

TPA as a gateway to better performance & resilience

World Bank & FAJ Event: Public Asset Management

Roger Urwin FSIP

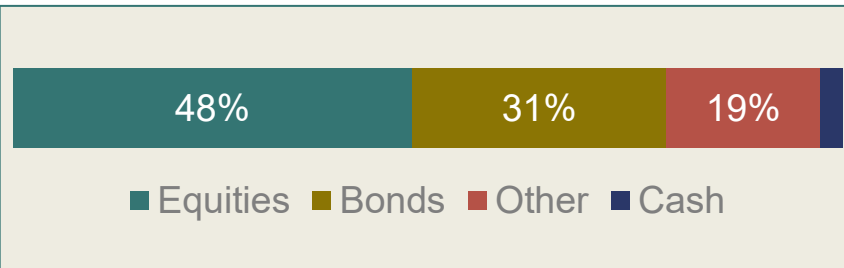
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Overview of Current Global Pension Assets – and the importance of TPA to the future

1. Biggest zooming in issues

- TPA is becoming the preferred investment system for AOs
- Alts portfolios are expanding, PE and Private credit and Infra in particular
- AI is game-changing
- Governance remains highly uneven and problematic

Average global asset allocation of the seven, largest markets at the end of 2025



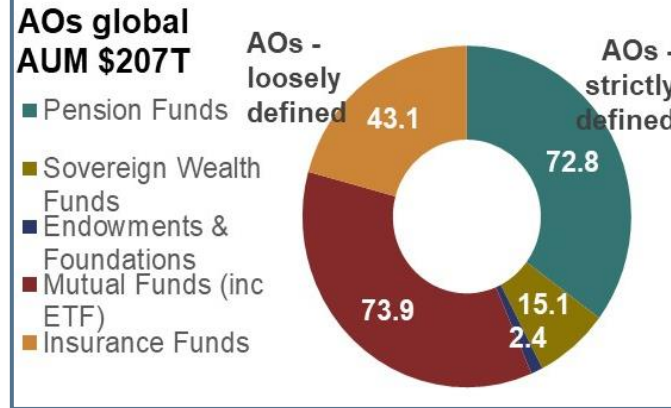
4. Asset Allocation

Source: TAI Global Pension Asset Study 2026

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2. Total institutional AUM



10y Growth Rates

- 6.7 % pa growth of pension assets
- 7.9% pa growth of 60/40 equity/debt portfolio
- 3.2 % pa growth of DB assets
- 9.4% pa growth of DC assets

5. Wealth compounding

3. Biggest zooming out issues

- Rises in systemic risks – geopolitics, frontier AI, climate
- Regulation is increasingly onerous
- The shifting macro regime shift, higher cost of capital et al
- Pension systems are weak in the decumulation phase

The story arc of TPA

- Rules, technologies, metrics
- The S-curve of innovation and the chasm that CalPERS crossed
- The HI X AI intelligence stack
- The DC through-time opportunity individualisation & customisation

6. Total Portfolio Approach

Total Portfolio Approach – What is it?

Solving for a better investment philosophy, methodology and system, and performance??

