THE METAVERSE HANDBOOK

Everything you need to know about the Metaverse

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Where Did The Term Originate

To understand where the Metaverse is going, we should investigate its origins. The term ‘Metaverse’ was first publicized in 1992 in the Sci-Fi novel Snow Crash.

The term described a virtual world that succeeds the internet where humans, as avatars, could interact with one another within a 3D virtual space. This certainly draws parallels with the contemporary vision for the Metaverse.

The Name

It’s also important to understand what brings the terms ‘Meta’ and ‘verse‘ together. The prefix ‘Meta’ derives from Greek. It means beyond, after, or across. The suffix, ‘Verse’, stands for universe. A space that engulfs a large number of things (to put it lightly).

Combining these words, we find ourselves with the portmanteau ‘Metaverse’. In a sense, the metaverse is a fitting term, indeed. It will be a place that is beyond the world that we know, one that would exist virtually.

Modern Meaning

Despite the term being around for 30 years, the concept is still within its inception. This means that there are no concrete, standardized understandings of what the metaverse will inevitably stand for.

Mark Zuckerberg describes the Metaverse as ‘an embodied internet that you’re inside of rather than just looking at’. Again, this highlights the clear level of immersion expected within this revolutionary space.

The digital investor and metaverse-enthusiast, Matthew Ball, claims that the easiest way to think of the Metaverse is ‘as a quasi-successor state to today’s mobile internet. Except instead of accessing all the internet via separated 2D web pages or apps, we’ll experience it via persistent, interconnected, virtual simulations.’.

How We Describe it?

Here at Takeaway Reality, we see the best way to envisage what the ‘Metaverse’ is going to be is to simply imagine a ‘virtual parallel world that interacts with our own ‘Reality’ where people can not only socialize, but also work, invest and create.’

The best way to think of the importance of the Metaverse is to think of it as simply the next internet.

TAR
TAKEAWAY REALITY

Meta Is not The Metaverse

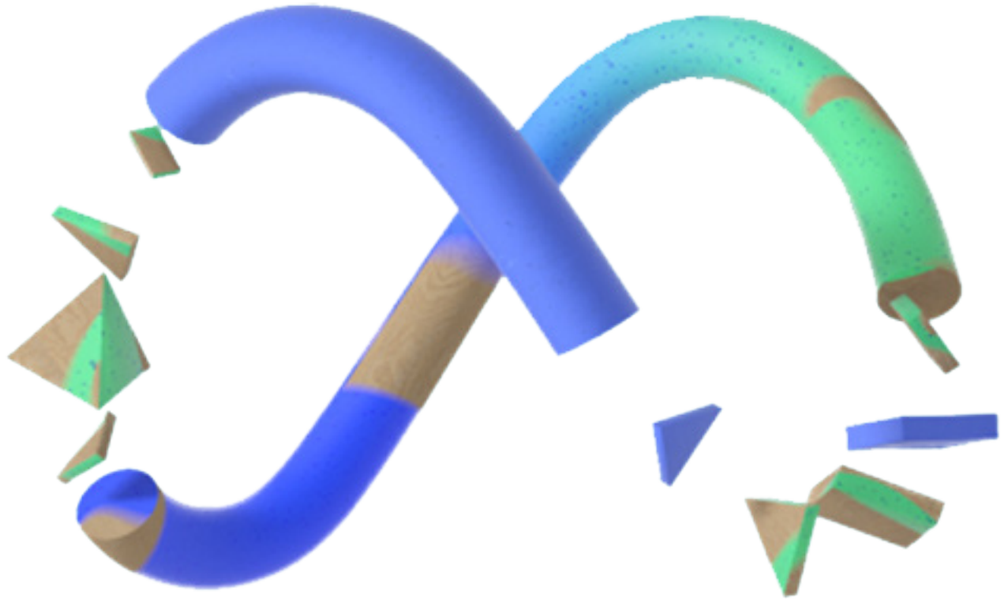
In November 2021, the internet “exploded” with Facebook’s announcement that it is changing its name to Meta. They released a video that was some people’s first look into the concept of the metaverse.

Naturally, people connected Facebook’s new re-branding as Meta with the concept of the metaverse. This resulted in a large number of people misunderstanding the metaverse as a closed concept that will be developed by the newly formed Meta.

This is simply not true, even Zuckerberg mentioned multiple times (even in the announcement) that Meta is working on APIs that will connect to other apps and environments.

Just as the Internet is an open platform and could not exist by being owned by one corporation, so will the metaverse, and Meta is aware of that.

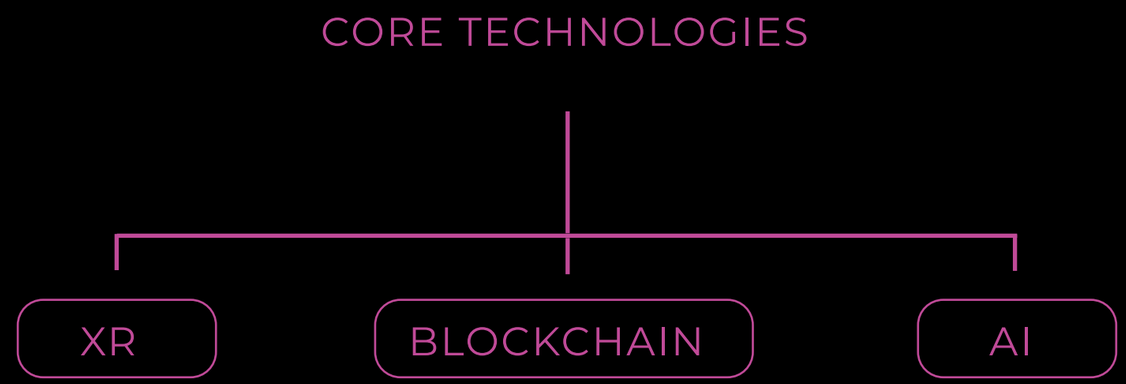
However, they aim to become synonymous with the Metaverse to become the entry point for people joining the metaverse (in a similar fashion that Google is for the internet with their chrome browser and search engine home page).

