Module 2 – Dashboards and Interacting with Data

Create visualizations to answer the following questions and write a few sentences interpreting what you see in each visualization. It is best to include multiple visualizations within a **dashboard**.

- To create a dashboard in Tableau, first create individual worksheets, each worksheet with a single visualization (chart/table)
- Choose Dashboard > New Dashboard
- Choose the worksheets that you want to include in the dashboard from the left.
- You can control the layout and the size of each visualization in your dashboard

Open your Tableau file from Week 1, with the merged datasets (you can open the Week 1 Solution file).

You should submit all your answers in homework submission file. PLUS copy one of your answers for Task 2 to this week's discussion board (in the thread "Task 2: Post Here").

Task 1: Price Explorations (8 points)

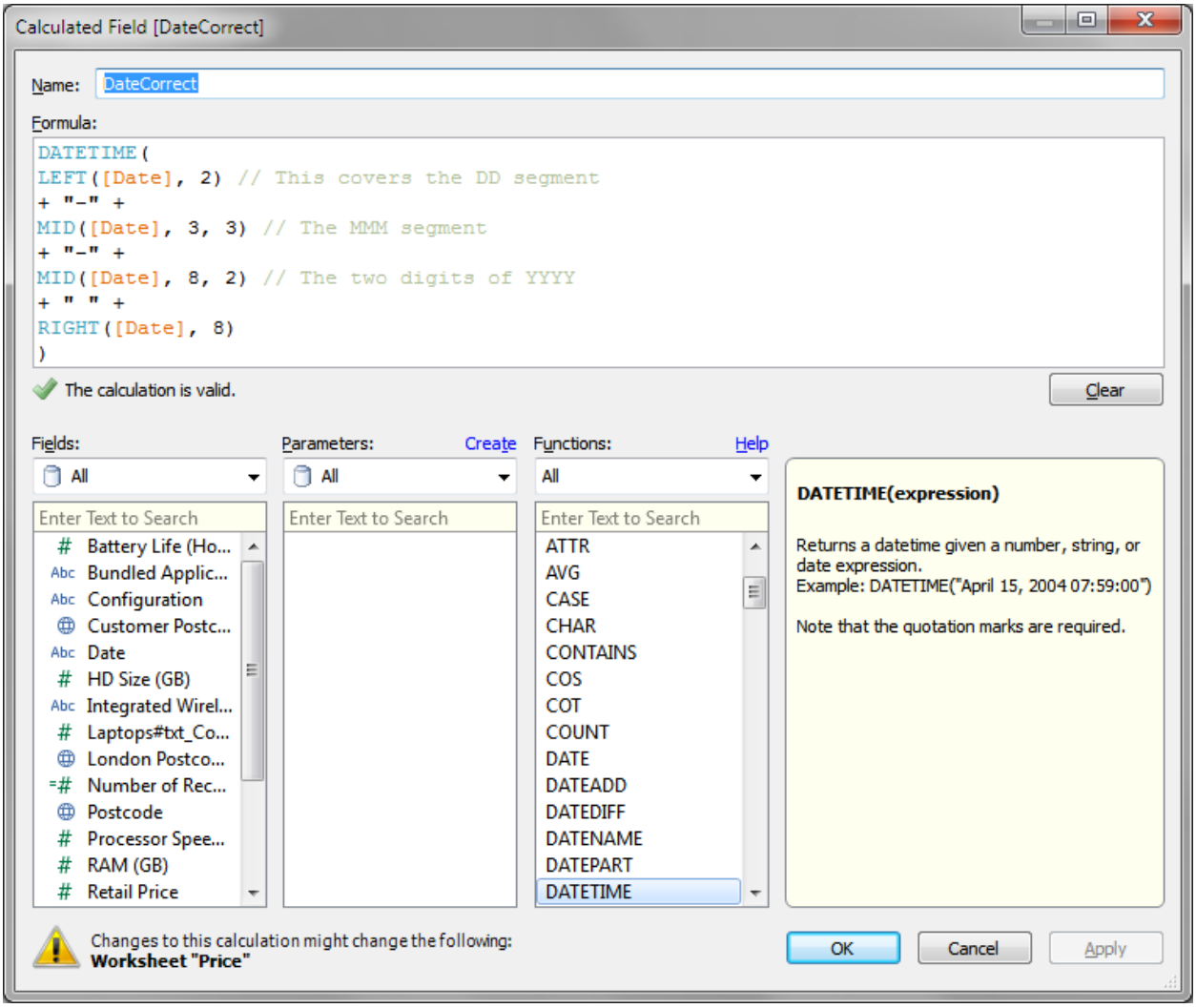
1. What prices are the laptops actually selling for? (e.g., use histograms/boxplots of retail price)
2. Does price change with time? (e.g., line charts and side-by-side boxplots)
3. Are prices consistent across retail outlets? (e.g., side-by-side boxplots)
4. How does price change with configuration? (e.g., bar chart or scatterplot)

Tip 1: Note that the "date" column is not properly identified (it is identified as a "string"). We will therefore not be able to use this temporal information in visualizations. Unfortunately, Tableau does not recognize the data format (14Jan2008 13:22:24) and therefore changing the type to *Date & Time* will not help. The solution is to create a new Calculated Column (Analysis > Create Calculated Field). Copy the following into the Formula are (see screenshot below):

```
DATETIME(
LEFT([Date], 2) // This covers the DD segment
+ "-" +
MID([Date], 3, 3) // The MMM segment
+ "-" +
MID([Date], 8, 2) // The two digits of YYYY
+ " " +
RIGHT([Date], 8)
)
```

Using this new DateCorrect column, you should now be able to use temporal information in visualizations. You can also now access additional temporal aggregation choices, to plot or visualize the data by week or month, or even by day of week (when you select the Date column for some visualization you will see those aggregation options).

Tip 2: If you want a visualization to use the non-aggregated transaction-level data, in the Analysis menu uncheck “Aggregate Measures”. This is especially useful in Boxplots.



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Task 2: Location Questions (10 points)

1. Where are the stores and customers located?
2. Which stores are selling most?
3. How far would customers travel to buy a laptop?

Task 3: Revenue Questions (4 points)

1. How does the sales volume in each store relate to Acell's revenues?
2. How does this depend on the configuration?

Task 4: Configuration Questions (3 points)

1. What are the details of each configuration, and how does this relate to price?
2. Do all stores sell all configurations?