



Metaverse - The Parallel Universe that uses Augmented Reality (AR), Virtual Reality (VR) and Block chain

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Abstract : In Stephenson's novel, Metaverse is defined as a shared "imaginary universe" which is "made available to the public through the international fiber-optics network" and projected onto virtual reality goggles. As a result, the term can be used to describe digital environments that have been supplemented using virtual reality (VR) or augmented reality (AR). Meta refers to the "beyond," and verse to the "universe." Furthermore, some individuals use the term metaverse to refer to virtual worlds in which players can travel and interact with one another; for example, a world where developers can create buildings, parks, signs, and other items that do not exist in reality. It features massive hovering light shows and well-known neighbourhoods (where the rules of three-dimensional spacetime are ignored, and free-combat zones where people can go hunting and kill each other).

Index Terms - Block chain, Virtual reality, Augmented reality

I. INTRODUCTION

The metaverse is potential iteration of the Internet as a single, ubiquitous, and immersive virtual world assisted by the usage of augmented reality (AR) and virtual reality (VR) headsets in science fiction and futurism. A metaverse is network of three-dimensional virtual environment focused on social interaction. The metaverse is the next stage of digital evolution that has the potential to dramatically increase digital adoption by expanding the realm of services beyond traditional online platforms. In the last few decades, digitization of services has been the trend for increasing efficiency in the domains of business, entertainment, education, and any other system that may be combined with online access. With the possibilities afforded by online storage/processing facilities and digital systems at remote data centres and cloud platforms, these services and systems were improved to their full potential. The focus has switched to the consumer experience as the efficiency, performance, and quality of service access have reached their maximum potential. As a result, there is a demand for better service.

II. THE ORIGIN OF METAVERSE

The term "metaverse" is a combination of the terms "meta-" and "verse." The prefix "meta" is derived from the Greek word "starting place," which means "beyond," and "verse" is derived from the word "universe." It changed into first utilized in literature via way of means of Neal Stephenson in his 1992 dystopian novel Snow Crash. In the e-e book, the metaverse is supplied because the final evolution of the internet - a form of digital fact in which any digital interplay may have an instantaneous impact at the original global too. The e-e book quite sums up what the metaverse is. It's a bodily chronic digital area in which there are digital avatars, virtual social interactions, and gaming amongst many particular matters that we partner with metaverse today. Snow Crash additionally underlines how the metaverse with inside the tale influences traits with inside the actual global of the protagonist, such as a conspiracy that turns human beings, whose brains are linked to the digital global, insane. Since the discharge of the e-e book, numerous different books, movies and tv suggests have dabbled with the idea to various degrees, such as Steven Spielberg's well-preferred film Ready Player One (2018), which changed into tailored from Ernest Cline's 2011 novel of the identical name. The common thread running through it all is that the metaverse is a digital reality in which human beings may be capable of doing everything they do in real life, depending on technological advancements. Blockchain technology is a structure that stores transactional records, also known as the block, of the public in several databases, known as the "chain," in a network connected through peer-to-peer nodes. Typically, this storage is referred to as a 'digital ledger.' Every transaction in this ledger is authorized by the digital signature of the owner, which authenticates the transaction and safeguards it from tampering. Hence, the information the digital ledger contains is highly secure [10]

Augmented reality (AR) is a technologically augmented version of the real world that is created by the use of digital graphic elements, music, or other sensory stimulation. It's an increasing trend among businesses that deal with mobile computing and commercial apps. Augmented reality is evolving and becoming increasingly widely used in a variety of applications. Marketers and technology companies have struggled to fight the impression that augmented reality is nothing more than a marketing tool since its inception. Consumers, on the other hand, appear to be reaping concrete benefits from this feature and expecting it as part of their buying process.

Virtual reality (VR) is a virtual experience that can be both comparable and dissimilar to the actual world[7]. Entertainment (video games), education (medical or military training), and business are all examples of virtual reality applications (virtual meetings). Augmented reality and mixed reality, sometimes known as extended reality or XR, are two further sorts of VR-style technologies. Currently, conventional virtual reality systems provide realistic visuals, sounds, and other sensations that imitate a user's real presence in an environment using virtual reality headsets or multi-projected environments. A person using virtual reality technology can gaze about and move around in the virtual world.

