The Impact of Artificial Intelligence on the Hedge Fund Industry

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Do you think that Al will fundamentally change the hedge fund industry?





Ray Dalio, Founder, Bridgewater Associates

"(AI) will impact almost everything, there will be exceptionally big differences between the performances of ... companies who use them well."

Ken Griffin, Founder, Citadel

"(AI) saves some time. It's a productivity enhancement tool. It's nice, I don't think it's going to revolutionise most of what we do in finance."





Daniel Loeb, Founder, Third Point

"You'll either be a beneficiary of AI or AI roadkill, so I think we all need to do our best to not be the latter,"

Our Methodology



Consolidative
Literature Review

Analysed over 50 research articles



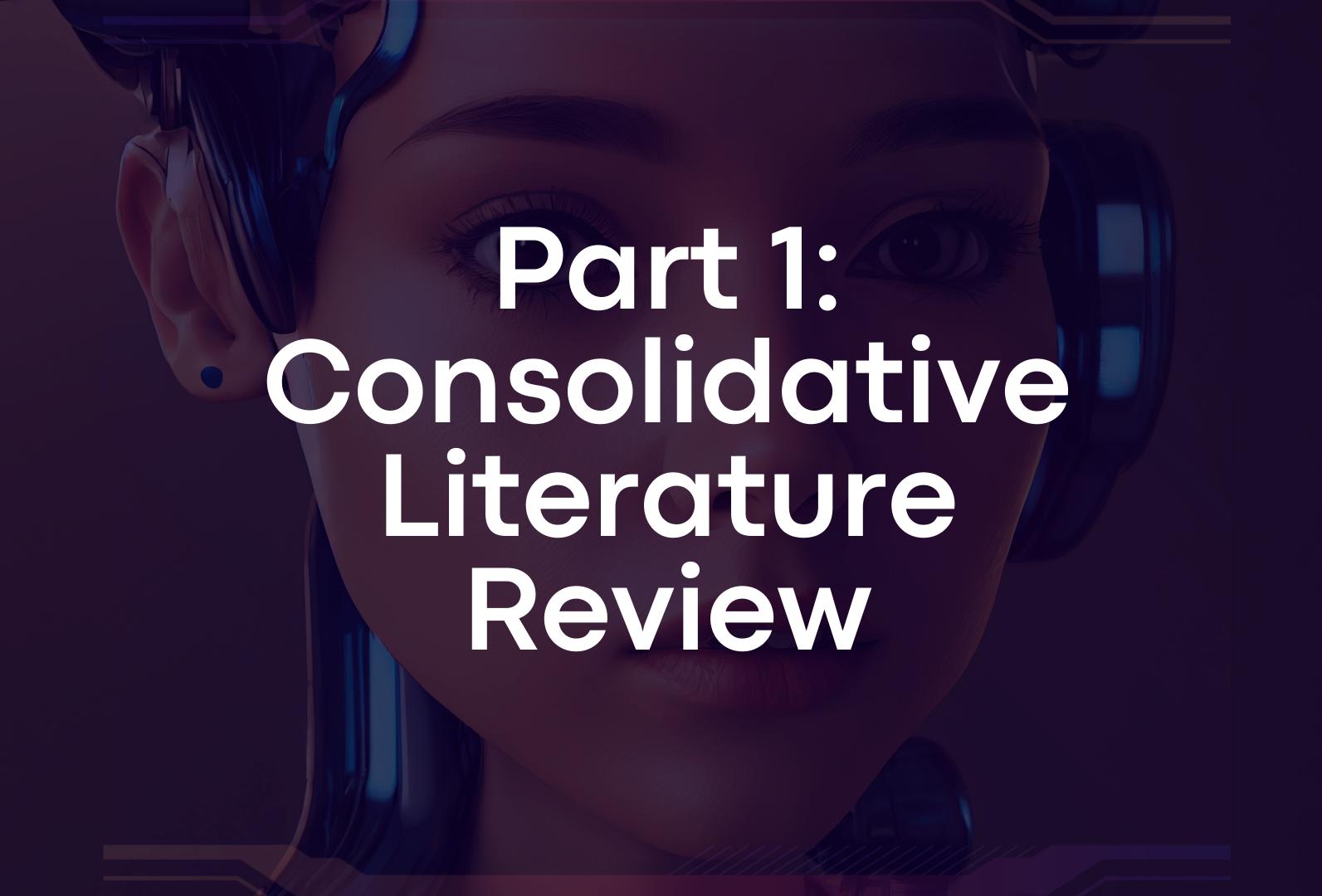
Comparative Case
Study Analysis

Analysed over 30 hedge funds

Our Definitions

Artificial Intelligence ------Machine Learning -----Deep Learning -------Generative Al
Large Language ------Models





