

Essentia White Paper Series

Can Traditional Active Fund Management Be Saved?

by Eric Rovick



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Summary

Active managers need to start incorporating the lessons of behavioural science if they have a chance of reversing the flow of assets into passive investment vehicles. Eric Rovick highlights some of the areas of cognitive risk evident in active investment management and provides a managerial and operational framework for addressing them.



Eric Rovick has been an equity markets professional for over 20 years, initially as an analyst and then as a manager of traders, analysts and salespeople. He is a seasoned observer of investment decision-making having worked across both the buy-side and sell-side in organisations that range from large banks to small investment boutiques.

Eric is an investor in Essentia Analytics.

Contact: eric.rovick@gmail.com

LinkedIn: uk.linkedin.com/in/ericrovick



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Can Traditional Active Fund Management Be Saved?

Traditional active fund management is increasingly vulnerable to the economics of passive investment vehicles. To meet this challenge, active managers must improve their investment performance by incorporating the lessons of behavioural finance and optimising the efficiency of their investment decision-making processes.

Any soul-searching by active managers must be extended to include a review of the investment process itself.

Introduction

In their 2016 annual review of the global asset management industry¹, Boston Consulting Group (BCG) highlighted active fund management's continuing loss of market share to passively managed vehicles. 2015 saw an extension of this trend with passive now expanding beyond core asset classes into specialty asset classes. Fuelling this trend is disappointment with performance (66% of large cap managers underperformed the S&P 500 in 2015. Over a five year period, that number rises to 84%)². Meanwhile, criticism of fees is growing and both investors and regulators are demanding increased transparency, in part to flush out the large number of perceived closet-indexers.

Past a certain point, the growth in passive investments does create opportunities for active managers, allowing them to trade against index funds as the latter move the markets with their fund flows and index composition changes.

But can traditional active managers afford to wait for that day to come? Not without making concerted efforts to raise their game. After all, the popularity of passive funds is driven by the fact that most active managers have failed to generate sufficient value-added to justify their higher fees.

BCG has previously observed³ that, in formulating a survival strategy, traditional active managers must 'face fundamental decisions about how to participate and what capabilities to develop'. These decisions range from optimising product and channel strategy to seeking deeper operational efficiencies in areas such as IT.

The purpose of this paper is to argue that any serious soul-searching by active managers must be extended to include a review of the investment process itself.



The good news is that salvation is possible, for those traditional active managers who are willing and able to focus their efforts. The performance shortfall experienced by most managers isn't huge. I believe that if the active industry were to optimise their investment process and consistently make returns over time that were marginally (50 -100 bps) above their benchmarks, the tide of money flowing into passive funds would slow and actively managed funds could see a resurgence.

To realise this, the industry needs to improve its investment efficiency: to raise the stock selection batting average from, for example, 52% to 54%; to improve the risk-adjusted portfolio construction process; to improve the idea-to-execution process.

The starting point is a review of the culture and framework in which most active management houses make their investment decisions. One likely outcome for the industry is a fundamental shift toward investment processes that incorporate the lessons of behavioural finance and cognitive science. Recent advances in technology and data analysis only serve to facilitate such change.

Using behavioural finance to improve asset management performance

Asked for his three golden rules of investment success, Fidelity's Anthony Bolton started his list with "Know your own behavioural biases."⁴

"Investors need to understand themselves," Bolton said, in order to see how emotions affect their investing.

Professional investors are, of course, used to considering the 'psychology of the market' and the investment opportunities created by irrationality in the behaviour of others. But it is increasingly accepted that the wise investor will also look inward if he or she is to understand the emotional and cognitive pitfalls in his or her own decision-making.

Behavioural finance, an increasingly influential field, helps us to understand how we make financial decisions and the importance of process and environment in ensuring that we make the best ones.

Darwinian evolution has yet to provide a distinct 'investor' personality type and despite the fact that financial theory posits a rigorously rational evaluation of events and information, very few professional investors could legitimately claim the emotional makeup to process things in this way. In fact, truly unemotional thinking has been found to result in an inability to make decisions at all.⁵

The wise investor will look inward to understand the emotional and cognitive pitfalls in his or her own decision-making.



