

# Leveraging Artificial Intelligence & Data-Driven Insights to Future-Proof Pension Schemes

Training Program for Pension Trustees and Corporate Executives  
in Kenya

*Facilitator: Joel Warutere | Venue: Ocean Beach Resort & Spa, Malindi |*

*Date: 30<sup>th</sup> October 2025*



GEMINUS  
CONSILIUM  
FINANCIALS

# Training Overview

## Purpose and Context:

1. Why AI and Data-Driven Insights Matter for Pension Schemes
2. Kenya's Pension Transformation and Digital Imperatives

## Goal:

Equip trustees with the understanding and tools to harness artificial intelligence and data-driven strategies for effective scheme governance, investment decision-making, member engagement, and long-term sustainability across generations.

## **Training Goals & Outcomes**

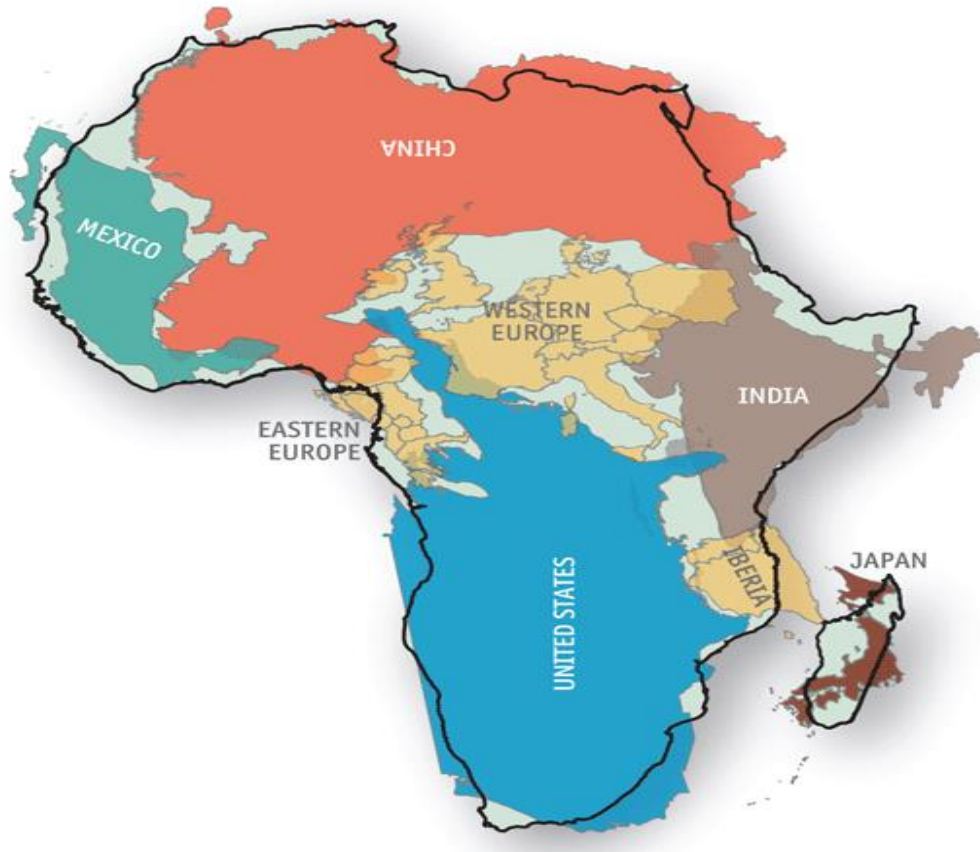
- a) Equip trustees with AI understanding**
- b) Improve data-driven decision-making**
- c) Enhance member engagement and efficiency**
- d) Build foresight for generational trends**

