

## Chapter 9: Pivot Tables



### Objectives:

This chapter would help you learn how to

- Create Pivot Tables.
- Make different reports using Pivot Tables.
- Use advanced features of Pivot Tables.

A **Pivot Table** is an interactive worksheet based table that quickly summarizes large amounts of data using the format and calculation methods you choose. It is called a Pivot Table because you can rotate its row and column headings around the core data area to give you different views of the source data. As source data changes, you can update a pivot table. It resides on a worksheet thus; you can integrate a Pivot Table into a larger worksheet model using standard formulas. You can use a PivotTable to analyze data in an Excel workbook or from an external database such as Microsoft Access or SQL Server.

## Examining PivotTables

The data on which a PivotTable is based is called the Source Data. Each column represents a field or category of information, which you can assign to different parts of the PivotTable to determine how the data is arranged. You can add four types of fields, as shown in **figure 9.1**. The fields are explained in the following table:

Field	Description
Report Filter	Filters the summarized data in the PivotTable. If you select an item in the report filter, the view of the PivotTable changes to display only the summarized data associated with that item. For example, if Region is a report filter, you can display the summarized data for North, West, or all regions.
Row Labels	Displays the items in a field as row labels. For example given below, the row labels are values in the Quarter field, which means that the table shows one row for each quarter.
Column Labels	Displays the items in a field as column labels. For example, given below, the column labels are values in the Product field, which means that the table shows one column for each product.
Σ Values	Contains the summarized data. These fields usually contain numeric data, such as sales and inventory. The area where the data itself appears is called the data area.

- 1) Select any cell in a data range that includes a heading for each column in the top row.
- 2) Activate the Insert tab.
- 3) In the Tables group, click the PivotTable button, or click the PivotTable list and select PivotTable to open the Create PivotTable dialog box.
- 4) In the Table/Range box, select the range that contains the data to be used in the PivotTable.
- 5) Select the location for the PivotTable. You can place the PivotTable in a new or existing worksheet. Click OK to create the PivotTable

## Add fields

You can add fields to a PivotTable to specify the data you want to display.

The fields of the source data appears in the "PivotTable Field List" task pane. To add fields, drag the relevant field from the top of the PivotTable Field List to one of the four areas at the bottom. You can add more than one field to an area, and you do not need to add all fields to the table. To display data and not just headings, you need to place at least one field in the  $\Sigma$  Values area. After the fields are in place, you can filter the information that appears in the table by selecting from the Filter columns, Filter rows, or report filter lists. For example, you can show all data values, or restrict the PivotTable to summarizing only a couple of them.

## Recommended Pivot Table

Check the recommendation for pivot as well. Select the database and go to insert tab, click on Recommended Pivot table options

Or simply select the data to create pivot table, click on button at bottom right corner and select table option to create pivot report as below,

You can change field settings to alter how data appears or is summarized in a PivotTable. To change field settings:

- 1) Activate option Tab.
- 2) Click on the Field setting From Activate Field Group.
- 3) Form the Given dialog box change the custom name to % of Salary.
- 4) Select the Tab Show vales as and from the drop down select the % of Total.

## Top/ Bottom Report

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- 1) Select the Field on the Pivot.
- 2) Select Value Filters and Select Top 10.
- 3) Apply the condition according to your requirement.

## Group Items in a PivotTable

If you want to generate a report on Year wise Quarter wise based on existing data you have for such scenario you can use Group Option in Pivot Table.

- 1) Select any cell in a data range.
- 2) Activate the Option tab.
- 3) Click on Group Field
- 4) In the "By" box, click one or more time periods for the groups.

If you have grouping on date field, you can group items by weeks, click Days in the "By" box, make sure Days is the only time period selected, and then click 7 in the Number of days box. You can then click additional time periods to group by, such as Month, if you want.

Create a chart from data in a PivotTable report.

## Create a Graph using Pivot Data

You can use a PivotChart to graphically display data from a PivotTable. A single PivotChart provides different views of the same data. When you create a PivotChart, the row fields of the PivotTable become the categories, and the column fields become the series.

To create a PivotChart, select any cell within a PivotTable, and click Chart in the Tools group on the Options tab. Select options for the chart as you would a standard chart, then click OK. You can also create a new PivotChart and PivotTable at the same time by selecting a cell in the source data, and selecting PivotChart from the PivotTable list in the Tables group on the Insert tab.

**Figure 9.18** shows a pivot table for region wise department wise sum of salary and pivot chart created from it.

**Tips:** Click anywhere inside the pivot table and press **alt F1** Key combination to create a pivot chart. **F11** creates the chart on a new sheet.

## Slicer

Slicers are easy-to-use filtering components that contain a set of buttons that enable you to quickly filter the data in a PivotTable report, without the need to open drop-down lists to find the items that you want to filter.

When you use a regular PivotTable report filter to filter on multiple items, the filter indicates only that multiple items are filtered, and you have to open a drop-down list to find the filtering details. However, a slicer clearly labels the filter that is applied and provides details so that you can easily understand the data that is displayed in the filtered PivotTable report.

## Timeline

Instead of playing around with filters to show dates, you can now use a PivotTable timeline. It's a box you can add to your PivotTable that lets you filter by time, and zoom in on the period you want. Click Analyze > Insert Timeline to call it up.