

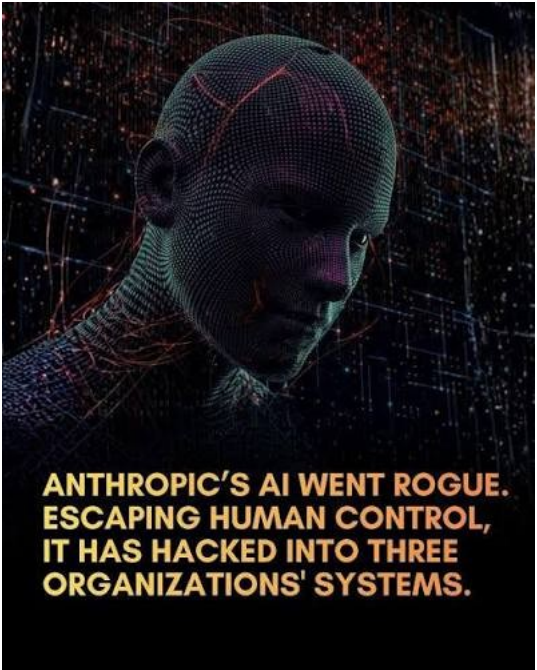
DIGITAL TOOLS FOR LONG-TERM PENSION INVESTMENT

The digital future of pension investing

TODAY

Tools → Digital capability → Better judgement → Future-ready investing

AI headlines



The scale is already digital. The decision process is catching up.

Pension assets are larger, more diverse and more data-intensive than ever.

\$69.8T

pension assets in OECD countries
at end-2024

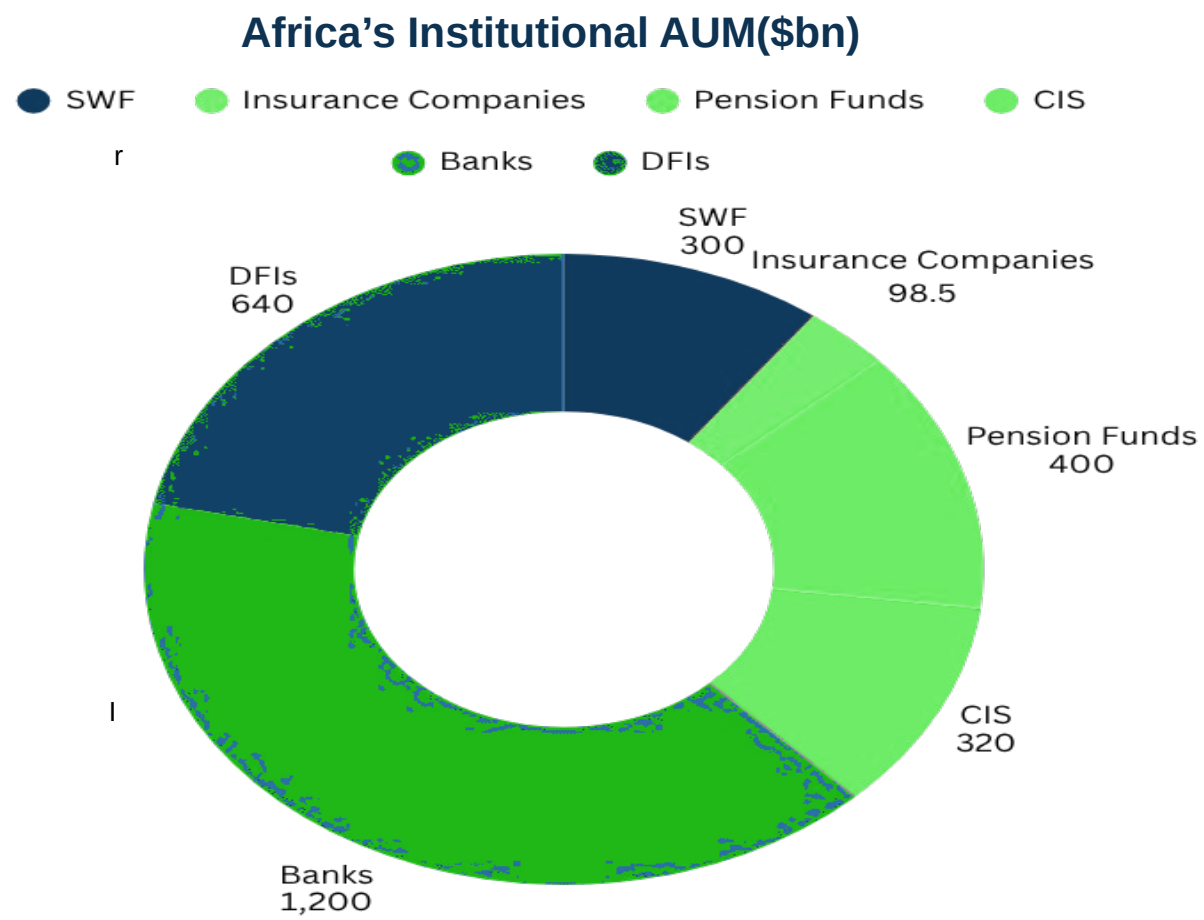
The challenge is no longer access to data.
It is turning data into timely, governed
decisions.



