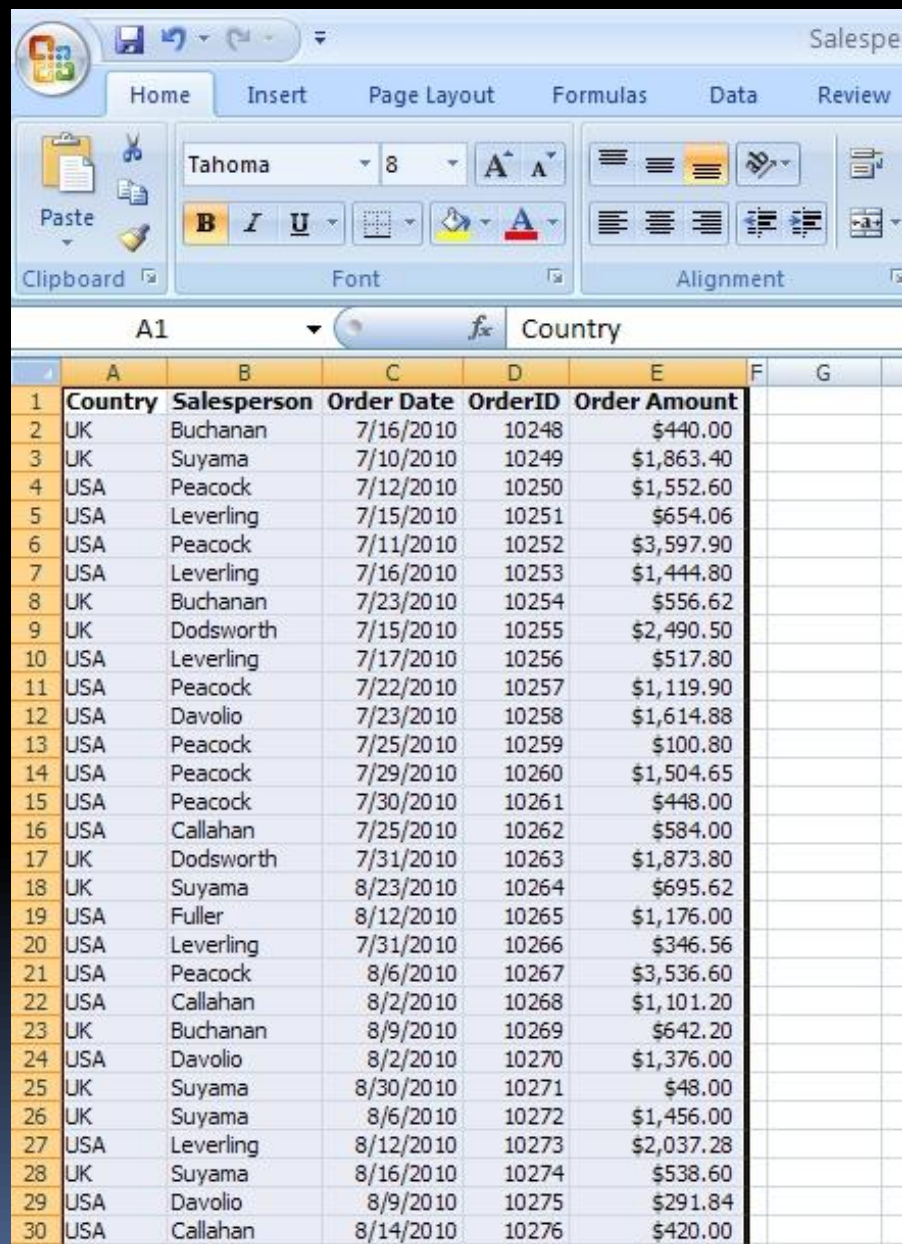


Select Data

Select the data to be included in the Pivot Chart

Tip: To select large amount of data use:
CTRL-SHIFT-*



The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The ribbon includes 'Clipboard', 'Font', and 'Alignment' groups. The active cell is A1, which contains the text 'Country'. The data table is selected from row 1 to row 30. The table has the following columns: Country, Salesperson, Order Date, OrderID, and Order Amount. The data is as follows:

	A	B	C	D	E	F	G
1	Country	Salesperson	Order Date	OrderID	Order Amount		
2	UK	Buchanan	7/16/2010	10248	\$440.00		
3	UK	Suyama	7/10/2010	10249	\$1,863.40		
4	USA	Peacock	7/12/2010	10250	\$1,552.60		
5	USA	Leverling	7/15/2010	10251	\$654.06		
6	USA	Peacock	7/11/2010	10252	\$3,597.90		
7	USA	Leverling	7/16/2010	10253	\$1,444.80		
8	UK	Buchanan	7/23/2010	10254	\$556.62		
9	UK	Dodsworth	7/15/2010	10255	\$2,490.50		
10	USA	Leverling	7/17/2010	10256	\$517.80		
11	USA	Peacock	7/22/2010	10257	\$1,119.90		
12	USA	Davolio	7/23/2010	10258	\$1,614.88		
13	USA	Peacock	7/25/2010	10259	\$100.80		
14	USA	Peacock	7/29/2010	10260	\$1,504.65		
15	USA	Peacock	7/30/2010	10261	\$448.00		
16	USA	Callahan	7/25/2010	10262	\$584.00		
17	UK	Dodsworth	7/31/2010	10263	\$1,873.80		
18	UK	Suyama	8/23/2010	10264	\$695.62		
19	USA	Fuller	8/12/2010	10265	\$1,176.00		
20	USA	Leverling	7/31/2010	10266	\$346.56		
21	USA	Peacock	8/6/2010	10267	\$3,536.60		
22	USA	Callahan	8/2/2010	10268	\$1,101.20		
23	UK	Buchanan	8/9/2010	10269	\$642.20		
24	USA	Davolio	8/2/2010	10270	\$1,376.00		
25	UK	Suyama	8/30/2010	10271	\$48.00		
26	UK	Suyama	8/6/2010	10272	\$1,456.00		
27	USA	Leverling	8/12/2010	10273	\$2,037.28		
28	UK	Suyama	8/16/2010	10274	\$538.60		
29	USA	Davolio	8/9/2010	10275	\$291.84		
30	USA	Callahan	8/14/2010	10276	\$420.00		

