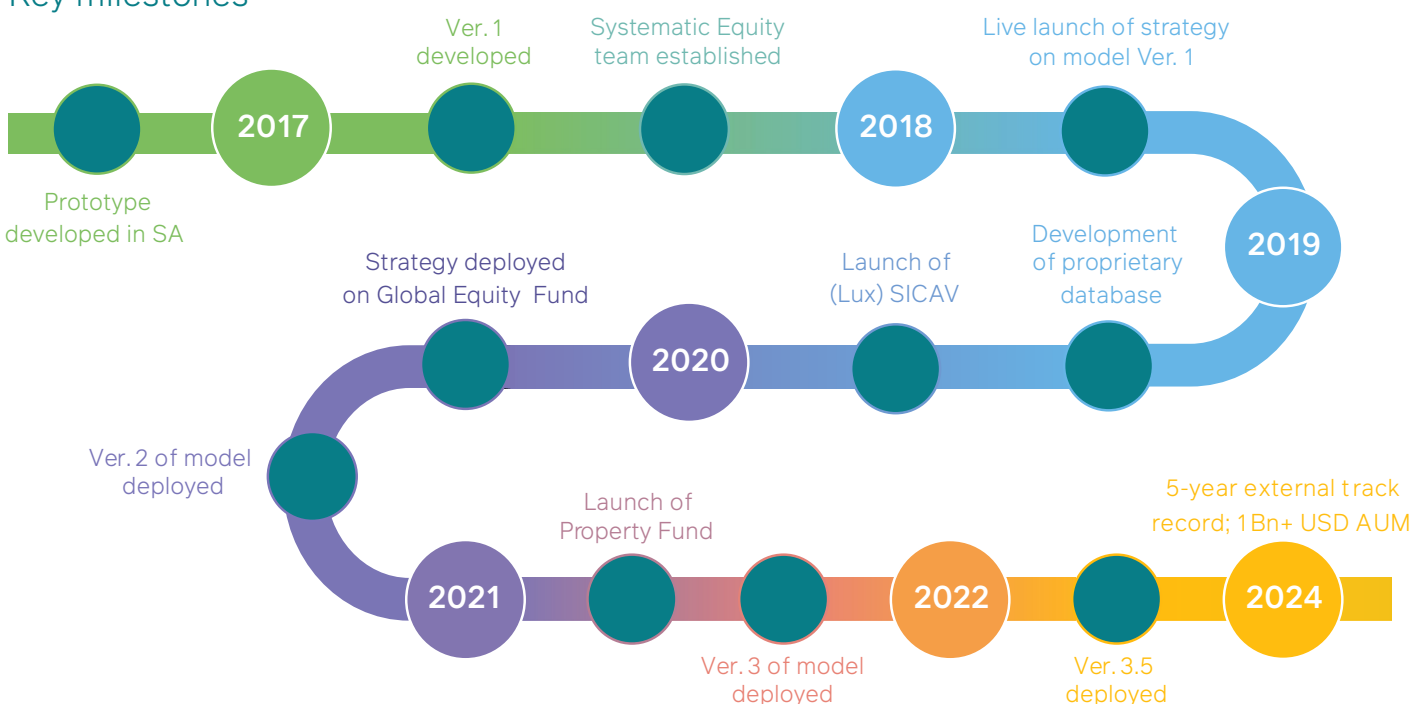
As co-managers of the M&G Global Equity Fund, we leverage advances in AI, data science, and computer processes to provide stock-picking recommendations. Recently, we traveled from the UK to South Africa, where we spent time with colleagues and clients, sharing insights into how these tools are applied within the fund's process.

In this article, we'll explore some of what we shared: How AI is not just enhancing our investment approach but how the fusion of human expertise and machine intelligence is delivering superior performance for our clients, even amid the uncertainties of the global equity markets.

Reflecting on five years of AI-driven investing

Systematic equity development timeline

Key milestones



The M&G Global Equity Fund's AI-driven approach builds on the foundation of the earlier AI-based machine learning strategy, the Global Maxima strategy, which was conceived in 2017. After building the team, launching the first prototype, and testing it for a year, we officially launched the fund in December 2019. Five years on, we're now running the fourth version of the model.