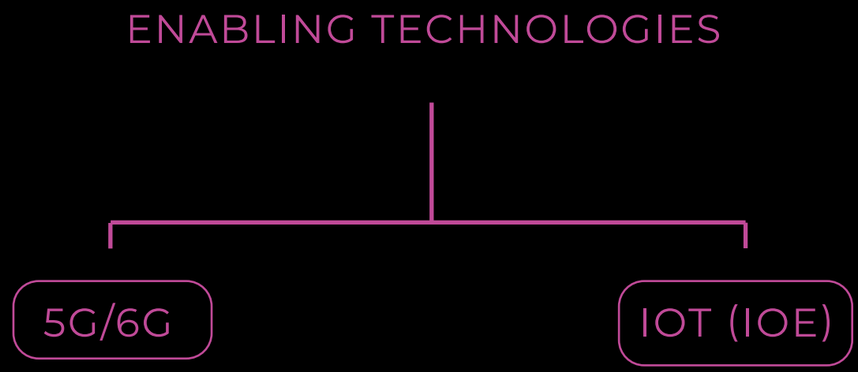


CHAPTER 1:
THE TECHNOLOGIES INVOLVED

The development of the metaverse has truly been made possible with the collaboration of a variety of pioneering technologies. These core technologies are XR, AI, and Blockchain.

Alongside the 3 core technologies, there are also enabling technologies: 5/6G Internet and IoT. These will enable the metaverse to be accessed easily across multiple devices and systems.





Core Technologies: XR, AI, and Blockchain

XR/VR Technologies

Extended Reality technologies are set to have a fundamental role within the metaverse. They will serve as the bridge between the present reality and the limitless digital space that users will be able to enter.

In a Forbes Article, Bernard Marr provides a good definition of XR. XR is an emerging umbrella term for all immersive technologies. The ones we already have today—augmented reality (AR), virtual reality (VR), and mixed reality (MR) plus those that are still to be created.

Although the metaverse will be cross-device (you will be able to use it on your smartphones/tablets), there are 2 distinct types of XR devices that the metaverse will be primarily used on.

These are:

1. VR Headsets

Virtual Reality headsets are head-mounted devices that provide the wearers with virtual reality.

They are stereoscopic, giving the user an enhanced illusion of depth. They provide stereo sound, offering multidirectional audible perspectives to the user.

They also provide head-motion tracking, meaning that the user's head movements are captured. This allows them to explore the virtual environment completely hands-free.

2. Augmented/Mixed Reality Headsets/Glasses

Alongside VR headsets, there are also mixed/augmented reality devices.

Unlike VR headsets, AR glasses seek to simply enrich the real-world environment that you see before you. One still has complete awareness of their surroundings, and they can interact with both, the real and augmented environments.

Some of them, like Microsoft HoloLens, are already on the market and have been used by hundreds of companies for training, process optimization, collaboration, and much more.

On the consumer side, AR/MR devices are still in their early development stages, they are often unfashionable and unpractical for everyday use, but with breakthroughs such as light-field technology and big players such as Apple planning to release their glasses you can expect that to change.

AI

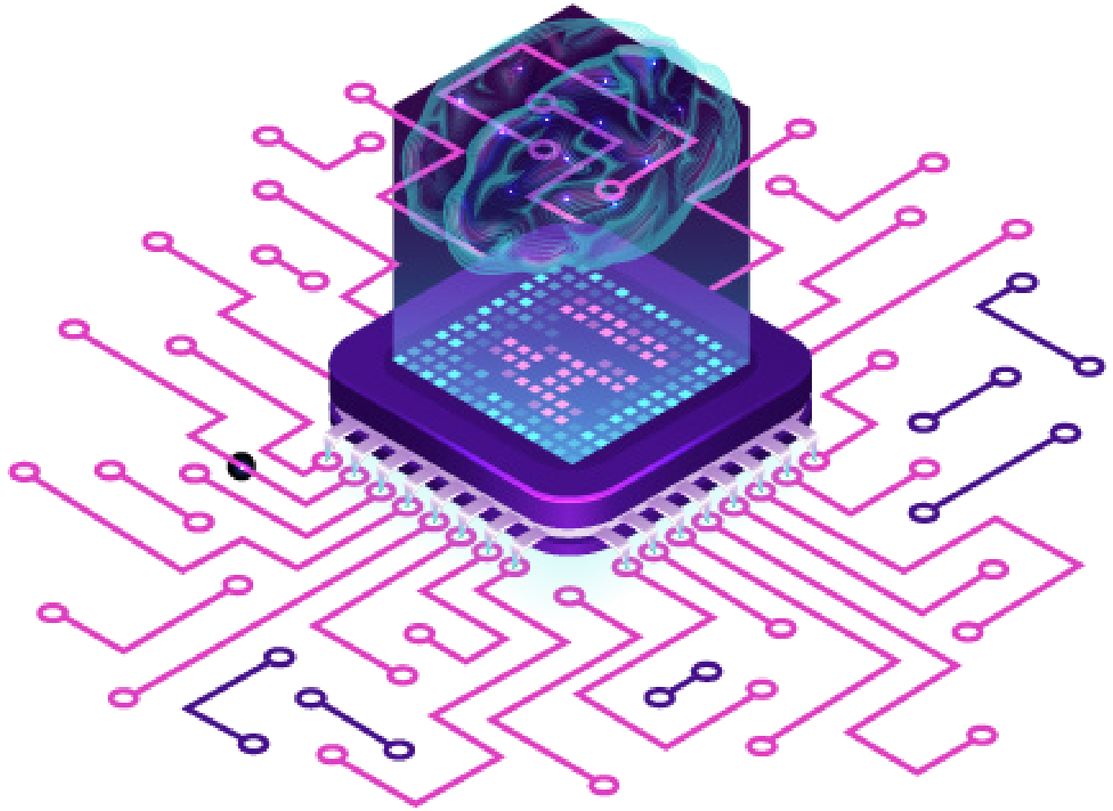
AI is, essentially, when machines can simulate human intelligence. Typical applications of AI can be found with computers/devices that can recognize speech, visually perceive objects, process language naturally, and simulate judgment to make decisions.

Artificial intelligence is already ubiquitous in our lives. Current examples of AI applications include automated social media monitoring, manufacturing robots, and self-driving cars.

While all very impressive at present, it is important to understand where this technology is heading in the future.

With all the data that computers are gathering about our consumer preferences, movements and other variables, machines are learning and becoming able to predict and assume with greater accuracy.

With literally hundreds of thousands of developers and data scientists across the world currently working on AI, the pace of development is accelerating, with increasingly eye-catching breakthroughs being announced daily.



What Does This Mean for The Metaverse?