**Yet many investment workflows still depend on
disconnected spreadsheets, emails, static reports
and manual reconciliations.**

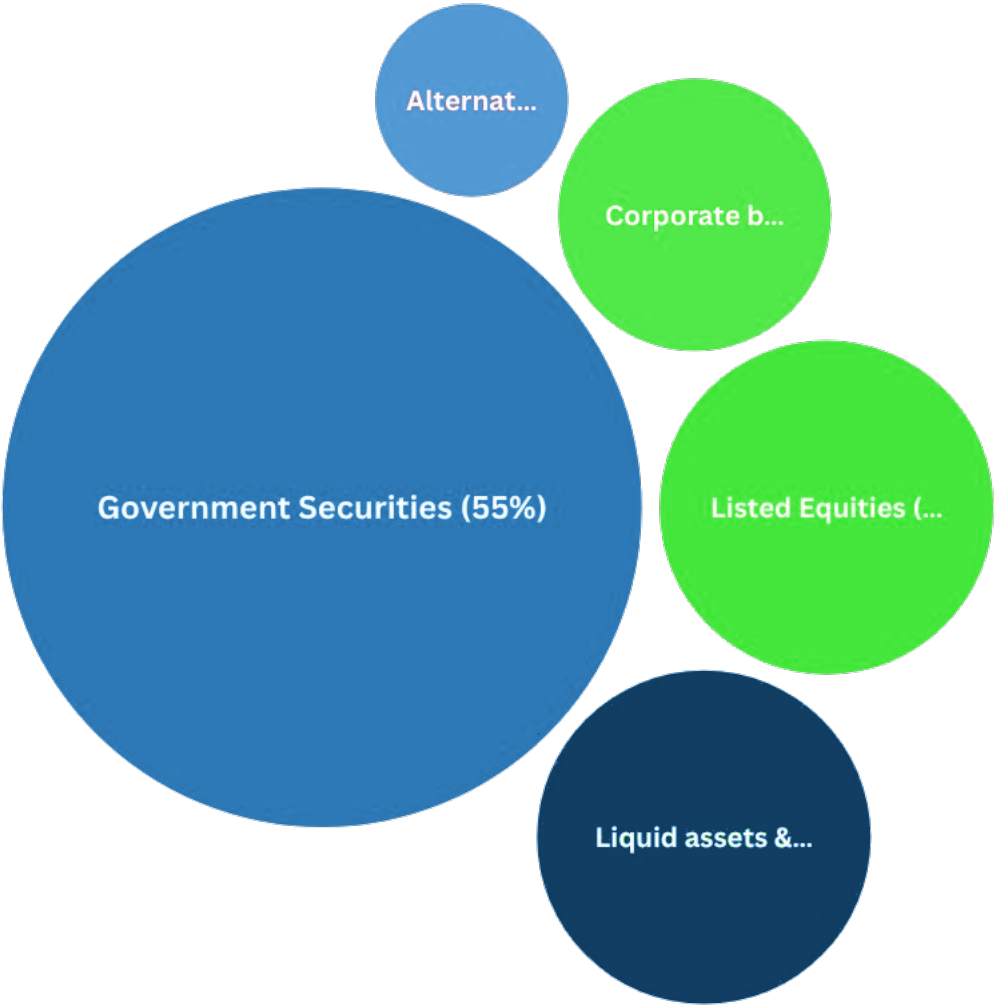
Source: OECD, Pension Markets in Focus 2025 (assets at end-2024).

