



Metaverse - A Virtual Reality

This editorial is based on [“Why Metaverse may Supersede the Internet”](#) which was published in Livemint on 11/02/2022. It talks about Metaverse which is being seen as a new version of the Internet.

For Prelims: Metaverse, Blockchain, Augmented Reality, Virtual Reality, Digital India.

For Mains: **Metaverse** - Opportunity and Challenges, India's role in Metaverse.

Metaverse is a combination of multiple elements of technology, including virtual reality, augmented reality, and video where users “live” within a digital universe.

The concept is gradually gaining immense significance with many tech giants have already set in motion the progress for this process, with **Facebook and Epic leading the pack**.

Metaverse isn't going to get built by any one company or even a small number of companies— but through empowering millions of creators around the world. In fact, as Mark Zuckerberg says, **India is going to be a huge part of Metaverse** considering that [India's online gaming sector](#), one of the important components of Metaverse, has seen a lot of growth over the past few years.

What is Metaverse?

- The metaverse is not a new idea, science fiction writer **Neal Stephenson coined the term in 1992**, and the concept is commonplace among video game companies.
- Metaverse is the next version of the Internet **focused on social connection**.
 - It can be defined as a simulated digital environment that uses [Augmented Reality \(AR\)](#), **Virtual Reality (VR)**, and [blockchain](#), along with concepts from social media, to create spaces for rich user interaction mimicking the real world.
- It can be imagined as a 3D virtual world, with ever-evolving aspects which are **collectively shared by its inhabitants** - a virtual world with real-time events and an online infrastructure.
- In theory, it encapsulates everything that's happening into the real world and will bring real-time events and updates going forward. The **user exists in a virtual world without borders**.

What Opportunities does Metaverse Offer?

- Virtual **communities, activities, events, all seamlessly accessible** without the need to sign into multiple apps.
- For a user-centric approach, a key aspect of the Metaverse that will work in its favour is the **effortless transition from one to the next step without discrepancies**.
 - One can sign into his virtual office as a **virtual avatar** of himself, meet a client, take a break or play a sport - virtually all in one place.

- With the Covid-19 pandemic confining us to our homes for work, the Metaverse takes it to another level. It facilitates seamless cross-platform interaction with one's friends, family, colleagues across the world.
- Cross-platform interaction is in its infancy even in the gaming industry. With the Metaverse, **cross-platform interaction** will be the gold standard for seamless virtual interaction across the globe. Addresses and pin codes won't be a mandate anymore.
- With the Metaverse, the **virtual marketplace will be a serious business affair.**
 - Brands will transform the way they advertise, which will be a memorable experience rather than the intrusive pop-ups and forced ads as seen today.

What are the Associated Challenges?

- Several women have reported **incidents of harassment**, including a beta tester who was virtually groped by a stranger. There has been a reported incident of gang-rape as well.
- It could also lead to **new scrutiny of old issues like privacy** and managing who does what to whom in a virtual world.
 - These are early days for the metaverse. If safety isn't baked early on into its design, it'll be much harder to secure down the line.
- Psychologists and social scientists across the world are now worried about the **psychological impacts of dual reality.**
 - They are already predicting a **loss of emotional quotient (EQ), a loss of individuality,** and a **dulling of our sensitivities** with shifting to a virtual world.

What Could Be The Way Forward?

- **Addressing Concerns:** While technological constraints are always there, **privacy concerns are hard to ignore.** One more concern is the concept of currency in the virtual world. All these challenges need to be taken into account.
 - The **government's involvement in Metaverse** is also a significant aspect as it may change the whole dynamic of the Metaverse since cryptocurrency is one of its driving forces.
- **Upgrading Technologies:** The metaverse is being seen as the **Internet 2.0** and for a smooth transition to it, **new tech infrastructure needs to be created** and **protocols written.** Today's internet as a **file-sharing protocol will need to be re-imagined** for the metaverse.
- **Integrating Metaverses:** If Facebook and other big internet companies build their own metaverses and sell their own proprietary hardware to access these zones, then the result could be a **collection of isolated worlds**, forcing digital citizens to pick where they spend the bulk of their time.
 - On the other hand, the **metaverse could comprise a set of more closely interconnected worlds**, some of them controlled entirely by their users.
 - This would be a place where people could take their personal data, digital goods and favourite services with them as they move from place to place.
- **Ensuring Safety in Metaverse:** Metaverse should be made more secure by **making safety features easier to find, like a fire extinguisher,** and get **volunteers to monitor behaviour.**
 - **Educating visitors about what constitutes potentially criminal behaviour** would help mitigate harassment, too.
 - With the police already stretched from social-media cases and the offline world, **tech firms should try more radical solutions to address harassment** in the metaverse before it's too late.
 - The dearth of women in the development process for virtual reality certainly isn't helping and needs to be fixed.
- **India's Role in Metaverse:** India's **talent at producing and exporting software** and **software developers** gives the country a unique advantage in the coming world of the metaverse, where our digital personas would be as important as our physical selves.
 - **Digital India and the components** under it such as - [Aadhar](#), [Digital Health IDs](#) and [Digital Payments System](#), therefore, is the **preparatory infrastructure that is needed for the transition** to a digital economy and to the metaverse.

Discuss the opportunities presented by entering into the virtual world of Metaverse and highlight the key issues associated with Metaverse.

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