

What is the Metaverse?

The Metaverse, Explained for People Who Still Don't Get It

Is it just a buzzword, the next internet, a video game, or an idea? We asked experts to break it down for us.



Whether you've come across Mark Zuckerberg's eerie virtual replica as he unveiled Facebook-rebranded-as-Meta (we're not getting used to this name any time soon though), live concerts in the immersive Fortnite universe, or a digital art gallery in Decentraland – there's no escaping the internet's favourite buzzword: the "Metaverse."

But what even is this metaverse? Is it a virtual universe with endless possibilities we can escape into? Is it the dystopian future of the internet built on speculative sci-fi? Or is it just a fancy way of categorising extended reality (XR) – an umbrella term encompassing augmented, virtual, and mixed reality technologies?

Talking about the metaverse feels a lot like talking about the internet back in the 70s and the 80s. As the building blocks of the new form of communication were being laid down, it sparked speculation around what it would look like and how people would use it. Everyone was talking about it but few knew what it really meant or how it would work. Looking back, it didn't turn out exactly as some people imagined.

However, with the metaverse pegged to become an \$800 billion market by 2024, and with tech giants like Facebook, er, Meta, Microsoft, Apple and Google investing big money in making it a reality, it's time to find out what this vague and complex term means.

So, we got a bunch of experts to break it down for those who still don't get what the metaverse is all about, AKA most of us.

So, what exactly is the metaverse?

While the term has been floating around for the last few years, the word "metaverse" was actually coined by author Neal Stephenson in his 1992 sci-fi novel Snow Crash. In his book, Stephenson

referred to the metaverse as an all-encompassing digital world that exists parallel to the real world. But in 2022, experts still aren't sure whether the metaverse IRL could evolve into something similar.

"The metaverse is a 3D version of the Internet and computing at large," Mathew Ball, a venture capitalist and angel investor who's written a series of essays about the potential and structures of the metaverse, told VICE.

According to Ball, there are two ways to place this in the current context.

"When these two technologies (internet and computing) first emerged, all interactions were primarily text-based (emails, messages, usernames, email addresses). Then they slowly became more media-based (photos, videos, livestreams). The next elevation of user interface and user experience is into 3D. Secondly, if we think of [a] mobile [phone] as placing a computer in our pocket and the internet being available at all times, think of the metaverse as always being within a computer and inside the internet."

Many experts look at the metaverse as a 3D model of the internet. Basically, a place parallel to the physical world, where you spend your digital life. A place where you and other people have an avatar, and you interact with them through their avatars. Some also argue that the metaverse in the truest sense of the term doesn't actually exist yet.

"It's not real at this stage, and won't become real until people have a single location they can go to to get into in a virtual world they could live in," Ibrahim Baggili, a cybersecurity expert and the founding director of the Connecticut Institute of Technology at the University of New Haven, told VICE.

Essentially, the metaverse is supposed to be a 3D version of the internet that is seen as the logical next stage of development, and would ideally be accessed through a single gateway.

"The internet was described as an 'information superhighway' in the 90s, but it was more of just a term to refer to a potential future with networked computers rather than an actual highway," said Timoni West, a vice president who oversees the AR and VR departments at Unity Software, a company that builds graphics engines for game development. "As it develops, the metaverse will also have equivalence to the real world and be much more distributed, democratic, fluid and varied," she told VICE.

While the discourse on defining the metaverse differs from case to case, it is, in the simplest terms, a shared virtual space that is interactive, immersive and hyper-realistic. It would also include your own customized avatar and digital assets, which will likely be recorded on a blockchain.

So, it's not just a video game?

While the metaverse is far more expansive than a video game, the gaming world seems to have already adopted its most rudimentary form. Take for instance an online shooter game like Fortnite, where users have a personal avatar to engage and interact with other players' avatars, while also earning virtual currency to unlock outfits for their avatar.

Perhaps the closest existing iteration to the envisioned metaverse is the game Second Life, a simulation game that lets users experience virtual reality in which their avatar could shop, eat, shower, and do everything they would in real life.

According to technologists, the metaverse will take the virtual reality experience to the next level, allowing users to float into the virtual world to do everything from buy land and host parties to even get married through digital avatars.



So, how do I access the metaverse for now?

While there is no single gateway to access the metaverse at this point, experts suggest acquiring some hardware to truly immerse yourself in the experience. This can range from the affordable \$10 Google Cardboard to the mid-range \$300 Oculus Quest 2 headset, or even the high-quality \$999 Valve Index VR, depending on your budget.

According to cybersecurity expert Baggili, the structure of the metaverse is currently akin to that of the Apple App Store. “At this point, you have multiple platforms that offer experiences in virtual reality, augmented reality and extended reality, which are like the different apps you could download from the App Store. But there isn’t a single portal that people can use to access it, kind of like how Yahoo created a portal to use the internet in its early days.”