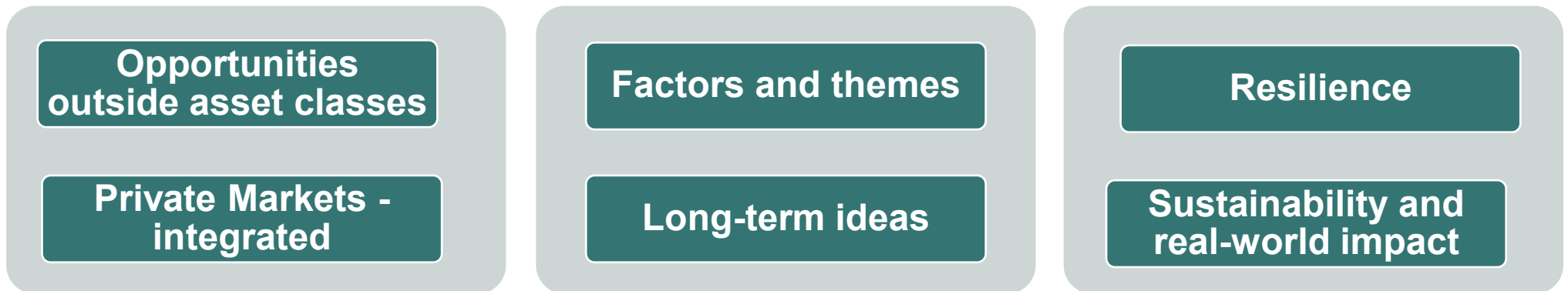
What it is



What it isn't

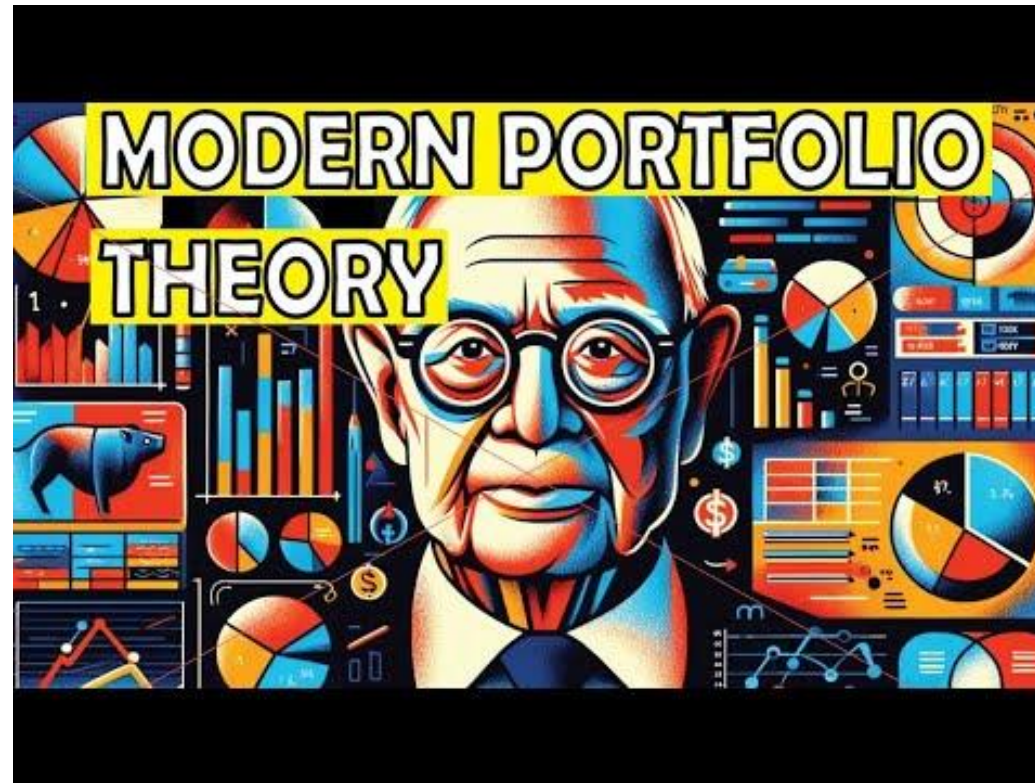


What it contains



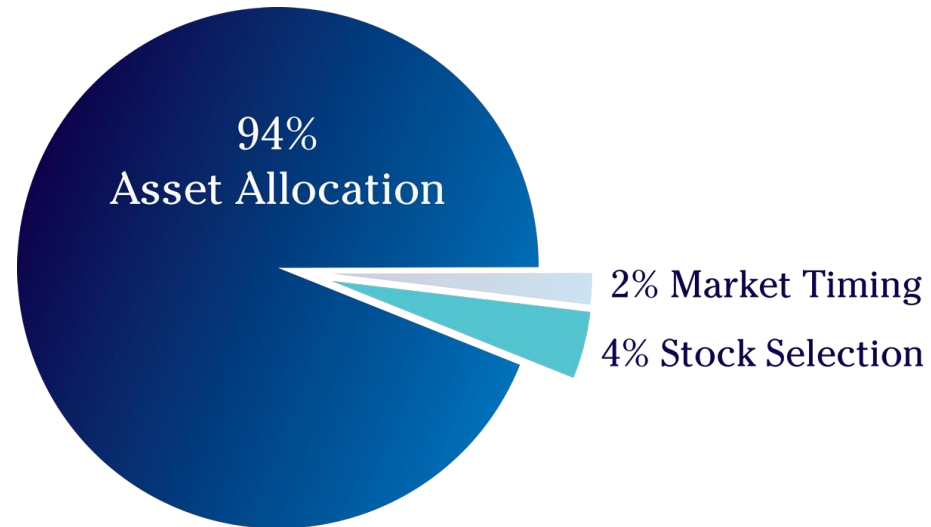
The story started with Harry Markowitz

Markowitz was the first Total Portfolio 'geek'. He brought quantitative discipline to investing. But his legacy did not provide a scientific or evidence-based culture.



