**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).**