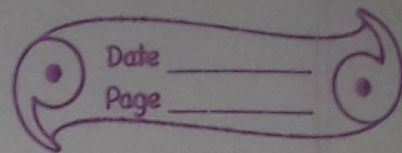


20/12/20



Qualitative Analysis :- Using intuition & knowledge of (future) market to help in future planning process

Business Intelligence :- Process of analysing & reporting (past) historical business data.

Aims to explain past events using business data

Machine Learning :- Ability of machines to predict (past & future) outcomes without being explicitly programmed.

It is about creating & implementing algo that let machines receive data & use this data to :

- make predictions
- analyse patterns
- give recommendations

Artificial Intelligence : simulating human knowledge & (past & future) decision making with computers.

Advanced Analytics : Marketing term, covers all other analytics.

★ Steps to approach a data science task:-

- 1) • boss read the company reports & dashboard
 - wants me to make predictions for upcoming costs for next years
 - gather relevant data
 - prepare for analysis
- 2) • boss tells about enormous amount of data
 - increase profit for next year with the customer data
 - data is already gathered.
 - analyse & apply analytic tools to extract insights & make predictions.

Infographic Analysis (Business disciplines)

~~S-17~~
Data: Info stored in digital format, which can be then used in decision making.

Traditional data

- structured
- can be managed from 1 computer

Big Data

- structured, semistructured, unstructured
- Vs of Big Data:
 - Vision
 - Value
 - Visualization
 - Variability

Volume

- Small amount of data, stored on 1 computer

- Enormous amount of data distributed b/w many computers

Variety

- values

- values, images, music, mobile data etc

Velocity

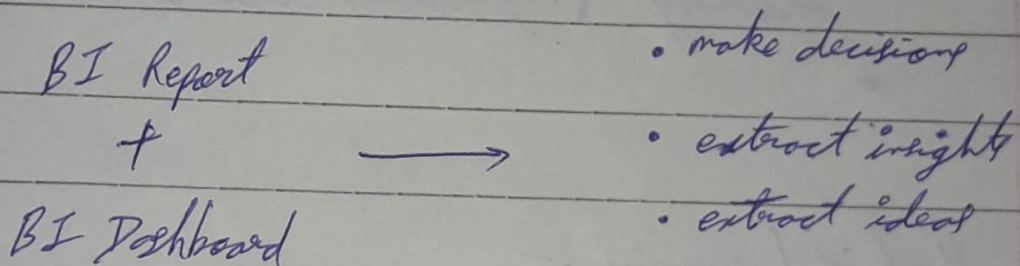
- slower

- faster

S-27

Business Intelligence :-

- analyse past data gathered
- includes technology driven tools involved in process of analysing, understanding & reporting available past data.



Parts of BI :-

- Understanding how sales grow & why
- Did competitors lose market share
- Was there increase in price of products
- Did we sell a mix of more expensive products.
- How did our profitability margins behave in same time frame of that of previous year.
- Were client's account more profitable

S-3)

Traditional Data Science Methods :- A set of methods that are derived mainly from statistics and are adapted for business.

- perfect for forecasting future performance with great accuracy. (Regression, Cluster, Factor Analysis)

S-4)

Machine Learning :-

$$\boxed{\Sigma + \Pi} + \boxed{\text{CPU}} + \boxed{\text{AI}} = \text{Predict outcomes from data without being explicitly programmed to}$$

Maths Computer Power

Algorithm:

Data \rightarrow AI \rightarrow Statistics \rightarrow Predictions with unprecedented accuracy