Instead, behavioural finance has revealed that financial decision-making is affected by an unconscious interplay of intuition, emotions and our physical state.

Even the most experienced fund managers and traders are affected by a range of cognitive factors or 'biases' that can detract from their skill in forming investment decisions. Some are rooted in millennia-old, unconscious instincts of greed and fear which, whilst once necessary for our survival, can now be triggered unhelpfully, especially in stressful situations.



But as well as an explanation, neuroscience presents an opportunity: the possibility of developing a self-awareness and professional culture in which cognitive bias is mitigated and better investment decisions are made.

Ultimately, what CIOs, end investors and even fund managers themselves want to know is how they are making money, so that they can do more of it. Traditional performance and risk measures look at stock selection vs asset allocation and style factors such as momentum vs value. While useful, these metrics do not go very deep into describing manager skill in a way that facilitates improvement. Yet for the fund manager and the CIO, information that facilitates improvement is of crucial importance.

Where decisions are not one-off bets, the way each decision is made is actually more important than the outcome that follows from it. Only with an investment process that takes account of this 'science of decision making,' can active management firms hope to deliver outperformance that is both persistent over time and not dependent upon a few key star managers.

With recent advances in technology and data analysis, investment professionals can now review the investment process as a feedback loop, learning to recognise and work around the cognitive or environmental factors that detract from their skill in decision-making.

A new generation of decision support software makes it possible to combine trade data with data on the fund manager's intention, the market environment, and personal (emotional and physical) factors. Performance coaching can be integrated into this process – providing either motivational support or expertise with which to review and objectively discuss trading activity over time.

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As I will argue in this paper, there are also a number of broader changes that can be made to the active investment process that will align it more closely to the findings of cognitive science.

As a result of behaviourally-aware initiatives and resources, active managers can:

- Recognise and avoid the cognitive biases to which they are prone so they can make more 'skill-driven' decisions and fewer cognitively-flawed decisions that leave them at the mercy of luck,
- Identify those scenarios or conditions in which good or bad decisions are likely to be made, so that the investor can set him or herself up for success and play to his or her strengths,
- Deliberately harness intuition⁶, and
- Channel emotions more effectively, either checking or exploiting them, as appropriate.

For many professional investors, such self-scrutiny may be frightening at first. Raising one's game normally is. However, an increasing number of investment institutions are embracing these concepts and embedding them into their investment cultures. I believe that in the not-too-distant-future, fund managers who are not prepared to strive for continuous improvement won't be fund managers anymore.

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Some of the world's top fund management firms - both hedge and long-only - are already embracing these practices:

GLG Partners has used technology including Essentia, combined with investment coaching, to improve portfolio manager self-awareness.

Fidelity International has an internal Portfolio Manager Academy that relies partly on behavioural principles to structure its coaching activity.

Union Investments, one of the top fund managers in Germany, has started using Essentia to hone the process for its flagship equity fund.

Schroders has recently hired British Cycling's head coach to help its fund managers achieve more consistent investment performance.



Which cognitive biases are most common in active fund management?

Identifying biases and how they materialise is a necessary first step in refining the active investment process and optimising the performance it generates.