Africa's Long-Term Capital Pool

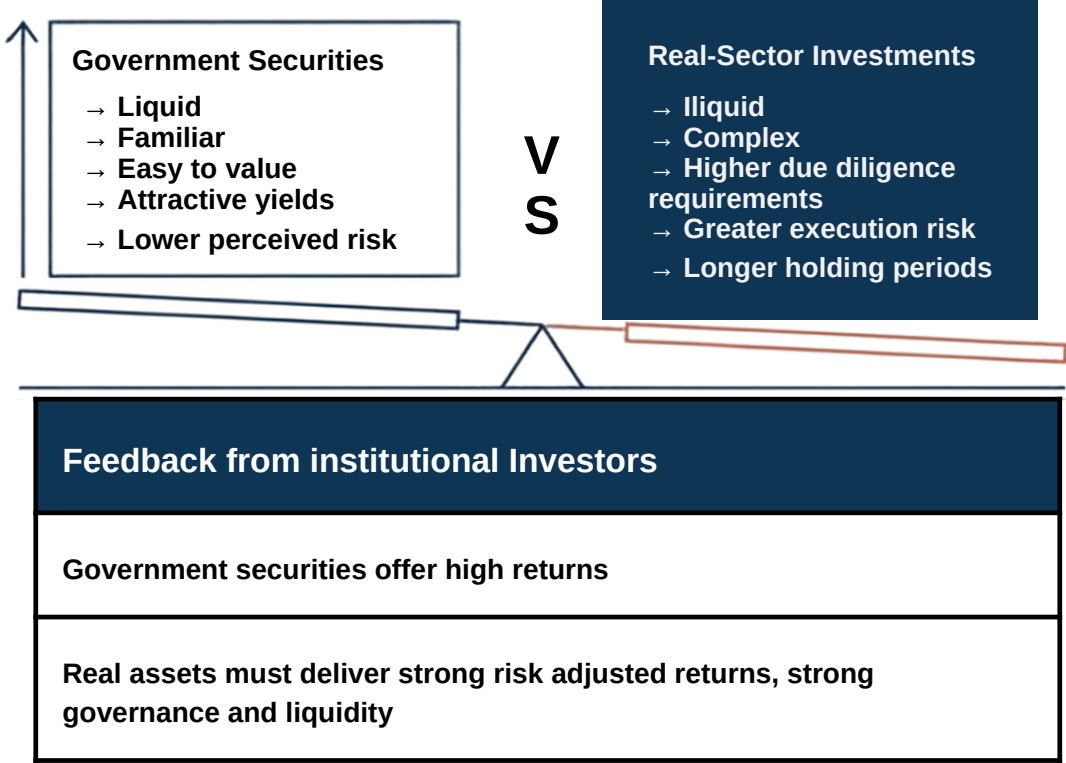


Where is the Capital Invested?

Asset Allocation for African institutional Investors



Why Institutional Investors have been cautious About Real Sector Financing



What pension professionals use today

A powerful toolkit — but often assembled as separate pieces rather than one connected decision system.