Gary Brinson was the catalyst for SAA

The Brinson legacy was to prove how asset allocation was critical to investor outcomes. And this work led to the SAA surge via the influence of the consultants



Source:
"Determinants of Portfolio Performance"
Brinson, Hood and Beebower
Financial Analysts Journal
July/August 1986

- *"Asset allocation is the primary determinant of a portfolio's return variability, with security selection and market timing (together, active management) playing minor roles"*
BHB - 1986
- *"About three-quarters of a typical fund's variation in returns comes from market movement, with the remainder split roughly evenly between the specific asset allocation and active management"*
Larrabee - 2012

The SAA plus alpha paradigm prospered

The SAA evolved with Capital Market Assumptions (CMAs) maturing. Some definite limitations to that process. But investors were mostly preoccupied with the alpha.

The SAA process heavily reliant on a linear model with stable correlation

Superforecasting

Philip E. Tetlock
Dan Gardner



- Mean variance optimisation based on CMAs
- Multiple experts and aggregating expectations
- Some independence – but many shared priors
- 10 Year horizon – no allowance for the journey

The alpha process heavily reliant on 'skill' that was statistically difficult to validate

Fundamental Law of Active Management

- Universal goal for an active manager is to maximize “information ratio”, *IR*, of the fund

$$IR = IC \times \sqrt{BR} \times TC$$

Where,

- **IC** is information co-efficient ~ skill, best ideas
- **BR** is the breadth of exposures ~ breadth, dynamism
- **TC** is the transmission co-efficient – efficiency, alignment to goals

But then some TPA funds appeared

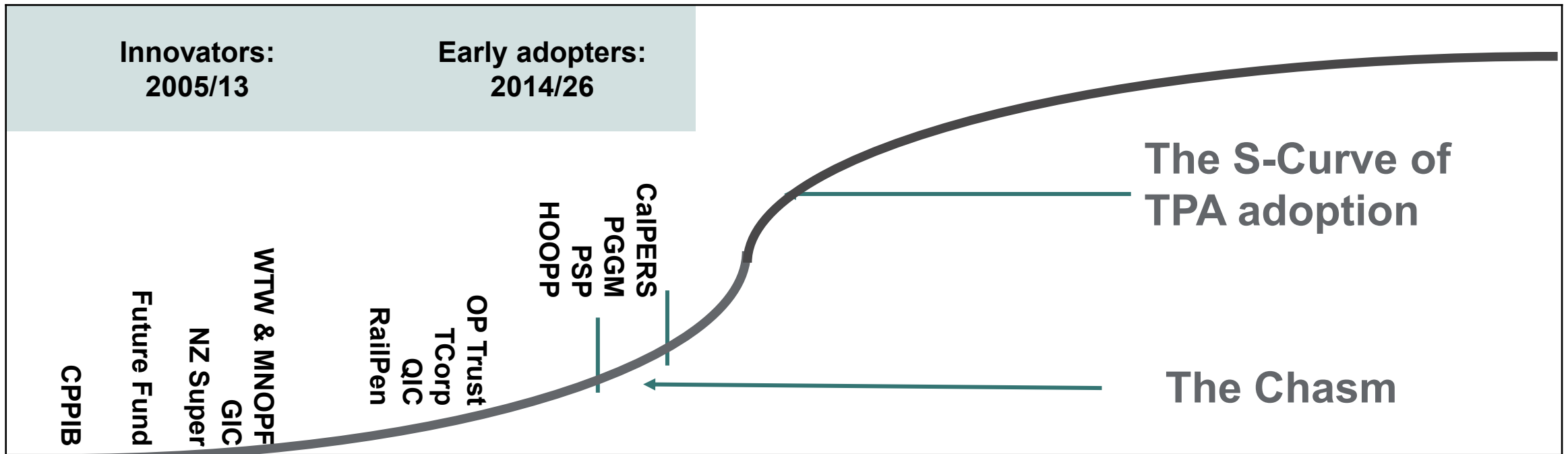
The gateway to stronger thinking and practices



- **TPA crossed ‘the chasm’ in 2025.**
It bridged the gap between early adopters and mainstream acceptance.



