

Greenwood Campbell

We call ourselves the Human Tech Agency because our purpose is to improve people's lives.

We use empathy, research and data to understand our clients and the motivations and needs of their users. Then we use the latest technology to create meaningful and engaging digital experiences.

We create websites, build Metaverses, design voice skills, develop chatbots, build apps and transform organisations with digital technology. Our work saves lives at sea, helps older people find the right care, ensures people find the right doctor, inspires people to get fit and healthy, brings fans closer to the game they love, connects isolated people with volunteers and revolutionises the way parents adopt children.

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Introduction

In October 2021 there were over 2.6 million Google searches for the term 'Metaverse'. Mainly because a "little social media company" decided to change their name to Meta.

Since then, the metaverse has quickly entered the zeitgeist.

But, the Metaverse can be confusing and difficult to define. It can encompass 3D worlds, NFTs, cryptocurrency and the blockchain. Access to it can require software installation or linking of crypto wallets.

It is not actually a new thing. Gamers have been spending time in Metaverses for over a decade; gaming, socialising and engaging in commerce, from second life to Minecraft to Fortnite. There is not a single Metaverse, just as there is not one single social media platform. But is it all just a passing fad? Or, if not, what opportunities does the Metaverse present for brands, organisations and users?

And what will the Metaverse become? A single 3D world like The Oasis from Ready Player One? Or multiple inter-connected online networks that use crypto for currency and where users trade NFTs for profit.

We have created this guide to help answer some of these questions and help you understand what opportunities and risks lie within...

Look out for QR codes like this throughout the guide.

Simply scan them with the Camera App on your Smart Phone for extra content.

The Metaverse

Gemma Greenwood

Ouick definition:

Put simply, the Metaverse is a virtual version of our physical world where digital representations of people (avatars) can work, socialise, relax, learn, shop and play. All powered by it's own digital economy.

A key point is that there is not one virtual world but many worlds that are typically accessed by a link provided by an organisation or the platform itself. Users can use virtual reality (VR) headsets for a more immersive experience, or the Metaverse can be used on a screen.

The Metaverse is widely tabbed as the next phase in human evolution.

Key platforms & what they're best for:

Horizons - meeting, sharing and conferencing, like the Metaverse equivalent to Zoom

Decentraland - eCommerce and branded experiences

Spatial - live events & social

Sandbox - eCommerce and branded experiences

Roblox - gaming, social & live events

Mozilla Hubs - exploration & work

VRChat - social, gaming, meeting sharing (available through VR only)

Organisations already in the Metaverse

Nike has filed four patent and trademark applications for downloadable virtual goods operational in the metaverse

Disney is developing a metaverse theme park. In December, the company filed for a patent for a "virtual-world simulator."

Hyundai Motor Company created Mobility Adventure, a Roblox metaverse showcasing motor goods and future mobility solutions.

Coca-Cola recently auctioned its first NFT, a prize package on OpenSea that reaped \$575,000.

Louis Vuitton created Louis: The Game.

Gucci opened Vault, a metaverse concept store selling "Supergucci" NFTs.

Balenciaga intends to continue merging the fashion and digital worlds after their successful collaboration with Fortnite.

Designer Charli Cohen and retail house Selfridges collaborated on a collection and VR experience to commemorate Pokémon's 25th anniversary.

Market size

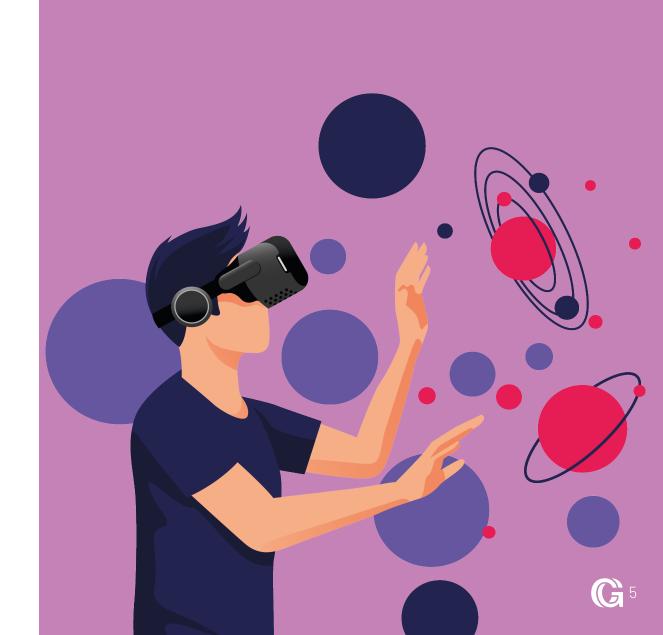
In 2020, the Metaverse market was worth \$46 billion. The tech industry predicts the Metaverse market will hit \$800 billion by 2024 and reach 1 billion people by 2030 with over 10,000 jobs created over a five-year period. And then there are the highly respected JP Morgan and Goldman Sachs throwing around figures of \$1-12 trillion.

Developing your strategy

The Metaverse opens a whole new realm of ways to engage which we expect will lead to uniquely new services and business models. Not everything in the metaverse will be relevant for every business. However, there is little downside to taking the opportunity to explore.

There are a number of considerations businesses should take into account when developing a metaverse strategy, such as the following:

- 1. What business objectives do you hope to achieve by operating in the metaverse?
- 2. What value can you offer users in the metaverse?
- 3. Who are the key players, which platform is best for us?
- 4. How will you create a presence in the metaverse that is compelling and engaging for users?
- 5. What policies and procedures do you need to put in place to ensure a safe and secure experience for users?
- 6. How will you generate revenue in the metaverse?
- 7. What are the risks and challenges associated with operating in the metaverse?
- 8. What legal and regulatory issues do you need to be aware of?
- 9. How will you stay ahead of the competition in the metaverse?
- 10. How can I get out to market quickly? Is there an expert agency to partner with (the answer is yes Greenwood Campbell)
- 11. What is our roll-out plan? We understand we can't all have a Gucci sized marketing team, however, no campaign regardless of how useful or cool will be successful without a roll-out plan to reach the right audiences.



