




Thinking Ahead Institute

Willis Towers Watson 

The asset owner
of tomorrow

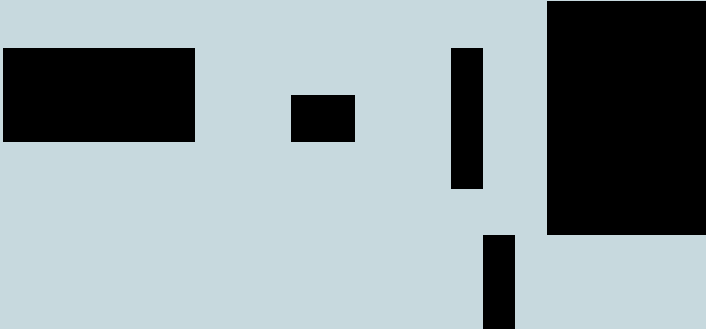
Business model changes for the
Great Acceleration





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Shifting gear

- Being an asset owner today can be mind-bogglingly complex. Life in the next 5-10 years will not get any easier. But there are practical steps asset owners can take to take control of many of their risks, exploit the opportunities out there and navigate the “Great Acceleration”.
- The impact of the “Great Acceleration”, a term popularised by the author Robert Colvile, is considerable and widely under-appreciated¹. He maintains that changes in technology, demography, globalisation, environment and social norms are speeding up. Those that hold to the belief that the *status quo* still exists for the economy and market may be in denial. To succeed in the Great Acceleration, asset owners will need to reposition their business models, operating models and investment models. To do this requires considerable shifts in mindset and practice.
- This paper builds on our recent peer group study of asset owners: *Smart leadership. Sound followership*. Where the peer group study was a snapshot of the present, this paper is intended to paint a picture of what the future could and should look like. Don’t take the tomorrow in ‘asset owner of tomorrow’ too literally – we are thinking 5-10 years out!
- Asset owners are too important to fail in their mission. Under a wide definition, their assets are worth around US\$120 trillion, a significant chunk of the

US\$420 trillion total global capital that exists today. They have little choice but to take their financial and social responsibilities seriously, to lead from the front and not to shrink away from the big issues.

- The key practical challenges for asset owners include developing stronger leadership, responding to regulation, clarifying their true mission, curtailing agency issues and improving the control of outcomes. There is also an overarching need for them to understand the world in which they operate through an ecosystem model that connects all the dots.
- This paper seeks to address these challenge through the “big four” shifts. These shifts imagine the rough direction of travel for asset owners over the coming 5-10 years.

They are:

- Repurposing the business model by institutionalising professionalism.
- Streamlining the operating model to make more effective decisions possible.
- Adapting the people model to leverage culture and diversity more.
- Evolving the investment model into increasingly smart and sustainable arrangements.

¹The term was first used in a working group of a 2005 Dahlem Conference on the history of the human–environment relationship (Hibbard et al., 2006)



Building on peer benchmarking

This current research work builds on our peer group study: “Smart Leadership, Sound Followership” which compared the practices of a group of 15 influential asset owners. The

five key findings from the peer study are below. We throw them forward into the dynamic context of the unfolding of the next 5-10 years.

1

These asset owners, by developing strong internal teams, have become very good at what they do. But while they have one foot in the future, they have a number of issues where they have not reached their potential.

2

Their decision-making has weaknesses. There are numerous and deeply-embedded biases that are present in all investment decision-making and these asset owners are not immune from these. They have opportunities to use diversity more effectively, and to develop better processes and use of technology to reduce the impact of such biases.

3

Their long-horizon investing and sustainability practices lack commitment. Opportunities are being missed in the overlapping areas of sustainability, ESG, stewardship and long-horizon investing, with mindset more of an issue than available skillsets.

4

Their boards struggle with acting strategically. The boards are strong in interpreting their funds’ mandates and in ensuring executive accountability, but weaker in strategic dialogue with their executive teams. Asset owners would be much better placed to meet the challenges of the future with more strategically-minded boards.

5

These asset owners are evolving their resourcing model between insourcing and outsourcing. This is still work in progress and they need to improve their grasp of how to optimise these components in the value chain of outside providers and internal professionals. For some, it is about continuing to strengthen internal capabilities, but for most of these organisations the issue is more about aligning the teams that they have with technology playing a larger part.





A glimpse of things to come

Asset owners cannot afford to stand still. In the age of the Great Acceleration only the fittest will keep pace with the speeding up of changes in technology, demography, globalisation, environment and societal norms. Corporations have suffered faster failure rates as a result – S&P 500 companies have a half-life of only a little over ten years now². Asset owners have so far been protected from existential risks, but they will be more exposed going forward. As not-for-profit organisations, many asset owners have enjoyed secure sponsorship which has so far guaranteed their existence. That is, safety nets have prevented them from going out of business.

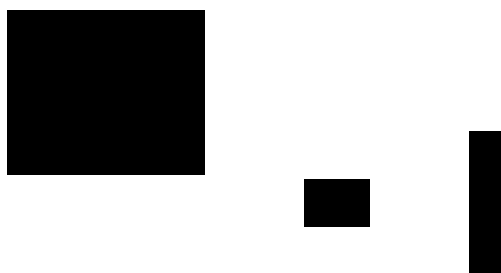
However, covenants are becoming weaker year by year, as economic realities bite and pension liabilities mature. Ever-lasting sponsorship is no longer a sure thing. Asset owners have long been rethinking their investment approach and strategies, but they have shown less appetite to address their business and operating models, from which the investment approach is derived. To some extent, this is understandable since these aspects are harder to tackle.

So, in this paper, we seek to shed light on these issues and help asset owners clarify their thoughts about them. We intend it to be as practical as it is theoretical.

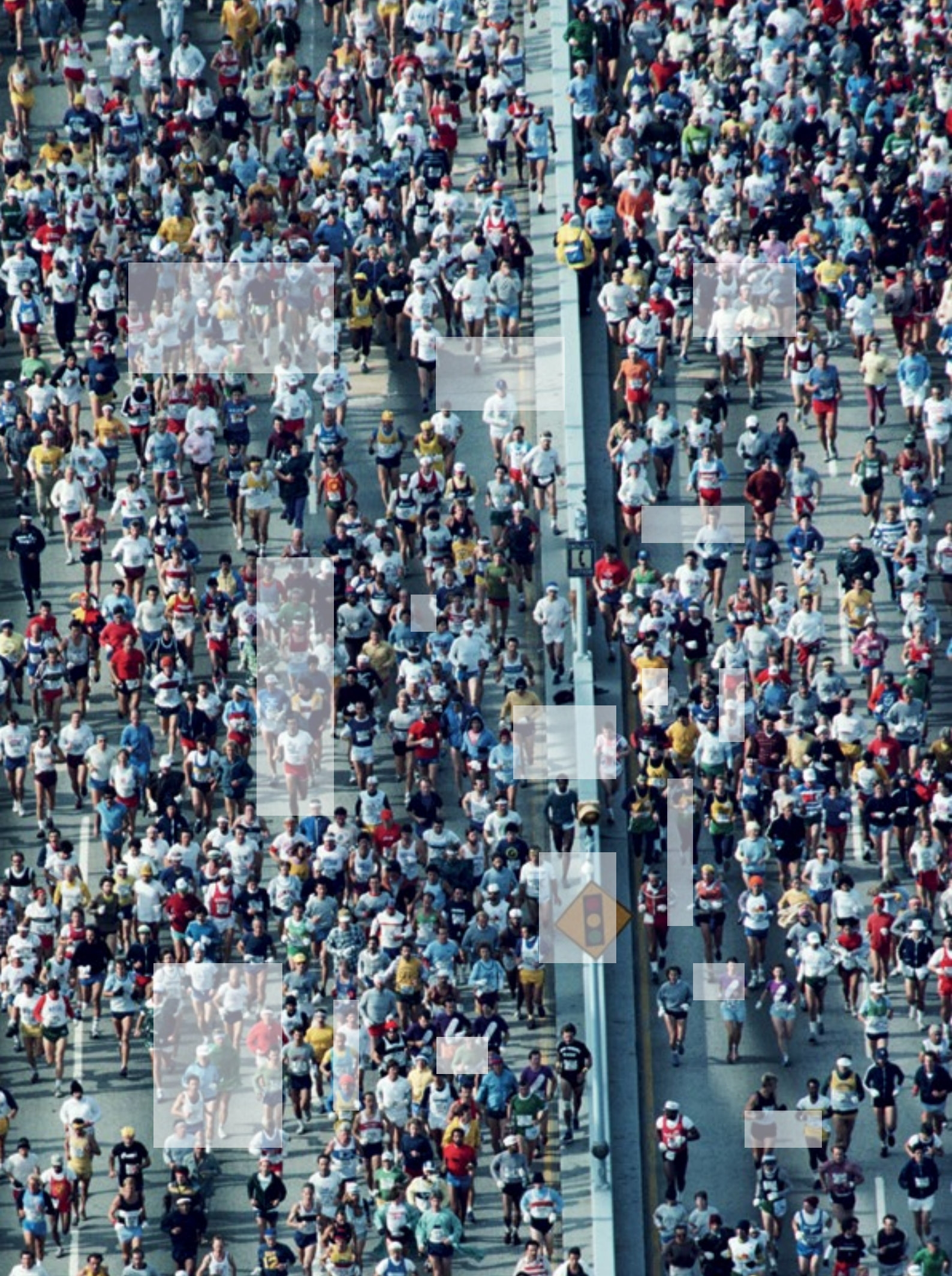
In building on our recent peer group study of asset owners, we have tried to turn the insights from this study into a roadmap about the future featuring a stronger, more focused model. Where the peer group study was a snapshot of the present, this paper is intended to paint a picture of what the future could and should look like. We examine the direction of asset owners' current pathways, but we also unashamedly project our skills, values and experience onto the asset owner's position. We advocate the use of an ecosystem framework because it shines a light on all the relevant connections and forces and makes the analysis more precise.

