



The Metaverse: Reimagining the World in a New Way

What is the Metaverse?

The word Metaverse is derived from the prefix “meta” (beyond) and noun “verse” (universe).



The Metaverse is a medium beyond the universe, where you can interact with virtual objects with real-time information thereby creating borders between different digital environments and the physical world. It's like stepping into a whole new virtual world.

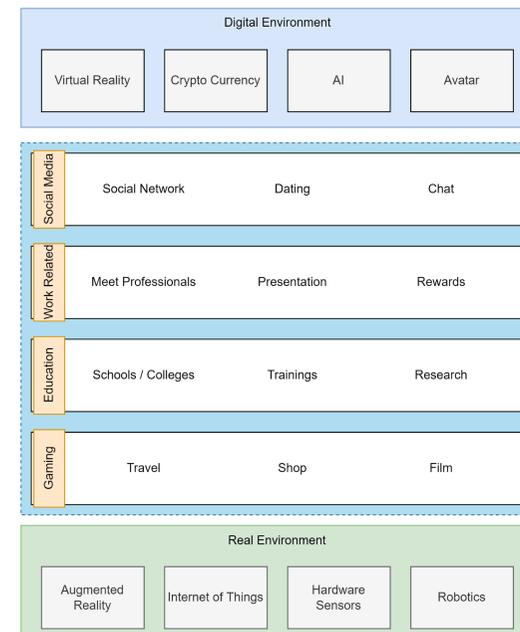
Attempts to create the Metaverse started way back in 1992 but were typically gaming related. With the new wave being led by Facebook (now Meta), work-related use cases and ideas around communication, socializing, entertainment, gaming, education, and business can be materialized into a single Metaverse.

Let's look at a few features of the Metaverse:

- **Interoperability** helps to merge different 3D virtual environments into a single Metaverse.
- **Unlimited users & worlds** mean no limit for users and the virtual worlds to be merged.
- **Real-time interaction** helps users experience a real-life environment in a digital space where they can socialize with others and participate in live events.
- **Persistence** in a way that you need not be present in the world and it still works.

It's a whole new world. You might have witnessed something similar in sci-fi TV programs or movies, where your avatar can socialize with other users whose avatars are also in the same Metaverse. You can thereby interact in a digital space, rather than meeting the person in real life.

This concept combines Virtual Reality, Augmented Reality, and information. Your digital self in the Metaverse is represented by an avatar that enables you to move around digital areas that can look similar to the real world. You can see other real users with their digital avatars in the same virtual world.



AR enables us to paint digital content over the real world. The most famous examples of apps where digital content is combined with the real world are Snapchat and Pokémon Go.

In the digital environment, the user can control content and objects virtually, interacting with them in the virtual space. The Metaverse concept applies to all real-world experiences in the virtual world. For example, your avatar could take a walk and meet friends around the virtual Taj Mahal in India.



You could visit a Samsung store inside a virtual mall and buy products that can be delivered to your real-world home, as the environment knows your physical address and other details. Payment can be processed on any digital payment medium. In this new world, we are not visiting any physical store but traveling there and having an experience virtually. It is almost as if you are visiting yourself.

Movies such as Ready Player One and Free Guy are classic examples of the Metaverse and how it could be imagined.

Imagine visiting a virtual bank for routine banking business – there's no waiting in line in the virtual world.

Some events are organized and attended by people in the Metaverse, as well. Use cases like these are not limited to physical restrictions.

Industries are working to improve the virtual world with interesting possibilities we may not have imagined yet, in which this new virtual world would act as a second life in itself.

There are few apps where you are paid for the virtual content you create. Soon, you could be able to purchase a space or house with the help of cryptocurrencies in the Metaverse.



How Does the Metaverse Work?

The Metaverse will build upon the internet, rather than replace it. As the Metaverse advances each day, there are limitless possibilities as to what it can do and how much bigger it can get.

As mentioned by Matthew Ball in his nine-part essay 'The Metaverse Primer', Metaverse is a highly scaled and interoperable network of 3D virtual worlds rendered synchronously in real-time. It can be accessed by n number of users where n is unlimited. Users can provide individual details such as presence, data, history, identity, communication details, choices, payments, etc.

