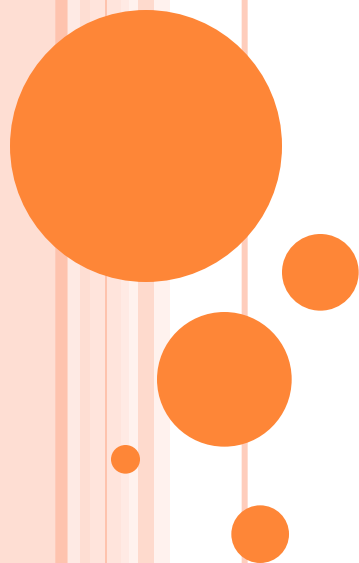# Getting Started
with

Pivot Tables in
MS Excel 2010

Pivot tables are used to summarize, analyze, explore and present data. It is a useful tool to extract data from a large pile of information and present it in a more meaningful and user friendly, understandable format.
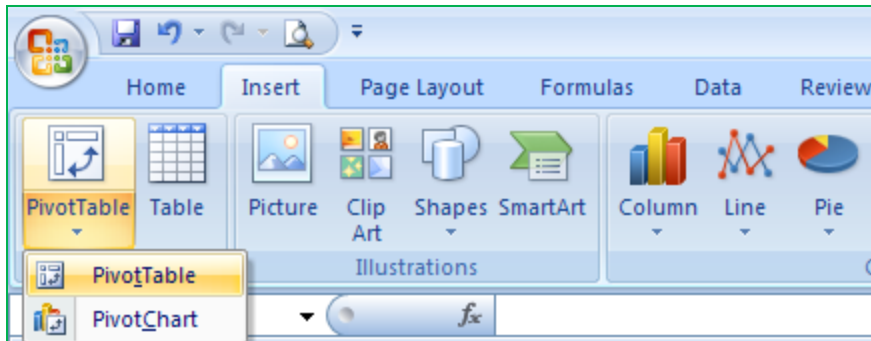
For the purpose of this tutorial, we will use data on the sales figures of a few popular automobile manufacturers. The table below displays the number of cars sold by model and manufacturer across 5 continents.

Manufacturer	Model	Sales in units				
		Asia	Australia	Europe	North America	South America
Audi	A3	25,000	40,000	30,000	42,000	34,000
Audi	A4	18,000	33,000	23,000	35,000	27,000
Audi	A6	14,000	29,000	19,000	31,000	23,000
Audi	A8	17,000	32,000	22,000	34,000	26,000
BMW	3 Series	18,000	33,000	23,000	35,000	27,000
BMW	5 Series	32,000	47,000	37,000	49,000	41,000
BMW	6 Series	18,000	33,000	23,000	35,000	27,000
BMW	7 Series	17,000	32,000	22,000	34,000	26,000
Chevrolet	Corvette	14,000	29,000	19,000	31,000	23,000
Chevrolet	Cruze	17,000	32,000	22,000	34,000	26,000
Chevrolet	Malibu	37,000	52,000	42,000	54,000	46,000
Chevrolet	Monte Carlo	39,000	54,000	44,000	56,000	48,000
Ford	Fusion	32,000	47,000	37,000	49,000	41,000
Ford	Focus	37,000	52,000	42,000	54,000	46,000
Ford	Edge	17,000	32,000	22,000	34,000	26,000
Ford	Escape	39,000	54,000	44,000	56,000	48,000
Honda	Civic	43,000	58,000	48,000	60,000	52,000
Honda	Accord	37,000	52,000	42,000	54,000	46,000
Honda	Fit	17,000	32,000	22,000	34,000	26,000
Honda	Odyssey	37,000	52,000	42,000	54,000	46,000
Hyundai	Accent	39,000	54,000	44,000	56,000	48,000
Hyundai	Elantra	14,000	29,000	19,000	31,000	23,000
Hyundai	Sonata	17,000	32,000	22,000	34,000	26,000
Hyundai	Genesis	18,000	33,000	23,000	35,000	27,000
Mercedes-Benz	A Class	17,000	32,000	22,000	34,000	26,000
Mercedes-Benz	C Class	14,000	29,000	19,000	31,000	23,000
Mercedes-Benz	E Class	17,000	32,000	22,000	34,000	26,000
Mercedes-Benz	S Class	18,000	33,000	23,000	35,000	27,000
Toyota	Corolla	37,000	52,000	42,000	54,000	46,000
Toyota	Camry	14,000	29,000	19,000	31,000	23,000
Toyota	Matrix	17,000	32,000	22,000	34,000	26,000
Toyota	Sienna	18,000	33,000	23,000	35,000	27,000

Step 1: Insert the Pivot Table by going to the Insert tab and then by clicking the Pivot Table icon.

Step 2: Select the Table / Range for the data you want summarized and then select the Worksheet where you want to place the pivot table. For this tutorial, select the New Worksheet option.