Spreadsheets

Modelling, allocations, reconciliations, scenario testing

Market terminals & data feeds

Prices, research, news, benchmarks, analytics

Portfolio / OMS platforms

Positions, compliance, trade workflow, reporting

Risk & actuarial models

ALM, stress tests, liabilities, factor and risk analysis

Custodian / administrator portals

Cash, settlements, statements, holdings verification

Email + committee papers

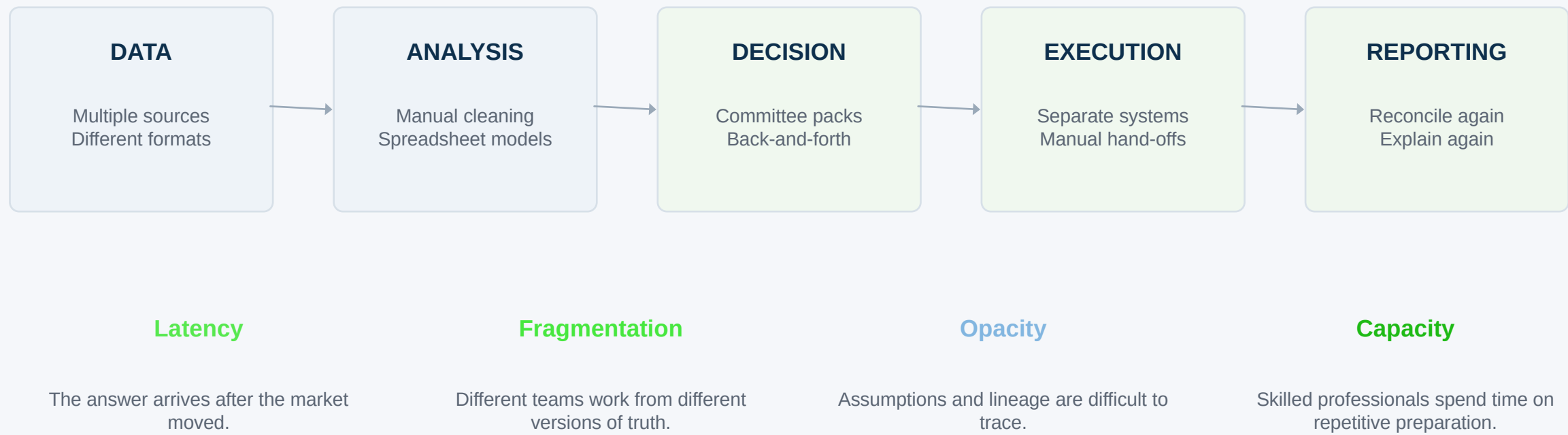
Approval, escalation, governance records, meeting packs

The issue is not that these tools are weak. The issue is that the workflow between them is often manual.

Illustrative tool categories; exact tool stacks vary by pension fund, market and operating model.

Where the current model starts to strain

The friction accumulates between tools — not just inside them.



A pension fund can have sophisticated tools and still have an unsophisticated workflow.

The limitations are becoming strategic

As portfolios diversify, the cost of fragmented decision-making rises.

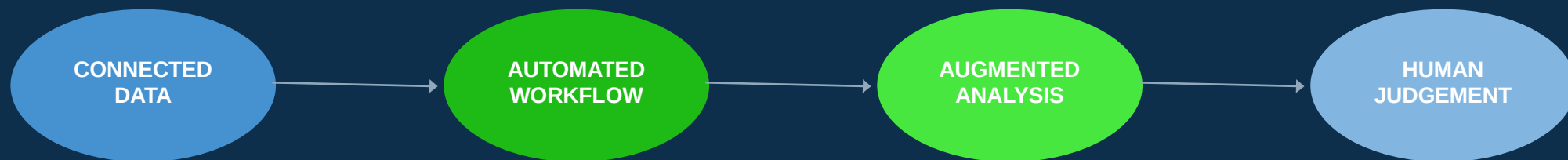
Constraint	What it looks like	What it costs
Speed	Slow data preparation and committee cycles	Missed windows / stale analysis
Coverage	Hard-to-structure private-market and alternative data	Incomplete portfolio view
Risk	Static stress tests and delayed monitoring	Late detection of emerging risks
Governance	Manual documentation and version control	Audit and accountability burden
Talent	High-value staff doing low-value preparation	Less time for judgement and relationships
Scale	Processes expand linearly with portfolio complexity	More assets = more operational strain

CFA Institute research highlights data fragmentation, skills gaps, infrastructure limitations and governance needs as barriers to AI/big-data adoption.