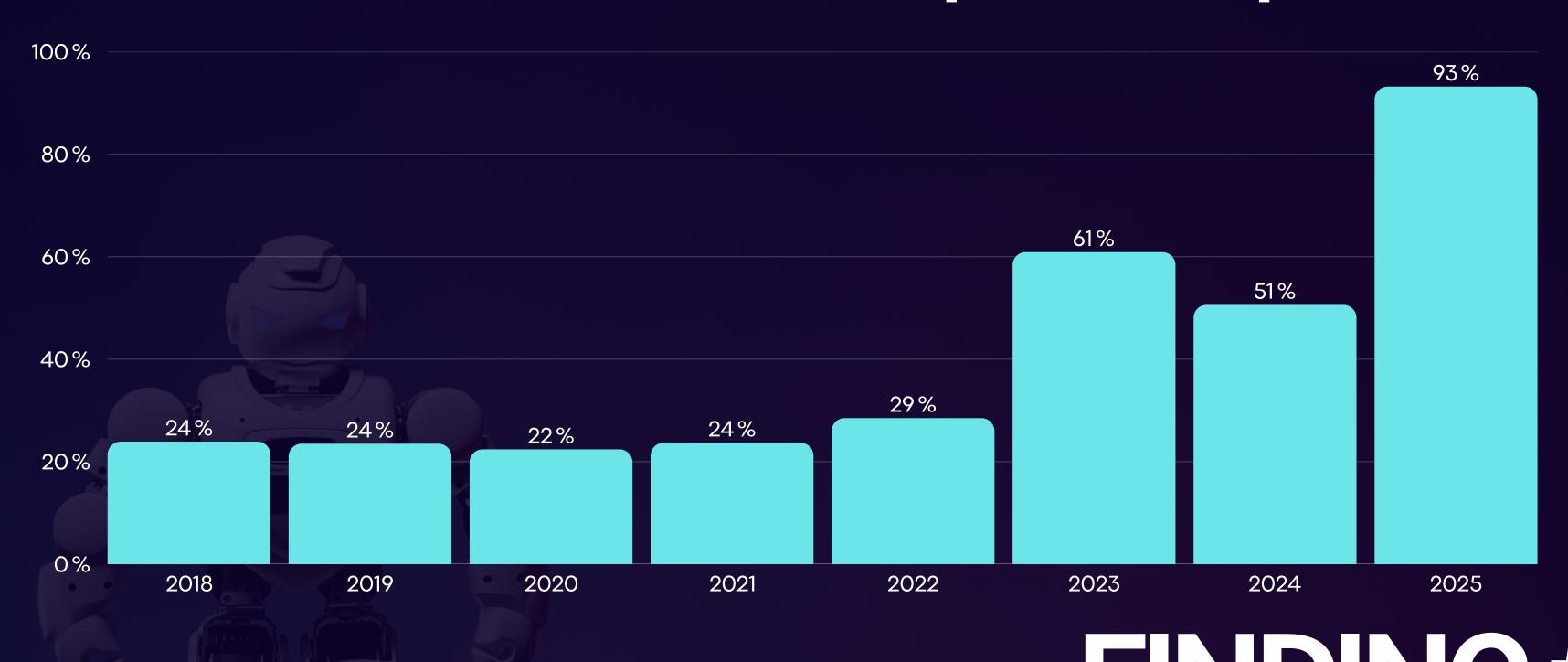
Finding #1: Hedge Funds are adopting Al at a rapid rate

