



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore - 641 107

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Accredited by NBA - AICTE and Accredited by NAAC - UGC with 'A' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



DEPARTMENT OF MANAGEMENT STUDIES

COURSE NAME : 19BA106 FUNDAMENTALS OF DATA ANALYSIS

I YEAR /I SEMESTER

Unit 1 - EXPLORING DATA ANALYTICS

Topic 1: FDA - Identify various data types



DATA

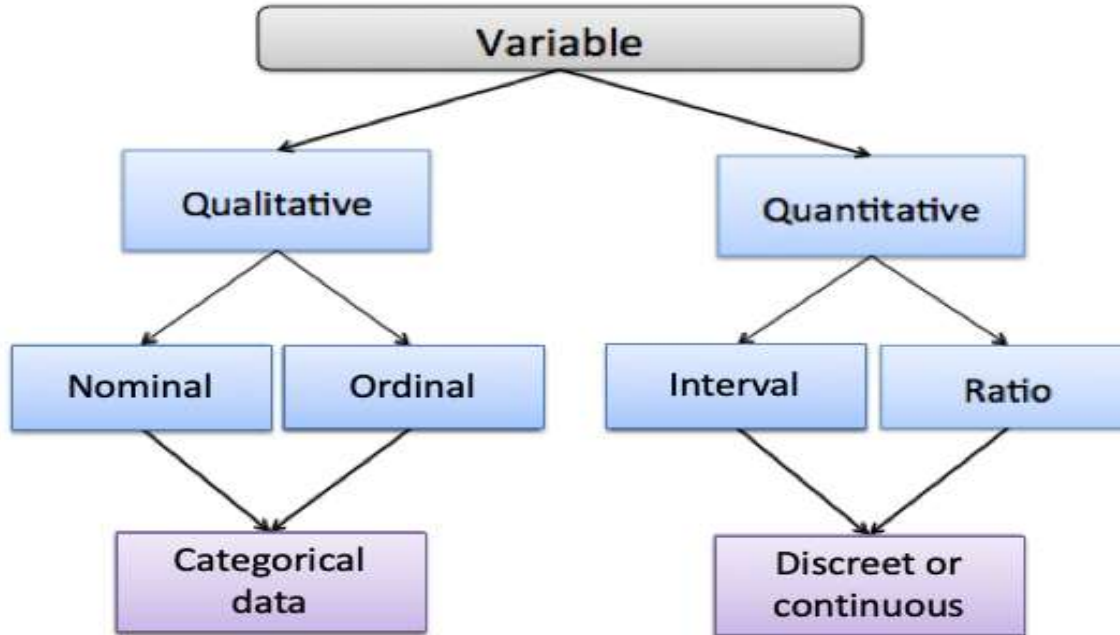
What is data ?

Data is a collection of facts, such as numbers, words, measurements, observations or just descriptions of things.

FV						
	A	B	C	D	E	F
1						
2						
3	Salesperson	Jan-13	Feb-13	Mar-13	Apr-13	Y-T-D
4	Julie	\$3,527	\$7,363	\$9,696	\$9,685	\$30,271
5	Richard	\$8,473	\$7,463	\$2,424	\$5,647	\$24,007
6	Bill	\$6,373	\$9,696	\$3,565	\$2,424	\$22,058
7	Osmand	\$3,738	\$2,424	\$7,847	\$366	\$14,375
8	Vanessa	\$7,263	\$2,452	\$765	\$2,537	\$13,017
9		\$29,374	\$29,398	\$24,297	\$20,659	\$103,278
10						
11	Julie	=RANK(B4,B4:B8)				
12	Richard					
13	Bill					
14	Osmand					
15	Vanessa					
16						



TYPES OF DATA





QUANTITATIVE DATA

- Quantitative data is defined as the value of data in the form of counts or numbers where each data-set has a unique numerical value associated with it.
- Discrete data - Anything that can be Counted is called discrete– Must be a whole number
- Continuous – Anything that can be Measured is called Continuous data– May or may not be a whole number





QUALITATIVE DATA

- Qualitative data based on observation. Generally you will use **WORDS** to describe
- It involves 5 senses like see, feel, taste, hear, smell.