The paper provides detailed and explicit suggestions for how asset owners should tackle the challenges they face. We present changes in the asset owner model that we think are needed. We are clear that changes are more than just desirable - in many cases they are essential for good future outcomes.

To put it another way (for those of statistical bent), we present normative and descriptive outcomes. That is, what is the likely outcome, and what is a good outcome for asset owners. They are not necessarily the same.



²Source: *Harnessing our Digital Future: Machine | Platform | Crowd* – McAfee and Brynjolfsson 2017



What does it really mean to be an asset owner?

To define, or redefine a model, requires an evaluation of what underpins that model.

First, asset owners control a very serious pool of money.

Wealth and investments End 2016 estimates	US\$tn	Representing	US\$tn
Total asset owners defined narrowly	48	<ul style="list-style-type: none"> ▪ Pension Funds ▪ SWFs ▪ Endowments & Foundations 	40 7 1
Total asset owners defined more widely	70	<ul style="list-style-type: none"> ▪ Mutual funds (inc ETF) ▪ Insurance funds 	40 30
Total global institutional asset pool	109	<ul style="list-style-type: none"> ▪ Publicly listed equities ▪ Publicly listed bonds ▪ Private assets ▪ Other alternative assets 	42 51 13 3

Source: All data estimated at 31 December 2016. Author's work, Doeswijk, Lam and Swinkels 2014, ICI, Piketty 2014, SWFI, Willis Towers Watson, World Bank. Some double counting in assets in sources of wealth (eg pension funds holding mutual funds)

Asset owners represent US\$48 trillion of total worldwide wealth under their narrow definition as pension funds, sovereign funds and endowments. Under a wider definition, which also includes mutual funds and insurance funds, the figure rises to around US\$120 trillion.

This is a very sizeable chunk of the US\$420 trillion total capital that exists in the world and attests to the central role of asset owners in economies and markets. We argue they have little choice but to take their financial and social responsibilities seriously, to lead from the front and not to shrink away from the big issues. If this group cannot front-run sustainability efforts, for instance, then who can?





In our view, an asset owner has five qualifying characteristics:

1. Works directly for a defined group of beneficiaries/savers/investors as the manager of their assets in a fiduciary capacity (upholding loyalty and prudence) under delegated responsibility

2. Works with a sponsoring entity, usually a government, part of government, a company or a not-for-profit

3. Works within explicit law and possesses an implicit societal license to operate because of its societal trust and legitimacy

4. Delivers mission-specific outcomes to beneficiaries and stakeholders in the form of various entitlements or benefits into the future

5. Employs a business model that combines a governance budget (essentially resources and processes) and a risk budget (reflecting the mix of financial assets that delivers on the mission).

Pension funds are the single biggest group of asset owners meeting all the qualifying criteria, above. Sovereign funds, endowments and foundations also fully qualify. So this paper naturally relates predominantly to these four types of asset owner. Other institutions, such as insurance companies and mutual funds partly qualify. Asset managers do not qualify in the majority of their mandates as they are the agents of the asset owners (although in their fiduciary management roles they should qualify).



No shortage of challenges

Unpacking the definition of an asset owner allows us to better distinguish which challenges are most relevant to them, to what degree and how they might tackle them.

The impact of the “Great Acceleration”, in our view, is huge and is under-appreciated. The Great Acceleration, coined by Robert Colvile in his acclaimed book³, is no fad. Those that hold to the belief that nothing is fundamentally changing in the economy and in markets, have probably been overtaken by developments. We have largely grown up with linear models, and these don’t include huge behavioural shifts. We accept there are trends, but deal with them by projecting the past into the future.

So what exactly are the challenges facing asset owners? Let’s try to distinguish the most material ones:

- **Need for stronger leadership.** A key thesis in this look ahead is that the relative influence of asset owners compared with asset managers will rise, in part through strengthening leadership. Asset owners have two natural advantages in advancing a more principled industry: a profit-for-members business model and a legitimate claim to be close to being a “principal” in terms of alignment with underlying savers and investors. These attributes enable certain positive impacts from leadership such as the exercise of longer-term capital allocation and of ownership rights and responsibilities. Such opportunities require the force of leadership to increase. We believe it will.

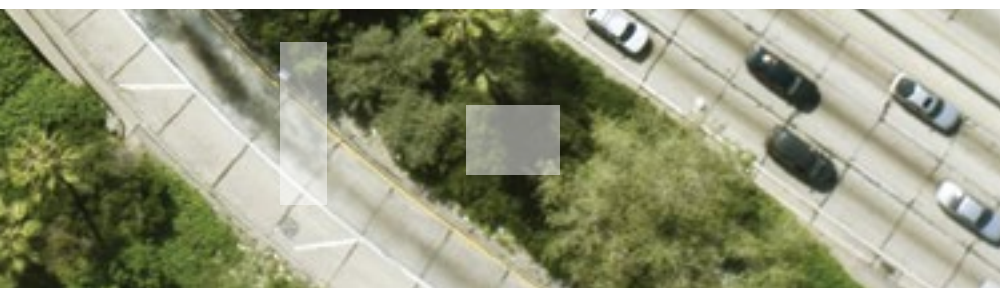


- **Response to regulation.** Asset owners will be on the receiving end of further investor protection and financial stability enhancing regulations, particularly in the US and Europe. Considerable attention is being given to mandating standards in solvency, costs and transparency, for example. What asset owners invest in will be over-regulated. In addition, many governments are seeking to streamline capital markets for long-term innovation and infrastructure requirements.
- **Mission issues.** Meeting the needs of multiple beneficiaries and stakeholders is challenging. It is particularly difficult with the addition of sustainability considerations, involving the balancing of inter-generational priorities and the integration of wider stakeholder responsibilities. Therefore, there is a major governance challenge in creating a unified perspective on purpose – what the asset owner exists for and what success looks like.
- **Working with a more comprehensive ecosystem model.** An ecosystem model (see Appendix for more description) is critical in showing the large and changing impacts from agents and the many wider inter-connections that asset owners will experience to deal with the mega-trends in the Great Acceleration. This model should recognise and account for:
 - multiple connections between a diverse range of participants with co-dependencies.
 - reflexivity where there is a particular type of two-way connection, where fundamentals affect and are affected by participants' beliefs and actions.
 - non-linearity where there is an allowance for jumps, or tipping points.
- **Increasing the control over outcomes.** It is an uncomfortable fact that asset owners have limited control in achieving specified outcomes in the shorter term because they face the highly uncertain conditions of the market. These conditions are, technically-speaking, “VUCA” – volatile, uncertain, complex and ambiguous. Fulfilment of mission-specific outcomes in the shorter term is likely to be influenced more by outside factors, such as markets and macro-economics, and less by inside factors such as skill and processes. The presence of agents and agency risks introduces additional control challenges for asset owners. It follows that it is critical to know where the loyalties and priorities of external firms lie and create the best possible relationships to help the alignment.

In short, it's pretty tough being an asset owner in 2017, and complexity is set to grow even greater.

Let's now introduce into this snapshot of how leading asset owners operate, a dynamic vision of evolution over the next 5-10 years under the Great Acceleration. We advance a discussion of what we expect to happen, and what we'd like to happen. We develop scenarios that are indicative of the future, but which are inevitably fallible given the uncertainties involved.

³ *The Great Acceleration: How the World is Getting Faster, Faster* – Bloomsbury, 2016





The big four shifts

We see asset owners' response to the Great Acceleration over the coming years as falling into four broad categories:

- Repurposing the business model: more professionalism inside the organisation, higher standing outside it.
- Streamlining the operating model: more decision accuracy, more outcome control.
- Adapting the people model: create more soft skills, but harden up competencies.
- Evolving the investment model: lead the thinking ahead of others.

Within these broad categories, we have identified some major shifts, which we will call the 'big four'. These shifts imagine the rough direction of travel for asset owners over the coming 5-10 years. The direction is not preordained and the big four includes theoretical and practical models that allow for different (better) pathways.

