Edge Computing

What is the issue?

- Cloud computing is now ready to move to the next level - Edge Computing.
- As per the research and advisory firm Gartner, by 2025, companies will generate and process more than 75% of their data outside of traditional centralised data centres i.e. at the “edge” of the cloud.

What change is happening now?

- Through Cloud computing, the remote servers host on the Internet store and process data, rather than on local servers or personal computers.
- Amazon, Microsoft, and Alphabet, the parent company of Google are the technology giants that provide cloud computing infrastructure to major corporates and governments.
- They want to leverage 5G technology and artificial intelligence to enable faster response times, lower latency and simplified maintenance in computing.
- [Latency – The ability to process very high volumes of data with minimal delay.]
- This is where Edge Computing comes in - which many see as an extension to the cloud, but which is different in several basic ways.

What is Edge Computing?

- Edge Computing enables data to be analysed, processed, and transferred at the edge of a network.
- The data will be analysed locally, closer to where it is stored, in real-time without latency, rather than send it far away to a centralised data centre.
- So whether you are streaming a video or accessing video games in the cloud, edge computing allows for quicker data processing and content delivery.

How is edge computing different from cloud computing?

- The basic difference between edge computing and cloud computing lies in **where the data processing takes place**.
- At the moment, the existing Internet of Things (IoT) systems perform all of their computations in the cloud using data centres.
- On the other hand, Edge Computing manages the massive amounts of data

generated by IoT devices by storing and processing data locally.
- That data doesn’t need to be sent over a network as soon as it processed; only important data is sent.
- Therefore, an edge computing network reduces the amount of data that travels over the network.

How soon can edge computing become part of our lives?

- Experts believe the true potential of edge computing will become apparent when 5G networks go main stream in a year from now.
- Users will be able to enjoy consistent connectivity without even realising it.
- Nvidia, a big player in the design and manufacture of graphics and AI acceleration hardware, has just announced its EGX edge computing platform.
- EGX platform will help telecom operators to adopt 5G networks capable of supporting edge workloads.
- The new Nvidia Aerial software developer kit will help telecom companies build virtualised radio access networks that will let them support smart factories, AR/VR and cloud gaming.

Source: The Indian Express

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