III. FACEBOOK’S IDEA OF METAVERSE



Figure 1: Facebook and Metaverse

On October 28, 2021, Facebook announced that it had rebranded as Meta Platforms Inc., or Meta forshort, a name it carefully chose to capitalise on what will inevitably become the inevitable destiny of human connectivity and, perhaps, of lifestyles themselves. "A sense of presence in the metaverse canbe defining — as if you're right there with another character or in another location.[3]" The remaining dream of social technology is to feel sincere gift with another character. That is why, following the announcement, CEO Mark Zuckerberg stated in his Founder's Letter, "We are being targeted on building this." Similarly, Zuckerberg went above and beyond to give tens of thousands of people around the world a glimpse into what the metaverse might entail.

IV. CORE ATTRIBUTES OF METAVERSE

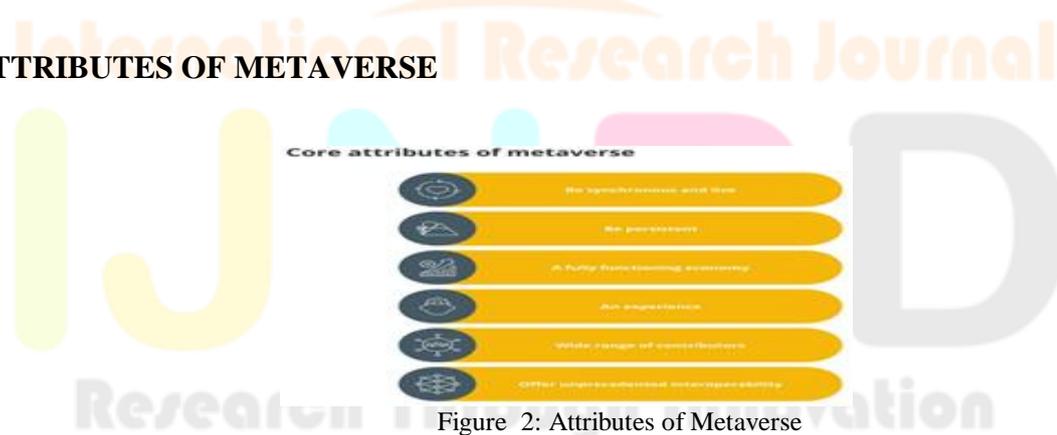


Figure 2: Attributes of Metaverse

Science fiction is where the most common concepts about the Metaverse come from. In this perspective, the Metaverse is commonly represented as a digital "jacked-in" internet — a manifestation of real reality but grounded in a virtual (often theme park-like) universe. [2] As a result, the Metaverse's basic characteristics are:

While self-contained and pre-deliberate activities will take place, the Metaverse could be a dwellingrevel in that exists constantly for anyone and in actual-time, simply like "actual life." It never "resets," "pauses," or "ends," alternatively persevering with indefinitely. Individually and simultaneously available:

Anyone can be part of the Metaverse and take part in a sure event/place/interest at the sametime as preserving their Metaverse agency. Businesses as well as individuals need to be capable of create, very own, make investments in, sell, and be reimbursed for an extensive variety of movementsthat offer cost that others recognize in a nicely functioning economy.

It needs to embody each the virtual and bodily worlds, in addition to non-public and public networks/reviews and open and closedplatforms [5].

A various organization of contributors: It need to be filled with statistics and reviews created as wellas operated via way of means of various organization of contributors, a number of whom are self- hired and others who run casual businesses or business enterprises offer first rate interoperability:

It need to offer notable data, virtual items/assets, content, and different interoperability among everyof the reviews—for example, a vehicle created for Rocket League (or maybe Porsche's website) is probably carried over to paintings in Roblox. Today's virtual international features like a purchasingmall, with every keep having its very own money, ID cards, proprietary devices of dimension for commodities like footwear or calories, and wonderful get dressed codes, amongst different things.

