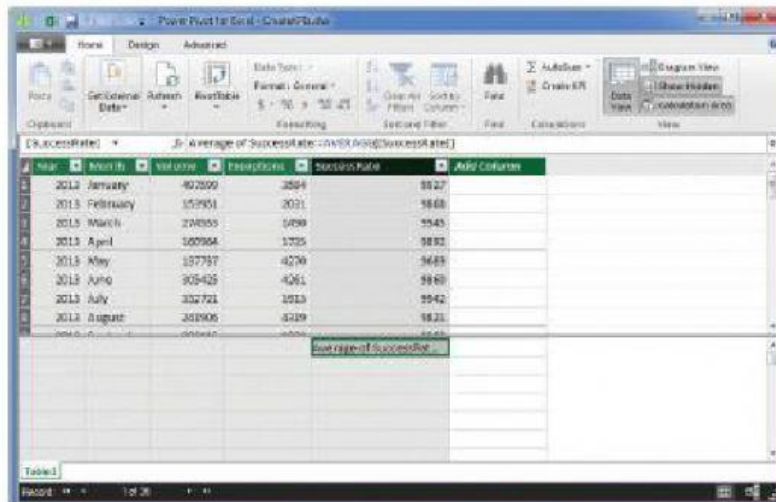


Lesson 2 Define and Manage Measures

You can use Power Pivot to analyse huge data collections that include millions or even hundreds of millions of rows of values. Although the details are important, it's also valuable to examine your data in aggregate. This type of aggregate summary, such as the average of values in a column. It is called a **measure**.



The screenshot shows the Power Pivot for Excel window. The PivotTable has the following data:

Year	Month	Value	Measure	Measure
2012	January	102000	2004	10.27
2013	February	153901	2031	10.68
2013	March	204055	1490	10.45
2013	April	100964	1725	10.32
2013	May	137797	4270	10.65
2013	June	905425	4261	10.69
2013	July	332721	1013	10.42
2013	August	248906	4289	10.21

Below the PivotTable, there is a section for 'Measures' with the formula: `=AVERAGE([Value])`.

Measures summarize columns of data in Power Pivot

There are two main ways to define a measure in Power Pivot. The first is to use a version of AutoSum, which calculates a sum, average, median, or other summary of a Power Pivot column.

The other method is to create a calculated column manually. Regardless of the technique you use to create your measure, you can always edit it or delete it if necessary.

To create a measure by using AutoSum.

1. Open a workbook in which you have added at least one Excel table to the Excel Data Model.
2. On the **Power Pivot** tab of the ribbon, in the **Data Model** group, click **manage** to display the **Power Pivot for Excel** window.
3. If necessary, in **Power Pivot**, on the **Home** tab of the ribbon, in the **View** group, click the **Calculations Area** button to display the **Calculation Area** of the grid.
4. In the **Calculation Area**, click the first cell below the column on which you want to base your measure.
5. On the **Home** tab, in the **Calculation** group, do either of the following:
 - . Click the **AutoSum** button to create a measure by using the **SUM** function
 - . Click the **AutoSum** arrow, and then click the function you want in the list.

To create a calculated column

1. In the **Power Pivot for Excel** window, display an **Excel** table that is part of the **Data Model**.
2. Click the first blank cell in the **Add Column** column.
3. **Enter** = followed by the formula.



Tip

To refer to fields in the Excel table, enclose the name in square brackets; for example, `[Exceptions]`.

To edit a measure

1. Open a workbook to which you have added at least one measure as the **Data Model**.
2. If necessary, in **Power Pivot**, click the **Calculation Area** button to display the **Calculation Area** of the grid.
3. Click the cell that contains the measure, and then, in the formula bar, change the text of the measure's formula.
4. Press **Enter**.

To delete a measure

1. Open a workbook in which you have added at least one measure in the Data Model.
2. If necessary, in Power Pivot, click the calculation Area button to display the Calculation Area of the grid.
3. Click the cell that contains the measure, and press **Delete**.
4. In the Confirm dialog box, click **Delete from Model**.

Questions

1. How do you create a measure by using AutoSum?
2. How do you create a calculated column manually?

3. How do you edit and delete a measure?