The Metaverse will be enabled and supported by artificial intelligence. Machine storytelling is going to amplify the user experience within the metaverse.

These AI-led computer-generated stories are going to make gaming limitless within the virtual world. Imagine an infinite quantity of quests, maps, and characters to interact within your favorite game.

Digital 3D characters powered by AI will not only make gaming more interesting but bring about a whole new era of customer service transforming boring chatbots into digital characters customers can interact with.

AI can also be used in conjunction with AR, helping you optimize your journey through a city by leading you on journeys where you might uncover hidden AR experiences tied with the content you consume in the metaverse.

Interface optimization is going to be pursued with the help of AI. With computers being able to interpret and understand our body language and emotion, we are going to be able to interact with computers more naturally. This is going to allow the metaverse to deliver the most immersive of experiences for each individual

Other Enabling Technologies to know about

5G (and 6G)

The 5th generation technology standard for cellular networks.

5G devices within covered geographical areas, known as cells, are connected to the internet always. 5G builds on 4G by offering greater bandwidth and higher download speeds.

This will enable 360-degree video, AR, and VR content to be streamed directly to your device.

The future iteration of this – 6G is already in development and can be assumed to allow for even more advanced opportunities, one of the most exciting ones being the possibility of streaming software from servers instead of it
having to be powered by a PC or headset. This would vastly increase the quality of XR content.

The Internet of Everything (IoE)

The keyword here is integration. Essentially, the IoE is a system of interrelated, internet-connected objects that are capable of collecting and transferring data over a wireless network to one another without human intervention ollecting and transferring data over a wireless network to one another without human intervention.

A prime example of this technology in everyday life is smart home appliances. Those who have installed smart appliances into their homes can control everything from their phone. They can close the curtains, tone down the lighting, lock the doors and review their smoke sensors.

In industry, we see IoE reshaping how we farm. Precision farming is helping farmers to monitor their crops and boost productivity. Using sensors to calculate moisture, humidity, and temperature, irrigation systems are enhanced to distribute water more accurately.

The future of the IoT is incredibly promising. The desire of consumers and businesses to integrate devices and machinery creates a huge demand for the optimization of this technology.

The entire premise of the Metaverse is that the worlds will be entirely interconnected.

The IoE helps to ensure interoperability between web services. With the IoE technologies, fueled by increasingly intelligent networks, objects within virtual worlds can be migrated from one world to another. In other words, IoT will play a huge part in merging the metaverse with the real world.

Neural Interfaces

A neural control interface is a direct communication pathway between the brain and a connected device.

With electro-laden headbands, machines can record and monitor brain activity. In medical science, this technology has aided brain mapping and neuro-imaging.

By far the most famous player in this industry is the Elon Musk-backed startup Neuralink who was able to create some famous early use cases for the technology.

Also, the Boston-based start-up Neurable was able to create a VR game that utilized this technology to allow the player to possess ‘telekinetic’ powers within the game.

By connecting the electro- laden headband with the VR headset, the players can manipulate the in-game environment with their minds. By tracking brain activity, software analyses the neural signals

and figures out what should happen in the game.

Researchers in this field are identifying new ways for machines to perceive brain signals.

Blockchain

Blockchain is a system for recording information in a way that makes it near impossible to alter.

The blockchain serves as a ‘digital ledger’ for the information and it is automatically distributed to a network of computer systems within the chain.

Everyone on the network can see everyone else’s data entries into the blockchain in near-real-time. The decentralized structure of a blockchain makes it difficult for one single person to control the network and the information within it.

The best analogy for describing this digital asset, in my opinion, is a google doc. A document that can be shared and altered amongst a group of people

at the same time, with all changes completely transparent.There are two main “products” of blockchain that are highly relevant for the metaverse. These are cryptocurrency and NFT’s.

How is This Helpful for The Metaverse?

Due to the decentralized nature of technology, this can help with creating collaboration and verifying ownership and transactions.

Blockchain is going to be the best defender again overbearing centralization from the ‘gate-keeping authorities within the metaverse.

The decentralization element will give power to the developers and users of the metaverse, preventing one party from dictating standards and policies.

Cryptocurrency

This is a digital currency that can be used within the virtual world. Secured with cryptography, the currency is nearly impossible to counterfeit.

The most well-known cryptocurrency is Bitcoin. With a secure digital currency, the metaverse can truly thrive.

Instant transactions will be made possible, and users will have full confidence that they will be completed. This has been made possible with blockchain technology.

Non-Fungible Tokens (NFTs)

These are digital assets that can be bought, sold, and owned online. These assets can be videos, music, art, and even land. Like how physical assets hold value, so do NFTs.

These tokens can serve as proof of ownership of a digital asset.

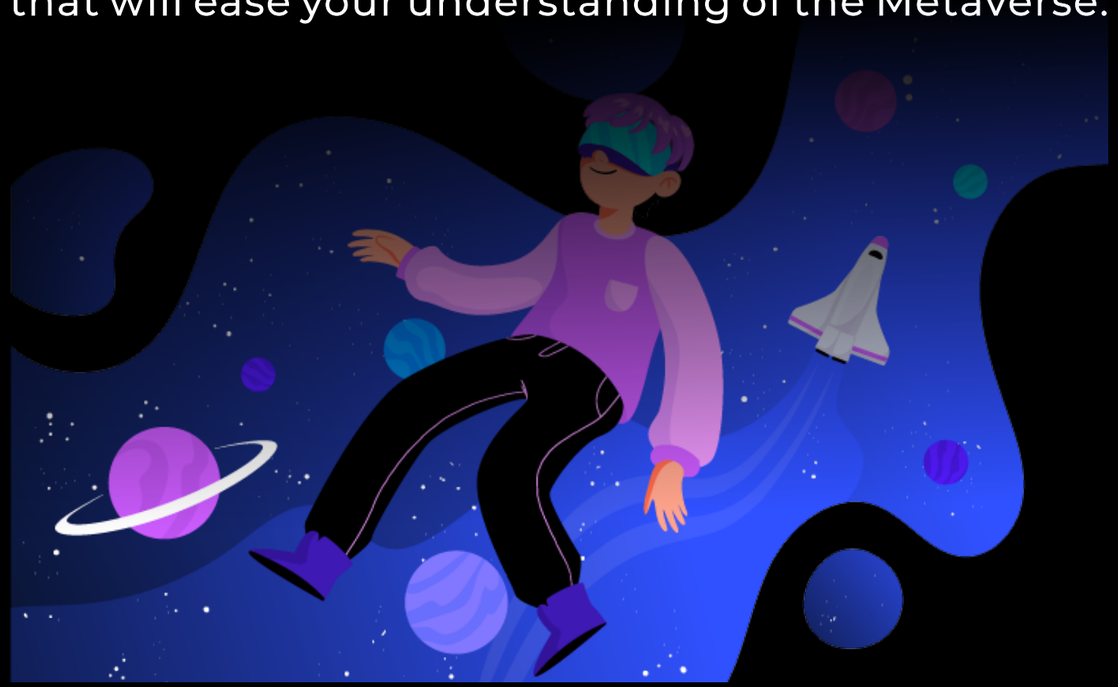
The virtual worlds within the Metaverse will present great opportunities for companies to find value in letting users purchase virtual versions of their products. These would be purchased and owned as NFTs.