The history of the Metaverserse

Metaverse

1991

On August 6 1991, British computer scientist Tim Berners-Lee published the first-ever website while working at CERN, the huge particle physics lab in Switzerland. Information technology analysis firm Gartner coined the term 'supranet' to signify the convergence of the virtual and physical worlds

The term was alluding to the ongoing convergence of the Internet, mobile communications, always-on connectivity, sensors and advanced human-computer interaction.

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02

03

04

1992

Neal Stephenson coined the name 'Metaverse' in his sci-fi novel 'Snow Crash'

In the novel, people use digital avatars of themselves to explore the online world, often as a way of escaping a dystopian reality 2002

Neal Stephenson coined the name 'Metaverse' in his sci-fi novel 'Snow Crash'

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'Second Life' introduced

An online multimedia platform that allows people to create an avatar for themselves and have a second life in an online virtual world. Developed and owned by the San Francisco-based firm Linden Lab and launched on June 23, 2003.

Virtual Reality headset maker, Oculus, made its debut

The Rift DK1 was released on March 29, 2013 and uses a 7-inch (18 cm) screen with a significantly lower pixel switching time than the original prototype, reducing latency and motion blur when turning one's head quickly.



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Bitcoin and Blockchain introduced

Bitcoin is a digital currency, a decentralised system that records transactions in a distributed ledger called a blockchain.

2014

NFTs first introduced to the market

A non-fungible token (NFT) is a non-interchangeable unit of data stored on a blockchain, a form of digital ledger, that can be sold and traded. Types of NFT data units may be associated with digital files such as photos, videos, and audio. Because each token is uniquely identifiable, NFTs differ from blockchain cryptocurrencies, such as Bitcoin.

2014

Facebook acquired Oculus

Facebook announced that it has reached a definitive agreement to acquire Oculus VR, Inc., the leader in immersive virtual reality technology, for a total of approximately \$2 billion.

Decentraland Launched

Decentraland is a 3D virtual world browser-based platform. Users may buy virtual plots of land in the platform as NFTs via the MANA cryptocurrency, which uses the Ethereum blockchain.

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Introduction of Augmented Reality

AR can be defined as a system that incorporates three basic features: a combination of real and virtual worlds, real-time interaction, and accurate 3D registration of virtual and real objects.

2018

A movie set almost entirely in a Metaverse environment. In 2045 the planet is on the brink of chaos and collapse, but people find salvation in the OASIS: an expansive virtual reality universe created by eccentric James Halliday. When Halliday dies, he promises his immense fortune to the first person to discover a digital Easter egg that's hidden somewhere in the OASIS.

Ready Player One is released

2016

Facebook rebranded to Meta and announced their dream project; Fortnite hosted a virtual concert Horizon. 2021 Fortnite is one the world's most popular Horizon Worlds lets people build custom games, attracting millions of young players environments to hang out and play games in from across the globe. More than 12 million as legless avatars. Meta announced in 2020 players logged in for the concert featuring that 10,000 separate worlds have been built Travis Scott which included a digital version in Horizon Worlds to date, and its private of Scott performing a fully-animated, Facebook group for creators now numbers scripted 10-minute set. over 20,000 members. Sotheby's held an NFT art show in Decentraland The virtual gallery has five ground floor spaces to show digital art, as well as a digital avatar of its London commissioner Hans

Lomulder to greet visitors at the door.

Web 3.0 Adam Greenwood

The term "Web 3.0' was coined by Fthereum co-founder Gavin Wood in 2014, referring to a 'decentralised' online ecosystem based on blockchain."

Before we unpick that statement, let's take a look at what Web 1.0 and 2.0 were and what Web 3.0 is promising.

Web 1.0



Web 1.0

Web 1.0 was the first iteration of the internet, it became widely available in 1989 but took a few more years to get fully adopted. Most internet connections were dial up 56k modems and most websites were very simple, corporate and information websites, created by web developers and read only.

Web 2.0

Web 2.0 saw the invention of new types of websites that allowed user generated content (UGC), meaning you no longer had to be a developer to create content.

Social networking sites became prevalent, Facebook and YouTube acquired hundreds of millions of users and advertisers took full advantage of the ability that these websites gave them to personalise content and target users.

The web became mobile with the release of the iPhone in 2007 and it really got going in 2008 with the release of the iPhone 2 (or iPhone 3G to add further complication!). If you haven't seen it, watching Steve Jobs' original iPhone launch is a masterclass in presentation and the crowd reaction is priceless.

Data, analytics, UX and CRO allowed businesses to understand and change their content to tailor it to their customer's needs.

One of the main characteristics of all of Web 2.0 is that it is all stored on servers owned and managed by trusted institutions. This centralistaion is one of the issues that Web 3.0 seeks to rectify.

Steve Jobs announcing the first iPhone in 2007







Web 3.0

Web 3.0 is the collective term for a number of new technologies which change the way we interact with content and computers interact with us including but not limited to: AI, blockchain, cryptocurrency, IOT, NFTs, Metaverse, Symantec web.

Web 3.0 is a decentralised internet, where individuals own and govern sections of the internet, rather than companies like Google, Apple or Facebook. Decentralisation can help to create trust, transparency, and privacy.

Blockchain

For example, the decentralised social network Akasha is using blockchain to build a censorship-resistant platform for free expression. The digital identity project uPort is using blockchain to give users control over their own data. Furthermore, the decentralised marketplace OpenBazaar, which until 2021, was using blockchain to build a peer-to-peer platform for commerce.



