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Text Tables and Highlight Tables

Consider the spreadsheet shown below that shows profit broken down by Product Sub-Category and Region.

Text Table

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Product Sub-Category</th>
<th>Central</th>
<th>East</th>
<th>South</th>
<th>West</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furniture</td>
<td>Bookcases</td>
<td>$73</td>
<td>$(19.151)</td>
<td>$(22.417)</td>
<td>$(587)</td>
</tr>
<tr>
<td></td>
<td>Chairs &amp; Chairmats</td>
<td>$37,920</td>
<td>$33,583</td>
<td>$34,026</td>
<td>$34,409</td>
</tr>
<tr>
<td></td>
<td>Office Furnishings</td>
<td>$26,292</td>
<td>$19,523</td>
<td>$26,121</td>
<td>$30,941</td>
</tr>
<tr>
<td></td>
<td>Tables</td>
<td>$(19,777)</td>
<td>$(50,677)</td>
<td>$26,172</td>
<td>$(16,950)</td>
</tr>
<tr>
<td>Office Supplies</td>
<td>Appliances</td>
<td>$22,910</td>
<td>$18,612</td>
<td>$26,986</td>
<td>$31,276</td>
</tr>
<tr>
<td></td>
<td>Binders and Binder Accessories</td>
<td>$73,951</td>
<td>$71,420</td>
<td>$69,520</td>
<td>$92,273</td>
</tr>
<tr>
<td></td>
<td>Envelopes</td>
<td>$10,825</td>
<td>$7,482</td>
<td>$19,182</td>
<td>$11,222</td>
</tr>
<tr>
<td></td>
<td>Labels</td>
<td>$2,323</td>
<td>$4,041</td>
<td>$3,479</td>
<td>$3,740</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>$11,047</td>
<td>$13,510</td>
<td>$10,997</td>
<td>$10,433</td>
</tr>
<tr>
<td></td>
<td>Pens &amp; Art Supplies</td>
<td>$2,781</td>
<td>$2,856</td>
<td>$1,397</td>
<td>$518</td>
</tr>
<tr>
<td></td>
<td>Rubber Bands</td>
<td>($174)</td>
<td>($238)</td>
<td>$156</td>
<td>$178</td>
</tr>
<tr>
<td></td>
<td>Scissors, Rulers and Trim</td>
<td>($1,765)</td>
<td>($1,279)</td>
<td>($2,903)</td>
<td>($1,953)</td>
</tr>
<tr>
<td></td>
<td>Storage &amp; Organization</td>
<td>($88)</td>
<td>($7,233)</td>
<td>$11,836</td>
<td>($2,018)</td>
</tr>
<tr>
<td>Technology</td>
<td>Computer Peripherals</td>
<td>$11,971</td>
<td>$14,808</td>
<td>$30,475</td>
<td>$37,280</td>
</tr>
<tr>
<td></td>
<td>Copiers and Fax</td>
<td>$513</td>
<td>$67,254</td>
<td>$63,598</td>
<td>$35,997</td>
</tr>
<tr>
<td></td>
<td>Office Machines</td>
<td>$38,876</td>
<td>$47,277</td>
<td>$129,060</td>
<td>$61,377</td>
</tr>
<tr>
<td></td>
<td>Telephones and Commu...</td>
<td>$79,393</td>
<td>$78,715</td>
<td>$78,985</td>
<td>$84,850</td>
</tr>
</tbody>
</table>

Can you quickly determine which combinations of Product Sub-Category and Region are performing very well and which are performing badly?
Now look at the same data rendered using a Highlight Table.

With this type of visualization it’s easy to see which combinations are performing well and which are performing poorly.

**Creating a Text Table (Cross Tab) in Tableau**

1. Click the New Worksheet tab at the along the bottom of your screen.
2. Click the Connect to Data tool at the top of your screen.
3. Indicate you want to connect to Microsoft Excel and locate the file Superstore Sales_DR10.xlsx.
4. Drag Orders from the list of sheets onto the Drag sheet here area. *We’ll stick with a Live connection for the time being.*
5. Click the tab for the new sheet you just created (along the bottom of your screen).
6. Drag Product Category to the Rows shelf, then place Product Sub-category to the right of it.
7. Place Region on the Columns shelf.

8. Drag Profit into the middle of the table. Your screen should look like the one shown below.

9. Rename the tab Text Table and save your work.

Creating a Highlight Table in Tableau

1. Right-click the tab and select Duplicate Sheet.

2. Click the Show Me button and select the Highlight table option.
3. Click the Color button and indicate you want a gray border, as shown below.

Your screen should look like the one shown below.

4. Name the worksheet tab **Highlight Table** and save your work.

**Topics for Discussion**

- Why this color combination and not red and green?
6. Right-click **IN/OUT (Profitable Customers)** on the Rows shelf and select **Show Members** in Set.

7. Drag **Profit** onto the Columns shelf and sort in descending order. Your screen should look like this.

![Image of a Tableau dashboard with IN/OUT (Profitable Customers) and Profit on the shelves]

Notice that Tableau places the set on the Filter shelf as well.

8. Rename the tab **Profitable Customers** and click save your work.

### Using Sets and Named Filters

Another way to use sets is as named filters where you give a name to a filter setting so you can reuse it without having to specify the settings over and over.

#### To Create a Set by Naming a Filter

1. Activate the **Sales by Category** visualization by selecting the applicable tab.
2. Make sure **All** is selected in the **Product Category** quick filter.
3. In the Product Sub-Category quick filter turn off make sure only Binders and Binder Accessories, Chairs & Chairmats, Copies and Fax, and Tables are selected, as shown
4. Right-click Product Sub-Category in the Filters shelf and select Create Set.

5. Name the set My Sub-Categories and click OK.
   Note that a new set appears on the bottom left portion of your screen, towards the bottom. You may now use this set the same way you used the Profitable Customers set.

**My Sub-Categories vs. Other Sub-Categories**

The set we just created will allow us to easily compare performance for our products vs. other products. Let’s see how we can highlight how our products are doing in a comparison of profitability.

**To Compare the Profitability of My Sub-Categories vs. Others**

1. Click the New Worksheet tab.

2. Drag Product Sub-Category onto Rows and Profit onto columns and sort by sum of Profit in descending order.
3. Drag the set My Sub-Categories onto the Color button, as shown below.

4. Right click the word “In” in the color legend and select Edit Alias as shown below.

5. Change the alias to **My Sub-Categories**.

6. Change the alias for “Out” to **Other Sub-Categories**.

7. Rename the sheet **Profitability Comparison** and click and save your work.

**Topics for Discussion**

- Groups
- Sets
- Filters
3. **Drag KPI Dot** to Rows, right after Store ID, as shown below.

4. See if you can figure out how to make the column with the dot narrower and to make the asterisk larger and red. Hint: For the formatting try right-clicking one of the asterisks.

5. Rename the tab **Sales vs Quota** with Dot and save your work.

**Topics for Discussion**

- Aggregate vs. row-level data (i.e., why we use SUM).
- Getting a dot instead of an asterisk.
- Why the dot / asterisk is so effective.
- How to see the actual values.

**Showing Progress Towards Goals – Bullet Charts**

An alternative to the bar-in-bar chart is the Bullet Chart where you show the actual value as a dark bar, the target as vertical line and a percentage of the target as lightly colored band.