

# The metaverse: will the virtual soon be real?



**EXPERT ARTICLE**

\_DANIEL NEUBIG

Senior Software Engineer & Head of AR

Ergon Informatik AG

\_DANIEL ZEITER

Head of Technology

Ergon Informatik AG

Published in SMART insights 2022 magazine

**ergon**

smart  
people -  
smart  
software®

**EVERYONE'S TALKING ABOUT THE METAVERSE.  
BUT WHAT IS IT EXACTLY? WHAT HAPPENS TO US  
AND THE WAY WE EXPERIENCE THE WORLD WHEN THE  
VIRTUAL MELTS WITH THE PHYSICAL? WE EXAMINE  
THE BUSINESS OPPORTUNITIES THAT THE METAVERSE  
OPENS UP, AND ASK IF THERE'S ANY REAL SUBSTANCE  
BEHIND THE HYPE.**

**I**t's New Year's Eve in the middle of the pandemic. French musician Jean-Michael Jarre is entertaining an audience of 75 million from Notre Dame in Paris, still off limits after the fire. But the real show-stopper is the fact that Jarre appears as an avatar against a virtual backdrop. The audience is at home, enjoying the music from the familiar comfort of their own sofas, all around the globe. Welcome to the metaverse. Welcome to the future?

**Digital interaction - the new way.**

The metaverse consists of 3D digital worlds in which people interact and share experiences as avatars. The term was coined in the 1990s, and it will soon be 20 years since it was initially hyped as the future. The first major multiverse, created in 2003, was called Second Life. It proved highly successful as a platform for VR games, chats and other applications.

Even after 15 years, some 350,000 new users were still signing up to be able to enjoy the virtual environment in avatar form. But the current vision of the metaverse goes beyond the concept of a virtual platform. The idea is that in the future, virtual platforms will be interlinked. Users and their avatars will be able to switch between platforms or, more precisely, communities. The metaverse is designed to inspire co-creation and shift social interactions from the real to the virtual 3D world. This interaction is natural and immersive and should resemble "real world" contact as closely as possible. The concert in the virtual Notre Dame becomes a shared experience that generates real memories, just as physically attending a concert does.

**The metaverse will open up new markets**

Living as an avatar allows owners to reinvent themselves. That brings a lot of

opportunities, but risks as well. Privacy takes on a new meaning in the metaverse. Verifiable digital identities will become even more important as the physical and virtual worlds increasingly merge. When you're moving around a shared space as a virtual body, the concept of closeness also takes on greater significance. Meta, formerly Facebook, for example, had to define minimum distances between avatars on its Horizon Worlds VR platform. If users break these or other rules, they're barred from the platform temporarily or permanently.

If the rules of a community are clear, the metaverse can be a hotbed of creativity which is also very interesting for companies. The gaming platform Roblox, for example, lets users create their own games. Within a short space of time countless games and worlds of experience have sprung

up; you can even buy virtual objects and upgrades. The monetisation of the metaverse is complex and rich in potential, with digital products traded for hard cash, particularly if they're rare or represent something special. At the moment non-fungible tokens (NFTs), which can even guarantee the uniqueness of digital works, are triggering gold fever. The metaverse will open up new markets. No wonder that well-known companies are looking for ways to be a part of it.

### **Prestigious first movers**

Market research company Gartner predicts that by 2026 each of us will be spending at least one hour a day in the metaverse. Companies with an eye on the future would therefore do well to adapt their offerings accordingly. And they're realising this. Nike has filed for patents and property rights for the virtual world, has bought a start-up for virtual fashion, and has inaugurated Nikeland, a virtual world of sports and experience, on Roblox. J.P. Morgan is the first big US bank to announce involvement in the metaverse in the form of a virtual lounge on the Decentraland platform. Sometime this year, Seoul intends to start setting up a virtual communications ecosystem

covering all areas of the city administration. US companies such as Epic Games and Meta are building their own metaverses. Microsoft has announced a preview of the Teams platform for this year: users attending meetings will interact in the form of avatars.

### **Big business for retailers**

The fashion industry is also sensing real business opportunities in the virtual space, with users fitting out their avatar with virtual clothing and accessories - already willing to pay money for it. A Roblox avatar might be carrying a Gucci handbag worth 4,100 dollars. Other retail sectors are also profiting. People shopping in the metaverse can move around a simulated supermarket and get instant information on how to cook with a product. Holding the new iPhone in your hand will give you a better idea of its size. Buying outdoor clothes becomes an experience on the Matterhorn with Reinhold Messner advising you. The digital world also has its own real estate market: In the Entropia Universe the digital planet Calypso sold for USD 6 million and has since been generating considerable revenues from the sale of in-game assets. In an auction on Upland, an online game for

selling virtual land, the New York Stock Exchange sold for the equivalent of USD 23,000. A virtual real estate market is conceivable where it will be possible to buy virtual streets and buildings, upgrade and resell them for more money.