Cryptocurrency and NFTs

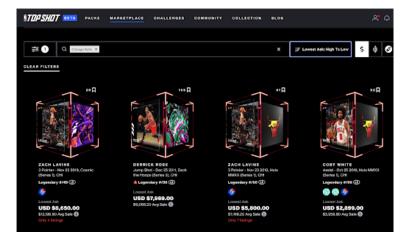
Cryptocurrency is a digital currency that uses cryptography for security. Crypto is decentralised, so it is not subject to government or financial institution control. Major financial organisations like PayPal are enabling users to buy and sell cryptocurrencies like Bitcoin and many others will likely follow.

A NFT (non-fungible token) is a non-interchangeable unit of data stored on a blockchain, that can be sold and traded NFTs are 'tokens' that we can use to represent ownership of unique items. They let us tokenise things like art, collectibles and even real estate.

Bored ape NFTs

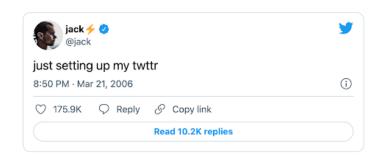


If it seems crazy to pay \$8000+ for a video file that you could watch for free on YouTube, it gets crazier!



Someone paid \$2.9M for Jack Dorsey's (founder of Twitter) first tweet!

Here it is for free online and for everyone in the world to view whenever they want!





Semantic web

Finally, Web 3.0 is about using advanced metadata to help Al better understand the world around us.

In other words, we add further data descriptors to otherwise existing content and data on the Web. As a result, computers are able to make meaningful interpretations similar to the way humans process information to achieve their goals.

The ultimate ambition of the Semantic Web, as its founder Tim Berners-Lee sees it, is to enable computers to better manipulate information on our behalf.

Web 3.0 is the next generation of the internet, where the web is more intelligent and connected. It is a more personalised and interactive web, where users can control their own data and privacy.

However, it may take a few more years for us to fully understand and realise its potential.





Someone paid **\$2.9M** for Jack Dorsey's (founder of Twitter) first tweet!



Buy your favourite basketball moments with NBA top shots.



Bored Ape is a non-fungible token collection built on the Ethereum blockchain. The collection features profile pictures of cartoon apes that are procedurally generated by an algorithm.

NFTs

James Overton

Why are Non-Fungible tokens important?

Non-fungible tokens are an evolution of the relatively simple concept of cryptocurrencies. Modern finance systems consist of sophisticated trading and loan systems. By enabling digital representations of physical assets, NFTs are a step forward in the reinvention of this infrastructure.



What's an NFT?

A NFT (non-fungible token) is a noninterchangeable unit of data stored on a blockchain, a form of digital ledger, that can be sold and traded. NFTs are 'tokens' that we can use to represent ownership of unique items. They let us tokenise things like art, collectibles and even real estate. They can only have one owner at a single time and they are built on the Ethereum blockchain which means no one can modify the record of ownership and no one can copy and paste an existing NFT and claim theirs is an original, as NFT ledgers claim to provide a public certificate of authenticity, or proof of ownership.

So the term non-fungible means the item is unique and can't be traded for anything like it, for example a one of a kind trading card is non-fungible whereas bitcoin is fungible as you can trade one bitcoin for another bitcoin and you will have the exact same thing in return.

How do they work?

NFTs were originally built on the Ethereum blockchain but other blockchains are now starting to support them. Whether the original file is a JPG, MP3, GIF or anything else, the NFT that identifies its ownership can be bought

and sold just like any other type of art. The ownership of NFTs are managed through the uniqueID and metadata that no other token can replicate. NFTs are minted through smart contracts that assign ownership and manage the transferability of the NFTs. Minting an NFT refers to the process of turning a digital file into a crypto collectible or digital asset on the Ethereum blockchain. When someone creates or mints an NFT, they execute code stored in smart contracts that conform to different standards, such as ERC-721. This information is then added to the blockchain where the NFT is being managed. NFTs are minted from digital objects as a representation of digital or non-digital assets. For example, an NFT could represent:

Digital Art:

- GIFs
- Collectibles
- Music
- Videos

Real World Items:

- Deeds to a car or house
- Tickets to a real world event
- Tokenized invoices
- Legal documents
- Signatures

NFT's are very much in their early stage so there's many more options for people to get creative with.

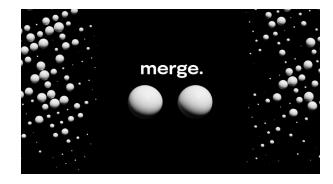
How are they being used?

NFTs have become hugely popular amongst artists, gamers and a wide range of innovative brands, it seems that every day there are more and more brands and artists stepping into the space. For artists, NFTs can be a great way for them to sell new forms of their art and provide their fans more ways to support them. NFT artwork can range from small and quick to make GIFS and pixel art to much more ambitious projects. An example of these quick and easy to make NFTs would be the popular GIF NYAN cat, which was sold for \$590,000.



However, some artists are taking a more unique approach to creating and distributing digital art. When the artist PAK released his NFT project "The Merge" it sold for \$91.8 million, he allowed people to buy fractional shares of the NFT. When people bought Merge they would get a dynamic NFT with their accumulated mass, which meant depending on how much they bought

the NFT would look different displaying the accumulated mass of the person's purchases.



NFTs are also starting to have a big impact on the gaming industry, as it's been very popular for a while for gamers to buy ingame items such as unique character, weapon or car skins, but even though the players bought these items they are still owned by the game companies. So implementing NFTs into games will allow users to have unique ownership of their items and can buy and sell them across the game.

This would be beneficial for the players and the game company, for example if Fortnite released a rare skin as an NFT and the first player to unlock this skin would completely own it and can then sell it to other players or collectors, this would still benefit Epic games (developers of Fortnite) as they can take a cut out of the payout.