The team has grown from two to five investment professionals, with significant technical and infrastructure support. Our assets under management have surpassed one billion US dollars. It's been a remarkable journey, and we're excited about what lies ahead.

AI: Hype or here to stay?

With AI becoming increasingly ubiquitous and large language models like ChatGPT hitting the mainstream in a dramatic way, there's no shortage of buzz surrounding the theme of AI. However, we view AI as more of an evolutionary development. As such, we feel that, with a diligent approach to implementing AI techniques, we're able to produce **differentiated outcomes**. That said, it is important to remain cautious in the application of AI, as not every problem is well suited to the use of AI in its solution.

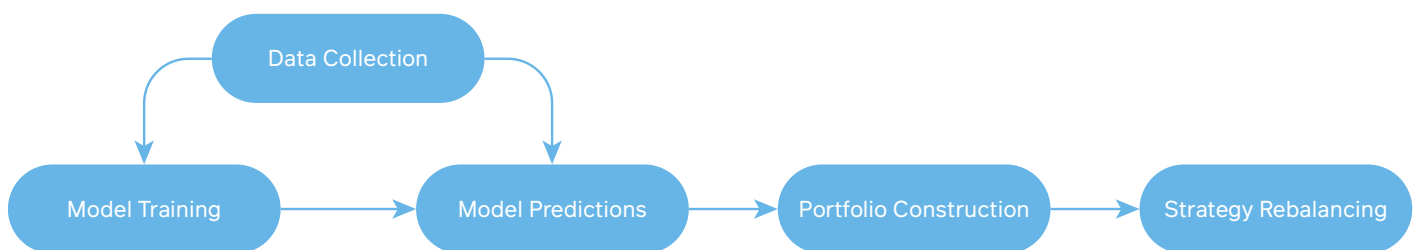
The ongoing evolution of AI in investment management

Looking at the history of technological innovation, we've seen that when a new technology first emerges, people often try to apply it to existing problems. The real breakthroughs come, however, when new possibilities arise — things that weren't conceived before the technology was available.

Take the internet, for example. In its early stages, access to the internet simply replicated what you could do via fax. Then, email emerged, and later, Google indexed the internet's entire universe, becoming the gateway to information and knowledge, and creating entirely new opportunities.

Similarly, AI is still evolving, and its full potential will unfold over time. The AI landscape is vast, opening new avenues for processing data and extracting valuable insights. It enables us to access useful information from text, images, and sound, enhancing our investment decision-making. As AI techniques develop, we continually explore new methods to refine our models.

How AI shapes our investment decisions



AI-based decision making is at the heart of our investment process. We use historically representative data from the investment landscape to train our AI model, enabling it to learn underlying patterns and provide us with a rich view of the market. These models not only help us predict investment outcomes but also deepen our understanding of how market factors interact.

We primarily use supervised machine learning, selecting data we believe is relevant for predicting share price movements. This is crucial in complex, noisy environments where it's easy to capture spurious relationships in data that might not be relevant in the future. In a pre-filtering process, we identify data sources such as economic, fundamental, pricing, and technical data. We also increasingly use natural language processing (NLP) techniques to extract sentiment data from sources such as company filings. The model learns how this data relates to future share price performance.

Our approach mirrors the traditional investment process — collecting data, modeling it, making predictions, and constructing a portfolio — but it does so at scale, without the biases often associated with human decision-making.

Data is the lifeblood of our approach. We ingest terabytes of data through fairly industrialised pipelines. We process billions of data points, incorporating over 500 characteristics, which allows for more granular insights. We strive to adopt a scientific approach to research, and our model framework enables us to objectively evaluate the marginal enhancements to our process by incorporating new sources of information. We have a continuous pipeline of possibilities for ingesting and integrating increasing amounts of data into our process.