Business model

1

Institutionalised professionalism

Operating model

2

More effective decisions
More valuable relationships

People model

3

Culture as an edge
Diversity as a value

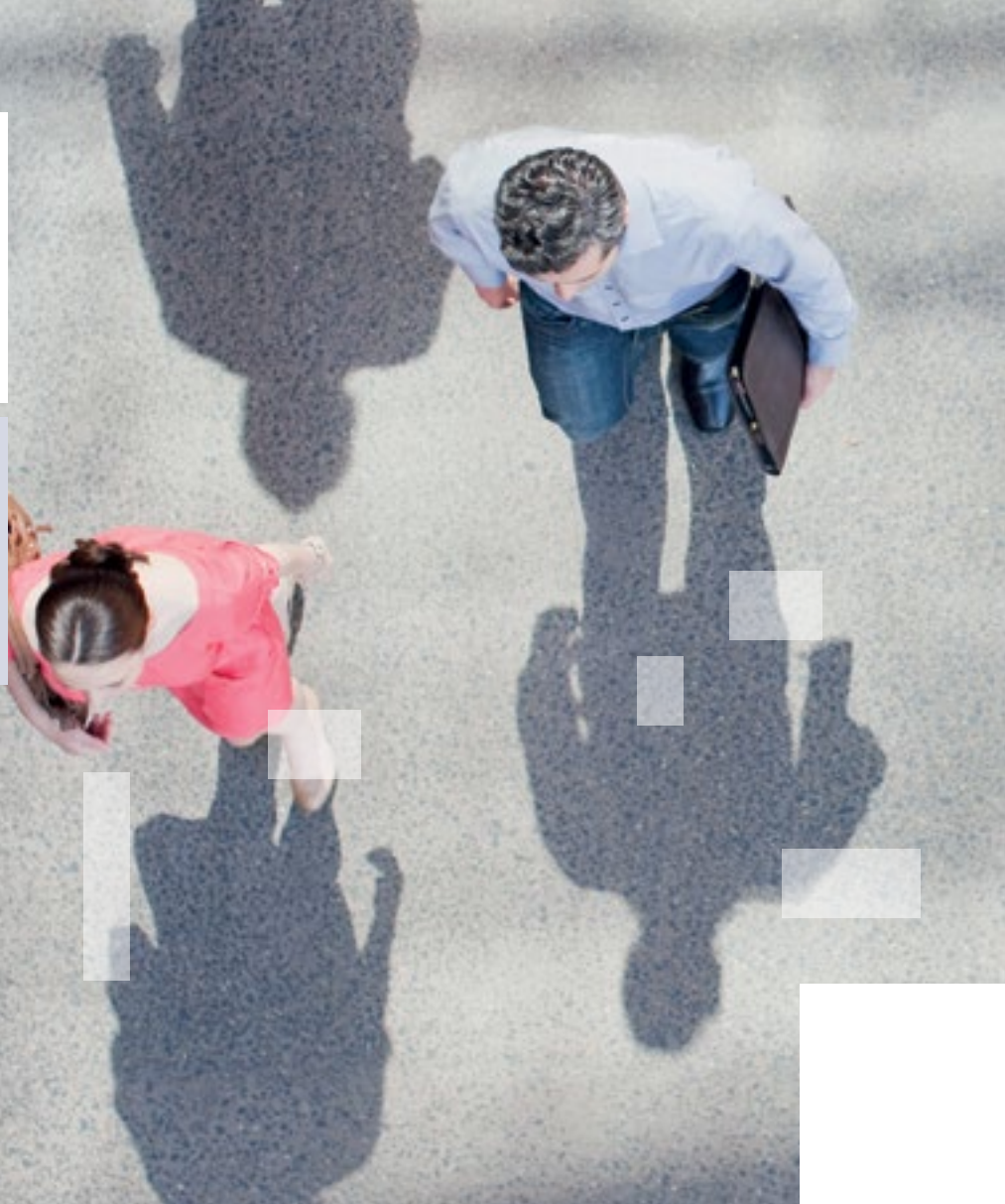
Investment model

4

Increasingly sophisticated and systemised
Increasingly sustainable practices

1

Business model



Institutionalised professionalism



Shift from

- Focus on performance results
- Focused over **short**- and long-term but weak on control
- No public responsibility, limited public voice
- Narrow/self-centred model
- Doing things right/efficiencies focus

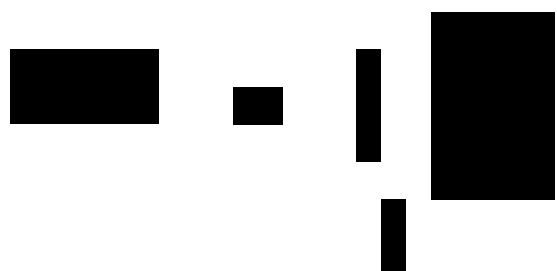


Shift to

- Focus on professional accomplishments
- Focused over **long**- and short-term and stronger on control
- Public responsibility and public voice
- Wider/balanced stakeholder model
- Doing the right things/professionalism focus



- For professionalism to be institutionalised, professional standards must be maintained in all parts of the organisation, starting with boards and progressing through executive leadership to all levels.
- Asset owners should aim for higher standing and professionalism. They have two natural advantages in advancing a stronger-principled and more professional industry: they work to a profit-for-members business model; and they are close to being a “principal” in status and alignment. These attributes enable a longer-term orientation to capital allocation and to ownership rights and responsibilities.
- Asset owners should be aligned to societal interests. Economic growth and societal well-being are positive by-products of healthy investment organisations. This thinking aligns with the mantra that a focus on the interests of stakeholders is likely to be a marker of sustainable organisations.
- Professionalism requires an asset owner’s associates to have professional credentials, to follow an accepted body of knowledge and fair practice and to have the discipline of continuous learning. Asset owners should manage their associates’ performance against these standards and assume public responsibility for them. These are marks of a “profession”.
- Stronger models of professionalism depend on leadership, the quality of which will rise in the coming years, given the attractions of assets owners as places to work.
- As these shifts take place we might expect to see some of the following scenarios play out in parts of the asset owner universe, some positive, some less so.





Some scenarios

Employer brand

Asset owners have an edge in attracting and retaining talent versus other asset management organisations, particularly in leadership roles.

Collaboration

Asset owners work together to create network benefits relating to ownership rights, responsibilities and opportunities.

Reputational blow-ups

With their large footprints, asset owners are increasingly vulnerable to damaging reputational issues.

Fiduciary management

Smaller asset owners are unable to create well-proportioned investment operations. The fiduciary management model grows, with its advantages of scope and scale.

Increased regulation

Increasingly burdensome regulations and rules will hamper some asset owners, but professionalised organisations can sail through if their internal resourcing is deep enough.

Self-destruct button

Some asset owner organisations may suffer significant failures in the face of increased external risks but usually in combination with mismanaged operational and governance factors. Asset owners must show heightened vigilance to risk.

Professionalism principles

Defining professionalism is hard – many of its characteristics lie on a spectrum and are situational. The checklist, below, is designed to encapsulate steps on the journey to strong professionalism.

Strong professionalism	
Skills	Precisely-specified investment skills and practice, adaptable to new circumstances, applied with prudence and diligence
Ethics	Consistently strong application of honesty, integrity, ethics and fair practice
Relationships	Fiduciary relationships (with beneficiaries) built around loyalty, control over agency pressures, embedded trust and empathy
Communications	Communications are open, realistic, authentic, comprehensive and accurate
Fees	Fees and rewards are fair, reflect value delivered and are subject to full disclosure
Wider responsibilities	Regard for wider societal responsibility and license to operate



2

Operating Model

More effective decisions



Shift from

- Social technology weak, physical technology limited; and disconnected
- Inconsistencies in ICT systems (information and communication technology)
- System 1 biases significant
- Decisions based on judgements with intuitive beliefs
- Data for information and measurement
- Low control exercised



Shift to

- Social technology strong, physical technology strong; and connected
- Coherence to ICT systems strategy; coordination in its implementation
- System 2 reasoning significant
- Decisions supported by increased technology with evidence base
- Data for insights and process inputs
- Increased control exercised



- Current decision-making in investing has limitations. All asset owners take their decisions through a combination of human input (we refer to this as ‘social technology’) and systems/support (we refer to this as ‘physical technology’). Achieving balance and efficiency in this combination is hard. Research has revealed biases that are present in all investment decision-making settings. These biases are more numerous and deeply-embedded than are readily recognised, and lead to behavioural anomalies including over-confidence, sub-conscious bias, framing and agency pressures.
- Humans have innate limitations with probabilities, systemic thinking and self-awareness, but these limitations can be reduced with help from **systems and automation**. Daniel Kahneman’s research⁴ on System 1 heuristic thinking (quick, but flawed) and System 2 reasoned thinking (slower, but more reliable) is a useful input into the process of making more effective decisions. Organisations which recognise the difference between these two approaches are more able to reduce the drags occurring in their decision-making.
- The likely trend is a movement from ad-hoc human-judgment processes to increased reliance on **rules-driven processes** that are less prone to human bias and more governance-friendly. This has the added benefits of creating transparency to explain how a strategy has “skill” (is expected to add value), and greater ease of implementation.
- **Artificial intelligence (AI) and machine learning** will enhance the trend to automation as investors get more efficient in handling and parsing big data sources and integrating technology more fully in the investment process. Successful asset owners will marshal technology alongside human talent. In short, the roles of humans are enhanced by technology.
- Lastly, the **resourcing models** of asset owner should adapt. The first change is already under way: the shift to using more internal resourcing and being less reliant on external resources. Despite this continuing trend in insourcing, most large asset owners will reach a **natural peak** in front-line investment professionals sometime soon as technology increases the efficiency and scope of each professional. But more support professionals may still be required. This particularly applies in IT and talent support.

