



## INSIGHT

# Technology trends in the retirement market

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The retirement landscape is undergoing a seismic shift. With changing demographics, longer life spans, and evolving economic trends, it has become imperative for the pension industry to move with the times.

At MUFG Retirement Solutions, we believe the transition to retirement and journey from that point onwards, can be further enhanced with a new era of technology-driven innovation, offering a glimpse into a future where financial independence is more attainable than ever before.

For most people, accumulation vehicles serve as the bedrock of retirement planning. One of the most significant changes we've seen in the global pension industry, is the increased desire and commitment to evolve services and foster innovation throughout the accumulation and decumulation phases, and the adoption of emerging and disruptive technologies to deliver real benefits to funds, members, advisers and employers. These new technologies also make it possible for funds and trustees to service their legislative and compliance requirements in a more seamless manner.

In fact, some of these emerging technologies are already having an impact and it's our collective responsibility to make sure they deliver the best outcomes for members in such a crucial stage of their lives. This means ensuring improved financial security, data privacy, increased efficiencies and simplified digital experiences that give people what they need, when and where they need it.

# What are disruptive technologies?

In the context of saving for and managing retirement, these are technologies that challenge conventional norms and provide innovative pathways to deliver products and services that matter most to our clients and their members.

There are many to explore, but one that is currently having the most influence on our industry is artificial intelligence (AI) including Generative AI.



AI is a game-changer, enabling machines to perform tasks that once needed human intelligence, such as processing data, making decisions and responding to enquiries. AI enables the creation of highly personalised financial plans, tailored customer service through enhanced first-call resolution, optimised retirement strategies based on unique data and identification of fraudulent activity and anomalies. The key is not to replace human interaction, but to augment and elevate it by solving a problem with a higher quality solution faster than ever before.

Generative AI adds an exciting dimension, allowing machines to create realistic content, including text, images, audio and video. This capability empowers us to generate tailored content for members, such as financial reports, communications and educational materials. It features strongly in the enablement of insights and intent-driven member interactions with contact centre and service staff by providing real time information and guidance that aligns outcomes with a members' request.

Another interesting area is AI-augmented software engineering, which enhances the development process from requirements analysis through to testing. At MUFG Retirement Solutions, we are currently using this technology through GitHub CoPilot for software development, which improves code quality and reduces adoption timelines for agile and DevOps methodologies. We believe AI-assisted development leads to more efficient systems and a quicker response to client and member needs.

Biometric technologies, including fingerprints and facial recognition, have also gained greater popularity in enhancing security and convenience, facilitating more seamless identity verification and access control. These technologies are part of our go-forward strategy as we delve deeper into stronger financial crimes controls to protect member data and retirement assets.

Of course, as we embrace disruptive technologies like AI, Generative AI and biometrics, we must also consider the ethical and regulatory challenges, and this requires a focus on accountability, transparency and fairness in algorithm and data usage.

# How are emerging technologies different?

Emerging technologies are generally those in their incubation growth phase and hold the promise of substantial future impact. In the retirement industry, these include big data and machine learning evolution using artificial intelligence, enhanced Robotic Process Automation and API Centric SaaS.



**Big Data and Analytics** is exactly what you'd expect. Processing and analysing large and complex data sets, offering personalised insights, predictions and recommendations to improve decisions around member satisfaction, operational efficiencies and competitive advantage. Through our integrated data platform, we use AI to automate predictive modelling and propensity forecasting to provide next best actions that create better member experiences and have a positive impact on retirement outcomes. This is the next frontier for driving automation and extensible insights and analytics.



**Federated Machine Learning (FML)**, offers a decentralised approach where multiple parties can build a shared machine learning model without sharing raw data. This addresses privacy and security concerns because data stays on a local server and individual data is not exposed. If we think about the collective intelligence and data held in different organisations across the pension industry, FML has the potential to be a powerful tool unlocking valuable insights that can allow better support, advice and decision making in retirement.



**Robotic Process Automation (RPA)** is where software robots or digital workers are used to perform automated, repetitive and rule-based tasks, like data entry and reporting. This can improve productivity, reduce human error, costs and risks, while also freeing up resources to focus on more complex member enquiries and personalised customer interactions. Designing an Enterprise Automation Framework is a good way to provide a strategic structure for successful RPA implementation.



**Pervasive Cloud** offers universal access to cloud services and resources, regardless of location, device or network. For the retirement market, this allows superior scalability of computing and storage capabilities, enhanced security and resilience with backup and recovery options, as well as protection from cyberattacks and natural disasters. These benefits flow through to members, with access anywhere at anytime, enhanced user experience, data security and tailored services.



**API-centric SaaS** allows seamless integration and customisation of software solutions and services through application programming interfaces (APIs). This empowers funds to tailor solutions and automate workflows easily using their own or third-party APIs without the need for installation, configuration or maintenance. These days, people want information in real time and this technology offers easy integration, efficient automation, faster transaction processing and more personalised experiences.

# How to stay on top of Innovative technology?

In a rapidly evolving technological landscape, tracking and evaluating new technologies is essential. An Emerging Tech Radar is a valuable tool and a good way to identify, evaluate and prioritise technologies based on strategic goals, business needs and member expectations.

Here's a few tips to help build your own.



**Define** the scope and purpose of your radar – does it align with your organisation's strategic objectives, mission and values?



**Identify** the key technology domains that are relevant to the industry and your organisation's goals.



**Gather** information and categorise the technologies into various levels on your radar. For example, adopt, trial, assess or hold.



**Analyse** and categorise the technologies based on criteria like maturity, adoption, potential or relevance.



**Develop** a clear decision-making framework that outlines how technologies move through your radar.



**Create** a visual representation and communicate the radar to stakeholders to help guide future decision-making based on insights.

## Let's talk money

Once you've chosen technologies to explore, the next step is to obtain funding, an important but sometimes challenging part of the process. To secure the necessary budget and resources, consider this approach:

1. **Align** the technologies with your organisation's strategic goals and priorities. Demonstrate how they support your vision, mission and values.
2. **Assess** the value proposition and return on investment (ROI) of the technologies, quantifying the benefits and costs as best as you can.
3. **Identify** and mitigate potential risks and uncertainties.
4. **Engage** and consult with stakeholders and members to gather feedback, address their needs and potential concerns.
5. **Propose** a realistic and agile project plan that outlines how these technologies will be delivered within constraints.

At MUFG Retirement Solutions, we believe the integration of disruptive and emerging technologies into the pension system has the potential to revolutionise the way members plan for and live in retirement. However, the true measure of success will be our ability to balance innovation with privacy and security, ensuring the benefits are shared by everyone, and no one is left behind in pursuit of their best possible retirement.