III. SEVEN LAYERS OF METAVERSE

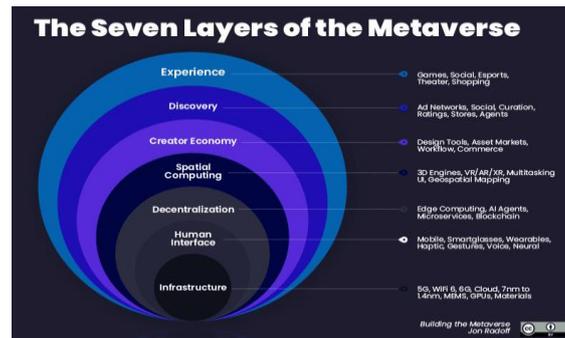


Figure 3: Seven Layers of Metaverse

EXPERIENCE

Contrary to famous belief, the metaverse is extra than only a 3-D illustration of the actual internationalfor our passive viewing pleasure. Rather, it'll be an correct portrayal of spatial dimensions and distances, concerning the dematerialization of bodily matters enabled through photorealistic visible elements. With the metaverse dematerializing bodily space, the bounds that physics imposes on it canvanish. The metaverse's digital fact has the capacity to offer stories that the real international cannot.This is one of the major motives why many famous manufacturers are making an investment in big interactive stay events, or MILEs.These events, which take vicinity on systems like Roblox and Decentraland, offer a glimpse into the future.

DISCOVERY

This layer explains the "push and pull" of information that results in experiencing discoveries. This "push and pull" of information introduces consumers to exciting new experiences. While "pull" pointsto an inbound system in which users actively seek out information and experiences, "push" refers to the processes that notify users about the metaverse experiences that await them. In fact, the discoverylayer is the most profitable for businesses [6].

The following are some examples of inbound and outbound discoveries:

Inbound:

User-generated content
Internet search engines
Presence in real-time

Outbound:

Advertising on display
Social media and email
Notifications

CREATOR ECONOMY

The metaverse's aim is to build a fully immersive 3D environment with interconnected virtual regionsthat mimic reality. These places will be specifically built to attract visitors who will be able to performnearly anything within them, thanks to AR, VR, and other related technology. It's clear that there's alot of room for economic growth in this virtual environment. [1] As the idea of metaverse becomes morepublic, it's almost guaranteed that the number of companies establishing metaverse spaces will increase significantly. Creators of content will be crucial in shaping this new universe. They've had alot of success on social media platforms and will continue to be a large part of the virtual world's expansion.

SPATIAL COMPUTING

Spatial computing has already made our lives less difficult with digital assistants and ride-hailing apps. It has made style a laugh and buying extra handy through permitting consumers to strive on garments in digital converting rooms. Now, spatial computing is ready to permit you to paintings, shop, and socialize as avatars in a rich, three-dimensional virtual international that mimics the actualone. Spatial computing combines AR, VR and MR to convey the concept of the "metaverse" to life. With the help of spatial computing, the prescient and imaginative of parallel, three-dimensional, digital universe which communicates with the actual international and by no means shuts down maybe materialized. For instance, a recreation that makes use of spatial computing will permit you to playit in opposition to the backdrop of your instant actual-international surrounding. The characters in the sport will now no longer simply locate the bodily items round you however may also be capable of engage with them, like sitting on a settee to your residing room. Essentially, spatial computing permits you to engage with each the digital and the actual international concurrently in actual time. Spatial computing has grown to be an critical elegance of generation over the years that permits us to get admission to and control three-D areas for progressed experiences. For spatial computing to paintings as desired, specialised

software program and hardware are required. In this section, you'll best find out about the software program additives needed; the hardware component can be handled withinside the "Human interface" layer mentioned later withinside the article. Various components of the software program layer that electricity the metaverse were indexed here

- 3D engines for displaying geometry and animation (Unity and Unreal Engine).
- Geospatial mapping and object recognition for mapping and interpreting the real and virtual worlds.
- Voice and gesture recognition.
- Internet of Things for data integration from devices.
- Human biometrics for identification purposes.
- Next-generation user interfaces designed to support concurrent information streams and analysis.