- A common cognitive tendency displayed by investment professionals is **outcome bias** – judging a decision by its eventual outcome, instead of by the quality of the decision at the time it was made. An investment can do well, but not necessarily because the initial hypothesis was correct. Buying and selling a stock at the right time for the right reason is rarer than many professionals would let on.
- **Herding** is one of the most cited biases – so common it needs no explanation here. Of its impact on performance, Howard Marks of Oaktree Capital Management wrote in 2006: “Herd followers have a high probability of achieving average performance, but in exchange for safety from being much below average, they surrender their chance of being much above average.”
- Conviction, a heavily-weighted mental measure for investment professionals, is a double-edged sword. In my experience, conviction building can be particularly prone to two cognitive biases: **confirmation bias** (the tendency to search for, interpret and remember information in a way that confirms one’s preconceptions) and the **curse of knowledge** (when knowledge of a topic diminishes one’s ability to think about it from a less-informed, but more neutral, perspective). It’s perhaps not surprising, then, that empirical evidence from one blue chip traditional asset management firm showed that analysts’ ‘strong buy’ ideas - where an analyst believes that the market is missing something that is obvious to them - did not necessarily outperform their ‘buy’ ideas.
- Broker and company meetings present their own hidden dangers. Some investment professionals spend a large amount of time looking into the eyes of the stewards of their investments. But they must be careful to put each additional insight or piece of information in context with the other information they already have, in order to avoid **recency bias** (the tendency to weigh recent events more heavily than earlier events, or believing the last company you saw more than the ones before it). One must be a good judge of people in order to avoid the **framing effect** (drawing different conclusions from the same information, depending on how or by whom that information is presented). All of this is exaggerated by the fact that both company managements and the brokers accompanying them are there to sell their stories, and therefore omit bad news or unflattering details. Lastly, you must be careful when colleagues all come out of a meeting in a bullish mood, lest you succumb to the **bandwagon effect** (the tendency to do or believe things because many other people do).

Buying and selling a stock at the right time for the right reasons is rarer than many professionals would let on.



- Analysts and brokers can act as an emotional comfort blanket as much as a source of rational information and research. Speaking to a large number of brokers can be a symptom of **information bias** (the tendency to seek information even when it cannot affect action). Does the 10th broker really bring anything new to the table? There is also too much **anchoring** (the tendency to rely heavily on one piece of information, often the first one received, when making decisions) caused by brokers' target prices.
- In the act of financial forecasting, both **anchoring** and **optimism bias** (wishful thinking or 'falling in love' with a stock) are at work. This is manifested when one first looks at consensus estimates before making one's own forecasts, and when we start with the standard assumption that revenues and profits will grow consistently and steadily into the future for most companies. Why do professional analysts and investors often disregard reversion to the mean when making forecasts?
- When adding to or exiting positions, one must be wary of both **optimism bias** and **irrational escalation** (or 'throwing good money after bad'). But perhaps the most significant error made by investors when deciding whether or not to offload a position is the consideration of the position's past performance, as opposed to future expected performance. This behaviour is linked to the **gambler's fallacy** (the tendency to think that future probabilities are altered by past events) and **loss aversion** (in this example, leading to premature profit-taking on a position because it has performed well to date). Investment professionals know, on a rational level, that the purchase price of a security, which determines the calculation of position performance, is irrelevant to the decision of what to do about the position today. Yet most can't help thinking about their positions as winners or losers, along with the extent of the gains or losses.

A good decision should not simply be measured by whether it was followed by a positive outcome.

For more on the behavioural biases that affect professional investors, download [Behavioural Finance Applied: A Professional Investor's Primer](http://www.essentia-analytics.com) from www.essentia-analytics.com.

To understand these cognitive biases (and how to reduce their impact on our decisions) properly, we must examine the context and culture in which they exist. I believe the culture that is currently prevalent in active management contains process elements which exacerbate, if not actively encourage, the behavioural factors that diminish performance.

Central to my observations about the active decision-making process is the principle that the way in which a decision is made is actually more important than the outcome that follows from it. After all, people can be right for the wrong reasons. For our purposes, a good decision should not simply be measured by whether it was followed by a positive outcome; a good decision is one that made a proper and intelligent assessment of all potentially knowable outcomes.



