

PROJECT METAVERSE

V1.4 | M8AB | Greenhouse Labs

AMBER MEIJERS

METAVERSE & E-COMMERCE

Greenhouse Labs

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CONTENTS

*	3	INTRODUCTION
*	4	DEFINITIONS
*	5	THE METAVERSE
*	6	E-COMMERCE
*	7	SOURCES

INTRODUCTION

To gain a better understanding of the overarching subject and possibilities of 'the metaverse', I will first require insights on what the metaverse is exactly. This literature study will delve deeper into the origins of the metaverse, where it is now and predictions as to where it is going. Furthermore, it will explore the difference between regular and e-commerce, as well as their shortcomings.

DEFINITIONS

Metaverse

A version of the internet that consists of virtual spaces where people can interact with one another, wherein all spaces are connected with one another, allowing seamless transition from one into the other using the same profile.

Web3.0

The next iteration of the internet that comes after the internet we know today. Many people believe that this iteration will be decentralized.

Blockchain Technology

A blockchain is a type of database wherein transactions of all types are stored. Once both parties approve of a transaction, it is turned into blocks of information which is verified by an independent third party - a process called mining.

Decentralization

The act of moving the activities of an organization away from a central authority or group of authorities. In the context of web3.0, you will often see this word relate to Cryptocurrency and how it moves the power away from banks.

Smart Contract

A coded agreement that is automatically put into motion when a certain condition is met. You can think of Marktplaats' 'Gelijk Oversteken' feature, but without the involvement of a third party. It is another example of decentralization.

Meta Horizons

Facebook or 'Meta's' new 3D virtual platform. Users can meet each other here and play or hang out together. It is similar to platforms such as Microsoft Mesh and games such as Roblox.

THE METAVERSE

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DEFINITION

The word metaverse comes from the greek word 'Meta' which means post or beyond, and the word 'verse' as in, universe. The word can be traced back to the 1992 novel Snow Crash by Neal Stephenson, wherein the protagonist escapes the trials and tribulations of his daily life in a virtual world: the Metaverse (Seggelen, 2022).

The idea is that in the metaverse, the entirety of the internet is connected with one another: rather than having separate pages, people can use digital avatars to express themselves and seamlessly navigate from 3D room to 3D room.

Another term that is often associated with the metaverse is web3.0. To understand what the so-called third iteration of the web is, we must understand what the internet was and is. Back in 1969, the very first node-to-node message ever was sent between the University of California and the University of Stanford (Andrews, 2019). This project had been funded by the American department of Defense and would continue to grow in the 70s. The www or World Wide Web would not be invented until 1990, which is where the internet as we know it began to form. This 'Web1.0' was incredibly segmented - it was largely used for individuals to post their own static web pages, and other users could read information on those pages. .

In 1999, the term web2.0 was first used in an article titled 'Fragmented Future' (DiNucci, 1999). In the article, DiNucci refers to web1.0 as "Pong compared to the Matrix"; it was a proof of concept for an internet that was to come. It speculated on many of the things that would come to be, including smartphones and a world of interconnected tools (the Internet of Things). This web2.0 would come to grow into the internet we know today - a place of interactivity, where webpages can be added to and people could chat and play together.

What is the next logical step? According to many, it is the introduction of web3.0; a new and improved web where freedom and personalisation will play a large role. It will be built on artificial intelligence and with decentralization in mind; relying on blockchain technology and smart contracts.

Unfortunately, our technology has not yet reached the level required to be able to connect all of these separate 3D instances, to allow us to move freely between these rooms using only one account. In a small interview conducted with a PAXworld representative, an expert confided in us that they believe that we might see this version of the metaverse in as little as 5 or as much as 10 years, though they won't exclude the possibility of a transitory 'web2.5' in the meantime to tide us over.

THE FIRST STEPS

While the metaverse as a concept is something we have seen in a variety of media ranging from the Matrix trilogy to Ready Player One. In its most basic form, however, many metaverse-like environments have existed for a long time.

