# Entering the metaverse

# ✓ As the virtual world, known as the metaverse, continues to develop rapidly, Laura Blows explores what opportunities it may hold for the pensions industry

hen did you first hear of the word 'metaverse'? Perhaps it was in October 2021, when Mark Zuckerberg announced Facebook's parent company changing its name to Meta to better represent his plans to create a metaverse.

Possibly it was earlier last year, in March, when children's favourite gaming platform Roblox – itself described as a metaverse – first listed on the New York Stock Exchange for \$30 billion.

Or maybe it's right now, in this article, that you're first coming across the term 'metaverse'.

Whenever it was that you first heard the word, chances are that it won't be the last. As recently reported in *Pensions Age*'s sister title, *CIR*, internet searches for the term 'metaverse' rose some 7,200 per cent in 2021. Interest in the metaverse is clearly growing fast; so, what exactly is it?

# The metaverse

As it is in its infancy, how the metaverse will develop (and how quickly) and how it will be used is still open to interpretation. However, in essence, the metaverse is the creation of virtual worlds for people to interact in, using a 3D representation or 'avatar' to do so.

Its origins are in virtual reality *[see boxout]*, with its growth initiated by the gaming world, but it is expected to evolve far beyond games to all aspects

of life. For instance, people may use it to virtually hang out with friends, work or attend events (for example, the first virtual concert took place on gaming site Fortnite – by DJ Marshmello – in 2019, and have continued even as reallife events were possible again, such as Ariana Grande appearing on Fortnite in August 2021 and Justin Bieber on virtual platform Wave in November 2021).

As reported in *Pensions Age*'s sister title, *FSTech*, in April, research by Citi predicts the metaverse could be worth between \$8-13 trillion by 2030 and total metaverse users could number around five billion by the same year.

J.P. Morgan's report, *Opportunities in the metaverse*, published in February, notes that every year \$54 billion is spent on virtual goods, "almost double the amount spent buying music" and that approximately 60 billion messages are sent daily on Roblox.

Hype about future digital worlds often comes and goes (eg in 2006 the emergence of online world Second Life generated buzz that we would all soon be living virtual lives on it but as of yet failed to become the mass market product predicted). But now it seems that technology and user behaviour may be converging to make it the right time for these claims to come true.

"You could argue that the metaverse already has penetrated our society with the advent of many contacts being digital (meetings being done via Zoom

# Summary

- The metaverse is an online world where people can interact virtually. It is expected to develop from the gaming market to all areas of people's lives.
- The pensions industry would be able to use the metaverse to engage and communicate with savers more easily.
- However, the technology, time and cost requirements may be a barrier to the pensions sector joining the metaverse.
- While it may be too soon for pension schemes to attempt to join the metaverse, in the near future it may be required to engage with members in this way.

or Teams, customer relations with companies moving online and being handled for a big part by bots/automation instead of by a physical person in a call centre or in a shop, and more purchases being done online)," Dutch pension fund APG's communications industry investor, Henny Crauwels, states.

"If you consider this combination of current online interactions and the advent of social shopping as a follow up and next step on the trend to purchase items and services online then the metaverse is already huge."

# Pension industry opportunities

If in the foreseeable future we are about to live in 'a whole new world, a new fantastic point of view' (to quote Disney's Aladdin), what role/s will the pensions sector have within it?

Key would be the opportunity to

metaverse, Rachidy suggests.

people through the use of digital

you can open it up to more people

and invest further in other aspects like

excellent customer service, better tools to

help people understand their savings, and

The cost of engaging and educating

technology is often at scale and at a lower

cost than through other means, "meaning

engage with retirement savers.

AI platform Abaka founder and CEO, Fahd Rachidy, notes that changing working patterns since the pandemic, with more people working from home or hybrid working, means the metaverse could help employers or pension providers communicate and engage with pension savers, providing the information they need "in a more entertaining way".

Ease of access is another benefit it may provide. For instance, pension providers could open 'shops' in the metaverse for people to simply 'walk in' via their avatar "and have that meeting online", as well as hosting events such as seminars there, he adds.

Quietroom development lead, Joe Craig, agrees that the metaverse is a "more vivid way of connecting with people" with the potential "to bring pensions to life in a way we've never been able to before".

"It could make the face-to-face experience possible, without having to actually be face to face", Craig says, by "cutting through people's wariness around using an IFA, and removing the laborious, worrying, gated process, all the way from googling without knowing who to trust, booking an appointment, having to turn up in person and sorting through all your paperwork".

PwC Luxembourg partner and global AWM market research centre leader, Dariush Yazdani, also feels that the metaverse could help educate savers in a way that is "far more appealing than conventional communication channels such as traditional educational strategies".