Manufacturer	Model	Sales in units				
		Asia	Australia	Europe	North America	South America
Audi	A3	25,000	40,000	30,000	42,000	34,000
Audi	A4	18,000	33,000	23,000	35,000	27,000
Audi	A6	14,000	29,000	19,000	31,000	23,000
Audi	A8	17,000	32,000	22,000	34,000	26,000
BMW	3 Series	18,000	33,000	23,000	35,000	27,000
BMW	5 Series	32,000	47,000	37,000	49,000	41,000
BMW	6 Series	18,000	33,000	23,000	35,000	27,000
BMW	7 Series	17,000	32,000	22,000	34,000	26,000
Chevrolet	Corvette	14,000	29,000	19,000	31,000	23,000
Chevrolet	Cruze	17,000	32,000	22,000	34,000	26,000
Chevrolet	Malibu	37,000	52,000	42,000	54,000	46,000
Chevrolet	Monte Carlo	39,000	54,000	44,000	56,000	48,000
Ford	Fusion	32,000	47,000	37,000	49,000	41,000
Ford	Focus	37,000	52,000	42,000	54,000	46,000
Ford					34,000	26,000
Ford					56,000	48,000
Honda					60,000	52,000
Honda					54,000	46,000
Honda					34,000	26,000
Honda					54,000	46,000
Hyundai					56,000	48,000
Hyundai					31,000	23,000
Hyundai					34,000	26,000
Hyundai					35,000	27,000
Mercedes					34,000	26,000
Mercedes					31,000	23,000
Mercedes					34,000	26,000
Mercedes					35,000	27,000
Toyota	Corolla	37,000	52,000	42,000	54,000	46,000
Toyota	Camry	14,000	29,000	19,000	31,000	23,000
Toyota	Matrix	17,000	32,000	22,000	34,000	26,000
Toyota	Sienna	18,000	33,000	23,000	35,000	27,000

Create PivotTable

Choose the data that you want to analyze

- ● Select a table or range
  - Table/Range: Sheet1!$A$2:$G$34
- ○ Use an external data source
  - Choose Connection...
  - Connection name:

Choose where you want the PivotTable report to be placed

- ● New Worksheet
- ○ Existing Worksheet
  - Location:

OK   Cancel

The new worksheet will open with the pivot table that you just created. You can now generate the report and perform various operations on this table for better visualization and presentation of data.

Step 3: Use the <u>Pivot Table Field list</u> to select the components of your report. You can drag & drop the field names from the list as shown below to develop the structure of your report.

Model	(All) ▼		
	Data		
Manufacturer ▼	Sum of Asia	Sum of North America	Sum of South America
Audi	74000	142000	110000
BMW	85000	153000	121000
Chevrolet	107000	175000	143000
Ford	125000	193000	161000
Honda	134000	202000	170000
Hyundai	88000	156000	124000
Mercedes-Benz	66000	134000	102000
Toyota	86000	154000	122000
Grand Total	765000	1309000	1053000

PivotTable Field List

Choose fields to add to report:
- ☑ Manufacturer
- ☑ Model
- ☑ Asia
- ☐ Australia
- ☐ Europe
- ☑ North America
- ☑ South America

Drag fields between areas below:

▼ Report Filter
- Model ▼

▦ Column Labels
- Σ Values ▼

▦ Row Labels
- Manufacturer ▼

Σ Values
- Sum of Asia ▼
- Sum of North ... ▼
- Sum of South ... ▼

☐ Defer Layout Update   Update

Value Field Settings

Source Name: Asia

Custom Name: Sum of Asia

Summarize by | Show values as

Summarize value field by

Choose the type of calculation that you want to use to summarize the data from selected field

- Sum
- Count
- Average
- Max
- Min
- Product

Number Format   OK   Cancel

You can change the data summary to sum (as shown above) or Count, Average, Max, Min, Product. This feature enables you to perform various mathematical calculations on the data.

By selecting the fields that I needed, I was able to arrive at a summary of sales in Australia for selected models as shown below. In this way, you can also arrive at other mathematical summaries by selecting the value types that is most useful to you

Drop Page Fields Here

Sum of Australia	Model								
Manufacturer	6 Series	A3	Camry	E Class	Fit	Focus	Monte Carlo	Sonata	Grand Total
Audi		40000							40000
BMW	33000								33000
Chevrolet							54000		54000
Ford						52000			52000
Honda					32000				32000
Hyundai								32000	32000
Mercedes-Benz				32000					32000
Toyota			29000						29000
Grand Total	33000	40000	29000	32000	32000	52000	54000	32000	304000

PivotTable Field List

Choose fields to add to report:

☑ **Manufacturer**
☑ **Model**
☐ Asia
☑ **Australia**
☐ Europe
☐ North America
☐ South America

Drag fields between areas below:

▽ Report Filter   ▦ Column Labels
         Model ▼

▦ Row Labels   Σ Values
Manufacturer ▼   Sum of Australia ▼

☐ Defer Layout Update   Update

Enjoy the gains in efficiency
by using

Pivot Tables!