

Data Analytics Project

5. Variables & Observations in Data Analytics



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WHAT are Variables, Observations & Data Points?

A. VARIABLES:

1. The key characteristics of data analytics.
2. It can vary, measurable & controllable.

B. OBSERVATIONS:

1. The recordings of values, patterns & occurrences.
2. It forms a dataset for analysis.

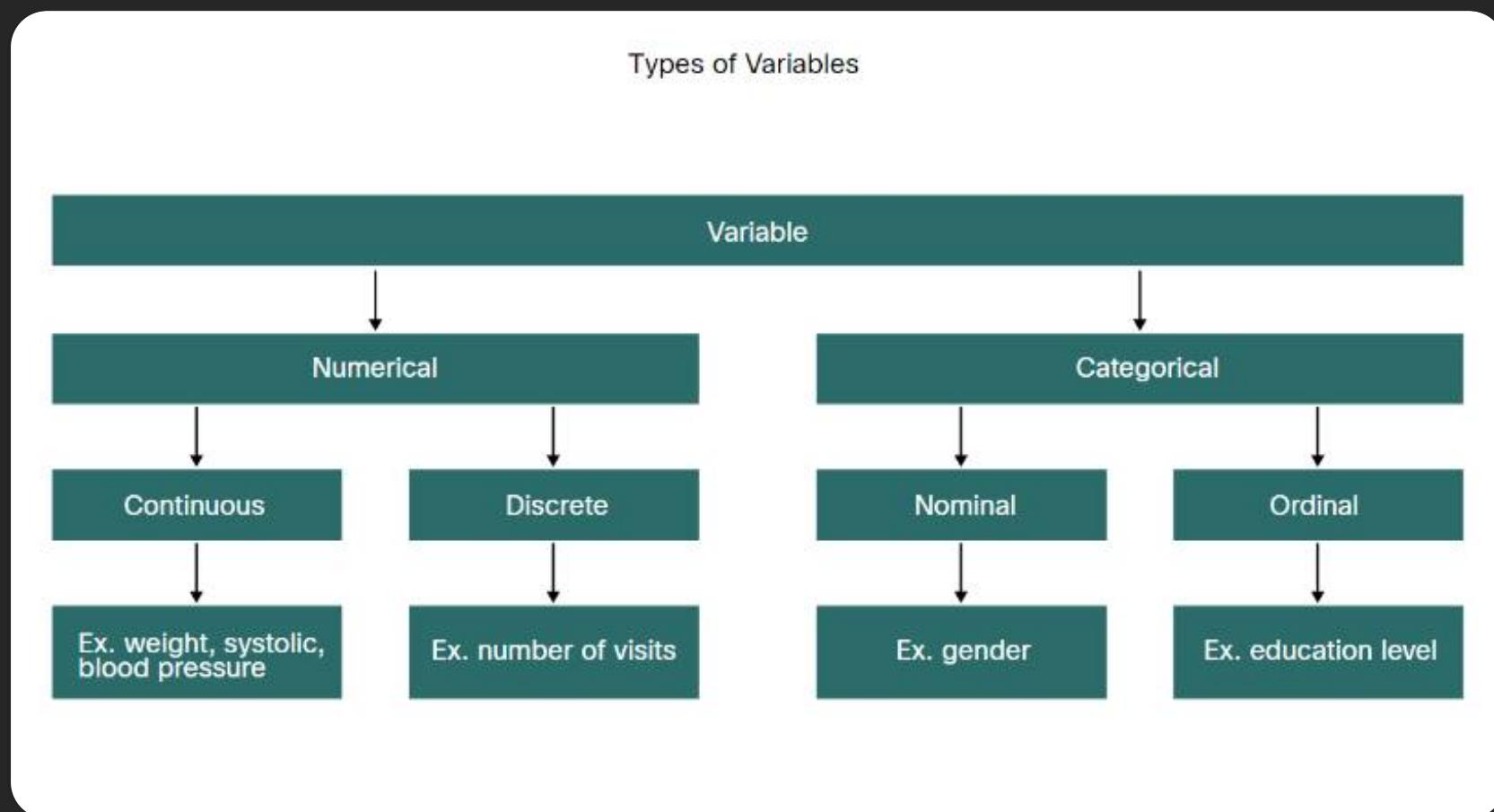
C. DATA POINTS:

1. The values for specific observations.
2. Resemble records in a database or Excel.

Types of Variables

Two main types of variables in Data Analytics:

1. **Numerical** --> (a) Continuous & (b) Discrete
2. **Categorical** --> (a) Nominal & (b) Ordinal



NUMERICAL Variables

The **quantitative values** from the data analysis are known as Numerical Variables.

A. **Continuous Variables:** The quantitative values that are measured along a range.

TYPES:

1. **Interval Variables:** Values that are *within a specific range* (e.g. Temperature, Time, etc.)
2. **Ratio Variables:** Special *Interval* Variables (e.g. Sales Volume, Income, etc.)

B. **Discrete Variables:** The quantitative specific values from the **finite set** of data.

e.g. No. of Cars in stock, No. of students, etc.

CATEGORICAL Variables

Values **indicating membership** in a particular group **with discrete** or specific **qualitative values**.

- A. **Nominal Variables:** The two or more discrete categories based on object identity.
e.g. Gender, eye color, type of animal.
- B. **Ordinal Variables:** The two or more categories with ordered values.
e.g. Students Ranks (1st, 2nd, 3rd), etc.

THANK YOU!!! FOR YOUR SUPPORT! For Now...

Keep Learning, Keep Sharing & Keep Following
Aagam Deolasi.



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