Hedge Funds are adopting Al at a rapid rate

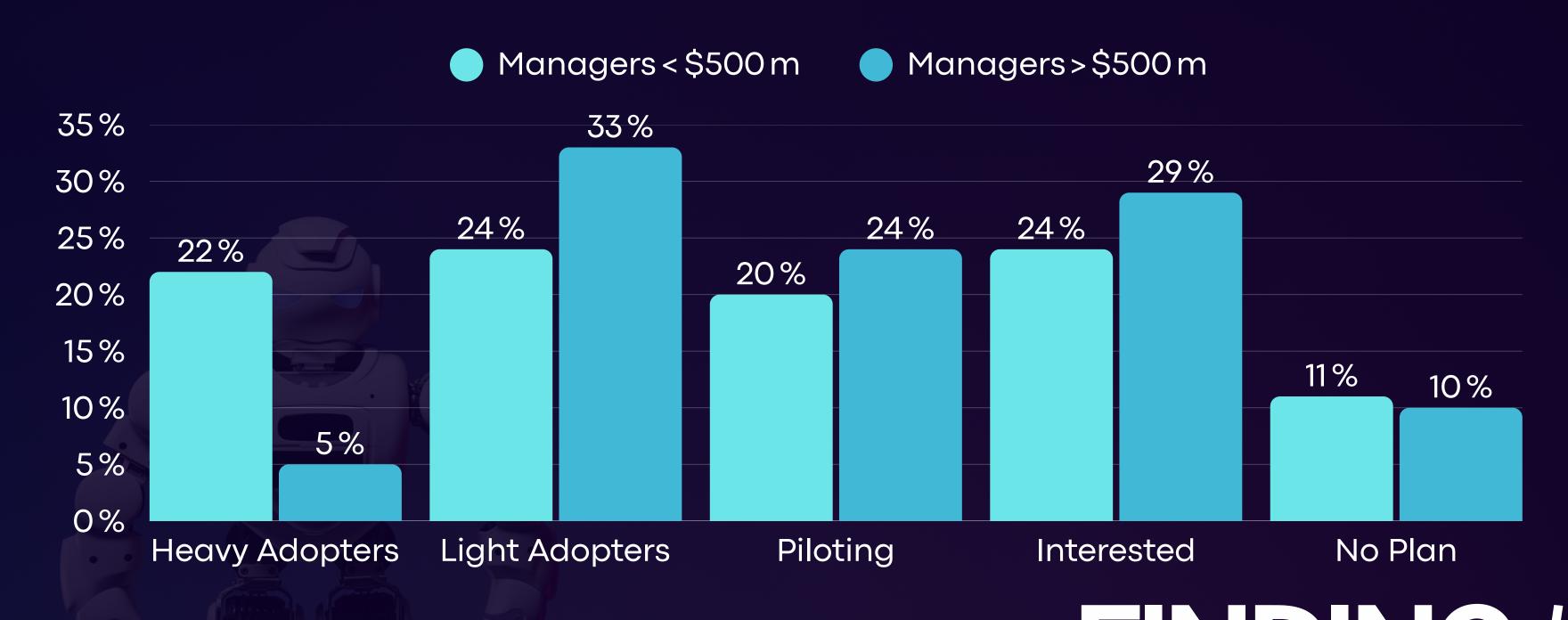
86%

of Hedge Fund managers grant their staff access to various Gen AI tools in their work