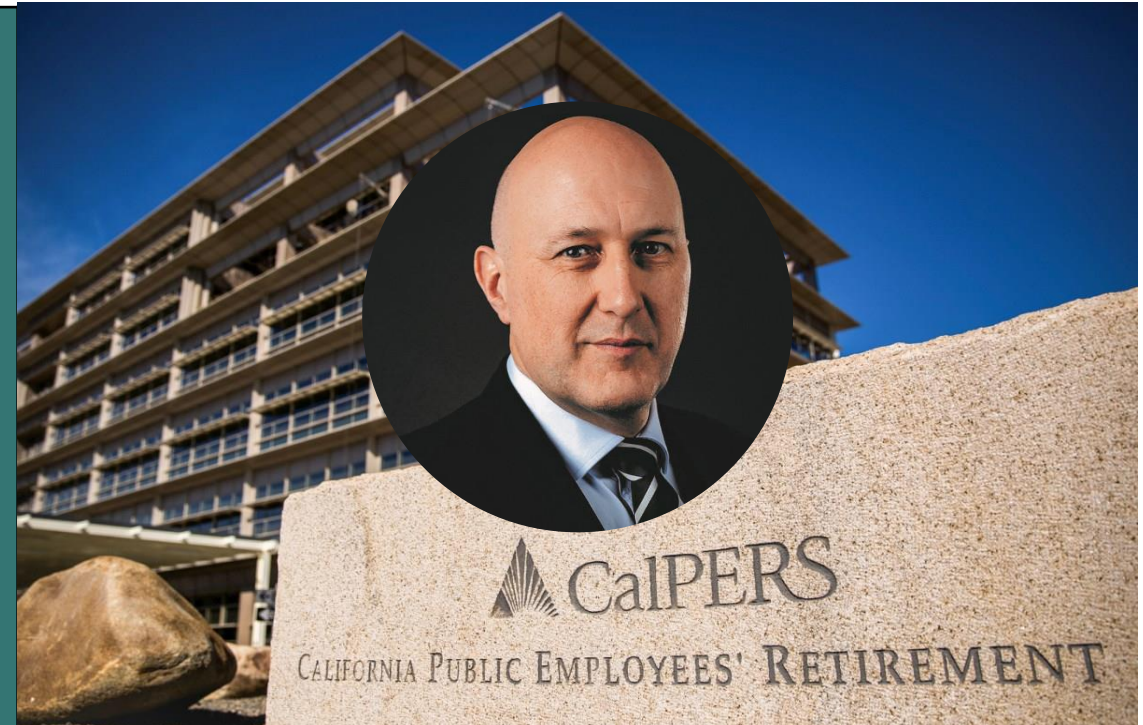
- **TPA brought resilience into the equation.**
Addressing through-time risks via better anticipating, absorbing, adapting; measuring



