MAKING A DIFFERENCE
SINCE 1996

AI, retirement funds, and the next chapter

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EMERGE

PENSION LAWYERS ASSOCIATION 30TH ANNUAL CONFERENCE

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Demystifying AI

AI and its relevance – past, present and future

Past

"AI has been part of our imaginations and simmering in research labs since a handful of computer scientists rallied around the term at the Dartmouth Conferences in 1956 and birthed the field of AI…Over the past few years AI has exploded, and especially since 2015. Much of that has to do with the wide availability of GPUs that make parallel processing ever faster, cheaper, and more powerful."

Nvidia's website

Present(ish)

"ChatGPT is incredibly limited, but good enough at some things to create a misleading impression of greatness. It's a mistake to be relying on it for anything important right now. it's a preview of progress; we have lots of work to do on robustness and truthfulness."

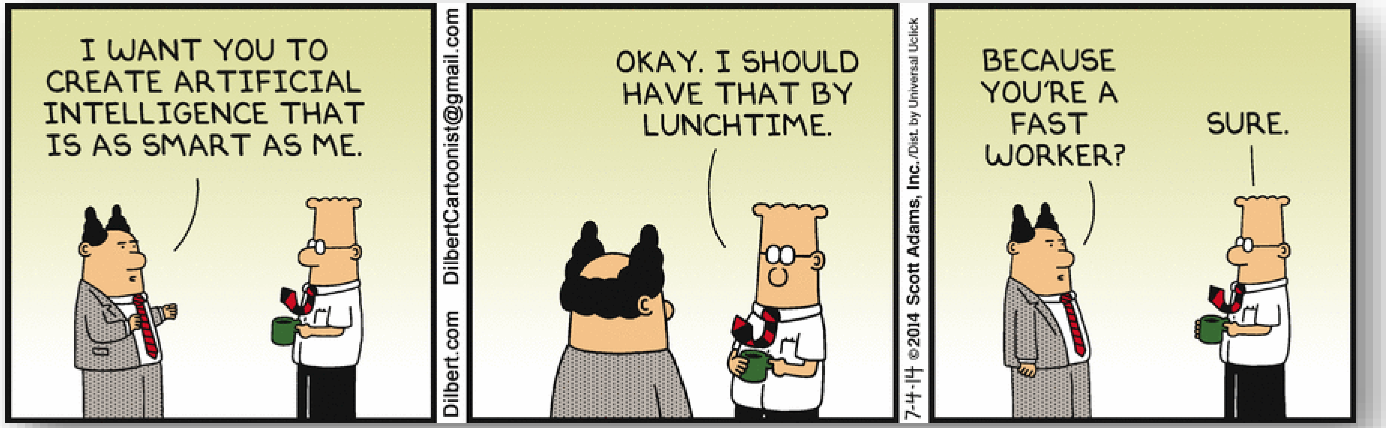
Sam Altman, CEO OpenAI. Twitter 12/10/22.

Future

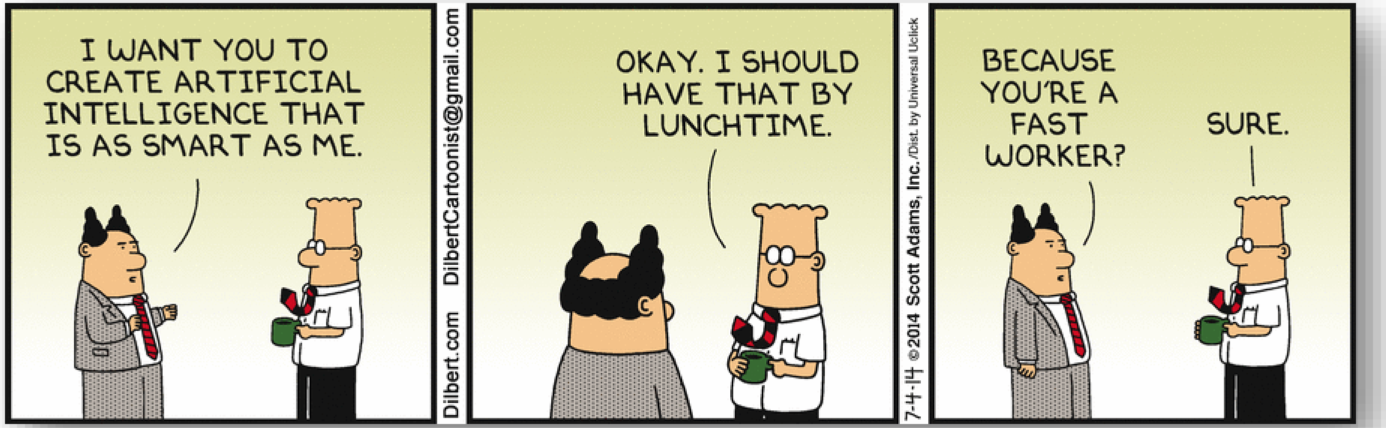
"There will be two kinds of companies at the end of this decade... Those that are fully utilizing AI, and those that are out of business."