"In other words, the metaverse represents an opportunity for pension funds to engage with younger retirees in a more casual and interactive fashion – one that takes into account that these retirees are, unlike their parents and grandparents, true digital natives. This engagement can potentially translate into increased engagement and asset retention, ultimately serving to alleviate the heightened pressure global pension systems have become subject to in recent years," Yazdani says.

The metaverse could also tap into people's interest with cryptocurrencies such as Bitcoin, as cryptocurrencies are used to 'purchase' items in the metaverse, so in the future people may even invest retirement savings and/or 'retire' in the

# **>** The development of the metaverse

"The metaverse is a seamless convergence of our physical and digital lives, creating a unified, virtual community where we can work, play, relax, transact and socialise, via many virtual worlds", J.P. Morgan states in its report, *Opportunities in the metaverse*.

However, PWC's *2022 US Business and Consumer Metaverse Survey* notes that it is important to keep in mind that this 'ultimate' version of the metaverse (fully immersive, with seamless and secure transitions among a multitude of metaverse environments) doesn't exist yet.

The actual word 'metaverse' was first coined in 1992 by science fiction writer Neal Stevenson, who used the term to refer to the 3D virtual world in his novel *Snow Crash*, Goldman Sachs writes in August 2022.

"The current metaverse can be likened to the internet in the 1970s and 1980s, when it represented the first form of enhanced digital communication via desktop computing," it adds.

This read-only format of the internet was known as Web 1.0, while the rise of mobile computing evolved the internet to Web 2.0, which is currently in its mid- to late-stages. Web 2.0 allows for anyone to create and share information online, such as app development and social networking sites, Goldman Sachs explains.

The metaverse represents a move to Web 3.0, which relies in interconnectivity without the need for a centralised intermediary. While Web 3.0 is still in the nascent stages, Goldman Sachs says, "we are starting to see more engagement as content can be accessed at the convergence of virtual 3D and physical experiences".

The concept of a metaverse is not a new one, J.P. Morgan's report notes.

"Online, multi-player, role-playing worlds like The Sims or Second Life have been around for nearly 20 years, with players spending an average of 20 hours per week in these worlds. Modern equivalents like Minecraft, World of Warcraft and Fortnite have hundreds of millions of users, and huge supporting economies," it states.

"A number of new technologies have come together to enable this vision of the metaverse. Augmented reality and virtual reality headsets have become cheaper and more powerful, improving the user experience. Blockchain has enabled digital currencies and NFTs.

"The new methods to transact and own digital goods are allowing creators to monetise their activities through tokens, with token-holders also able to participate in the platform's governance (eg vote on decisions). This democratic ownership economy coupled with the possibility of interoperability, could unlock immense economic opportunities, whereby digital goods and services are no longer captive to a singular gaming platform or brand.

"Meanwhile, Covid-19 accelerated the digitisation of our lives and normalised more persistent and multi-purpose online engagement and communication. It is this combination of technological, social and economic drivers that is resulting in the explosive interest in the metaverse." extended service through allowing them to connect with their pensions in real time, from anywhere", Smart platform director, Martin Freeman, says.

Helping people to connect with an alternative or future reality (on any technology, eg augmented reality, gaming) certainly helps to humanise the hard reality of facts and figures by enabling people to 'live' an experience, instead of just hearing or being warned about it, WTW pensions communication expert, Lou Harris, says.

"Especially for scheme members, the metaverse could enable them to engage with their pension funds in a more immersive way for example, to see how and where their savings are being invested, and experience how those investments are having a positive impact on the issues they care about. It could also help members to better visualise their financial decisions by providing them with the opportunity to see all the potential outcomes played out in virtual scenarios," she adds.

While Craig suggests that some schemes would try to show members what their future life will look like with the pension pot they have, "that's not what members want, it's not what they need and it won't change what they do".

"I don't think that's the best way to use the metaverse," he states. "First of all, too few providers can bring together all of a member's pots and other sources of income to show them an accurate future life - they'll miss all kinds of things, like pots with other providers or employers, or income from a partner's pension. Second, though picturing your own future is notoriously difficult, it's not the main problem. What stops people paying in more are their other financial priorities and concerns. Saving up for a house. Paying off debt. Paying their bills. We can't stumble into the metaverse as blinkered as we are now."

Instead, the best use of virtual environments is to bring communities together, he says. "That could mean members of a single pension scheme looking to their peers for support or to answer questions. Members do a lot of this already, whether it's on Twitter or in Facebook groups. If the metaverse enables gatherings that are effectively just more vivid Facebook groups then schemes and employers will have to be even more careful to support those groups with accurate information. Vacuums create problems."

# "The metaverse could help employers or pension providers communicate and engage with pension savers, providing the information they need in a more entertaining way"

## Barriers

This commitment needed for ongoing management (and the associated costs) could well be a problem for pension schemes engaging in the metaverse.