# Africa & The Future



# Africa & The Future

## AFRICA.....



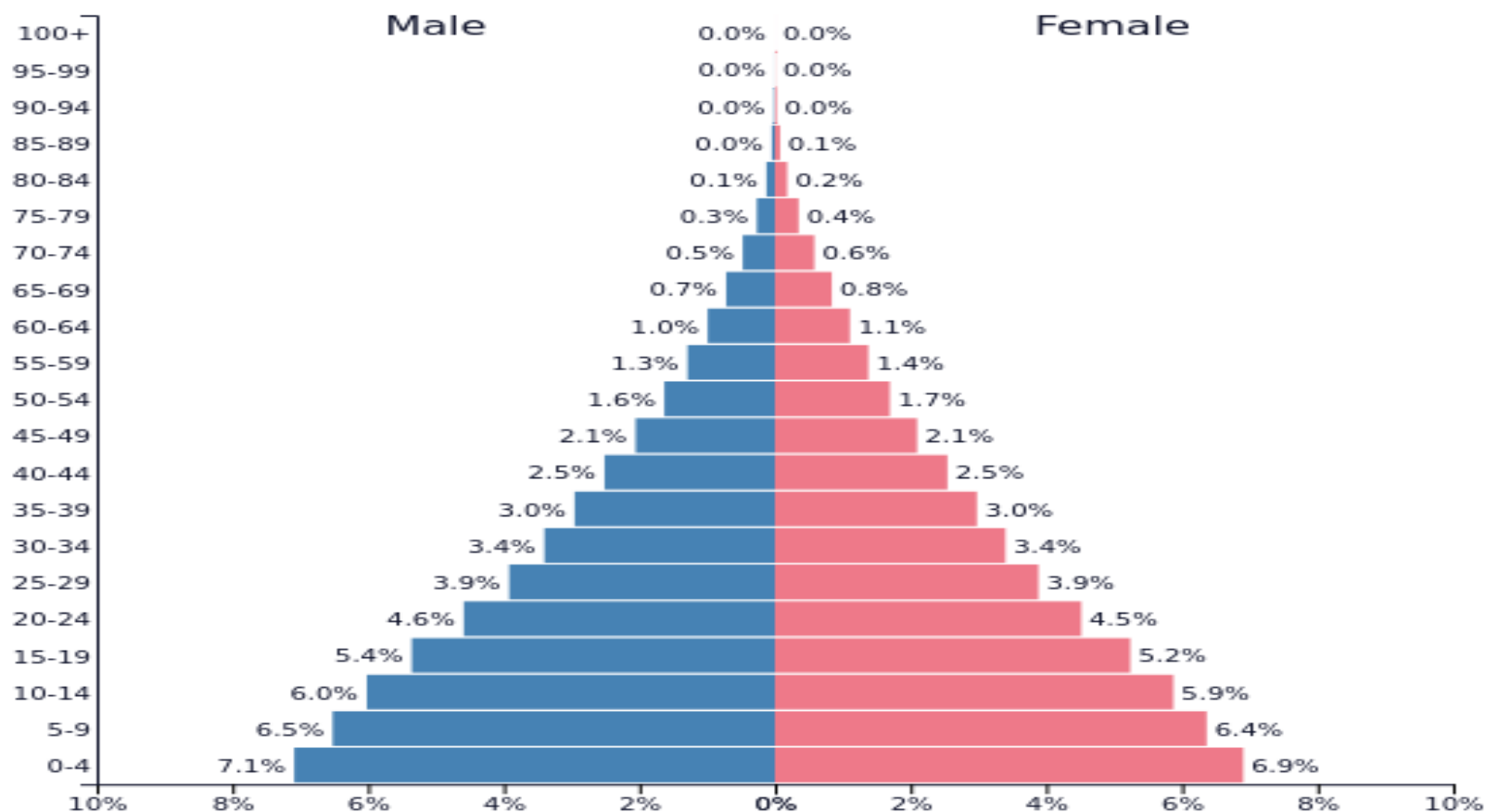
The landmass of the continent of Africa exceeds that of China, India, US, Mexico and Western/Eastern Europe

SSA represents approximately 1/6 of the world's population and 1/5 of its total landmass

Source: The Economist , 2010.

For illustrative purposes only. We are not soliciting or recommending any action based on this material.