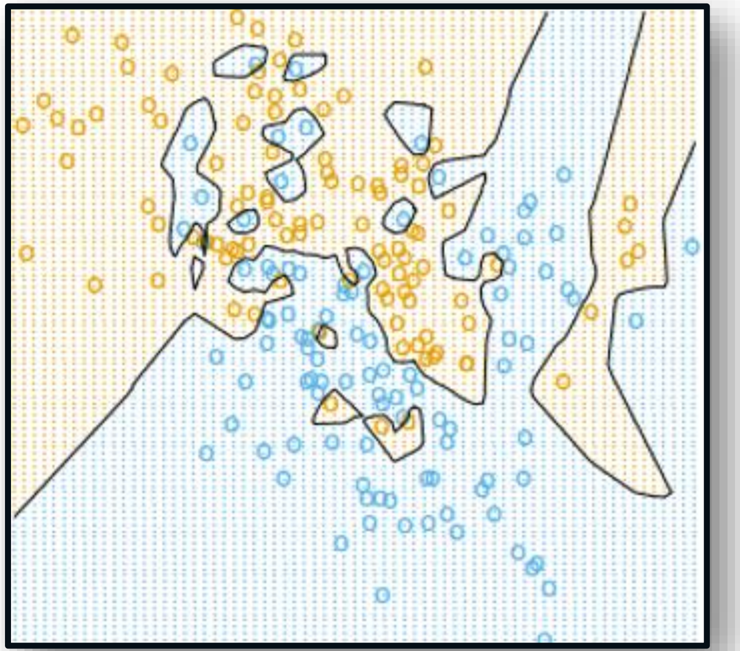
Peter H Diamandis

What is AI?


I WANT YOU TO CREATE ARTIFICIAL INTELLIGENCE THAT IS AS SMART AS ME.
Dilbert.com DilbertCartoonist@gmail.com
OKAY. I SHOULD HAVE THAT BY LUNCHTIME.
7-4-14 ©2014 Scott Adams, Inc./Dist. by Universal Uclick
BECAUSE YOU'RE A FAST WORKER?
SURE.

What is AI?





AI is about finding patterns in data

(often a lot more accurately than human beings ☺)

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The modern AI frameworks

ML Models (The Predictor)

Forecasting

Used for actuarial models to predict fund liabilities, fraud detection, and identifying dangerous withdrawals rates.

Personal LLMs (The Assistant)

Reviewing, summarising, and drafting

Used for summarising trustee meetings or compliance reviews.

RAG (Retrieval-Augmented Generation)

The Researcher

Connects generative AI to secure, internal knowledge bases to fetch factual financial reports before responding.

