## Mataverse

What is matavers?

## **Introduction:**

The Metaverse is a collection of every virtual world built using blockchain technology. They can be gaming planets or NFT galleries, curated lands, or digital streets. The main thing to always remember when you think about the Metaverse is that it is not one place. It is the aggregate of the new digital spaces that people are calling the next iteration of the internet.

## **Definition**

A massively scaled and interoperable network of real-time rendered 3D virtual worlds that can be experienced synchronously and persistently by an effectively unlimited number of users with an individual sense of presence, and with continuity of data, such as identity, history, entitlements, objects, communications, and payments.



THE TERM "METAVERSE" WAS COINED BY AUTHOR Neal Stephenson in his 1992 novel Snow Crash. For all its influence, Stephenson's book provided no specific definition of the Metaverse, but what he described was a persistent virtual world that reached, interacted with, and affected nearly every part of existence. At any given time, there were roughly 15 million human-controlled avatars on "The Street," which Stephenson called "the Broadway, the Champs Elysees of the Metaverse," but stretched across the entirety of a virtual planet more than two and a half times the size of the earth. As a point of

entirety of a virtual planet more than two and a half times the size of the earth. As a point of contrast, there were fewer than 15 million total users of the internet in the real world the year Stephenson's novel was published. While Stephenson's vision was vivid and, to many, inspiring, it was also dystopic. Snow Crash is set at some point in the early 21st century, years after a global economic collapse. Most layers of government have been replaced by for-profit

"Franchise-Organized Quasi-National Enti ties" and "burbclaves," a contraction of the term

"suburban enclaves." Each burbclave operates as a "city-state with its own constitution, a border, laws, cops, everything"1 and some even provide "citizenship" purely based on race it was also dystopic. Snow Crash is set at some point in the early 21st century, years after a global economic collapse. Most layers of government have been replaced by for-profit "Franchise-Organized Quasi-National Enti ties" and "burbclaves," a contraction

of the term "suburban enclaves." Each burbclave operates as a "city-state with

its own constitution, a border, laws, cops, everything"1 and some even provide

performance of actors that might be tens of thousands of miles away. Despite

his far-reaching impact, Stephenson has consistently warned against a literal

"citizenship" purely based on race But Stephenson's novel was clear: *in Snow Crash the Metaverse has made life in the real world worse.*Stephenson's novels have been cited as the inspiration for various cryptocurrency projects and non- cryptographic efforts to build decentralized computer networks, as well as the production of CGI-based movies which arewatched at home but generated live through the motion-captured

interpretation of his works—especially Snow Crash. In 2011, the novelist told the New York Times that "I can talk all day long about how wrong I got it"2 and, when asked about his influence on Silicon Valley by Vanity Fair in 2017, he reminded the publication to keep "in mind that [Snow Crash was written] pre Internet as we know it, pre-Worldwide Web, just me making shit up."3 As a result, we should be wary of reading too much into Stephenson's specific vision. And while he coined the term "Metaverse," he was far from the first to introduce the concept. In 1935, Stanley G. Weinbaum wrote a short story titled "Pygmalion's Spectacles," about the invention of magical VR-likegoggles that produced a "movie that gives one sight and sound . . . you are in the story, you speak to the shadows, and the shadows reply, and instead of being on a screen, the story is all about you, and you are in it." †4 Ray Bradbury's 1950 short story "The Veldt" imagines a nuclear family in which the parents are supplanted by a virtual reality nursery that the children never want to leave. (The children eventually

lock their parents inside the nursery, which then kills them.)

Philip K. Dick's 1953 story "The Trouble with Bubbles" is set in an era where humans have explored deep into outer space, but never succeeded in finding life. Yearning to connect with other worlds and life-forms, consumers begin to buy a product called "Worldcraft" through which they can build and "Own [Their] Own World," which are cultivated to the point of producing sentient life and fully realized civilizations (most Worldcraft-owners eventually destroy their worlds in what Dick described as a "neurotic" "orgy of breaking" intended to "assume some god suffering from ennui"). A few years later, Isaac Asimov's novel The Naked Sun was published..In it, he described a society where face-to-face interactions ("seeing") and physical contact are considered both wasteful and repugnant, and most work and socializing takes place via remotely projected holograms and 3D televisions. In 1984, William Gibson popularized the term "cyberspace" in his novel Neuromancer, defining it as "A consensual hallucination experienced daily by billions of legitimate operators, in every nation. . . . A graphic representation of data abstracted from the banks of every computer in the human system.

Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding." Notably, Gibson called the visual abstraction of cyberspace "The Matrix," a term repurposed by Lana and Lilly Wachowski 15 years later for their film of the same name. In the Wachowskis' movie, the Matrix refers to a persistent simulation of the planet earth as it was in 1999, but which all of humanity is unknowingly, indefinitely, and forcibly connected to in the year 2199. The purpose of this simulation is to placate the human race so that it can be used as bioelectricbatteries by the sentient, but man-made, machines which conquered the planet in the 22nd century.



If there's any aspect of the Metaverse on which everyone—from believers to skeptics and even those barely familiar with the term— can agree, it's that it is based on virtual worlds. For decades, the primary reason to build a virtual world was for a video game, such as The Legend of Zelda or Call of Duty, or as part of a feature film, such as those of Disney's Pixar or for Warner Bros.' The Matrix. This iswhy the Metaverse is often misdescribed as a game or entertainment experience.

Virtual worlds refer to any computer-generated simulated environment. These environments can be in immersive 3D, 3D, 2.5D (also known as isometric 3D), 2D, layered atop the "real world" via augmented reality, or purely text-based, as in the game-like MUDs and non-game-like MUSHs of the 1970s. These worlds can have no individual user—as in the case of a Pixar film, or when virtually simulating an ecosphere for a biology class. In other cases, they might be limited to a single user, as when playing Legend of Zelda, or be shared with many others, as in Call of Duty. These users might affect and be affected by this virtual world through any number of devices, such as a keyboard, motion sensor, or even a camera that tracks their motion. Stylistically, virtual worlds can reproduce the "real world" exactly (these are often called a "digital twin") or represent a fictionalized version of it (such as Super Mario Odyssey's New Donk City, or the quarter-scale Manhattan of PlayStation's 2018 game Marvel's Spider-Man), or represent an altogether fictional reality in which the impossible is commonplace. The purpose of a virtual world can be "game-like," which is to say there is an objective such as winning, killing, scoring, defeating, or solving, or the purpose can be "nongame-like" with objectives such as educational or vocational training,

commerce, socializing, meditation, fitness, and more.

## Reasons of invasion in virtual world:

**In** recent years, the biggest uptick in virtual world creation has been via worlds which have no "gameplay" whatsoever. For example, a digital twin of the Hong Kong International Airport was created using the popular game engine Unity—the purpose of the twin was to simulate the flow of passengers, the implications of maintenance issues or runway backups, and other events that would impact airport design choices and operational decision-making. In other cases, entire cities have been re-created and then connected to real-time data feeds for vehicular traffic, weather, and other civic services, such as police, fire, ambulance response. The goal of such a digital twin is to enable city planners to better understand the cities they manage and make more informed decisions about zoning, construction approvals, and more. For example, how would a new commercial mall affect travel times for emergency medical or police services? How might a specific building design adversely affect wind conditions, urban temperatures, or downtown light? Virtual worlds can prove an essential aid.

Some virtual worlds are fully persistent, which means everything that happens inside them is permanent. In other cases, the experience is reset for each player