How bias manifests itself in fund management firms

Cognitive biases thrive in institutional settings. Most buy-side professionals will recognise:

- **Blunt performance analytics**
Performance analytics generally use fund data to dissect ex-post fund performance and risk. I believe it should also encompass ex-ante exposition and ex-post analysis of the decision factors behind each investment. Only in this way can we begin to understand if performance is a result of luck or skill, and, to the extent that it is skill, whether that skill is sustainable over time.
- **Cult of the star fund manager**
Some very large long-only businesses have a tendency to mollycoddle their better fund managers, afraid to performance-manage them properly, lest the stars jump ship. The message to fund managers is something akin to “Go work your magic. We won’t seriously question your performance whilst it is good.” The focus on outcome leads to a lack of accountability for process.
- **The ‘jack of all trades’ PM**
Can every equity fund manager really be good at all aspects of managing a portfolio, e.g. sector bets, stock selection, and portfolio construction? Do fund management houses do enough to identify what their fund managers are really good at and then employ them to focus? There is an argument that the role of managing a fund should be disaggregated into two or more roles, with each person specialising where he or she is most skilled. A jack of all trades is master of none.
- **Poor investment process design**
Fund managers and analysts are not omniscient and the information edge is increasingly elusive. Why do fund managers speak to so many brokers? Why do fund managers meet so many companies? How do investment professionals build conviction? Our instincts lead us into the unconscious traps of cognitive bias. Investment processes can be re-engineered to minimise this risk.
- **Mandate drift**
Funds can end up being managed in a way that is detrimental to fund holders. Examples include shifting risk around in order to maximize performance bonuses, or taking risk off the table in order to ‘lock in’ fund returns. Investors in long-only equity funds deserve a consistent level of active money, a consistent exposure to other elements of risk, and style fidelity. Ultimately, incentives for investment professionals need to reward good processes as well as good outcomes.
- **Short-term performance goals**
There may be little that one can do to address the now-ingrained focus on the short-term and chasing of quarterly top-quartile performance. But it is worth noting its impact in magnifying the behavioural bias in fund managers, encouraging them to diverge from their processes and fuel the already prevalent issue of herding.



Focus areas for change

Looking forward, what practical changes can investment managers make to adopt a more skill-driven approach? Some of those I outline below involve a meaningful organisational effort; others require a gradual optimisation that can be achieved at the level of the individual, through the formation of new habits.

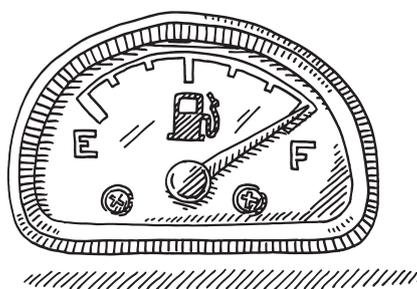
It will never be possible to achieve an investment process that is free from human bias, but now that the scientific evidence is in, we should be trying. As Nate Silver says in his book *The Signal and the Noise*: "I'm of the view that we can never achieve perfect objectivity, rationality or accuracy in our beliefs. Instead we can strive to be less subjective, less irrational, and less wrong."

What's certain is that, with its now seamless integration into asset management workflows, technology is a meaningful accelerator to change and one major reason why I am optimistic that changes are within reach of the active management community.

Technology is one of the major reasons that I am optimistic that meaningful changes are within reach of the active management community.

Proposed areas of investment process review and optimisation:

- **Data collection on investment decision-making.** Traditional portfolio analytics have helped to shed light on fund performance, improve risk management and provide the data required to reduce style bias or drift. But what CIOs need at this point is a system to capture the kind of data that will allow them to identify the strengths and weaknesses of each decision-maker in an investment team – the conditions under which each one makes good and bad decisions, based on the inputs considered at the time of the decision.
- **Alpha capture.** All buy-side houses should at least have a rudimentary alpha capture system to track idea generation, whether those ideas have come from within the firm or without. Each idea should be labelled with price, price target, time horizon, type of trade, name of idea proposer, etc. This data allows a PM to conduct an ex-post analysis of the initial source and subsequent performance of investment ideas, whether the investments were executed or not.
- **Risk assessment.** Too much time is spent on the analysis of potential returns, to the detriment of the analysis of potential risks or uncertainties. Where the investment process is a team-based approach, team members should allocate risk factor responsibilities amongst themselves, in addition to sector or country responsibilities. In this way each team member can discuss the others' investment ideas in light of their assigned risk perspectives.