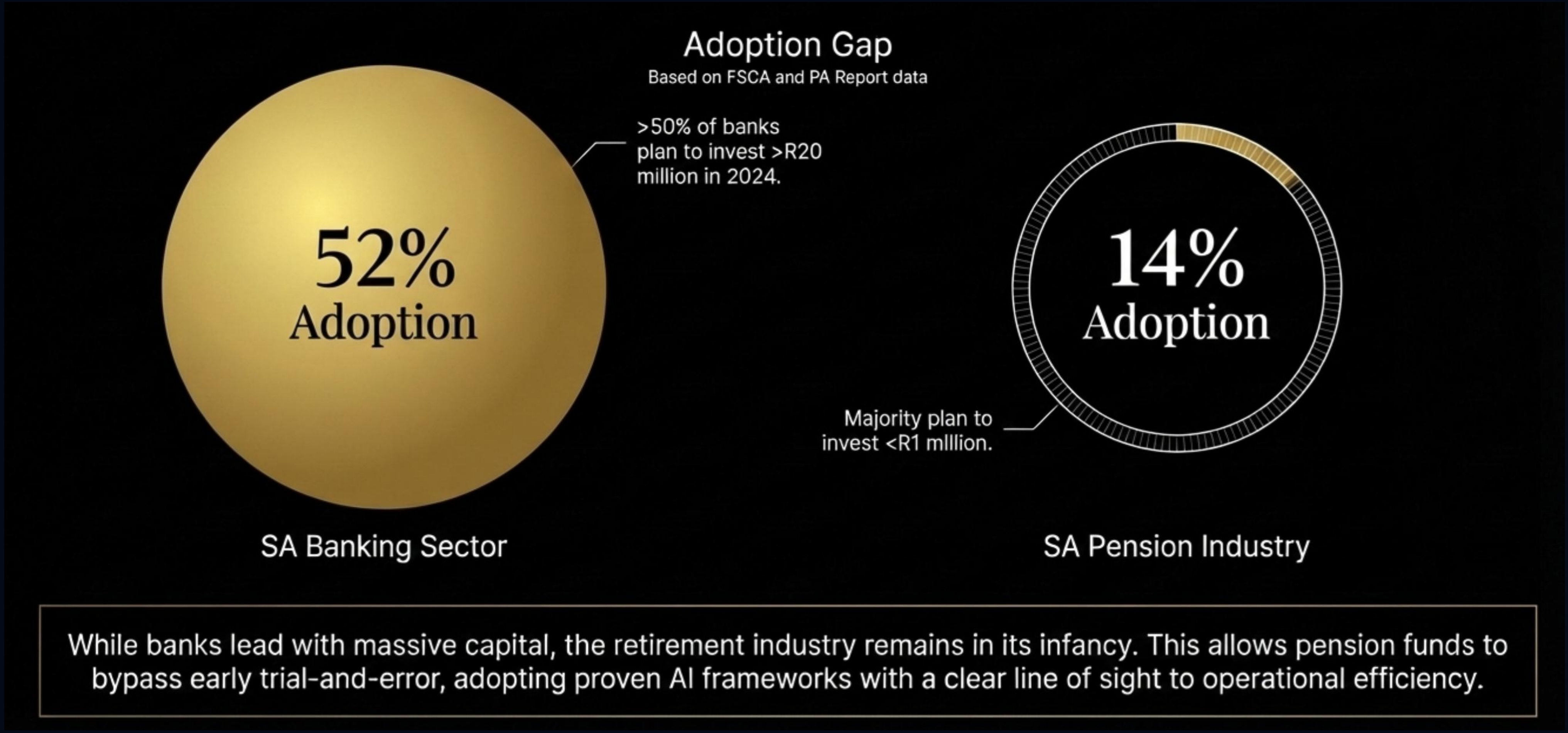
Agentic Frameworks (The Collaborative Planner)

Taking action

Autonomous AI agents that independently use tools, plan multi-step processes, and execute proactive tasks.

The South African landscape and regulatory framework

The SA state of play: second-mover advantage



The regulatory and supervisory horizon

	Current Frameworks	Incoming Scrutiny (The Horizon)
Data Protection	**POPIA compliance**. Prevents automated decisions with legal/substantial effects without consent.	**Stricter enforcement** on data confidentiality and mandatory **third-party validation**.
Automated Advice	**FAIS Act.** Requires algorithmic testing, human resources, and robust internal controls.	**CoFI Bill.** Shifting to rigorous, **outcomes-based** regulation across all digital innovations.
The Black Box	Opaque AI decision-making accepted due to technological limitations.	Demand for **XAI** (Explainable AI) like SHAP/LIME methods for auditable, transparent decisions.