Managed Futures, Digital Assets and Global Macro are Top 3 Adopters



Smaller hedge funds are generally heavier adopters



US hedge funds are leading, followed by EU and APAC

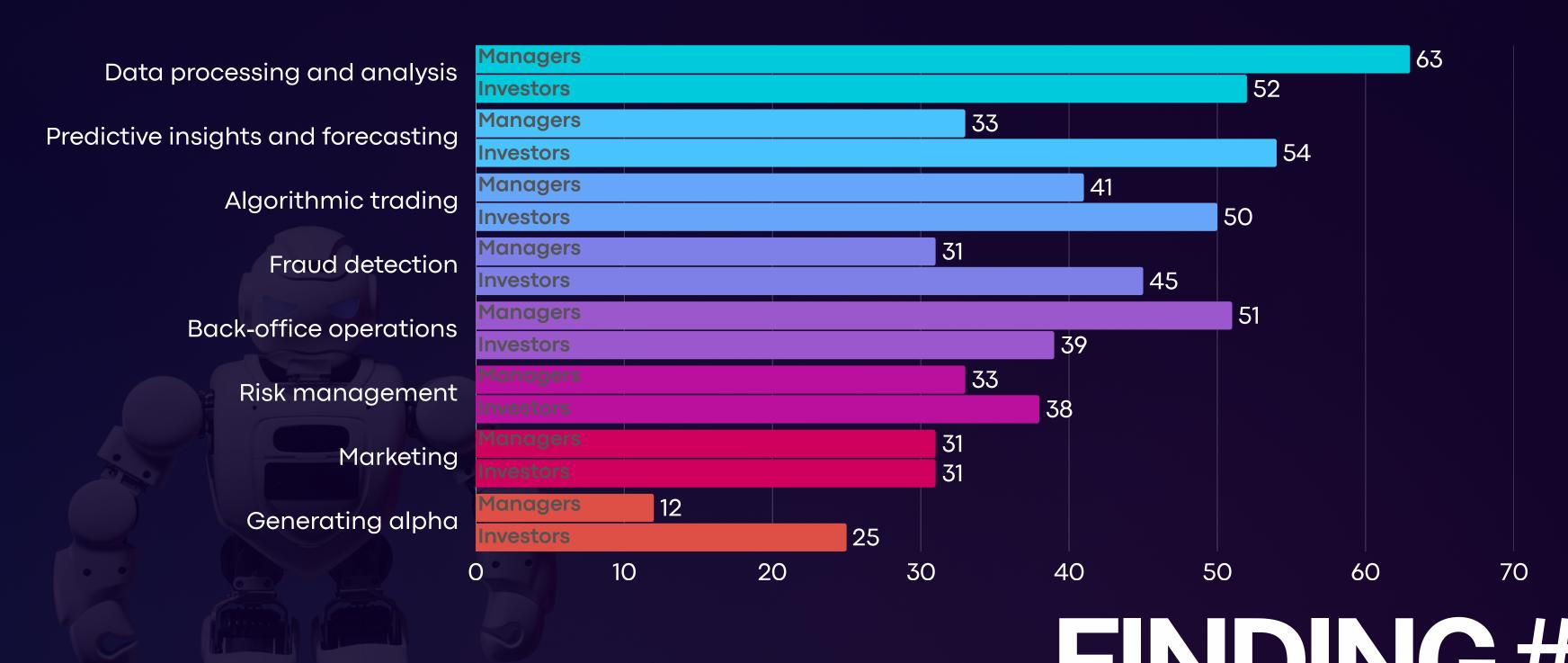


ChatGPT is most popular, followed by Bing, Bard and Github Copilot

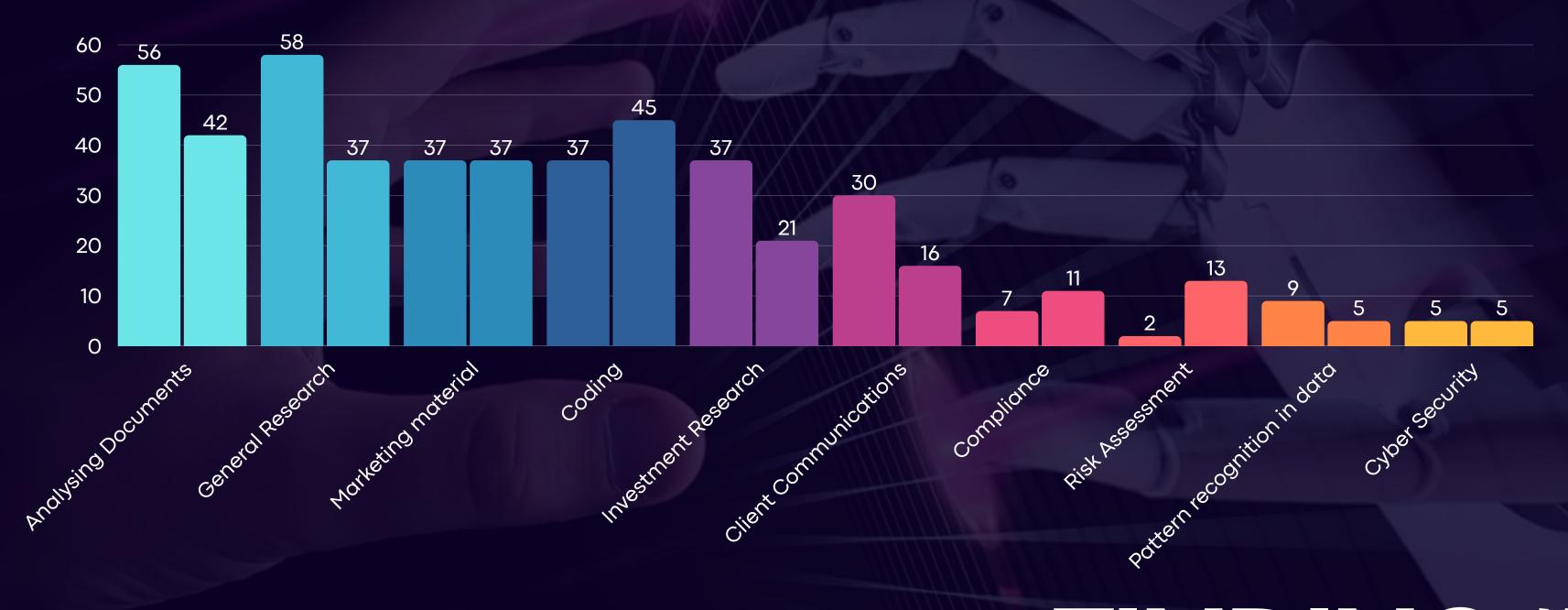


Finding #2: Hedge Funds are applying Al everywhere

Managers and investors both expect hedge funds to use AI extensively



In practice, Al is mostly used for research and analysis



EINDING#2

Top 5 Areas of Application of Al in Hedge Funds

- 1 Business Operations
- 2 Investment research and analysis
- Developing trading strategies and ideas
- 4 Trading decision-making
- 5 Risk management

Finding #3: Impact of Al on Performanceis Mixed

One study by IG argues that Al hedge funds underperforms market

9.8%
Eurekahedge Al
Hedge Fund Index



13.7% Standard & Poor's 500

- Study conducted by IG on data from Dec 2009 to Jul 2024
- Attributed to burden of management fees and transaction costs, coupled with the huge cost of investing in and deploying AI

Others see positive returns in specific strategies and markets

IMF,2025

5-7% Higher Returns for Application of ML in Statistical Arbitrage Strategies Deloitte, 2025

15% Reduction in
Portfolio Drawdowns for
Funds which Integrated
Al for Risk Assessment

Financial
Times, 2024

25% Increase in Returns for Hedge Funds using Al to trade in Emerging Markets

One quasi-experimental study found positive effects at fund-level

1.8%-3.5%

Increase in annualised abnormal returns from using Gen AI, based on difference-indifference study from 2022 to 2025

