Q) Big data Technologies :

> It is categorized into four main types : data storage, data mining, data Analytics and data Visualization.

> Each technologies used certain tools, and we want to choose the right tool for our business needs.

1. Data storage :

> It has the capability to fetch, store and manage the big data.

> It is made up of infrastructure that allows users to store the data and convenient to access the data.

Eg : Apache hadoop & Mongo DB.

> Apache Hadoop :

* It is the most widely used

big data tool.

* It is an open source software platform that stores & processes big data in a distributed computing.

> Mongo DB

* It is a NO SQL database.
* It can be used to store large volumes of data.
* It is written in C, C++ & JS.
* It can manage & store unstructured data easily.

2. Data mining:

> It is used to extracts the useful patterns and trends from the raw data.

> It can turn the unstructured and structured data into usable information.

Eg: Rapidminer, Presto.

Rapid miner:

> It is a data mining tool used to build predictive models.

> pruning & preparing data & building machine & deep learning models (roles)

Presto:

> It is an open-source query engine.

> It is developed by Facebook to run analytic queries.

> It is widely available.

3. Data analytics:

> These technologies are used to clean & transform data into information.

> Eg: Apache spark & splunk:

Apache spark:

> It is a popular big data tool for data analysis.

> It is fast & efficient at running applications.

> It is faster than Hadoop.

splunk:

> It is another popular big data analytics tool.

> It is used to derive insights from large datasets.

> It has the ability to generate graphs, charts, reports & dashboards.

4. Data Visualization: (DV)

Eg: Tableau: It is very popular tool in (DV) because its drag and drop interface makes it easy to create pie charts, bar charts, box plots, Gantt charts and more.

> It is secure platform to share the visualizations.

Q) Crowd sourcing Analytics:

> It is a model where individuals or organization seeks help, ideas or financial support from a large group of people to solve a problem.

> The term "crowdsourcing" was first coined by Jeff Howe and Mark Robinson in 2005.

> It combines the words "crowd" & "outsourcing", meaning you outsource tasks to the public rather than relying on a specific group or company.

How crowdsourcing works:

It works by leveraging the collective intelligence, creativity and contributions of a large group of people usually via the Internet to complete tasks or problems

Examples of crowdsourcing:

1. Geeks For Geeks: This website allows young minds to contribute articles or videos about coding & Technical Topics.

2. Doritos: It has been using crowdsourcing for its advertising campaigns. They use consumer-created ads for one of their 30-second super Bowl spots

3. Starbucks: The coffee company used crowdsourcing in its "white cup contest" where customers decorated starbucks cups with their own designs & submitted them on social media.

Where can crowdsourcing Be Applied?

1. Enterprise
2. IT
3. Marketing
4. Education
5. Finance
6. Science & Health.

Crowdsourced Marketing:

> It is becoming an essential part of modern marketing strategies.

> It saves money on professional design & development.

> Creates excitement and buzz around the brand as customers get directly involved.

popular crowdsourcing platforms:

* Kickstarter
* GoFundMe
* patreon
* Rocket hub

Adv:

* Fosters Innovation
* cost - Effective
* speed & ~~security~~ scalability
* Engagement & Loyalty.

Dis - Adv :

* Lack of confidentiality
* Quality control
* Management Overhead
* Trust Issues.