

“AI emerges as a crucial element in the metaverse ecosystem, as a leveller, a driver of innovation, and a means to accelerate content creation and enable dynamic NPC interactions.”

- [Improbable Worlds, 2024](#)

As a creator and developer of metaverse ecosystems, Improbable has always viewed AI technologies as an enabler for virtual worlds development, from traditional machine learning optimizations, to generative AI boosting content creation. We are delighted to see that the European Commission is already starting its forward-looking evaluation of both systems in an effort to ensure that the EU Digital Single Market remains open and competitive for innovators like us. **Virtual worlds are the crucible in which a myriad of exciting and emerging technologies, including generative AI, will start to transform our culture.**

We have listed below where we see generative AI bringing countless developments:

- **Faster and cheaper building of virtual worlds:** The primary challenge in interactive entertainment is the cost of content production, but generative AI can automate many tasks involved in creating virtual worlds, such as building environments, characters and dialogue. This will significantly reduce the cost and time required to develop experiences and dramatically increase the velocity of the industry.
- **Increased accessibility:** Generative AI tools are usually easier to use than traditional content and platform development methods, which should help make virtual world creation more accessible to a wider range of EU citizens and small businesses, while quickening the process for professional developers.
- **Democratisation of virtual world creation:** Generative AI is a leveller – by lowering costs and accelerating asset creation, it enables leaner teams to build more interesting virtual assets or entire virtual worlds. Anybody can already begin to build experiences that can reach 1000s of people. And these experiences are starting to connect together and become part of an ever more diverse tapestry of experiences: an economy of both cultural artefacts of communities and of people interacting together in ways that weren't possible before.
- **Innovation:** By reducing the economic risk of innovation, generative AI helps unlock experimentation and will likely lead to new kinds of experiences, empowering content creators to develop even more captivating virtual worlds, bringing our imaginations to life in new and exciting ways.
- **More dynamic and interactive virtual worlds:** Generative AI can be used to create virtual worlds that are more responsive to user input and can evolve over time. This means an acceleration of user-generated content capabilities in virtual worlds. At Improbable, we have released in open source a Metaverse Mark Up Language, allowing to create assets within the metaverse. By combining these with Generative AI tools, you don't need to know how to write HTML or Javascript because the Gen AI tools will do so for you. The objects created then can become components in a game, or simply tradable assets in any project that will support that standard.

- **A shift in the role of creators:** Similar to other sectors, generative AI may change the way virtual worlds are created, with humans providing more high-level direction and AI handling smaller details, such as individual asset creation.
- **A new way of thinking:** Generative AI is not simply a new technology, but a new way of thinking about innovation – one that's essential for staying relevant and effective in the evolving landscape of virtual world creation.

We at Improbable certainly see generative AI as an opportunity to improve competition: as a societal leveller, an innovation enabler and a tool that will allow even the smallest enterprise or individual to challenge the ecosystems' largest players. We are also confident that the EU's existing and robust antitrust framework will be able to address any unexpected challenges that may emerge along the path to a more interactive, democratic and immersive future.

We would be delighted to continue this conversation with the European Commission and to take part in future initiatives dedicated to understanding the potential impact of generative AI and virtual worlds on the EU.

About Improbable

Improbable is a metaverse technology company that has been at the forefront of building virtual worlds for over a decade. We believe that the metaverse is an opportunity for communities, companies and brands to have a positive social and economic impact in the real world. Today, we are initiating new technologies, models and partnerships to venture further into new worlds.