Another compared strengths and weaknesses of Al vs human trades

Compared 100 Al-generated trades and 100 human-recommended trades

Al Trades



Better Average Returns



Better Risk-Reward Potential



Greater Volatility



Longer Holding Periods

<u>Human Trades</u>



Higher Consistency



Faster Execution Times

The impact of AI on operational efficiency was also positive

80%

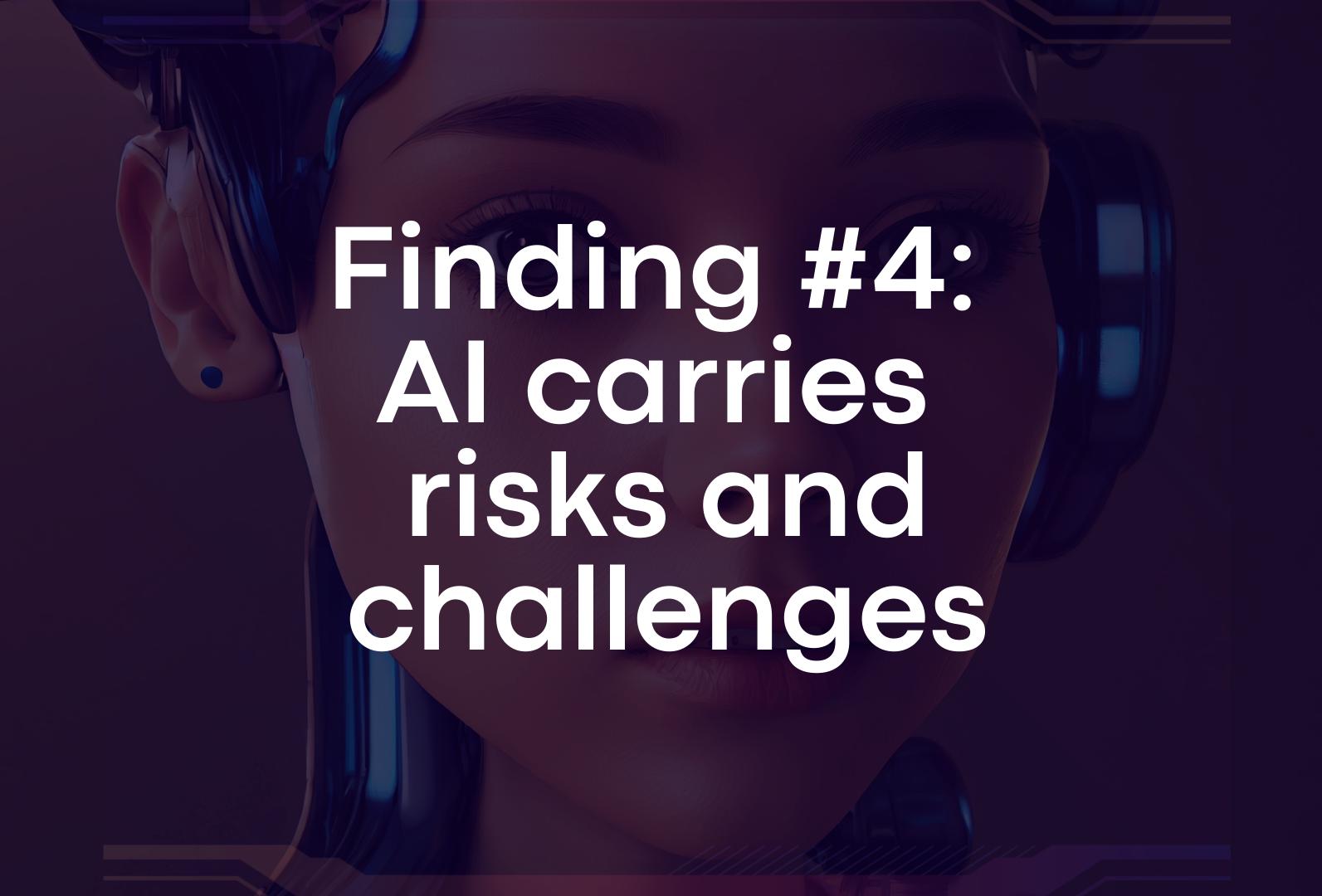
Reaped operational savings
(Hedgeweek, 2025)

46%

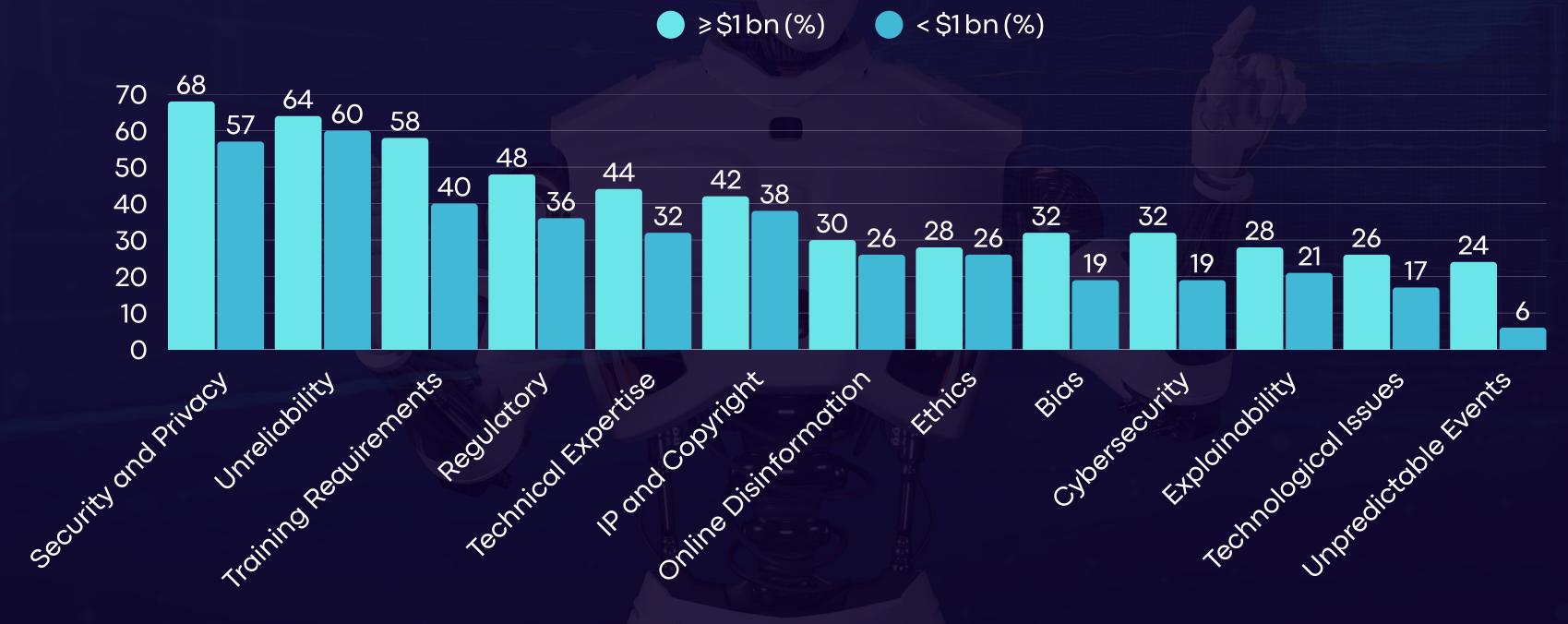
Saw Al making a significant impact (Hedgeweek, 2025)