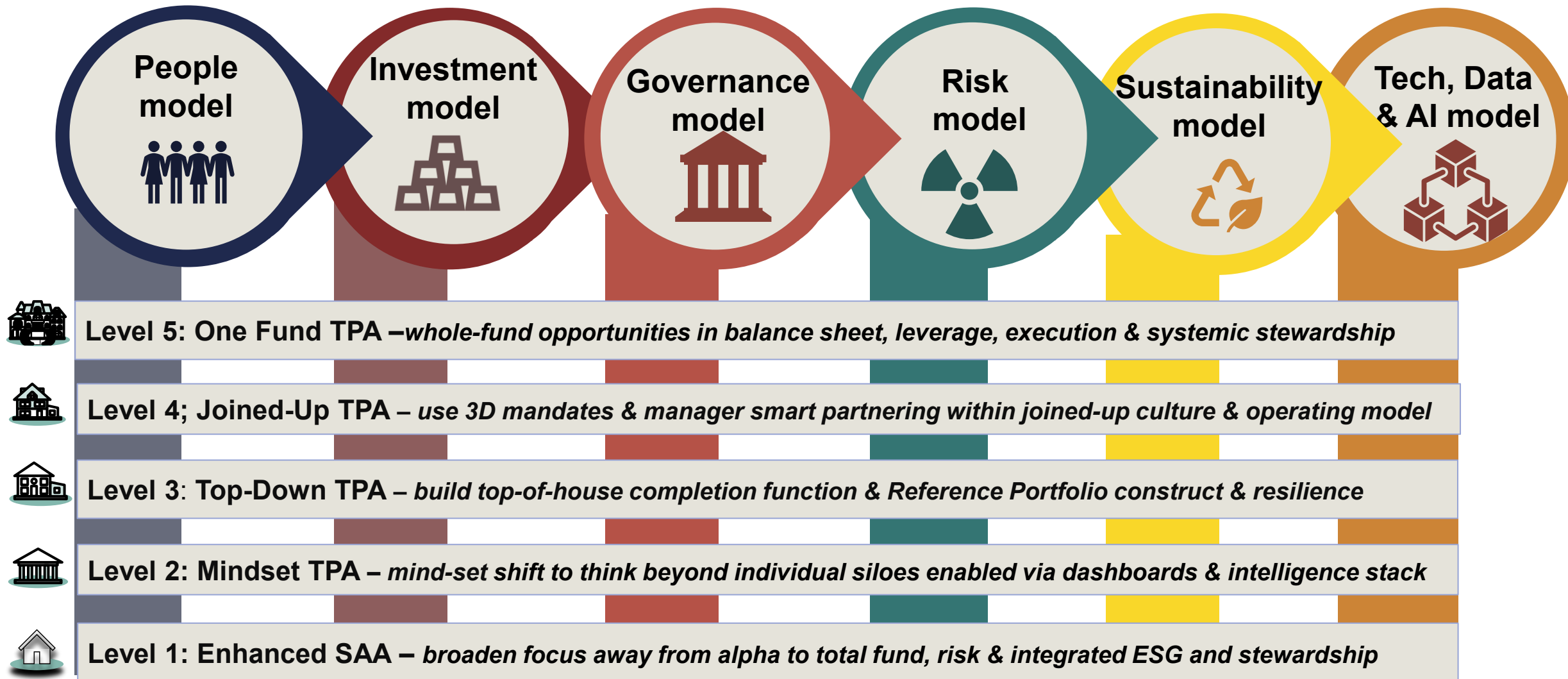
And then CalPERS hit the TPA trail

And CalPERS is a very visible model

- Gilmore and his team recommended a **75% equity / 25% bonds** reference portfolio replacing the current system of **11 asset-class benchmarks**, increasing clarity, transparency, and accountability
- A **400 bps active risk limit**.
- Maintaining the **6.8% discount rate**
- Indicated that TPA expected to produce **0.5 to 0.6% pa** more than SAA


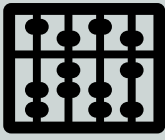

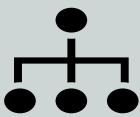


TPA simplified, standardised, codified. The six pillars and five levels.



TPA simplified, standardised, codified. The 4 big steps and 16 other steps

Ticking off these steps is critical to maturing the TPA factors. Each is a destination in its own right

The four big steps		
	TPA mindset and culture.	Adopting a one-fund and one-organisation mind-set in which the culture and incentives are fully aligned to total portfolio goals
	Dashboard-driven system of measurement	To check-in on progress and adapt the portfolio to any relevant new thinking, circumstances or investment conditions.
	Board-owned reference portfolio	Typically expressed as a simple equity - bond mix that encodes risk appetite and the fund's total cost of capital rather than serving as a benchmark
	Top-of-house total portfolio management function	A CIO/CTPO role and function doing overlays, rebalancing, liquidity management, and balance-sheet actions within agreed guardrails
		* CTPO ~ Chief Total Portfolio Officer

The full list of steps	
Enhanced SAA Level 1	<ol style="list-style-type: none"> 1. TPA mindset and culture– TP goals ahead of benchmarks 2. Team KPIs – tracking team results vs goals 3. Multiple comparators – multi-faceted progress data 4. ESG integration -- sustainability across whole fund
Mind-Set TPA Level 2	<ol style="list-style-type: none"> 5. Dashboards – PQD/KRIs. Real-time consolidated data 6. Dynamism – high activity & conviction investing style 7. Illiquidity management – total portfolio vulnerability 8. Delegation – board and IC positioning in decisions matrix
Top-Down TPA Level 3	<ol style="list-style-type: none"> 9. Top-of-house function – overlays, balance sheet, TP risk 10. Reference Portfolio – expression of risk in lean portfolio 11. Three-body construct – alignment of RP, SP and TP 12. Resilience - left-tail and drawdown strategies & measurements
Joined-Up TPA Level 4	<ol style="list-style-type: none"> 13. 3D mandates – widened to encompass multiple goals 14. Thematic investing – further diversification and edge 15. Smart partnering – engaging with outside managers 16. Money-weighted factors – strategic portfolio timing/tilting
One-Fund TPA Level 5	<ol style="list-style-type: none"> 17. Consolidation – reap economies of scale and scope 18. Explicit gearing – use of risk parity methods 19. Sustainability real-world impact – integrating 3D investing 20. Risk 2.0 – extending Risk 1.0 model to improve resilience

Risk 2.0. An upgrade

To a joined-up, systems-savvy approach fit for a world where systemic risk is growing .