You need a hardware device to connect to the Metaverse ecosystem. This hardware device can be a head-mounted display like Oculus Rift or HTC Vive. It could also be a pair of goggles or some new device we have yet to see invented. Can you imagine yourself on a weekend morning wearing these devices and entering the Metaverse? This is no longer the stuff of science fiction.

We access the Metaverse via devices that know the user's location, habits, and preferences. We feel that mobile devices will always be a critical element for Metaverse. Visual interfaces may change in the future and may even provide the capability to connect the virtual and real worlds.

Have you heard of Roblox, for example? Would you be interested in watching a movie in this game? Perhaps you would also prefer to buy groceries inside Grand Theft Auto. The use cases are limitless. This migration in terms of interaction between our real and virtual worlds will drive the Metaverse.



Metaverse Benefits

Let's look at a few advantages of
the Metaverse...



The world has moved drastically to digital in most domains since COVID-19. One impact is that millions of people have moved into virtual workspaces. This increased adoption has given a real boost to the different real-world capabilities we can find in the virtual environment.

Let's look at a few advantages of the Metaverse in a general way:

Social Media in 3D Space

At present, social media platforms only allow users in 2D space. The Metaverse enables social interaction to go 3D. In 2D space, user photos, chats, and data were the content but in the Metaverse, users will themselves become the content. Companies will be able to combine VR and AR for much better digital interactions.

New Opportunities for Marketing

Across the product industry, companies will need to create digitized campaigns for marketing in the virtual world. They'll want campaigns, ads, and stores to be seen and navigated in virtual space. Electronic commerce will allow ads to provide a more immersive experience.

Seamless Remote Work

Remote work makes it difficult to understand body language, which can result in misunderstandings. Employees can work together more closely in a 3D environment that models the real world.

Virtual Economy Promotion

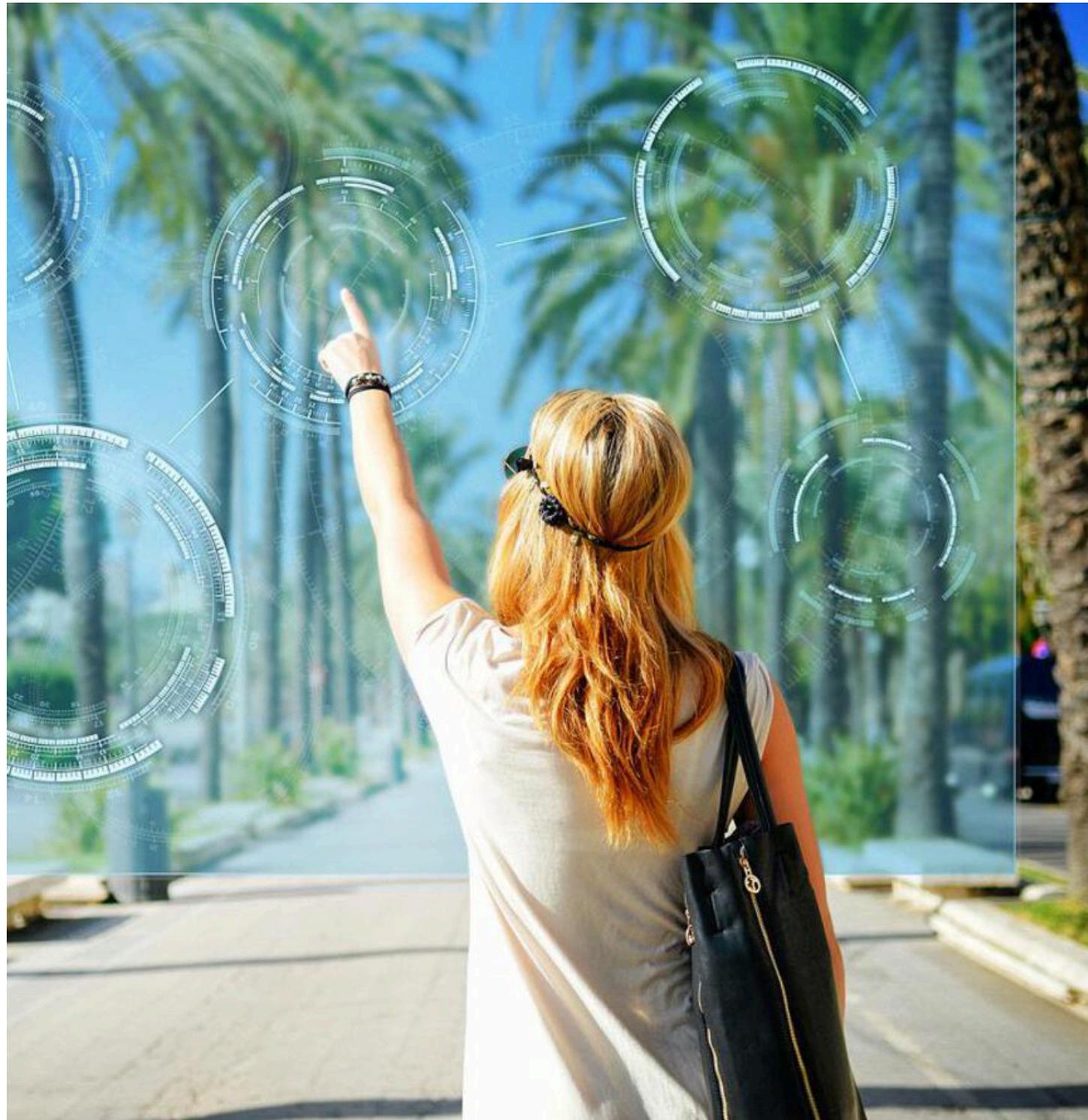
The Metaverse will provide a platform for digital economies and offline product exchange. In this way, it will support activities for trading and jobs that exist in shared virtual space or the real world.