18%

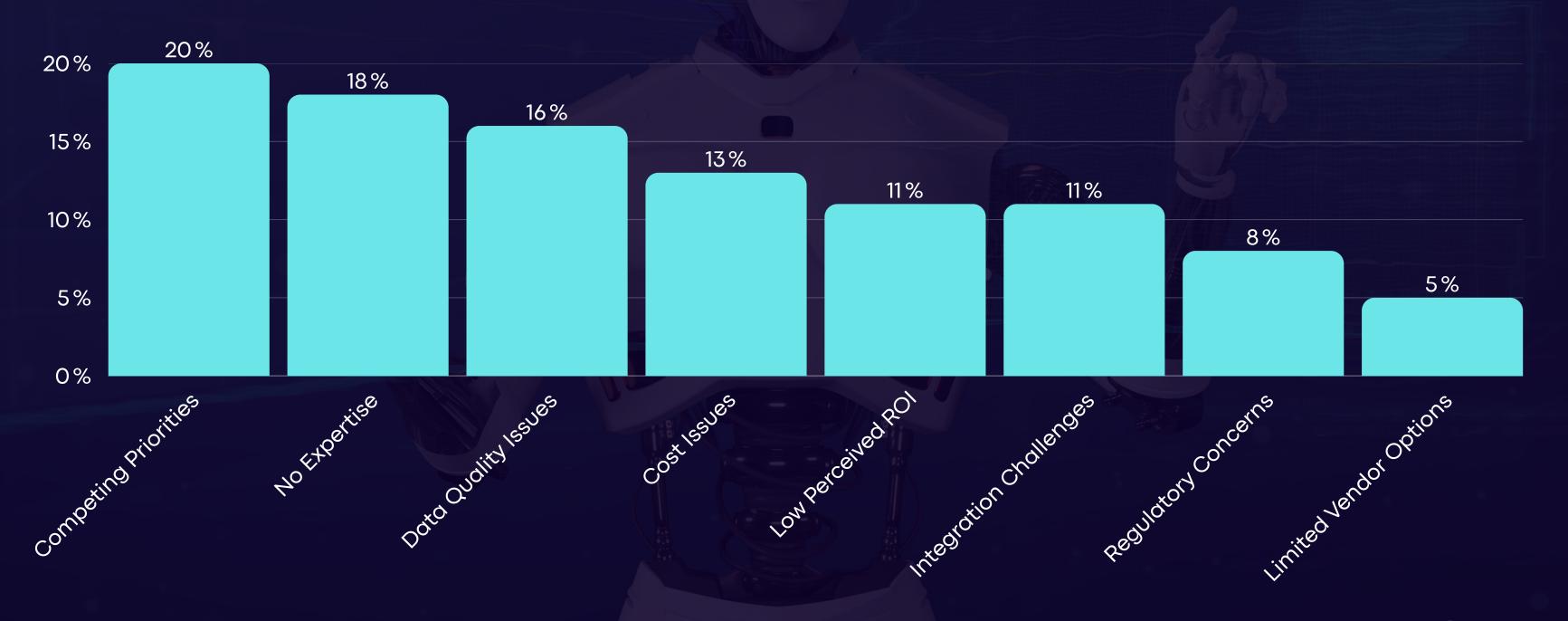
Reduction in Costs by
Hedge Funds
(Bain and Company,
2024)



