QUANTAMENTAL INVESTING & MANAGED ACCOUNTS

RESONANT
ASSET MANAGEMENT

THREE KEY PILLARS

Governance

- Individualised Mandates
- Risk Monitoring
- Performance Attribution

Cost

- Fundamental Stock Picking Approaches are too Expensive
- Productivity Efficiency of Data & Software

Portfolio Management

- Return Enhancement
- Whole of Portfolio Risk
- Objectivity

RESONANT ASSET MANAGEMENT

GOVERNANCE

Resonant, clients and an independent chair collaborate to govern the investments. Our sub-committees are armed with the following "Quantamental" evidence-based toolkit.

Individualised Mandates

- APLs
  Asset Allocation Ranges
  Stock Exclusions
- Income Targets
  Risk Targets
  Third Party Provider Preferences

Risk Monitoring

- Quantify Deviations from Stated Objectives
- Scenario Analysis

Performance Review

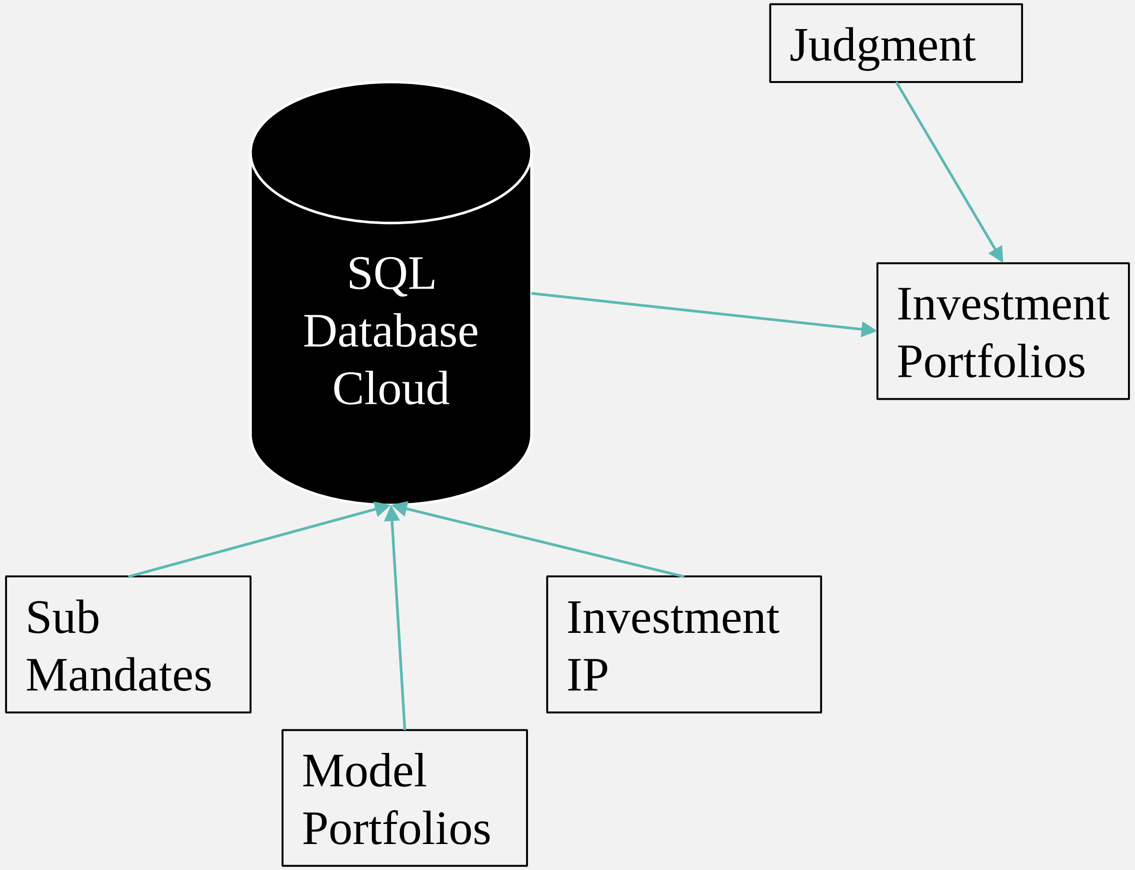
- Rolling Performance Review of sources of risk and return vs stated objectives
- Review of past decisions, product selection, asset allocation and position sizing

COST

Downward Pressure Inevitable in a ‘Best Interests’ Focused World

Where Are the Potential Savings?

