

Automating Investing

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Hard wired for the short term

Hard wired to herd

Self control a limited resource

Hot cold empathy gaps

Anchoring

Endowment effect

Personal experience

Overoptimism

Overconfidence

Illusion of knowledge

Illusion of control

Groupthink

Conservatism



« Hundreds of studies have shown that wherever we have sufficient information to build a model, it will perform better than most people. »

Daniel Kahneman

« There is no controversy in social science which shows such a large body of qualitatively diverse studies coming out so uniformly in the same direction as this one... predicting everything from the outcomes of football games to the diagnosis of liver disease, and when you can hardly come up with a half a dozen studies showing even a weak tendency in favour of the clinician, it is time to draw a practical conclusion. »

Paul Meehl

« To my mind the lessons are clear. Financial analysis should really be a logical process. »

James Montier

Human brain - the **darkest** deepest box

Finding nonlinear patterns in large heterogeneous datasets

...**not** a **natural** human skill



“I don’t believe in quant investing. Markets are driven by psychology and quants don’t understand this.”

Former global head of equities at top bank

Former global head of markets at top bank

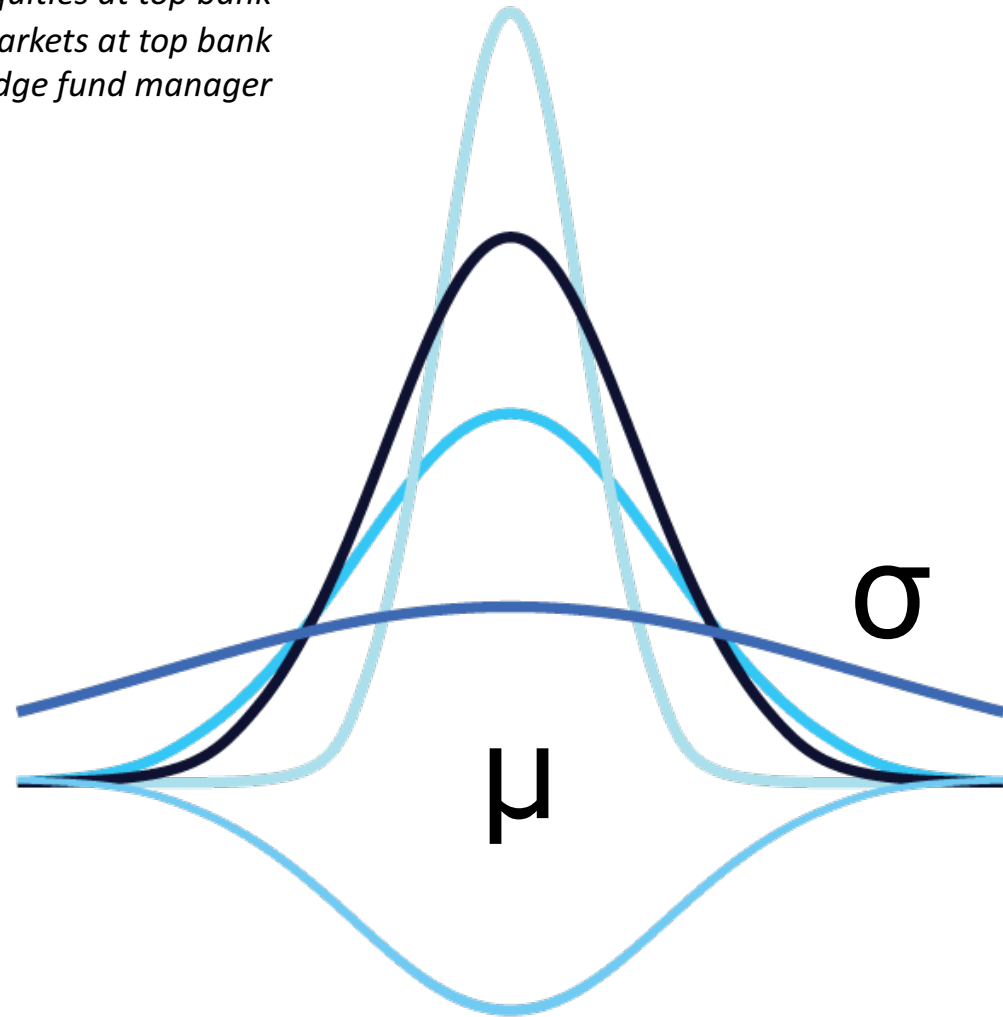
Fixed income hedge fund manager

Airplanes not synthetic birds

Diversification

Statistical frameworks

Futures made of overlapping distributions



Data

2x/year

New types

New sources

Modelling

Innovative
approaches

Non parametric

Machine learning

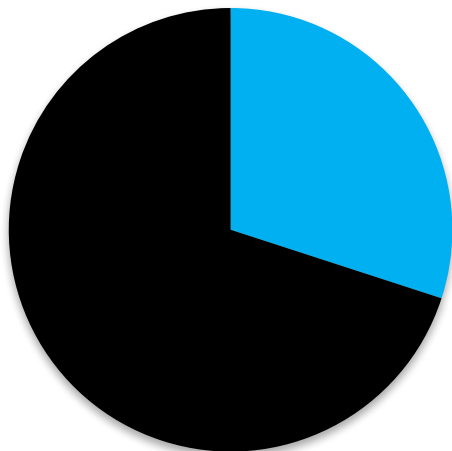
Technology

Software

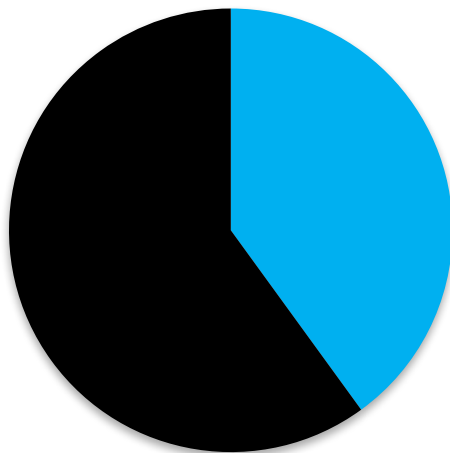
Computing

Storage

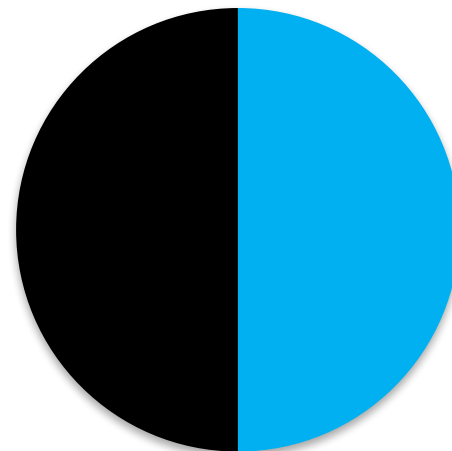
33%



40%



50%



- teams replacing key men/women
- constant improvement replacing large actions/reactions
- compliance and risk management built into the investment process
- new skillsets

caveats: Data

concentrated style of investing

« Investing should be **dull**. It shouldn't be exciting. Investing should be more like watching paint dry or watching grass grow. If you want excitement, take \$800 and go to Las Vegas. »

Paul Samuelson

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