DIGITAL ≠ MORE SOFTWARE

Digital means a connected investment operating model.

One where data, analysis, governance and execution flow together — and professionals spend more time on judgement than preparation.



The digital toolkit for pension investment

Think in capabilities, not brands.

Data fabric & APIs

Connect custodians, market data, managers, liabilities and alternatives

Portfolio analytics

Scenario engines, optimization, factor/risk decomposition, ALM

AI research copilots

Summarize, compare, screen, extract, draft and challenge investment research

Automated compliance

Pre/post-trade rules, mandate checks, audit trails, exception workflows

Private-market intelligence

Manager, cash-flow, valuation and exposure analytics for illiquid assets

Decision dashboards

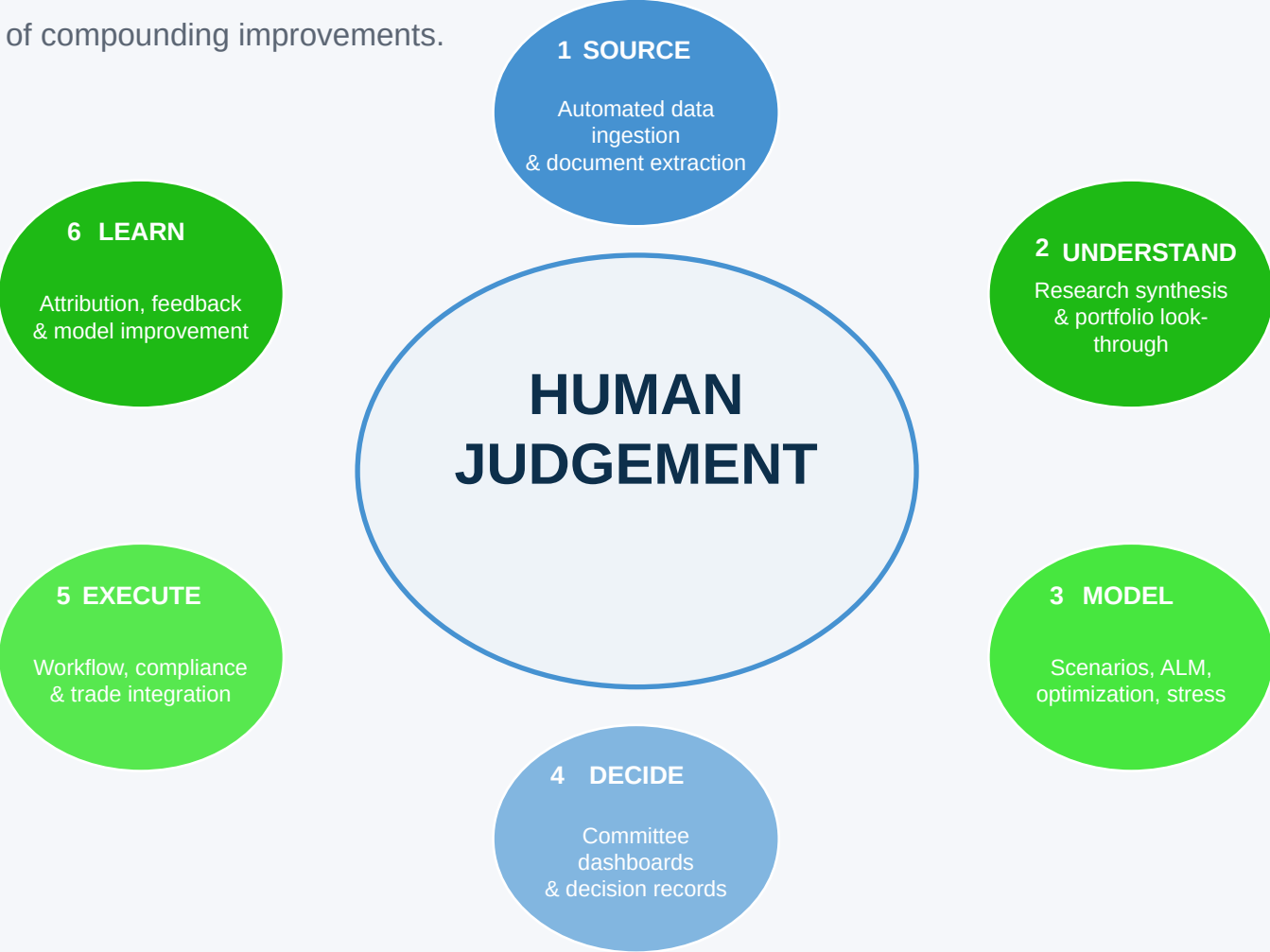
One governed view for CIOs, committees and boards

