



Astute Excel: Dashboards Part 1

Written and Presented by
David H. Ringstrom, CPA
Accounting Advisors, Inc.
www.accountingadvisors.com



About the speaker:

David H. Ringstrom, CPA, is an author and nationally recognized instructor who teaches scores of webinars each year. His Excel courses are based on over 25 years of consulting and teaching experience. His mantra is “Either you work Excel, or it works you.” David offers spreadsheet and database consulting services nationwide.

Excel Versions

I'll be teaching from the Microsoft 365 version of Excel, and noting any differences or limitations in the legacy versions of Excel.

The Future of Excel

Microsoft 365 (Formerly Office 365)

Subscription-based version of Microsoft Office, which includes Excel. Use the software on multiple devices, new calculation engine, services and more features are rolling out that will dramatically set this version apart from past Excel versions.
www.microsoft365.com

Legacy Versions

Perpetual Licenses

Pay once for the software to use on a single computer. No new features added until you buy a new license. Includes
Excel 2019
Excel 2016
Excel 2013
Excel 2010
Excel 2007 and earlier

References to Excel 2013+, Excel 2016+, and so on mean a feature is available in all subsequent versions, including Microsoft 365.

You can play back a recording of this presentation for free by way of your Professionals Excel account.

1 File Home Insert Page Layout

2 Copy

I demonstrate each technique at least twice, first by way of numbered steps in PowerPoint, and then in Excel.

Handouts include PDF of today's presentation along with an example workbook that contains most examples I'll teach from as well as related articles.
Email ask@daavidringstrom.com if you haven't received the handouts.

Related Articles Car Payme



Example of an Excel Dashboard

Region | **Total Sales** | **Vendors** | **Total Sales**

Mid GA	691,787	Bob's Fruit	403,746
North GA	3,109,427	Whistlestop Fruit Stand	308,852
South GA	318,912	Mountain Fruit	318,912
Grand Total	3,249,638		3,249,638

City | **Total Sales**

Atlanta	1,410,000
Blue Ridge	383,506
Brunswick	235,000
Clarkesville	308,852
Macon	691,787
Valdosta	214,041
Grand Total	3,249,638

Product | **Total Sales**

Oranges	715,977
Bananas	756,649
Kiwi	643,277
Apples	614,847
Mixed Berries	518,888
Grand Total	3,249,638

Vendors | **Total Sales**

Whistlestop Fruit Stand	495,770
Bob's Fruit	403,746
Mountain Fruit	383,506
Fruitju	372,053

Top 5 Vendors

Vendor	Total Sales
Whistlestop Fruit Stand	495,770
Bob's Fruit	403,746
Mountain Fruit	383,506
Fruitju	372,053
Orange U Glad	318,912

Product Slicer

- Apples
- Bananas
- Kiwi
- Mixed Berries
- Oranges

Dashboard | Region | City | Vendors | Top 5 Vendors | Product | Monthly Sales | Fruit Sales

Linked Pictures free us from column restrictions.

Report is self-updating from its data source by way of Microsoft Query.

Pivot Table

Slicer

Pivot Chart



Microsoft Query: New Data Source

1 Select cell A1 of a blank worksheet.

In all other versions of Excel skip step 3 and do this instead:

2 Click the **Data** tab on the ribbon.

3 Click **Get Data**.

4 Click **From Other Sources**.

5 Click **From Microsoft Query**.

6 Check Use the Query Wizard to create/edit queries.

7 Double-click **New Data Source** to establish a new type of data connection.



Microsoft Query: New Data Source

The image shows two overlapping 'Create New Data Source' dialog boxes from Microsoft Query. The left dialog is partially obscured by an 'ODBC Text Setup' dialog box. Red circles with numbers 7 through 13 highlight specific UI elements: 7 (name field), 8 (driver dropdown), 9 (Connect button), 10 (checkbox), 11 (Select Directory button), 12 (OK button), and 13 (OK button). A pink callout box points to the driver dropdown with the text: 'If the ODBC driver you need does not appear on this is you'll need to procure and then install it before you can create the data source.' A green callout box at the bottom right contains the text: '• ODBC is short for Open DataBase Connectivity. • A driver is a type of software that enables Excel to connect to other data sources and platforms.'