The game platform Steam does this but without the NFTs, as players can buy and sell items off each other on their market place and a percentage of all these sales go towards Valve (owners of Steam).

Brands are starting to use NFTs as a part of their marketing strategy, thanks to the global interest they have generated they have opened up new ways of brand storytelling and consumer interaction. NFTs are important to brands as they represent digital files, such as art, audio, and video.

They are so versatile they can be used to represent other forms of creative work like virtual real estate, virtual worlds, fashion, and much more.

NFTs can be used to:

- Generate interest in your brand and product
- Encourage interaction
- Create unique brand experiences



Nike are trying to use NFTs as a way to certify the veracity of a pair of trainers. So when someone buys a pair of Nike shoes they will get a digital version which will be stored in their "virtual locker" under the initiative they have named cryptokick. This is a truly unique use for NFTs, having a physical item linked to a digital collectable, and as there's a huge culture behind buying, trading and collecting shoes, adding a digital seal of authenticity to the physical item could prove very useful to people collecting and trading Nike shoes. Having NFT versions of your Nike shoes can go far beyond a seal of authenticity and actually allow people to take their shoes into the Metaverse and video games.



Burberry is another example of a clothing brand using NFTs to promote their product, teaming up with a game developer to create their own NFT to be featured and used in the game, Blankos Block Party. The shark Blanko can be purchased, upgraded and sold in-game, which has then moved the brand into the digital space. By doing this, Burberry will expose a different demographic to their brand and not only will they be making money off the sales of their NFT but they will increase their chances of getting new customers that wouldn't normally get exposed to Burberry. Burberry's Chief Marketing Officer, noted that, "With this exciting concept, we are able to unlock genuine value for the gaming community by encouraging players to interact with our brand in an environment that celebrates art, design and exploration." The use of NFTs open up the fashion world to new digital channels and will be critical for brands that want a presence in the metaverse.





What impact will NFTs have on the Metaverse?

Most people perceive NFTs as digital art or collectibles which they can sell online. However, the frenzy surrounding digital art in present times has pointed out many new possibilities with NFTs, with their use in the Metaverse being the most promising use case. Almost all discussions around the metaverse point towards the Metaverse and NFTs being blended together, whereas some think that NFTs will be a smaller component to the Meterverse. This topic has only been brought to life through the recent popularity of blockchain gaming which allows players to buy or unlock NFTs which hold value on the blockchain. This has become so popular due to the idea that people can play to earn, this means players have full ownership of their items, skins and even virtual land, allowing them to trade, sell and buy them and all these virtual items will hold real value that can be transferred to the real world.

Even though blockchain gaming is relatively new, the concept of games with a virtual economy that links to the real world have been around for a while. The most known case study being Entropia Universe, which is a massively multiplayer online (MMO) virtual universe designed by the Swedish software company MindArk, which was released in 2003.

The game has its own economy that has a fixed exchange rate to the real world. When you make 100 PED (as the Entropia currency is called) you can trade it out for \$10 USD at any time, and vice versa. Users control avatars that allow them to enjoy a range of activities, there is hunting, fashion, dancing, exploring, farming, and much more.

In 2005 a man by the name of Jon Jacobs purchased club Neverdie for \$100,000. The club, located on a giant asteroid orbiting the planet Calypso, was history's most expensive virtual item for a number of years. Renting this club out to other players in the game Jon was able to make \$200,000 a year in revenue, he later went on to sell the property for \$630,000.

More recent examples of blockchain games that are actively trying to become big platforms in the metaverse are Decentraland and The Sandbox. These are both blockchain based games which use NFTs to assign traceable and verifiable ownership to in-game items. Both of these games are built on the Ethereum blockchain which means they can buy items and land in the form of NFTs and then trade them within the community, once people own items or land within the games it is permanently owned by the community, which provides members with absolute control over their creations.

This style of game allows people from all over the world to create and help develop a massive community within a virtual world.

These platforms aren't just being used by video game fans, the games company Atari have brought virtual land in The Sandbox with the intentions of building an Atari theme park featuring all their iconic games.

This is an example of how brands can essentially build "interactive adverts" in these popular Metaverse worlds to gain exposure and increase customer engagement.

It is reasonable to infer that the Metaverse will shape up only through virtual worlds. Interoperable games and NFTs can drive the development of the metaverse by serving the virtual worlds.



The foundation for our digital future.

Josh Curtis

Let's start with cryptocurrency, what is it and how does it work?

Cryptocurrency is software and a purely digital phenomenon - a set of protocols and processes, an encrypted data string that denotes a unit of currency.

Like traditional currencies, cryptocurrencies express value in units – for instance, you can say "I have 2.5 Bitcoin" just as you'd say, "I have £2.50."

It is monitored and organised by a peer-to-peer network called a blockchain. Unlike physical money, cryptocurrencies are decentralised, which means they are not issued by the governments or other financial institutions.

Blockchain allows cryptocurrencies to operate across a network of operations, this not only reduces risk but also eliminates many of the processing and transaction fees. Blockchain consists of three important concepts, blocks, nodes and miners. Every chain consists of multiple blocks and each block has three basic elements:

- Data in the block
- 32-bit whole number called a nonce.
- The hash which is a 256-bit number wedded to the nonce.

When a block of a chain is created, a nonce generates the cryptographic hash. The data in the block created is signed and forever tied to the nonce and hash unless it is mined.

In a blockchain every block has its own unique nonce and hash, but also references the hash of the previous block in the chain, so mining a block isn't easy.

Miners receive bitcoin as a reward for completing "blocks" of verified transactions, which are added to the blockchain.

You need either a graphics processing unit (GPU) or an application-specific integrated circuit (ASIC) in order to set up a mining rig.