For example, Ferrari may sell limited editions of a digital version of their car to a user who will be able

CHAPTER 2:
KEY METAVERSE CONCEPTS

It's very important that you have a decent grasp of the big trends that are running parallel with the rise of the Metaverse.

Getting familiar with the terminology and concepts that will ease your understanding of the Metaverse.



Cross-Platform

Although VR and AR technology is expected to most facilitate the development of the metaverse, it will be accessible through all platforms.

You will be able to access the metaverse (or certain areas of it) in some capacity through your phone and desktop.

However, Virtual and Augmented/Mixed Reality devices will offer the full experience.

Virtual Identity

This is the manifestation of oneself within the digital world. Already, you would have a virtual identity.

It is shown through your social media profile, your presence in online games, and e-mails.

It’s important to understand that, for many people, our identity is not tied to the physical anchors, like passports and our reputations within our towns, but through digital platforms too.

Virtual Identities will be a huge topic within the metaverse as we start to invest in building our avatars.

Digital Ecosystem

This is an interconnected network that will allow for reliable communication and socialization between customers and businesses.

The Metaverse is going to allow users to interact with brands with ease, creating a huge opportunity for brands to add value and build relationships in new, unique ways.

Projection-Mapping

This is a key area of exploration within AR technology and it will be crucial for bridging the real and virtual worlds within the metaverse.

When you can overlap a video or digital image onto any surface, like a building or road, this is projection mapping.

Walled Gardens

These are domains within the metaverse. Within them, people are allowed to create content according to specific rules, tools, and permissions.

The tools for creating content are often easy to use and the creations can be offered to substantial audiences. In exchange for this, large portions of revenue are taken from the creators. Walled Gardens are often also better serviced in terms of finding

strategies of use, setup support, and best practice guides.

And finally, they are self-serve and fairly easy to use by design. Within the Metaverse, these platforms will continue to grow in power. Their rivals will be Open Platforms.

Open Platforms

These are permissionless platforms and they are heavily decentralized. Creators are allowed to make content and applications that are not specifically tied to a walled garden. The creator has full ownership, but the tools and design are often harder to use.

Those who can overcome the technicalities and create something will still have the challenge of finding an audience on their own. It is heavily decentralized.

These will often be reminiscent of early internet forums.

Simulating Reality

With the help of technologies like 3D engines, machine intelligence, and digital twinning, the ‘real world’ can be accurately simulated and mirrored within computers.

This gives way to a megatrend that will involve places, people, and information from the real world being replicated digitally.

Creators are allowed to make content and applications that are not specifically tied to a walled garden. The creator has full ownership, but the tools and design are often harder to use.

Virtual Mainstreaming

This is the growing trend of societal acceptance of the importance of our virtual identities and digital assets.

As generations of humans continue to grow up in digitally connected worlds, this acceptance is likely to grow exponentially.

Low Code Platform

These platforms will allow users to create content with little to no coding. This will make virtual content creation much more accessible and fun within the metaverse community.

Distributed Network

With 5G making the speed of the internet much faster, the internet can afford to become more distributed within cloud-based infrastructures.

This decentralized network of the internet will allow for faster data transferring and faster connections that will aid online gaming, AI, and other areas of the Metaverse.

Telepresence

Within the metaverse, users are going to have the ability to teleport to different realms and spaces with ease. You can be at a virtual concert in one moment before teleporting to a work meeting instantly after.

This will also extend into reality, where video calls will evolve into holographic calls, where your whole body can be “present”.

Decentralization

Essentially, these are technologies and practices that shift the power and control away from centralized authorities.

These can include Walled Gardens and institutions. New technologies like Blockchain are helping to grow open-source standards and decentralization, shifting the power dynamic back to individual creators and projects.

Zero-Knowledge Proof

The ability to prove something without giving unnecessary information. For example, when one must prove their age in a pub in the UK, they present the bartender with an ID.

This not only confirms their age, but it also tells the bartender your name, address, and if you are an organ donor.

Algorithms are being developed to help two parties confirm proof of something without exposing unnecessary information. This will help ensure privacy and safety within the Metaverse.

Network Effects

This is the idea that networks gain value exponentially with the growth of their user base.

By limiting the friction of adoption, a network can gain huge benefits from growth.

Creator Economy

With open, low-code platforms and decentralization, the Metaverse will allow the creator economy to thrive.

This is a combination of software and marketplaces that make it possible for creative people to add content to the metaverse themselves.

From virtual assets (e.g Artwork) to an entire system (e.g a game or a virtual world).

CHAPTER 3:
THE KEY PLAYERS IN THE METAVERSE

Contrary to what some may think, it is not only Zuckerberg and Meta that is solely constructing the Metaverse.

Dozens of companies are doing huge things to create software and hardware that will build the metaverse. Let's take a look at some of the big players in this young industry.

The Roblox Corporation

This is the company that designed Roblox. Roblox is an online gaming platform that gives users the freedom to program their games and play them with others. Since the Covid 19 pandemic, the growth of this platform has seen massive acceleration.

Effectively, the game possesses the principles of a virtual world. There are avatars, virtual currency, and virtual events being hosted here. With over 20 million subscribed players and 400,000 daily visitors to the platform, it's a massive hub for creativity, socialization, and entertainment. Brands like Gucci have collaborated with Roblox to bring their products into the game.

The company is embarking on the long-term vision to keep growing the Roblox community and further elevate shared experiences that can be had within the metaverse.

Microsoft

The tech giants have a huge interest within the Metaverse. This year, the CEO Satya Nadella announced that the company is working to build an ‘enterprise metaverse’.

