Call for Papers—Management Science Virtual Special Issue on AI for Finance and Business Decisions

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Please scroll down for article—it is on subsequent pages

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In the dynamic and rapidly evolving landscape of finance, artificial intelligence (AI) is emerging as a powerful force that reshapes traditional paradigms and drives impactful innovations. AI technologies, including machine learning (ML) and generative AI, have the potential to transform financial services and redefine the architecture of the global financial system. These advancements prompt a reexamination of financial strategies, risk management frameworks, and business decision making.

In particular, AI technologies in finance and business decisions offer unprecedented opportunities for improving decision-making processes, optimizing operations, and enhancing financial inclusion. They also enable the analysis of vast amounts of data, can uncover hidden patterns, and provide insights that were previously unavailable with traditional methods. As these technologies continue to evolve, there is a growing need for robust theoretical foundations, tailored methodologies, novel approaches, and comprehensive empirical analyses to guide their development, ensure their integration into existing financial and business ecosystems, and align regulatory frameworks with the pace of innovation.

The interdepartmental virtual special issue on AI for finance and business decisions aims to explore the transformative impact of AI and attract top-quality research on the economics, methodology, and applications of AI and novel data analytics in practice and research in finance and business decisions. Both theoretical and empirical work is welcome, and studies developing new methods for decision making, optimization, inference and prediction, and interdisciplinary research are encouraged. We especially welcome submissions that transcend the departmental boundaries at *Management Science* and explore unconventional frameworks.

To be considered, papers should examine significant problems at the intersection of AI and finance and closely related areas, including—but not limited to—the following:

- Generative AI, large language models (LLMs), and other foundational models having impacts or applications in finance and related areas.
- Leveraging AI, machine learning, and agent-based models to study heterogeneity in the finance and business economics domain.
- AI/ML models for finance applications and econometrics, including time series predictions, causal inference, and managerial learning/optimization under uncertainty.
- Decision analytics and methods applied to financial management and decisions.
- Robust control, dynamic programming, and structural estimations using deep learning with applications in finance and related areas.
- Algorithmic transparency and interpretable AI in finance and related areas.
- Algorithmic fairness, bias, discrimination, and amplification in AI/ML/big data applications in finance and related business domains.
- Human-centered AI and human–machine interaction in finance and related areas.
- Security, systemic risk, and privacy issues concerning use of AI and ML in finance.
- Reinforcement learning, federated learning, and transfer learning in financial settings.
- Business fraud detection and AI/ML applications in financial regulation.
- AI-driven optimization techniques and applications or advanced methodologies for prescriptive decision making in finance and business economics domains.

• The use of AI in creating personalized financial advice and automated investment management services through, for example, robo-advisors or LLM-based apps.

• Alignment issues to deal with reward hacking, instrumental strategies (power seeking, survival), etc., and its relevance in financial and business settings.

• Multimodal systems and models with applications in finance and business decisions.

• Methods for machine unlearning, data selection, or data augmentation in the settings of finance and related business fields.

Submission

To be considered for the virtual special issue on AI for finance and business decisions, submit your manuscript online via https://mc.manuscriptcentral.com/ms. Select "Virtual Special Issue on AI for Finance and Business Decisions" as the manuscript type in step 1, and select one of the issue's coeditors (listed above) in step 5. Manuscripts will be assigned to one of the editors for this issue, and you may recommend (guest) associate editors and referees.

The virtual special issue aims to provide timely outlets for innovative, cutting-edge research on the aforementioned topics and beyond. Deadline for submission is **December 31, 2025**. A paper submitted to the virtual special issue will be processed right away, and accepted papers will be published in regular issues without delay. As such, authors are encouraged to submit as soon as they are ready. This virtual special issue will be an online collection of all these articles tied together under a unifying editorial article for greater impact and outreach.

Most submissions enter minor revision or rejection status after one round of review. All acceptance decisions are expected to be made before July 2026. If a paper is desk-rejected in the process, it can be submitted again to *Management Science* as a regular submission.