# **Getting Started with PivotTables**

1.

Download the course material and open up Bananas Sales.xlsx in Excel from the Datasets folder.

#### Hint

Navigate to the Datasets folder from the downloaded course material and open Bananas Sales.xlsx with Excel.

2.

- Create a *PivotTable* of the Account Sales History tab and place it in a new *Worksheet*.
- To keep things organized, rename the new sheet to PivotTable.

#### Hint

- Click Insert then PivotTable. Make sure the Table/Range input is 'Account Sales History'!\$A\$1:\$M\$2221.
- Check New Worksheet, then click OK.
- Double click on the *Worksheet* name at the bottom, then type PivotTable and hit Enter on your keyboard.

3.

In the *PivotTable* display the sum of Licenses Bought and the sum of Sales Amount. Using the *Value Fields Settings*:

- Format Sum of Licenses Bought as a number with a, separator and 0 decimal places.
- Format Sum of Sales Amount as a currency with 0 decimal places.

#### Hint

- Drag Licenses Bought and Sales Amount down to the Values section. They should automatically aggregate by Sum.
- Double click on the headers of the *PivotTable* to open up the *Field Settings*. Then click on *Number Format*.
- Select Number, 0 for the *Decimal places*, and check the box for *Use 1000 Separator* (,).
- Repeat for the Sum of Sales Amount and in the *Number Format* section select Currency and 0 for the *Decimal places*.

4.

Continue your EDA process by adding the average of Sales Amount to the *PivotTable*.

- Rename the average calculation to Average of Sales Amount.
- Format it as a currency with 0 decimal places.

## Hint

- Drag Sales Amount down again to the *Values* section. This should create a new field called Sum of Sales Amount2.
- Click on it and open the Value Field Settings, and set the summarization to Average.
- Right click on the Average of Sales Amount2 header, then select Value Field Settings.
- Type in Average of Sales Amount for the Custom Name.
- Double click on the headers of the *PivotTable* to open up the *Field Settings*. Then click on *Number Format*.
- Select Currency and 0 for the Decimal places.

5.

What is the Average of Sales Amount? Round to the nearest dollar.

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## **Calculated Fields in Pivot Tables**

1.

We want to analyze the KPIs by Subscription Type.

Add this to the *PivotTable* to split them up by row.

## Hint

Drag Subscription Type to the Rows section in the PivotTable.

2.

Already, we can see that our analysis is getting more interesting.

Create a Calculated Field that divides Sales Amount by Number of Users and call it Sales per Sub.

### Hint

- Click on the PivotTable to make sure the PivotTable Analyze ribbon bar is showing.
- Under the PivotTable Analyze ribbon click Fields, Items & Sets, then Calculated Field.
- Set the Name to Sales per Sub.
- The Formula should be = 'Sales Amount'/ 'Number of Users'.
- Double click on the field names to easily bring them into the formula rather than typing.

Add the sum of Sales per Sub to the *PivotTable* and format it as a currency with 0 decimal places.

## Hint

- Drag Sales per Sub to the *Values* section. It should automatically set as a *Sum* aggregation.
- Double click on the *PivotTable* header, Sum of Sales per Sub to open up the *Field Settings*. Then click on *Number Format*. Select Currency and 0 for the *Decimal places*.

4.

This seems lower than expected. We want to find the sales per paying user, so let's try to use Licenses Bought in our denominator rather than Number of Users.

#### Hint

- 1. Click on the *PivotTable* to make sure the *PivotTable Analyze* ribbon bar is showing. Then click on the *PivotTable Analyze* ribbon bar, then click *Fields, Items & Sets*, then *Calculated Field*.
- 2. Select Sales per Sub from the dropdown menu.
- 3. Delete Number of Users and replace it with Licenses Bought. Your formula should look like this:
- = 'Sales Amount'/ 'Licenses Bought'
  - 1. Click OK to save the changes.

5.