Nearly two decades ago, in 2003, the internet saw the launch of Second Life. Players made their own custom avatar - a virtual representation of themselves. This massive multiplayer virtual world had no set objectives or goals; players, also known as 'residents' in the game, were encouraged to explore the world, meet with other avatars, build, socialize and trade virtual property with one another.

Interestingly, Second Life compartmentalized parts of

its world to keep users safe. 13 to 15 years olds would have the ability to join the world via select organizations such as schools, and were unable to leave the instance of said organization. They couldn't use certain functions such as purchasing items from the market. 16 and 17 year olds had the ability to access regions, but automatically had a general maturity rating filter applied to their search results in the world.

A year later, IMVU was released. This 3D chat game fulfills the role of a social media platform with user pages and profiles and chat functionality. Users can create and decorate their own rooms and other users can join those rooms to chat with one another about different topics.

WHAT IS E-COMMERCE?

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DEFINITION

Commerce is the act of buying and selling items, often on a large scale. It seems only logical then that electronic commerce or e-commerce is the industry of buying and selling items and services online. This booming business saw a 25% increase of sales during the COVID-19 pandemic and is expected to grow to a revenue of 6.5 trillion dollars by 2023 (Eira, 2022). E-Commerce plays into a society that increasingly seeks out an on-demand lifestyle; we overwhelmingly seek out convenience for the completion of simple or repetitive tasks.

A survey by the National Public Radio revealed key insights as to why we are choosing to shop online

over visiting a brick-and-mortar store (Gilbert, 2022). Besides the convenience of being able to pick up and put down shopping whenever you feel like it, you can often find the product you are looking for quickly and can compare prices across various sellers. The fact that you don't have to put up with long lines in stores, and that you can often find a discount in one or another webshop further drives people out of the stores and onto the internet.

Even when we are out and about in physical stores, many find themselves pulling out their phone to compare prices or look up product information that is not readily available at the store.

E-COMMERCE: THE BE-ALL, END-ALL?

Does this mean that e-commerce is infallible? Not exactly. Despite the growth of online shopping, 56% of Americans questioned by NPR still prefer shopping in a physical store (NPR, 2018), though not necessarily because they enjoy the experience of shopping itself. According to a worldwide survey conducted by KPMG, around 55% of people questioned want the ability to see and feel an item first, or try it on (KPMG, 2017). Over half of the individuals are also concerned that the item would look different. Tending to these concerns in a virtual environment is difficult - people greatly rely on their sense of sight and hearing, but also on smell and touch. We are a tactile species sensitive to the texture of objects around us; the weight of a phone, the howling of the wind or the slide of silk against your skin.

Delivery and Return Policies also play a large part: in China, people care more about the convenience of

delivery than the price of an item, and in Turkey and India people care most about being able to return an item that does not suit them. As a generation, Millennials also possess a great demand for instant gratification - they want their products in hand as soon as possible and will actively avoid long delivery times if they can get the product sooner by visiting a store.

When considering the options for commerce in the metaverse, we could tap into a well of solutions that currently cannot be addressed due to the limitations of Web2.0.

Without delving too deeply into solutions that may redirect the project in a certain way, we could think about the added layer of engagement that allows people to see and hear, or even feel and smell wares in a three dimensional space, without ever having to visit a store physically.

CONCLUSION

The metaverse sounds incredibly futuristic, and the things we want and imagine cannot be implemented at this time. The basic concept of an interconnected 3D virtual world to socialize in is not so far fetched however. Up and coming technologies will likely allow us to begin the implementation of many features in the next couple of years, and see a first version of web3.0 within a decade. When considering the

options for commerce in the metaverse, we should be careful not to try and bring the real world into the metaverse - if people were interested in that, they would go seek out those experiences in the real world, after all. Instead, our focus should be on convenience and the enhancement of the current online shopping experience by engaging and stimulating customers.

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