Interoperability & Limitless Space

The Metaverse places no limitations on space or features. Virtual workplaces can be made interoperable with productivity tools to promote feature-rich, collaborative experiences without building the infrastructure to support it in the real world.

Companies Adapting to the Metaverse

The concept of the Metaverse began with Roblox, Fortnite, and Second Life and the gaming industry is where the greatest use cases are found.



However, as people move to digital, users are interested in engaging with their physical and virtual worlds. Second Life began back in 2003 and is now being modernized with its own digital currency (which has a GDP value of more than a few countries combined). With Roblox, a new game released in Q4 2020 provides the co-existence platform for humans to learn, play, and connect together.

If the Metaverse wants to reach its full potential in terms of commercial space, it must adhere to persistence, interoperability, creating value for advertising and marketing, and runtime user experiences that will keep users on these platforms. The power, network, and digital audience required for such a platform are already present today and Metaverse will inevitably expand in the upcoming decade.

Technology giants including Facebook (now Meta), Microsoft & Unity have already invested a lot in building the Metaverse and will play a big role in its success. Companies with the upper hand in building AR and VR headsets, such as Microsoft's HoloLens and Facebook's Oculus VR, will be the trendsetters in this space. However, many new startups and industry experts are following and adding to this market with significant investment capital.

Facebook is also using Horizon Workrooms, recently rebranded as Meta Horizon Workrooms, internally. Employees can come together to discuss work and even design in the virtual space. Microsoft created Microsoft Mesh for Teams, which enables the creation of 3D avatars that can be

used during office meetings. Imagine three employees want to have a meeting – two available at one location but another who is working remotely.

