# **REPORT: Basics of Data Analytics**

Steps of the Data Analytics Process

#### 1.Data Collection:

Gathering a raw data from various sources like databases, APIs, sensors, or surveys these are the various sources we are using as a data collection.

EXAMPLE:Collecting customer purchase data from an e-commerce platform.

## 2.Data Cleaning:

Data Cleaning means Preparing data for analysis by handling missing values, correcting errors, and removing duplicates.

**EXAMPLE:** Removing invalid email addresses from a customer database.

#### 3.Data Analysis:

Data Analysis in the sense of Applying Statistical techniques or algorithms to uncover patterns, trends and relationships.

**EXAMPLE:** Analysing website traffic data to identify peak visitor times.

#### 4. Data Visualization:

Data Visualization is Representing data visually through charts, graphs, and dashboards for easier interpretation.

**EXAMPLE:**Creating a pie chart showing the market share of different products.

#### 5. Reporting:

Presenting insights and findings through detailed reports, presentations, or dashboards.

**EXAMPLE:** A report summarizing quarterly sales performance.

### DIFFERENT TYPES OF DATA(STRUCTURED AND UNSTRUCTURED)

Examples and types of data of structured and unstructured data

### **STRUCTURED DATA:**

Structured Data is organized in a defined format, such as rows and columns in a table or database.

### **EXAMPLE:**

1. Customer details or Financial Transactions stored in a sql database.

# **UNSTRUCTURED DATA:**

Data without a predefined format, requiring advanced tools for analysis.

## **EXAMPLE:**

- 1. Social media posts, including images and text captions.
- 2. Audio recordings from customer service calls.

## **SUMMARY:**

1.Concepts to cover:

**Basics of Data Analytics.** 

Different types of Data(Structured and Unstructured Data).