

## Lesson 7 – Exercise 7.2: Histograms

### Business Scenario

The plant manager now wants to analyze the distribution of distinct orders placed by the customers and the performance of customers. Create visualizations that will help him analyze profit ranked by customer orders. Then, answer the following questions:

- How many orders have been placed in bin 4? (**Hint-** Enable Labels)
- Which customer is generating highest profit and what's the value and the number of orders placed by that customer?  
(**Hint-** Apply the Top filter)

### Overview

- Create a calculated field to show distinct orders placed by the customer using an LOD calculation.
- Create a calculated field to generate rank of customers using the Index function.
- Create a view using these calculated fields.
- Break the view by placing customer name in detail.
- Color the view by profit.
- Set the scope of table calculation applied on Rank as customer name.
- Sort the calculation in ascending order based on profit.
- Change the default color of marks using the color property.

The result should resemble the image given below:



## Detailed Instructions

1. In the same workbook, open a new sheet.
2. To create a calculated field, on the Analysis menu, select **Create Calculated Field**.
3. In the Calculated Field window, in Name box, select **Count Distinct Orders**.
4. In the Formula box, type **{FIXED [Customer Name]:COUNTD([Order ID])}**
5. Click **OK**.
6. Create another calculated field for **Index**.
7. In the Formula box, type **INDEX()**.
8. Click **OK**.
9. To create a view, from Dimensions, drag and drop **Count Distinct Orders** to Columns.
10. Right Click on **Count Distinct Orders** pill and change this to **Dimension**.
11. From Measures, drag and drop **Index** to Rows.
12. From Dimensions, locate and drag **Customer Name** to **Detail**.
13. To add a table calculation, right click the **Index** pill, and from context menu, select **Edit Table Calculation**.

14. In the Table Calculation window, select **Specific Dimensions**.
15. Drag and drop **Customer Name** above **Count Distinct Orders**.
16. Select the **Customer Name** check box.
17. In the Sort Order drop down, select **Custom Sort**.
18. Select **Profit** from the drop-down list and set aggregation as **Sum**.
19. Make sure the **Ascending** radio button is selected.
20. Close the window.
21. Under Marks, click the **Automatic** drop down and select **Gantt**.
22. Drag the **Profit** measure to **Color**.
23. To edit color, click **Color** and select **Edit Colors**.
24. In the **Edit Colors** window, select the **Orange-Blue Diverging** palette.
25. Click **OK**.
26. Rename this sheet as **Profit ranked by Customer Orders**.
27. Save this workbook as **Lesson 7 - Exercises**.
28. Close the workbook.

## Answers

Based on the view, these are the answers to the questions in the problem statement:

- How many orders have been placed in the bin 4?  
Answer – **96**.
- Which customer is generating highest profit and what's the value and number of orders placed by that customer?  
Answer – **Tamara Chand, \$8981, and 5**.