Funds perceive that the greatest risks are in security and reliability



Adoption is also mainly hampered by capacity, expertise and data

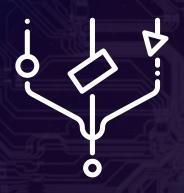


Part 2: Comparative Case Study Analysis

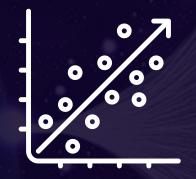
Why comparative case study analysis?



Current research focuses on industry wide or specific firm



We want to establish typologies of how firms use Al



This will facilitate further quantitative research

From our study of 30 hedge funds, we identified 3 types of Al adopters

Characteristic	Type #1: Minimal Adopters	Type #2: Hybrid Adopters	Type #3: Pervasive Adopters
Examples	"Pando"	Bridgewater Associates	Minotaur Capital
Strategy	Fundamental-Based Strategies	Mixed Strategies	Quant-Based Strategies
Composition	Analysts	Analysts + Tech Teams	Engineers, Quants, Data Scientists
Role of Al	Research and Analysis	+ Modelling	+ Decision-Making and Execution
Use Cases	Text Summaries, Signal Assistance, Volatility Alerts	Economic Modeling, Causal Inference, Sentiment Analysis	Portfolio Optimization, Pattern Recognition, Model Retraining
Decision-Making	~70% Human Decision, ~30% Al-Assisted	Human-Guided but Systemised with Al	Fully Decided by AI with Occasional Human Intervention

Type #1: "Pando"



Based in China, Launched in 2020



\$20m Assets Under Management



Managed by a Team of Four



Equity Long-Short Strategy based on Fundamental Research



Focuses on HK and US Equities, Semiconductors, Cybersecurity, Tencent + US MAG 7

Type #1: "Pando"



Applications

Uses Al primarily for content summarisation, report generation and signal detection



Philosophy

Believes that true alpha still comes from humans, Al can enhance speed & clarity, but not replace discretion



Performance

Fund achieves about 20% annualised returns

Type #2: Bridgewater Associates



Based in Connecticut Launched in 1975





\$172b Assets Under Management



Three Co-Founders, 1,166 Employees



Global Macro Strategy Seeking
Uncorrelated Active Returns + Risk
Parity Allocation

Seeks to Diversify Risks as Much as Possible to Achieve Returns Across Market States

Type #2: Bridgewater Associates



Applications

Uses AI for economic modelling and simulation in addition to research (AIA Lab)



Philosophy

Al can make good decisions, but humans should remain the final decision-makers



Performance

Fund achieves about 11% annualised returns

Type #3: Minotaur Capital



Based in Australia Launched in 2023



\$31m Assets Under Management



Two Founders, <10 Analysts



Global Equity Long-Short
Strategy



Seeks to Beat Market Returns through Al

Type #3: Minotaur Capital



Applications

Uses AI for portfolio optimization, pattern recognition, and real-time model retraining



Philosophy

Al should be core and central to the decision-making process, with humans in a supervisory role



Performance

Fund achieves about 25% annualised returns

Key Observations on Typologies

- Extent of adoption of AI depends on strategy and philosophy and exists on a spectrum
- No hedge fund thus far has fully relied on AI; humans continue to play supervisory role
- Funds which adopt Al more seem to be performing better, but hard to establish conclusive results
- Further research could go into quantifying performance across typologies

Conclusions

#1

Almost every hedge fund is trying to adopt Al as best as possible #2

Al for now seems more like a useful tool than a double-edged sword

#3

Too premature to conclude the material impact of Al for now

