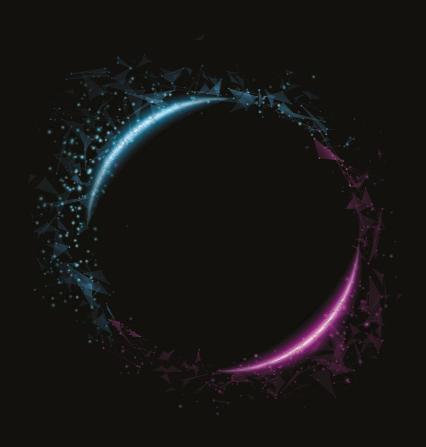
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# The New Physics of Financial Services Understanding how artificial intelligence is transforming the financial ecosystem



## Al is changing the physics of financial services

As artificial intelligence (AI) significantly changes the traditional operating models of financial institutions, Deloitte and the World Economic Forum's latest report in their 'Future of Financial Services' series explores how financial services firms can better embrace AI. The report is comprehensive, so here we have explored the sector-specific findings relating to investment management.

#### A quick look at the impact of AI on investment management



Al is enabling investment managers to adapt their business models by altering or replacing core differentiating capabilities. Potential strategies include:

- Enhance and expand wealth advisory. An example of this would be providing clients with a branded chatbot that seamlessly integrates with existing advisory relationships.
- Become a hyper-efficient, low-fee investment manager. For example, using machine learning to make macroeconomic analysis faster and cheaper than traditional methods.
- Offer more customised investment portfolios. For example, using new data sources to better inform and articulate investor profiles and preferences.
- Pioneer emerging markets and low-income wealth. An example of this could be using digitalised account setup
  and management to expand access for lower-net worth clients.
- Use data to generate alpha and differentiate returns. For example, use deep learning and other cutting-edge techniques to innovate in the creation of investment strategies.



Al is allowing wealth advisors to provide a personal and targeted investment advice to massmarket customers in a cost-effective manner. New capabilities include:

- Advanced analytics dashboards provide detailed insights about clients' needs and enable easy calculations
  to optimise products, services and advice. This can expand the branch adviser role by enabling junior and
  non-dedicated financial advisers to provide personal and potentially niche advice to clients (e.g. portfolio
  modelling).
- Econometric indicators can combine economic datasets and market events to provide customers with relevant
  insights and data on macroeconomic trends; customers will tend to stay with the platform that houses their
  historic data and consequently delivers stronger insights.
- Cross-product analysis can use machine learning to look across a customer's financial products and automatically
  optimise areas of improvement (e.g., suboptimal savings allocations).



Al is taking on a growing portion of investment management responsibility, delivering high-quality service at a lower cost. New capabilities include:

- Data gathering automation can be employed to find information to generate reports.
- Image recognition can be used to digitise compliance documents and extract key figures.
- Automated legal disclaimers and boilerplate text can be generated using machine learning.
- Parsing unstructured data (e.g. voice, text, images) at scale using machine learning can open up new data sources
  that can be indexed to market trends. Trading strategies based on these indices offer differentiated return profiles
  at lower costs.
- Automation of data analytics through machine learning technologies and cloud processing significantly increases
  the analytics throughput of talent, allowing a small number of professionals to replicate what previously took an
  army of analysts.



#### Al-driven personalised portfolio management enables more tailored customer experiences and better investment outcomes. New capabilities include:

- Analysing new data sources, including transaction and third-party data, using machine learning, allows for the generation of personalised risk factors.
- Achieving continuous monitoring in real-time by building data feeds that monitor clients' finances and detect immediately when rebalancing is necessary.
- Building personalised asset-allocation models, despite their complexity, to expand products.
- Analysing new risk exposures can develop proxy portfolios for common risk areas (e.g. real estate).
- Correlating new data with market performance using machine learning allows development of customised strategies.
- Integrating customer views can personalise financial advice in the context of a broad set of potential client life goals (e.g. holidays, starting a business).
- Modular offerings can provide goal-driven solutions rather than product-driven bundles.



#### Al enables institutions to serve low-income markets in a cost-effective manner. New capabilities include:

- Data normalisation allows institutions to access data from disparate sources, increasing the scalability of digital channels.
- Digital identity solutions can be bolstered by Al using image recognition to reduce uncertainty of identity verification.
- Building integration points allows account setup and servicing to be connected to digital platforms that hold deposits (e.g. payment apps).
- End-to-end automation allows straight-through processing of accounts opened on digital channels, at low marginal cost.
- Voice search allows clients to ask questions using natural language when they do not have certainty over where to find a particular answer.
- Intelligent dashboards adapt to every interaction that advisers have with their customers to make critical information accessible.



### Al can be used to generate products with new return profiles that are uncorrelated with established strategies. New capabilities include:

- Automate the collection and structuring of data to support efficient investment decision-making (e.g. by automatically summarising key insights).
- · Employ modern data storage architecture to make large datasets accessible (i.e. searchable and sortable).
- Parse unstructured data using advanced-learning algorithms to continuously and economically build new datasets that can support investment analysis.
- Develop general-purpose analysis technologies that can derive insights from a wide variety of types of data (e.g. social, quantitative) and formats (e.g. audio, text).
- Use cutting-edge algorithms (e.g. deep learning) to identify previously unexplored patterns and correlations that support investment decision-making to generate alpha for investors.



Download the full report at Deloitte.co.uk/AIFSfuture



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