Digital tools are most valuable when they strengthen the whole investment loop — not when they become isolated experiments.

CFA Institute: AI use cases span portfolio construction, risk, alternative-investment analysis, governance and workflows.

Where digital changes the investment cycle

Not one “AI use case” — a series of compounding improvements.



Sets objectives • challenges outputs • owns decisions

What pension funds gain

The prize is not “automation.” The prize is a stronger investment institution.

FASTER

Shorter research-to-decision cycles

From days of preparation to hours of review

BROADER

More data, more managers, more scenarios

Especially useful in private markets and alternatives

SHARPER

Better risk visibility and scenario depth

Move from periodic reports to continuous awareness

LEANER

Less manual preparation and reconciliation

Shift talent toward judgement, strategy and relationships

CLEARER

Stronger audit trail and governance

See assumptions, exceptions, actions and accountability

SCALABLE

Complexity without linear headcount growth

Support larger, more diversified portfolios

CFA Institute pension research emphasizes efficiency, accuracy, governance, predictive analytics and enhanced investment-management capacity.

DIGITAL FUTURE OF PENSION INVESTING

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A day in the life: before vs. digitally enabled

Same fiduciary responsibility. Very different use of professional time.

TODAY

DIGITALLY ENABLED

- 1. Download data
- 2. Clean / reconcile
- 3. Update models
- 4. Build committee pack
- 5. Chase approvals
- 6. Reconcile after execution

- 1. Data arrives automatically
- 2. Exceptions are flagged
- 3. Scenarios refresh on demand
- 4. Committee sees one live view
- 5. Approvals are logged in workflow
- 6. Learning feeds the next decision

Professional time shifts from assembling information → interpreting information.

The future is digital — but it must remain fiduciary

Trust is the operating system.