In turn, this has led to multiple tech heavyweights offering a variety of experiences, from gaming and virtual workspaces to live entertainment and real estate. This includes platforms like Decentraland, Axie Infinity, Horizon, Sandbox, Fortnite and Roblox.

However, many experts also argue that you don’t necessarily need a VR headset to get into the metaverse.

“We are on the Internet all the time via smartphones in our pocket, Alexas in our living room, and cameras in the world around us,” Ball pointed out. “Normally, we’ll access the metaverse via a smartphone, but we will often be passively in it. There are hundreds of millions [of people] accessing real-time rendered 3D virtual worlds each day via tablets and smartphones. In a decade, it’s likely these devices will remain the primary way we access the metaverse.”

Though accessing the metaverse from your smartphone, tablet or computer would mean taking away from the immersive aspect, it’s a good way to test the waters and see what the hype is all about.

So, what is the use of the metaverse, really?

Given its high-value projection, the metaverse is touted as a major player in growing the digital economy.

“The metaverse will grow the digital economy, which is the primary growth driver of the world economy,” said Ball.

But while the metaverse is already being seen as the future of entertainment, fashion, gaming and even partying, experts argue that its best-case use will likely be for education.

“Just like how you'd understand dissection much better by actually performing it rather than just reading about it, 3D-based education is likely to be much better than, say, schooling over Zoom,” Ball said.

Baggili agrees. “Buying virtual countries that don’t exist in the real world could be an investment opportunity for making a quick buck, but the real value of the metaverse is when it’ll be used in ways that bring value to people’s lives [beyond money].”

As an experiment, Baggili taught his students a class on forensics using VR headsets. “It was effective in terms of documenting a crime scene and creating a consistent environment you can save for later. But eventually, even my students’ eyes got tired and it became difficult to work on the computer,” he said. “So while there are scenarios where the technology and implementation can be useful – such as an augmented reality setup to train car mechanics or to help someone remotely fix an elevator they are stuck in – it still needs some work.”

But is it safe to be in the metaverse?

There’s probably a reason why fictional touchstones for a metaverse, including Ready Player One and Snow Crash, are set in grim dystopias.

A major item in the conversation on the metaverse is whether it can create a safe and responsible immersive environment. Earlier this year, Facebook came under fire after a woman reported she had been sexually harassed and “virtually gang-raped” in the metaverse. Digital privacy experts also continue to point out that the metaverse would be the ultimate surveillance tool.

“Not only would the metaverse collect data on your eye-tracking movement, hand movements, the shape of your room and more. We also have to figure out a legal [framework] of what happens if you get harassed in a virtual platform, given that it has real implications since you’re so immersed in the technology,” said Baggili.

The metaverse, he added, presupposes an implicit trust in technology, the way we rely on Google Maps for directions even if we’re never really sure whether it will lead us to the right destination. “There’s all this legal stuff we have to think about and actively [pursue] if we want to responsibly develop these technologies.”

So, will I be living in the metaverse some years from now?

Some experts believe “a large proportion of people will be in the metaverse in some way” by 2030. But despite the current obsession with it, the idea still needs a lot of work. The first challenge will be the accessibility of the hardware it requires. Then there’s the need for interoperability – allowing you to take virtual items like clothes or cars from one platform to another. Many experts believe this is vital for the metaverse to work. There will be legal and commercial challenges too, apart from

figuring who will act as the police out here. Also, there's no guarantee that people will want to hang out in the metaverse.

Perhaps we'll live in the metaverse intermittently – we enjoy putting on VR goggles but don't keep them on for very long. Or, maybe, we'll laugh at this VICE article a decade from now, thinking how naive people were to have questioned the rise of the metaverse.

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Brands that are already “into the Metaverse”.

Video games

Components of metaverse technology have already been developed within online video games. The 2003 virtual world platform Second Life is often described as the first metaverse, as it incorporated many aspects of social media into a persistent three-dimensional world with the user represented as an avatar. Social interaction and 3D virtual worlds are often an integral feature in many massively multiplayer online games. The multiplayer game creation platform Roblox has been described as a metaverse and has since employed significant usage of the term in marketing. Other claims of developing a metaverse include the games Active Worlds, The Palace, and Fortnite.

Virtual reality

In 2019, the social network company Facebook launched a social VR world called Facebook Horizon. In 2021, Facebook was renamed "Meta Platforms" and its chairman Mark Zuckerberg declared a company commitment to developing a metaverse. Many of the virtual reality technologies advertised by Meta Platforms remain to be developed. Facebook whistleblower Frances Haugen criticised the move, adding that Meta Platforms' continued focus on growth-oriented projects is largely done to the detriment of ensuring safety on their platforms. Meta Platforms has also faced user safety criticism regarding Horizon Worlds due to the occurrence of sexual harassment on the platform.