If you own cryptocurrency, you don't actually own anything tangible. What you own is a key that allows you to move a record or a unit of measure from one person to another without a trusted third party.

There are thousands of cryptocurrencies, some of the best known include: Bitcoin, Ethereum, Litecoin and Ripple.

You can also spend cryptocurrency in major retailers, e.g. Starbucks, Tesla, Microsoft and most importantly KFC!





KFC Canada presents The #Bitcoin Bucket. Sure, we don't know exactly what Bitcoins are, or how they work, but that shouldn't come between you and some finger lickin' good chicken. facebook.com/KFCCanada/vide...

Where does cryptocurrency come in?

Well, cryptocurrencies will likely be the main form of exchange in the Metaverse.

You can buy and sell digital products in the Metaverse using cryptocurrency. As mentioned previously, the most commonly used cryptocurrency is Ethereum, this is also the same for the Metaverse.

JP Morgan becomes the first bank to open in the metaverse

You can now do your banking in the metaverse! JP Morgan opened up a lounge in the blockchain-based virtual world of Decentraland on Tuesday 17th of February, becoming the first major bank to do so.

The bank unveiled its virtual world, called the Onyx Lounge, alongside a report which showed the types of business opportunities companies may find in the metaverse. Greeted by a tiger and an avatar of JP Morgan's CEO Jamie Dimon. JP Morgan said it plans to "play a major role in the metaverse" and could help tackle issues in the virtual world currently dealt with in real life, such as validating accounts and fraud prevention.

The Virtual Boutique

Many popular luxury fashion brands have made an entrance into the virtual world, near the end of 2021 Balenciaga was the first to take on Fortnite, allowing users to purchase digital outfits inspired by real-life Balenciaga pieces from its virtual boutique.



How popular is the Metaverse and cryptocurrency?

More than 1 in 10 Americans invested in cryptocurrency over the past year 2021, according to a survey published by the University of Chicago.

As of last year (2021), about **106 million people** around the world use cryptocurrencies & roughly **22**% of the adult population own a share of Bitcoin.

Bitcoin, a cryptocurrency, was worth **9% of the world's gold supply**. An estimated 114 million accounts hold Bitcoin worldwide, according to Crypto.com.

The Metaverse is poised to be the next big thing in the internet revolution with cryptocurrency as the main exchange.

Metaverse eCommerce

Josh Kelley

We're also building a Horizon marketplace where creators can sell and share 3D digital items. And our hope is that this will enable a lot more commerce and help grow the overall Metaverse economy.

- Mark Zuckerberg, CEO of Meta, 2021



Mark Zuckerberg talks about the Metaverse and VR



It's no secret that a huge focus of the Metaverse is eCommerce. From previewing physical goods, to purchasing digital goods & NFTs, to embracing uniquely tailored and ultra-personalised experiences, the Metaverse is set to impact every part of eCommerce.

During the Facebook Connect last October that announced the transition from Facebook to Meta, Mark Zuckerberg mentioned eCommerce no fewer than 13 separate times.

Metaverse and AR

Innovative companies are already launching immersive Metaverse experiences to showcase their products, allowing potential customers to get a realistic preview of products before buying them. Many of these eCommerce platforms take advantage of AR (Augmented Reality), and with good reason – it provides a convenient way of previewing the look and fit of a physical product in your own environment, and helps sellers by reducing returns & showcasing their products to customers who may not have had a chance otherwise.

In September 2020, Shopify - one of the largest eCommerce platforms for online stores - found that conversion rates for products sold using Metaverse technologies such as AR were 94% higher than those without.

"In terms of AR, I think the big opportunity is in merging virtual and physical product experiences. The Roblox / Fortnite generation will look for brands that blend the real and unreal, and let them show that off to friends. Repping your virtual style in the real world is a solid use case for AR."

- Nick Pringle, SVP Creative Director of R/GA, 2021

Wanna Kicks - is an AR app which allows you to see how different elusive and exclusive sneakers look on your own two feet.

Gucci Garden - is a Metaverse experience on the platform Roblox which allows players to walk around a unique environment as a mannequin, try on Gucci products, and buy limited-edition Gucci avatar items.

Warby Parker - has an AR app which lets customers virtually try on glasses on their own face using the 3D face scanning built into the iPhone X and later.

Metaverse Platforms for eCommerce

Far from the vision of Ready Player One's "Oasis", the current state of the Metaverse exists spread over many different platforms. Roblox, for example, is only one of many platforms originally designed for gaming, but is now being used by companies to introduce their own branded Metaverse experiences.

Fortnite, for example, is a game developed by Epic Games, reaching nearly a quarter billion active users last year. In the same year, brands like Nike, the NFL, and John Wick used the game to let users into their custom experiences.

Decentraland is a famous example of a platform created specifically for Metaverse, of which eCommerce is a cornerstone. Built on the Ethereum blockchain, Decentraland makes profits through selling virtual realestate, selling over \$4,500,000 of NFTs over the last 7 days.

In December 2021, Walmart began to dip their toes into the Metaverse with trademark applications made referencing virtual goods in shared environments, cryptocurrencies, and NFTs. This news comes shortly after their announcement last August that the company was seeking a cryptocurrency product lead.



Has the Metaverse Changed the way B2B Companies Work?

Tamieka Flannigan

Will the Metaverse change the way B2B companies work?

As a result of the Metaverse, new marketplaces are opening, and B2B businesses are now having to consider new ways they can approach and engage with consumers. meetings, communications, workspaces and events are quickly becoming digitised experiences.



Which B2B industries have adapted to Metaverse so far?

Creators and technology companies are having to adapt... and fast!. A huge amount of well known brands are joining the Metaverse but to do this they need to join forces with big names in the tech world.