⁴Thinking, Fast and Slow – Daniel Kahneman, Penguin, 2012

Some scenarios

Moderate speeds of adoption of technology

The slow speed of change in social technologies (think committees) is being overtaken by the fast speed of change of physical technologies (think automation). Asset owners will have to cope with the many technological disruptions in the finance sector with the collateral issue being major upheavals in the world of work.

Fintech disruption

There are a number of new applications of technology that support better decision-making, notably new platforms, new asset allocation processes, AI applications, machine learning and blockchain. The best asset owners transition to streamlined and coherent infrastructures for data and analytics.

More evidence-based approaches

Evidence is limited in the investment field: with complexity you get reflexivity, and with reflexivity you get conflation and with conflation you cannot isolate correlations or linkages. In short, the power of evidence-based methods, while being asked for increasingly, is intrinsically limited, human judgements are still critical.

Cognitive diversity

Difficult decisions require diversity in thinking, but most group decision settings are weak on diversity. Decision processes can be augmented by technology alongside human talent.

Evolved skills

The soft skills of investment professionals will be increasingly required for creativity, communications, situational fluency and ethical interpretation. Routine tasks carried out by humans will decline.

Control

While control over short-term performance outcomes may still remain weak, control over some of the elements of operational effectiveness will get much stronger. That can produce adequate long-term performance control.

Technology taxonomy

Transformational areas*	Asset owner examples
Machines with minds	
<ul style="list-style-type: none"> ▪ Artificial intelligence in recognition and cognition ▪ Machine learning/deep learning ▪ Gains at levels of task, process and business model ▪ Examples: medical diagnosis, digital assistants, 3D printing 	<ul style="list-style-type: none"> ▪ Machine learning in portfolio construction ▪ Robo model in DC lifecycle allocation ▪ Risk systems deepen and broaden; data and decision support systems integrate
Platforms and products	
<ul style="list-style-type: none"> ▪ One- and two-way interfaces ▪ Online to offline products ▪ Exploiting flows and transactions ▪ Economies of scale and scope ▪ Examples: Apps, Uber, Amazon 	<ul style="list-style-type: none"> ▪ DC master trusts and platforms ▪ Fiduciary manager model ▪ Asset management product platforms – streamlining of ancillary elements of propositions
Crowds and core businesses	
<ul style="list-style-type: none"> ▪ The power of many to produce economies of scale and scope ▪ Curating through core businesses ▪ Gains at levels of process and business model ▪ Examples: social media, crowdfunding, crowd design 	<ul style="list-style-type: none"> ▪ Member communication networks ▪ Collaboration platforms including alternative financing models ▪ Blockchain applications enabling deeper trust in transactions

* Harnessing our Digital Future: Machine | Platform | Crowd – McAfee and Brynjolfsson 2017





More valuable relationships



Shift from

- Internal resources still developing
- Large line-up of outside firms, potentially clunky and duplicative
- Arms-length, transactional relationship with outside firms
- Price taker on fees in outside mandates, costs not a focus
- Private markets model very clunky and expensive



Shift to

- Internal resources fully developed
- Selective line-up of outside firms, fewer, bigger, more specialists
- Deeper relationships with engaged partner outside firms: two-way intellectual property (IP) flow
- More influence on fees, cost attenuation focus
- Private markets model more balanced and value-driven



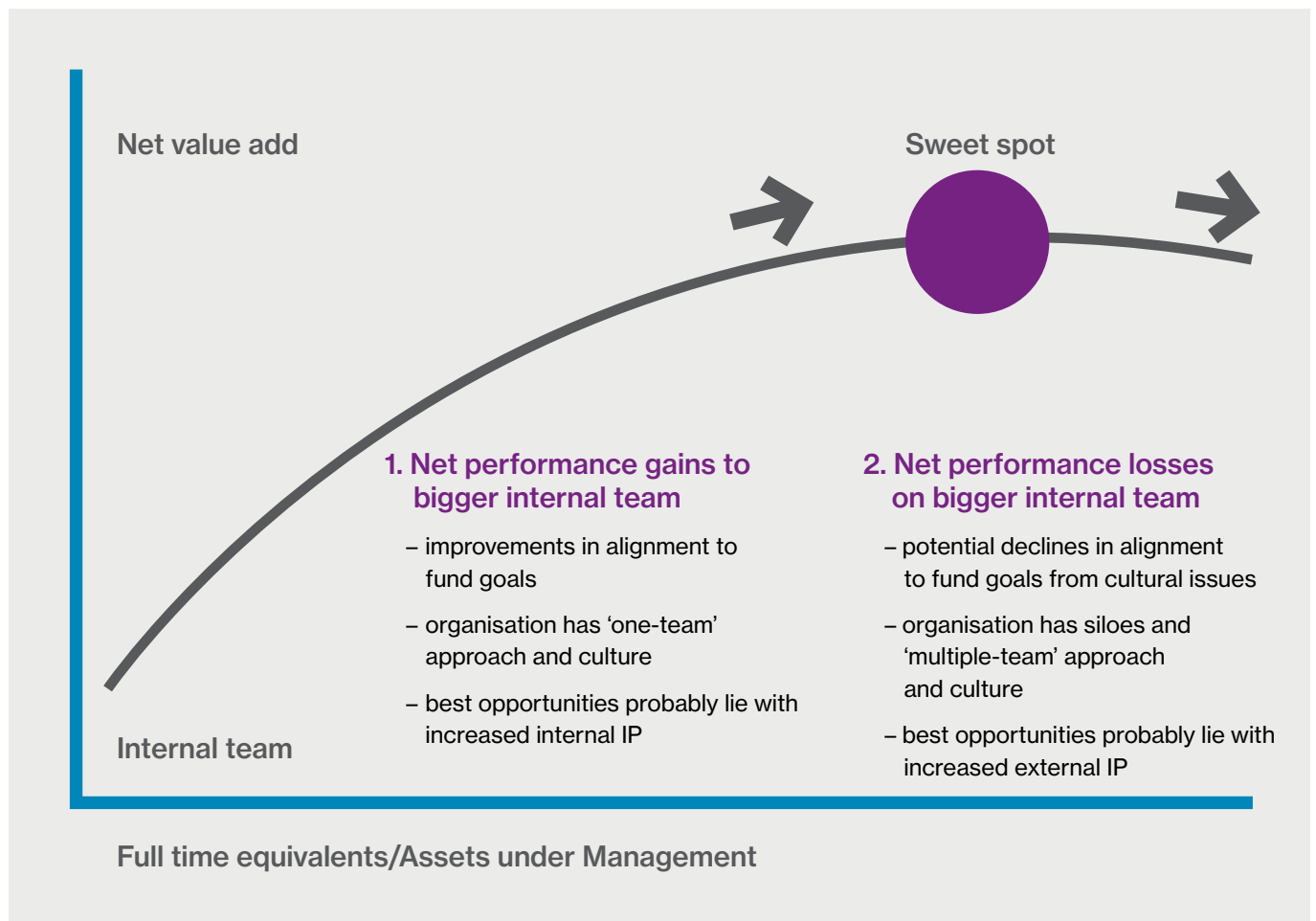
- Asset owners should consider giving credence to the **'One Portfolio Principle'** – by which all decisions seek improvements relative to other choices at the portfolio level, irrespective of Strategic Asset allocation (SAA) targets or tracking error constraints. External relationships must be framed by this discipline - the use of benchmarks and tracking error is a practical measure, but sub-optimal to overall control.
- Asset owners are starting to evolve their mix of **internal and external intellectual capital and IP** to create network thinking. They can further improve their grasp of how to optimise the value chain of outside providers combined with internal professionals. External strategic relationships should extend beyond asset managers and go deeper with chosen participants in the value chain. Opportunities for **increased synergies from collaboration** are linked to decision-making decentralisation, better appreciation of intellectual capital and lower costs for search and implementation of collaborations⁵.
- It is beneficial for asset owners to seek **deeper relationships** with a selective list of engaged partners, where ideas flow in both directions, and values, costs and incentives are in sync.
- The **engaged partner model** has three main features: it enables ideas to flow in both directions so there is a positive sum value-add to ideas; values coincide and trust is significant; costs are aligned to interests and economies of scale and scope are realisable.
- An increasing part in the large asset owner's future portfolio will be committed to **private markets**. Only a few select very large asset owners can solely rely on internal teams to invest in private markets. The dependency on outside firms is set to remain. But the relationship will become more demanding as asset owners become more confident and assertive in their side of the mandate.
- We see increased internalisation and automation at asset owners, decreasing the external IP dependency. **Internalising of asset owners' frontline investment capabilities** is aimed at producing better performance after cost, benefiting from more targeted strategy, less agency drag and better selection of outside mandates and managers. As a result, we see total headcount rising over the next 5-10 years in the asset owner space. We see a corresponding fall in personnel among asset managers as this part of the ecosystem faces headwinds with real revenue growth.