Click on the Insert tab

The insert Tab contains the PivotTable button

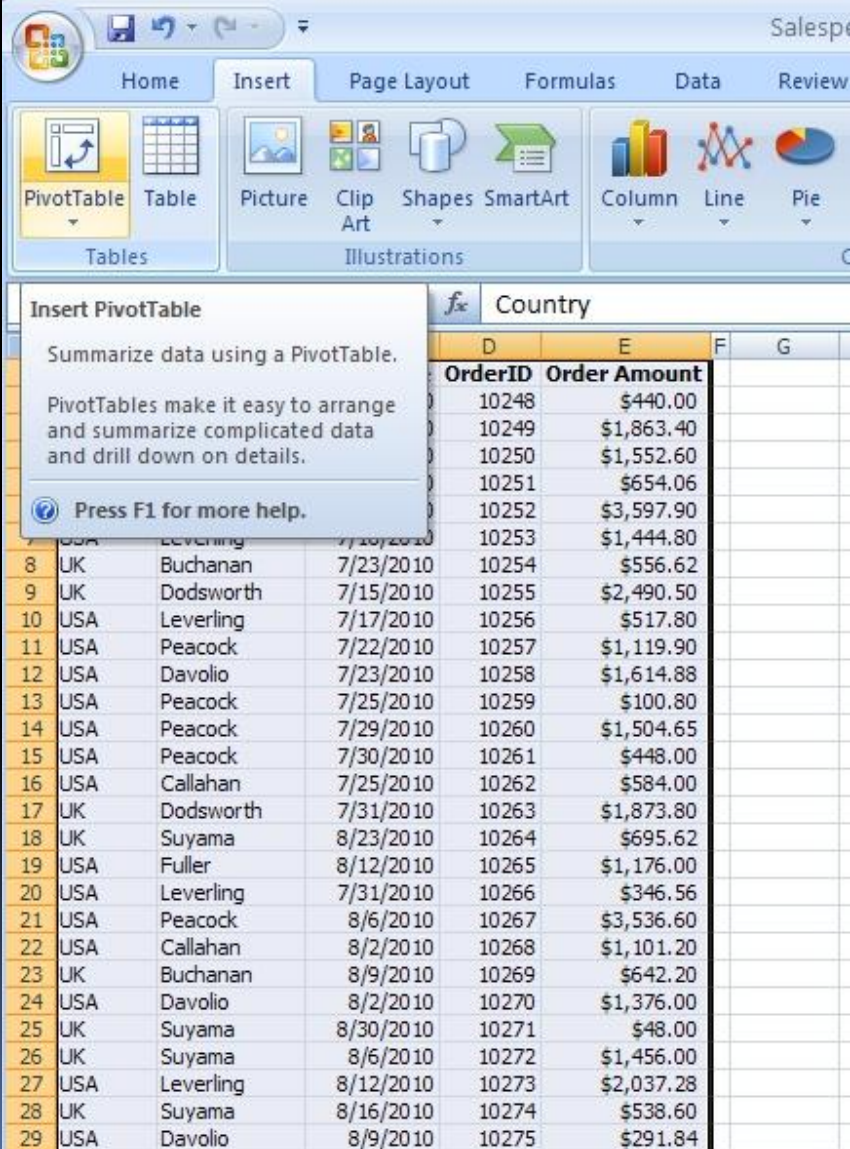


The screenshot shows the Microsoft Excel interface with the 'Insert' tab selected. The ribbon includes buttons for PivotTable, Table, Picture, Clip Art, Shapes, SmartArt, Column, Line, and Pie. Below the ribbon, a data table is visible with columns for Country, Salesperson, Order Date, OrderID, and Order Amount. The table contains 30 rows of data.

	A	B	C	D	E	F	G
	Country	Salesperson	Order Date	OrderID	Order Amount		
1	UK	Buchanan	7/16/2010	10248	\$440.00		
2	UK	Suyama	7/10/2010	10249	\$1,863.40		
3	USA	Peacock	7/12/2010	10250	\$1,552.60		
4	USA	Leverling	7/15/2010	10251	\$654.06		
5	USA	Peacock	7/11/2010	10252	\$3,597.90		
6	USA	Leverling	7/16/2010	10253	\$1,444.80		
7	UK	Buchanan	7/23/2010	10254	\$556.62		
8	UK	Dodsworth	7/15/2010	10255	\$2,490.50		
9	USA	Leverling	7/17/2010	10256	\$517.80		
10	USA	Peacock	7/22/2010	10257	\$1,119.90		
11	USA	Davolio	7/23/2010	10258	\$1,614.88		
12	USA	Peacock	7/25/2010	10259	\$100.80		
13	USA	Peacock	7/29/2010	10260	\$1,504.65		
14	USA	Peacock	7/30/2010	10261	\$448.00		
15	USA	Callahan	7/25/2010	10262	\$584.00		
16	UK	Dodsworth	7/31/2010	10263	\$1,873.80		
17	UK	Suyama	8/23/2010	10264	\$695.62		
18	USA	Fuller	8/12/2010	10265	\$1,176.00		
19	USA	Leverling	7/31/2010	10266	\$346.56		
20	USA	Peacock	8/6/2010	10267	\$3,536.60		
21	USA	Callahan	8/2/2010	10268	\$1,101.20		
22	UK	Buchanan	8/9/2010	10269	\$642.20		
23	USA	Davolio	8/2/2010	10270	\$1,376.00		
24	UK	Suyama	8/30/2010	10271	\$48.00		
25	UK	Suyama	8/6/2010	10272	\$1,456.00		
26	USA	Leverling	8/12/2010	10273	\$2,037.28		
27	UK	Suyama	8/16/2010	10274	\$538.60		
28	USA	Davolio	8/9/2010	10275	\$291.84		
29	USA	Callahan	8/14/2010	10276	\$420.00		
30							

