Systems Curriculum virtual event series

Principles and practical applications of systems thinking in the investment industry

Session 3. Beliefs | 16 October 2024 | Pre-reading slides

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0. Preface – Roger Urwin

Defining beliefs and their application to investors

Systems curriculum: understanding the power and practice of systems thinking

3. Systems beliefs – 16 October 2024

Pre-reading

- 90 minutes hybrid
- Includes expert inputs
- Includes Q&A

0. Systems primer – the key features of systems thinking and systems design and the different lenses to see systems through

1. Systemic risk - Systemic risk concepts. Deepening understanding

Adapting our practices

2. Systems leadership – *the use of systems leadership models* which recontextualise problems as shared problems and use systems thinking to explore and solve the problem

3. Beliefs – *the use of system patterns* to understand the present landscape and plan for the future

4. Sustainability – *the use of systems-level investing* in which the three dimensions of risk, return and impact are integrated

5. Measurement - *the use of balanced scorecards* in which measuring and incentivisation is addressed more holistically and systemically

Source: TAI Systems Curriculum: June – December 2024

Systemic risk : the elephant never forgets | Systems Curriculum session 3

1. Beliefs and systems – 9 October

The elephant never forgets

- *The beliefs concepts - Roger*
- *Beliefs primer – Marisa*
- *High-level beliefs – Tim*
- *Polling – moderator Tim*
- *Alva Devoy in conversation with Roger*
- *Tools to develop beliefs – Roger*
- *Takeaways – Roger*

  Q&A – moderator Tim

- Pre-reading
- 90 minutes hybrid meeting
- Two time zones

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Beliefs are everywhere

Gordon: When I was young and green. I remember going to London. Do you know the place? The station's King's Cross.
Foreign Engine: King's Cross! London's station is Euston. Everybody knows that.
Duck: Rubbish! London's Paddington. I know. I worked there.
Gordon: I'm sure it's King's Cross. I'll go and prove it

……A week later

Gordon: (sadly) London's all wrong, they've changed it. It isn't King's Cross anymore. It's St Pancras.

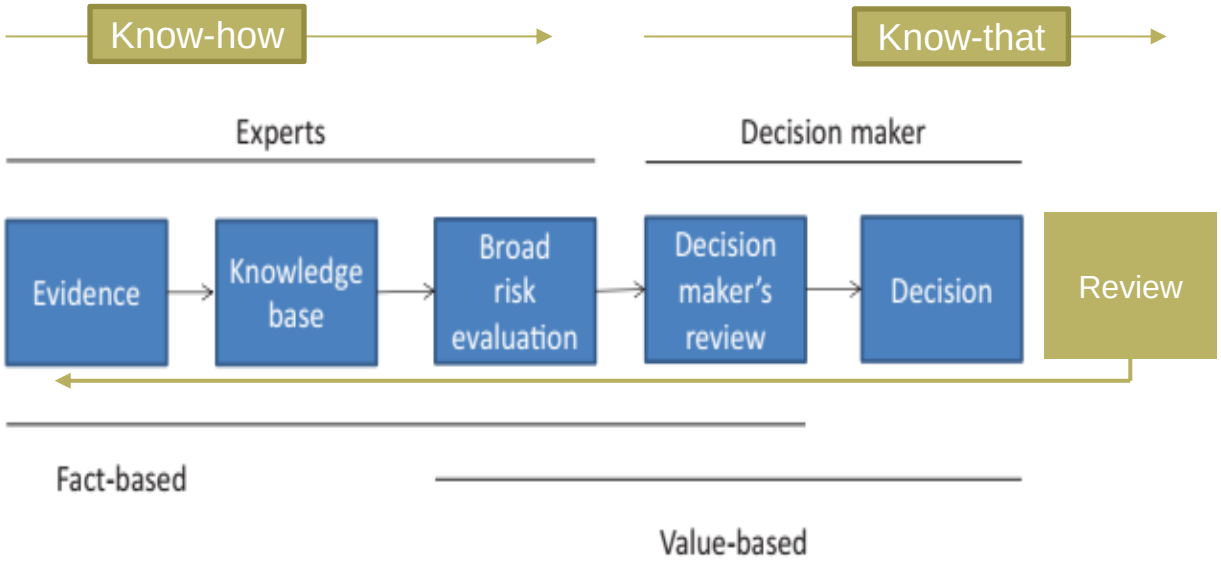
Source: Enterprising Engines | Rev W. Awdry | 1967

- This is a good (and bad) example of beliefs
- These engines are not that accurate, aligned, and coherent on their beliefs
  …and are more invested in/convinced about their beliefs than they should be.
- They need a leader to step up to lead a beliefs project because there is a good actionable belief lurking
  – London is big enough to have multiple terminuses and to produce multiple mental models

Investment as decision-making under conditions of risk and uncertainty

New factors

- *Increasing efficiency*
- *Accuracy and coherence*



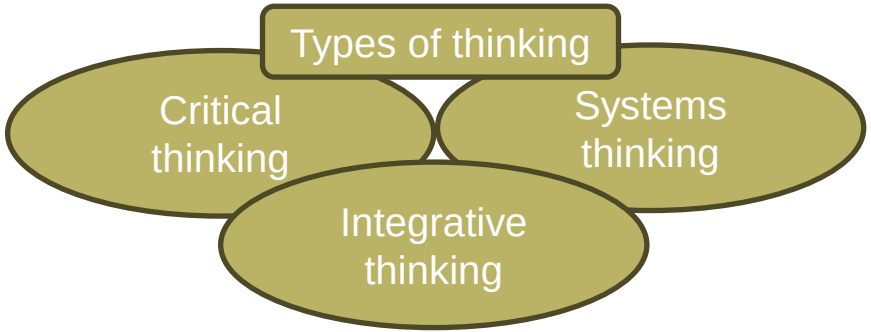
Source: Aven & Hansen

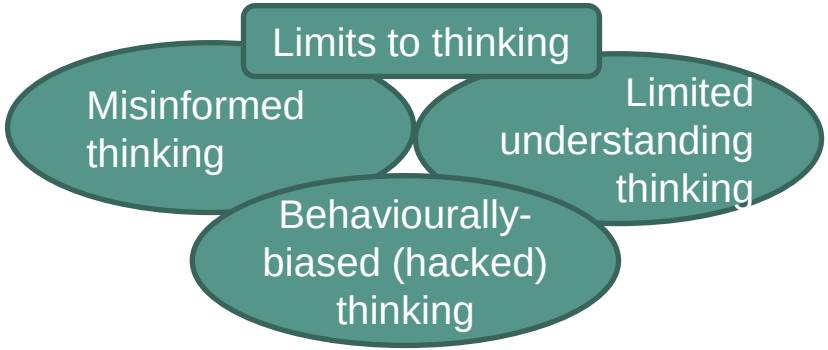
Define your terms

Thinking

New factors

- *Increasing complexity*
- *Increased disinformation and hacking*
- *Increased tech and AI*





1. Beliefs overview – Marisa Hall

Define your terms

Values, beliefs and principles

- **Values** are factors in our lives that matter to us and motivate us, and we hold up as standards.
- **Beliefs** are assumptions on the way things work.
- **Principles** and propositions combine beliefs and values with high-level intentions to act in a certain way

Beliefs as a key governance element – a *central tool but a degree of under-use*

Time is saved

Establishing shared values and beliefs can act as short-cuts in our discussions and decision making, saving large amount of time.

Enhances discipline & consistency

Human behavior and psychology affect investment success. Values and beliefs provide a strong foundation to decisions even in times of stress.

Settle differences

A good values and beliefs process will surface sensitive issues, encourage constructive thinking, socialise the issues and can settle differences.

Improve transparency

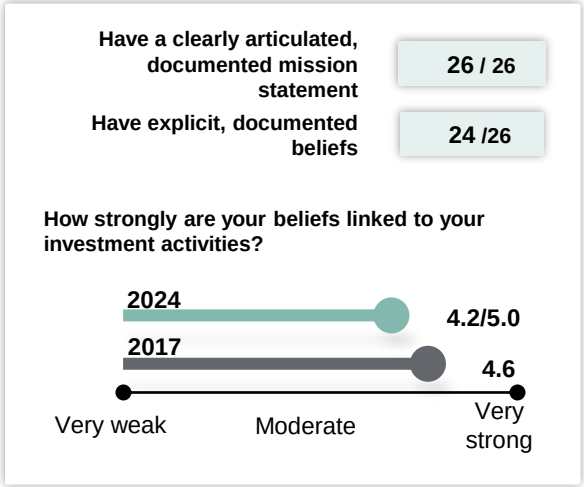
Values and beliefs help decisions to be subject to greater transparency and greater institutional memory for our benefit and our stakeholders too.

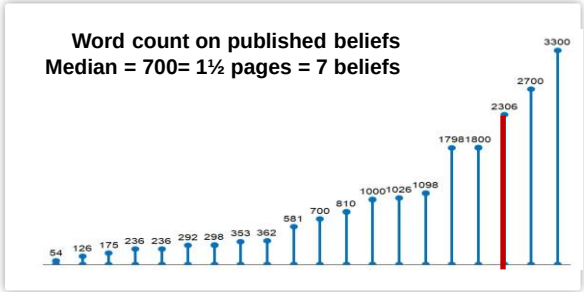
Gaps are filled

Our knowledge of the world is incomplete and uncertain. We need values and beliefs to help us make decisions/avoid being “paralyzed” to inaction.

Promote insightful action

The best teams have beliefs that are smart and edgy (incorporate deep insights) and thoroughly socialised (be widely understood and acted upon).