“Quantamental” enables us to automate low value investment management tasks at scale, without sacrificing judgment.



Examples of low value tasks that a machine can do better

- Data Collection (e.g. manually collecting and calculating P/Es)
- Mandate Monitoring
- Customised Portfolios
- Standardised Reporting
- Upload/Download of Data
- Upload/Download of Positions
- Elements of Portfolio Construction

COST

Even five years ago, the savings would not be as dramatic as they are now.

The cloud software revolution is here to stay with associated massive productivity improvements.

The ubiquity and availability of reliable data means many more tasks can be automated – careful to only automate low value tasks

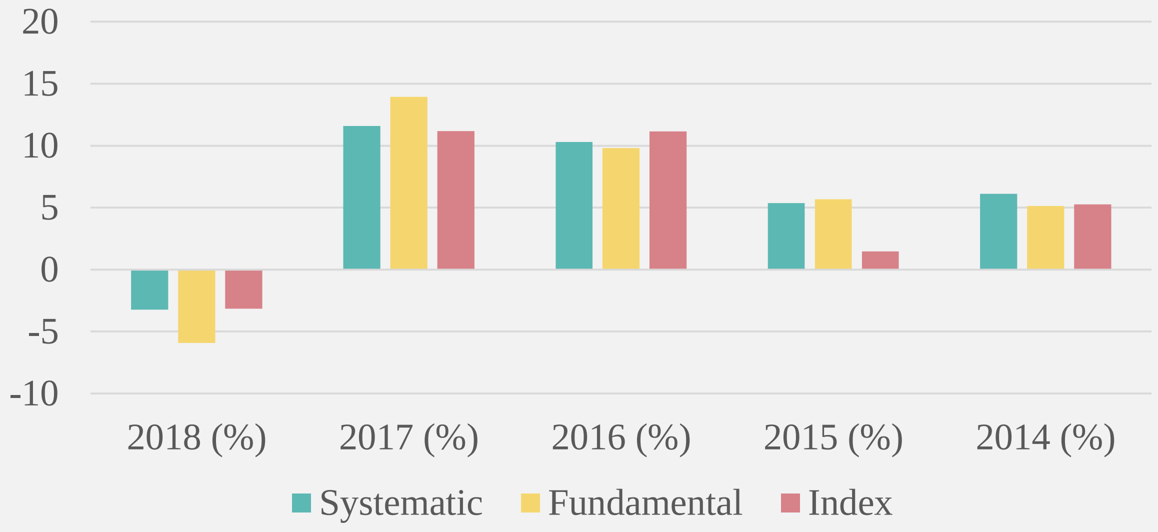
Cannot sacrifice judgment however – “Quantamental” is about preserving the power of judgment but harnessing the productivity benefits of data and software

- **That is the key to delivering active management at close to passive cost!**

PORTFOLIO MANAGEMENT

2018 was a terrible year for fundamental active funds.

- **Risk management practices found wanting.**
  - **Over-concentration**
  - **Inappropriate sizing of positions**
- **Ignored factors.**
  - **Portfolios often embedded with inappropriate or outsized factor bets**
  - **Not taking into account big macro-picture**



	Systematic	Fundamental
YTD (%)	13.9	12.9
2018 (%)	-3.2	-5.9
2017 (%)	11.6	13.9
2016 (%)	10.3	9.8
2015 (%)	5.4	5.7
2014 (%)	6.1	5.1

RESONANT ASSET MANAGEMENT

PORTFOLIO MANAGEMENT

"Quantamental" is a solution for many of the issues

Fundamental Portfolio Management

- Behavioural bias
- Lack of awareness
- Organisational
- Risk Management

"Quantamental" Portfolio Management

- Investments constantly re-evaluated
- Factors and Macro part of the process
- Less decision makers enables decisiveness
- Quantitative risk management

PORTFOLIO MANAGEMENT

Additional Advantages in Multi-Asset Space

- Whole of Portfolio Risk & Return
- Mix Long and Short Term to Match Client Portfolio Turnover Requirements
- Look Through ETFs, direct stocks, enables effective estimation of correlations, which are key in MAC
- Better Adapt to Changing Macro Conditions
- Target Specific Objectives