Metaverse - A Virtual Reality

This editorial is based on <u>"Why Metaverse may Supersede the Internet"</u> 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 <u>India's online gaming sector</u>, 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 <u>Augmented Reality (AR)</u>, Virtual Reality (VR), and <u>blockchain</u>, 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, crossplatform 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.
 - <u>Digital India</u> and the components under it such as -<u>Aadhar, Digital Health IDs</u> and <u>Digital Payments System</u>, therefore, is the preparatory infrastructure that is needed for the transition to a digital economy and to the metaverse.

Drishti Mains Question

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

The Vision

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