DECENTRALIZATION

As per Roundhill Investments, the metaverse enterprise will develop at a compound annual fee of 13.1% withinside the years to come. This increase will preserve to boost up because the metaverse will become extra extensively accessible. Tim Sweeney, the CEO of Epic Games, perspectives aboutmetaverse as "multi-trillion-greenback a part of the arena economy," which is just like the net in its normal contemporary form, could now no longer be beneathneath any unique entity's possession. However, all of the buzz across the metaverse is presently being created through the largest tech organizations getting into the space. Clearly, primary businesses will play an essential function withinside the in addition improvement and evolution of the metaverse. This increases the question: Will they devise the equal privateness and facts safety troubles that plague the net today? Let's take the instance of Facebook. The company's enterprise version is primarily based totally on person facts,and it makes use of the facts it gathers to allow 1/3 events to expose centered marketing and marketing to its customers. Imagine an organization or centralized entity controlling the complete metaverse. This state of affairs could create countless possibilities for the controlling authority to research personsports inside the metaverse and use the ensuing facts as in keeping with need. The authority may thenlayout the running of the metaverse in the sort of manner that it advantages advertisers and agencies through giving them get right of entry to to this facts. If the facts have been saved centrally, it might be hard for everyday customers to affirm who has get right of entry to to it and beneathneath what conditions. This may finally result in safety troubles which could, in turn, disenchant the customers. Blockchain generation is a modern manner to cope with privateness and facts safety troubles that a centralized metaverse is probably plagued through. Block chain-primarily based totally applications,also known as Apps, are being created and used throughout industries, cashing in on the blockchain'sinherent first-class of being decentralized and stable.Also, decentralized finance (DeFi) is a manner to make monetary merchandise to be had thru a decentralized blockchain network. Anyone can makeuse of deFi wallets inclusive of Metamask and Trust Wallet without going thru banks or brokerages.A social safety number, government-issued ID, or evidence which you are a resident of your USA isn't required so that you can use a DeFi wallet. This additionally boosts privateness through makingsure anonymity. A host of decentralized metaverse tasks are already the usage of blockchaingeneration to offer person-owned reports that make sure interoperability and face up to censorship. Decentraland is possibly the maximum famous instance of the decentralized metaverse. It is a decentralized digital international jogging at the Ethereum blockchain and controlled through a Decentralized Autonomous Organization, which may be voted directly to modify its policies. Individuals and businesses are already grabbing land in those decentralized universes of the metaverse. To realise the total capacity of the metaverse, it will likely be important to have a obviousand traceable manner to carry out transactions and interactions. Both blockchain and cryptoassets provide a option to this problem. NFTs, on the opposite hand, will make sure that there may be no asset possession disputes withinside the metaverse. The metaverse is high-quality on its own,blockchain, cryptoassets and NFTs will play key function in allowing generation to attain its completcapacity.

HUMAN INTERFACE

The hardware or devices that will allow users to experience the true magic of the metaverse are discussed in the human interface layer. We're getting closer to our gadgets thanks to technology. The reality of diminishing distances between humans and gadgets was emphasised in 1985 by renowned scholar of technology and science studies Donna Haraway's essay "A Cyborg Manifesto." The concept of a "cyborg" was introduced by the author, a human with athletic capabilities which go beyond human limitations thanks to mechanical components built into his body. In the present, whatshe imagined in 1985 is becoming a reality. As technology becomes smaller, smarter, and more portable, it draws closer to our bodies, transforming us into incomplete cyborgs. Are we on our way to becoming complete cyborgs? While we don't have a definitive answer to this question, our smartwatches and smart glasses offer us reason to believe we do. Despite a growing proximity between humans and machines, an immersive, lifelike metaverse experience is required. We will soonbe able to experience the metaverse in the same way that we experience the physical world, combinedwith advanced spatial computing and the right interface[10]

INFRASTRUCTURE

This layer pertains to the technological infrastructure that will be required to create a fully functionaland interoperable metaverse. Five technology clusters power the metaverse.

- First, computing power and network, which include spatial positioning algorithms, edge computing, GPU servers, real-time network transmission, virtual scene fitting and more.
- Second, is artificial intelligence.
- Third, video gaming technologies such as 3D game engines like Unreal Engine and Unity for the creation of resources like animations, sounds and images.
- Fourth, display technologies such as AR, VR, MR, ER, and XR, not just for an immersive audiovisual experience but also to adapt the experience to users' changing tastes and preferences with time.
- The fifth on the list is blockchain technology.