Training-based companies have fully taken advantage of the ever growing Metaverse. It has opened up the whole new world of fully immersive virtual training courses for students and employees. A large number of businesses have substituted the traditional, face-toface training process with virtual realitybased alternatives.

Construction, Engineering, Nursing and Social Care industries are just a few of many to have tackled virtual training. Virtual training sessions allow users to complete virtual tasks and jobs in a safe environment. It is seen to be a more 'hands on' (virtual hands) approach to remote learning.

Training-based companies have changed the way businesses develop their employees' skill sets. Virtual training has given companies the ability to train up members of staff remotely, which became extremely useful during the pandemic.

The introduction of businesses training other businesses in the Metaverse has resulted in companies growing without having to pay for staff to physically attend training courses.

How has the Metaverse changed the way B2B companies work?

Virtual offices

The Metaverse has opened up the ability for businesses to conduct virtual meetings and pitches, any time and anywhere. An increasing number of VR companies are now offering virtual offices and spaces for businesses to attend meetings and conferences. The introduction of this has meant companies across the globe can gather together in digitised spaces without having to leave their home comforts. The CEO and Co-Founder of Plutoverse recently said "The metaverse will host most of your office meetings within two or three years".



Virtual products

There is becoming a small line between the virtual/digital world and the physical world. More companies are now building their own virtual products in the Metaverse.

The introduction of virtual products and services will massively impact B2B companies and how they work. Factories and manufacturing companies are now producing replicas of their machinery to allow buyers to test the efficiency before they bulk purchase for resale. This is a far more cost effective way of retailers testing products before purchasing them.

Another example of this is wholesalers' newly found use of virtual products. Wholesalers can now invite businesses to a virtual space to see a digital interpretation of the product/s they are looking to invest in.

Prashant Sharma "As people will tend to spend more and more time on the Metaverse, their need for virtual goods and services will also increase. Organisations and brands will have to focus towards increasingly creating more virtual goods (or replicas) of their actual products,".

Virtual events

The Metaverse has made it possible for businesses to host virtual conferences, events and workshops. Business people can attend these virtual events in avatar form, allowing them to learn, network and trade in the comfort of their own house. This became increasingly popular during the pandemic when workers were unable to leave their homes.

Research has found that virtual events can produce the hosting company with useful data during and after the event. They can monitor who has attended the event, their geographical location and whether the event has led to conversion.





Travis Scott made \$20 million from his 9 minute Fortnite concert



So is the Metaverse beneficial to B2B Companies?

The Metaverse has the potential to be really beneficial for B2B companies. Here are just some of the ways the Metaverse could have a positive impact:

- No Geographical Restrictions Businesses located all over the world can meet in the Metaverse. Geographical barriers in e-commerce are removed, meaning international businesses have the ability to unite and work together.
- Data Collection/Analytics The Metaverse will provide businesses with reliable, trackable data on anyone who enters. Businesses can track multiple aspects of the meeting/event attendees: How long people are in the meeting/event for. How many times they attend. Who came to the virtual event/meeting. How users are interacting.
- **Devices** The Metaverse can be joint using both desktops and mobile devices with a single click of a button. This allows business workers to access meetings on the move, away from their desk.

- Digital Currency Businesses can use a virtual currency/wallet that will allow them to make more seamless transactions.
- **Environment** There are no limits on the amount of attendees in the Metaverse. Venue capacity is non-existent in the Metaverse and meeting/conference rooms can be designed to suit the needs of each business.
- **Design Freedom** Businesses have an extensive freedom of design. There are no physical construction costs and physical limitations in the Metaverse. Therefore, businesses can construct impressive and professional environments that wow other attendees.

How could the Metaverse negatively impact B2B Companies?

The Metaverse is not all good for B2B businesses. There are also some major limitations for B2B when it comes to the Metaverse:

• Lack of Equipment - The Metaverse heavily relies on VR headsets and other specialist equipment. Only a small percentage of people have this technology due to costs and accessibility.

- **Unregulated** The Metaverse is Decentralised meaning it is currently unregulated. Businesses are at an increased risk if they are using an unregulated platform.
- Behaviour and Security Behaviour in the Metaverse is seen to be worse than on social media. With sensory experiences heightened, actions and words in the Metaverse can feel more 'real' and hurtful.

So, will the Metaverse change how B2B Companies work?

Yes, and it has already begun. The Metaverse has enabled global businesses to interact and network with no geographical limitations. The possibilities of where B2B companies can go in the Metaverse are endless (and are very exciting!).

With this said, B2B companies are being advised to get 'Metaverse ready'. A vast amount of companies are now utilising the growing ability to digitally engage with consumers in a fully immersive environment. Companies must be future-proof in order to compete with other companies in their chosen industry.

The Metaverse and working from home

Gemma Greenwood



There is no escaping the fact that the pandemic has created a shift in employees preferences when it comes to their working location.

FlexJobs ran a survey of more than 2,100 people who worked remotely during the pandemic from March 2021 through to April 2021. They found that not only do employees want remote work post-pandemic, 58% say they would absolutely look for a new job if they weren't allowed to continue working remotely in their current position. 65% want to work remotely full-time post-pandemic, and another 33% prefer a hybrid work arrangement. Top concerns of returning to the office include Covid-19 exposure, less work flexibility and worse work-life balance. Some other top level findings include:

- 55% say their productivity increased while working remotely, while 33% say it stayed the same.
- 30% say their ability to collaborate has improved in a virtual environment, compared to a traditional office, one-third say their ability to collaborate has suffered (33%) and another one-third say it has been unchanged (34%).
- Cost savings is listed as the 2nd top benefit of working remotely (75%), second only to not having a commute (84%), and 38% estimate they save at least \$5,000 a year from remote work.