⁵See *Harnessing our Digital Future: Machine | Platform | Crowd*, by McAfee and Brynjolfsson 2017

Optimal size of internal team

Internalisation is not necessarily a panacea. As asset owners grow their internal teams, they can reach a size where control of the team declines. For reasons of cultural

and organisational design, and their impact on portfolio co-ordination, there is an optimal sweet spot size for internal teams.





Some scenarios

Increased efficiency in collaborations

The costs of collaborations decrease and their impacts increase amid more streamlined contracting and due diligence, including the use of exchanges.

Asset manager headwinds

The business challenge for asset managers faces big headwinds, notably through pricing pressure and substitution with potential for declining assets under management. Opportunities for asset owners to engage more successfully in fee negotiation will grow markedly.

Private markets

There remains growing appetite for private markets but this is vulnerable to “buyer’s regret” as the illiquidity premia on offer become more squeezed by larger demand than supply.

Alternative fee structures

Payment for asset management mandates are currently concentrated upon basis points and share-of-performance structures with limited application of cost-plus approaches. Asset owners increasingly voice frustration with this. Some innovation is likely.

Expense ratios

The total expense ratios (TERs) could decrease markedly. The leading asset owners could take a third to a half out of their previous TERs. Leading asset owner TERs might settle in the 20bp-40bp range.

Cost transparency

Increased focus on cost produces new forensic approaches which isolate embedded costs. Cost disclosure standards emerge.

3

People model

Culture as an edge



Shift from

- Culture tacit and difficult to describe and a by-product
- Weaker associate engagement and EVP (employee value proposition)
- Culture at tension with compensation incentives and long time-horizons
- Culture not seen as important to outside relationships
- Communication is guarded and not always honest



Shift to

- Culture more explicit and professional, and developed by design
- Stronger associate engagement and EVP
- Culture better managed by intrinsic incentives, less on compensation
- Culture seen as a critical element of outside relationships
- Communication is open, honest and authentic



- The unique cultural edge that some investment organisations have developed can be traced back to the work of leaders, past and present.
- Asset owners often cannot trace their roots as far back in time as asset managers and have not enjoyed such strong leadership, so their culture might be less evolved.
- Investment organisations operate in settings that are weak on outcome control with hard-to-assess and slow-to-emerge elements. Such settings call for **strong and effective** culture to create the conditions that stimulate realistic narrative, allay anxieties, mediate choices and produce positive motivations. Culture in institutional investment is most powerful in terms of 1) the **purpose** and drive of the organisation, particularly in its passion for serving and 2) the **people ethos** – how the team is treated and behaves.
- The management of culture must recognise a number of **difficult-to-manage** issues. First, culture is inevitably diminished by self-centred leaders, who lack authenticity. Secondly, good culture has a natural tendency to decline over time without conscious action to maintain it. Thirdly, extreme cultural attributes produce dangers of their own.
- Culture can be reinforced by incentives that point the preferred way but explicit incentives through compensation can produce perverse outcomes. Good organisations aim to embed intrinsic motivations – purpose, working conditions and development opportunities – and **centre compensation on qualitative assessments**.
- The **measurement** of culture can develop over time drawing from improvements in social science assessments and incorporating new data sources from various social media sources. The challenge will be in curating the many new sources of data and narratives that are becoming available in the big data era.
- Asset owners, first and foremost, should attend to their own culture. But their dependencies on outside firms will need to be considered as part of a cultural plan. The **selection of organisations whose culture and values are aligned** will become more important over time.



Some scenarios

More leadership influence on culture

The recognition of the considerable influence of culture on organisations, for better and worse, will stimulate more leaders to spend significant time and effort in attempting to manage their culture to achieve better outcomes.

More measurement

The EVP (employee value proposition) and CVP (client value proposition) are increasingly referenced concepts and can be given some perspective and insight via <Integrated Reporting>. EVP and CVP will emerge as measured components of an organisation and seen as indicative of the strength of culture.

More assessment

Tools become more widely used to assess culture including measures of EVP and CVP (see model for culture assessment, opposite⁶).

Connections to incentives

More deliberate attempts to link culture through behaviours to incentives including compensation.

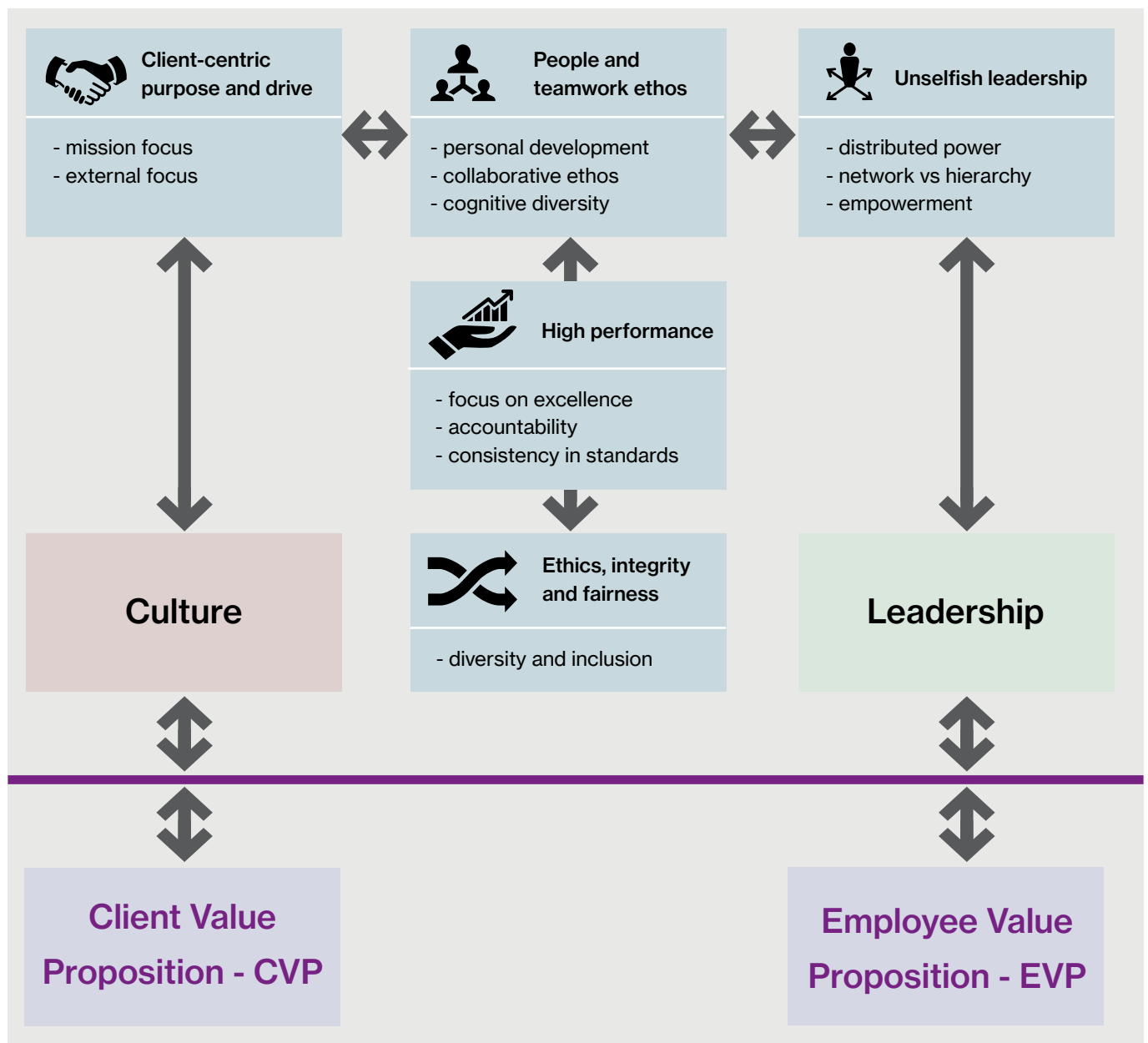
Regulatory scrutiny

Culture attracts increasing attention from regulators who seek to integrate their position into the protection environment for investors.