Source: TAI Future Fund | Global Asset Owner Peer Study 2024

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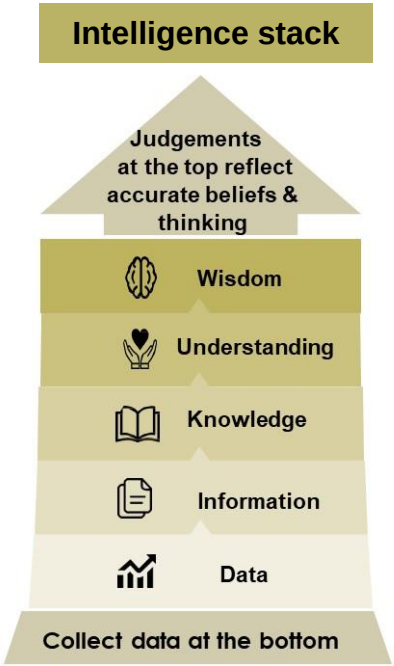
Taking beliefs further as a differentiator – *opportunities in critical thinking*

Deeper situational awareness and fluency	▪ The investment landscape has become more challenging to understand ▪ Deeper investigation is necessary
Seeing the organisational context through a P2P lens	▪ Governance, culture, leadership and relational opportunities important ▪ The P2P (people-to-people) lens helps the organisation focus
Development of innovation in TPA and 3D investing	▪ TPA and 3D investing are accepted as key areas for the organisation to develop their understanding and capabilities
Using evidence in abductive process	▪ Where possible, data supports the proposition being considered ▪ Where data not available, strong lines of argument & judgement needed
Ensure behavioural biases are understood & mitigated	▪ Reduce the incidence and influence of biased information / hacking ▪ Reduce the unconscious biases in cognitive dissonance
Strengthen the link between beliefs & decisions	▪ Build the vision of the benefits of beliefs ▪ Develop the assimilation of the beliefs through socialisation



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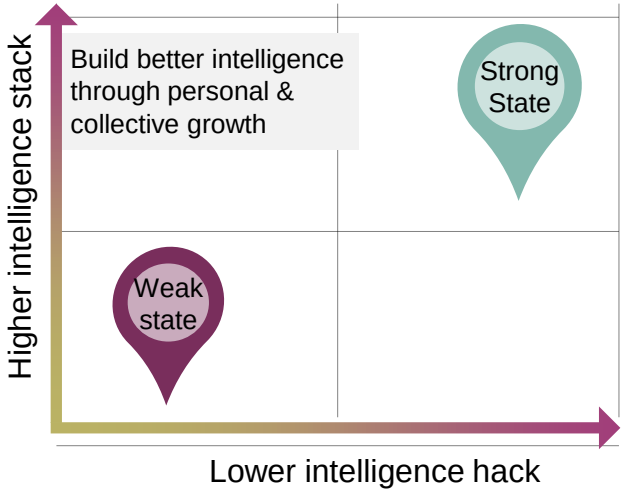
Building stronger, more accurate, better embedded beliefs

Beliefs provide edge and simplification and are increasingly critical

- Better beliefs are generally ones that have more accuracy, alignment and action-orientation obtained from a stronger state of knowledge – see opposite
- Embedding and use of beliefs within teams and at a more granular level
- Beliefs combine your inner state and the outer state, so does hacking
- Better beliefs are evidence-based
- Beliefs in a system are broader than just investment, the boundary is unhelpful



SUPERTEAMS

A Superteam is a team which through **combining** a diverse array of **talent** that is unleashed by **great culture** and **governance** achieves outstanding results

Culture

Inclusion

Trust

Talent

Cognitive Diversity

Governance

Rigour to action

Accurate judgement and decision-making from accountability & problem versatility

Framework to thinking

Explicit beliefs and principles as scaffolding for critical thinking and to support decisions

Peer Study conclusions on beliefs

Organisational alpha

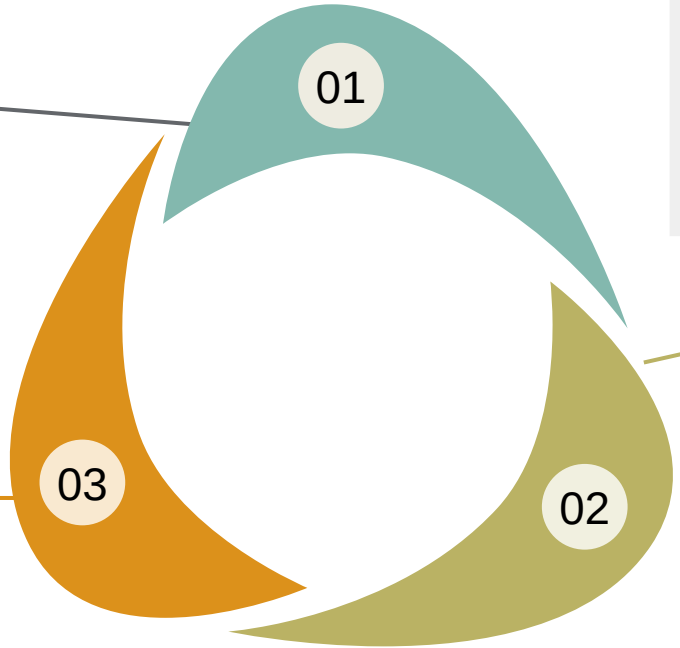
- Explore beliefs about decision making, people, culture, governance and technologies – sources of value add (or ‘organisational alpha’)
- Gap one

Portfolio construction

- Review investment framework and policies, including how allocations can be made to asset classes and risk factors
- Largely covered

Sustainability beliefs

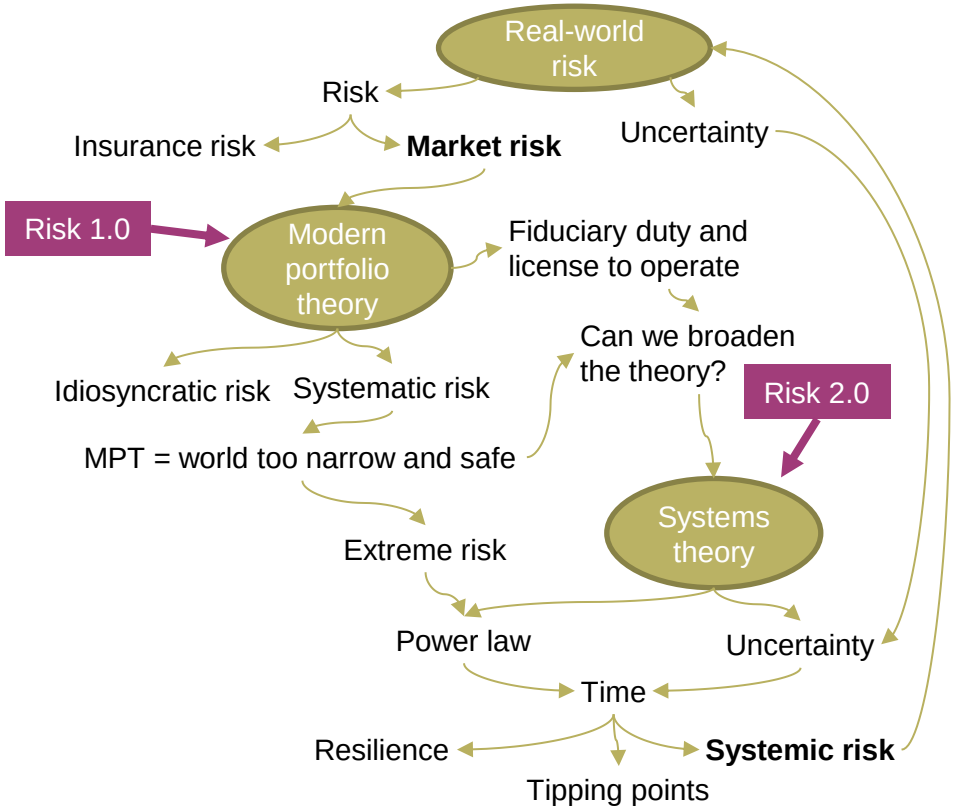
- Expand current section on sustainability & ESG, including how climate change and other systemic risk factors are considered
- Gap two



2. High-level investment beliefs – why, and what
Tim Hodgson

Beliefs to support the widening of risk: risk 1.0 to risk 2.0

Five issues with risk 1.0
1. There is more risk measurement (backward looking) than risk assessment or risk management (forward looking)
2. Focus tends to be on managing expectations rather than value creation and dealing with systemic risk
3. There is a preference to treat risk as a single number when it's a multi-faceted concept; and it needs to allow for its own provenance
4. Focus is on short-term risk and single periods but to most AOs long-term risk and multiple periods are more critical
5. External factors are modelled (market risks, manager risks) when internal forces (decision-making given personal and organisational pressures) are often more important



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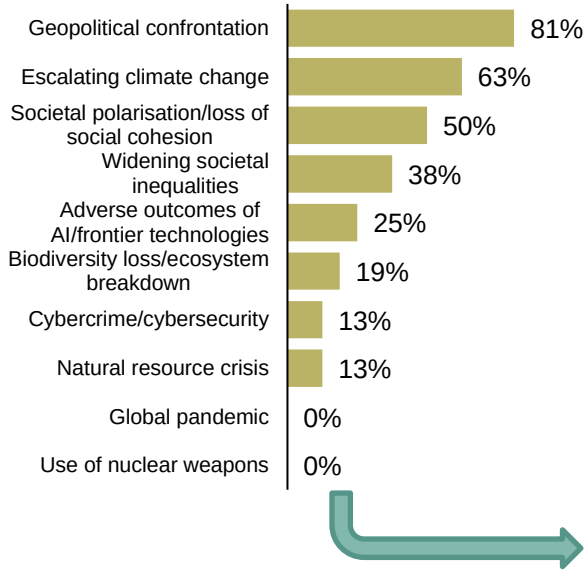
Case study 1 | example results from *horizon scans of systemic risk*