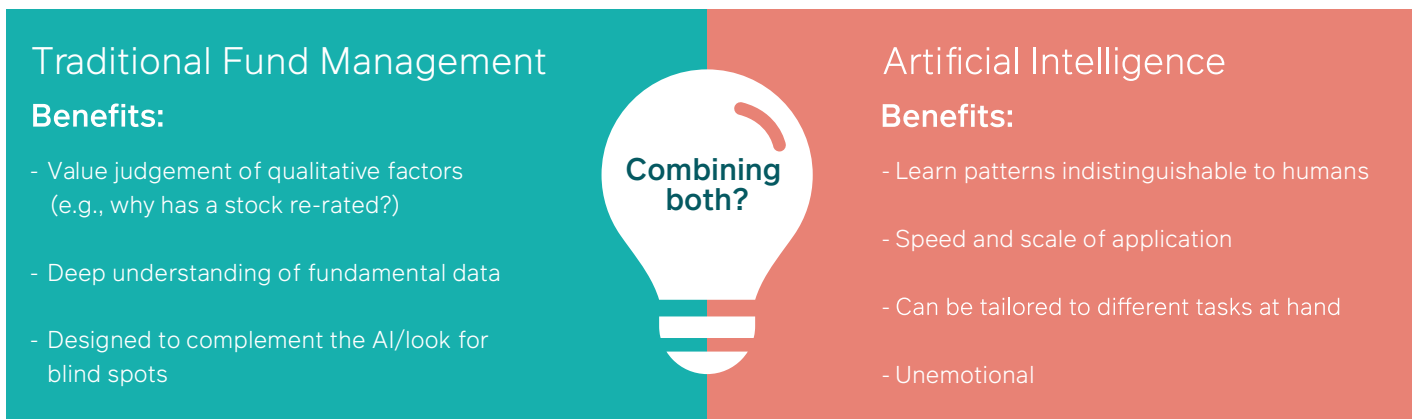
We then apply supervised machine-learning techniques to model the data and uncover underlying relationships in the complex system of inter-related considerations we need to take into account when evaluating companies. Traditionally, a discretionary approach may be able to track a few tens to hundreds of companies; our investment process is able to assess over 10,000 companies in real-time, ranking them and generating AI-driven predictions daily. This vast coverage gives us a unique advantage and significantly expands the pool of investment opportunities we can analyse for our clients.

Within our portfolio construction process, we use these insights to narrow down to the most attractive companies - forming a portfolio of approximately 100 stocks, ensuring diversification across sectors and regions to manage macro risks. During regular portfolio rebalances, we maintain the portfolio's exposure to attractive companies, ensuring both quantitative and qualitative checks are met before adding a stock to the portfolio.

Unlocking the combined potential of humans and machines

Investment philosophy

The benefits of artificial intelligence to investing



Machine learning is well-suited to modelling the complexity of markets

Source: M&G Investments

We feel that the real benefits of our AI approach come from blending the strengths of both humans and machines. The model excels at identifying patterns and nuances in the data that are indistinguishable to human beings. It also operates at a speed and scale that would be impossible for humans alone. The model is also emotionless, which helps mitigate biases such as overconfidence or fear that can distort human decision-making.

However, human judgment is crucial for addressing areas where AI models can't always perform optimally. For example, humans can provide additional context to data, accounting for shifts in the market, and filling in the gaps where the AI might be blind to certain qualitative factors.

Every stock selected for our portfolio undergoes a human check before being added. We make sure that the things we've accounted for are correct and consider any critical factors that may not be captured within the model. We use various techniques to manage large-scale data, enabling our models to process nuances and outliers effectively. It is important to note that not all outliers are errors, and our models are designed to distinguish between valid data

and anomalies. When it comes to risk management, human oversight combined with robust quantitative risk management ensures that we maintain a balanced exposure at the portfolio construction level. For example, we limit exposure to any single industry or country to within 5% of the fund benchmark. This ensures diversification and stability across the portfolio.

The future of AI in investment management

AI is undoubtedly here to stay, driven by three key factors: the evolution of modeling techniques, the growth in computational power, and the explosion of available data. With 90% of the world's data being created in the last two years, AI's role in asset management will continue to grow more central to investment decision-making.

However, careful management and expertise are required to ensure optimal results. While AI presents great possibilities, the key to success lies in the processes used to apply it. We remain committed to harnessing its power as it evolves, ensuring that both technology and human expertise continue to work hand in hand to deliver exceptional outcomes for our clients.

To discover more about the M&G Global Equity Fund, visit:

<https://www.mandg.co.za/personal-investor/our-funds/all-funds/mg-global-equity-fund/>

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