Click on PivotTable (Ribbon)

PivotTable summarize data in a flexible manner allowing also the generation of charts as soon as the PivotTable is completed

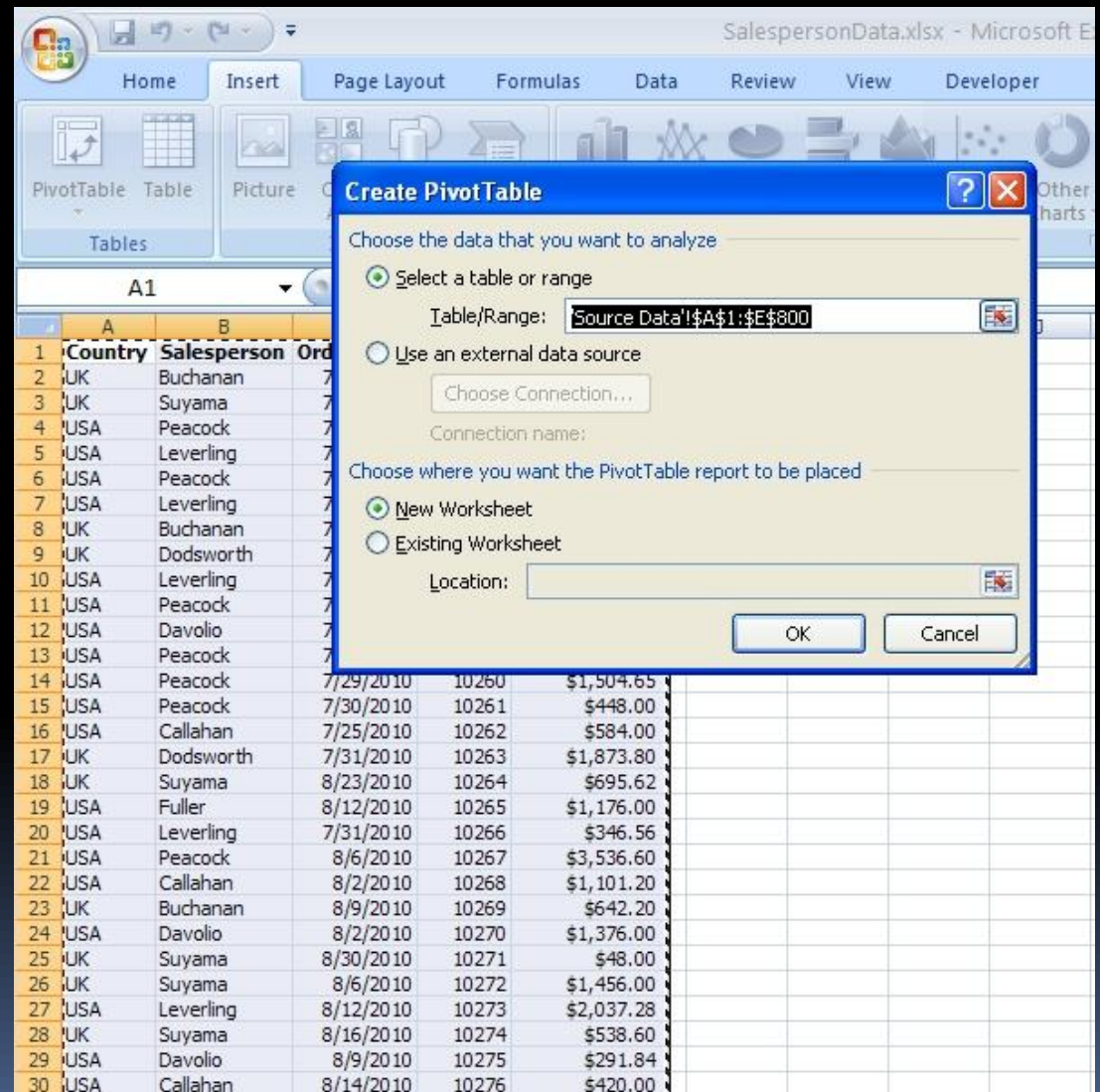


The screenshot shows the Microsoft Excel interface with the 'Insert' ribbon selected. The 'PivotTable' button is highlighted in the 'Tables' group. An 'Insert PivotTable' task pane is open, providing instructions on how to use PivotTables. The background data table is visible, showing columns for Country, OrderID, and Order Amount.

Country	OrderID	Order Amount
USA	10248	\$440.00
UK	10249	\$1,863.40
USA	10250	\$1,552.60
USA	10251	\$654.06
USA	10252	\$3,597.90
USA	10253	\$1,444.80
UK	10254	\$556.62
UK	10255	\$2,490.50
USA	10256	\$517.80
USA	10257	\$1,119.90
USA	10258	\$1,614.88
USA	10259	\$100.80
USA	10260	\$1,504.65
USA	10261	\$448.00
USA	10262	\$584.00
UK	10263	\$1,873.80
UK	10264	\$695.62
USA	10265	\$1,176.00
USA	10266	\$346.56
USA	10267	\$3,536.60
USA	10268	\$1,101.20
UK	10269	\$642.20
USA	10270	\$1,376.00
UK	10271	\$48.00
UK	10272	\$1,456.00
USA	10273	\$2,037.28
UK	10274	\$538.60
USA	10275	\$291.84