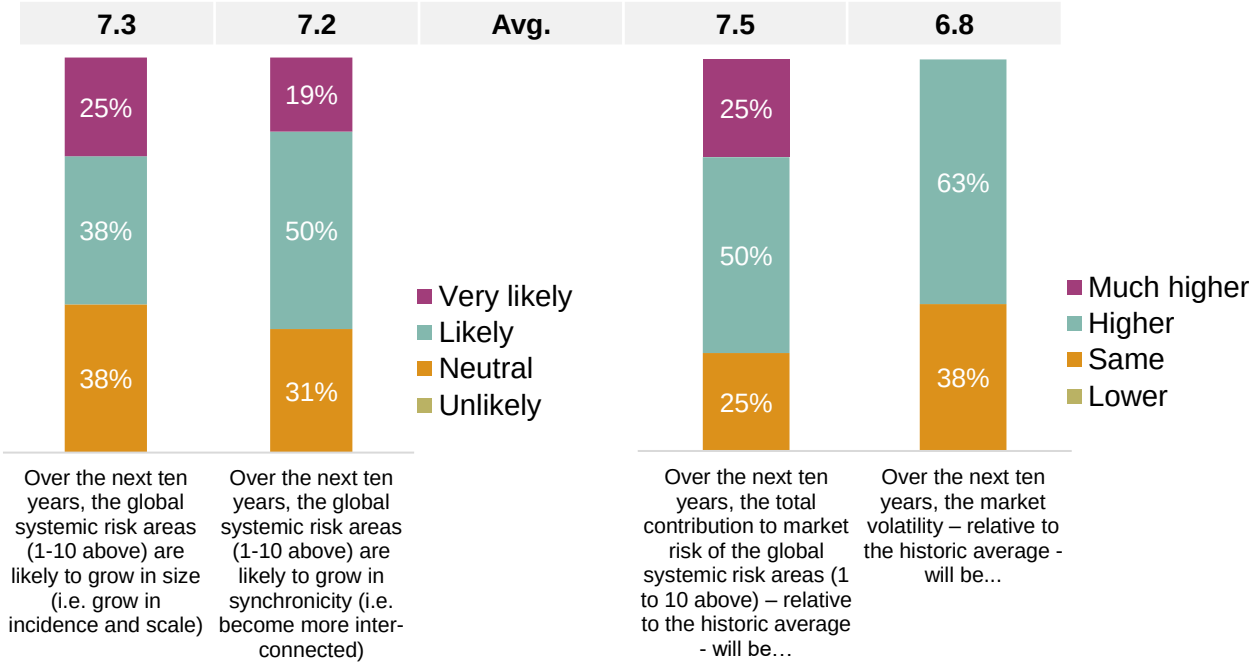
TAI / Future Fund Asset Owner Peer Study 2024

Top systemic risks



Systemic risks are likely to grow, synchronise and impact market prices

Systemic risk future vision



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Case study 2 | difficult beliefs from systems perspective on climate

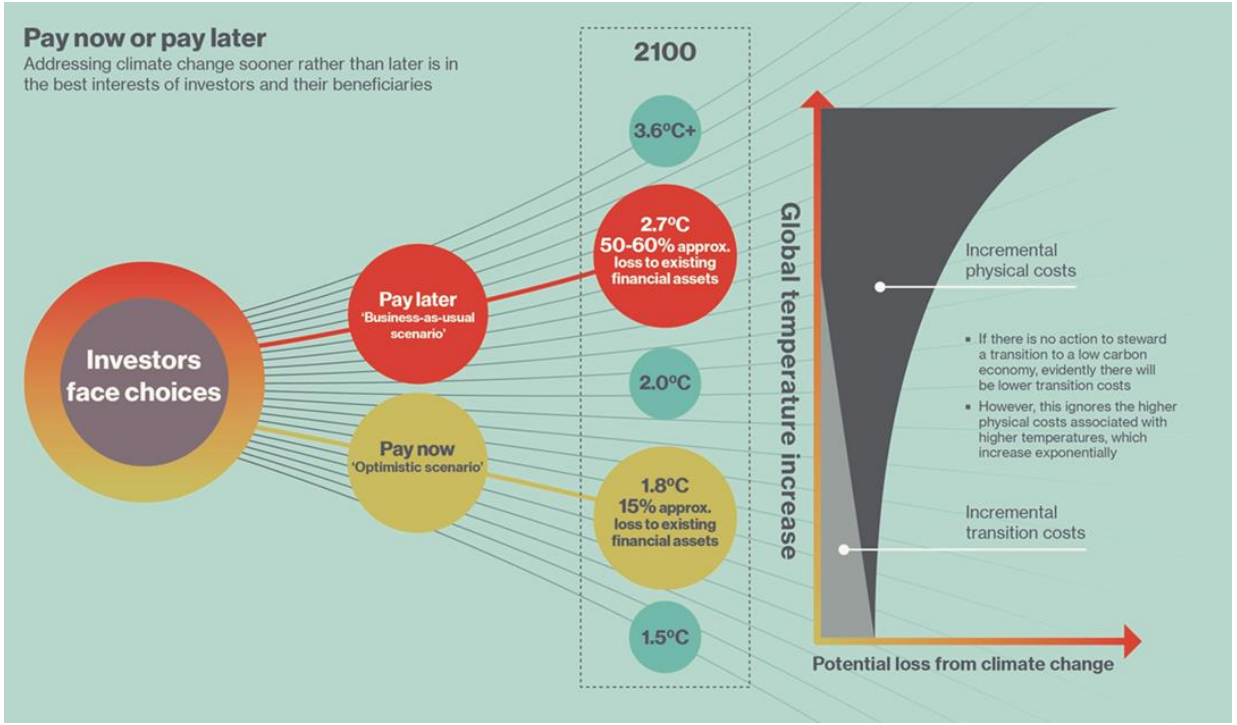
Pay Now or Pay Later

- **Current position**. The investment industry is not acting swiftly and definitively enough on its net-zero commitments.
- **It is an emergency**. Humanity is no longer on a path towards 1.5C warming, as the most 'optimistic' temperature rise scenario is 1.8C by 2100.
- **We have all the evidence we need to act**. The world is already experiencing warming of 1.2C. At this temperature rise the physical risk impacts, experienced across the world have been numerous and severe.
- **Reframing the transition as a net benefit.** If the industry acts now there will be costs, but these will be materially less than those arising from a late transition or no transition at all.
- Climate tipping points are likely to magnify the costs of inaction, we could see a 50-60% downside to existing financial assets in a business-as-usual scenario where climate risks are not addressed.
- In contrast, taking action to transition to a well below 2C world might lead to a loss of 15% of existing assets which could be at least be partly offset by the positive benefits from new primary investment.
- Responses necessary
  - Investment beliefs to change the climate trajectory (this course and other background)
  - 3D net-zero mandates (revisit external resources and consider 3D investing mandates)
  - Beyond ESG: System solutions for sustainability (adopt and apply systems thinking)
  - Choosing to pay now or pay later

Impact of climate action vs inaction on financial assets

It is preferable to pay now than pay later

- This is first and foremost a **macro position** – it is only preferable to pay now if the collective does so (individuals + investment industry + corporations + governments)
- The viability of ‘pay now’ as a micro position adopted by funds depends on the industry co-operation / competition balance
- Notably, how influential is **the systems leadership** that sees the benefits of solidarity and collective action solutions vs defectors and tragedy of the common free riders
- The alternative viable micro position is a high tracking-error, dynamic, contrarian approach that seeks to preserve value while the collective chooses to ‘pay later’



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Case study 3 | group and team processes – example from TAI working groups

Climate change beliefs

1. **We believe climate change is an emergency and we are part of the economic system that must address this**
   we must act
2. **We have all the evidence we need to act**
   we will act now
3. **Acting ambitiously now will incur costs, but these will be materially less than those arising from a late transition or no transition at all**
   acting now, while costly, will be cheaper
4. **We believe the only way to change the climate trajectory is to adopt the stop, substitute and siphon framework**
   we will invest differently
5. **We will invest to create the future we all need which requires establishing new investment conventions**
   we will think differently
6. **We will actively participate in the collective action required to address climate change**
   we must collaborate

Experiences from developing investment beliefs and values

- Investment beliefs and values are likely to differ across board, investment team members and stakeholders but for effective practice it is critical to develop shared values and beliefs
- The process cannot reasonably expect a perfect consensus (one identical shared view); it should target a settlement (views coming together in an agreement to work to a shared view)
- A good beliefs process will surface sensitive issues, encourage constructive thinking, socialise the issues and settle the differences
- The process of codifying values and beliefs involves considering something inherently abstract (or ‘soft’) and codifying it in a clear and more tangible form (or ‘hard’)

…applications again

Conversation

Roger Urwin with Alva Devoy

Beliefs from asset owners and asset managers

Alva Devoy
Strategic Business Builder & Systems Leader in the Asset Management Industry

3. Practical applications – Roger Urwin

- Tools
- Organisational alpha
- Systems patterns and archetypes

Tools to support the establishment of beliefs

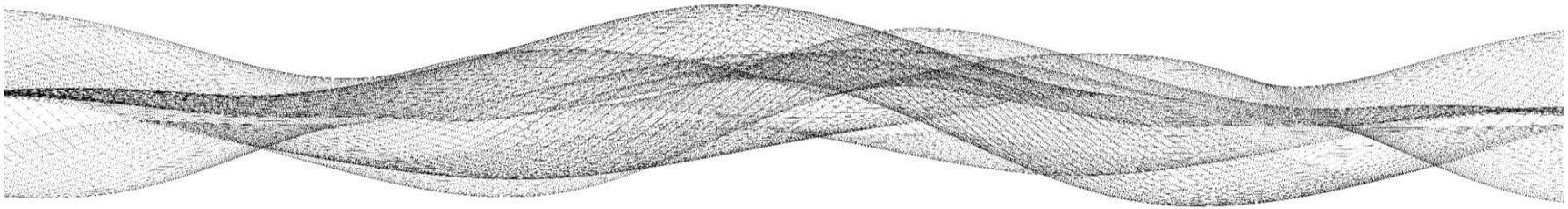
1. **Group and team processes**
   -Survey and Delphi methods
2. **Horizon scanning & theory of change**
3. **Systems tools**
   -patterns and archetypes
   -the iceberg model

1. Surveys and Delphi method

- The **survey method** is a systematic method mixing horizon scanning used to help exploit expert opinion and develop best practice principles
- Electronic polling enables answers to be presented confidentially, analysed comprehensively and refined where necessary
- TAI has used survey since its inception in 2001

- The **Delphi survey method** is a systematic method mixing horizon scanning and interactive discussion used to help exploit expert opinion and develop best practice principles

- Delphi is based on the principle that scenarios, forecasts and decisions from a structured group-process are more accurate than those from unstructured groups
- The polling is in two rounds using discussion in between the rounds to improve outcomes. Group members are encouraged to revise their earlier answers in light of the discussion to reduce the range of the answers converge towards a better answer
- *TAI has used the Delphi method for over five years*