IV. TOP 10 METAVERSE PLATFORMS

HyperVerse

The HyperVerse is a digital global platform that is also one of the most well-known metaverse platforms. It contains a collection of planets that are not owned by any single body. There are hundreds of thousands of different universes in this cosmos. Each person who lives in the HyperVerse is known as a Voyager, and they can generate tokens, interact with one another, and travel the world together.

DECENTRALAND

Decentraland was one of the first metaverse structures to present a viable proof-of-concept for the metaverse platform, paving the way for the platform's market dominance. The company made its metaverse platform available to the general public in 2020, and it has seen a significant increase in popularity since then. Decentraland is a virtual reality environment where users can create content, interact with one another, and earn money through investments and other virtual assets.

THE SANDBOX

The Sandbox is the name of a blockchain-based totally game and a metaverse platform through which traders can sell, buy, and trade digital land plots. Sandbox takes its inspiration from the Ethereum blockchain. It is frequently praised for its stability and balance. The creators have created their own Ethereum-based token known as SAND. Traders can use SAND tokens to pay for gasoline on the Ethereum network.

NAKAMOTO

Traders will be able to accumulate digital land, construct buildings, and do a variety of other things after using the Nakamoto token. The crew at the back of the NAKA token recently announced the launch of the NAKAverse. It's one of the first metaverses to attempt to implement a true in-recreation economy. Investors will be able to purchase digital land, construct buildings, and much more.

ROBLOX

Roblox is another of the top metaverse structures where users can play video games created by other users. Currently, the platform has over 20 million video games that have been uploaded by its users. If they monetize their video games, many of the creators can earn as much as \$1 million in a single year. Roblox is working to build a metaverse, and they've recently released a 'spatial voice chat' feature to enhance both digital and real-life conversations.

EPIC GAMES

Epic Games is also the company behind the smash hit video game Fortnite. Outside of its middle battle royale activity, the organisation has expanded to include virtual song activities and dance parties. Travis Scott recently held virtual event within the Fortnite metaverse platform, which was huge success, indicating that Epic Games is one of the best metaverse structures to check out in 2022.

BLOKTOPIA

Bloktopia is one of the most advanced metaverse systems that aspires to honour Bitcoin, which has a maximum limit of 21 million coins. Customers of Bloktopia can create their own avatars, participate in social activities, learn about cryptocurrency, and buy metaverse 'real estate' in the company's digital truth skyscraper. Investors can also use a builder tool to create artwork, games, obstacles, sequences, and other things.

CRYPTOVOXELS

It is a metaverse platform based on the Ethereum blockchain protocol that provides a virtual gaming world that supports VR and PC use, as well as regular user events organised by the community. In addition to virtual land, the platform offers a large marketplace for buying and selling NFTs, which include everything from wearables to gaming props to artwork and apparel.

METAHERO

It's a task that targets to combine bodily items into the virtual age. Even though MetaHero is much less hooked up than Decentraland, it makes up for it with the aid of using imparting 3-d scanning that transforms real-global items into digital counterparts. Hence, those digital items may be applied in numerous sectors like education, training, and entertainment.

STAR ATLAS

Star Atlas is a next-generation gaming metaverse. It has been created from the convergence of blockchain, multiplayer video games, real-time visuals, and decentralized financial technologies, The Solana blockchain provides the foundation for Star Atlas. Within the game, investors can buy digital assets like ships, crew, land, and equipment with an in-game monetary system known as POLIS.

V. PRACTICAL & POWERFUL BUSINESS APPLICATIONS OF METAVERS**Enhanced Social Media Experience**

Mark Zuckerberg, the founder of Meta (formerly Facebook), used the term "embodied internet" in his letter to shareholders in October 2021. And that is precisely what Social Media will become once the metaverse becomes mainstream. Nowadays' social media structures, such as Instagram, Facebook, and Whatsapp, are 2D structures, in which customers only see a display screen and the types of content that is displayed over it [4]. If you want to be significantly altered as soon as the metaverse kicks in, interaction is limited to 'liking,' 'commenting,' or 'sharing.' Social media becomes immersive with AR and VR-powered metaverse, with meaningful interaction and meetings, much like inside the real world. Instead of a small screen to connect with, social media will reflect reality, in which people, or rather avatars of customers, will interact, talk, and interact in a three-dimensional world, similar to what social media is within the real world.