- Not having to travel/drive to meetings (75%), wearing comfortable clothing (58%), the ability to mute (55%) and more scheduling flexibility (51%) were the top favourite elements of video meetings.
- 86% engaged in some kind of professional development during the pandemic.
- 50% like video meetings versus 14% who dislike them.
- o 37% would consider relocating if they had permanent remote work.
- 70% do not think working remotely during the pandemic has had an impact either way on their chances of promotion/ advancement.

However, when work becomes more geographically dispersed, managers have less insight into what work their employees are doing. This leads to inaccurate and potentially biassed performance ratings based upon where employees work rather than the impact they are having.

A Gartner survey in late 2020 of nearly 3,000 managers revealed that 64% believe in-office employees are higher performers than remote employees, and 76% believe in-office workers are more likely to be promoted. Moving forward, with advances in new technologies, companies across the globe are scrambling to create the ultimate future workplace.

The Metaverse opportunity

With the Metaverse, organisations can create whatever virtual environment they like from their dream office with multiple meeting rooms and breakout spaces to 1:1 replica for their actual office.

Using a mouse or keypad to move avatars around on a screen (or using a Virtual Reality headset), users can enter into virtual rooms and spaces for meetings. It's a huge improvement over Zoom because the interactions feel closer to the way we behave in real life.

Another life-like feature of the Metaverse is 'spatial audio' where you hear someone's voice coming from the direction of their avatar and their voice fades when they walk away from you. It allows for semi-private conversations with people as you stand around a coffee machine or trail other avatars on the way to a meeting.

"The more distributed workforces become, the more companies will need these spaces to collaborate", Erin McDannald, CEO of Environments, a smart building design company in Baltimore that has created a digital twin of its headquarters



Metaverse experiences allow people to present on a screen, write on whiteboards, or in the air, and to watch video feeds which is why they make an ideal environment for team meetings and catch ups.

Virtual meetings will move to the metaverse as quickly as within three years, Bill Gates predicts

Well-known organisations like JP. Morgan, Nike, and Gucci, all have a presence in the Metaverse and many more have plans to experiment, too.

Want to explore our office?



Luxury fashion leads the way in the Metaverse

Kayley Doyle

Avatars will be as common as profile pictures today, but instead of a static image, they're going to be living 3D representations of you, your expressions, your gestures that are going to make interactions much richer than anything that's possible online today. You'll probably have a photo realistic avatar for work, a stylized one for hanging out, and maybe even a fantasy one for gaming. You're going to have a wardrobe of virtual clothes for different occasions designed by different creators and from different apps and experiences.

Meta CEO, Mark Zuckerberg.

Would you pay hundreds of pounds for a luxury item? A purse, coat or shirt that you never get to wear in the real world?

On its surface, digital fashion may seem like a distant need. Yet, perfecting our online appearance is already a large part of our day to day life. Gamers already have a long history of using clothes and accessories to establish their virtual identities, and there is every indication that Metaverse users will do the same.

In the Metaverse, avatars are everything. And this means users will pay big money to look the best. In fact, analysts at Morgan Stanley predict the market for virtual luxury goods could reach \$50 billion by 2030.

Examples

Bernard Marr, for Forbes states that "Executives of luxury brands are taking the trend seriously and moving quickly to capitalise on the opportunity to sell virtual versions of their products to people in the metaverse"

American designer Tommy Hilfiger revealed late last year that the brand will be partnering with Elite World Group (EWG) Virtual to invest in virtual talent and experiences to expand the organisation's reach.

The partnership will utilise EWG's digital technology and emerging media to expand the fashion label's presence in v-commerce*, virtual content and hyper realistic avatars. Uniting Hilfiger's experience in fashion and entertainment with EWG's work in the Metaverse, the two hope to transform how brands interact with virtual talent and experiences.

*Virtual commerce (sometimes known as vCommerce, v-commerce, or vCom) is a type of application, service, or product feature that helps enterprises implement strategies and design websites for e-commerce (the buying and selling of goods and services using the Internet).



So, how does it work?

How can a virtual piece maintain exclusivity of a luxury brand piece? Most virtual luxury goods are released in limited quantities, and users who purchase them receive an NFT (non-fungible token) as a virtual certification of ownership.

Still not with me? "Non-fungible" more or less means that it's unique and can't be replaced with something else. For example, a Bitcoin is fungible — trade one for another Bitcoin, and you'll have exactly the same thing. A one-of-a-kind trading card, however, is non-fungible. If you traded it for a different card, you'd then have something completely different.

For luxury brand Balmain, development of the potential of NFTs is already a strategic pillar of its business. As recently as 8 December 2021, the brand launched its third NFT project — a pair of NFT trainers accompanied by VIP experiences, linked to its upcoming collaboration on a physical pair with celebrity gym Dogpound in New York and Los Angeles.

Balmain's very first NFT was the digital Flame Dress, designed exclusively for Vogue Singapore in August, in collaboration with Singaporean games organisation Altava, which has partnered with Balmain on all three NFT projects. The dress sold on NFT marketplace Binance in September for 23 BNB (\$14,000 at the time of writing).

"To bring a luxury brand into the metaverse and have them create a virtual-only asset is really exciting. Collaboration should take different forms. It's not only about creating an actual capsule collection. You have to think bigger these days." Elizabeth von Guttman of Unmatereality, the gaming company behind Altava, which digitised the "Flame Dress" NFT from Balmain for Vogue Singapore.



The opportunities

The opportunities for luxury brands are endless. Beginning with virtual stores. These three-dimensional, navigable, branded spaces are maturing beyond digital replicas of physical locations. Now, they are being designed to offer the best of both the physical and virtual worlds, turning into a third mode of shopping that resembles neither stores nor websites.

From physical stores, they borrow immersive, visually appealing experiences for both entertainment and utility; from e-commerce, they borrow convenience and data. And from the pandemic, they have gained a willingness for both brands and consumers to experiment digitally. Harrods' virtual Dior Beauty store includes flowers sprouting from the polished floor, under a domed starry night sky — all inside Harrods. Use the QR code below to experience their creation in full.