Survey method. Sustainability beliefs agreement

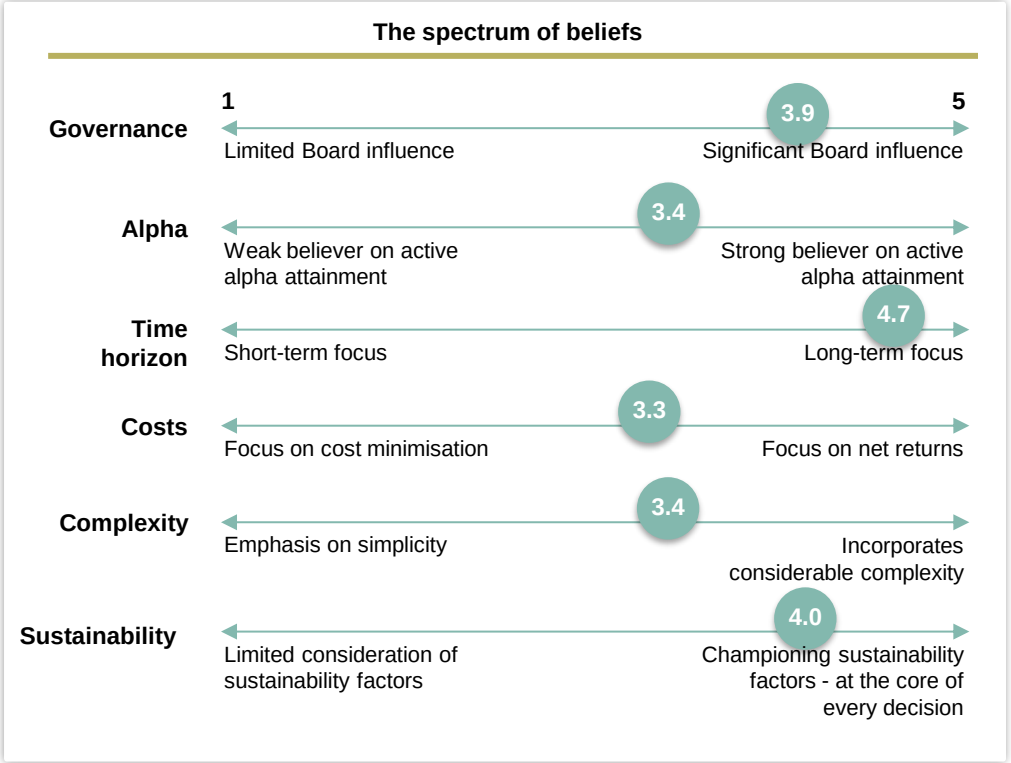
Highest alignment

Statements with which respondents agreed most on average	% agree
14. Sustainability in investing is broader than considering ESG factors, and includes sustainability of the economic and financial system	86%
17. Systematically considering ESG issues will lead to more complete analyses and better-informed investment decisions	85%
19. The execution of ownership rights, including voting and engagement, can positively influence the performance and lower the risk of investments over time	85%
1. Investors are over-sensitive to short-term factors and not sensitive enough to long-term factors. As a result, long-term factors are less efficiently priced	82%
23. Asset owners as part of their overall responsibilities should consider direct and indirect negative impact with respect to the ESG footprint of their investments	81%
5. I am willing to accept a lower return in the shorter term to deliver higher long-term returns	80%

Survey method example. Asset owners are forward-thinking and pragmatic

The Peer Study asset owners reveal strong governance, long-term investment, and sustainability with strategic clarity of mission and beliefs

- The figures are sometimes ahead of the narrative
- Comparisons are critical
  - social proof
  - dealing with ambiguity
- Comparisons over time set out the direction of travel



Source: Asset Owner Peer Study 2024

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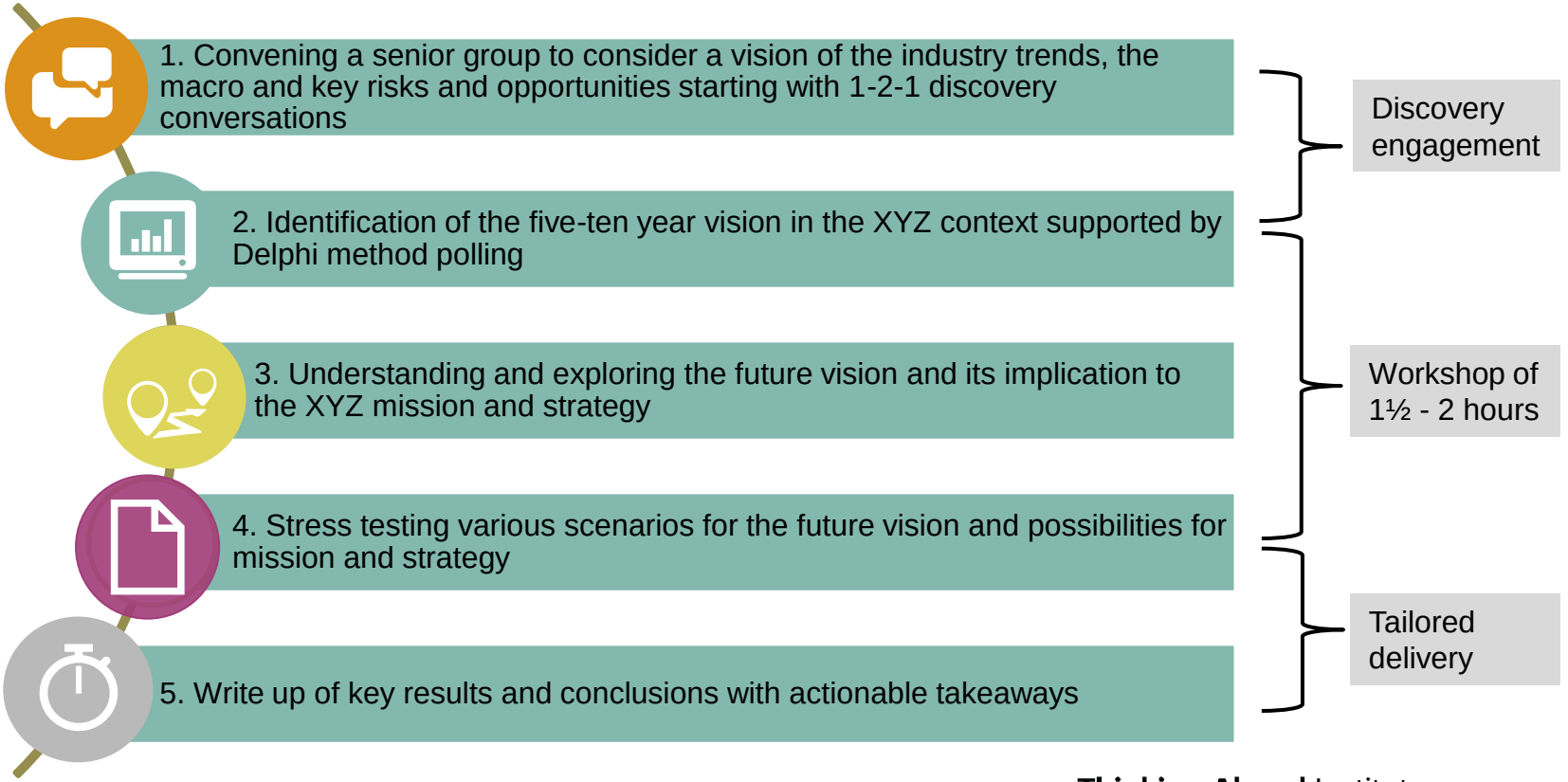
2. Horizon scanning and theory of change

- The survey enables us to get the input of to help us understand the issues better, agree what matters and review the opportunities and challenges such scenarios present.
- **Horizon scanning** plays its part in a spectrum of tools that institutional investors are increasingly commonly applying – these include variants from scenarios, stress tests, pre-mortems and **theory of change models** (scenarios linked to interventions and outcomes). These methods are getting more use among investors, but are still not common. Points of leverage
- "Superforecasting: The Art and Science of Prediction" by Philip Tetlock and Dan Gardner suggests some parameters for improving the forecasting outcomes:
    - think probabilistically
    - updating beliefs based on new evidence (Bayesian principles)
    - remain open to changing minds
    - breaking down complex problems into manageable pieces,
    - seeking out diverse perspectives.

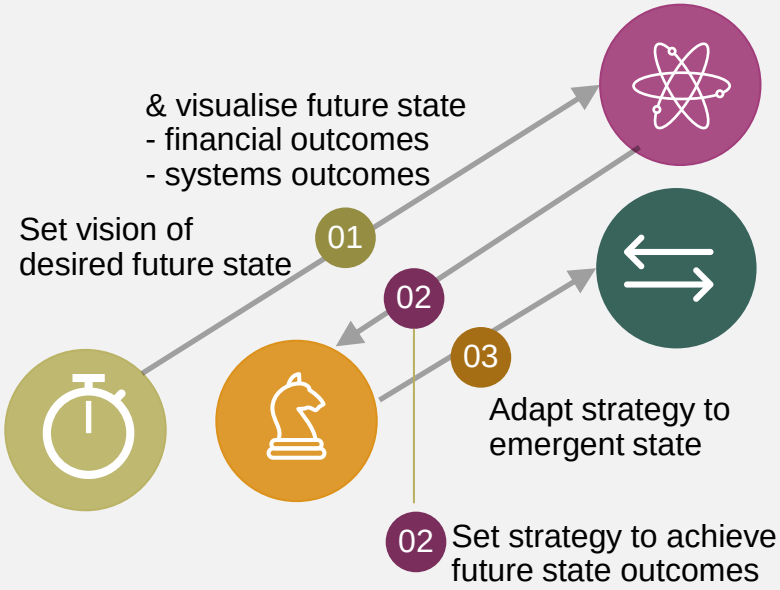
Case Study: Horizon scanning and theory of change workshops



Case Study. Applying theory of change and stress testing

Linking the future outcome with the current strategies and evolving pathways

1. Clear vision of desired future state and the visualisation of the future state that is necessary
2. Work back to a set of beliefs and inter-connections/co-dependencies that must lie behind this future state and set strategy and goals consistent
3. Recognise co-dependencies in the system. Look for points of leverage.
   Look for ways to adapt and be resilient.
   E.g. Recognise the future climate system as largely a given* with respect to the finance system co-dependency