Business Communication & Optimized Productivity

Metaverse will unleash a revolution within the business conversation and productivity space, with never-before-seen enhancements and breakthroughs. Currently, the most well-known enterprise conversation channels, such as Zoom, Microsoft Teams, and Google Meet, provide a 2D conversation mode with pictures and audio. This takes on new meaning in the metaverse, where hologram-based completely real-time communication, akin to a business meeting in real life, could be enabled. For example, a full-fledged hologram of someone will sit in front of you, interact, and talk with you just like a real person. For example, a real estate company may allow a practical digital excursion in their commercial and residential projects, in which visitors can clearly walk into the condo or office, touch and experience the components, and appreciate the distance and scale as if they were there in person. This has huge implications in industries like manufacturing, wholesale, real estate, business conferences, and more. Even working from home will see a shift in attitude in terms of conversation and productivity, as conferences and seminars become more realistic, real-time, and eerily similar to in-person conversations.

Immersive Sales & Marketing

Figure 4: Education and Metaverse

With better social media, and optimized commercial enterprise communication, the complete manner of income and advertising will witness a super transformation a good way to boost up commercial enterprise boom all-around. Imagine billboards and digital hoardings on digital highways and expressways, which are being visible through hundreds of thousands of customers or avatars in real-time, and agencies absolutely spending cash to collect rights to the ones commercial spaces! This isn't any greater fiction,

as traders are absolutely shopping for metaverse real-estate, and strengthening their digital property for monetization. The creation, distribution, and intake of advertising content material could be modified forever, with metaverse. With several factors already to be had for the net customers or avatars in a metaverse, manufacturers could be in a higher role to marketplace their products, in a customized, tailored manner, with captivating results. Targeting and positioning of services and products could be so accurate, that each metaverse consumer will enjoy advertising campaigns primarily based totally on their particular choices and choices. Brands can install their very own metaverse-stores, and invite customers from all internationally to go to them certainly and enjoy the goods and offerings in real-time, with the alternatives of certainly the use of them, test them out, and feeling them thru ultra-superior augmented reality. And we've slightly scratched the floor right here on the subject of innovation that the metaverse will unleash!

Revolutionized Online Education

The pandemic has made online education to become mainstream, but the current medium of the asynchronous mode of teaching via video conferencing platforms is not that user-friendly and productive. Metaverse will change this. Students can now create their own virtual avatars and attend classes as if they were in the real world, learning and greedy the knowledge from academics with hanging readability and depth. Metaverse will unleash an immersive studying adventure, fueled by means of graphics-rich digital systems and virtual systems, that will allow students to not only interact, collaborate, and eat with their classmates in real-time, but also to nearly comprehend the rules and information the theories, perhaps better than real life on many levels. With metaverse, on-line training can be revolutionised, thanks to 3- dimensional learning tools, visualised learning aids, and instant access to world-class professors and instructors.

Futuristic Block chain Applications

Because each has the same underlying generation for constructing blocks, it becomes a charming case study on how blockchain can simply supplement and empower metaverse. Blockchain is the technology that gave birth to ethereum, bitcoins, and other virtual currencies, as well as non-fungible tokens and blockchain gaming. These technologies could be the building blocks of a metaverse, allowing for a more practical, scalable, and long-term digital economy without the need for fiat money, such as currencies. A powerful combination of barter systems and blockchain – based technology could be the catalyst for growing and empowering the metaverse and creating a parallel Universe that is constantly expanding into new horizons.