7 What name do you want to give your data source?
1. Text File

8 Select a driver for the type of database you want to access:
2. Microsoft Text Driver (*.txt; *.csv)

9 Click Connect and enter any information requested by the driver:
3. Connect...

Select a default table for your data source (optional):
4.

Save my user ID and password in the data source definition

10 Use Current Directory

11 Select Directory...

12 OK

13 OK

ODBC Text Setup

Data Source Name:

Description:

Database:

Directory: E:\

10 Use Current Directory

11 Select Directory...

12 OK

Cancel

Help

• ODBC is short for Open DataBase Connectivity.
• A driver is a type of software that enables Excel to connect to other data sources and platforms.



Microsoft Query with Text Files

1 Select cell A1 of a blank worksheet.

2 Data

3 Get Data

4 From Other Sources

5 From Microsoft Query

6 Text File

7 Use the Query Wizard to create/edit queries

8 OK

In most versions of Excel "From Other Sources" appears in this section, but it appears under Get Data in the Microsoft 365 version of Excel 2016.

The screenshot shows the Excel interface with the Data tab selected. The 'Get Data' button is highlighted. A 'Choose Data Source' dialog box is open, showing 'Text File' selected in the list. The 'Use the Query Wizard to create/edit queries' checkbox is checked. The 'OK' button is also highlighted.



Microsoft Query with Text Files

Query Wizard - Choose Columns

What columns of data do you want to include in your query?

8 Available tables and columns: FruitSales.csv, general ledger.CSV, Holiday Calendar.csv, inventory.CSV, january.csv, nacy, n&I.CS

9 Columns in your query: Region, City, Vendor, Product, Unit, Cases Sold, Sales

10 Optional: Select unnecessary field(s) click the button in step 11.

11

12 < Back Next >

Query Wizard - Filter Data

Filter the data to specify which rows to include in your query. If you don't want to filter the data, click Next.

13 Column to filter: Region

14 Only include rows where: Region is Not Null

15 < Back Next > Cancel

Sheet1



Microsoft Query with Text Files

Query Wizard - Sort Order

Specify how you want your data sorted.
If you don't want to sort the data, click Next.

Sort by: [Dropdown]
 Ascending
 Descending

Then by: [Dropdown]
 Ascending
 Descending

Then by: [Dropdown]
 Ascending
 Descending

< Back **16** Next >

Query Wizard - Finish

What would you like to do next?

Return Data to Microsoft Excel Save Query...

View data or edit query in Microsoft Query

< Back **17** Finish Cancel



Microsoft Query with Text Files

24 Select how you want to view this data in your workbook:

- Table
- PivotTable Report**
- PivotChart
- Only Create Connection

Where do you want to put the data?

- Existing worksheet: =SAS1
- New worksheet

25 **Properties...** **OK** **Cancel**

Connection Properties

Connection name: Query from Query from Text File

Description:

Usage Definition Used In

Refresh control

Last Refreshed:

- Enable background refresh
- 26** h every 60 minutes
- Refresh data when opening the file**

27 **OK**

28 **Click on OK.**

29 **A blank pivot table appears on the worksheet.**

PivotTable Fields

Choose fields to add to report:

Search

- Cases Sold
- City
- Product
- Region
- Total Sales
- Vendor

Drag fields between areas below:

Filters Columns

Field List

To build a report, choose fields from the PivotTable

Field List

If Microsoft Query doesn't work properly for you, open the FruitSales.csv file by way of the File, Open command. Choose Insert, PivotTable, and then click OK to be able to follow the remaining steps in the presentation.