Additionally, all companies should be analysed in terms of gross (un-risked) upside/downside potential and the associated risks, in order to avoid the cognitive biases inherent in the production of risk-adjusted valuations. I've already mentioned the dangers of anchoring caused by brokers' target prices – these are generally based on unsophisticated implicit risk models insofar as they use historical beta to calculate a DCF discount rate. Instead, all company valuations could be portrayed in a similar way to biotech or oil & gas explorers, with un-risked as well as risked numbers.

- **Broker and company meetings.** As we've seen, information from brokers, sell-side analysts or company managements can introduce the risk of significant cognitive bias within the investment process. The FCA's current push for further unbundling of trade commissions will likely ameliorate some of this by resulting in smaller commission pools across the industry and an incentive for the buy-side to prune broker lists.

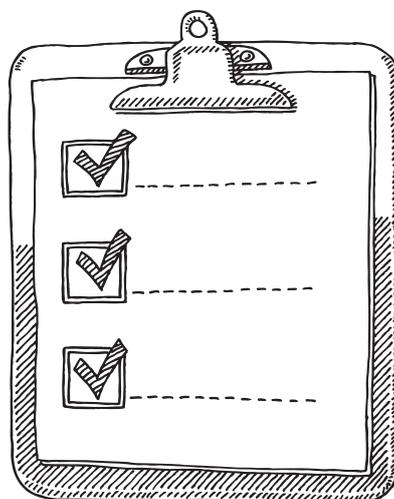
There is one heuristic that makes sense: get a second opinion.

But there is significant scope for company meetings to be run more effectively. This could include (a) approaching company meetings from a Porter analysis perspective, querying each company more on the competitive environment than the company itself, and (b) carefully constructing questionnaires using a checklist approach, particularly with regard to those questions designed to judge the quality of management.

- **Use of 'big data' to generate investment decisions.** Care should be taken to avoid the unconscious assumption that the more information we have, the better the decision will be. In reality, it's possible to be overwhelmed by the noise within data, with the result that we are sucked into short term trading driven by data analysis, instead of long term investing founded upon sound investment principles. The alpha in big data-inspired trading may actually have a short half-life, providing a poor return on the data investment.
- **Improve cognitive diversity.** Modern neuroscience and psychology have demonstrated the negative impact of many traditional heuristics on rational decision-making. However, there is one heuristic that makes sense: *get a second opinion*. The diagnostic error rate in the medical community is alarming when one considers society's expectations of modern science. On the art / science spectrum, fund management clearly sits much further towards art than does medicine. Yet whilst it is common to get a second opinion when making life-dependent decisions, why are fund managers' decisions not questioned more closely? Fund managers would benefit from having an advisor or coach constantly kicking the tyres of their funds, examining their decisions with a fresh, cognitively diverse mind. Cultural, gender, and professional diversity can all encourage cognitive diversity, but investment style diversity can be more important: get a coach without an investment style bias or one with a different style altogether.



- **Use of checklists.** The human brain isn't capable of remembering all of the factors that influenced a decision at the time that it was made. Intuition and conviction, though often thought of as an investor's friends, can become an investor's enemies at times. So it is worth creating a checklist of factors to always review at the time of making the decision. Of course, one should weight the factors differently in different situations, but forgetting to look at some of the outlier factors, especially, can result in poor consideration of the risks associated with an investment. Writing down one's hypotheses for each of the factors on the checklist will also help to avoid hindsight bias and improve learning.



- **Improve the decision-making mindset.** When competing, professional athletes know to look forward to the next point rather than to use their mental bandwidth to examine the previous one. It doesn't matter that you lost the previous point or that the other team scored the last goal; the only rational line of thought is to focus on the tactics for the next game/play/point. In a similar vein, professional investors would do well to be aware of their mindsets at the time of investment decision-making. One does need to learn from one's mistakes, in part through examining past performance, but one must also learn to compartmentalise that investigation of the past, so that cognitive bias is minimised in current investment decision-making activity.
- **Use a Process Engineer.** To achieve all these improvements, active fund managers should consider appointing a Process Engineer. Wearing a behavioural finance hat, he or she would review and explore opportunities to optimise investment processes, including:
 - *How the fund sets its investment objectives and parameters*
 - *Asset allocation decisions*
 - *Security selection and de-selection (at both strategic and day-to-day levels)*
 - *Portfolio construction*
 - *Ongoing decision analysis and feedback*

Any optimisation efforts should then be followed up with ongoing assessment and/or coaching, either by an internal professional or an external, specialist coach, to ensure that behaviour does actually change over time. Without a data-driven feedback loop, it is all too easy to revert to historical behaviour patterns, even if the individuals know better.



