

Meet Improbable, developing the technologies powering interconnected metaverse experiences

As part of our quick fire questions series – or QFQs – we spoke to Herman Narula, cofounder and CEO of Improbable, about defining the metaverse, enhanced social interactions, a sense of presence inside virtual spaces and the need to adapt.

Temps de lecture : minute

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Improbable was founded in 2012 after I met my cofounder Rob Whitehead. We were both massively into gaming – Rob paid for university through his virtual job in Second Life – and we realised we had the same frustration when playing multiplayer games: they were fun but felt small, restrictive, and had no connection to our real lives.

For us, a virtual world was supposed to be an extension of the real one; a space in which people could make connections, develop real skills, find jobs and, ultimately, fulfilment. So we created Improbable to realise that vision (the name we chose tells you just how difficult we thought it would be to do it at the time...).

In that sense, the impulse to start the company was never technology, it was always to build the fun experiences and virtual social interactions we wanted to share with our community, but didn't yet exist.

Tell me about the business - what it is, what it aims to achieve, who you work with, how you reach customers and so on?

We're a metaverse technology company which develops technologies powering rich virtual worlds for over 60 global gaming companies, the Web3 and entertainment sectors, and defence and national security institutions.

The worlds we're building for gaming, Web3 and entertainment can take the form of open metaverses, multiplayer games, concerts, watch parties and sporting events - amongst others. And we design them so that anyone with a device that has a screen and an internet connection can participate in them - no expensive VR headset needed.

The things that make our vision of the metaverse different (in the very buzz-heavy yet ill-understood market we're in) are the scale and interconnectivity of the worlds we want to create. Our technology - which we developed over ten years - allows us to bring up to 15,000 people together in high-quality, accessible virtual environments where they can spontaneously interact with each other. This matters if you want to share a collective experience in real time and feel the same emotions you would in real life.

We also want these worlds to go much further than the online video game worlds my co-founder Rob and I played by building interconnectivity and co-development into them. People should be able to seamlessly move from world to world as they please, freely taking the virtual items they own with them as they go, and to co-create parts of the worlds and the virtual items themselves. For us, this isn't about putting people in a closed space owned by a single platform to bombard them with ads - it's about creating a network of metaverses where people have real input,

ownership and enjoyment.

In terms of our relationships with customers, we are essentially a B2B services company with lots of experience in creating tailored content that speaks to different audiences. Right now, we are having many discussions with potential partners because there is massive excitement for what large virtual worlds can bring to real world fan communities in sports, music, art, cinema etc.

How has the business evolved since its launch? When was this?

Improbable has changed a lot since we started it ten years ago, though our goal of creating richer and larger virtual worlds has always stayed the same.

We spent the first decade of the company investing in games and technology, becoming one of the industry leaders in solving multiplayer problems. In parallel, we also developed our simulation, modelling and AI tech which is in active use by the UK government.

At the end of 2021, we leveraged the nascent metaverse market to bring back our founding vision to the fore. While continuing to grow our multiplayer solutions and defence businesses, we re-focused our strategy on the development of metaverses and enabling interoperable metaverse experiences. This was also when we established M² (MSquared) – a metaverse network and ecosystem powered by Improbable's technology.

How are you funded?

Since Improbable was founded, we've raised around \$600M in funding from investors like SoftBank, Andreessen Horowitz, Horizons Ventures and Temasek, to support the development of our technology and our growth

strategy. In April 2022, we raised \$150M to establish and develop M² (MSquared), which will help us create further technological features that support interoperability, commerce in digital assets and governance in Web3.

What has been your biggest challenge so far and how have you overcome this?

Being early in a space that wasn't well-developed meant that the technology we created was initially fairly complicated to use - particularly for our smaller customers. That made us realise that an ambitious vision and a sophisticated piece of software were not enough to scale. So we evolved our stack and, as a result, Morpheus, the second generation of it, has much improved accessibility and is supporting many of our current projects in web3.

How does Improbable answer an unmet need?

As technology and entertainment companies prepare their entry into the metaverse, they will be looking for highly engaging, large-scale and easily accessible (read: not requiring expensive hardware) virtual worlds for their communities to explore. Those worlds will need to realistically project a crowd-like, community atmosphere. They will need to be linked to each other to allow people to navigate from one world to the other, access a variety of experiences, travel with their virtual assets. All this is very difficult to realise with current metaverse offerings which are limited in their features and closed up in their approach.

Our technology enables enhanced social interactions and a sense of presence inside virtual spaces, with thousands of real users interacting in the same place, at the same time, in a lag-free experience, with quality

graphics. Every player avatar is fully customisable and can see the entirety of the crowd they are in, and all users can express themselves using their natural communicative capabilities. To add to this, we hope that the open way in which we want to build our metaverse network will give our clients and their communities access to shared economic opportunities.

On the defence side, we use our video games heritage to build synthetic environments – SEs – which governments can use to plan, prepare and deliver a fast response to threats ranging from climate change and COVID response, to cyberattacks and even open conflict. It allows these organisations to explore scenarios in the safety of a virtual world before they take action in the real one, which is of major importance in a context where threats are increasingly more globalised, fast-moving and complex.

What's in store for the future?

In the immediate future, we're focused on building and giving life to the worlds our partners have asked us for. Then we want to develop partnerships across the industries where we see the most impact for our technology: web3, sports, music and art.

More broadly, there is an interesting conversation around properly defining the metaverse and its impact on our future. A lot of people talk about it as an extension of the internet. We don't agree. The metaverse is the next evolution of our culture. It will be a network of objects, people and things that create value in the real world as well.

What one piece of advice would you give other founders or future founders?

You need to regularly ask yourself whether the problem you are trying to solve is one that your target customers actually want to solve. Listen to

your community and question whether you have relevant, persistent, product market fit.

And if not, adapt your product - find the people who will care about the tech you are developing as much as you do, those who clearly see the potential in it. It doesn't mean you have to compromise on your initial, overarching vision: on the contrary, if you keep sight of it, all the changes you make to get there will eventually get you closer to achieving that vision.

These decisions are incredibly tough - we should know, we went through this! - but they contain the lessons you have to learn in order to bring your vision closer to a reality.

Herman Narula is cofounder and CEO of *Improbable*.

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