Asset manager culture

Asset owners make culture assessment of asset managers a central part of the due diligence process

Culture and leadership at investment organisations



⁶The impact of culture in institutional investment (2015) Towers Watson



Diversity as a value



Shift from

- Male, ethno-centric, economics educated professionals
- Biases in thinking via groupthink in decision-making
- Identity-level dominant groups; weak diversity in values and perspectives and ways of thinking
- Non-inclusive culture, opportunity is granted selectively to favoured groups
- Diversity where it is present is not leveraged through inclusiveness



Shift to

- Multi-disciplinary diverse spectrum of backgrounds
- Focus on *cognitive diversity* and better decisions
- Both identity-level and deeper-level diversity across values, perspectives, knowledge, experience, way of thinking
- Inclusive culture, an equal opportunity orientation is valued and rewarded
- Diversity is leveraged through inclusiveness in support of the organisations values of fairness, respect and excellence

- The case for greater diversity in investment organisations is strong both in the business case context and on the grounds of better culture. The team settings for the investment industry and the uncertain and ambiguous nature of decisions make it especially susceptible to forms of groupthink.
- Diverse groups of people bring more and different ways of approaching difficult problems and better ways of solving them. With the complex problems faced in investing, limited diversity - where everyone thinks alike - produces roadblocks. With greater diversity, roadblocks can be circumvented.
- Diversity is not completed without inclusion. The combination is critical and organisations that only focus on creating balance in workforce composition by numbers miss the real business case which is based on inclusiveness producing the benefits of increased opportunity and cognitive diversity.
- The investment industry has had difficulties with the pipeline of women suffering from hiring preferences for STEM (science, technology, engineering and maths) graduates where women do not have full representation in the aggregate population.
- Gender diversity in the investment industry varies by country with some of the Asian countries exhibiting the best balance, often because they have better balance in STEM graduates.
- Gender diversity can progress positively in the next 5-10 years as organisations achieve greater success through diversity in the pipeline of talent and **diminish the problems of inflexible work practices**, such as long-hours culture.
- Diversity is often viewed as surface characteristics or 'identity diversity' (such as gender, race, national culture, education, sexual orientation, age and others), which introduce values-laden issues and confirmation biases. It is **more impactful when it is cognitive diversity** – that is, innate to an individual's values, perspectives, knowledge, experiences and way of thinking.
- Cultural homogeneity can, however, improve group motivation (working as a "tribe"), so **diversity is not valuable in all contexts** and is best regarded as a "sweet-spot" issue, where there is a balance to be struck.

Some scenarios

Leadership tone

In many cases, leaders will set a strong tone for improving diversity, but this naturally will vary and diversity fatigue may present particular challenges.

Increased diversity through regulation

Political consciousness of diversity is creating a raft of regulations, particularly on disclosure, but more directive policies may follow.

Diversity through organisational process

The diversity and inclusion council approach adopted by many organisations may not prove to be that effective. The key dimension is leadership commitment and tone set at the top of organisations.

Diversity targets and quotas

The use of targets and quotas in diversity categories is likely to grow. It is important to agree targets and KPIs, which reflect values as much as organisational effectiveness.

Measuring cognitive diversity

Research shows promise in measuring cognitive diversity (e.g. brain monitors applied to group situations).

World of work

More flexible working practices and the use of virtual teams will help to improve poor gender diversity, but overall levels of gender diversity are unlikely to reach levels that could be considered as balanced.

4

Investment model

Increasingly sophisticated and systemised



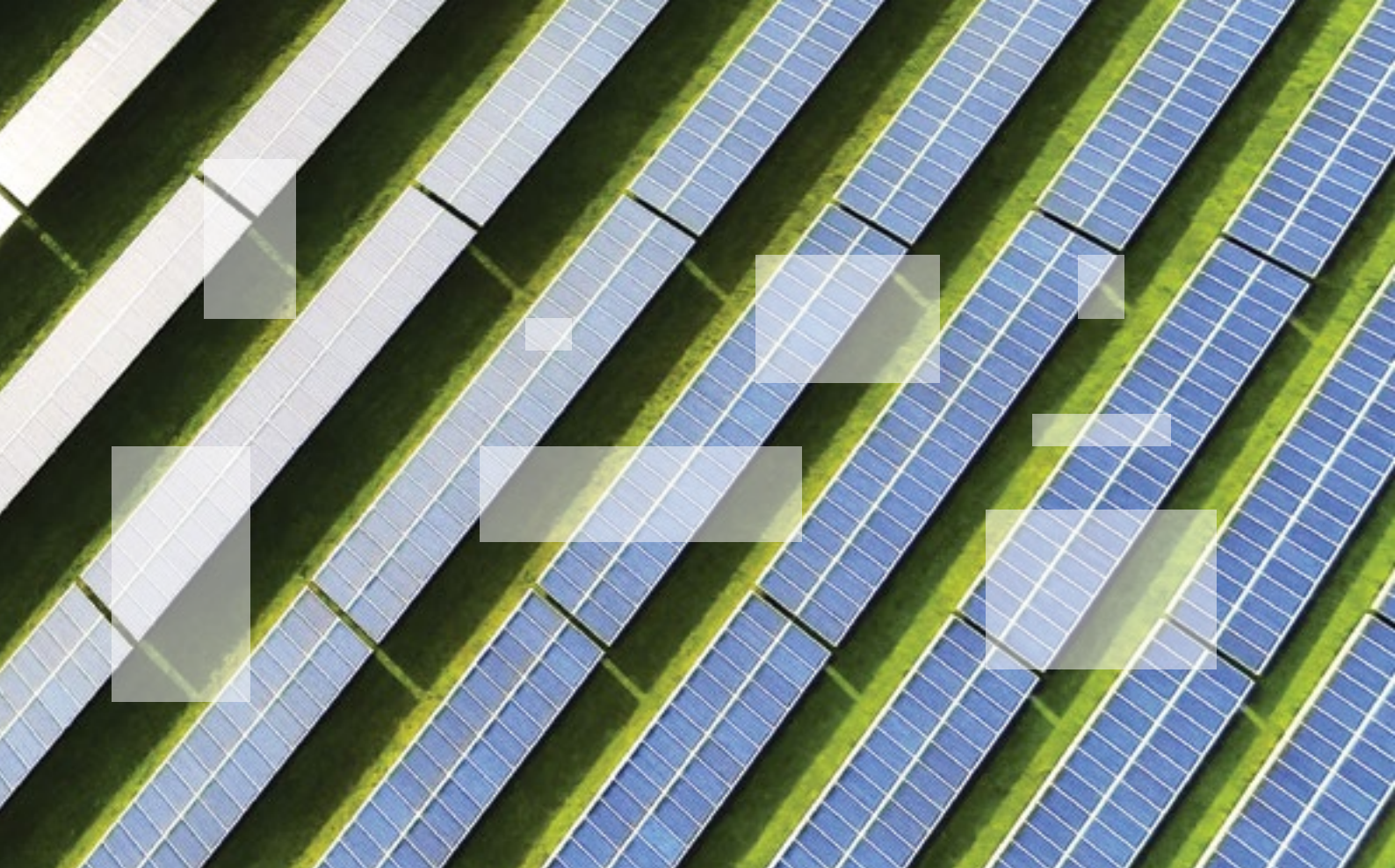
Shift from

- Asset-only thinking; limited integration of liabilities
- Weak use of mainstream investment theory
- Risk systems are quite rudimentary
- Alternatives moderate-sized
- Alpha broad, factors small
- Capital allocation
- Reactive allocations, weak meta-thinking
- Pro-cyclical allocations likely driven by recent short-term performance
- Optimisation processes that are assumptions-heavy
- Core asset classes



Shift to

- Asset and liability thinking; goals-based investing
- Stronger use of alternative investment theories, ecosystem in particular
- Risk systems are sophisticated
- Alternatives large-sized
- Alpha selective, factors larger
- Risk allocation
- Pro-active allocations, strong meta-thinking
- Counter-cyclical allocations that are value driven and apply long-term thinking
- Balanced scorecard processes that are judgement-heavy
- Harder to reach new asset classes



- In response to the multiple problems of applying modern portfolio theory, the use of these methods is fading.
- In its place, the dominant investment paradigm is increasingly a pragmatic mix of theory, logic and reasoning. This includes the development of investment beliefs, employing various risk-return drivers among asset classes, factors, themes and skill, and targeting specific outcomes.
- A System 2 model is needed, a deeply thought-through and reasoned process. The investment landscape mapped into the future is more complex than any model can describe – hence the need for beliefs. Investment is increasingly a collective effort, so how we work in groups to build beliefs is critical. The shift towards a collective belief system and an integrated portfolio takes time, empathy and strong process.
- The critical mix between public and private markets will continue to evolve. The natural supply of public markets from corporations accessing capital to grow their business has fallen away. It becomes natural for more expansion capital to be based on private markets in future. The asset owner of tomorrow is more geared up to get closer to target companies and can use their relationships productively. Private investing as a category will expand - this includes investment in peer-to-peer and crowdfunding models.
- The asset owner investment model will evolve over the next 5-10 years given these theory shifts. Likely outcomes include:
 - Increased allocations to factors and themes and increased use of rules-based approaches
 - Increased allocations to private markets
 - Global allocations will shift, notably into China and India
 - New instruments will emerge – but more as derivatives than from primary asset classes
 - Active management more focused on those markets that are ripe for alpha where efficiency is limited
 - Stewardship and active ownership will scale up.