*** The co-dependency spectrum: *get given/inherit/bystander to → contributor to/influencer → controller***

3. Systems models and tools | the iceberg model

		Iceberg model elements
Visible 	**Observables**	The outcomes, situations and events relevant to the system that are visible manifestations of the ecosystem in a complex adaptive way
Not visible 	**Patterns**	The trends or patterns of observables and situations that guide our understanding of past and future events
	Structures	The ways that the system works through policies, processes, and practices which result in the trends and patterns, such as
	Mental model	The shared values & beliefs, mindsets & attitudes, that created the system of interest and how it operates – a compression of how something works and can concentrate the ecosystem into understandable and useable chunks

Start here at the bottom

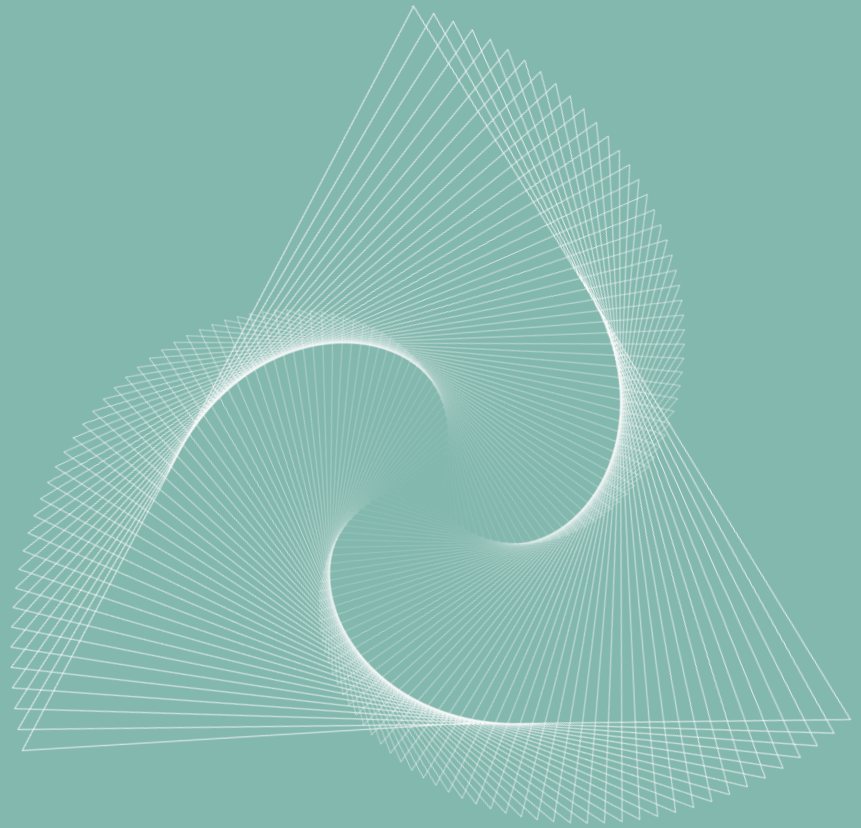
Systems thinking patterns – joined-up ways of thinking and working

Complex systems have motion, flux & feedback	Tragedies of the horizon are failures of imagination	If you torture the data, it will confess to anything
Circular feedback is generally more vicious than virtuous	Long-term investing is damned if you do, damned if you don't	Measurement gives a subject a respect. What gets measured gets managed
Most investments involve j-curves – particularly patient capital	Cost and value, cause & effect are rarely close in in time, space, provenance	Performativity can work short-run, but can't outrun authenticity
Most innovation diffusion patterns are s-curves	Managing through process beats managing through measurement	What is claimed is going on is not the same as what is really going on
Systems don't go in straight lines or in one direction. They are curved and reflexive	In a complex system there are always places to hide from accountability	In a complex system there are no simple causations
Complicate to understand, simplify to explain	*The bird in the hand is worth two in the bush*	*We measure what we do because we can. We can measure more than what we do*

Systems pattern and archetypes

- Descriptions related to patterns of future change
- Systems thinking often calls these archetypes
- More types than these core three – see Resources
- Extends into possible responses to circumstances – the italicised ones

4. Wrap and takeaways



One more Case Study. CalPERS Investment Beliefs

Intelligent design. Diligent implementation. Good outcomes

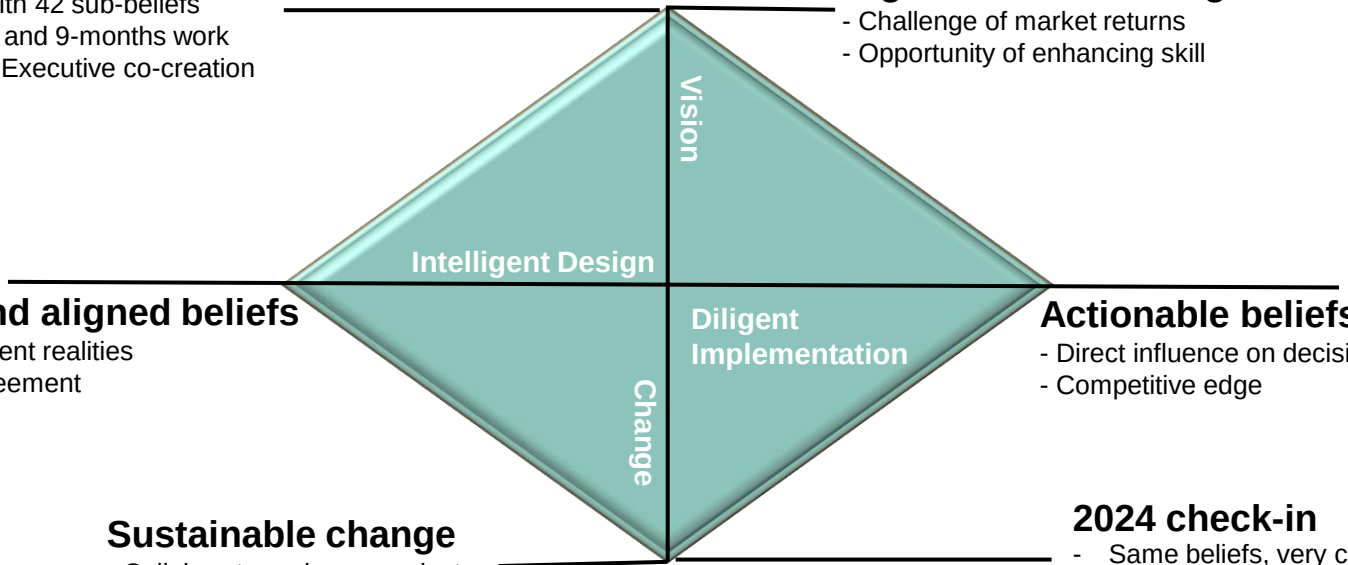
CalPERS beliefs

2013 Beliefs Process

- Global best practices review
- 10 beliefs, with 42 sub-beliefs
- 80 meetings and 9-months work
- Trustee and Executive co-creation

Right time – for doing this

- Challenge of market returns
- Opportunity of enhancing skill



Accurate and aligned beliefs

- Map to investment realities
- Negotiated agreement

Actionable beliefs

- Direct influence on decisions
- Competitive edge

Sustainable change

- Collaborate and communicate
- Measure and incentivise

2024 check-in

- Same beliefs, very consistent use
- Issue with total portfolio thinking

Best-practices. The Peer Study Best-bits Model

The Peer Study generated this Model of what the Peers considered their stronger propositions.
The biggest focus has been on TPA and internalisation, but beliefs has been an anchor point in all cases

Thinking Ahead Peer Study 'Best-Bits-Model' taken from the 26 Peers strongest propositions for success in future			
	Best-practice best bits (Canada model)	**Total portfolio thinking best bits**	**P2P (People-2-People) model best bits**
Governance	**#1. Governance/fiduciary duty – Canada model** ***Considerable focus***	**#2. Risk 2.0 – risk assessed wider, longer, softer** ***Emerging focus***	**#3. Soft stuff – culture, governance, talent, tech** ***Significant focus***
Investment	**#4. Private market emphasis – various versions** ***Significant focus***	**#5. TPA- various versions** ***Considerable focus***	**#6. 3D Investing – various versions** ***Emerging focus***
Operating	**#7. Org design & internalisation – mix of IPs** ***Considerable focus***	**#8. Balanced scorecards – multiple comparators** ***Emerging focus***	**#9. Beliefs – aligning values, beliefs, propositions** ***Emerging focus***

Some changes are needed

Changes to thinking	
Systems thinking	Recognise systemic risk Apply systems thinking
Extended risk framework	See risk through multiple lenses. Think of risk in wider, softer terms Adopt total portfolio thinking
Narratives & numbers	Balance between data and narrative Respect the limits of data inference

Changes to investment practice	
Adapt to systemic risk	Adapt to lack of meaningful data Incorporate 3D investing
Risk culture	Develop organisational resilience Build resilience from awareness
Build in robust-ness	Extend portfolio-level scope Extend system-level scope

Changes to leadership	
Adapting the mindset	Triaging problems: problems, wicked problems and super-wicked problems
Systems leadership	Applying systems leadership selectively and coherently
Promotion of systems leadership	Socialising the methods and the results of systems leadership

