New tools for PRT

Kelvin Wilson looks at AI and technology impacting the pensions risk transfer (PRT) market

echnology has always played an important role within pension risk transfer (PRT) – from software that administer and record pension benefits to complicated asset liability management (ALM) models that attempt to orchestrate scheme funding.

In this article, Heywood director of PRT, Kelvin Wilson, discusses how artificial intelligence (AI) and machine learning (ML) technology could be added to existing technology to bring efficiencies and enhance the value proposition for all stakeholders within PRT.

AI refers to imitation of human cognitive functions using computers, whilst ML is a subset in which machines produce outputs based on algorithms trained on past data. We will consider four (not exhaustive) areas of the PRT value chain: Assembling liability information (the pension scheme); Broking to get pricing (the adviser); Transaction implementation (the trustee); and Buyout risk settlement (the insurer).

Assembling liability information

Accurate assembling of information relating to pension members and their entitled benefits forms a key part of risk transfer transactions. Being 'transaction ready' for a scheme requires trustees, administrators and advisers pulling together extensive and diverse data sets, ensuring accuracy and completeness. AI can significantly improve the speed, accuracy and automated way in which such data is collected. From AI tracing techniques that use algorithms for locating pension beneficiaries to technology that read and translate historic pension benefits into summarised benefit specifications, AI technology is already helping schemes embark on their PRT journeys.

Broking and pricing

Broking advice and actuarial modelling play pivotal roles in the PRT value chain. Whether it is a longevity swap or a bulk purchase annuity (BPA), the decision to transfer risk out of the pension scheme needs to be analysed and assessed on a cost-to-risk reduction basis. The scheme, with help from their advisors, must decide on which risks to transfer, how, when and at what price.

AI's ability to expedite calculations, analyse dynamic changes in market conditions and support automated drafting of risk transfer contracts allows for capture of market opportunities and operational efficiencies. Example usage has been during newly developed streamlined BPA transaction processes for small pension schemes (those typically with assets less than £150 million). AI technology has been developed to automate translation and mapping of data from multiple small schemes into unique insurer templates.

Transaction implementation

Completing a PRT transaction should rightly be celebrated but a BPA buy-in or longevity swap is usually the pathway to pension liability settlement or run-on to self-sufficiency. It activates further, non-trivial, data analysis, calculations, processing and exchange of information.

Application of technology to necessary areas of insurance payment reconciliation, guaranteed minimum pension (GMP) equalisation/ rectification, data migrations and benefit translations are now a given. Where we are seeing AI add value to these processes are in automating, standardising and personising to bring operational efficiencies, reduce costs and enhance pension members and policyholder experiences.

Liability settlement and run-on

Whether a scheme is running on, settling liabilities through insurance or transferring to a commercial superfund, good risk management of assets and liabilities will be needed at the endgame destination. Pension member and policyholder engagement, facilitated by an effective communications strategy, is also something stakeholders are actively looking to improve.

AI, through machine learning and deep learning, is able to supplement conventional actuarial models in ALM (that are based on time-tested statistical methods) with complex, non-linear dynamics, removing the need for frequent expert recalibrations in light of market changes.

AI is being deployed to enhance communication strategies through use of videos and emails that have delivery and content linked to the personal circumstances of the individual. These solutions will help schemes and PRT providers become more secure, efficient and attuned to the needs of their members and policyholders.

AI that supplements many of the technology already deployed represents a significant opportunity for the UK and global PRT market. Potential benefits range from advanced data analytics to tailored financial advice, and from operational efficiency to enhanced member communication.