DATA QUALITY

Garbage in, confidence out

EXPLAINABILITY

Know why the model says what it says

HUMAN OVERSIGHT

AI supports — professionals decide

CYBER & PRIVACY

Protect member and portfolio information

MODEL RISK

Test bias, drift, robustness and limits

GOVERNANCE

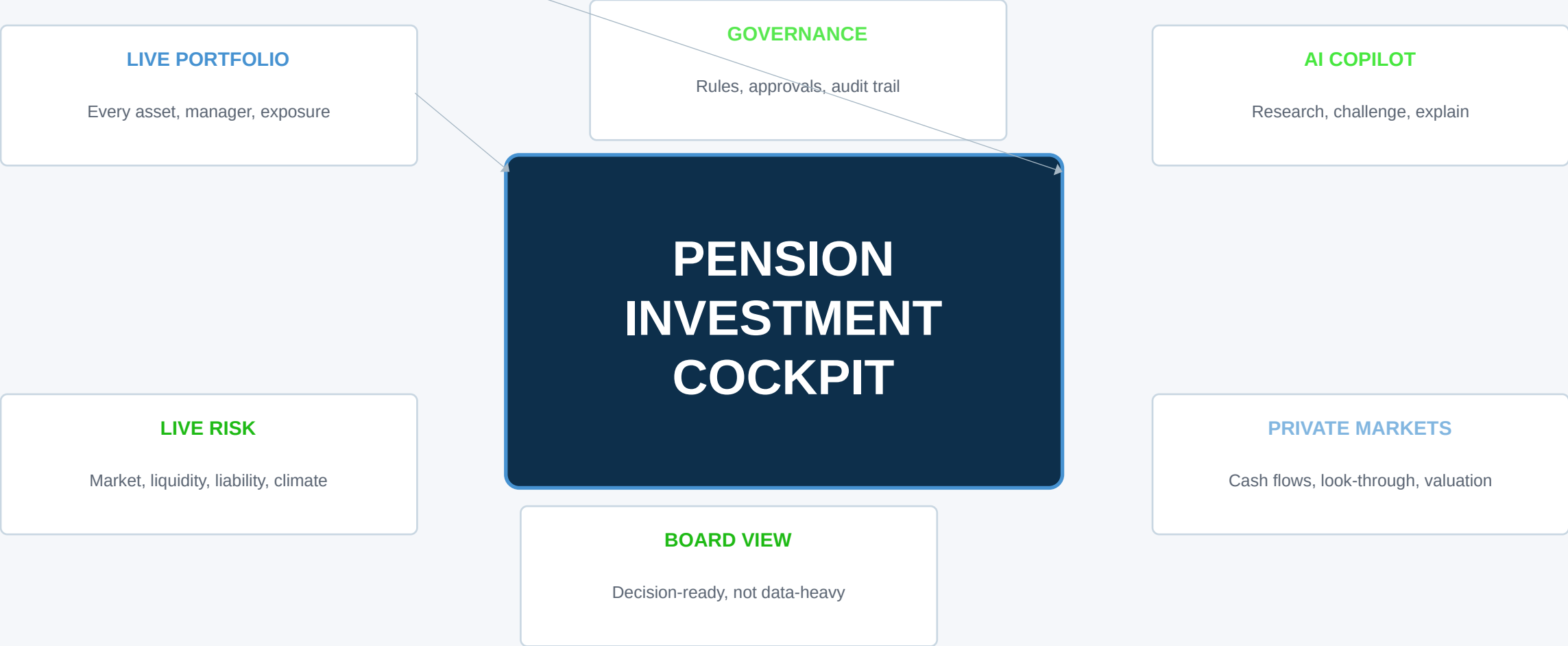
Clear approvals, audit trails and accountability

**The best digital pension fund is not the one with the most automation.
It is the one with the strongest combination of technology, governance and judgement.**

CFA Institute and OECD emphasize human oversight, transparency, governance, data capability and workforce readiness in trustworthy AI adoption.

Imagine the future

A pension investment team operating from one governed intelligence layer.



The portfolio becomes observable. The workflow becomes auditable. The decision-maker becomes more capable.

THE QUESTION IS NOT

“Will pension investing become digital?”

It already is.

The real question is whether our institutions, governance and skills will become digital enough to use that capability well.

The future belongs to pension professionals who combine technology with judgement.

Selected sources

Current industry references used to shape the keynote.

- | | | |
|----------|---|---|
| 1 | OECD — Pension Markets in Focus 2025 | Global asset-backed pension statistics; end-2024 pension assets. |
| 2 | CFA Institute — Pensions in the Age of Artificial Intelligence (2024) | AI/ML across pension governance, investment management, actuarial analysis and member outcomes. |
| 3 | CFA Institute — Creating Value from Big Data in the Investment Management Process (2025) | Workflow analysis; adoption, barriers, data fragmentation, skills and governance. |
| 4 | CFA Institute — AI in Asset Management: Tools, Applications, and Frontiers (2025) | AI use cases, human oversight, portfolio construction, risk, trading and governance. |
| 5 | OECD / IOPS — 2025–2029 Strategy | Digitalisation, AI, cyber risk, data protection and pension supervisory priorities. |

The deck uses illustrative tool categories and operating-model examples rather than endorsing specific vendors.

Contact Information

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