Create PivotTable window

The Create PivotTable window pop up after clicking on the Pivot Table button



PivotTable window (details)

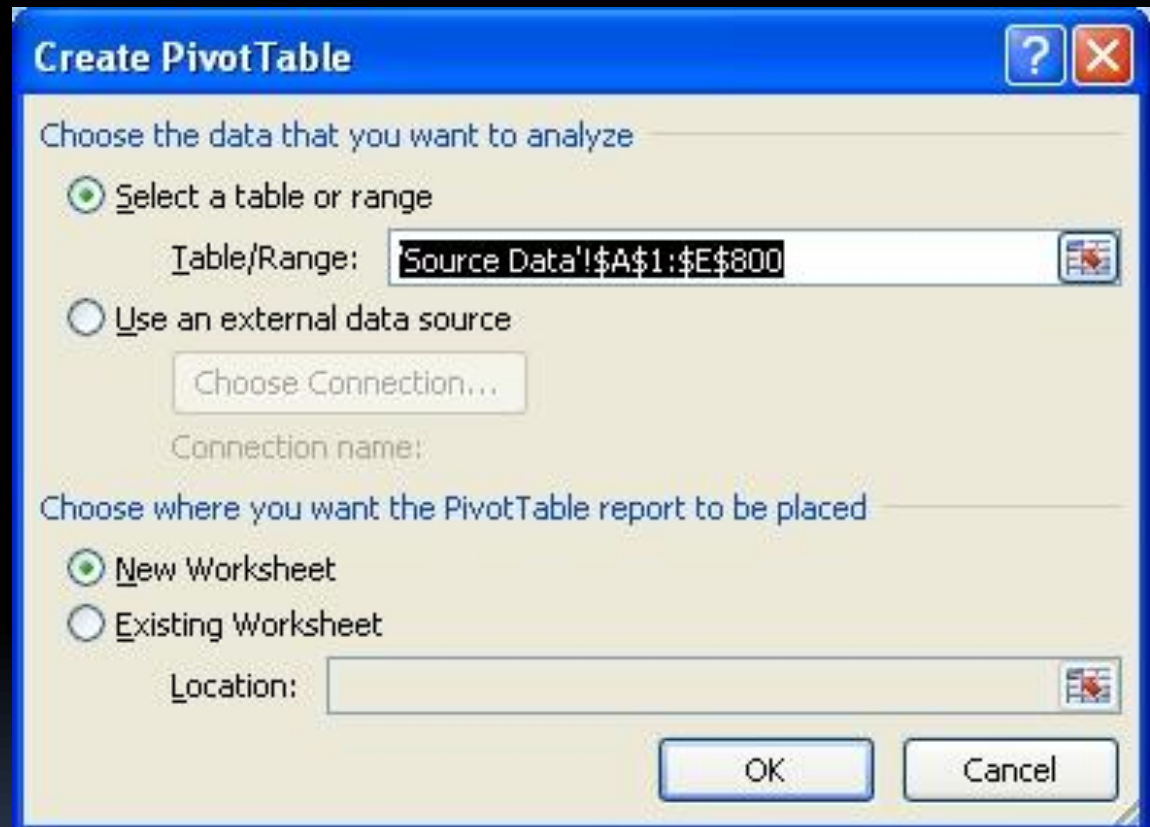
Data to be analyzed:

- Table/Range
- External data source

In most cases we will use the Table/Range option. No change needs to be made since the data was selected at the beginning of the process

Placement of the PivotTable:

In most cases the default choice will suffice since it is convenient to place the PivotTable in a new worksheet



The screenshot shows the 'Create PivotTable' dialog box with a blue title bar and standard window controls. The dialog is divided into two main sections. The first section, 'Choose the data that you want to analyze', has the 'Select a table or range' radio button selected. The 'Table/Range' text box contains the formula 'Source Data!\$A\$1:\$E\$800'. The second section, 'Choose where you want the PivotTable report to be placed', has the 'New Worksheet' radio button selected. The 'Location' text box is empty. At the bottom are 'OK' and 'Cancel' buttons.

Create PivotTable

Choose the data that you want to analyze

☒ Select a table or range

Table/Range: Source Data!\$A\$1:\$E\$800

☐ 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

PivotTable screen

The screenshot displays the Microsoft Excel interface with the PivotTable Tools ribbon active. The PivotTable Name is "PivotTable1". The Active Field is empty. The PivotTable Field List task pane is open on the right, showing the following fields to be added to the report:

- ☐ Country
- ☐ Salesperson
- ☐ Order Date
- ☐ OrderID
- ☐ Order Amount

Below the field list, there are four areas for dragging fields:

- Report Filter
- Column Labels
- Row Labels
- Values

The "Defer Layout Update" checkbox is unchecked, and the "Update" button is visible at the bottom right of the task pane.

Select 2nd field (Order Date)

Notice the dates (all of them are listed!)

The screenshot displays the Microsoft Excel interface with a PivotTable and the PivotTable Field List task pane.