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AI for operational efficiency

Operational case studies

Cross-sell

250%

Increase in sales conversion rate for an insurance campaign to existing clients

Retention

50%

Reduction in cancellations with very simple email interventions

Credit

42%

Improvement in credit defaults by implementing an AI-based credit application scorecard

Fraud

20

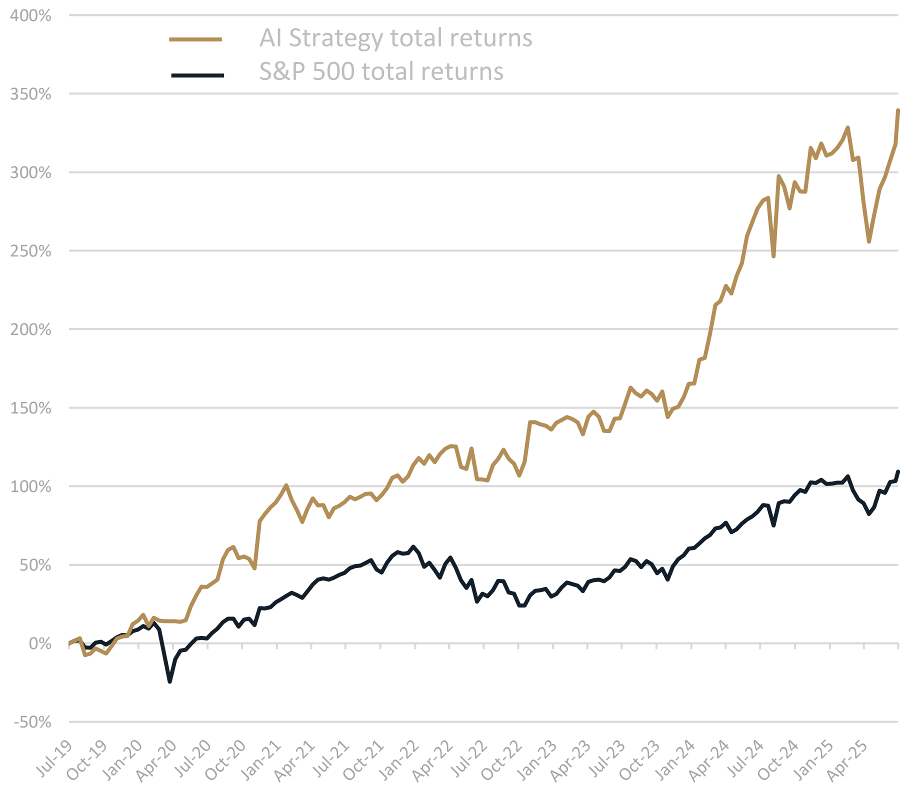
Fraud investigators no longer needed to be hired because fraud was more accurately found

AI and investments

AI-based investment case study

Conservative mandate
Large-cap stocks
Highly liquid and scalable
Shares with 10 years of history
Spread of industries
No leverage
No arbitrage
No shorting
No high-frequency trading

Real money track record investing in US large-cap equities (from July 2019 to Jun 2025)



S&P absolute return	AI strategy absolute return
109%	340%

Risk Metrics (updated to Q2 2025)	S&P 500	AI Strategy
Annualised returns	13.10%	27.98%
Max Drawdown	24.77%	10.82%
Peak-to-Valley	21/12/31 - 22/09/30	25/01/31 - 25/04/30
Recovery	15 months	2 Months
Sharpe Ratio	0.65	1.16
Sortino Ratio	1.00	2.52
Standard Deviation	4.99%	6.11%
Downside Deviation	3.17%	2.70%