Amending the Query

The screenshot shows the Excel PivotTable Tools ribbon and the Connection Properties dialog box. The ribbon has three tabs: View, Analyze, and Design. The Analyze tab is active, and the 'Change Data Source' button is highlighted with a red circle and the number 2. The 'Change Data Source...' button is highlighted with a red circle and the number 3. The 'Connection Properties...' button is highlighted with a red circle and the number 3. The Connection Properties dialog box is open, and the 'Definition' tab is selected with a red circle and the number 4. The 'Connection name' is 'Query from Text File'. The 'Connection type' is 'Database Query'. The 'Connection string' is 'DBQ=E:\DefaultDir=E:\;Driver={Microsoft Text Driver (*.txt; *.csv)};DriverId=27;FIL=text;MaxBufferSize=2048;MaxScanRows=8;PageTimeout=5;SafeTransactions=0;Threads=3;UserCommitSync=Yes;'. The 'Command type' is 'SQL'. The 'Command text' is 'SELECT FruitSales.Region, FruitSales.City, FruitSales.Vendor, FruitSales.Product, FruitSales.Cases Sold, FruitSales.Total Sales FROM FruitSales.csv FruitSales'. The 'Excel Services' section has an 'Authentication Settings...' button. The 'Edit Query...' button is highlighted with a red circle and the number 5. The 'OK' button is highlighted with a red circle and the number 6.

1 Analyze

2 Change Data Source

3 Change Data Source...
Connection Properties...

4 Definition

5 Edit Query...

6 OK

The "Refresh Data When Opening the File" setting appears on the Usage tab.



Data Security Prompts

The screenshot shows the Microsoft Excel interface with a security warning banner. The ribbon is set to 'Home'. A yellow banner at the top of the worksheet reads 'SECURITY WARNING External Data Connections have been disabled' with an 'Enable Content' button to its right. The 'Info' pane on the right side of the screen is open, showing a 'Security' section with 'Enable Content' and 'Enable All Content' options. A red speech bubble points to the 'Enable Content' button with the text: 'If you click Enable Content then you won't be able to make the document be trusted until you close it and reopen again.' Red circles with numbers 1 through 4 highlight the 'File' tab, the 'Enable Content' button, the 'Info' pane, and the 'Enable All Content' option respectively.

1 File

2 Info

3 Enable Content

4 Enable All Content

SECURITY WARNING External Data Connections have been disabled Enable Content

If you click Enable Content then you won't be able to make the document be trusted until you close it and reopen again.

Info

Home

New

Open

Save

Save As

Print

Share

Export

Publish

Upload

Share

Security

Active content has been detected in this document.

- Enable Content
- Enable All Content

Always enable this document's content (make this a Trusted Document)

Advanced Options

Select which active content controls you want to use. This content will be enabled or disabled according to the selected options.

Control Panel



Recommended Pivot Tables (Excel 2013+)

1 Click on any cell within your list of data.

Region	City	Vendor
North GA	Atlanta	Fruit R Us
North GA	Atlanta	Bob's Fruit
North GA	Atlanta	Bob's Fruit
North GA	Atlanta	Bob's Fruit
North GA	Atlanta	Bob's Fruit

2 Insert

3 Recommended PivotTables

4 Double-click on your selection to skip the OK button.

5 The Pivot Table is created.

Recommended Pivot Tables is available in Excel 2013 and later.

Row Labels	Sum of Total Sales
Mid GA	691787
North GA	2108437
South GA	449414
Grand Total	3249638

Row Labels	Sum of Total Sales
Mid GA	691787
North GA	2108437
South GA	449414
Grand Total	3249638

Row Labels	Sum of Total Sales
Mid GA	691787
North GA	2108437
South GA	449414
Grand Total	3249638



Recommended Charts (Excel 2013+)

	A	B	C	D
1	Fruit Sales	January	February	March
2	Apples	327	192	397
3	Oranges	466	449	370
4				
5				
6				
7				
8				
9				
10				

1 Select any cell within the data that you wish to chart.

Apples vs. Oranges

Charts - Saved

File Home **Insert** Page Layout Formulas

Tables Illustrations Add-ins

3 Recommended Charts

	A	B	C	D
1	Fruit	January	February	March
2	Apples	327	192	397
3	Oranges	466	449	370

Apples vs. Oranges

	A	B	C	D	E	F	G	H	I
1	Fruit Sales	January	February	March	April	May			
2	Apples	327	192	397	464	500			
3	Oranges	466	449	370	385	482			
4									

4 Double-click to add a recommended chart to your worksheet.

More options appear here.