PivotTable:

- PivotTable Name:** PivotTable1
- Active Field:** Country
- Field Settings:** Field Settings
- Group Selection:** Group Selection, Ungroup, Group Field
- Sort:** Sort (A-Z, Z-A)
- Data:** Refresh, Change Data Source
- Actions:** Clear, Select, Move PivotTable
- Tools:** PivotChart, Formulas, OLAP tools
- Show/Hide:** Field List, +/- Buttons, Field Headers

PivotTable Field List:

- Choose fields to add to report:**
 - ☒ Country
 - ☐ Salesperson
 - ☒ Order Date
 - ☐ OrderID
 - ☐ Order Amount
- Drag fields between areas below:**
 - Report Filter:** (Empty)
 - Column Labels:** (Empty)
 - Row Labels:** Country
 - Values:** Order Date

Worksheet Data:

Row Labels	UK
7/10/2010	
7/15/2010	
7/16/2010	
7/23/2010	
7/31/2010	
8/6/2010	
8/9/2010	
8/16/2010	
8/23/2010	
8/28/2010	
8/30/2010	
9/4/2010	
9/10/2010	
9/11/2010	
9/18/2010	
9/24/2010	
10/10/2010	
10/11/2010	
10/18/2010	
10/21/2010	
10/23/2010	
10/24/2010	
10/25/2010	
11/5/2010	
11/15/2010	
11/20/2010	
11/25/2010	
11/26/2010	
11/27/2010	
12/2/2010	

Select 3rd field (Salesperson)

The screenshot shows Microsoft Excel with a PivotTable named 'PivotTable1' in the 'SalespersonData.xlsx' file. The PivotTable is located in the range A3:L24. The PivotTable Fields task pane is open on the right, showing the following fields:

- ☒ Country
- ☒ Salesperson
- ☒ Order Date
- ☐ OrderID
- ☐ Order Amount

The PivotTable data is as follows:

Row Labels	
UK	
7/10/2010	Suyama
7/15/2010	Dodsworth
7/16/2010	Buchanan
7/23/2010	Buchanan
7/31/2010	Dodsworth
8/6/2010	Suyama
8/9/2010	Buchanan
8/16/2010	Suyama
8/23/2010	Suyama
8/28/2010	King

Select 4th field (Order Amount)

SalespersonData.xlsx - Microsoft Excel

PivotTable Tools: Options, Design

PivotTable Name: PivotTable1
Active Field: Country
Field Settings: Field Headers

Group Selection: Group, Ungroup, Group Field
Sort: Sort
Data: Refresh, Change Data Source
Actions: Clear, Select, Move PivotTable
Tools: PivotChart, Formulas, OLAP tools

Field List: Field List, +/- Buttons, Field Headers, Show/Hide

Row Labels

Row Labels	Sum of Order Amount
UK	333330.91
7/10/2010	1863.4
Suyama	1863.4
7/15/2010	2490.5
Dodsworth	2490.5
7/16/2010	440
Buchanan	440
7/23/2010	556.62
Buchanan	556.62
7/31/2010	1873.8
Dodsworth	1873.8
8/6/2010	1456
Suyama	1456
8/9/2010	642.2
Buchanan	642.2
8/16/2010	538.6
Suyama	538.6
8/23/2010	695.62
Suyama	695.62
8/28/2010	479.4
King	479.4
8/30/2010	48

PivotTable Field List

Choose fields to add to report:

- ☒ Country
- ☒ Salesperson
- ☒ Order Date
- ☐ OrderID
- ☒ Order Amount

Drag fields between areas below:

Report Filter:

Column Labels:

Grouping the Dates

This will solve the problem of the dates being in raw format

SalespersonData.xlsx - Microsoft Excel

PivotTable Tools: Options, Design

PivotTable Name: PivotTable1

Active Field: Order Date

Field Settings: Field Headers

Group Selection, Ungroup, Group Field, Sort, Refresh, Change Data Source, Clear, Select, Move PivotTable, PivotChart, Formulas, OLAP tools, Field List, +/- Buttons, Field Headers, Show/Hide

Row Labels: Sum of Order Amount

Row Labels	Sum of Order Amount
UK	333330.91
7/10/2010	1863.4
Suyama	1863.4
7/15/2010	2490.5
Dodsworth	2490.5
7/16/2010	440
Buchanan	440
7/23/2010	556.62
Buchanan	556.62
7/31/2010	1873.8
Dodsworth	1873.8
8/6/2010	1456
Suyama	1456
8/9/2010	642.2
Buchanan	642.2
8/16/2010	538.6
Suyama	538.6
8/23/2010	695.62
Suyama	695.62
8/28/2010	479.4
King	479.4
8/30/2010	48
Suyama	48
9/4/2010	497.52
Suyama	497.52
9/10/2010	1430

PivotTable Field List

Choose fields to add to report:

- ☒ Country
- ☒ Salesperson
- ☒ Order Date
- ☐ OrderID
- ☒ Order Amount

Drag fields between areas below:

Report Filter: [Empty]

Column Labels: [Empty]

Grouping the Dates

Select any date !

PivotTable Name: PivotTable1

Active Field: Order Date

Group Selection: Group Selection, Ungroup, Group Field

Sort: Sort, Refresh, Change Data Source

Actions: Clear, Select, Move PivotTable

Tools: PivotChart, Formulas, OLAP tools

Show/Hide: Field List, +/- Buttons, Field Headers

Row Labels	Sum of Order Amount
UK	333330.91
7/10/2010	1863.4
Suyama 7/10/2010 (Order Date)	1863.4
7/15/2010	490.5
Dodsworth	2490.5
7/16/2010	440
Buchanan	440
7/23/2010	556.62
Buchanan	556.62
7/31/2010	1873.8
Dodsworth	1873.8
8/6/2010	1456
Suyama	1456
8/9/2010	642.2
Buchanan	642.2
8/16/2010	538.6
Suyama	538.6
8/23/2010	695.62
Suyama	695.62
8/28/2010	479.4
King	479.4
8/30/2010	48
Suyama	48
9/4/2010	497.52
Suyama	497.52

PivotTable Field List

Choose fields to add to report:

- ☒ Country
- ☒ Salesperson
- ☒ Order Date
- ☐ OrderID
- ☒ Order Amount

Drag fields between areas below:

☒ Report Filter

☐ Column Labels

Grouping the Dates

Click on “Group Selection” (Ribbon)