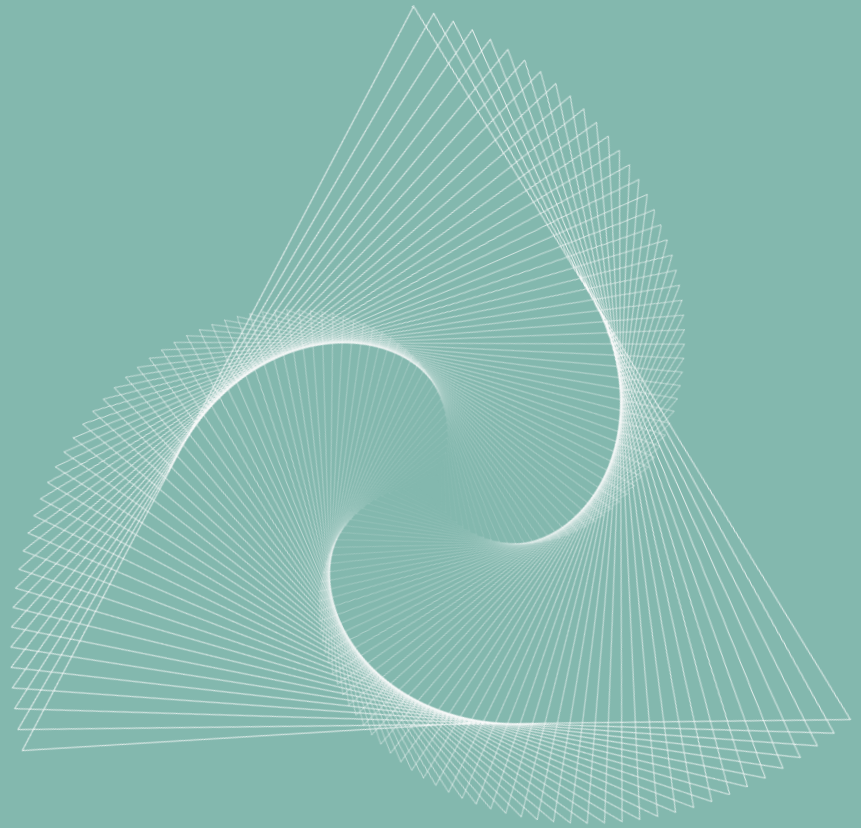
Beliefs. Changes to process	
Use beliefs as scaffolding	Compelling reasons to train, rehearse and prepare - the sports analogy. You need **accuracy, alignment and actionability**
Use collective methods	The power of the collective effort to deal with the toughest challenges
Embedding, enablement and empowerment	Embedding - needs socialising Enablement - needs clear policies & processes Empowerment - needs decision matrix clarity and supportive culture

Takeaways from beliefs

Socialise understanding. Deep learning. Increase collective intelligence

BaU – Business-as-Usual	BbU – Business-beyond-Usual
1. Socialise understanding of know-that knowledge	3. Build stronger beliefs in the scaffolding to use in decision-making
2. Sharpen your skills, broaden your boundaries, battle your biases, know your limits	4. Use the iceberg as one of the scaffolding poles

Resources



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Case Study 4. Systems thinking patterns – joined-up ways of thinking and working

Complex systems have motion, flux & feedback	Tragedies of the horizon are failures of imagination	If you torture the data, it will confess to anything	People respond to incentives, the rest is commentary	Quick fixes will usually fail, the easy way out leads back in	The soft stuff is the hard stuff, it's all about the people	We're better together when we-re in it together
Circular feedback is generally more vicious than virtuous.	Long-term investing is damned if you do, damned if you don't	Measurement gives a subject a respect. What gets measured gets managed	Progression & regression are hard to see, e.g. the boiling frog	Same as ever and different this time. Yesterday's solutions = tomorrows problems	We hear what he want to hear and disregard the rest	All of us are smarter than any one of us
Most investments involve j-curves (e.g patient capital)	Cost and value, cause & effect are rarely close in in time, space, provenance.	*Performativity can work short-run, but can't outrun authenticity*	Looking good means feeling good	Going above and beyond produces imbalances e.g. Whack-a-mole	Overconfidence is loud and unshakeable but confidence is quiet and assured	If you've had a hand in it, you'll have your heart in it
Most successful innovations have s-curve diffusion patterns (e.g. net zero investing)	Managing through process beats managing through measurement	What is claimed is going on is not the same as what is really going on	In a tragedy of the commons free riders are paid well	There are simple, quick wrong answer to most problems	You can't solve wicked problems using innocent thinking	The power of both/and thinking
Systems don't go in straight lines or in one direction. They are curved and reflexive	In a complex system there are always places to hide from accountability	In a complex system there are no simple causations,	Reason is the slave of passion. Feelings first, socialising second, thinking third	Power these days is harder to use and easier to lose	Out of great power come great opportunities and excesses	Some interventions can make a real power of difference e.g. Streisand effect
Complicate to understand, simplify to explain	*The bird in the hand is worth two in the bush*	*We measure what we do because we can. We can measure more than what we do*	*Quantifications need qualifications.*	*The devil is in the details*	*To drive change work on reducing the frictions more than increasing the fuel*	*There is power in having skin in the game*

*See the Hemingway 'six-word story';. 'Hemingways' summarise the issues in a memorable meme-like six words (or similar numbers)

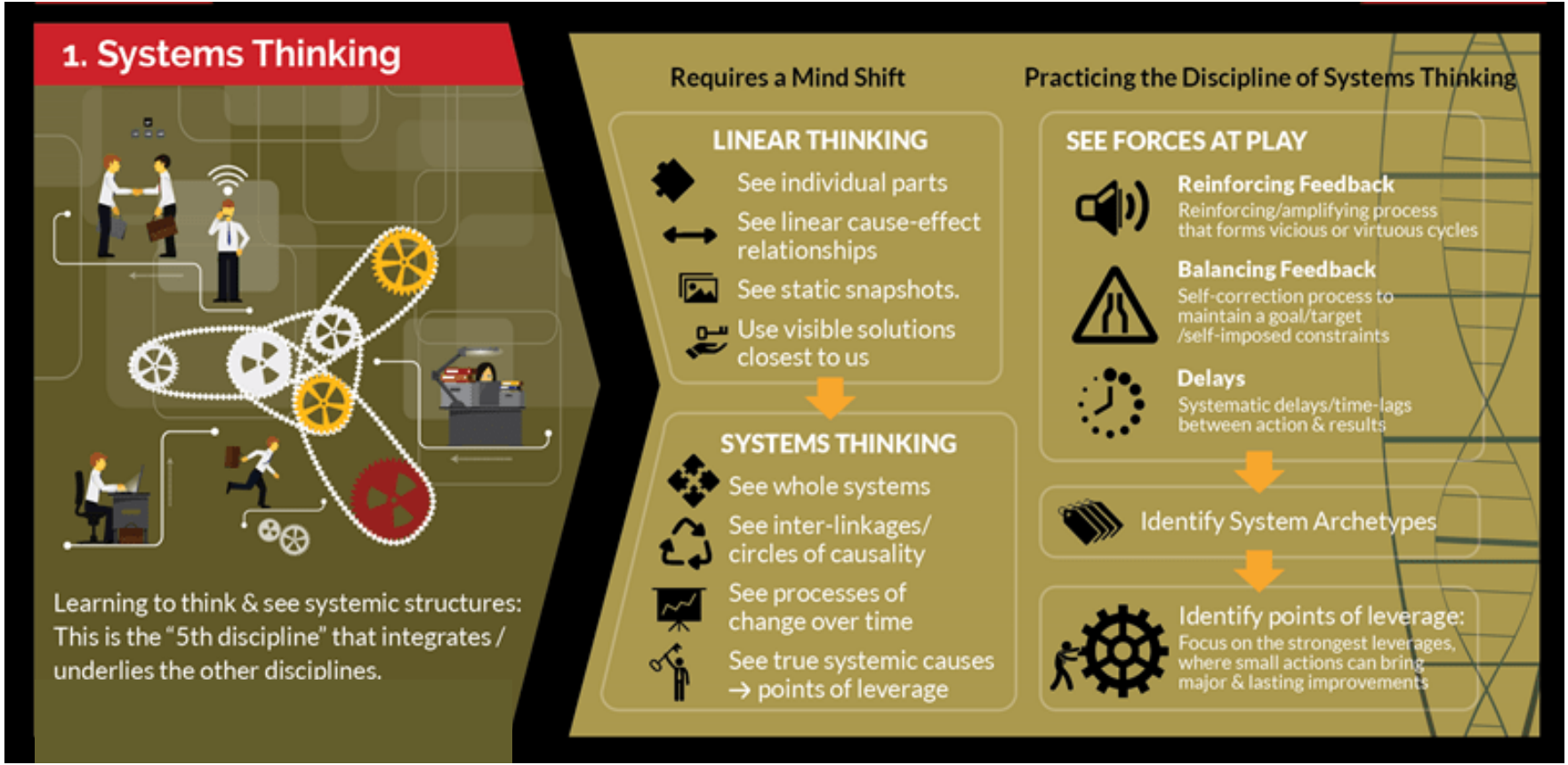
Organisational-alpha. The Peer Study Best-bits Model

The TAI Peer Study generated this list of key features of best practice to be considered. These points came from the discussions with peers and emerged literally as 'best bits' of practice. The first column maps from the Canadian model*, the other two columns are new features in the peers' and our thinking. But context will vary, no one size fits all and funds should be selecting *their best bits* from this list of best bits

	Canadian Model best bits	Whole Fund best bits	Soft Stuff best bits
Governance Model	**#1. Governance & fiduciary integrity** ▪ Independent, simple mandate and independent, strong board ▪ Pursuit of financial goals above all else ▪ Governance that addresses complexity	**#2. Risk 2.0** ▪ Managing risk, uncertainty, robustness and resilience ▪ Risk understood wider, deeper, longer ▪ Particular dependence on #1, #5 & #9	**#3. Soft stuff** ▪ The soft stuff is the hard stuff ▪ Superpowers: identity & strategy; culture, governance & leadership ▪ Progression of tech in AI x HI equation
Investment Model	**#4. Private market emphasis** ▪ Dependency on stronger joint IP ▪ Probable dependency on higher, more diverse allocations ▪ Particular dependence on #7	**#5. TPA-Whole Fund** ▪ Investment optimising (TPA) beats governance satisficing (SAA) ▪ TPA is whole fund, goals-driven, joined-up, dynamic, with portfolio scorecards	**#6. 3D Investing** ▪ The returns we need must come from a well-functioning system ▪ Provides alignment to fiduciary duty ▪ Particular dependence on #3 & #9
Operating Model	**#7. Org design & internalisation** ▪ T-shaped org design and competencies ▪ An optimal *co-opetition* design through a combination of internal and external IP ▪ On- the-ground internal IP in alts	**#8. Balanced Scorecards** ▪ Multiple comparators beat benchmarks ▪ Addressing materiality & provenance in data; reflecting standards of knowledge ▪ Particular dependence on #9	**#9. Beliefs** ▪ The power of critical & systems thinking ▪ Well-justified propositions that are aligned, accurate, & actionable ▪ Beliefs that address identity & purpose

* See van Gelderen | On the sustainability of the Canadian Model | SSRN 2024

Systems thinking



Source: Reading Graphics

Propositions on investment skill

Thinking Ahead Institute
An innovation network founded by WTW

Systems and systems thinking

Define your terms

Connecting dots - *seeing wholes as inter-connected not isolated parts*
Recognising patterns - *seeing moving patterns not static pictures*
Socialising solutions - *seeing solutions through a collective not individual effort*

The definition of systems thinking in Arnold & Wade (2015)
Systems thinking is a set of synergistic analytic skills used to improve the capability of identifying and understanding systems, predicting their behaviours, and devising modifications to them in order to produce desired effects.

