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**PROJECT WRITE-UP – EXCEL SALES DASHBOARD**

**Submission Deadline : 15-10-2022**

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**PROJECT WRITE-UP**

**INTRODUCTION :**

The project that I chose to work upon is designing a **Sales Dashboard** in Excel. The purpose of choosing this is to add a little bit of creativity and more of my past learnings to do a justice on making a Sales Dashboard that is more interactive and user friendly. By Click of a mouse button and implementing few formulas, Data Analysis tools, we will be able to derive better insights from the raw data (which is a sales report with over 50,000 records). Though we can present the data within seconds using Pivots, I am going to present the Dashboard with a basic table with appropriate formatting in place and users will be able to control it with a Combo box which is also a Project requirement.

In this write-up, I will elaborate on my approach / Procedural steps that I followed while creating the Dashboard. However, I am not going to include the actual formulas here as it will be tagged against the Source Code.

**BUSINESS REQUIREMENT:**

The following project tasks are required to be performed in Excel:

* Use the saved Sample E-Commerce database
* Prepare a table of Sales and Profit month-wise in a working sheet
* Prepare the sales table region-wise in the working sheet
* Create User Control Combo box for Product Category
* Create a Column Chart of the month-wise table and region-wise table
* Link the table with a combo box
* Create a dashboard.

**OBJECTIVES :**

\*To derive the data and visualize it so as to make it user friendly.

\*To get better insights on Profit and sales achieved Month-wise and Region-wise.

\*To forecast the historical performance based on past results.

\*To make the data more dynamic so that users will be able to see the desired results within seconds by click of a button.

\*To analyze the difference in Profit and sales figures Month-wise and Region-wise.

\*To help business to plan and execute business strategies such as Resource planning, reducing wastages, marketing and awareness of the product, budget planning etc to optimize the Profit and increase the sales.

\*To help businesses to analyze the future trends in terms of Profit and Sales.

\*To visualize the data more effectively for the business to make important decisions.

**PROBLEM STATEMENT :**

Preparing a Sales Dashboard from Sales report with over 50000 records.

**SOLUTION :**

1. Formatting
2. Removing duplicates
3. Creating Tables
4. Adding Formulas
5. User control Combo Box
6. Applying Charts for the Table data
7. Adding Buttons to make it interactive.

**MY APPROACH :**

* **Prepare a table of Sales and Profit month-wise in a working sheet :**

**Step 1 :** Select Column U data which is under the header “Months” and copy the range.

**Step 2 :** Add a header as “Unique Months” in Column V and Paste the data

**Step 3 :** Select the data under the header “Unique Months” and Go to Data tab – Remove Duplicates – Choose Continue with Current Selection – Remove Duplicates button.

**Step 4 :** Unique Values remain and duplicate values will be cleared.

**Step 5 :** Copy the unique monthly values and navigate to this Sheet “Working – Final”

**Step 6 :** Add 3 headers namely Month, Sales, Profit in Column A13,B13 and C13 respectively

**Step 7 :** Paste the unique monthly values below A13 and sort by values as Month and Order by Custom List – Choose Month series from Custom list and click ok.

**Step 8 :** Add SUMIFS formula to Sales and Profit columns to arrive at Monthly Sales and Profit numbers based on certain criteria. Then, drag it till the last available Monthly value to arrive at the results.

**Step 9 :** Copy the entire value range starting from A13.Then, go to Home tab – Format as Table – Choose the desired Table format.

* **Prepare the sales table region-wise in the working sheet :**

**Step 1 :** Select Column T data which is under the header “Region” and copy the range.

**Step 2 :** Add a header as “Unique Regions” in Column W and Paste the data

**Step 3 :** Select the data under the header “Unique Regions” and Go to Data – Remove Duplicates – Choose – Continue with Current Selection – Remove Duplicates button.

**Step 4 :** Unique Values remain and duplicate values will be cleared.

**Step 5 :** Copy the unique region values and navigate to this Sheet “Working – Final”

**Step 6 :** Add 2 headers namely Region, Sales, in Column K13, and L13 respectively.

**Step 7 :** Paste the unique region values below K13.

**Step 8 :** Add SUMIFS formula to Sales column to arrive at Regional Sales numbers based on certain criteria. Then, drag it till the last available region value to arrive at the results.

**Step 9 :** Copy the entire value range starting from K13.Then, go to Home tab – Format as Table – Choose the desired Table format.

* **Create User Control Combo box for Product Category :**

**Step 1 :** Select Column F data which is under the header “Product Category” and copy the range.

**Step 2 :** Add a header as “Unique Product Category” in Column X and Paste the data

**Step 3 :** Select the data under the header “Unique Product Category” and Go to Data – Remove Duplicates – Choose – Continue with Current Selection – Remove Duplicates button.

**Step 4 :** Unique Values remain and duplicate values will be cleared.

**Step 5 :** Navigate to “Working – Final” sheet.

**Step 6 :** Go to Developer Tab – Insert – Under Form controls - Combo box

**Step 7 :** Click the left mouse button in Cell range D5,D6 and drag it to achieve the desired size.

**Step 8 :** Now, Press and hold Ctrl and Left Mouse button on top of the combo box to select it

**Step 9 :** Right click – Format Control – Select Input range from Sales Data worksheet - i.e Column X under “Unique Product Category” header. Cell Link as D7 from “Working – Final” sheet.

**Step 10 :** Now, we will see the Combo box with Product categories in it. Click on the drop-down and try switching the Product category and appropriate result will show up in Cell D7.

* **Create a Column Chart of the month-wise table and region-wise table :**

**Step 1 :** Navigate to “Working – Final” Sheet and Copy the entire table with Monthly sales and Profit data.

**Step 2 :** Go to Insert tab and choose – Column or Bar chart. Apply relevant formatting.

**Step 3 :** A chart will pop-up. Drag and drop the Chart in desired region. I had chosen this range Column E : I

**Step 4 :** Same goes with Region wise Sales data - Copy the entire table

**Step 5 :** Go to Insert tab and choose – Column or Bar chart. Apply relevant formatting.

**Step 6 :** A chart will pop-up. Drag and drop the Chart in desired region. I had chosen this Column range M : T

* **Link the table with a combo box :**

**Step 1 :** Go to “Working – Final” sheet and Include Offset function in A10 and K10 respectively

**Step 2 :** Offset function references Unique Product category from Sheet 1, Row value from Cell D7 in “Working – Final” sheet and returns single value in A10 and K10 based on the Combo-box drop-down option.

**Step 3 :** Now, to link the combo-box, we use SUMIFS function i.e – SUMIFS function references Product category (i.e single value that we arrived at in Cell A10 and K10) and the Product category value is also being defined as a criteria in SUMIFS function to link it with Monthly Sales and Profit table as well as Regional sales table.

* **Create a dashboard :**

\*Added headers as “SALES REPORT” in “Sales data” Worksheet and “SALES DASHBOARD” in “Working – Final” sheet.

\*Font formatting and color formatting for the above headers.

\*Removing Background noise by unchecking “Gridlines” option under View tab for both the sheets.

\*Added online pictures inside the charts to make it more presentable based on the Chart title. (Insert tab – Online Pictures – Did a Bing search, downloaded the relevant picture and finally applied it to the charts).

\*Included buttons using Shapes option under Insert tab, formatted the button and finally added text to switch between the excel worksheets.

\*Included formula to arrive at total sales by Product category and Overall sales. Also included a formula to arrive at total profit by Product category and Overall profit. Also, applied color formatting to those cells.