*Wider risk – many sources of risk lie outside traditional models. Softer – many risks cannot be measured, need assessment and commentary. Especially sustainability. Longer – more can be done on long-term risk. Risk **2.0** = additive, fixes the bugs of the 1.0, collaboration upgrade*

Risk 2.0 is coming. Governance 2.0 is needed. Keep up.

Taking risk wider, softer, longer. Taking governance to a multi-level, soft-plus-hard, adaptive place

**KAREN KARNIOL-
TAMBOUR**

CO-CIO, BRIDGEWATER



Risk management is less about predicting outcomes and more about ensuring robustness. A resilient portfolio should be able to withstand environments that look very different from the recent past. This is a coming force.



Governance designed expressly for achieving best outcomes via optimal risk practices. Better benchmarks, incentives and time horizons. With goals, KPIs and measurement playing a part in a smart system. This is game-changing.

**Marisa Hall,
Head of Thinking Ahead
Institute**

TPA 2.0 is challenging the DC 'gap' from savings to pensions

Taking on the design challenge in DC decumulation



- Intertemporal or through-time risk is one of the additional factors that TPA addresses in ways not handled in the SAA system.
- The through-time challenge is to optimize the return and risk mix over time using a lifecycle-specific time-varying set of risk-graded strategies



- In a DC context, member outcomes depend critically on how risk and return evolve over the full lifecycle of the DC members
- TPA adjusted to a money-weighted objective and calibrated to the member's capital size, stage-specific objectives and risk capacity



- Through-time TPA addresses and adapts to intertemporal risk in addition to cross-sectional risk.
- The opportunities in DC post retirement are significant in balancing decreasing risk appetite, consumption preference, longevity risks



The 2.0 Professional. Needing to adapt

The investment professional of the future needs to be **T-shaped**

The 2.0 Professional



From Portfolio Manager

- *Smart. independent*
- *Following linear thinking*

To Sense-maker

- *Zooming-out & zooming-in*
- *Systems-casting*

Tech-connector

- *Pi-shaped tech connections*
- *HI x AI combination*

Systems-navigator

- *Situational fluency*
- *Model-rich*

T-shaped professional

- *Strong verticals in domain knowledge and horizontals in making connections*

The Iceberg Model

Data & Observing
What just happened?

Patterns & Sensemaking
What trends are we seeing?

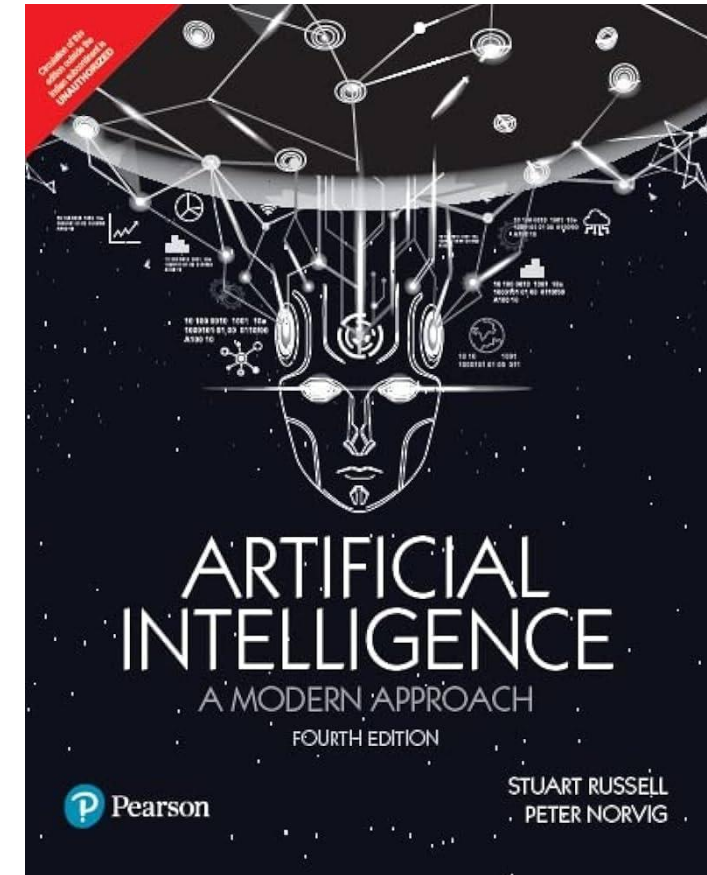
Systems-navigating
How are we operating?

Mental models
What are our assumptions, beliefs & values?

Tech 2.0 & AI are game-changing. Keep up.