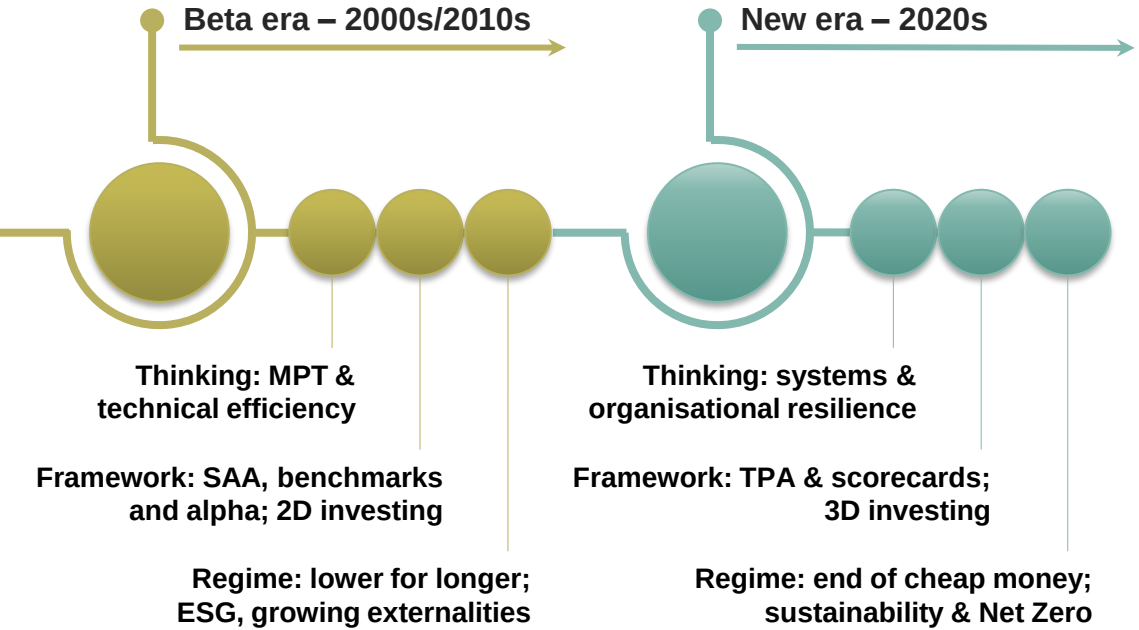
The system is defined as a collection of elements that are inter-connected and fulfil a certain purpose or function.

Three key characteristics

- Each system has its elements, its purpose or function, and, often, associated goals. The elements in the systems and the systems themselves are linked through various interconnections, some intended and some not
- There is no single system; there are multiple systems of which we are a part. These systems overlap and have a hierarchy, and some systems contain other systems
- Systems are always changing; they add new elements, lose old elements, change their interconnections, and evolve different functions. These systems are always adapting to changing circumstances hence *complex adaptive systems*.

Investment industry era change – thinking, framework and regime

Change on multiple fronts Structural change is generally slow and sticky



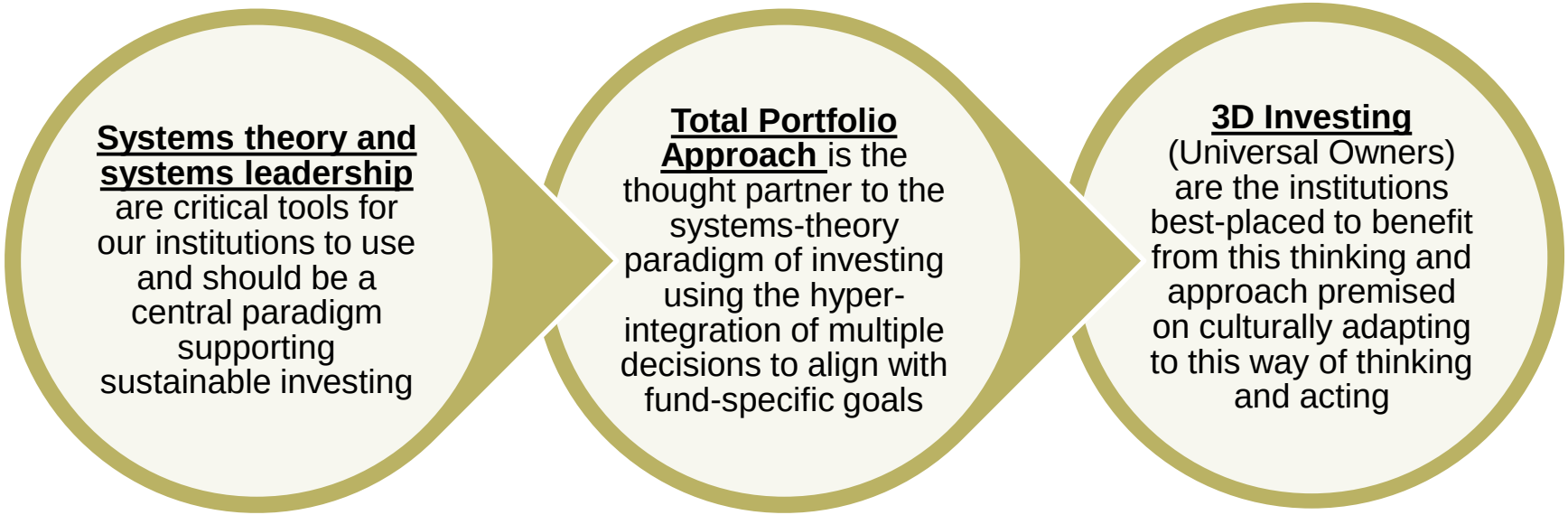
- Are we at a major inflexion point in terms of how the world operates? **The world has several crises** to wrestle with. It has geopolitics, it has climate change and the issues of inequality that could collectively challenge capitalism as we know it.
- The principal asset owner model of **multiple external managers has come under pressure**. Internalisation has progressed, particularly in listed markets and further versions that internalise private market investing via offshore investment teams are now being tried. These carry many advantages, but their effectiveness can only be judged over long periods of time with individual contexts significant.
- All asset owners retain complex operating models using many third parties. They have always had **multiple stakeholders,** but the reality is that stakeholder management has got harder with more pressure being brought to bear by sponsors. In this situation, it is no surprise that governance arrangements are under pressure.
- The macro has fundamentally changed and quite swiftly from lower to longer to the end of cheap money. Investment beliefs need a big makeover with rates and inflation very different going forward. We again face lower real return expectations.

Big changes occurring in the big ecosystem settings

The big reset

Systems leadership	▪ Mindset shift, to work in such close collaboration, to find shared benefits ▪ To build traction there needs to be a story, a theory and some figures
Aligning purpose, vision, and strategy	▪ Organisations have weak alignment ▪ Socialisation is time-intensive but results-intensive ▪ There are always moments to relitigate the mix
Evolving board practices	▪ Deepening the communications with stakeholders about key issues ▪ Reinforcing the apolitical mandate of the fund but working with the growing likelihood of a bigger political context

There is a quiet revolution coming here…



Where next? Systems innovation

Source: Leadership and Systemic Innovation | Laszlo | 2018

Alexander Laszlo work on systems innovation	Alexander Laszlo's work has come to us via Alva Devoy's recommendation and has both personal and industry significance for us So be prepared for some personal commentary We took three things from it – the framing of systems-thinking and specifically how innovation should play a bit part in systems evolution; -- the continuum of controlling, influencing and experiencing systems outcomes – some blend of acceptance and some activism needed -- the state of coherence we are in with the system, where we can think narrowly (selves) but have opportunities and upside with thinking more broadly, expansively and imaginatively; and this latter state is a more optimistic answer to the anthropogenic existential spectre
Innovation	The focus on innovation is helpful in defining the concept as the space between the invention of an idea and diffusion; and suggesting this could be any tool or technique, any physical equipment or method of doing or making, by which human capability is extended. The potential to foster a positive VUCA world — one based on Vision, Understanding, Collaboration and Agility also resonates
Protopian visions	Staying practical he calls out a focus on protopian visions (but easier said than done?) *Protopian scenarios serve as systemic nurturance frameworks for the design and curation of socio-technical systems that are evolutionarily viable, actionable and attainable.* *Those who wish to engage in such processes of systemic innovation immerse themselves in, and help to create, ecologies of new ways of researching, developing and innovating socio-technical solutionatiques that embody social values, technological creativity, economic opportunity, and environmental integrity.*
The states of controlling, influencing, experiencing	'*We cannot direct the wind, but we can adjust the sails'.* *This is learning to sail the currents of evolution — not just to 'go with the flow' but to become active participants in the journey — this is at the heart of the ESD (evolutionary systemic design)* *Both individually and collectively, we can learn how to have change happen through us, not to us!*
Good problem summary	*Even a cursory glance at the impact humankind is having on the life support systems of Earth makes patent the unsustainability of contemporary cultures of individualism and self-entitlement. Creating a new culture through an ethic adapted to our time is not a quest of foolish arrogance – it is the survival imperative for sustainable co-existence of humankind with planet Earth.* This spectre seems to be 100% reasonable, but only about 5% accepted. So what is the transformational change that is actionable and attainable? This is a bit more hazy, not surprisingly.