With the convergence of the digital and physical worlds, the company is pursuing the opportunity to enhance the value of its current products. Microsoft teams is set to allow 3D user avatars to collaborate in virtual spaces.

Furthermore, companies are going to be able to make immersive experiences for employees and visitors to enjoy.

The Consulting giants, Accenture, pioneered this approach with the One Accenture Park virtual campus. Recruits and employees can conduct meetings, enjoy virtual parties and freely talk with others in this space.

Epic Games

The team who brought us Fortnite, Epic Games is a hugely influential company within the Metaverse space.

The American company, founded by Tim Sweeney, has long expressed the desire to revamp the internet. Their desire to help create an expansive, digitalized communal space that allows users to freely interact with brands and others is the exact vision that should be driving those building the metaverse.

The hit free-to-play game Fortnite speaks volumes about the companies drive and passion to pursue a limitless playground for the world to enjoy.

Nvidia

The graphics and chip-building specialists have a huge part to play in the building of the Metaverse.

Currently, the company has rolled out NVIDIA Omniverse, a platform for connecting 3D worlds into a shared virtual universe.

One of the key applications of this is the creation of ‘digital twins’. These are digital simulations of real-life infrastructures and places that will be enjoyed within the virtual world.

With this in mind, NVIDIA is effectively helping to build the foundations of the Metaverse by providing the technology needed to create digital replicas of real places.

Meta

Perhaps the most affiliated company to the Metaverse, Meta has recently made waves by sharing the company’s vision with the world.

The fact that the company has renamed itself from Facebook to Meta reflects very clearly how devoted this social-media giant is to be at the forefront of the metaverse.

Amongst many things, Meta has been acquiring talented tech firms over the recent years, many of whom have been integrated into the Oculus Studio and Reality Labs divisions.

Open Metaverse Interoperability

With members consisting of businesses and individuals, this group is working towards the common goal of building an informed, cohesive community

of artists, developers, and creators for the virtual worlds.

With an initiative like this, the creators of the metaverse will be empowered and cooperative. This will be fundamental for spurring grassroots innovation within this space.

There are loads of companies that are working towards building the Metaverse. From those concentated on designing more ergonomic headsets to 3D modeling agencies that are helping to digitize fashionwear and other tangible products for the virtual world.

CHAPTER 4:
THE METAVERSE AND WORK

The pandemic ignited huge change within the way that we work. From whathas long been the traditional five days a week in the office, companies are now exploring hybrid work patterns.

More and more employees are working remotely as well as on-site. The likes of Zoom and Microsoft teams have made this possible, helping to bring remote employees together online.

However,the great exposure to remote working has highlighted particular flaws and needs. For example, companies have a difficult time radiating their culture through remote networks of employees.

The Metaverse has grand visions for revolutionizing the way that we work, working towards what is called ‘The Infinite Office.’ Freedom and Flexibility are on offer to those who embrace this technology.

How Will Work Be Like Within the Metaverse?

Virtual Workspaces

Using VR headsets, teams will be able to work collaboratively within completely virtual workspaces.

The Workspaces can be customized by employers to create an atmosphere that reflects the culture and ambiance within the HQ. However, these spaces can be even more pleasant, with a luscious virtual forest backdrop instead of a car park.

Furthermore, there is the opportunity to work alongside Co-workers in a less- deliberate setting. Jumping into the VR space and seeing the avatars of your colleagues also working is one of the key elements to the metaverse. To be connected to people, no matter where you are is a driving ambition for those building the metaverse.

Augmented Workspaces

Physical workspaces can also be enriched with Augmented Reality. Digital Overlays can allow workers to enjoy hands-free information and the ability to see it through the lens of their AR glasses instead of through the screen of their laptop.

With enhanced visuals, the worker has a far greater visual scope to process information and plan their work. This can stop them from getting screen fatigue. Furthermore, a pair of AR glasses are far more mobile than a laptop. One can be in their workplace anywhere, and it isn't half the hindrance of carrying around a laptop and charger.

This will also improve security, as it will be easy to identify who accessed or transmitted some information through biometrics such as eye recognition.

With both AR and VR technologies being utilized within the Metaverse, workers will be able to collaborate despite having various levels of immersion.

Digital Models and 3D Designs

One of the key challenges of remote working is the problems that teams face when working with complex design processes.

Without a tangible prototype that all can play within a realistic environment, the quality of work may be jeopardized. This concerns those from architects to product developers.

Major developments in smart computing, 3D modeling, and digital overlaying have meant that companies can manipulate 3D models in ways that offer authenticity, returning to a time that they can walk around it and examine the model with their hands.

One such early adopter of this strategy was the Automobile manufacturer, Ford. To appropriately visualize and understand car designs while working remotely, Ford had adopted virtual and augmented reality technologies to assist them with this feat.

The idea was simple, directors and designers would create an avatar to join a 'viewing room' where they can look at a life-size holographic model of a car.

Within this room would be multiple people who can view it from several different angles. They even had virtual laser pointers to draw attention to particular aspects of the design.

Ways that the Metaverse-enhanced workplace can benefit Businesses

Less Dependence on On-site Working

By embracing XR and metaverse-related technologies, companies will greatly reduce the need to have everybody in the physical office. The metaverse and its intended applications will offer employees huge opportunities to work with colleagues completely digitally.

The implications of the metaverse for the future of the office are clear with Meta's new app, Horizon Workrooms. Using digital avatars, colleagues can interact with one another in a shared digital office. Employees can collaborate using whiteboards, stream videos and presentations from their laptops for all to see and explore digital models/designs together with ease and convenience.

With more employees able to work from home, businesses can greatly reduce their overheads. Smaller sites are needed for the fewer employees whose physical presence is necessary.

These smaller sites will cost less to lease, utility be

done with smaller teams too. This can help a company to gain a cost-competitive edge

Furthermore, a remote team won't need to commute to work daily. Transport is the biggest contributor to greenhouse emissions in the UK and the efforts to address this polluter are dependent on the efforts of companies as well as individuals. Easing the commuting emissions is an effective way for businesses to meet green targets and embrace sustainability to greater extents.

Out of location and convenience, individuals who may be less suited to a role will get the job. This can make a company less productive.

However, by enhancing the effectiveness of a remote-work experience, the Metaverse can help the labor force to become more of an asset by allowing recruiters to harness the talents of those working far and wide.

Job positions can be filled by applicants living in locations far from the main offices who are willing to commute to work for a day or two a week.