The Future of Entertainment

In the approaching days, we might also additionally witness a new, never-seen-earlier than enjoyment industry, located proper on the center of metaverse: Imagine digital live shows attended through tens of thousands and thousands of avatars, every paying a rate to get an entry, and experiencing stay performances through the optimum celebrities, all from the consolation in their homes. Virtual fact subject parks, for example, may be some other crucial software of a metaverse, in which customers from internationally can attend, take part and enjoy precise rides with out shifting out in their homes. The equal is going with sports activities: Unique sports activities may be organized inside the metaverse, with superior and honest sports activities bettings, and more. These effective and realistic enterprise programs are only a start.. When a feature-rich, full-fledged, immersive metaverse is truly created, we might also additionally witness lots of different enterprise programs like eCommerce, criminal industry, manufacturing, retailing, books, movies, audio streaming, and more. Tech Ahead are proper now reading and experimenting a few current metaverse-primarily based totally enterprise programs which have the strength to extrade the world [8].

VI. FUTURE OF METAVERSE

The goal of a metaverse is to improve human contact. As a species, we are progressing technologically faster than at any time in recent memory, we must pay attention to how our identity relates to the world and others around us. Meta is the epitome of this concept. Consider an instructional metaverse in which you can attend classes from the comfort of your own home while seeing and interacting with your instructor as if you were physically present. Imagine being able to attend a gathering from the comfort of your own home, seated at a virtual table among people whose nonverbal communication and responses you can evaluate in the same way you would in person. A metaverse will most likely transport these thoughts to the real world in the near future. If you're wondering what else metaverses have to offer, the answer is that there's a lot. The Metaverse now offers a new type of brand promotion with the development of nonfungible tokens (NFTs). It may prove to be an effective method for both igniting and restoring client interest because it allows for the exchange of lands, the purchase of assets, and the display of the organization's image through logos or banners.

A good *metaverse example*: They can assist businesses in a variety of ways. Generating hybrids among properties, sorting out events, and speaking with the client's local region is made simpler than ever before in a world like essentially limitless, allowing businesses to draw in with their clients in ways they couldn't previously. With VR and AR as sophisticated as they are right now and a plethora of financing that these tech behemoths currently have, there are basically no innovative cutoff points to this idea. In any event, specialized limits and possible inadequacies are not immune to the Metaverse.

METAVERSE – THE FUTURE ITSELF!

There are other aspects of the Metaverse, but here are a few predictions about how it is going to affect the way we work and drive a societal evolution toward a more welcoming society.

- **We will start expressing ourselves in creative and innovative ways.**

People will begin to witness extreme self-expression in this context as people learn how to change the virtual world around them using tools designed for creators by creators. If you don't have time to create your own world, you can explore other people's worlds and possibly adopt their creations as your own. In the Metaverse, everyone will have an avatar, which is a character that represents them.

- **Work will feel like game.**

Imagine going to the office and teleporting to Beijing to meet with your lead engineer, the Bahamas to check in with your boss, and a Fairy Tale realm to meet with a vendor partner. The ability to travel between real and imagined worlds for meetings will give our day a creative twist.

- **The Ability to travel being still**

It is possible to see locations we've never seen before while fully engaged in the surroundings. We will not be feeling solely at the location of the meeting. Instead, we shall experience and live it as if we were genuinely present. The creative power that will be available will be an aid in our collective expansion.

- **A Total change in how we currently buy, sell and experience**

With major brands already launching digital products on the internet, it is reasonable to expect that, rather than browsing for products on a 2-D screen, we will soon be able to interact with services, products, and commodities in a much more personal way, forever changing the way we shop.

- **A change in entertainment, learning and Sports**

With Virtual classrooms, movie theatres, and stadiums, how we now experience these events will undergo a change with the development of the Metaverse.

VII. CONCLUSION

The metaverse is no longer a dream; it is now a reality, and our real world will become more virtual in the coming days as a result of this technology. Virtual reality will evolve in the future, taking our experiences to new heights. Many people will gain employment as a result of this technology, and millions will be introduced to a new technological marvel. Every technology has advantages and disadvantages, which you can determine when Metaverse becomes a reality[9]. The internet has evolved over the years, and the outcome of this evolution is metaverse. We exist in a time where a significant change in the history of humanity is going on, and our real lives are bound to spill over to the metaverse. It is a virtual reality/augmented reality universe that helps you build social connections virtually. In simple words, a metaverse is a network of 3D virtual worlds focused on social connection and it can be defined as a simulated digital environment that uses augmented reality (AR), virtual reality (VR), and blockchain, along with concepts from digital media, to create spaces for rich user interaction mimicking the real world.

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