

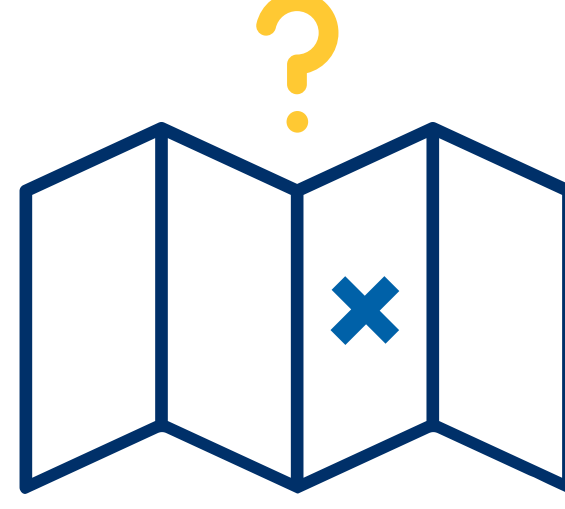
AI in Capital Markets: Top 5 Ethical Risks

As artificial intelligence (AI) becomes more embedded in financial decision-making, how can we ensure it's bringing real value to clients?

These 5 key concerns must be addressed:

1 Explainability

- AI is often a black box – opaque and complex to explain and understand.
- But explainability is critical for trust, end-users must feel confident engaging with predictions.



64% of IT professionals say that being able to explain how their AI arrives at different decisions is important to their business.¹



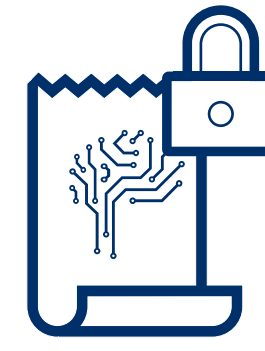
Between 3.4% and 38.6% of data used to inform certain AI systems is biased.²

2 Bias

- Data, and people, can be unintentionally biased and that can adversely influence AI models.
- There are documented cases where racial bias has been detected in AI systems³, for example.
- Discriminatory bias can significantly erode trust.

3 Competitive market dynamics

- Automation and using AI to generate deeper trading insights is opening up new competitive dynamics in markets.
- Greater competition could lead to issues stemming from collusion, market dominance, or mergers.⁵



Since 2017 at least 60 countries worldwide have enacted AI-related guidelines.⁴



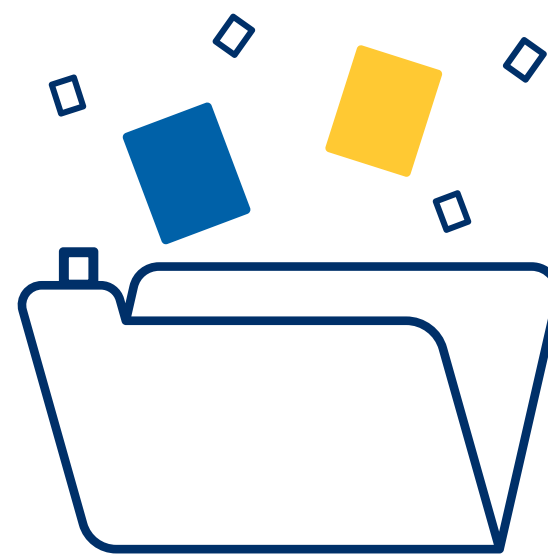
Only 50% of people trust companies that use AI as much as they trust other companies.⁶

4 Robustness

- Robustness, or reliability, is essential for AI used in capital markets.
- Robustness refers to the AI model's sensitivity to any inputs that might result in incorrect predictions or results.

5 Data security and privacy

- AI is heavily reliant on large quantities of data, and without proper controls, data can be corrupted.
- Addressing privacy concerns while leveraging large datasets is also a challenge – risks include the exposure of personal identifiable information.



Almost 20% of IT experts believe data security is a major concern when it comes to AI systems.⁷

Building the future

RBC Capital Markets is committed to building better AI. Discover more about our approach to responsible and explainable algorithms in our article: [Responsible and Explainable AI: Exploring the Future of Trading](#).

¹ <https://www.ibm.com/downloads/cas/GVAGA3JP>

² <https://viterbischool.usc.edu/news/2022/05/thats-just-common-sense-usc-researchers-find-bias-in-up-to-38-6-of-facts-used-by-ai/>

³ <https://www.genpact.com/insight/responsible-ai-developing-a-framework-for-sustainable-innovation>

⁴ <https://www.brookings.edu/blog/techtank/2022/02/01/the-eu-and-u-s-are-starting-to-align-on-ai-regulation/>

⁵ <https://www.oecd-ilibrary.org/sites/3acbe1cd-en/index.html?itemId=/content/component/3acbe1cd-en#section-dte9039>

⁶ <https://www.ipsos.com/en/global-opinions-about-ai-january-2022>

⁷ <https://www.ibm.com/downloads/cas/GVAGA3JP>