# Africa & The Future

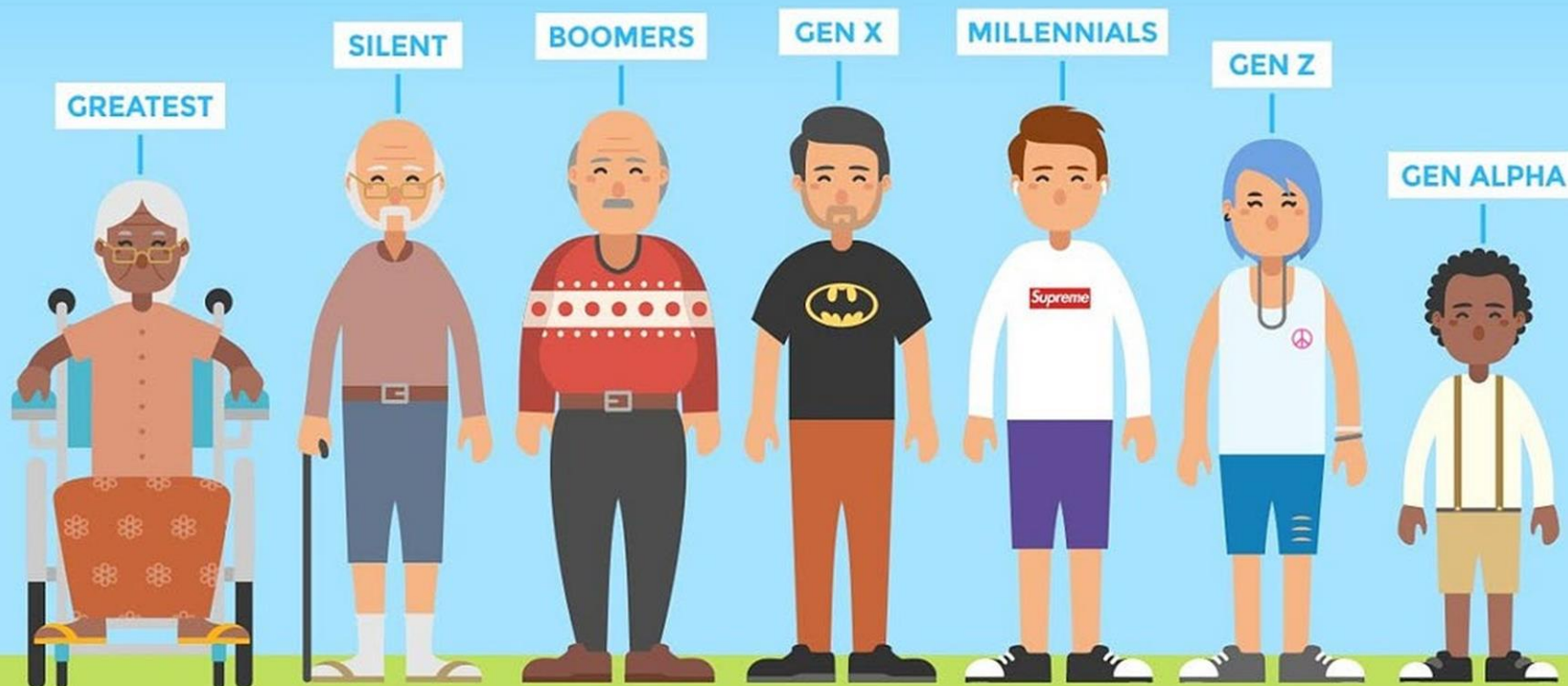


PopulationPyramid.net

**AFRICA - 2025**  
Population: **1,549,867,579**

# Our Generations & The Future

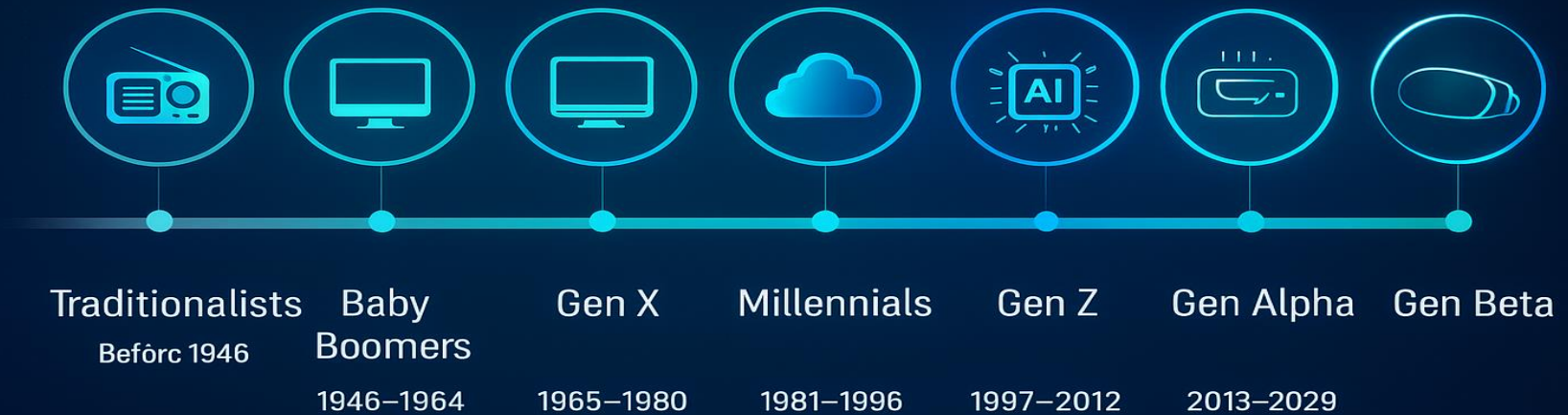
## EVERY GENERATION



# Generations & Technology

Generational diversity profoundly shapes expectations, attitudes, and digital behaviors within pension schemes — influencing how members engage with providers, interpret financial security, and use digital tools for retirement planning.

## GENERATIONAL TECHNOLOGY ADOPTION



# The Age of Intelligence in Pensions



Evolution of pension management:

Manual → Digital → Intelligent

'By 2030, 70% of pension interactions will be digital-first.'

## 1. Different Life Stages, Different Priorities

**Baby Boomers (born ~1946–1964)**

- **Focus:** Security and stability; nearing or in retirement.
- **Expectations:**
  - Clear, trustworthy communication (often prefer phone or in-person contact).
  - Simplicity and reassurance over innovation.
  - Strong trust in institutions and regulatory frameworks.
- **Digital Behavior:**
  - Increasingly comfortable online but often cautious about digital-only services.
  - Prefer intuitive, accessible interfaces (large text, straightforward navigation).
  - Value hybrid options—digital access plus human support.



# The Age of Intelligence in Pensions

Evolution of pension management:

Manual → Digital → Intelligent

'By 2030, 70% of pension interactions will be digital-first.'

