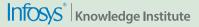


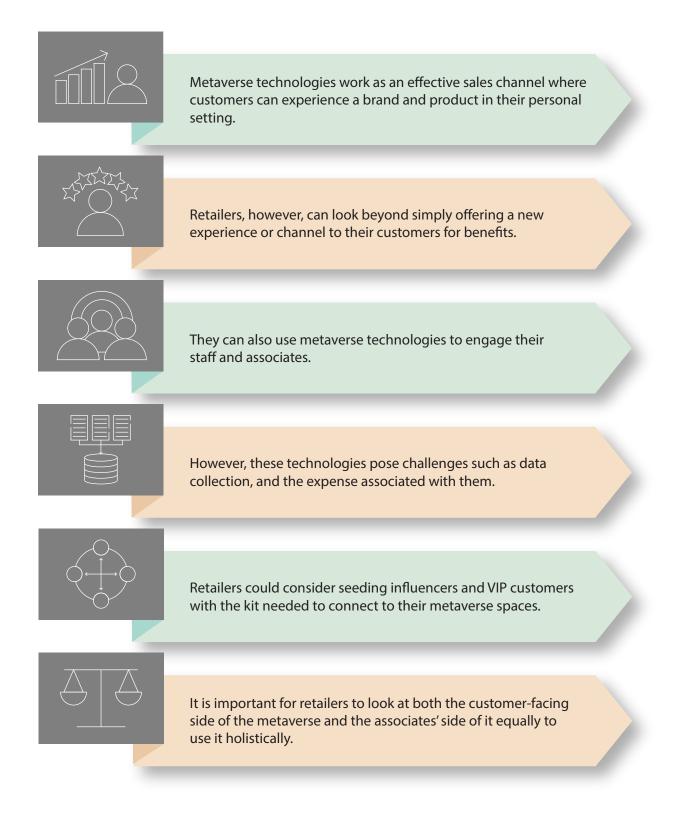
VIEWPOINT

THE METAVERSE - PIPE Dream or profit machine?

Four Infosys experts recently took part in the fourth edition of the Infosys Consumer Spotlight – Quarterly Reflections, the series that discusses trends across the consumer, retail and logistics landscapes. They shed light on what the metaverse is – and what it isn't – and how retailers can make the most of the technologies.



Key points



It can be hard to separate out the hype from the more levelheaded discussions of what the metaverse might be. For retailers, there is the promise of a whole new way of engaging with their customers, but it's important not to lose sight of a number of challenges.

Although the metaverse – the interconnected, immersive, persistent world envisaged first by science-fiction writers and more recently by companies determined to be first movers in this new space such as Mark Zuckerberg's Meta – does not yet exist, the technologies that we, at Infosys, think will be needed to underpin the metaverse do exist.

We describe these technologies, from AR and VR to digital twins and from edge computing to Web 3.0, as "metaverseadjacent" technologies, and it's with these that businesses from fintechs and healthcare companies to banks and retailers are experimenting, and working out how they might build products and services with them.

Four Infosys experts recently took part in the fourth edition of the Infosys Consumer Spotlight – Quarterly Reflections, the series that discusses trends across the consumer, retail and logistics landscapes. Vishwa Ranjan, Associate Vice President, Infosys Center for Emerging Technology Solutions, and Andrew Hogenson, Partner and Global Head, Consumer, Retail and Logistics, Infosys Consulting, were joined from London by Kate Bevan and Samad Masood from the Infosys Knowledge Institute to talk about what the metaverse is – and what it isn't – and how retailers can make the most of the technologies.

Luxury brands such as Burberry, Gucci and Louis Vuitton are already experimenting with these experiences, but so too are other retailers such as Nike, adding augmented reality experiences to flagship stores.

The most obvious use case for metaverse technologies is as a sales channel, where customers can see products in 3D, pick them up and try them on their virtual self, or avatar. It is, as Andrew Hogenson explained, "a different way for consumers to experience the brand, to experience the product, in their personal setting or situation".

Luxury brands such as Burberry, Gucci, and Louis Vuitton are already experimenting with these experiences, but so too are other retailers such as Nike, adding augmented reality experiences to flagship stores. Home goods are also a good use case for these technologies, with the Swedish company Ikea building an app that allows customers to visualize items in their own homes. Retailers, however, can look beyond simply offering a new experience or channel to their customers for benefits. For example, it seems as though virtual and augmented reality have helped reduce the rate of returns. Andrew Hogenson explains: "The more they get the consumers to see how that item will look and feel in their homes, on themselves, then that leads to a reduction in returns, which as e-commerce sales continue to grow is becoming more and more of an issue that retailers are looking to combat."