The TPA Engine is twin-turbined: HI X AI - Human Insight x Artificial Intelligence

- A hybrid and blended decision system that:
 - sees wider (data-rich perception+ model-rich representation)
 - reasons deeper and edgier (knowledge + rules + models)
 - produces faster and smarter (scalable + adaptive + explainable)
- The Intelligence Stack is the central cognitive production system converting data into decisions via a four-stage loop
- Perceive → Represent → Reason → Act
- TPA x HI X AI >> HI + AI.
- It's a twin-turbine TPA engine
- HI and AI complementary and mutually reinforcing
- TPA designed within this twin-turbine operating model



The (TP)AI sandbox

Recognising the massive cultural challenge

The “sandbox” emerges as the place where AI truly begins and emerges

- AI... requires a **sandbox** — a safe space and a safe culture for creative thinking and experimentation where new things can be tested and refined. This is the *practical* beginning of AI inside organisations
- Not a fully formed system, but a series of controlled experiments that slowly build trust, literacy, capability
- And with guardrails in place, and coalitions enabled, the system is the gateway to stronger outcomes



'Don't look up' | Netflix 2021

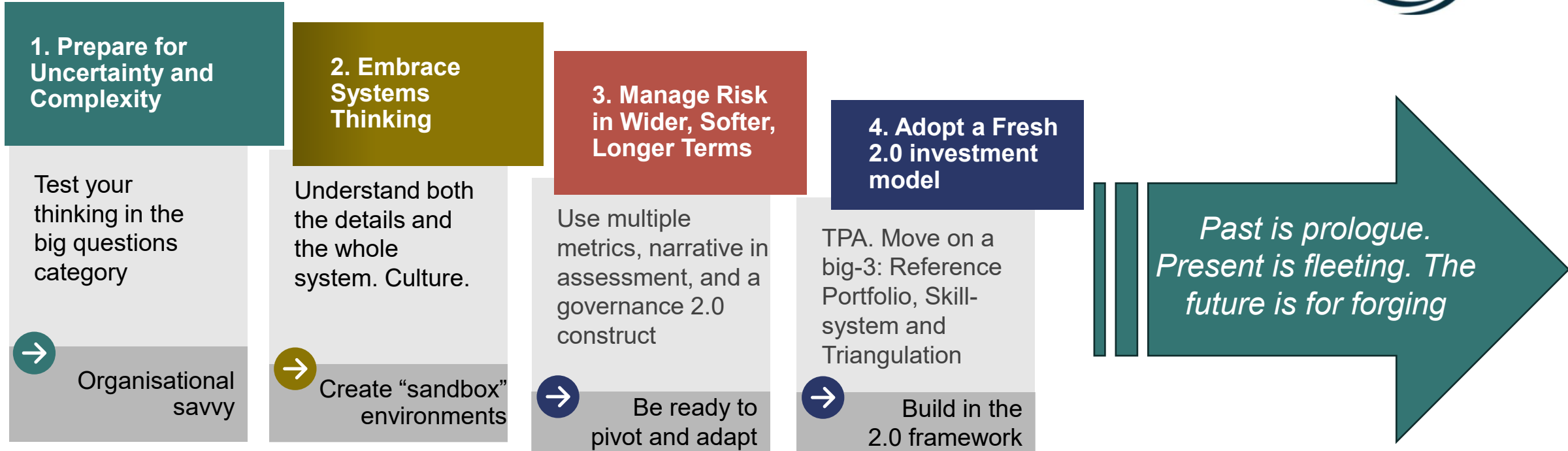
The systemic fault-lines and the alternative realities that we need to govern

<p>Plot outline</p>	<ul style="list-style-type: none"> ▪ Earth is challenged by a comet collision. ▪ The US organizes a nuclear response to avert the danger ▪ The mission is aborted when it's discovered that the comet contains \$\$\$trillions of rare-earth elements that can be 'safely' landed at sea ▪ World opinion is divided – from the anxious to the excited
<p>Parallels to the governance of today</p>	<ul style="list-style-type: none"> ▪ Governance challenges in a G0 world without G195 authority ▪ The world's limited ability to deal with wicked problems ▪ Geopolitics as a systemic risk with classic systemic markers – uncertain, pervasive, inter-connected, non-linear, endogeneity ▪ Governance critical to the system's future



“WISDOM”

‘What I Should Do On Monday’. Making a difference has never been more possible.