Insert Chart

Recommended Charts **All Charts**

Chart Title

Clustered Column

Chart Title

600

500

100

0

January February March April May

Apples Oranges

A clustered column chart is used to compare values across a few categories. Use it when the order of categories is not important.

OK Cancel



Summarize With Pivot Table

1 Region is selected and moved to the Rows area.

3 Total Sales is selected and moved to the Values area.

2 The pivot table shows one of each region.

Row Labels	
Mid GA	
North GA	
South GA	
Grand Total	

4 The pivot table shows sales by region.

Row Labels	Sum of Total Sales
Mid GA	691787
North GA	2108437
South GA	449414
Grand Total	3249638



Applying Number Formats to Pivot Tables

1 Right-click any number.

Although you can use these commands to format a Pivot Table, it's best to use steps 2 through 6.

2 Number Format...

3

4

5

6 OK

Row Labels	Sum of Total Sales
Mid GA	69178
North GA	210843
South GA	44941
Grand Total	324963

Format Cells

Number

Category:

General

Number

Currency

Accounting

Date

Time

Percentage

Fraction

Scientific

Text

Special

Custom

Sample

691,787

Decimal places: 0

Use 1000 Separator (,)

Negative numbers:

-1,234

1,234

(1,234)

(1,234)

Number is used for general display of numbers. Currency and Accounting offer specialized formatting for monetary value.



Hiding Worksheet Gridlines

1 Select the worksheet tab 'Region'.

2 Uncheck the Gridlines checkbox in the View tab.

3 Type Region in place of Row Labels. You can type any text you like in this space, but you cannot press the Delete key here.

4 Double-click the worksheet tab and change the name to Region.

Worksheet gridlines will pose a visual conflict on our eventual dashboard. We'll be replicating this worksheet, so turning off the gridlines now will save us effort later.

Region	Sum of Total Sales
Mid GA	691787
North GA	2108437
South GA	449414
Grand Total	3249638



Autofit Column Widths

1 Presently column A is 21 points wide. A point is approximately 1/16"

2 Column A is now 14 points wide. By default pivot table columns resize automatically.

3 Column A is now 14 points wide. By default pivot table columns resize automatically.

4 Right-click.

5 PivotTable Options...

6 Layout & Format

7 Autofit column widths on update

8 Click OK.

Row Labels	Sum of Cases Sold
Middle Georgia Fruit	15538
Whistlestop Fruit Stand	40550
Grand Total	56088

Row Labels	Sum of Cases Sold
Bob's Fruit	38185
Fruit Direct	25322
Fruit R Us	27169
Fruitju	27487
Mountain Fruit	29015
Orange U Glad	26111
Grand Total	173289

PivotTable Options

PivotTable Name: PivotTable3

Layout & Format | Totals & Filters | Display | Print

Layout

Merge and center cells with labels

When in compact form indent labels: 1

Autofit column widths on update

Preserve cell formatting on update



Renaming Value Fields in Pivot Tables

1 Delete "Sum of " and then press Enter.

2 OK

3 Field names in the Values section cannot be the same as in the Field List, which occurs if we strip out "Sum of ".

4 Solution: Leave a single space before or after the field name.

5 Cases Sold

The image shows two side-by-side screenshots of the Microsoft Excel PivotTable Fields task pane. The left screenshot shows the initial state where the value field is 'Sum of Cases Sold'. A yellow callout box with a red circle '1' points to the text 'Sum of Cases Sold' in the Values section, with the instruction 'Delete "Sum of " and then press Enter.' A second yellow callout box with a red circle '2' points to the 'OK' button in a warning dialog box that says 'PivotTable field name already exists.' A red circle '3' points to the 'Cases Sold' field in the Field List, with the instruction 'Field names in the Values section cannot be the same as in the Field List, which occurs if we strip out "Sum of ".' The right screenshot shows the result after the field has been renamed to 'Cases Sold'. A yellow callout box with a red circle '4' points to the 'Cases Sold' field in the Values section, with the instruction 'Solution: Leave a single space before or after the field name.' A red circle '5' points to the 'Cases Sold' field in the Field List, which is now highlighted in yellow.