Conclusion: Can active fund management change? Does it want to?

The structure of institutional portfolio management teams and investment decision-making hasn't fundamentally changed much over time. In this paper, I have outlined the opportunity to optimise some of the industry's processes and improve fund performance by incorporating the lessons of cognitive science. I believe that this opportunity could be the salvation of traditional active management.

It's about making active management more active.

The changes I propose are actually about making active management more active – stripping away the legacy elements of culture and behaviour which inhibit active management skill and damage performance.

Is the industry ready for a statistically-driven revolution? Given that professional sport has already demonstrated the benefits of the data-driven feedback loop, it would be odd if investment management – arguably the most intellectually rich of investment banking activities – refused to do the same. After all, the technology to do so is commercially available.

Investment consultants and other allocators of capital to fund managers may take some convincing – the distribution system is, after all, often configured to perpetuate the culture of the star fund manager. I also recognise that a cognitive optimisation of the investment process will take time to implement and deliver results.

The main question, then, is one of intention: do CEOs and CIOs have the willingness to embrace these techniques as a way to improve investment performance? Do portfolio managers themselves? Or will they succumb to the ostrich effect (ignoring existing problems), leaving the door open to passive vehicles to capture the majority of fund flows?





References & Sources

1. Global Asset Management 2016: Doubling Down on Data - by Gary Shub, Brent Beardsley, H el ene Donnadieu, Beno t Mac e, Zubin Mogul, Achim Schwetlick, Benjamin Sheridan, Kenneth Wee, Qin Xu, and Yasuhiro Yamai - July 11th, 2016 - <https://www.bcgperspectives.com/content/articles/financial-institutions-global-asset-management-2016-doubling-down-on-data/>
2. <https://us.spindices.com/documents/spiva/spiva-us-yearend-2015.pdf>
3. Global Asset Management 2013: *Capitalizing on the Recovery* - by Gary Shub, Brent Beardsley, H el ene Donnadieu, Kai Kramer, Monish Kumar, Andy Maguire, Philippe Morel, and Tjun Tang - Boston Consulting Group - July 9th, 2013 - https://www.bcgperspectives.com/content/articles/financial_institutions_global_asset_management_2013_capitalizing_recovery/
4. Bolton: *My three golden rules for investment success* Investment Week - by Nick Paler - Investment Week - November 21st 2013 - <http://www.investmentweek.co.uk/investment-week/news/2308459/bolton-my-three-golden-rules-for-investment-success>
5. Damasio, A., 1994, *Descartes' Error: Emotion, Reason and the Human Brain*. New York: Avon Books.
6. Intuition, as defined by Herbert Simon and Daniel Kahneman, is *pattern recognition*. Professionals become experts through experience and rely on their intuition to identify patterns when making decisions. But we need to be honest with ourselves – have we really accumulated sufficient experience for our intuition to give us the expertise that serves as a foundation for our intuition?



About Essentia

Essentia Analytics is a cloud-based software solution that uses behavioural data analytics to help professional investors to make more skilled investment decisions.

Essentia's platform enables both hedge and traditional active fund managers to capture richer data about their own behaviour and its context, to understand where their individual skills and weaknesses lie, identify patterns, and apply that enhanced self-awareness to achieve improved performance.

In other words, we provide a simple, accurate, continuous feedback loop – the same sort that professional athletes use to achieve excellence.

Investment excellence demands a feedback loop. Essentia supplies one.

Learn more about us, request a demo and subscribe to our white paper series at www.essentia-analytics.com.



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