METAVERSE ASSETS

What is metaverse?

- The metaverse is a virtual universe that represents a new frontier where VR, augmented reality (AR), mixed reality (MR), gaming, social interaction and commerce come together and create experiences that bridge the gap between real and digital worlds.
- That is why many view the metaverse and associated Web3 technologies such as the blockchain, NFTs, cryptocurrencies and decentralized computation as the birth of a new internet.
- What does the metaverse have in store for end users? Access to business opportunities, immersive social and personal virtual experiences and answers to many physical limitations.

METAVERSE LAYERS

Seven layers of the metaverse

1. Experience
2. Discovery
3. Creator economy
4. Spatial computing
5. Decentralization
6. Human interface
7. Infrastructure

1.Experience

•Contrary to what many believe, the concept of the metaverse does not limit itself to being a 3D manifestation of the real world for our passive viewing. It will rather be a true representation of spatial dimensions and distances and will involve the dematerialization of physical objects made possible by photorealistic graphic elements.

•With the metaverse dematerializing the physical space, the limitations that physicality presents might cease to exist within it. The VR of the metaverse has the potential to provide experiences that the real world can never offer.

•This is an important reason many notable brands now put their money into massive interactive live events or MILEs. These events hosted on platforms like Roblox and Decentraland offer a glimpse of how events and activities in the metaverse would manifest interactivity. Failing to get a front-row ticket to a concert? In the metaverse, all tickets are going to offer a front-row experience.

2. Discovery

•This layer talks about the experiential discoveries that result from a continuous “push and pull” of information. It is this information “push and pull” that acquaints users with new experiences. Whereas “pull” represents an inbound system where users proactively look for information and experiences, “push” is more outbound and involves processes that inform users about what experiences await them in the metaverse. The discovery layer is, in fact, the most lucrative for businesses. Here are some ways in which inbound and outbound discoveries take place.

2. Discovery

•**Inbound:**

Community-driven content

Search engines

Real-time presence

•**Outbound:**

Display advertising

Emails and social media

Notifications

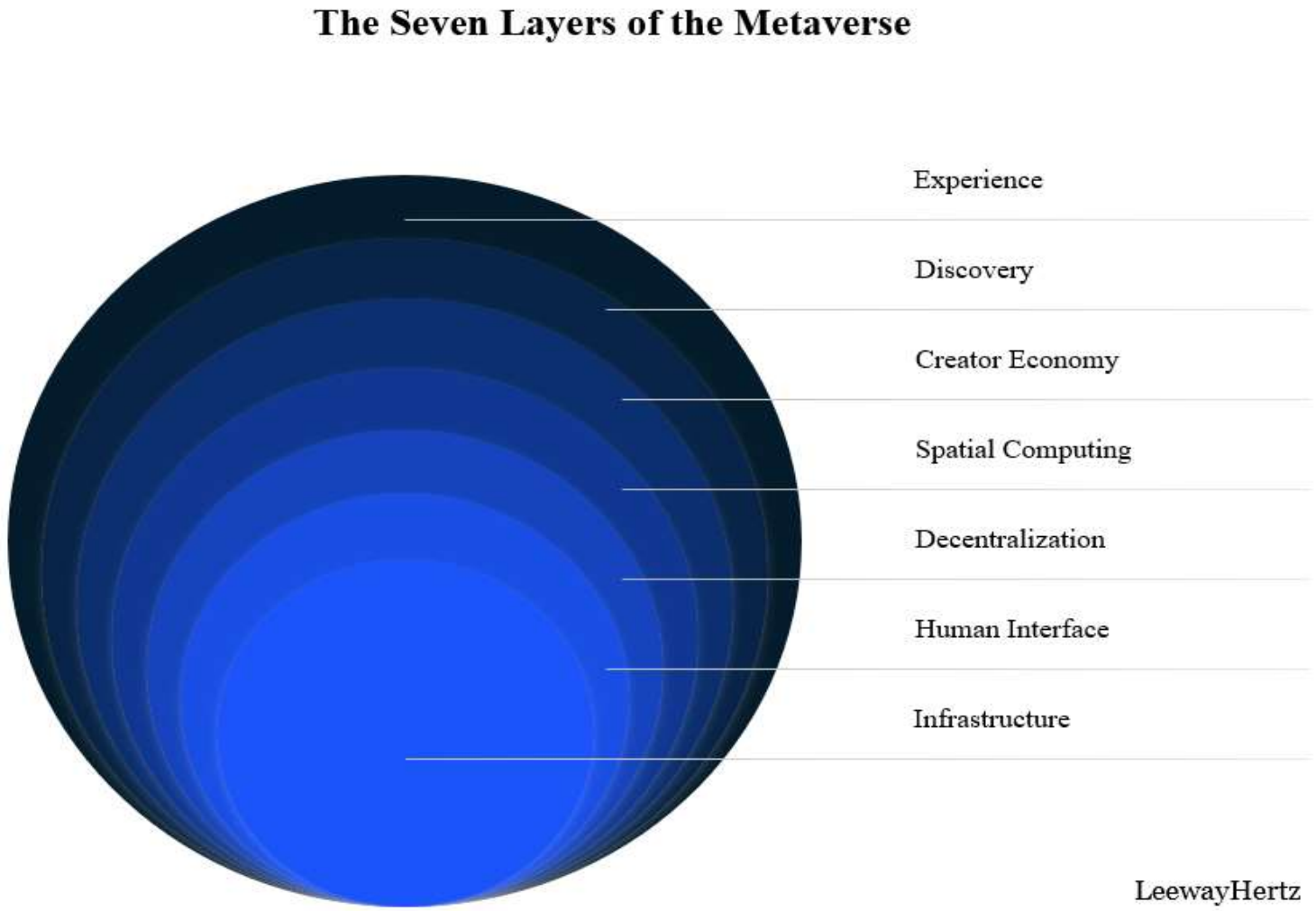
Community-driven content will be a major inbound means for discovering metaverse experiences. It is, in fact, one of the most cost-effective means for those interested in learning about the metaverse.

