## Introduction of Big Data Platform

- Big data analytics describes the process of uncovering trends, patterns, and correlations in large amounts of raw data to help make data-informed decisions. Big Data analytics can help organizations to better understand the information contained within the data and will also help identify the data that is most important to the business and future business decisions. Analysts working with Big Data typically want the *knowledge* that comes from analyzing the data.

- Big Data platform generally consists of big data storage, servers, database, big data management, business intelligence and other big data management utilities. The primary benefit behind a big data platform is to reduce the complexity of multiple vendors or solution into one cohesive solution.

- For example: (i) The New York Stock Exchange generates about *one terabyte* of new trade data per day. (ii) The statistic shows that *500+terabytes* of new data get ingested into the databases of social media site Facebook every day.

## ➢ Different types of Big Data Analytics

- **Descriptive analytics** or data mining are at the bottom of the big data value chain, but they can be valuable for uncovering patterns that offer insight. A simple example of descriptive analytics would be assessing credit risk; using past financial performance to predict a customer's likely financial performance.
- **Predictive analytics** use big data to identify past patterns to predict the future. For example, some companies are using predictive analytics for sales lead scoring. Some companies have gone one step further use predictive analytics for the entire sales process, analyzing lead source, number of communications, types of communications, social media, documents, CRM data, etc.
- **Prescriptive analysis** is the frontier of data analysis, combining the insight from all previous analyses to determine the course of action to take in a current problem or decision. Currently, most of the big data-driven companies (Apple, Facebook, Netflix, etc.) are utilizing prescriptive analytics and AI to improve decision making.
- **Diagnostic analytics** are used for discovery or to determine why something happened. Diagnostic analysis takes the insights found from descriptive analytics and drills down to find the causes of those outcomes. For example, for a social media marketing campaign, you can use descriptive analytics to assess the number of posts, mentions, followers, fans, page views, reviews, pins, etc.



## Need of Data analytics

- Data analytics is important because it helps businesses optimize their performances. A company can also use data analytics to make better business decisions and help analyze customer trends and satisfaction, which can lead to new—and better—products and services.

- Data Modelling and visualization is one of the major aspects of analytics and so to get an up gear from this, you really need to understand the intricacies of it as a whole. Earlier data