What is the average sales per paying subscription? Round to the nearest dollar. 20

# **Custom Grouping in Pivot Tables**

1.

- In the pivot table, create a group with Business, Enterprise, and Premium, and rename it Paid.
- Change the group name with Basic to Unpaid.

## Hint

- Select Premium, Business, and Enterprise on the *PivotTable* by holding Ctrl and clicking on their *Row Labels*
- Then right click and select *Group*. This should create two groups.
- Rename the groups by clicking into the row headers and typing Paid and Unpaid.

2.

Rename Subscription Type2 to Paid Category.

## Hint

- Open the Field List in the PivotTable Analyze ribbon.
- Locate Subscription Type2 in the Rows of the PivotTable Fields, then click on it and select Value Field Settings.
- Type Paid Category in the Custom Name box.

Great! Let's take this a bit further by segmenting our data into groups by Licenses Bought to see if there are any trends.

In the PivotTable display all the data for Licenses Bought by rows.

#### Hint

- Open the Field List in the PivotTable Analyze ribbon.
- Click and drag Sum of Licenses Bought from the Values section to the Rows section.

4.

Clean up the *PivotTable*:

- Remove Average of Sales Amount from the PivotTable Fields.
- Remove Sum of Sales per Sub from the PivotTable Fields.

#### Hint

Open the Field List in the PivotTable Analyze ribbon.

- Right click on any of the bucket values of Licenses Bought on the PivotTable and click Subtotal Licenses Bought.
- Click on Average of Sales Amount and select *Remove*.
- Click on Sum of Sales per Sub and select Remove.

5.

Create buckets for Licenses Bought by groups of 25 from 0 to 600.

## Hint

Right click any of the number values of Licenses Bought on the *PivotTable* and select *Group*.

Make sure to check both boxes. The settings should be:

Starting at: 0Ending at: 600

By: 25

6.

Rearrange the Rows so that Licenses Bought is between Paid Category and Subscription Type.

## Hint

Click and drag Licenses Bought in the Rows section so that the order is:

- 1. Paid Category
- 2. Licenses Bought
- 3. Subscription Type

7.

What is the total sales amount of the Enterprise for the 25-49 bucket? Round to the nearest dollar. 4110.

# Slicing data in PivotTables

1.

In the PivotTable Analyze ribbon bar, you will find the Filter section.

Insert a Slicer on the PivotTable of Subscription Type and filter for Business and Premium subscription types.

#### Hint

- 1. Select the PivotTable Analyze ribbon bar
- 2. Under the Filter section select Insert Slicer
- 3. Then select Subscription Type
- 4. Then click OK
- 5. Hold Ctrl and click on Business and Premium on the Slicer options so they are highlighted.

2.

Add Sales Month to the Columns section.

#### Hint

Open the Field List in the PivotTable Analyze ribbon. Then drag Sales Month from the Field List to Columns section.

3.

Adding dates usually causes the *PivotTables* to automatically create groups.

Remove Months (Sales Month), Quarters (Sales Month), and Years (Sales Month) from the PivotTable.

## Hint

- In the *Columns* section, there will be four variables showing.
- Remove Months (Sales Month), Quarters (Sales Month), and Months (Sales Month) from the Columns section by dragging them out of the area.

4.

Within the Filter section, you also have the option to add Timeline slicers, as well as general slicers.

Insert a Timeline slicer to the PivotTable on Sales Month.

## Hint

- 1. Select the PivotTable Analyze ribbon bar
- 2. Under the Filter section select Insert Timeline
- 3. Then select Sales Month
- 4. Then click OK

5.

Change the *Timeline* slicer to filter by quarters and filter for 2021 Q2.

# Hint

- 1. Click on the *Timeline* dropdown menu and select *Quarters*.
- 2. Then click on Q2 under 2021.

6.

Which bucket of licenses bought of saw a decrease in Sales between 5/1/2021 and 6/1/2021?

- 0-24
- 25-49
- 50-74