International Journal of Trend in Scientific Research and Development (IJTSRD)
Volume 4 Issue 2, February 2020 Available Online: www.ijtsrd.com e-ISSN: 2456 – 6470

Data Analytics Features and Concepts

K. Balaji Kumar, S. Balamanoj, Ashik K. H

Student, Computer Applications, Sri Krishna Adithya College of Arts and Science, Tamil Nadu, India

How to cite this paper: K. Balaji Kumar | S. Balamanoj | Ashik K. H "Data Analytics Features and Concepts" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-4 | Issue-2, February 2020, pp.489-490, URL: www.ijtsrd.com/papers/ijtsrd30062.pdf

IJTSRD30062

Data analytics is a qualitative and quantitative features and process used

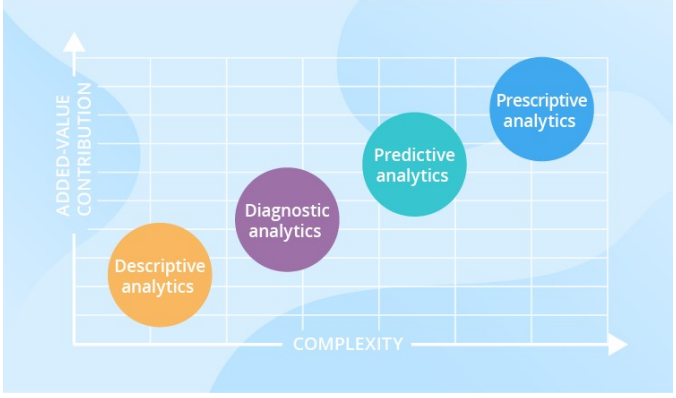
Data analytics is a qualitative and quantitative features and process used to enhance the productivity and business gain. Data is extracted and categories identity analyzes behavior data and patterns according to organization requirement.

Analytics is an interpretation and communication of meaningful patterns or summary in data. Data integration is a precursor to data analysis, and data analysis is closed linked to data visualization and data.

TYPES OF DATA ANALYTICS

- Descriptive analytics
- Predictive analytics
- Prescriptive analytics
- Diagnostic analytics

DESCRIPTIVE ANALYTICS

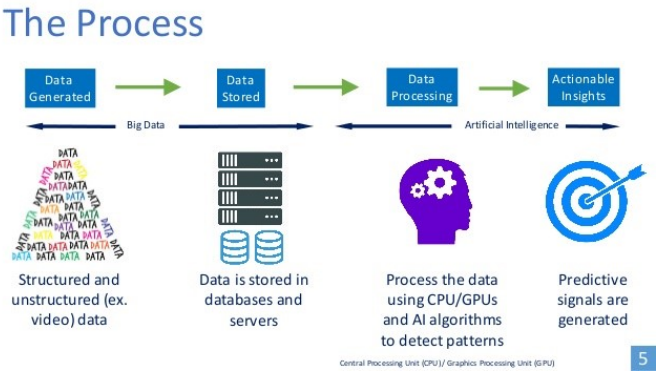


It is an interpretation of historical data to better understand changes that have occurred in a business. Descriptive analytic develop the use of range of draw comparison. It provide information about data aggregation and data mining into past and answer. Descriptive analytics are useful because they allow us to learn from past behaviors and understand how they might influence future outcomes.

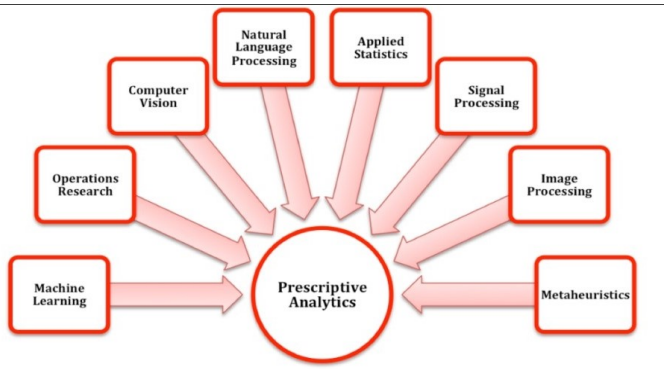
PREDICTIVE ANALYTICS

Predictive analytics is a branch of advanced analytics is used to make predictions about unknown future events. It make many techniques from data mining, statistics, modeling machine learning .it defines that project data analytic this converted data can be used for closed loop product life cycles improvement.

PRESCRIPTIVE ANALYTICS



It is a type of business analytics that focuses on finding the best course of action. It related to both descriptive and predictive analytics. Prescriptive analytics it takes decision options for how to take advantage of a future opportunity or mitigate and future risk.



DIAGNOSTIC ANALYTICS

In this analysis, we generally use historical data over other data to answer any question or for the solution of any problem. We try to find any dependency and pattern in the historical data of the particular problem. For example, companies go for this analysis because it gives a great insight for a problem, and they also keep detailed information about their disposal otherwise data collection may turn out individual for every problem and it will be very time-consuming

PROCESS OF DATA ANALYTICS

DATA REQUIREMENT

The data are necessary as inputs to the analytics, which is specified based upon the directing analytics or customer. The general type of entity which the data will be collected is referred to as an experimental unit.

DATA COLLECTION

The data are collected from a variety of sources .the requirements may be communicated by data. The data may also be collected from sensor in the environment such as traffic cameras, satellites, recording devices etc.

DATA PROCESSING

It is initially from processed or organized for analysis .such as within spreadsheet or statistical software. It involves placing data into rows and columns in a table format.

EXPLORATORY DATA ANALYSIS

The data are cleaned it can be analyzed. It may apply a variety of techniques referred to an s exploratory data analysis to begin understanding the messages contained in the data. The process of exploratory may result in additional data cleaning or request the data.

MODELING AND ALGORITHMS

Mathematical formulas or models called algorithms may be applied to the data to identify relationship among the variables.

DATA PRODUCT

A data product is a computer application that takes data inputs and generates output feeding them back into the environment. It may be based on model or algorithms. A discipline that incorporates the use of statistics, data visualization, machine learning, computer and data mining database to solve complex problems in organizations.

Tools and basic prerequisites for a beginner in data analytics

- Mathematics
- Excel
- Basic SQL
- Web development

ADVANCED TOOLS AND PRE-REQUISITES FOR DATA ANALYTICS

- R programming
- Python programming
- Database proficiency tools
- Mat lab

DATA ANALYTICS WORKFLOW CAN BE EXPLAINED IN THE FOLLOWING STEP

Data analytics matter

Data analytics is important because it helps business optimize their performance.

Implementing it into the business models means company can help reduce cost by identifying more efficient ways of doing business and by storing large amount of data.

A company can also use data analytics to make better business decisions and help analysis customer trends and satisfaction which can lead to new –and better –products and services.