This will give the company a larger scope to recruit

talent that is better suited to fill the desired position.

A great way to build a more productive, cohesive workforce is to create an avatar to join a 'viewing room' where they can look at a life-size holographic model of a car. Within this room would be multiple people who can view it from several different angles. They even had virtual laser pointers to draw attention to particular aspects of the design.

Better Ability to Build a Cohesive Internal Culture

One of the recognizable concessions of moving to a remote workforce was that corporate culture was going to be difficult to maintain and strengthen.

Company culture is strengthened and guided by a lot of things that a Zoom-based workforce simply can't experience. The less-formal interactions in the lunchroom with colleagues, the employee of the month pictures that dot the hallway, the wel-

coming that one receives every morning from the receptionist.

These are the vital elements that can radiate a company's culture to its employees.

With virtual workrooms, companies will have a greater say on how they design them. From the color schemes, wall displays, and layout, companies will more greatly control the remote environments that their employees work within. Some may encourage creativity while another space can be organized to resemble a seminar hall.

With this level of control and personalization, businesses have a greater chance to retain cultural cohesiveness within their ranks.

Furthermore, the more sociable elements of the Metaverse will provide remote workers with opportunities for casual interaction with co-workers. Chill-out rooms can be available, for example, where colleagues can play games and kick back in a social, informal setting.

By strengthening bonds in these ways, a company can maintain a culture that transcends the physical office and enables people to collaborate with greater speed and cohesion.

In the increasingly unpredictable world that we live in, it is crucial that workforces can interact freely and continuously. A more connected, decentralized remote workforce can also be great for cultivating and harnessing new ideas and innovations from the ground up.

Addresses the Problem of Isolation with Remote Workers

Despite the often-favorable views towards remote working, one of the key reasons that people have said that they would want to return to the office is due to the lack of connection with their colleagues.

Loneliness is certainly an adverse side-effect, and it must be addressed by companies who wish to maintain a remote workforce into the future. Loneliness stifles motivation and productivity heavily, while also being detrimental to one's health.

The virtual workspaces of the Metaverse can certainly address loneliness, bringing remote workers much-needed opportunities to socialize and work within a team environment.

With the potential to coexist within a virtual workspace, users won't feel so alone. They can be working on their assignments within the same space as other colleagues. You can reach out to them with ease if you had issues.
It is companies like Spatial that stand at the fore-

It is companies like Spatial that stand at the forefront of this technological frontier. Founded by ex-employees from Google and Microsoft, the company presents remote workers with an AR platform that allows users to attend virtual meetings and interact with one another in a shared workspace.

Users would adopt an AR headset that scans their environment before developing a 3D avatar to represent them in the virtual rooms. The company is currently working with the likes of NASA, Ford, and Microsoft to improve on the product. They aim to create virtual rooms that support up to 100 people at a time.

Feeling disconnected from colleagues, which has been an issue for many during the 'Zoom phase' has had detrimental effects on motivation and morale. Employees are less eager to go the extra mile to help colleagues and group projects lack the touch brought by human connection.

The Virtual workspaces in the Metaverse can make sure that no employee is isolated, no matter where they are in the world. With this, companies can enjoy a more driven, connected workforce and hopefully be able to alleviate mental stresses brought about by loneliness.

Fewer Distractions

One of the big issues that one faces when working from home is the bombardment of distractions.

Whether it's the family walking through your 'office' on the way to the kitchen, or it's the postman at your door that's sent you dog wild, you may not be able to channel your complete attention into work for very long.

The immersive quality of the virtual workspace means that one can work without distraction. Putting on the VR headset is going to allow workers to enter a calmer workplace setting.

Views of rolling Alpen foothills can be seen from the window while your pleasant, unassuming piano pieces play softly through the headphones.

Mixed reality is going to be an important element of this. Having the ability to work with physical materials, like your laptop, while remaining in your peaceful virtual work setting can ensure that you are at your most productive when working.

By addressing one of the key detergents of working remotely, companies will truly be able to harness the potential of an effective remote workforce. Employees won't be burnt out or fall behind to great extents as they can remain more focused on their tasks at hand.

Furthermore, this is an important element for helping remote employees to maintain a good work/life balance. Being able to remove themselves from their surroundings while remaining at home will help them to prevent burnout and take more control of how they spend their time.

CHAPTER 5:
THE METAVERSE AND THE MARKET

When the internet entered the households of the world, businesses knew that they would deal with entirely different markets before long.

At any time of the day, consumers were able to initiate immediate contact with companies while in the convenience of their own homes. With unlimited information, demands grew. Let's look at modern consumers.

What they have lost in terms of patience and loyalty to brands, they make up for with increased ethical consciousness and a stronger desire for personalized goods.

To thrive within the Metaverse, consumer-centric companies need to watch closely and utilize the changing consumer behavior that the world will witness.

Our existence will become more deeply intertwined with the virtual world. The biggest catalyst for changing behaviors within the Metaverse is going to be the increased amount of time that one spends online and within virtual worlds.

The rise of virtual world users had taken off during the Covid Pandemic. With the likes of Fortnite and Roblox bringing free, limitless entertainment to the masses, perceptions of virtual-world gaming changed.

With growing numbers of users within these worlds, the developers are reaping higher revenues that they can invest into making these experiences even better. This amplifies the trend massively.

Furthermore, we are seeing the rapid legitimization of virtual assets and cryptocurrency, enabling this trend to gain even wider acceptance. With a growing presence in the virtual realm, we expect the following trends to occur.

We Will Be More Used to Paying Using Blockchain and Cryptocurrencies

Cryptocurrencies and the Metaverse are more correlated with each other than many realize. From the rise of Bitcoin, the most famous currency for trading digital assets, thousands of alternative cryptocurrencies have emerged.

With the growing demand for virtual items, like artwork, music, and gaming content, it is a cryptocurrency that guarantees the security of these purchases. With billions of accounts linked with the Metaverse and its social media, digital assets and, therefore, digital currencies are going to be

sticking around for good.

With deeper client engagement opportunities for those who can trade with cryptocurrency, it is certainly a concept that your company should consider embracing for the future.

We Will Have an Even Greater desire to try before we buy

The one major advantage that physical stores have over e-commerce, the ability to see and feel products.

Augmented Reality technologies are already addressing this deficit for remote shoppers, providing them with the apps to explore how furniture can look in their home, how it would look like in a new dress, or whether the new Sedan looks good in their driveway.