Row Labels	Sum of Cases Sold
Bob's Fruit	38,185
Microsoft Excel	
Mountain Fruit	29,015
Navel Oranges & More	20,180
Orange U Glad	26,111
Oranges 'n Onions	18,030
Whistlestop Fruit Stand	40,550
Grand Total	267,587



Replicate the Pivot Tables

1 Hold down the Ctrl key as you drag the Region tab the right to make a copy of the worksheet.

2 Type City in cell A1.

3 Turn Region off and City on.

4 Rename as City.

5 Right-click here to show all visible worksheets in a workbook.

6 Repeat steps 1 - 4 until you have worksheets. Top 5 Vendors should be an copy of the Vendors worksheet for now. We'll filter that pivot table next.

Region	Total Sales
Mid GA	691,787
North GA	2,108,437
South GA	449,414
Grand Total	249,638

City	Total Sales
Atlanta	1,416,079
Blue Ridge	383,506
Brunswick	235,373
Clarkesville	308,852
Macon	691,787
Valdosta	214,041
Grand Total	3,249,638

Top 5 Vendors	Total Sales
Bob's Fruit	403,746
Fruit Direct	308,852
Fruit R Us	318,912



Top 10 Pivot Table

Step 1: Select the PivotTable field 'Total Sales'.

Step 2: Click on 'Value Filters' in the PivotTable field list.

Step 3: Click on 'Top 10...' in the Value Filter dropdown menu.

Step 4: In the 'Top 10 Filter (Vendor)' dialog box, set 'Show' to 'Top 5' items by 'Total Sales'. Click 'OK'.

Step 5: The PivotTable now displays the top 5 vendors.

Step 6: The PivotTable shows the top 5 vendors based on sales.

Step 7: Right-click any number in the PivotTable.

Step 8: Click on 'Sort' in the context menu.

Step 9: Click on 'Sort Largest to Smallest' in the context menu.

Top 5 Vendors	Total Sales
Bob's Fruit	403,746
Fruitju	372,053
Mountain Fruit	383,506
Orange U Glad	321,368
Whistles	
Grand Total	



Creating a Top 10 Pivot Chart

1 Select any cell within the pivot table.

2 Click the Insert tab.

3 Click the Charts group.

4 Select a 2-D Column chart.

5 Click the Analyze tab.

6 Click Field Buttons to show or hide the gray buttons on the pivot chart in Excel 2010 and later.

7 Optional: Click Total and press Delete to remove.

Vendor	Total Sales
Bob's Fruit	403,746
Fruitju	372,053
Mountain Fruit	383,506
Orange U Glad	321,368
Whistlestop Fruit Stand	495,770
Total	1,976,443

Vendor	Total Sales
Bob's Fruit	403,746
Fruitju	372,053
Mountain Fruit	383,506
Orange U Glad	321,368
Whistlestop Fruit Stand	495,770
Total	1,976,443



Slicing Pivot Tables (Excel 2010+)

1 Click any cell within a pivot table.

2 Analyze

3 Insert Slicer

4 Product

5 OK

6 Apples

7 The pivot table now shows sales of apples by vendor.

Vendor	Total Sales
Bob's Fruit	403,746
Fruit Direct	308,852
Fruit R Us	85,106
Fruitju	107,856
Middle Georgia Fruit	15,764
Mountain Fruit	83,538
Navel Oranges & More	17,772
Orange U Glad	31,260
Oranges 'n Onions	61,464
Whistlestop Fruit Stand	108,147
Grand Total	614,847

Vendor	Total Sales
Bob's Fruit	21,910
Fruit Direct	82,030
Fruit R Us	85,106
Fruitju	107,856
Middle Georgia Fruit	15,764
Mountain Fruit	83,538
Navel Oranges & More	17,772
Orange U Glad	31,260
Oranges 'n Onions	61,464
Whistlestop Fruit Stand	108,147
Grand Total	614,847



Slicing Pivot Tables (Excel 2010+)

Slicing is an extension of filtering a pivot table.