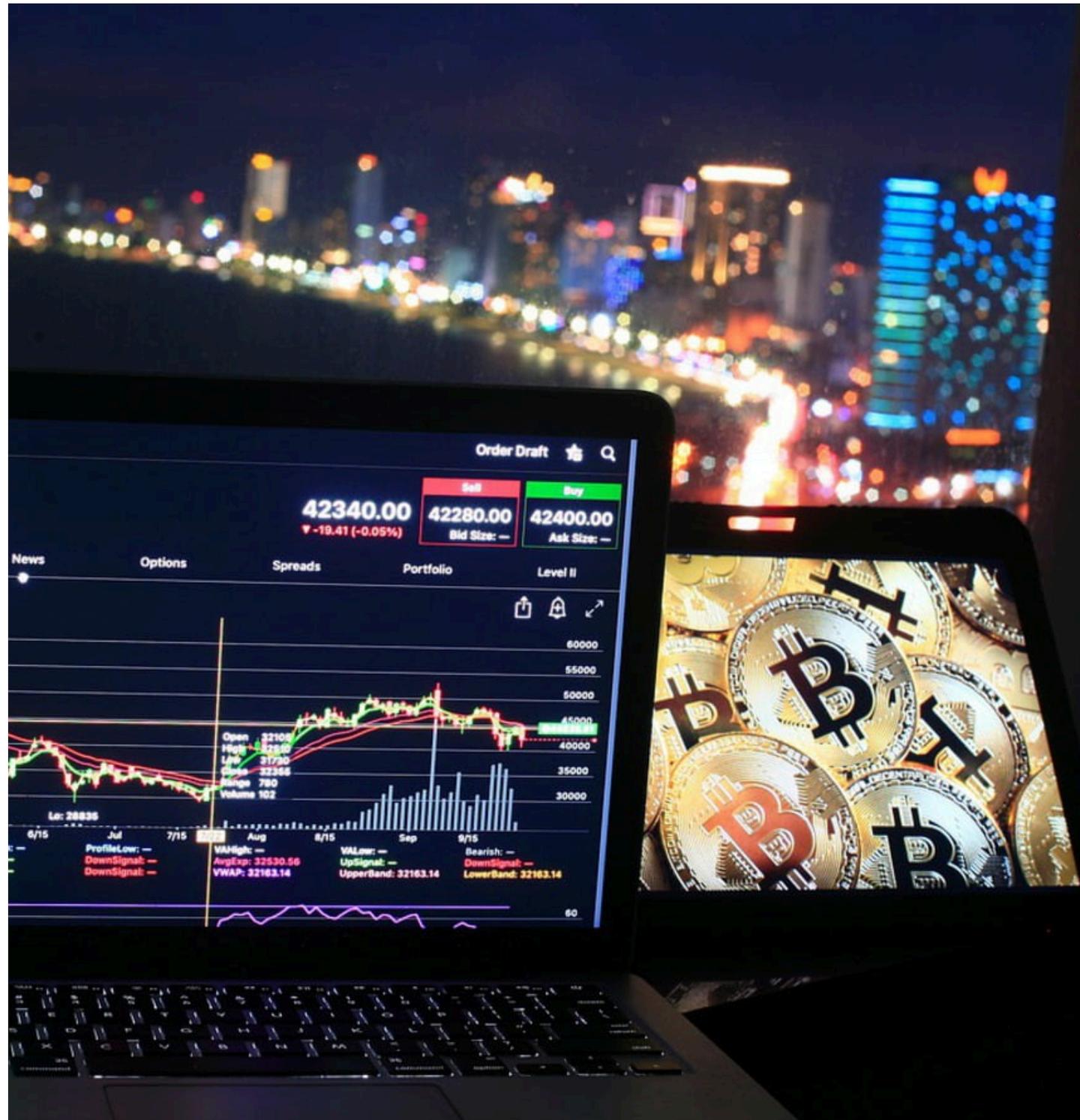
Each will wear the headset and necessary gear to be in the Metaverse. These employees will be visible to one other as avatars who can create 3D objects and design in the virtual space, rather than on a screen or laptop. These creations can be kept in safe, shared storage once finalized. This provides excellent interaction between employees whether they are in the same physical space or working remotely.

There is a lot of commercial potential for Metaverse and its applications. It will alter how we live life and impact every industrial sector, from retail and events to manufacturing, construction, healthcare, etc.

Any product you see in the Metaverse could be purchased seamlessly, without requiring an external site or app. This would enable businesspeople to market their products and purchase virtual space worldwide, regardless of location.

It will be a great opportunity for businesses and celebrities to increase collaboration, and people will be able to interact with brands and stores directly. All of this combined will provide better user engagement and great commercial impact.