The Month option needs to be changed

Microsoft Excel - SalespersonData.xlsx

PivotTable Tools: Options, Design

PivotTable Name: PivotTable1
Active Field: Order Date
Field Settings

Group Selection

Grouping

Auto

☒ Starting at: 7/10/2010
☒ Ending at: 5/2/2012

By

- Seconds
- Minutes
- Hours
- Days
- Months
- Quarters
- Years

Number of days: 1

OK Cancel

PivotTable Field List

Choose fields to add to report:

- ☒ Country
- ☒ Salesperson
- ☒ Order Date
- ☐ OrderID
- ☒ Order Amount

Drag fields between areas below:

Report Filter Column Labels

Row Labels	Sum of Order Amount
UK	333330.9
7/10/2010	1863.
Suyama	1863.
7/15/2010	2490.
Dodsworth	2490.
7/16/2010	44
Buchanan	44
7/23/2010	556.6
Buchanan	556.6
7/31/2010	1873.
Dodsworth	1873.
8/6/2010	1456
Suyama	1456
8/9/2010	642.2
Buchanan	642.2
8/16/2010	538.6
Suyama	538.6
8/23/2010	695.62
Suyama	695.62
8/28/2010	479.4
King	479.4
8/30/2010	48
Suyama	48
9/4/2010	497.52

Grouping the Dates

Grouping changed to Years

Click on OK

The screenshot shows the 'Grouping' dialog box in Microsoft Excel. The dialog box is titled 'Grouping' and has a blue border. It contains the following options:

- ☒ Auto
- ☒ Starting at: 7/10/2010
- ☒ Ending at: 5/2/2012
- By**
- Seconds
- Minutes
- Hours
- Days
- Months
- Quarters
- Years** (selected)
- Number of days: 1
- OK
- Cancel

The background shows a PivotTable with the following data:

Row Labels	Sum of Order Amount
UK	333330.9
7/10/2010	1863.
Suyama	1863.
7/15/2010	2490.
Dodsworth	2490.
7/16/2010	44
Buchanan	44
7/23/2010	556.6
Buchanan	556.6
7/31/2010	1873.
Dodsworth	1873.
8/6/2010	1456
Suyama	1456
8/9/2010	642.2
Buchanan	642.2
8/16/2010	538.6
Suyama	538.6
8/23/2010	695.62
Suyama	695.62
8/28/2010	479.4
King	479.4

The PivotTable Field List on the right shows the following fields:

- ☒ Country
- ☒ Salesperson
- ☒ Order Date
- ☐ OrderID
- ☒ Order Amount

Dates are fixed: Years are displayed

SalespersonData.xlsx - Microsoft Excel

PivotTable Tools: Options, Design

PivotTable Name: PivotTable1
Active Field: Order Date
Field Settings
Group Selection
Ungroup
Group Field
Sort
Refresh
Change Data Source
Clear
Select
Move PivotTable
PivotChart
Formulas
OLAP tools
Field List
Field Headers
Show/Hide

A5 2010

Row Labels	Sum of Order Amount
UK	333330.91
2010	57313.55
Buchanan	17667.2
Dodsworth	9894.51
King	15232.16
Suyama	14519.68
2011	156843.61
Buchanan	31433.16
Dodsworth	24756.89
King	59827.19
Suyama	40826.37
2012	119173.75
Buchanan	19691.89
Dodsworth	40396.64
King	41903.64
Suyama	17181.58
USA	894996.49
2010	136002.99
Callahan	19160.7
Davolio	30861.76
Fuller	17811.46
Leverling	18223.96
Peacock	49945.11
2011	452347.15
Callahan	56954.02
Davolio	95850.36
Fuller	71168.14
Leverling	103719.07
Peacock	124655.56
2012	306646.35
Callahan	46917.95
Davolio	55787.97

PivotTable Field List

Choose fields to add to report:

- ☒ Country
- ☒ Salesperson
- ☒ Order Date
- ☐ OrderID
- ☒ Order Amount

Drag fields between areas below:

Report Filter: [Empty]

Column Labels: [Empty]

Row Labels: Country, Order Date, Salesperson

Values: Sum of Order...

Expand Entire Field option (Ribbon)

The screenshot shows the Microsoft Excel interface with the 'SalespersonData.xlsx' file open. The 'PivotTable Tools' ribbon is active, and the 'Options' tab is selected. The 'Expand Entire Field' button is highlighted in the 'Sort' group. A tooltip for this button is visible, stating 'Expand all items of the active field.' The PivotTable is named 'PivotTable1' and is based on the 'Order Date' field. The PivotTable structure is as follows:

Row Labels	Sum of Order Amount
UK	333330.91
2010	57313.55
Buchanan	17667.2
Dodsworth	9894.51
King	15232.16
Suyama	14519.68
2011	156843.61
Buchanan	31433.16
Dodsworth	24756.89
King	59827.19
Suyama	40826.37
2012	119173.75
Buchanan	19691.89
Dodsworth	40396.64
King	41903.64
Suyama	17181.58
USA	894996.49
2010	136002.99
Callahan	19160.7
Davolio	30861.76
Fuller	17811.46

The 'PivotTable Field List' task pane on the right shows the following fields:

- ☒ Country
- ☒ Salesperson
- ☒ Order Date
- ☐ OrderID
- ☒ Order Amount

At the bottom of the task pane, it says 'Drag fields between a' and 'Report Filter'.

Collapse Entire Field option (Ribbon)

The screenshot shows the Microsoft Excel interface with the PivotTable Tools ribbon selected. The 'Options' tab is active, and the 'Collapse Entire Field' button is highlighted. A tooltip for this button is visible, stating: 'Collapse Entire Field. Collapses all items of the active field.'