## Generation X (born ~1965–1980)

•**Focus:** Balancing saving with current financial pressures (e.g., mortgages, children).

•**Expectations:**

- Flexibility and transparency.
- Detailed performance data and control over investment choices.

•**Digital Behavior:**

- Pragmatic adopters of digital tools; expect efficiency and security.
- Comfortable managing pensions via apps or dashboards, but want expert guidance available when needed.

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Evolution of pension management:

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## Millennials (born ~1981–1996)

- **Focus:** Long-term financial wellness and sustainability.
- **Expectations:**
  - Personalized, engaging experiences (gamified insights, progress tracking).
  - ESG (environmental, social, governance) options aligned with personal values.
- **Digital Behavior:**
  - High digital fluency; expect mobile-first design, instant access, and seamless UX.
  - Prefer self-service tools, chatbots, and social-media-style engagement.

# The Age of Intelligence in Pensions

Evolution of pension management:

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## Generation Z (born ~1997–2012)

•**Focus:** Financial education, early wealth building, and short-term flexibility.

•**Expectations:**

- Transparency and authenticity; dislike jargon.
- Expect pensions to integrate into broader financial apps or “super apps.”

•**Digital Behavior:**

- Native to mobile, social, and AI-driven personalization.
- Seek real-time, visual, and interactive content (videos, simulations, AI assistants).