"Once you go live with it you need to commit to it and develop it, which involves creating compelling content. This might include web-text content, films, games, and following other social media trends, which pension schemes either do not have funds for or do not yet see the benefit outweighing the cost," Harris says.

"There's also the current, very controlled, review and sign-off process often involved when creating content for pension scheme members, which takes time, whereas social channels, like the metaverse, are more spontaneous and founded in the moment."

Many pension providers do not get the basics right when it comes to technology, Freeman adds, so "jumping from a legacy tech position directly to trying to launch in the metaverse would, I suspect for many, be a gimmick, and therefore essentially a cost that they would have to pass on to members without providing real benefit".

According to Freeman, for a pension provider, the difficult elements would be the technology side of presenting personalised, up-to-date information to many people in a virtual environment.

"In order to achieve that they would need to have excellent record quality, real-time information, great cybersecurity credentials, and a technology stack capable of delivering that in any environment. Those are all big barriers for providers based on legacy technology. If, on the other hand, they are using a cloud-based, API-driven platform, this all becomes a little simpler," Freeman says.

The risks of cybercrime, such as scams, biometric hacking and 'identity' or 'avatar' theft are "also very real and will need to be addressed", Harris adds.

However, Craig is optimistic that it should be easier to have better, smoother, security in the metaverse than outside it, as the metaverse, or devices to access it, will be able to read biometric information to instantly verify the user.

## Awareness

Another potential barrier is the pensions industry's traditional reluctance to be a 'first mover' into new technology.

The finance sector more broadly has started to make its first steps into the metaverse. For instance, in February J.P. Morgan was the first bank to enter the metaverse, opening its Onyx lounge in online world, Decentraland.

"The asymmetrical risk of being left behind is worth the incremental investment needed to get started and to explore this new digital landscape for yourself," J.P. Morgan commented at the time of launch.

Around the same time, both HSBC and PwC Hong Kong bought virtual plots in the online world, The Sandbox.

Yazdani says its believe that most

pension industry players are aware of the benefits of joining the metaverse but only a small number of players are actively (considering) embracing this opportunity. "This, however, means that

# **>** Investing in the metaverse

The metaverse is expected to generate \$5 trillion in economic opportunities by 2030, with a compound annual growth rate of 44 per cent, Neuberger Berman portfolio manager and head of thematic Asia, YT Boon, states.

Meanwhile, McKinsey & Company's June 22 report, *Value creation in the metaverse*, finds that more than \$120 billion was invested in the metaverse in the first five months of 2022, more than double the \$57 billion invested in all of 2021.

Its report finds that 95 per cent of business leaders expect the metaverse to have a positive impact on their industry within five to 10 years, and 61 per cent expect it to moderately change the way their industry operates.

According to McKinsey's report, multiple factors are driving investor enthusiasm, including ongoing technological advances across the infrastructure required to run the metaverse; demographic tailwinds; increasingly consumer-led brand marketing and engagement; and increasing marketplace readiness as users explore today's early version of the metaverse largely driven by gaming, with applications emerging that span socialising, fitness, commerce, virtual learning, and others.

Boon highlights three opportunities for investors in the metaverse. These are 'the virtual world' – investing in companies developing the software to gamify almost everything by creating immersive, interactive online spaces, 'infrastructure' – investing in companies providing cloud space and computing power to carry massive amounts of data and connect multiple devices, and finally, 'the physical gateway' – firms there might be significant first mover advantage for players that decide to join the metaverse in the near future."

Craig predicts that a master trust will likely be the first mover within the

building specialist wearable hardware and components to connect to these virtual worlds.

As the universe of companies involved in the metaverse is spread across geographies, sectors and market capitalisation, meaning many of these companies are not found in traditional or mainstream equity benchmarks, pension fund investors could benefit *[from investing in the metaverse]* through the diversification of their equity portfolios and gaining exposure to an important, secular growth theme, Boon states.

"In addition, the evolution of the metaverse is expected to take place over the next decade and beyond, so this is an investment opportunity that is aligned with the long-term nature of pension fund liabilities," Boon adds.

According to Boon, an allocation to a metaverse strategy can be incorporated into a pension fund portfolio in a number of different ways, from satellite investments offering alpha exposure alongside a core portfolio, to replacing a portion of an investor's cross-sector global equity exposure.

While APG communications industry investor, Henny Crauwels, agrees that the metaverse will impact society in seven to 10 years, he states that the "metaverse requires big investments and the returns are still uncertain".

"Sceptics would argue that the metaverse is defined by and overly exposed to the volatile and high-risk worlds of cryptocurrencies and NFTs (non-fungible tokens)," Boon says.