NFTs & Decentralized Finance

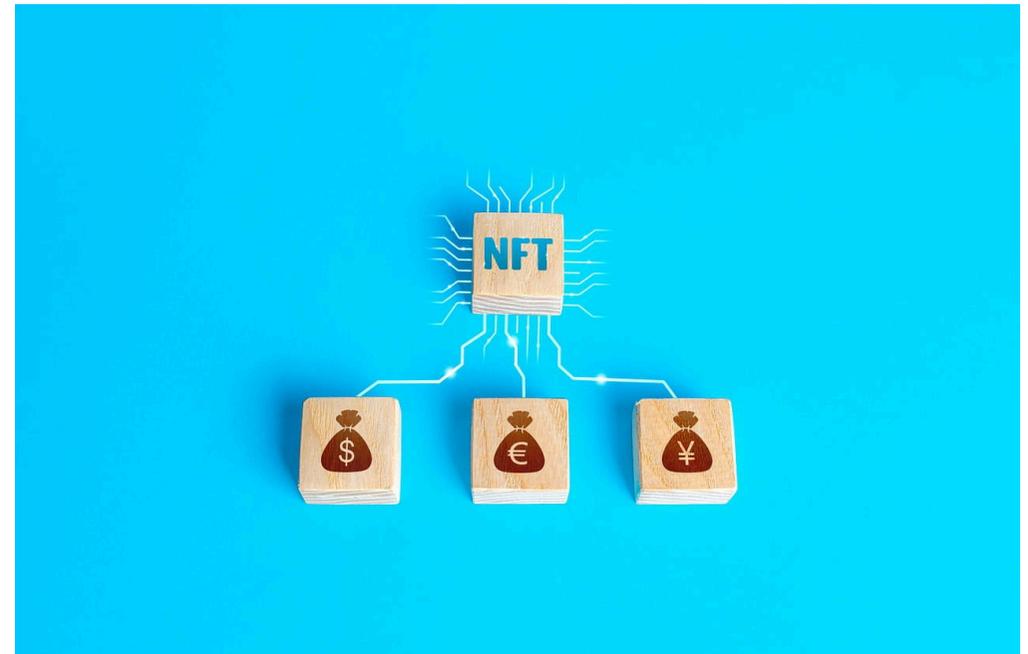


The Metaverse will enable users to buy different digital assets and one up-and-coming method of payment is Non-Fungible Tokens, or NFTs.

Tokens such as MANA and GALA, used for trading purposes in the virtual Metaverse environment, are already becoming popular. They are not only used to buy or sell in the virtual environment but also have tremendous potential use cases as many companies have started their distribution of NFTs.

Users may be able to get NFTs for playing the games of different gaming platforms, which can then be traded on marketplaces for higher prices. To facilitate buying and selling Metaverse tokens, decentralized finance (DeFi) provides Smart Contracts, P2P transactions, and much more.

NFTs & DeFi work on the concept of Blockchain.



The Future of the Metaverse

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This will enable many job opportunities and create more options for brands and industries to attract customers and gain more revenue streams. Creating the complete ecosystem will take some time – maybe even a decade to come to a full-fledged reality – but it is inevitable.

Many companies are investing in the Metaverse. It won't be created by one company but by millions of contributing developers. The full potential of this platform is not yet evident but current use cases make replicating an entire second life completely possible. AR & VR will play a vital role in providing interaction in the virtual space. While the previous decade was known for the rise and maturation of the internet, this current one may be known for creating the Metaverse.

Based on the Blockchain platform, the Metaverse promises to be more interactive, immersive & collaborative – and the lingering impacts of COVID-19 will continue to accelerate its development.

Education, retail, and manufacturing have all changed post-pandemic, and remote working culture will get a boost in terms of using Metaverse. Users will continue to avoid the long commute, dress up avatars just as they would in offices, and enjoy more flexible working hours.

There are limitless possibilities in terms of what Metaverse can provide. Chances are high we'll see new wearable devices that will act as the interfaces for connecting and collaborating inside the Metaverse. Games such as GTA can be played with your friends as if you are present in the virtual world. Cryptocurrencies will be integrated into Metaverse experiences, and brands must decide which currency to accept in their real and virtual worlds. Digital transactions will boom all over the world.



Users will be able to own virtual land and could throw a party in the virtual world where their friends can join in and enjoy themselves together. Crypto tokens can be used for payment purposes, and superstar singers will be able to organize virtual concerts with digital tokens as “entry,” enabling them to have concerts attended by users in larger numbers inside the virtual world.

The Metaverse will help in boosting the global economy. With major companies already working on their involvement in the Meta platforms,

we could soon see exponential growth for consumers and investors.

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