Takeaways from systems primer – wisdom*

Having a system for balancing business-as-usual with business-beyond-usual

BaU – Business-as-Usual	BbU – Business-beyond-Usual
1A. Look out for systems angles – the mindset change, the growth	2A. Starts with socialising and learning new thinking. Systems Curriculum, other resources**, take the test***
1B. Systems leadership is a system of leadership that can be widely applied starting now	2B. Undertake beliefs work. Investment beliefs and values. Organisational beliefs and values

* ’Wisdom’ = What I should do on Monday
** Note reading options, Meadows, Senge, Donaldson
*** Take the test – are you a systems thinker?
Systems thinking as one part wiring, one part study, one part practice

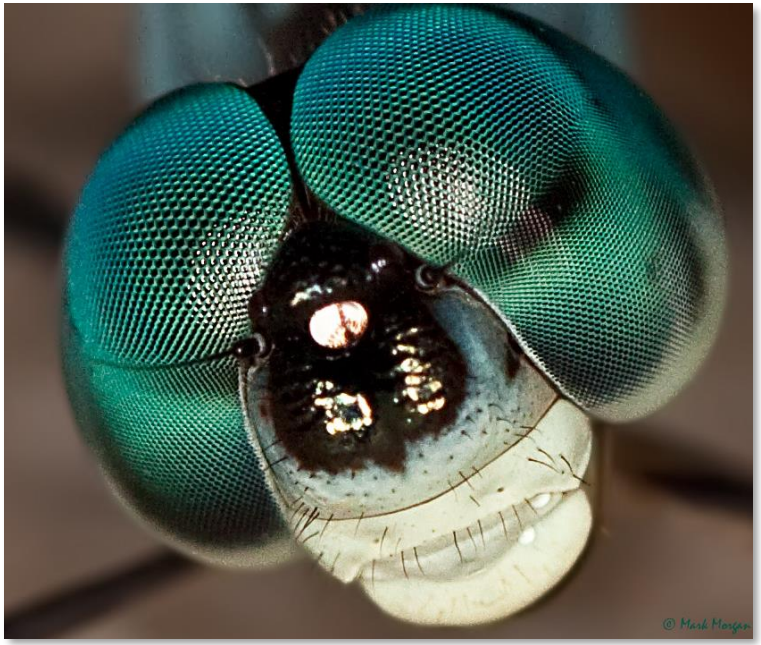
Takeaways from systemic risk

Socialise understanding. Reset modelling. Deepen resilience.

BaU – Business-as-Usual	BbU – Business-beyond-Usual
1A. Socialise understanding. Some structured learning	2A. Remodel the risk budget to integrate systemic risk allowing for the low-provenance
1B. Socialise the wider, softer, longer principles	2B. Evolve the scenarios and theory of change. Build out the intelligence stack. Develop the resilience

Multiple lenses – dragonfly eyes

- The challenge is to build better perspectives and take better decisions by reducing blind spots and enhancing the accuracy of our vision
- The best way to reduce our blind spots is to change our perspective
- Think of each new perspective as a model and a lens through which you can see the world. Models simplify the world into useable chunks



Dragonfly eyes have 30,000 lenses

Concepts used in the Peer Study - systems thinking

The concept of systems thinking has particular relevance to this Project

Systems thinking

It can be summarised in three elements: connecting dots, recognising patterns, socialising solutions.

It is also emphasising:

- the whole over the parts,
- the collective over the individual,
- the inter-connectedness of the elements of system
- the emergent properties and changing features of the system over time
- the purpose or function of the system.

Ways of simplifying the complex

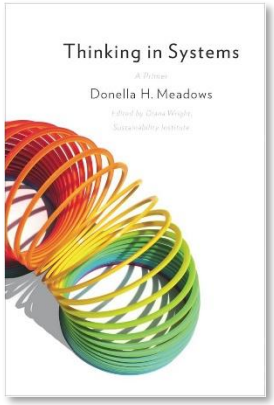
- Because of the investment ecosystem's complexity, looking at the asset owner across all factors at once runs the risk of creating confusion; there are too many moving parts to do this satisfactorily. Thus, in our work we separate investment organisations and their sustainability ambitions into sub-systems or "models": the systems model, the business model, the investment model, the governance model, and the people model
- Viewing the investment ecosystem through these models enables us to study the issues at the highest level, concentrate our attention on understandable and usable chunks, and focus on best practice principles.
- It also introduces the framing of this analysis. First top-down looking at good design. Secondly, bottom-up looking for good planning, execution and review. Thirdly, by reference to past results. And fourth by reference to ancillary factors that describe desirable results or states – these items are more like a box-tick and are important as part of an evaluation, but a small part of the whole picture.

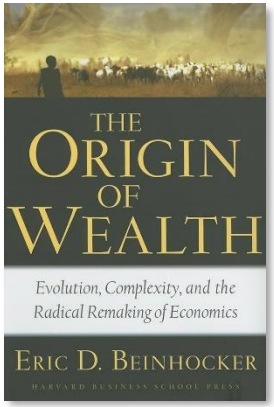
Advantages of systems thinking

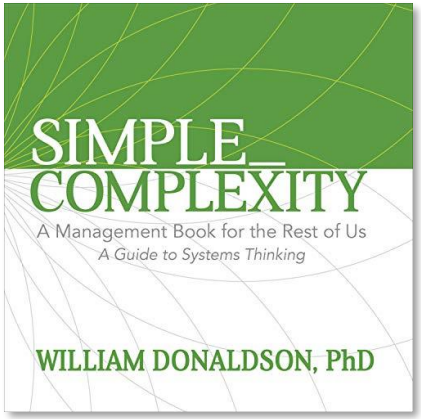
A number of advantages flow from this way of thinking

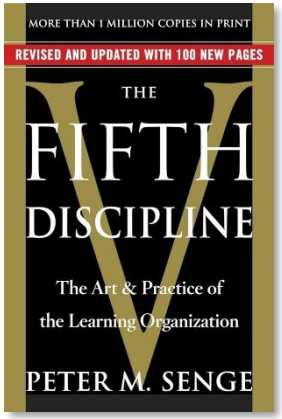
- We can understand organisations at a relatively nuanced level
- We can make progress with understanding some of the tricky patterns that organisations experience
- We can incorporate some of the tricky moving patterns experienced in organisations – like the problems of the *tragedy of the commons or the tragedy of the horizons* where failure to recognize a reality can be damaging
- The thinking enables the *storyline* unfolding in future (say what to expect next year) can be embedded in a *theory* where we have the *figures* as evidence
- We can compare different perspectives from both different angles, but from different levels. Systems thinking involves being comfortable moving in agile fashion from a high level (think of the meta level looking down at the entire investment ecosystem) to a low level (think of the micro-level zooming in on an individual or a team). Adding these perspectives together has a critical value to thinking and acting
- Systems thinking comes with a number of practical tools for analysing problems and implementing solutions, such as the use of the following:
  - System patterns (archetypes): Using common patterns in systems to understand what is happening now and to prepare for what might happen in the future
  - Systemic risk models: Using models and scenarios that consider risks affecting entire systems, to help with managing risks and assessing how much overall market risk is influenced by these sources
  - Systems leadership models: Using leadership models that see problems as shared systems-related challenges, approach them with a holistic and longer-term perspective, and encourage team and cooperative solutions.

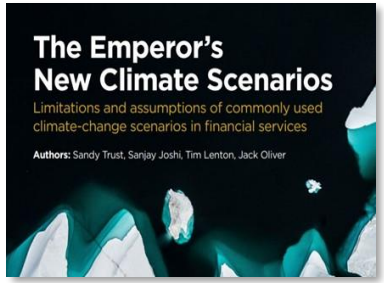
Book list and resources











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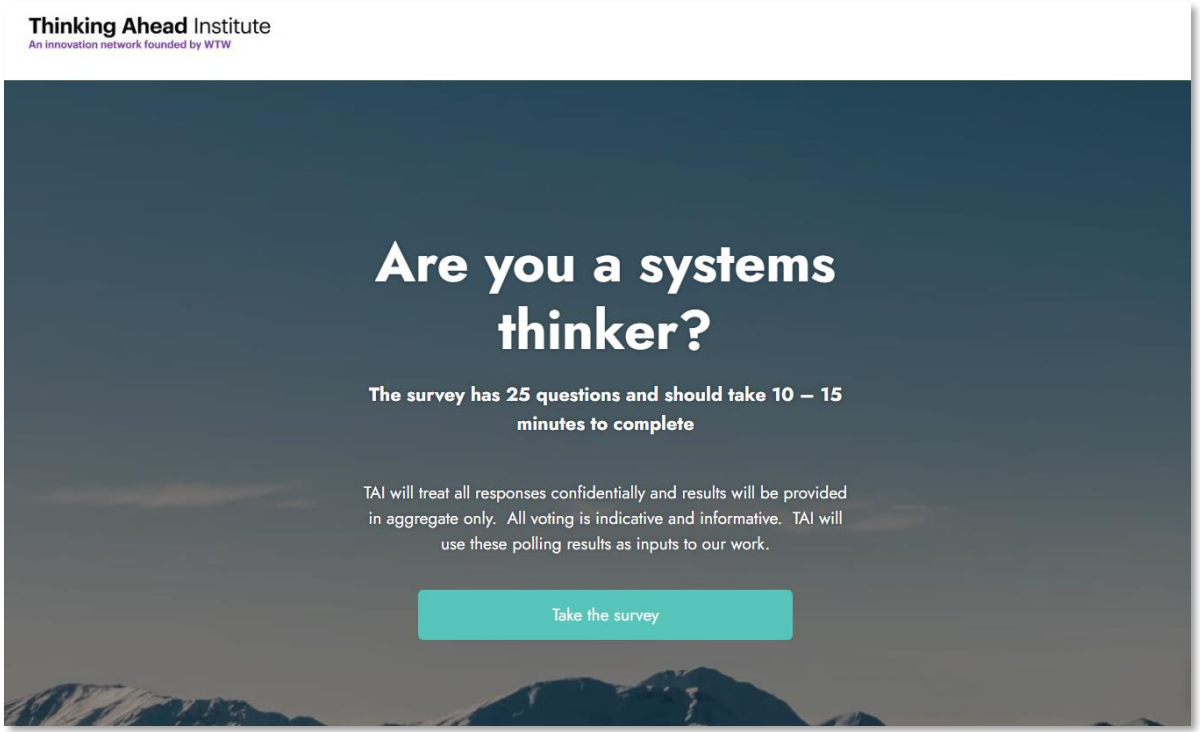

https://areyouasystemsthinker.scoreapp.com/

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