### **Many industries set to benefit**

The metaverse is also creating new opportunities for organisers of training and workshops: learning in 3D becomes immersive and efficient. Organisations no longer have to fork out for travel or renting premises; the digital experience is more easily scalable. At little expense and effort they can offer courses all over the world and extend their own market reach considerably.

The virtual universe is also interesting for industries that rely on discretion and integrity, such as banks and insurance companies. Virtual consultations will open up new opportunities and be more interesting for customers. Banks will be able to offer loans for virtual real estate trading, and insurers will create new products to cover novel digital goods. The metaverse also raises new legal issues: at present trademark and property rights



"In the metaverse the real and virtual worlds are closely intertwined."  
\_Daniel Neubig, Senior Software Engineer  
& Head of AR, [daniel.neubig@ergon.ch](mailto:daniel.neubig@ergon.ch)



"To a considerable extent the community co-creates the metaverse."  
\_Daniel Zeiter, Head of Technology,  
[daniel.zeiter@ergon.ch](mailto:daniel.zeiter@ergon.ch)

# The multiple facets of the metaverse

Category	Name	Since	Users currently active per month	Description
3D socialising	Second Life	2003	1 million	Virtual 3D world
	IMVU	2004	7 million	Users can appear as an avatar, inhabit personal rooms, meet others, interact and communicate
	RecRoom	2016	5 million	
	Decentraland	2018	500,000	There are events, tasks and goals
	Zepeto	2018	13 million	You can take part with VR or on your PC/mobile
	Active Worlds	1995	Not known	
	There.com	2003	Not known	Companies can run and market their own presence and content
	Open Simulator	2007	Not known	
	Altspace VR [Microsoft]	2013	x1000 per event	
Meta Horizon [venues and worlds]	2021	300,000		
Social media	Facebook	2004	2.9 billion	Social platform
	LinkedIn	2003	310 million	Users appear under their account and can find and communicate with friends, acquaintances and people with similar interests  Users can share their content  Companies can do targeted marketing by directly addressing people who are potentially interested
Spatial	Apple Maps	2012	>1 billion	Digital maps are used for navigation and searches
	Google Maps	2005	>1 billion	
	TomTom	2004	800 million	<ul style="list-style-type: none"> <li>Local offerings</li> <li>Located</li> </ul>
	Microsoft AzureAnchors	2019	Not known	<ul style="list-style-type: none"> <li>Companies: can be searched for locally</li> </ul>
	Google WorldAnchors	2019	Not known	<ul style="list-style-type: none"> <li>Spatial anchors: points of interest anchored on places or objects</li> </ul>

Category	Name	Since	Users currently active per month	Description
Communication	MS Teams Mesh	2022	Beta phase	Chats, events, conferences, hybrid team meetings
	Virbela	2012	10,000 per event	3D events - for training/ conferences - very closely related to social VR
Gaming: MMORPG  [massive multiplayer online role playing games]	World Of Warcraft	2004	26 million	Online role playing for many users  Users get a role and an avatar enabling them to inhabit personal rooms, meet others, interact and communicate
	Rust	2013	12 million	
	Eve Online	2003	400,000	
	Entropia Universe	2003	50,000	There are events, tasks and goals  In most cases you can take part on your PC/mobile  Companies can run and market their own presence and content
Gaming: Sandbox	Minecraft	2011	160 million	Players become content creators and create their own places, objects, levels and concepts
	Roblox	2006	210 million	Can be shared with other players or friends
Gaming - location-based	Pokémon Go	2016	80 million	Location based gaming with AR  Users act in the real world, can meet others, interact and communicate  There are events, tasks and goals  You can take part on your mobile  Companies can run and market their own presence and content

\_THIS TABLE IS NOT EXHAUSTIVE AND IS BASED IN SOME CASES ON UNOFFICIAL DATA; AS OF APRIL 2022

only apply to real assets. From a legal point of view the virtual world is a fairly open universe.