The PivotTable is named 'PivotTable1' and has 'Order Date' as the Active Field. The PivotTable data is as follows:

Row Labels	Sum of Order Amount
UK	333330.91
2010	57313.55
Buchanan	17667.2
Dodsworth	9894.51
King	15232.16
Suyama	14519.68
2011	156843.61
Buchanan	31433.16
Dodsworth	24756.89
King	59827.19
Suyama	40826.37
2012	119173.75
Buchanan	19691.89
Dodsworth	40396.64
King	41903.64
Suyama	17181.58
USA	894996.49
2010	136002.99
Callahan	19160.7
Davolio	30861.76

The PivotTable Field List on the right shows the following fields:

- ☒ Country
- ☒ Salesperson
- ☒ Order Date
- ☐ OrderID
- ☒ Order Amount

Drag fields between Report Filter and Columns/Rows.

Dates (Years) collapsed 2010 was a bad year. Why?

The screenshot shows a Microsoft Excel window with the file name "SalespersonData.xlsx". The ribbon includes Home, Insert, Page Layout, Formulas, Data, Review, View, Developer, and PivotTable Tools (Options and Design tabs). The PivotTable is named "PivotTable1" and its active field is "Order Date". The PivotTable is structured with "Country" as the Row Labels and "Sum of Order Amount" as the Values. The data is grouped by country, with "UK" and "USA" expanded to show data for the years 2010, 2011, and 2012. The "Grand Total" is 1228327.4.

Country	Year	Sum of Order Amount
UK	2010	57313.55
UK	2011	156843.61
UK	2012	119173.75
USA	2010	136002.99
USA	2011	452347.15
USA	2012	306646.35
Grand Total		1228327.4

The PivotTable Field List task pane on the right shows the following fields:

- Country (checked)
- Salesperson (checked)
- Order Date (checked)
- OrderID (unchecked)
- Order Amount (checked)

Drag fields between areas below:

- Report Filter: (empty)
- Column Labels: (empty)
- Row Labels: Country, Order Date, Salesperson
- Values: Sum of Order...

2010 expanded

Dodsworth sold much less than his colleagues

The screenshot shows an Excel spreadsheet with a PivotTable and the PivotTable Field List task pane. The PivotTable is named 'PivotTable1' and is located in the range A5:K21. The task pane shows the following fields:

- Country (checked)
- Salesperson (checked)
- Order Date (checked)
- OrderID (unchecked)
- Order Amount (checked)

The PivotTable data is as follows:

Row Labels	Sum of Order Amount
UK	333330.91
2010	57313.55
Buchanan	17667.2
Dodsworth	9894.51
King	15232.16
Suyama	14519.68
2011	156843.61
2012	119173.75
USA	894996.49
2010	136002.99
Callahan	19160.7
Davolio	30861.76
Fuller	17811.46
Leverling	18223.96
Peacock	49945.11
2011	452347.15
2012	306646.35
Grand Total	1228327.4

Create a Pivot Chart

Click on PivotChart (Ribbon)

The screenshot shows the Microsoft Excel interface with the 'SalespersonData.xlsx' file open. The 'PivotTable Tools' ribbon is active, specifically the 'Options' tab. The PivotTable is named 'PivotTable1' and has 'Order Date' as the active field. The PivotTable data is as follows:

Row Labels	Sum of Order Amount
UK	333330.91
2010	57313.55
Buchanan	17667.2
Dodsworth	9894.51
King	15232.16
Suyama	14519.68
2011	156843.61
2012	119173.75
USA	894996.49
2010	136002.99
Callahan	19160.7
Davolio	30861.76
Fuller	17811.46
Leverling	18223.96
Peacock	49945.11
2011	452347.15
2012	306646.35
Grand Total	1228327.4

The 'PivotChart' task pane is visible on the right, showing the instruction: 'Insert a PivotChart based on the data in this PivotTable.' Below this, the 'Choose fields to add to report' section lists the following fields with their selection status:

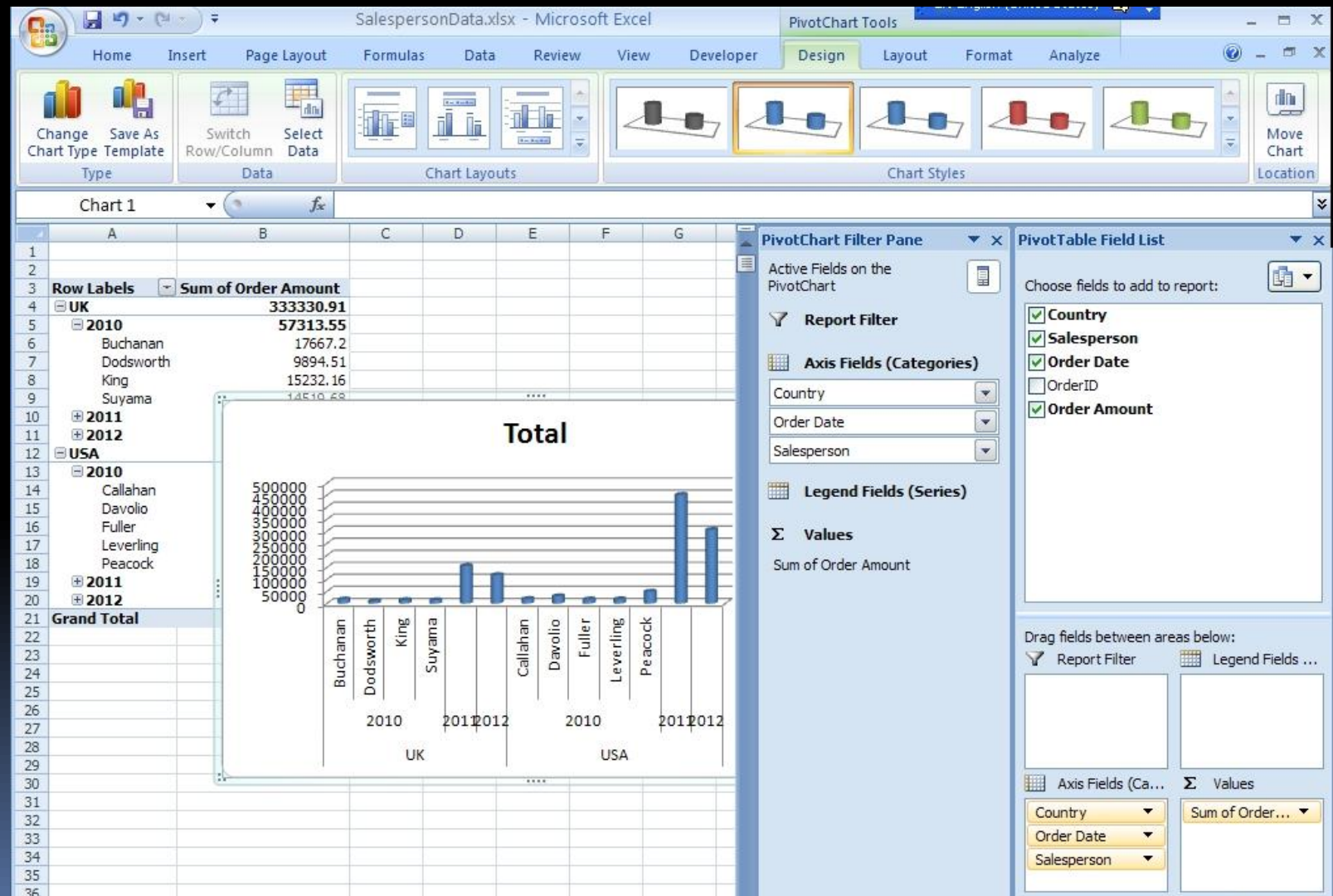
- ☒ Country
- ☒ Salesperson
- ☒ Order Date
- ☐ OrderID
- ☒ Order Amount