By creating a digital gallery system, you can enable your recipients to view the brand's latest collections online instantly and give the media and influencers a place to download high-resolution images and request samples directly from a single space. Once the system is in place, you can easily share that interactive material with your contacts via email to replace the usual and tedious "lookbook attached" format brands often use in individual emails.

Operational excellence

Beyond the creative benefits, in 2022, having agile teams and seamless internal processes is more essential than ever. With the rise of e-commerce, fashion brands cannot afford major setbacks in the product launch cycle. As many departments are involved in a sample's journey — such as sales, design and production, control and logistics and PR — internal disorganisation can slow down the process for brands and decrease brand performance.

Creating digital luxury goods doesn't take up any raw materials, and labour is minimal. This means then that selling virtual clothes and accessories equals almost all profit. Many of the smart certificates or "NFTs" for virtual items also include royalty fees or revenue shares on future transactions. This also means fewer problems with conferfits and continued revenue for the original designer.

Designers also have a huge amount of creative licence in creating virtual goods because the limitations normally imposed by market practicalities don't apply.

Most luxury brands have decades of archival designs that they can convert into virtual assets with minimal investment, providing a whole new revenue stream.

What might the future look like?

Luxury brands are ideal for the taking a leadership position in how the metaverse develops – particularly fashion brands: the majority are independently owned by the three big groups so they can invest and take a long view. They value imagination, creativity and spectacle enormously and, in this new physical-to-digital reality, individuality, self expression, creativity and distinctiveness will be at a premium in these new imaginary worlds. In that respect, everything and nothing has changed. The best, most relevant and resonant idea wins.

The 'phygital' world will likely only expand as we move forward in the Metaverse. As a result, digital presentations and events will continue emerging, and adapting to this new trend will become essential for brands. This can help generate the priceless exposure that drives sales and expands your reach in ways that you may not have the budget to do with a full physical showroom with physical samples.

The big question luxury brands are asking right now is: 'which Metaverse?' It's still early. Cost of entry is high. Demand culture is still, in terms of scale, in its infancy. There will likely be plenty of Second Lifes as this area explodes. It's definitely safe to say, the best is yet to come.



Say what? Yes, these really happened

We have gathered what we consider to be the most jaw dropping "WTF" headlines about the Metaverse so far. Happy reading...



Metaverse mortgages are being issued to buy virtual land — and one of the first ever was just signed for a property in Decentraland





Virtual Mega yacht sells for recordbreaking \$908,000 in the Metaverse

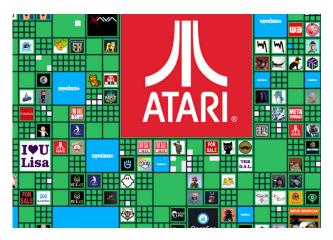




Meta-marriage: Decentraland hosts first metaverse wedding



Say what? Yes, these really happened



Digital land grab: Metaverse real estate prices rose 700% in 2021



Here's what a Metaverse rave is like



First Metaverse protest held at Samsung's Decentraland HQ







Data privacy in the Metaverse

Kirsten Dent

The Metaverse tracks individuals in a more intimate manner than any social media platforms we're familiar with. So before we all dive in head-first, we should understand the ins and outs on what happens to this personal information and the risks.

Companies have been tracking users' data for many years, from a user's location to what they're spending the most time reading. But the Metaverse opens up a whole new range of data points companies can know about us. This allows companies to have a deeper understanding of a user's behaviour than they have ever before and exposing data we didn't even know could be tracked.

We can expect companies in the Metaverse to collect personal information for individual identification, advertisement, and tracking through multiple channels, like wearable devices, microphones, heart and respiratory monitors, and user interactions to an extent that we have never seen before.

What can they track?

- Location data Just like how most of the countries 'Ring' doorbell cameras have decreased anonymity while out in public in the real world, location privacy will be so much harder to accomplish when using the Metaverse. Not only will AR glasses collect and transmit the location of the users to tech companies, they could also have facial recognition technology installed. Meaning that any of the user's passers-by can also be tracked. This could be shared with a company's marketing team or a government agency.
- Wearable tech can also track where you're looking for every split second with new eye-tracking technology. This will likely be fitted into wearable tech.
- Physiological responses and biometric data can also be tracked. Companies will know your every emotion and every reaction.

Do you recall a scene in the film, Minority Report, where Tom Cruise is walking through a station and all the ads around him are hyper personalised, even using his name. Check out this clip if you need to refresh your memory. With the Metaverse being a virtual world, there is no reason why this level of personalised advertising couldn't be a reality.



Of course, the more data which is collected, the more data out there to be hacked. Even the big companies like Facebook and LinkedIn have left their users as victims from data breaches.



Does the EU's General Data Protection Regulation apply to the metaverse?

Although it could arguably apply to the Metaverse, as could the UK's Data protection act but given the nature of the Metaverse, the processes governing informed consent around data processing may need to be looked at again. GDPR applies to the location of the subject when their data is processed, not the country they're in/belong to.

How can this benefit brands?

The data that can be collected from users can completely change the way advertising is done. Brands can really personalise advertisements in a way they haven't been able to before. Their ad campaign can be more targeted, increasing conversion rates.

What are the risks for consumers?

Just as with social media platforms, privacy issues will be at the forefront of the Metaverse as it develops and begins to gain widespread traction by users. For users, it could mean violation of their personal privacy, potential identity theft, and other types of fraud. Another consideration lies in the hyper-realistic avatars like the ones being developed by Meta. These avatars could allow users to hide their identity or even make it possible for children to appear as adults. How would this impact consent in the Metaverse?





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