NOMINAL DATA

- Nominal data are used to label variables without any quantitative value.
- Note that nominal data that has no order. Therefore if you would change the order of its values, the meaning would not change.

Ex

Volley ball player uniform number

Students roll number

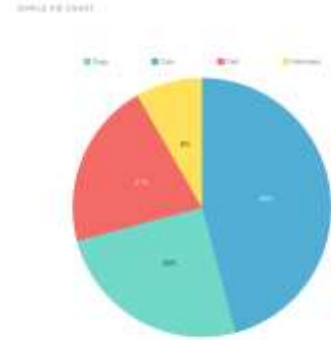




NOMINAL DATA

➤ Common Visualization Method

- 1) Use pie charts to display nominal variables
- 2) Tables





ORDINAL DATA

➤ **The *order* of the values is what's important and significant**, but the differences between each one is not really known.

➤ Ex

Running race – 1st place, 2nd place & 3rd place

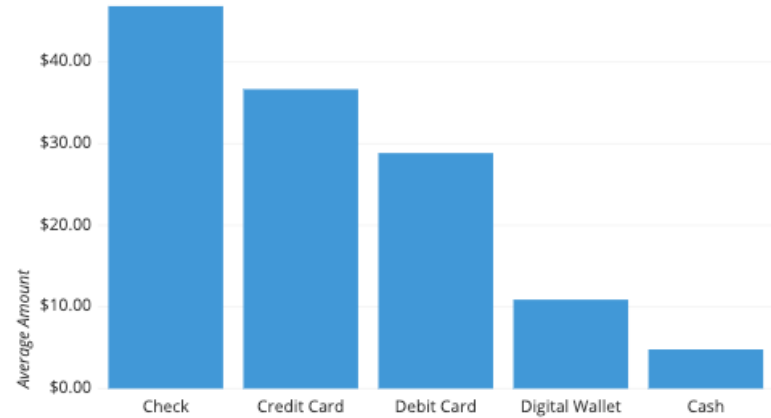
Election Results - 1st place, 2nd place & 3rd place





ORDINAL DATA

➤ Common visualizations are the bar chart or a pie chart. Tables can also be useful for displaying ordinal data and frequencies





INTERVAL DATA

- Interval scales are numeric scales in which we know both the order and the exact differences between the values.
- Example – Temperature, Time, etc.,
- In the case of interval scales, zero doesn't mean the absence of value, but is actually another number used on the scale, like 0 degrees celsius.





Ratio

- They tell us about the order, they tell us the exact value between units, AND they also have an absolute zero
- Good examples of ratio variables include height, weight and duration.
 - 10kg is twice as much as 5kg (Ratio is $10/5 = 2$)
 - 0 kg means no weight or absence of weight

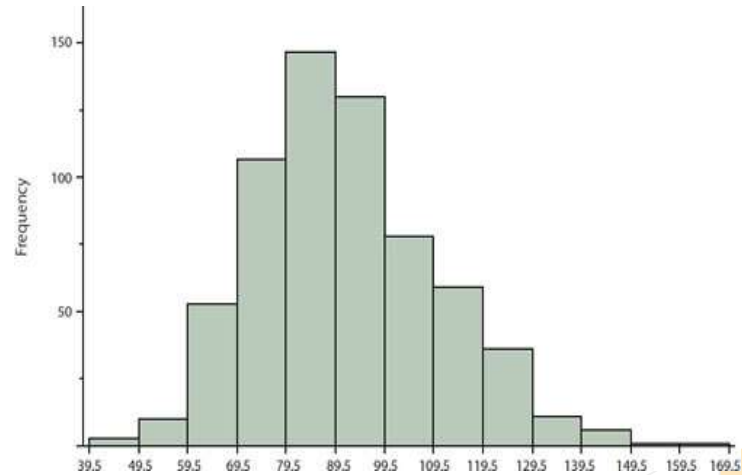




Interval & Ratio

Visualization Method :-

Histogram, line diagram, Bar chart and other statistical tools (Will discuss during business research)





RECAP

QUESTIONS???

THANK YOU