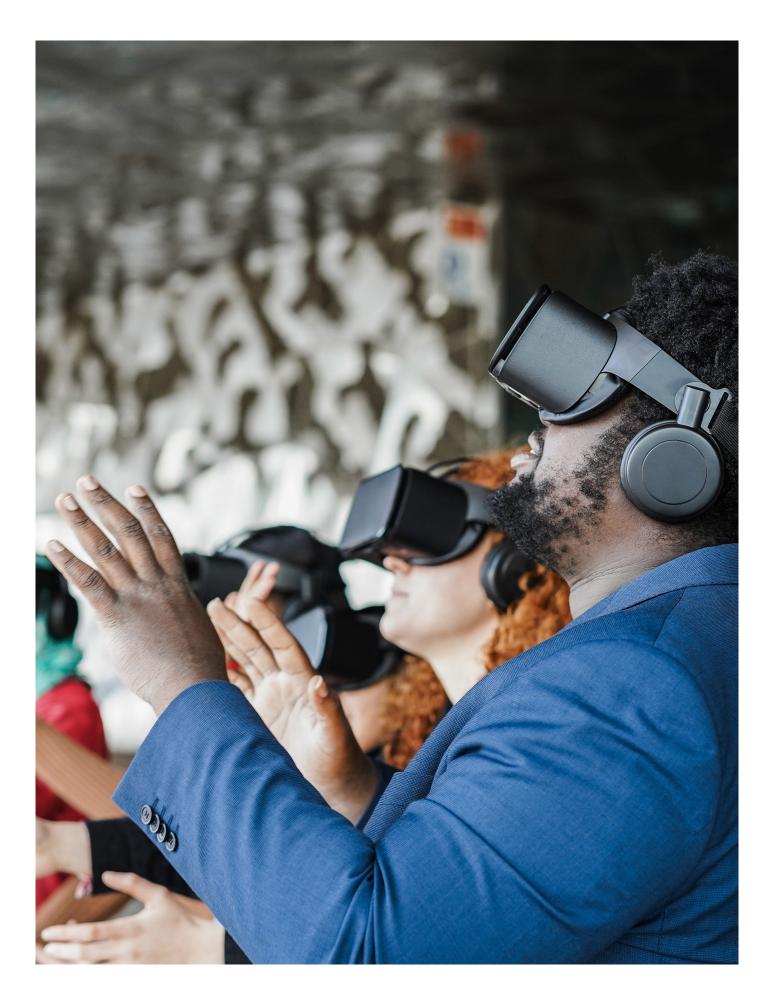
One key metaverse technology that enables training in the retail sector – and in other sectors – is digital twins.

While retailers are focusing on virtual reality and augmented reality to engage their customers, they can also use metaverse technologies to engage their staff and associates: such technologies can also be deployed for training. Says Andrew Hogenson: "I view the metaverse as an effective learning and development tool to both speed up or accelerate the pace of training so that we can make sure that these associates are capable of in-store operations, whether it's point of sale [or] consumer engagement. Something at the very front and center of my mind is how do retailers do a better job of strengthening their workforce in stores as well as behind the scenes and in distribution centers."

One key metaverse technology that enables training in the retail sector – and in other sectors – is digital twins. A digital twin can be anything from an exact replication of a single process or step in a supply chain to a full-blown 3D representation of a store, a warehouse, a factory, an office – a digital twin can replicate any space or process.

Vishwa Ranjan is enthusiastic about the use of digital twins for training purposes, pointing to how the US army, for example, trains soldiers for dangerous settings in digitaltwin settings. He points out the potential cost savings, citing a partnership between Siemens Energy and Nvidia to build a virtual representation of a power plant. "They ran very realistic simulations on the corrosion of their steam generator pipes, and they've announced that this is going to save them close to \$1.7bn a year", adds Ranjan.

Although the fully realized dream of the metaverse does not yet exist, now is nonetheless a good time for retailers to look more closely at the metaverse technologies. As Vishwa Ranjan notes, "the metaverse is not one technology. It's a confluence of technologies that have become prominent due to the circumstances that were imposed on us because of Covid."



He adds: "For well over a decade, retailers have been trying to reach into consumers' homes. The metaverse not only brings an opportunity to get into the home, but also to bring your products into the home."

However, there are challenges for retailers, one of which is data collection. First, new immersive spaces mean collecting even more data than hitherto: as well as information gleaned from a customer's choice of device, browser, location, etc, users will also generate data through the use of avatars.

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Kate Bevan points out: "If you're using an avatar in the metaverse, you're going to be looking for what their facial expressions tell you, what their hand gestures tell you", as well as what their choice of avatar style tells you. She adds: "The governance of that data is an interesting challenge for companies, for governments, for civic groups. There's an awful lot of data and governance to grapple with there."

A further challenge is the technology itself: at present, the headsets needed to access the 3D immersive spaces are expensive, and each world requires its own headset, further adding to the cost. Additionally, joining an immersive world requires solid, fast, low-latency broadband connections, which many consumers do not have access to. Retailers could consider seeding influencers and VIP customers with the kit needed to connect to their metaverse spaces. Andrew Hogenson says: "Obviously there are a lot of costs associated with that technology. I think it comes down to – how profitable is the consumer? If and when they get to the point where they want to explore providing tech to consumers, it'll be on the basis of how loyal is that consumer? How frequently does that consumer shop our brand? What's the profitability there? Retailers aren't operating on huge profit margins."

There is much for retailers considering dabbling in the metaverse to consider. The Infosys experts concluded by offering advice to brands thinking about the metaverse. Kate Bevan said: "Know what you want to use the metaverse for. Don't just leap in; understand who your customers are, who your audiences are and what you want to get out of it."

Andrew Hogenson built on that by saying: "Look at the metaverse holistically – it's a channel, but what is it relative to your other channels. Don't look at it in isolation. And look at both the customer-facing side of the metaverse and at the associates' side of it equally. How am I engaging my associates? How am I training them more effectively? Look at both sides of the equation."

Finally, Vishwa Ranjan added: "When a new technology or buzzword comes along, do a lot of experimentation. Try to understand the pros and cons of all those technologies individually, and then when they are put together – think of it holistically.

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