

MIS IAT-1

Q Define Big Data and discuss its basic characteristics

Answer:

① Big data meaning a data that is huge in size. Big data is a term used to describe a collection of data that is huge in size and yet growing exponentially with time.

② Big data analysis examples include stock exchange, social media sites etc

③ Big data could be
i) structured
ii) Unstructured
iii) Semi structure.

④ Volume, Variety, Velocity and variability are few of big data characteristics.

⑤ Improved customer service, better operational efficiency, better decision making are few advantages of Big data

⑥ Characteristics of Big data

A] Volume

→ It is estimated that 2.5 ~~BB~~ Trillion GB of data is created each day

→ The world population at present is 7 Billion out of which 6 Billion people have cell phones

→ 40 zettabytes of data will be created by 2020

B] velocity

- The NYSE captures 1 TB of trade information
- Modern cars have close to 100 sensors that can share monitoring data
- Digital content will double in 18 months, every 18 months thereafter

C] Variety

- 80 million pieces of content are shared
- variety refers to heterogeneous sources and the nature of data.
- Over the year spreadsheets have been replaced with PDFs, audio, visual tools
- This variety of unstructured data poses certain issues of storage, mining and analyzing data.

D] Variability

- This refers to the inconsistency which can be shown by the data at times, thus hampering the process of being able to handle and manage the data effectively
- variability refers to the uncertainty and the inconsistencies in the data.