"Some commentators also sight the infancy of the metaverse as good reason to be cautious. The truth here is that we are still near the beginning of the pensions sector into the metaverse "to stand out from the competition and prove it can capture a new audience. For anybody smaller, it would be a risky allocation of resources at this point. But

journey, but this is a rapidly evolving ecosystem with notable activity (including rising corporate investment) that is accelerating the development of the metaverse. The nascency of this long-term theme also means that there is an opportunity to capture strong potential returns by identifying the opportunity early and investing in the early movers," Boon adds.

To invest, Boon suggests that investors can access the metaverse theme via a number of different routes including active funds, ETFs and venture capital.

According to Van Lanschot Kempen head of client solutions UK, Nikesh Patel, the metaverse is a very specific and early-stage theme to focus on for pension fund investors. "To the extent that such investors believe they can invest in the meta-builders, they are either already doing it without realising it or would not have the capabilities to truly do it... Most pension funds are already significantly exposed to the metaverse, blurred through the lens of Big Tech."

Companies such as Microsoft and Facebook will likely be among their largest equity holdings, Patel adds, along with those providing cloud computing capacity that the metaverse will rely on, the telecommunications companies that will be needed to deliver the increase in high-speed bandwidth to make an unlimited number of virtual worlds possible, and the banks and payment processors, as well as the blockchain and NFT architects, that will enable real world to virtual world transactions to have value.

"Hence," says Patel, "to the extent a pension fund wishes to say they invest in the metaverse, they already can."



give it a few years".

APG's Growth Factory, which focuses on innovations around the needs of participants, employers and pension funds, noted in February 2022 that the metaverse is "still a concept, but one that can completely revolutionise our interaction with our fund clients' participants".

"After all, if a participant or company wants to approach us through Metaverse, we must adapt our services accordingly so that we can also serve them in that world. It is therefore definitely something we are keeping an eye on," its head, Anne-Marie Le Doux, said.

### Joining up

Any pension scheme with a wellengineered API-driven platform could launch in the metaverse quite quickly, Freeman says.

Yazdani states that the first step would be to define a clear strategy, such as what does your organisation want to achieve by entering the metaverse? Which type of clients will the metaverse experience be targeted towards? How is this going to be beneficial for your organisation and your current/prospective members? How will this complement your organisations' existing online/offline communications?

"Once this strategy is defined, the next step is to acquire/develop the right skillset and to proceed with the technicalities (buying space, adapting it accordingly, etc). Then it's time to deploy your strategy – ensuring that operational aspects such as response time, opening hours, service catalogue, etc are all in place," Yazdani says.

"With any new leap forward in technology, starting small to test the water is a good position and making sure that the reasons for doing so are clear and strategic," Harris suggests.

"Adding just another communication channel without it fitting into a wider strategy would not create success. So some upfront insights and testing prototypes to help inform strategy would be some first steps. Looping in the target audience, particularly those under age 25 would be sensible, as they've grown up with similar gaming, augmented reality and virtual reality experiences, such as Minecraft and Fortnite," she adds.

Administrators, communication professionals and digital specialists would then need to work together to integrate and present a 'joined up' experience. "For example, if a web chat feature is available, or WhatsApp chat, as well as email and telephone, then metaverse in the future may need to join the party in a way that's seamless," Harris explains.

# Future

While Freeman states that he does not believe it's currently right for pension schemes to enter the metaverse, Harris states that keeping pace with technology is always going to be important for any future engagement strategy.

"It can't be ignored because the future generations will be early adopters and will come to expect service providers to adapt to their needs. So, ignoring it will, over (a long) time 'lose' members in your engagement efforts," she says. "The metaverse may feel like a far-off fantasy, yet, it could completely revolutionise member engagement and participation in the future."

Craig agrees that if members are in the metaverse then the pensions sector should be too as it is "much better to go where members are already than to create your own content hub or portal, usually at great expense, that nobody uses".

They are not there yet though. PwC's 2022 US Business and Consumer Metaverse Survey finds that only 9 per cent of consumers say they currently use any of the existing [metaverse] environments. However, 50 per cent of consumers call the metaverse exciting, with 53 per cent saying they want to use the metaverse to interact with customer service agents, and 52 per cent to attend courses/training, it finds.

So, with this enthusiasm, members may be in the metaverse soon enough.

Yazdani gives the example of Facebook. "Ten to 15 years ago, only a very limited number of companies used this social media to engage with clients and showcase their products/services. Today, you would struggle to find a single company that does not do so.

"This is because, as Facebook's user base exploded, companies understood that a lack of social media presence would put them at a significant disadvantage given the sheer number of potential clients present on the platform. We believe that a similar trend will soon emerge with regards to the metaverse."

Harris agrees, comparing it to the internet. "When it landed it was a novelty, a tool only for exclusive and limited use by a few. Now it is the leading method of communication. It's hard to say regarding the metaverse as it is so early, but technology leaps of five years are not uncommon, so perhaps within the next five years we'll see some schemes embracing the metaverse. We will blink and we'll all be using it."

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