Assignment Solutions

# Question 1

The Regional Manager for the Country United States wishes to visualize Sales and Profit for each Subcategory for all four regions in the United States. Based on the information provided above, create a Dashboard which will convey the appropriate information

# Solution

## ****Visualization 1: Creating line chart for Visualizing profits for US-Region****

Step 1: Create a new worksheet drag the Country and Region into filter ,for the Country filter select United States and for region select All.

Step 2: Drag the Order Date into Columns, Region and Profit into Rows. Right Click the Order date and select continuous and Month.

Graphical user interface, chart, line chart

Description automatically generated

Step 3:Drag the Profit measure into Color and Labels mark. Right click the Labels in Mark and select Min/Max

Graphical user interface, chart, application

Description automatically generated

Step 4: Click Format from the Menu and select Shading , click Default worksheet choose Color as green. In the lines choose Grid lines as None. The Visualization should looks as following

Graphical user interface

Description automatically generated

**Visualization 2: Creating a Bar graph to visualize Orders, Profit and Sales for each state.**

Step 1: Create a new worksheet drag the Country and Region into filter ,for the Country select filter select United States and for region select All.

Step 2: Drag Sales and Profit measures into Columns. Drag Country, State and Order Quantity into Rows. Right click the Quantity and select discrete. Change the Color of Profit and Sales to orange and green in the Marks. The visualization should like the following graph.

Table

Description automatically generated

Step 3:Drag the Sales and profit measures into labels. Format the axis ,change the font to blue color and Bold .Change the Numbers to Custom🡪Display Units: Thousands (K) and reduce the Decimal values to 0.

Table

Description automatically generated

**Visualization 3:Creating a bar graph for comparing Sales and Profit for each sub-Category**

Step 1: Create a new worksheet drag the Country and Region into filter ,for the Country select filter select United States and for region select All.

Step 2:Drag Sales, Profit into Columns, Sub-Category and Quantity into Rows

Chart, bar chart

Description automatically generated

Step 3: Right click the Quantity measure and change the Sum into Count

Step 4:Right Click the Profit and Click dual Axis. Drag SUM(Profit) into X-axis , the Output should like

Chart, bar chart

Description automatically generated

Step 5: Format the Labels . change the color to blue and Bold

Chart, bar chart

Description automatically generated

**Creating a Dashboard:**

Step 1: Create a new Dashboard, Drag the Region\_Profit worksheet into Dashboard

Chart, histogram

Description automatically generated

Step 2: Drag the Sales and Profit worksheet to the right of region profit worksheet as shown below

Chart

Description automatically generated

Step 3: Drag the last worksheet right below to the Sales and Profit worksheet.

Chart

Description automatically generated

Step 4: Click the Region wise Worksheet and select Filter icon , this will create an interactive dashboard. Now ,when you select the Particular region ,the values will change accordingly in the other sheets.

Chart

Description automatically generated

Conclusion :

Using this dashboard , the Regional Manager can visualize the Sales and Profit measures for each state of that region along with the Product Sub-Category.

# Question 2

What is the Global Super Store's profit per day? Divide the profit into two or more categories, such as profitable and unprofitable, and create a visualization for the last three years.

# Solution

Step 1: Click Analysis , Select Create Calculated Field . Name it as Profit Per day

Inside write the following formula: { FIXED [Order Date] : SUM([Profit])}

Graphical user interface, text, application, email

Description automatically generated

Step 2:Create another calculated field ,name it as Daily Profit KPI. Write the following formula

IF [Profit per day] >= 2000 THEN "Highly Profitable"

ELSEIF [Profit per day] <=0 THEN "Unprofitable"

else "Profitable" END

Graphical user interface, text, application, email

Description automatically generated

Step 3: Drag the Order date to Columns ,Click the plus sign in the YEAR(Order date) to get MONTH(Order Date). Drag the Daily profit and Order date to Rows. Click the Order date and change into CNTD measure.

Graphical user interface, application

Description automatically generated

Step 4:Drag Daily Profit KPI to color . In the Mark shelf click the Automatic and change it to Area

A picture containing chart

Description automatically generated

Step 5:Click the Color in Marks and change it to green , orange and red . Format the Labels and axis color to Black and Bold. The final visualization should look like the following

Chart, diagram

Description automatically generated

Conclusion :Now we can visualize Profit per day based on three different conditions we created Highly Profitable, Profitable, Unprofitable for all the months.

# Question 3

How do you compare the sales of one subcategory to the sales of all subcategories?

# Solution:

Step 1: Create Parameter 🡪Name : Select a Sub\_Category

Data Type: String

Allowable values: List

Enter Sub\_Category in value

Graphical user interface

Description automatically generated

Once created , right click the Select a Sub\_Category parameter and select Show Parameter

Graphical user interface, application

Description automatically generated

Step 2: Create Calculated Field and name it as Selected Sales. Enter the following code:

If [Sub-Category] = [Select a Sub\_Category]

then Sales else 0 end

Graphical user interface, text, application, email

Description automatically generated

Step 3: Create another Calculated Field and name it as Sales of Selected Category. Enter the following code:

{ Exclude [Sub-Category] : SUM([Selected Sales])}

Graphical user interface, text, application, email

Description automatically generated

Step 4: Create another Calculated Field and name it as Difference from Selected . Enter the following code:

SUM(Sales)-SUM([Sales of Selected Category])

Graphical user interface, text, application, email

Description automatically generated

Step 5:Drag and drop Sales , Difference from Selected to Columns. Drag Sub-Category to Rows.

Drag and Drop Select a Subcategory parameter to color.

Timeline

Description automatically generated

Step 6: Format the Labels ,change the font to Bold and Black color.

Chart

Description automatically generated

# Conclusion:

Now you can compare the Sales of one category to another by selecting a category from the Parameter as shown below:

Chart, funnel chart

Description automatically generated