The functionality of these AR-based apps must improve as a means of enhancing the wider Metaverse

With the roll-out of such developer platforms as AR Core and AR Kit in recent years, more and more E-commerce brands can offer try-before-you-buy options.

With the Metaverse building greater platforms for AR-based retail, companies will find immense value in providing prospecting customers with the option to bring digital products into the real world for exploring.

We Will Be Buying Virtual Items

Deeper integration into the Metaverse will see our avatars become more prominent and announced. From virtual concerts to the workplace, our virtual representations (Avatars) are going to be connected with vast networks of friends, family members, and, likely, strangers.

With this comes a desire to pay more attention to how we are represented digitally. Greater interest will be had in virtual fashion and other assets thatthat can help us to better express ourselves digi-

Of course, with billions of virtual identities enjoying what's on offer in the Metaverse, the virtual economy is going to be full of awesome things to purchase and enjoy. From real-world digital twins of buildings, cars, and anything imaginable, the options for what can be on offer are endless.

With the integration of NFTs into the Metaverse, brands are already realizing the opportunity to tap into the digital market.

Within the game Roblox, Gucci released a collection of fashionwear for characters to enjoy. Coca-Cola did a similar, providing virtual clothing within the world of Decentraland. The launch was celebrated with a virtual rooftop party.

We Will Respond Differently to Advertising

A by-product of increased time spent within the Metaverse, we will be paying greater attention to how brands market themselves digitally.

Beyond creating items, and even their digital worlds, brands can also place ads and run marketing campaigns completely virtually.

Anzu, the digital advertising company, places ads within gaming environments across mobile, console, and, now, virtual worlds.

Viewability can be tracked in real-time and they blend into the game-play, further enhancing the authenticity of a virtual world to real life. Warner Media and Paramount have explored this lucrative avenue already.

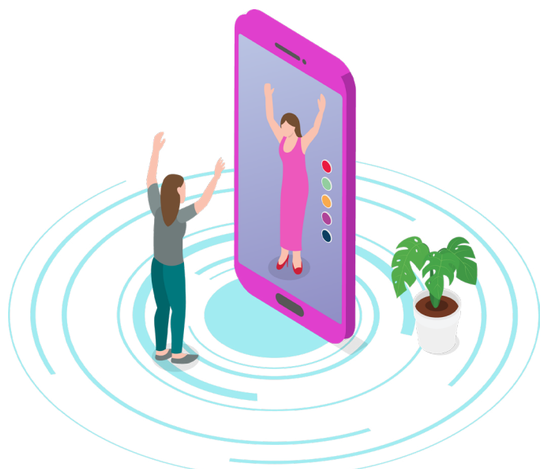
Additionally, brands should pay more attention to letting their products or processes be virtually tried in the metaverse before being purchased in the real world.

We Will Be Exploring Outlets Within The Virtual Realm

Yes, one of the many recreational activities that one can enjoy within the Metaverse is to explore the virtual retail outlets.

A far more immersive, enjoyable experience than traversing today's 2D online outlets, this is bound to take off. Products on offer don't have to be virtual.

The ability to explore models to the most accurate of degrees will give consumers deep insight into a product, offering much of the benefits that a physical store retains.



Digital Identity Will Become More Important

Digital identities are becoming the foundation of our rapidly evolving technology-based and data-driven economy and society.

Every organization has to deal not only with its own digital identity, but also with the digital identities of its employees, co-workers, customers, and other stakeholders-as well as the digital identities of devices and applications.

Furthermore, our digital identities will become more decentralized. With a trust framework in place, we can prove our identities without having to compromise our privacy or user experience.

Companies will have to utilize this opportunity to make it easier to register as a customer, gain personalized services and pay with ease.

Cross-Platform Enjoyment Can Take Assets to Other Platforms

With the ability to teleport freely to new worlds within the Metaverse, it makes sense to be able to bring your assets with you.

From clothing to cars, it's important that digital products that companies are selling can be enjoyed in multiple worlds.

The greater the level of cross-platform compatibility, the more value that these digital items will hold with consumers.

CHAPTER 6:
HOW TO PREPARE FOR THE METAVERSE?

With the Metaverse and its enabling technologies opening up many doors regarding market reach, product diversification, and enhancing brand value, here are the ways that we feel your company can pursue innovation and thrive within the Metaverse.

Opening Virtual Stores

Imagine if customers can explore your products within a mind-blowing storytelling experience. For example, one can explore what Patagonia has on offer while having a guided virtual tour with the founder, Yvon Chouinard himself.

Here, customers can gain first-hand contextual knowledge of the quality of Patagonia's products and performance, while understanding deeper the brand and its relationship with the environment.

Should you wish to buy a new car, why not take it for an adrenaline-pumping drive around a track of your choosing. All can be offered to consumers within the Metaverse.

Companies will be able to open up spaces within the Metaverse that will allow customers to take tours and interact with all kinds of objects, from key rings to Boeing 747's.

The ability to replicate and digitally twin any retail product in 3D will make virtual stores as immersive

as real stores, without compromising the convenience of E-Commerce. It's time for companies to start thinking about what a 'store' can be.

Developing Virtual Training

One of the great elements within the Metaverse is the evolution of the Creator Economy. No-code infrastructure and comprehensive tutorials will make it even easier to develop niche training programs that employees would be able to get stuck into and enjoy within the Virtual World.

Expect the price of obtaining the right training content to fall while the quality and authenticity will only get higher.

Virtual Reality is already a huge platform for training. Within the Metaverse, employees will be able to obtain accreditation for their training as the VR training practices become more standardized and legitimate within industries.

Educating and Raising Awareness

A new planetarium can cost a museum millions of pounds to build. In many cases, a digital substitute of a campus, museum exhibition, or gallery can offer a more-than-suitable alternative to the public.

With fast improving AI and digital replication, companies and institutions can expand their spaces for a tiny fraction of the cost.

For companies who wish to raise awareness of global issues, educate their customers about their mission and CSR work or are educationally based, the Metaverse will present you with limitless amounts of dedicated spaces that visitors can enjoy and interact with.