Microsoft acquired the VR company AltspaceVR in 2017, and has since implemented metaverse features such as virtual avatars and meetings held in virtual reality into Microsoft Teams.

In 2022, HTC announced its launch of a cross-platform metaverse ecosystem called VIVERSE, which would allow connections between virtual worlds accessible by both VR and non-VR devices. and supports parental controls for children.

Proposed applications for metaverse technology include improving work productivity, interactive learning environments, e-commerce, real estate and fashion.

Other, smaller companies have worked towards creating the metaverse through virtual worlds in the past, such as the video-game VRChat.

Wikipedia contributors. (2022, 19 april). *Metaverse*. Wikipedia. Geraadpleegd op 25 april 2022, van https://en.wikipedia.org/wiki/Metaverse#Video_games

These Brands Are Betting Big On The Metaverse

Global metaverse revenue opportunities on things like live events, ads, social commerce and hardware are projected to reach over \$1 trillion according to JPMorgan, and \$800 billion according to Bloomberg. The market for game makers and gaming hardware alone may surpass \$400 billion.

Gaming and entertainment brands, as well as some fashion labels, are paving the way for brands seeking to navigate the metaverse. Meanwhile, Google contributed almost \$40 million in a private equity fund for all metaverse projects and Walmart has filed dozens of metaverse trademark requests since December 2021. And big brands like Nike, Meta and Disney are creating their own metaverse business units.

There are already 1 billion active augmented reality (AR) users worldwide, and that number will almost double by 2024. What's more, 56 percent of influencers say they currently participate in the metaverse. As marketers continue to break through the noise facing consumers 24/7, understanding and embracing new immersive technologies can be an effective way to engage and delight audiences.

According to Harvard Business Review, brands seeking to enter the metaverse should first determine their place in it and balance the risks and rewards of entering the digital landscape. Next, they should determine whether and how much of their target audience spends time in the metaverse and adjust their approach accordingly. The metaverse may be the next iteration of how we use the internet to connect, communicate and transact so it's also important for brands to stay in a "test-and-learn" mode and remain agile as they venture into this uncharted territory.

Ahead, see a round-up of some of the brands that have embraced the metaverse so far—or plan to in the near future—and how they've navigated some of the considerations raised by HBR.

Autodesk

Autodesk developers have recently begun using its software to design and build virtual worlds for entertainment and gaming. It now features several products for the purpose of rendering 3D animation, constructing virtual buildings and creating within virtual reality (VR) and augmented reality (AR) landscapes. Revenues from this segment alone were up 10 percent year-over-year (YOY) in Q3 2021, further pointing to the possibility that Autodesk may soon be the main contender for metaverse developers.

Benetton

In the Italian fashion brand's metaverse retail store, digital shoppers won't buy clothes but instead participate in gaming experiences with the opportunity to accumulate QR codes, which can then be used to make purchases in Benetton's physical stores. The brand's Milan flagship was transformed into a mixed-media experience to tease the look and feel of the store in the metaverse, according to WWD.

ByteDance

TikTok's parent company is in the beta-testing phase of its own metaverse called Party Island. Though ByteDance refuses to label it a "metaverse," conceptually Party Island is a metaverse. Users can create personal avatars, chat in a virtual world and schedule real-world events. The company spent \$1.4 billion to acquire VR headset maker Pico—solidifying its entry into the metaverse space along with a number of other investments within the metaverse supply chain.

Google

Google has started investing in the metaverse with a \$39.5 million contribution to a private equity fund for all metaverse projects. Despite the failure of its AR glasses in 2014, chief executive officer

Sundar Pichai has since frequently addressed the company's ongoing interest in AR. It may even make services like YouTube and Maps available in the virtual landscape.

Gucci and Roblox

In May 2021, Gucci debuted the Gucci Garden, a two-week art installation aimed at raising brand awareness among young customers, inside Roblox. Upon entering the garden, visitors could view, try on and buy digital Gucci products to dress their blank, genderless avatars before exploring the garden's themed rooms.

JPMorgan Chase and Decentraland

The largest bank in the US and seventh-largest in the world has recently made moves to modernize its brand by designing and launching a lounge in the blockchain-based virtual world Decentraland called The Onyx. The opening coincided with the release of its report on growth opportunities within the metaverse, which found that the metaverse's market opportunity will reach over \$1 trillion in annual revenues. It said the risk of "being left behind is worth the incremental investment needed to get started" in the race to occupy a space in the metaverse.