# The Age of Intelligence in Pensions

## 2. Impact on Pension Scheme Design and Communication

ASPECT	GENERATIONAL IMPACT	Examples
Communication Channels	Older generations value emails, letters, and phone calls; younger ones prefer apps, notifications, or DMs.	Providers must adopt multi-channel engagement strategies.
User Experience (UX)	Simplicity and accessibility for older members; speed and interactivity for younger ones.	Tiered UX with customizable dashboards.
Education and Guidance	Younger members need bite-sized, visual education; older members value detailed guides.	Video explainers, interactive calculators, and webinars by age group.
Trust and Transparency	Boomers rely on institutional trust; Gen Z expects peer validation and open data.	Verified user reviews, ESG transparency, and easy-to-read disclosures.
Technology Adoption	Digital maturity varies; schemes must avoid alienating less tech-savvy users.	Maintain human support options (e.g., live chat with advisers).

# The Age of Intelligence in Pensions

## 3. Strategic Implications for Trustees

- **Personalization by Age and Attitude:** - Use data analytics to tailor messaging, investment options, and interfaces based on user demographics and behavior.
- **Hybrid Engagement Models:** - Combine digital tools (apps, dashboards, chatbots) with accessible human support to cater to all generations.
- **Financial Literacy Integration:** - Embed education into digital journeys—especially for younger cohorts—to drive early and consistent engagement.
- **Trust Through Transparency:** - Publish clear, plain-language information about fees, performance, and sustainability.
- **Innovation with Inclusion:** - Design digital services that are both cutting-edge and accessible (e.g., accessibility standards, intuitive design).

# The Age of Intelligence in Pensions

## 4. Emerging Trends

- **Gamification of savings** (especially effective for Millennials and Gen Z).
- **Social proof and community-based learning** (peer influence in financial decisions).
- **AI-powered personalization** (adaptive dashboards that adjust to user behavior).
- **Cross-generational education programs** (helping older members adopt digital tools and younger ones build trust in long-term saving).

# The Age of Intelligence in Pensions

Evolution of pension management:

Manual → Digital → Intelligent

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## THE PENSION AI ECOSYSTEM

ADMINISTRATION

MEMBER  
ENGAGEMENT

AI &  
DATA  
ANALYTICS

BENEFITS  
& FUNDING

GOVERNANCE



# Governance & Fiduciary Duty in the AI Era

- Trustees' oversight responsibilities
- Ethical AI and data governance
- Compliance with Kenya's Data Protection Act

## AI ADOPTION FRAMEWORK FOR TRUSTEES



# The Tech Dividend – AI Across Scheme Operatio

- Administration: automation & reconciliation
- Investments: portfolio optimization
- Member engagement: personalization
- Funding adequacy: predictive analytics

## AI AND DATA-DRIVEN INSIGHTS TO FUTURE-PROOF PENSION SCHEMES

### TECHNOLOGY ACROSS GENERATIONS



### TANGIBLE GAINS OF AI & TECH



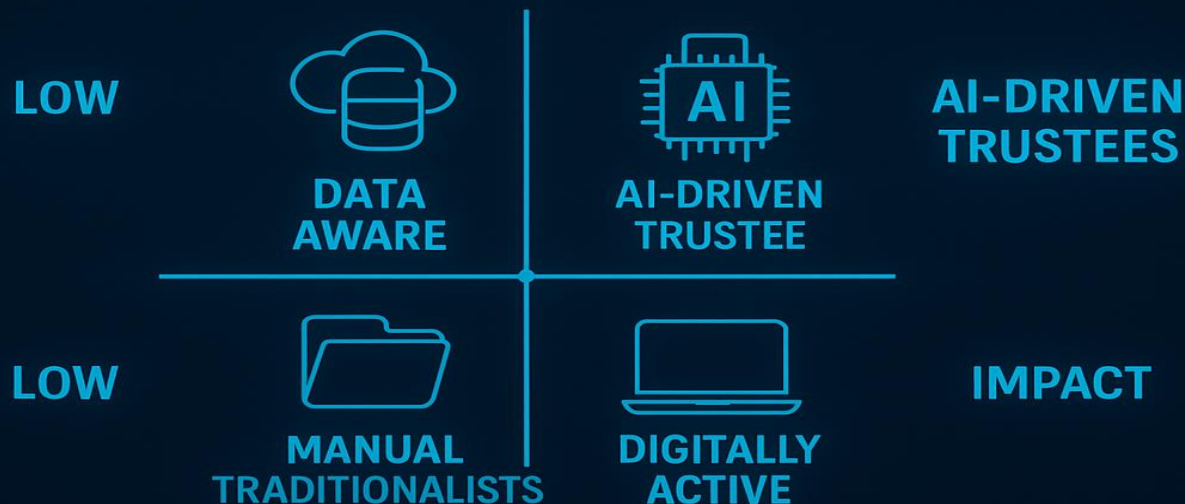
### LEVERAGING DIGITAL PLATFORMS



# Digital Market Leverage

- Membership as digital capital
- Partnerships: fintech, insurance, wellness
- European and African success examples