3. Creator economy

•The vision of the metaverse is to create an immersive 3D world with interconnected virtual spaces that would mirror reality. These spaces, powered by AR, VR and other similar technologies, will be specifically designed to attract visitors who will be able to do virtually anything within them. It is easy to see that there is tremendous potential for economic growth in this virtual world. It is almost certain that we will witness significant growth in the number of companies creating metaverse spaces as the idea of the metaverse becomes more mainstream.

•Content creators will play a key role in creating this new world. They have been achieving great success on social media platforms and will continue to be a major driver of growth in the virtual world of the metaverse. Experts believe the metaverse will make the creator economy a multibillion-dollar industry. And who constitutes the creator economy? Independent creative people who produce digital content such as images and videos and digital goods such as e-books, webinars, art and blog posts.

Layers of Metaverse



4. Spatial computing

•Spatial computing has already made our lives easier with virtual assistants and ride-hailing apps. It has made fashion fun and shopping more convenient by allowing shoppers to try on clothes in virtual changing rooms. Now, spatial computing is all set to enable you to work, shop and socialize as avatars in a rich, 3-dimensional digital world that mimics the real one.

•Spatial computing combines AR, VR and MR to bring the idea of the “metaverse” to life. With spatial computing, the vision of a parallel, three-dimensional, virtual universe that interacts with the real world and never shuts down can be realized. For instance, a game that uses spatial computing will enable you to play it against the backdrop of your immediate real-world surroundings. The characters in the game will not just detect the physical objects around you but will also be able to interact with them, like sitting on a sofa in your living room. Essentially, spatial computing allows you to interact with both the virtual and the real world simultaneously in real time.

4. Spatial computing

For spatial computing to work as desired, specialized software and hardware are required. In this section, you will only learn about the software components needed; the hardware part will be dealt with in the “human interface” layer discussed later in the article. Various aspects of the software layer that power the metaverse have been listed 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.

5. Decentralization

According to Roundhill Investments, the metaverse industry will grow at a compound annual rate of 13.1% in the years to come. This growth will continue to accelerate as the metaverse becomes more widely accessible.

Let take the example of Facebook. The company's business model is based on user data, and it uses the data it gathers to enable third parties to show targeted advertising to its users.

Imagine a corporation or centralized entity controlling the whole metaverse. This situation would create infinite opportunities for the controlling authority to analyze user activities within the metaverse and use the resulting data as needed. The authority might then design the working of the metaverse in such a way that it benefits advertisers and businesses by giving them access to these data.

If the data were stored centrally, it would be difficult for regular users to verify who had access to it and under what conditions. This could lead to security issues, which would, in turn, upset the users.

Blockchain technology is a revolutionary way to address privacy and data protection issues that might plague a centralized metaverse.

Innumerable blockchain-based applications, also called dApps, are being created and used across industries, benefiting from the blockchain's inherent quality of being secure and decentralized.

6. Human interface

The human interface layer talks about the hardware or the devices that will enable users to experience the true magic of the metaverse.Technology is slowly bringing us closer to our devices. In a 1985 essay titled “A Cyborg Manifesto” by renowned scholar of technology and science studies, Donna Haraway, the reality of the shrinking distances between humans and gadgets was highlighted. The author introduced the concept of a “cyborg,” a human with physical abilities beyond human limitations enabled by certain mechanical elements built into their body. What she envisioned in 1985 is turning into a reality in the present times. As gadgets get smaller, smarter and highly portable, they are coming closer to our bodies, probably turning us into partial cyborgs. Are we heading toward becoming complete cyborgs? Although we do not know the answer to this question yet, our smartwatches and smart glasses give us a good reason to believe we are. This growing proximity between humans and machines is, nonetheless, imperative for an immersive, lifelike experience of the metaverse. With advanced spatial computing and the right interface, we will soon be able to experience the metaverse just as we experience the physical world.

7. Infrastructure

This layer pertains to the technological infrastructure that will be required to create a fully functional and interoperable metaverse.

Five technology clusters power the metaverse:

The computing power and network, including spatial positioning algorithms, edge computing, GPU servers, real-time network transmission and virtual scene fitting

Artificial intelligence

Video gaming technologies, including 3D game engines like Unreal Engine and Unity, for the creation of resources such as animations, sounds and images

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

Blockchain technology. Supported by decentralized value transfer mechanisms, settlement platforms and smart contracts, it will assure value ownership and circulation. With decentralization, an economic system featuring transparency, efficiency and stability will be realized

THANK YOU