Enhancing Data Analysis and 3D

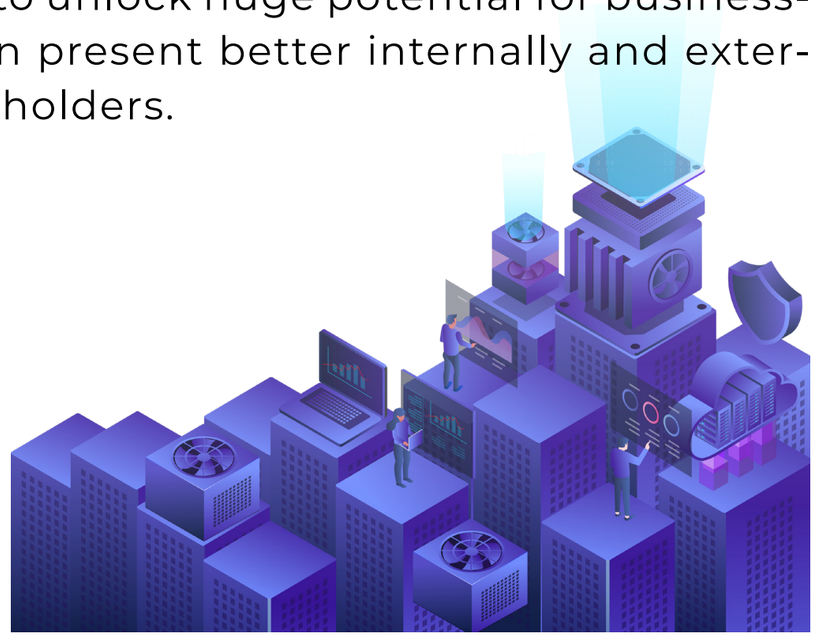
Today's big data projects tend to involve amalgam-

ating huge amounts of data sources. With this in mind, it's clear that displaying this data as 2D isn't the most optimal or appealing.

With AR and VR, the intriguing opportunity to gain a 360-degree vision of the data will greatly broaden the experience and ability to comprehend the information appropriately.

Furthermore, more natural abilities to reach out and manipulate the data models for closer inspection will help humans to gain a stronger grasp of what the data is suggesting to us.

Effectively, we will be able to 'step inside the data. This is going to unlock huge potential for businesses as they can present better internally and externally to stakeholders.



Selling Virtual Goods

As we spend more time within the Metaverse, virtual status symbols could become every bit as important as real-world possession.

From Virtual homes to virtual jewelry, there is going to be a great desire for these products to be available.

Brands should capitalize on this demand, creating an ever-growing assortment of products for consumers to engage within the Metaverse. Companies that are more avant-garde and proactive will be planning to sell, both, physical and digital products to consumers.

Pursuing Sustainability and Customization

The Metaverse is going to create countless oppor-

tunities to move business practices into the digitalworld. From remote working to virtual outlets, the Metaverse will accommodate huge amounts of activities.

By transitioning to these digital practices, companies can greatly reduce their carbon footprints and meet sustainability goals.

Transport emissions can fall as employees work from home instead of commuting, The greater consumer confidence from the try-before-you-buy experiences will reduce the product return rates, again cutting logistical-based offsets.

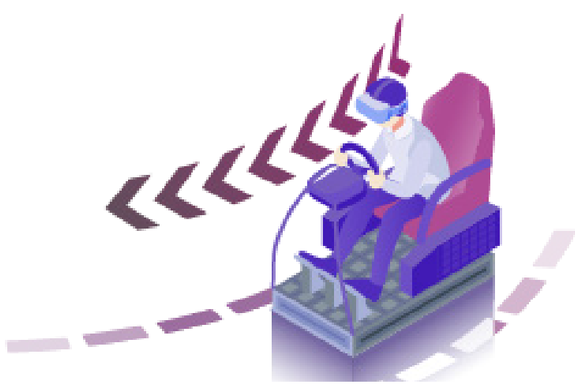
As companies can create immersive virtual environments for consumers to enjoy, they can raise awareness of causes that they are involved with and educate visitors on how the brand can be helped .to address sustainability issues.

Marketing in Virtual Worlds

Within the virtual world, brands will have great opportunities to engage with consumers and raise awareness. For those looking to build a relationship with the new generation, brands can work with content creators and virtual world hosts to incorporate their image inside them. For example, Nike teamed up with Fortnite to promote the new Jordans within the game, grasping the attention of the GenZ group.

The Metaverse is going to be populated by real people, your consumers. Give your brand the refreshing new marketing strategy it needs to thrive within the Metaverse.

Another important aspect is that people can use your products within the metaverse. This means you need to think about potential ways to showcase the usage of your product, for example, a car manufacturer might want to create a simulation of driving the car within the metaverse environment.



CHAPTER 6:
HOW TAKEAWAY REALITY CAN WORK WITH YOU THROUGHOUT THE METAVERSE

TAKEAWAY REALITY

Reality is what you make it

The Metaverse presents massive opportunities for companies to seek new fortunes, engage with new audiences and revitalize their image and story in incredible new ways. To get the most out of it, it's highly advantageous to work intimately with experts in the field.

Here at Takeaway Reality, we offer data-driven insights to help you to traverse the unknown waters of the Metaverse.

Our expert team of XR developers, consultants, and Metaverse-enthusiasts are here to help you at every stage.

We are focused on gaining a deep insight into the Metaverse and how industries like yours can be shaped by it.

With up-to-date knowledge of what's occurring and when we aim to bring you influential advice for how your company can thrive within the multiverse.

Metaverse Strategy Consulting

One way in which we can help you with this is with our Metaverse Strategy Consulting services.

With rich experience behind us, our trained consultants intend to work with you to develop the most effective strategies for your company to create value within the Metaverse.

From Marketing to the establishment of a digital product range within the Metaverse, we can provide expert guidance.

Digital Content Creation

Our expertise exceeds consulting. We will also help with the digitization of your products, making them compatible with the new ways that people can interact and enjoy your brand within the Metaverse.

Our 3D Asset Modelers will bring your products to life in the virtual world. From Cars to Branded Beanie Hats, we pride ourselves on delivering digital replicas with the highest of authenticity.

Once designed, we will support your company with the release of these products into the Metaverse and be on stand-by for post-service maintenance and KPI analysis as well.

Virtual Spaces Building

Working closely with your company and branding vision, we will design and build your virtual space for clients, colleagues, and public visitors to enjoy.

This is a great way to tell your story and interact more directly with your stakeholders. From conferences to training, these spaces will host memorable events in the near-distant future.

CONTACT US

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TAR
TAKEAWAY REALITY

Designs and Illustrations by Freepik & Vecteezy