## TRUSTEE TECH ADOPTION MATRIX



# Future Outlook – Beta Generation & Beyond

- AI, robotics, blockchain & the future of work
- Scenario 2035: Intelligent Pension Ecosystem
- New trustee competencies

## THE DIGITAL MEMBER EXPERIENCE LOOP



# International Case Studies

- AP Pension (Denmark): AI document management
- Europe: Digital pension reforms
- Singapore CPF: AI member communication
- South Africa GEPF: AI data validation

## Leveraging Artificial Intelligence & Data-Driven Insights to Future-Proof Pension Schemes

### 1. Build a Digital Transformation Agenda

- Develop a sector-wide roadmap for digital modernization



### 2. Strengthen Data Governance

- Establish a unified framework for quality data



### 3. Adopt an AI-Readiness Assessment

- Evaluate each provider's readiness for AI



# Trustee AI Readiness & Action Checklist

A: Governance – Data protection and ethics  
B: Service Providers – Transparency in AI use decisions  
C: Investments – Data-driven opportunities  
D: Members – Digital engagement  
E: Operations – Automation  
F: Foresight – Preparing for Gen Z–Beta

## TRUSTEE AI READINESS & ACTION CHECKLIST



### GOVERNANCE ETHICS & OVERSIGHT

- Develop AI governance policy
- Embed AI topics in board training



### SERVICE PROVIDERS VENDOR TRANSPARENCY

- Require disclosure of AI use in services
- Evaluate AI systems for bias and accuracy



### INVESTMENTS DATA-DRIVEN PORTFOLIO

- Use AI for trend forecasting and risk modelling
- Align analytics with ESG metrics



### MEMBERS DIGITAL ENGAGEMENT

- Deploy chatbots and personalized dashboards
- Use predictive insights to support benefit adequacy



### OPERATIONS STRATEGIC ADAPTATION

- Create an AI-readiness roadmap
- Monitor emerging tech (Gen AI, blockchain, quantum)

EMPOWERED TRUSTEES. INTELLIGENT SCHEMES. SUSTAINABLE FUTURES.

# How AI, Robotics, and Immersive Technologies Will Redefine Pension Systems and Trustee Roles

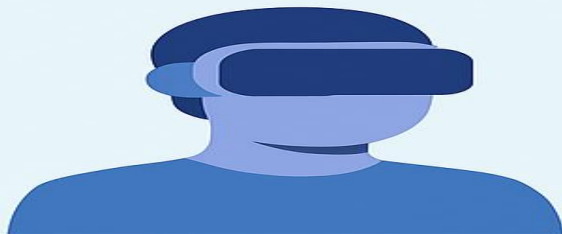
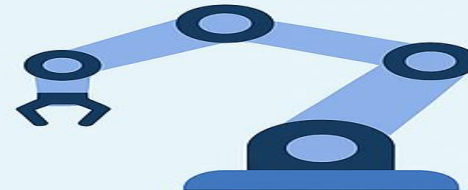


## AI

Enhances predictive analytics and decision-making processes

## Robotics

Automates administrative tasks and processes



## Immersive Technologies

Transforms member engagement and education

## Closing & Next Steps

*“The future will not wait. Trustees must lead their schemes into intelligence, not be led by it.”*

# THANK YOU

## Leveraging Artificial Intelligence & Data-Driven Insights to Future-Proof Pension Schemes

*‘The future of pension governance will not be defined by technology alone, but by how boldly trustees embrace innovation to safeguard member value.’*

**Let’s lead the transformation — responsibly, intelligently, and together.**

**Joel Warutere**

Investment & Pensions Advisor

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