Best practice investment model

<ul style="list-style-type: none"> Strong beliefs 	<ul style="list-style-type: none"> Strong investment philosophy and beliefs with evidence base commanding fund-wide support that aligns with operational goals and informs all investment decision-making
<ul style="list-style-type: none"> Risk budget 	<ul style="list-style-type: none"> Frame the investment process by reference to a risk budget aligned to goals and incorporating an accurate view of alpha and beta; risk well-understood and well-managed
<ul style="list-style-type: none"> Manager line-up process 	<ul style="list-style-type: none"> The effective use of external managers, governed by clear mandates, aligned to goals, selected with rigorous application of fit for purpose criteria within a cost-conscious framework; mandates dispassionately assessed for value add, costs and alpha share
<ul style="list-style-type: none"> Competitive positioning 	<ul style="list-style-type: none"> Frame the investment philosophy and process by reference to the institution's comparative advantages and disadvantages; strategic partners used effectively for their skill and ideas
<ul style="list-style-type: none"> One portfolio principle for capital allocation 	<ul style="list-style-type: none"> An integrated portfolio construction process in which the best investment ideas that improve portfolio quality are adopted in a competition for capital among risk premia and return drivers
<ul style="list-style-type: none"> Integrated measurement 	<ul style="list-style-type: none"> Integrated approach to measurement and reporting, having regard to liabilities and goals, with links to integrated funding and strategy, with narrative across inputs and outcomes
<ul style="list-style-type: none"> Long horizon excellence 	<ul style="list-style-type: none"> Long-horizon investing skill-sets and mind-set to capture horizon premia from asset classes, factors and themes
<ul style="list-style-type: none"> Liquidity framework 	<ul style="list-style-type: none"> Long-horizon and short-horizon investing to meet cash flow and liquidity needs while capturing liquidity premia at appropriate prices Incorporating a clear understanding of how alternative scenarios impact liquidity through the portfolio
<ul style="list-style-type: none"> Sustainability integration 	<ul style="list-style-type: none"> Financial and extra-financial factors fully implemented into portfolios, reconciling wider stakeholders and time horizon pressures
<ul style="list-style-type: none"> Operating excellence 	<ul style="list-style-type: none"> The ability to efficiently manage complex portfolios, create meaningful feedback loops, handle data and systems requirements, execute on deal negotiation, manage tax effectively
<ul style="list-style-type: none"> Governance excellence 	<ul style="list-style-type: none"> Competent and committed boards, adding value through strategic dialogue and disciplined oversight
<ul style="list-style-type: none"> People excellence 	<ul style="list-style-type: none"> High calibre people working in strong team settings, energised through effective culture



Some scenarios

Mainstream alternatives

High allocations to alternatives and private assets. This creates issues of supply and measurement, strategy integration, complexity and liquidity squeezes.

Passive-aggressive

Further growth of passive will stoke controversies around the systemic risk arising if the diminished force of active management affects price discovery. While new flows into cap-weighted will likely not have distorting features, new asset flows into factors will likely reduce returns from those return drivers.

Fiduciary management

Smaller asset owners are unable to create well-proportioned investment operations. The fiduciary management model grows, with its advantages of scope and scale.

Theory skirmishes

Investment arguments move on from CAPM and alpha-beta separation to competing frameworks such as behavioural finance, complex systems and alternative-to-capitalism models.

Public markets' role in capital allocation declines

Less capital is tapped to fund expansion, more capital is returned. The consequences are a repurposing towards stewardship and active engagement and an improved alignment of interests between asset owners and investee companies.

Private markets' role increases

Asset owners seek and achieve greater governance alignment and leverage from their relationships.



Increasingly sustainable practices



Shift from

- Small-scale Responsible Investment (RI) model
- Narrower focus, finance-only objectives
- Silent and disengaged owners
- Sustainable Development Goals (SDGs) are ignored by asset owners
- 'License to operate' is legal construct



Shift to

- Larger scale Responsible/Sustainable Investment (RI/SI) model
- Wider focus, including stakeholder responsibility
- Engaged or activist owners
- SDGs become an integrated part of asset owners' strategies and communications
- 'License to operate' is societal grant



- Sustainability and long-horizon investing are currently practiced by asset owners in a relatively shallow way. While most asset owners are in a position to **use competitive advantages to take longer-term views**, frequently mindsets and incentives get in the way. Opportunities are frequently missed in the overlapping areas of sustainability, ESG and long-horizon investing.
- Transformational changes via the Great Acceleration – technology, demography, globalisation, environment and social norms – will produce a faster-changing risk environment. That may well argue for certain **risks to be more centrally-managed** – a particular example is climate risk.
- Large, long-term oriented asset owners can adopt the principles of **universal ownership**, integrating their investing in dimensions that include wider stakeholders and inter-generational fairness. But will they? Some are certainly doing so, acting on their beliefs and on the context of their exposure to a large variety and volume of assets.
- Asset owners have to combine **two drivers to build a sustainable strategy** – investment beliefs and their wider sustainability motives. Forces are gathering behind these drivers, but relatively slowly due to: industry conservatism (on most new things); a lack of data evidence; career risk (reputations trump truth); and the restrictions imposed by fiduciary standards.
- Pressures are set to build in the next 5-10 years from both the business case, based on sustainability's materiality, and from an implied **“license to operate”**. In a world of increased stress on climate, resources and societal cohesion, asset owners are likely to be pressured into a recognition of their portfolio's real-world impact on stakeholders and the SDGs, alongside risk and return.
- **Boards can play their part** by driving executive-level consideration of sustainability. To date, they have been reluctant to engage with the issue. Their increasing involvement is likely to be influential and create an opportunity for asset owner organisations to set explicit sustainability agendas.



Some scenarios

Rise of purposeful capitalism⁷

Capitalism evolves under governmental and societal influences; the investment industry raises its game with more professional, ethical and client-centric organisations.

Rise of parallel worlds

Different segments – by geography, generation, socio-economic group and values – engage in society differently; a higher baseline for financial services participation, but with wide dispersion; major impacts on DC business models producing demand for increased personalization, simplicity, speed and trust.

Public-private partnership

Some positive development in the model of combined state and private funding of infrastructure and other government-driven initiatives. The rise of infrastructure as a full-scale asset class can occur with this provision.

Climate risk

Climate change considerations cause upheavals and disruptions within society, business and the financial sector.

Data emergence

Data on ESG will improve and expand hugely. While it is clearly price-material, it is incomplete, lacks objectivity and is hard to interpret.

Game over

Some asset owners suffer a significant failure due to exogenous causes, market failures, political change and withdrawal of societal license to operate. One category of failing asset owner is likely to be defined benefit pension funds which fall into deficit and lose the support of their sponsors.

⁷The Future State of the Investment Profession (2017) CFA Institute. This has narrative on the place for scenarios and includes more detailed descriptions of this scenario and 'Parallel Worlds'

Universal owners (UOs)

1

UOs are large long-term holders of index-like portfolios that are exposed to the entire market and economy.

2

UOs also own a significant slice of corporate externalities which risk being internalised to their funds' net cost, now or in the future.

3

UOs are leadership-minded to grow the value and utility of their sponsor/member wealth by managing their long-term risk exposures.

The universal owner investment approach⁸ involves integrating the financial and extra-financial factors, while including in the framework wider stakeholders – recognising inter-dependence across the portfolio, across stakeholders in the portfolio and across time.

The investment beliefs are concerned with the materiality and mispricing of ESG-related factors and externalities, that risk being internalised to the funds' net cost, now or in the future.

⁸Universal Owners: Opportunity Beckons and Leadership Calls, Roger Urwin, Rotman International Journal of Pension Management, 2011



Applying this in practice

Asset owners may now be wondering exactly how to manage the journey implied by these four shifts to new models. We recognise that it is potentially a big ask. We have some suggestions.

- **Using change management processes can help.**
Change management processes have not been used widely by asset owner institutions, but there seem to be good reasons to apply versions of this model of working in the coming years. Change management is generally understood in business to comprise approaches for preparing and supporting companies to change their organisational models and practices. Usually it applies to reasonably significant instances of change. The key conclusions from change management have developed over the past 50 years since the seminal work of Rogers on the steps required in change⁹, and subsequently Peters and Waterman¹⁰. Most evidence from the considerable research on change emphasises the need for the commitment of strong leadership supporting the change, the benefits of a clearly-structured process and clarity on the benefits of making the change.
- **Asset owners can learn from each other.**
In our research, we have found various role models that have dealt with some of these changes particularly well. Quite naturally, there is no single exemplar that has mastered all the factors, so discussions need to involve a number of funds. Discussion with these funds can be organised through a structured peer programme.