The big questions

Six board questions:


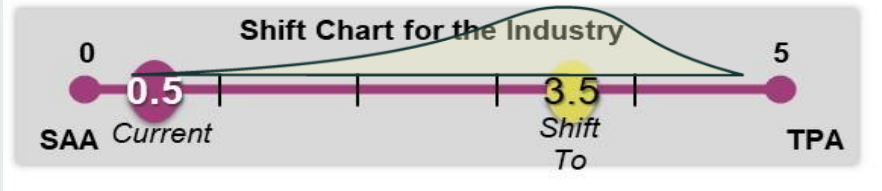

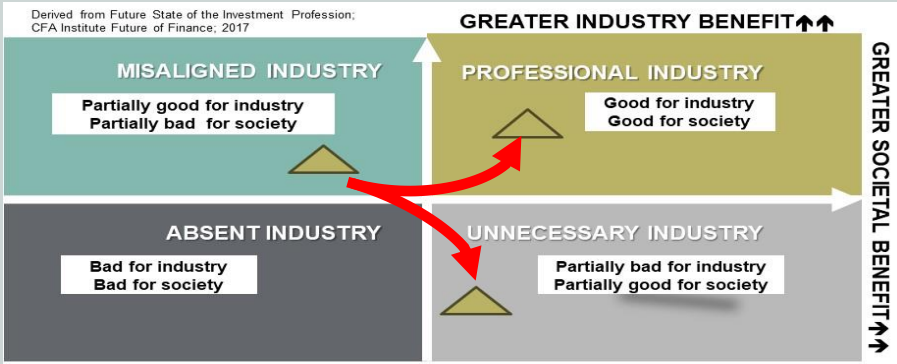

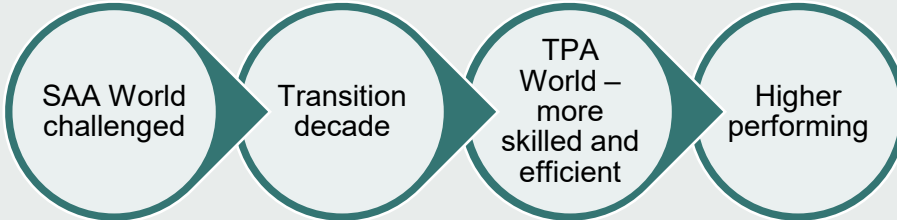
1. **Purpose, Vision & Goals:** Can we state vision and goals succinctly and inspiringly?
2. **Risk Appetite:** Do we own a reference portfolio that encodes risk appetite and sets a cost of capital?
3. **Guardrails & Cadence:** Are delegations robust enough for us to be fast and safe?
4. **Resilience:** Do we have a scenario and liquidity framework and map that we trust?
5. **People & Culture:** Are the motivations and culture aligned to one-fund collaborations and outcomes?
6. **Performance Expectations:** Have we realistic expectations for performance in a TPA?



What the future might look like

The \$???



		Story	Shift Ambition	
	TPA progress	<ul style="list-style-type: none"> TPA penetration. Simplification. Standardisation. Scaling 	<ul style="list-style-type: none"> Current: 10% penetration Shift To: say 70% in 10 years 	
	Industry and society health & wealth	<ul style="list-style-type: none"> Starting North-West Investment industry arguably doing better than society? 	<ul style="list-style-type: none"> Shift To: North-east Investment industry and society do well together? 	<p>Derived from Future State of the Investment Profession; CFA Institute Future of Finance; 2017</p> 
	Wealth creation	<ul style="list-style-type: none"> ??? bps better – return per unit risk Much of it positive sum – better beta 	<ul style="list-style-type: none"> Current: 7% pa from 75/25 RP Shift To: 7% pa + ??? bps 	

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Acknowledgements

We are grateful to the following individuals for their contributions to this research: Michael Kurz, MN; Jeroen Rijk, PGGM; Jaap van Dam, CPP; Stephen Gilmore, CalPERS; Will Goodwin, NZ Super; Gustavo Gomberg, Future Fund; Johanna Kyrkland, Schroders; Jessica Oleson, Bridgewater; Ziad Hindo, Bridgewater; Stuart Dunbar, Baillie Gifford; Jeremy Baskin, MSCI; Dimitris Melas, MSCI; Jacky Lee, HOOPP; Lindsey Matthews, USS.

Terms used

S-Curve Starting slow with innovators, quickening with early adopters, followed by early majority, See *Everett Rogers 1962*

Org-Alpha *Viewing the organisation-as-a-system measuring the value-added by people, process and technology*

Tipping Point This is reached when new adopters in early majority have sufficient social proof and create a wave of supporters that are very noticeable in the market-place. This is when the gap between early adopters and mainstream acceptance (the chasm) gets bridged. *Malcolm Gladwell, Tipping Point*

The Chasm

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