At the bottom of the task pane, it says 'Drag fields between area'.



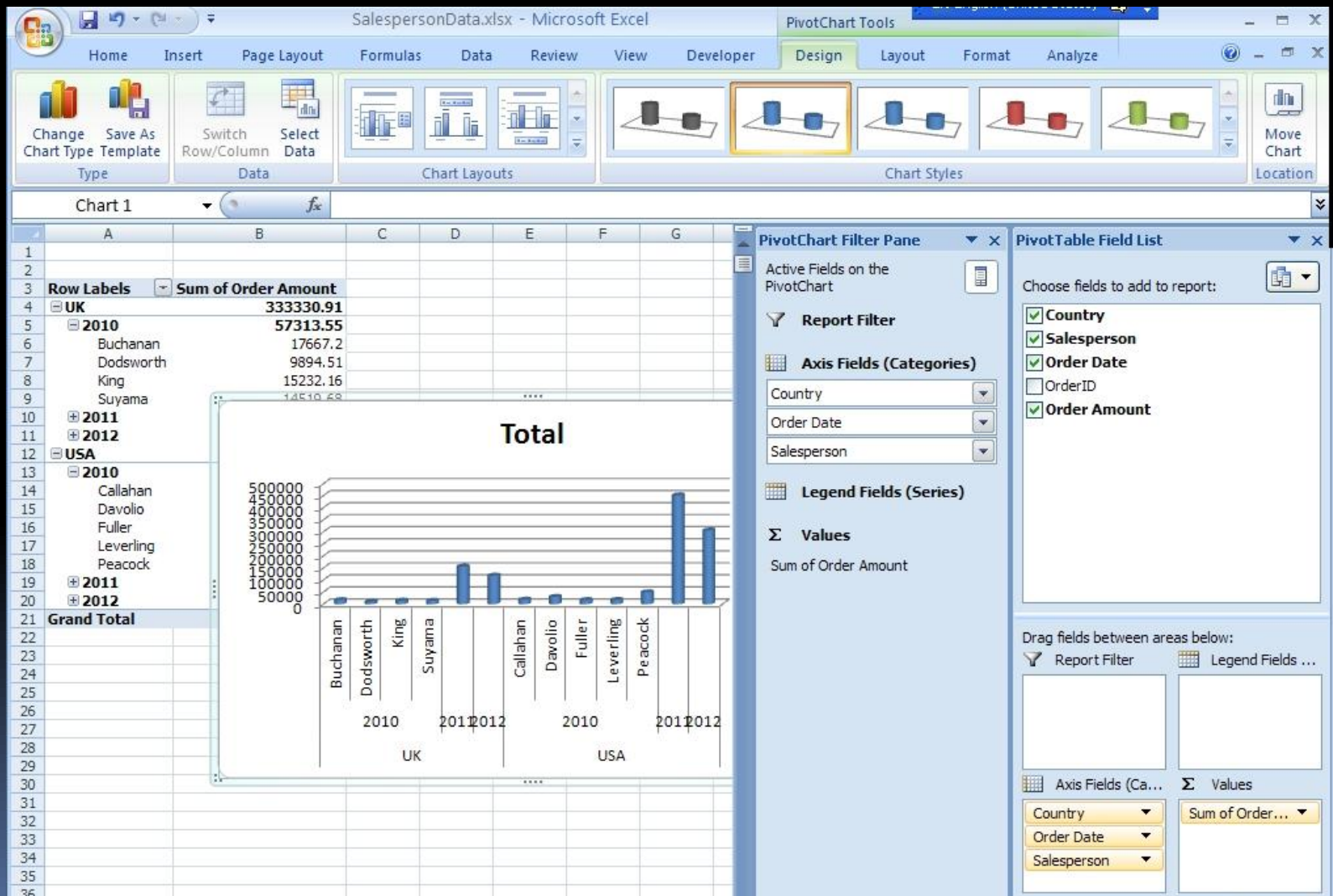
Create a PivotChart

The Chart is displayed



Creating a PivotChart

Close the auxiliary windows



PivotTable and PivotChart completed