**Real and virtual become one**

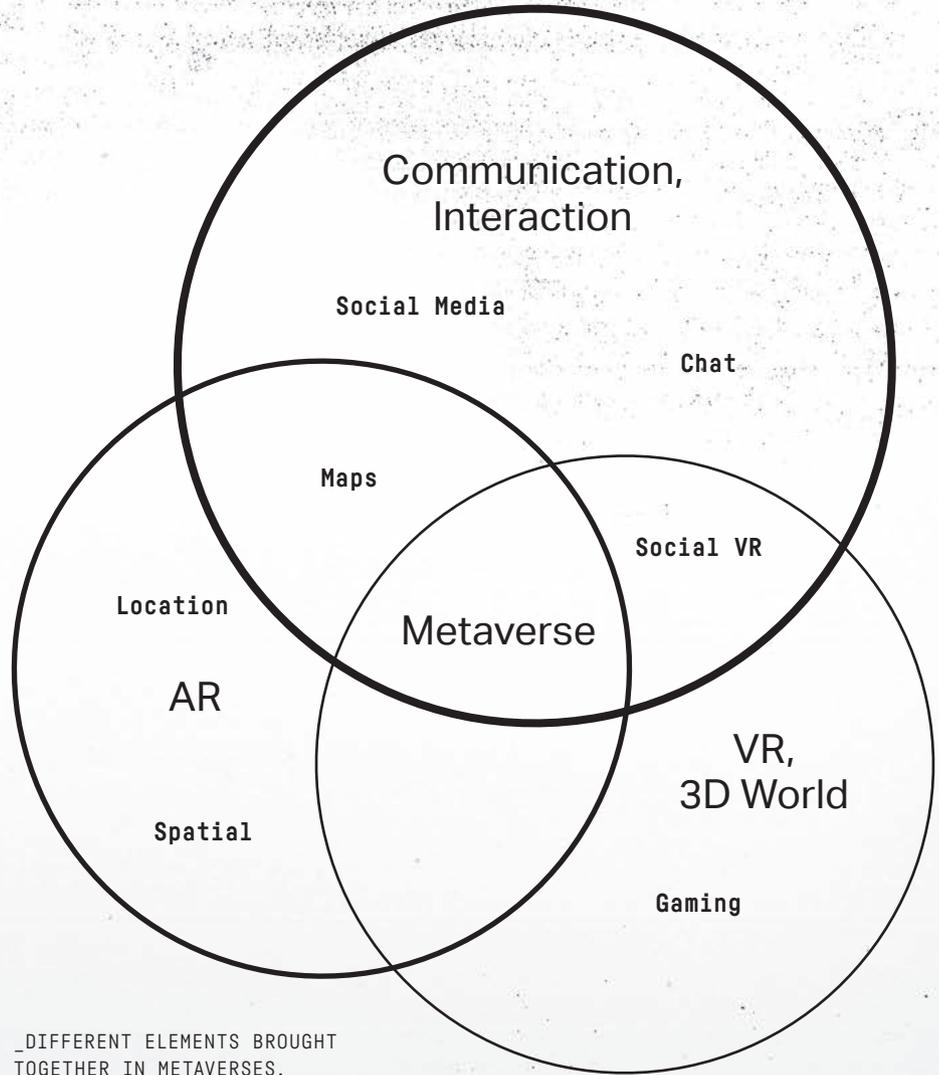
The metaverse would seem to have a golden future ahead of it. But how realistic is it really? While the platforms currently used already have a big reach, they still lag far behind conventional social media and gaming platforms. The potential is huge. Now it's time to acquire users. One particularly interesting development is augmented reality, which integrates virtual worlds into the real world. Examples include map services such as Google Maps, Apple Maps, Microsoft and Niantic, which anchor certain points of interest and make them usable.

To see what that actually involves, consider Pokémon Go: the app and games are free of charge for users. Companies pay for their location to be a game venue. It's a new, very effective form of advertising.

The metaverse is still hype. But the technology is ready and relatively affordable. More and more companies and users want to be a part of it. Even though the term "metaverse" might disappear, the technologies will remain. The virtual

and the real will become one. This is something companies should already be taking a good look at. Maybe they'll find their virtual home on an existing metaverse. Or maybe they'll even create one of

their own. The opportunities are rich and varied, and the potential is huge. Now's the time to try out, explore, learn and profit. See you soon - in the metaverse. />



\_DIFFERENT ELEMENTS BROUGHT TOGETHER IN METAVERSES.

**Interested in more?**

Digitisation projects  
Change makers  
Tech trends

**Order now**

ergon.ch/smart-2022