- **This analysis is relevant for smaller funds, but with adaptation.**

The thinking here has been drawn from the most sophisticated investors and so has most applicability to large asset owners with plenty of in-house resources and some flexibility in their governance budget. Applying this to funds with more modest resources and governance budget may be more vexed, particularly as economies of scale and scope are significant advantages for big funds. That said, some of these advantages can work at any size. One route to capturing these advantages is the fiduciary management model, where organisations with the resources of a big asset owner are appointed to manage smaller funds.

- **This analysis is relevant for de-risking funds.**

The pension fund profile worldwide includes significant numbers of funds that are managing assets over relatively short investment horizons. This requires specialist skills in (high levels of) liquidity and cash flow management, and sensitivity to liabilities and specific goals. The analysis of large funds has predominantly focused on ones with long-term features, but all long-term funds are short-term funds as well – they have to think about multiple time horizons. In short, there are reasonable inferences we can make about this special group of funds as well.

- **Asset managers can draw from this analysis too.**

At a fundamental level, better asset management practice involves understanding asset owners. In this regard, the work here should be helpful to asset managers. In addition, there are quite a few change principles that apply as much to asset managers as asset owners. This is particularly true for the operating model and the people model. The shift towards stronger professionalism in the business model change also represents an opportunity for asset managers to achieve better differentiation.

- **Context is everything.**

There are no blank canvasses for investment organisations to work from. All situations have unique considerations at work. The art in this challenge is working with the evolving best practice principles and applying them to unique circumstances.



⁹Diffusion of Innovations – Everett M. Rogers, Free Press

¹⁰In Search of Excellence: Lessons from America's Best-Run Companies – Thomas Peters and Robert Waterman, Harper & Row



Don't get comfortable

To succeed in the Great Acceleration, asset owners will need to undergo four shifts with the refocusing of the components of their success: the business, operating, people and investment models.

Implicit in all of these components is the need for asset owners to maintain a social licence to operate. In other words, to succeed, asset owners cannot only be successful in managing the wealth of underlying investors and members – they must also accept they have wider, sustainable responsibilities to stakeholders.

To do all this requires some considerable shifts, in mindset and practice, as defined in the big four.

More relevant asset ownership models are not easy to shape and are not created overnight. Like most things that are truly important, discussions over the evolution of models for asset ownership will not be comfortable.

But if done well these shifts enable the asset owner of tomorrow to be a critical force in the wealth and well-being of current and future generations of the planet.

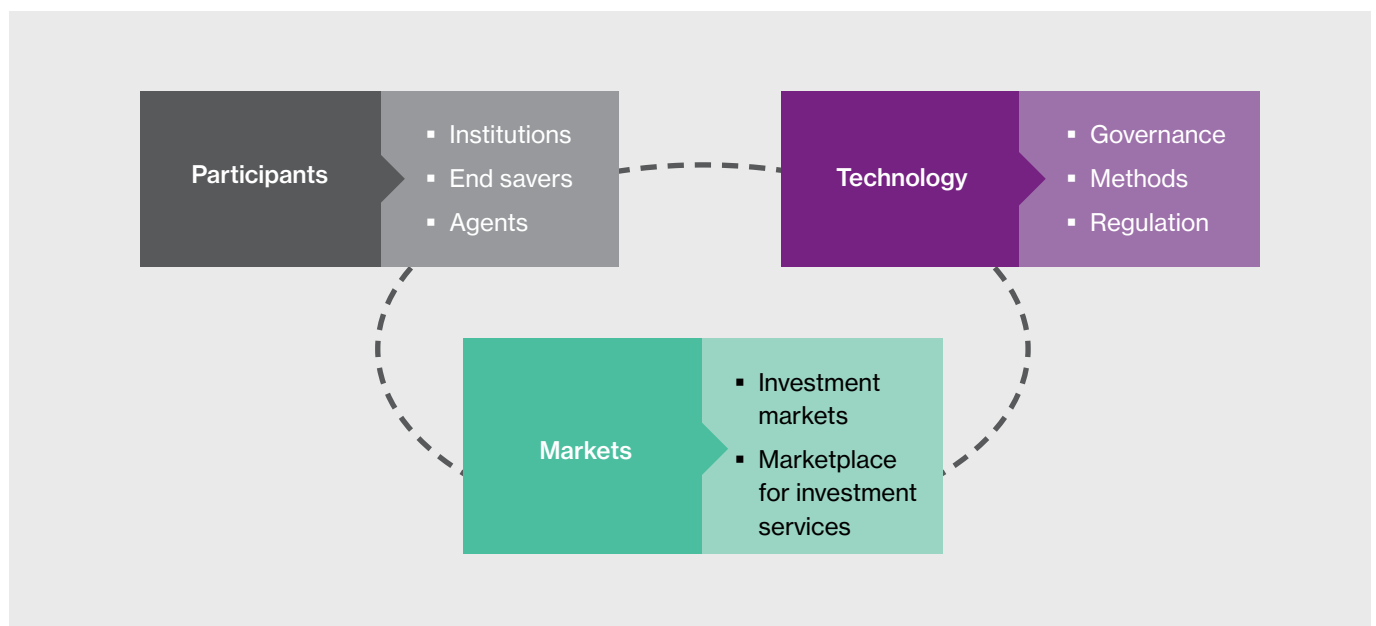
Appendix

The investment ecosystem

Viewing the economy, the firms of which it is comprised and its financial systems as inter-connected ecosystems, has gained popularity in recent years. Over time, economies and financial markets have become more interconnected such that this change in perspective is a natural progression. We believe this approach allows better assessment and management of risks faced by individual organisations as well as systemic risks. In particular, those risks that might be described as the tragedy of the commons (where the self-interested actions of individuals lead to the demise of the group) come into focus and we can begin to consider how pressures both within the investment system and applied from outside will shape how it changes over time.

In practice, when an industry is viewed as an “ecosystem” this is often short-hand for saying there are many interconnected organisations in that industry, which on some levels compete and on other levels rely on each other (“co-opetition”). At its heart, the financial ecosystem involves modelling the interactions of the system’s participants (individuals and particularly organisations) with each other and with their environment by reference to the motivational forces driven by the participants’ functions, values, and beliefs and accompanying business models. An ecosystem model allows us to uncover elements either ignored or under-weighted in most other models.

Our *ecosystem model* is roughly described below and links investment industry participants with physical technologies (like IT), social technologies (like investment committees) and markets.



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This document has been written by members of the Thinking Ahead Group 2.0. Their role is to identify and develop new investment thinking and opportunities not naturally covered under mainstream research. They seek to encourage new ways of seeing the investment environment in ways that add value to our clients.

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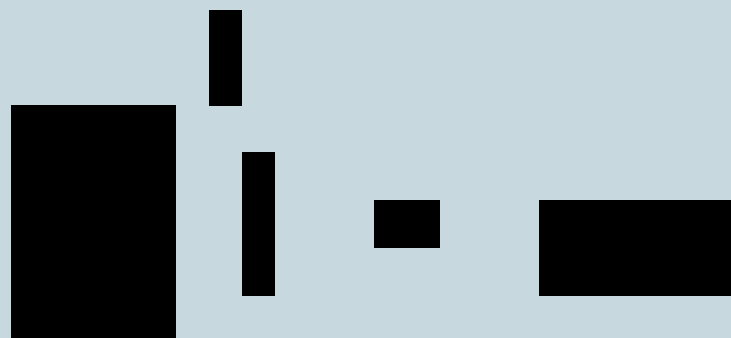
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About the Thinking Ahead Institute

The Thinking Ahead Institute seeks to bring together the world's major investment organisations to be at the forefront of improving the industry for the benefit of the end saver. Arising out of Willis Towers Watson's Thinking Ahead Group, formed in 2002 by Tim Hodgson and Roger Urwin, the Institute was established in January 2015 as a global not-for-profit group comprising asset owners, investment managers and service providers. It has over 40 members with combined responsibility for over US\$13 trillion and aims to:

- Build on the belief in the value and power of thought leadership to create positive change in the investment industry.
- Find and connect people from all corners of the investment world and harnesses their ideas.
- Work to bring those ideas to life for the benefit of the end saver.

At the Institute we identify tomorrow's problems and look for investment solutions, which, we strive to achieve through:

- A dynamic and collaborative research agenda that encourages strong member participation through dedicated working groups.
- A global programme of events including roundtable and key topic meetings, webinars and social events.
- One-to-one meetings between Institute member organisations and senior representatives of the Thinking Ahead Group.

The solutions we collectively develop fall into three overlapping areas:

- Better investment strategies.
- Better organisational effectiveness.
- Enhanced societal legitimacy.

This framework guides the Institute research agenda and the desired output of each research project. The Thinking Ahead Group acts as the Institute's full-time executive. The Institute has a governance board comprising both Institute members and Thinking Ahead Group representatives.





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