Meta

Few companies are boldly pushing for a metaverse future the way Meta, formerly Facebook, is. Mark Zuckerberg has shifted the company's priority almost entirely to the metaverse and has committed a \$10 billion initial investment in development, and has filed for several patents related to tech that utilizes metaverse users' biometric data to generate what they see in the virtual landscape. The company intends on monetizing the metaverse through virtual commerce and advertising revenue streams.

Microsoft

Microsoft aims to expand its dominance over the professional software market by integrating the Internet of Things into the metaverse, along with digital twins and mixed reality. For example, in order to troubleshoot, boost collaboration and directly interact with their product spaces, Microsoft Dynamics 365 Connected Spaces will allow professionals to recreate and visit their retail stores or factories during virtual meetings.

Additionally, the company made a substantial move into the social metaverse space in January when it announced its acquisition of Activision Blizzard for \$69 billion, which would give the company access to 400 million monthly active gamers.

Microsoft's Xbox celebrated its 20th anniversary with a virtual 3D museum where gamers could personalize their own avatar and camera POV to immerse themselves in the franchise's history of consoles, games and infamous mistakes.

Nvidia

It's no secret that the metaverse requires a monumental amount of processing power. That's where Nvidia has a leg up in the metaverse. Chief executive Jensen Huang said that the metaverse could save money and resources while reducing waste by simulating plants, factories, power grids and other infrastructure products before they're constructed in the real world.

Qualcomm

Qualcomm recently announced a new partnership with Microsoft to develop new technology that facilitates consumer and enterprise adoption of AR. The company's chief executive mentioned that

its Snapdragon semiconductor products—which already power an array of augmented and VR devices, most notably Meta’s Oculus Quest—will dominate the next generation of the Internet of Things and the metaverse.

Roblox

Founded in 2004, the online entertainment platform that allows users to develop games has roughly 47 million daily active users (including about half of American children), 9.5 million developers, its own digital currency and several unique virtual experiences. The company recently purchased Guilded, a platform designed to connect various gaming communities.

Selfridges and Pokémon

To commemorate its 25th anniversary in 2021, Pokémon partnered with Selfridges, designer Charli Cohen and Yahoo Ryot Lab, to build a virtual city called Electric/City where fans could shop for exclusive virtual and physical Pokémon merch. Visitors were able to create custom avatars, dress them and view them via AR body-tracking Snapchat Lens and share them on social media and other virtual platforms.

Shopify

The Canadian ecommerce company will play a critical role in monetizing the metaverse. It will be responsible for the digitalization of assets, currency and the ability for content creators to get paid. In 2021, it made two moves giving it a foothold into the possible commerce aspirations of the metaverse. First, it acquired the AR app Primer, which will allow users to see the effects of a purchase or project in their space firsthand—a powerful tool that’ll allow subscribers to build-out shopping experiences and stores in the metaverse. It also launched an NFT platform allowing digital creators—the first of which being the Chicago Bulls—to sell art and other content directly to consumers.

Several other companies are beginning to toy with the idea of a metaverse future by applying for trademarks. Brands like Victoria’s Secret, L’Oreal and McDonald’s and even the now-defunct Blockbuster have all filed trademark requests for online retail services featuring virtual foods, brand names, product names and more. Premier League champions Manchester City, along with its new partner Sony, is building its iconic home, Etihad Stadium, in the metaverse using Sony subsidiary Hawk-Eye’s image analysis and skeletal-tracking technology.

Aghadjanian, N. (2022, 26 februari). *These Brands Are Betting Big On The Metaverse*. AList. Geraadpleegd op 25 april 2022, van <https://www.alistdaily.com/digital/brands-enter-the-metaverse/>

What is your opinion on the Metaverse? Is it a good idea or not? Why? Why not? Do you like it, Does it scare you, does it make you uncomfortable, is it progress?

In my opinion it has two sides, the metaverse has a lot of pro's and a lot of cons. And yes it does scare me. If you take for example the phones we have right now compared with 6-10 years ago there are a lot of changes. Not only useful changes but also privacy changes that company's make abuse of. The internet knows more about you than yourself sometimes what could be very shocking. This is something that's going to be worse. There are algorithms that are learning who you are, what you like, and how even ads can approach you. The metaverse is a big progress, but yes I do feel uncomfortable with it. Also the new generation doesn't know better and they are getting more lazy every year. They grow up with the laziness of automatic apps. The metaverse is not going to help with this.

The advantages the metaverse has:

Innovations in Communication for Workplaces and Educational Institutions

Doubling Up the Power of Blockchain

New Opportunities for Branding

Developing and Promoting a Virtual Economy

The dis-advantages the metaverse has:

Required of Advanced Digital Technologies

Privacy and Security Implications

Reducing the Difference between Real and Virtual