**Interactive Sales Dashboard Using Excel**

* ***Objective :***

Vrinda store wants to create an annual sales report for 2022. So that vrinda can understand their customers and grow more sales in 2023.

* ***What will Learn:***

Here we will learn about the data cleaning , data processing, data analysis and dashboard creation in excel.

* ***Data Cleaning:***

When combining multiple data sources, there are many opportunities for data to be duplicated or mislabelled. So in order to avoid we use data cleaning. Data cleaning is the process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset.

* ***Data Pre-Processing:***

Data preprocessing is a very crucial step in data analysis. In this process, the raw data is cleaned and transformed into a format.

In order to pre-process the age group we are using the formula- =IF(E3>=50,"Senior",IF(E3>=30, "Adult", "Teenager")).

To pre process month use this formula- =TEXT(G2,"mmmm")

* ***Data Analysis:***

Analyse Data in Excel empowers you to understand your data through natural language queries that allow you to ask questions about your data without having to write complicated formulas. In addition, Analyse Data provides high-level visual summaries, trends, and patterns.

Here we are creating pivot table for data analysis, where we can make changes in the future if we need.

And finally we have created slicer connected with the pivot table to make the dashboard interactive. Slicer will work only if you use pivot tables.

* ***Sample questions for Data analysis:***

1. Compare the sales and orders using single chart?
2. Which month got the highest sales and orders?
3. Who purchased more men or women in 2022?
4. What are the different order status in 2022?
5. List top 10 states contributing to the sale?
6. Relation between age and gender based on number of orders
7. Which channel is contributing to maximum sales?
8. Highest selling category?

* ***Sample Insights:***
* March month made more sales than other months.
* Women are more likely to buy compared to men(~65%)
* Maharashtra, Karnataka and Uttar Pradesh are the top 3 states (~35%)
* About 92% of the orders have been delivered.
* Adult age group(30-49 years) is maximum contributing(~50%)
* Amazon, Flipkart and Myntra Channels are maximum contributing (~80%)
* ***Final Conclusion:***

Target the women customers of age group 30-49 years living in Maharashtra, Karnataka and Uttar Pradesh by showing ads/offers/coupons available on Amazon, Flipkart and Myntra. And do some work on the shipments and find why the customers are returning the orders if you get a common reason try to resolve it.