AI risks

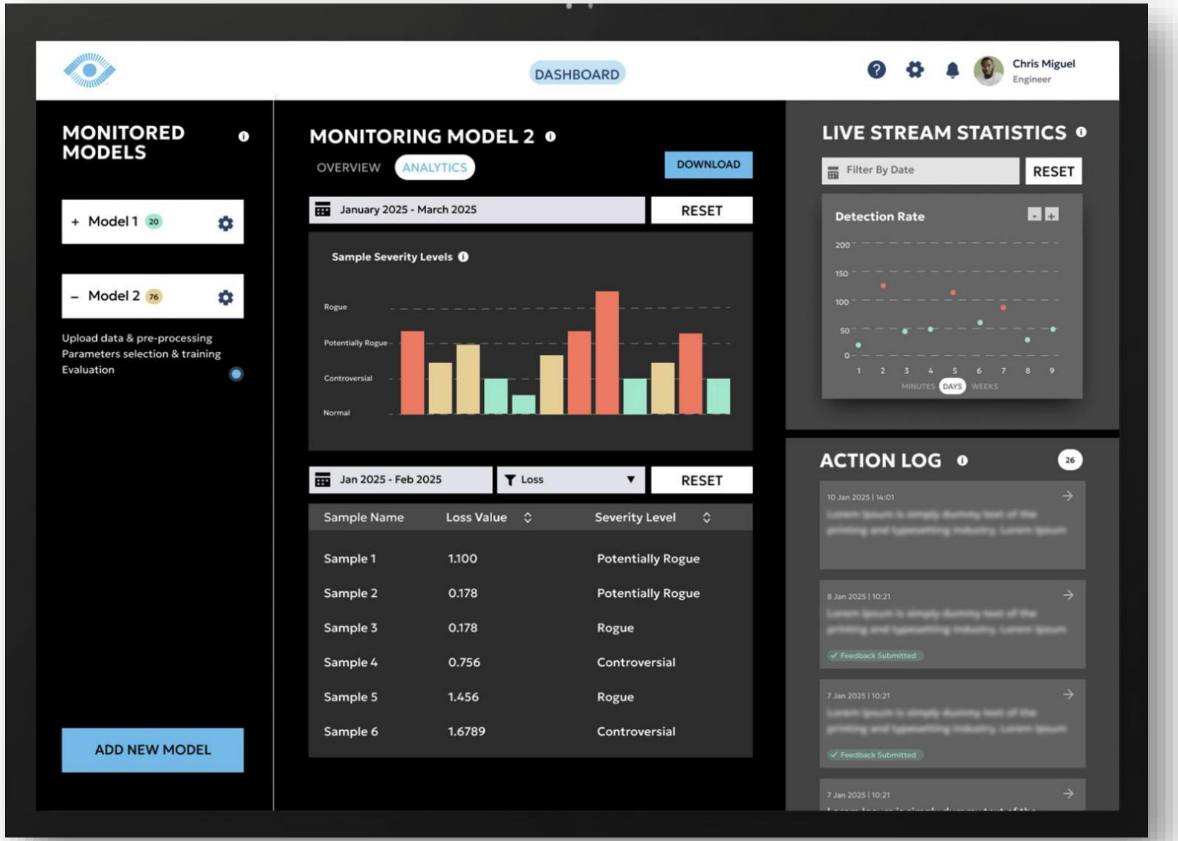
The costs of rogue AI

Financial Losses:
AI failures in trading and autonomous vehicles risk major losses, with AI bias projected to cost businesses $10B annually by 2025 (McKinsey, 2023).

Reputation Damage:
AI-generated bias and misinformation can damage brands and erode trust, as seen in Facebook's AI moderation errors (Forbes, 2021).

Regulatory Risks:
Non-compliant AI risks penalties, legal action, and lost credibility, especially in healthcare and finance (Harvard Law, 2024).

Using AI to monitor AI



Behaviour Metrics

Real-time tracking of AI performance.

Anomaly Alerts

Clear notifications of flagged behaviours with context.

Actionable Insights

Step-by-step guidance to address issues.

Benefits vs risks

Benefits

- Increased revenue
- Reduced expenses
- Better compliance
- Increased efficiency and scalability
- Improved customer experience
- Creating a competitive advantage

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Risks

- Agentic misalignment
- Privacy issues
- Skills scarcity
- Job losses
- Model bias and fairness
- Lack of explainability
- Ethical challenges and market risks

THANK YOU