1 Hold down the Ctrl key to make two or more choices from the slicer to see a combined view.

2 A benefit of slicers is you can see what's being shown on the pivot table, as well as what isn't.

3 Click here to reset the slicer and show all items again.

Vendor	Total Sales
Bob's Fruit	115,726
Fruit Direct	91,634
Fruit R Us	146,786
Fruitju	162,119
Middle Georgia Fruit	86,861
Mountain Fruit	173,348
Navel Oranges & More	79,272
Grand Total	1,330,824

Vendor	Total Sales
Bob's Fruit	403,746
Fruit Direct	308,852
Fruit R Us	318,912
Fruitju	372,053
Middle Georgia Fruit	196,017
Mountain Fruit	383,506
Navel Oranges & More	235,373
Grand Total	3,249,638

Product Slicer:

- Apples
- Bananas
- Kiwi
- Mixed Berries
- Oranges

Product Slicer:

- Apples
- Bananas
- Kiwi
- Mixed Berries
- Oranges

Product Slicer:

- Apples
- Bananas
- Kiwi
- Mixed Berries
- Oranges



Formatting Slicers (Excel 2010+)

1 Click the outer edge of slicer to display the Options menu that enables you change colors if you wish.

2 Options

3 Optional: Change the color of the slicer.

4 Columns: 3

5 Use the handles to resize a slicer.

Vendor	Total Sales
Bob's Fruit	403,746
Mountain Fruit	383,506
Navel Oranges & More	235,373
Orange U Glad	321,368
Oranges 'n Onions	214,041
Whistlestop Fruit Stand	495,770
Grand Total	3,249,638



Slicing Multiple Pivot Tables

1 Create at least two pivot tables from the same data source.

Row Labels	Sum of Cases Sold
Apples	1565
Bananas	9842
Grand Total	38185

Row Labels	Sum of Cases Sold
Apples	1565
Bananas	9842
Kiwi	9967
Mixed Berries	8993
Oranges	7818
Grand Total	25322

2 Right-click the Slicer.

3 Excel 2010: Choose PivotTable Connections.

4 Select additional pivot table(s)

5 OK

6 Both pivot tables update when you make a choice from the slicer.

Row Labels	Sum of Cases Sold
Atlanta	118952
Blue Ridge	20015
Brunswick	10007
Clarkesville	25322
Macon	25322
Grand Total	25322

Vendor

- Bob's Fruit
- Fruit Direct
- Fruit R Us



Incorrect Way to Assemble the Dashboard

1 Right-click.

2 Insert...

3 Double-click.

4 Dashboard

5 Clear the Gridlines checkbox on the View menu.

6 Cut and paste the Product, Top 5 Vendors, and the slicer onto the Dashboard.

Region	Total Sales
Mid GA	691,7
North GA	2,108,4
South GA	449,4
Grand Total	3,249,6

Product	Total Sales
Bananas	756,649
Grand Total	756,649

Top 5 Vendors	Total Sales
Bob's Fruit	403,746
Fruitju	372,053
Mountain Fruit	383,506
Orange U Glad	321,368
Whistlestop Fruit Stand	495,770
Grand Total	1,976,443



Pivot Table Conflicts

1

Product	Total Sales
Bananas	756,649
Grand Total	756,649

Top 5 Vendors	Total Sales
Bob's Fruit	403,746
Fruitju	372,053
Mountain Fruit	383,506
Orange U Glad	321,368
Whistlestop Fruit Stand	495,770
Grand Total	1,976,443

2

Microsoft Excel

A PivotTable report cannot overlap another PivotTable report.

OK

3

A conflict has arisen because two pivot tables are too close in proximity to each other. The product pivot table cannot expand to show all products.

Product	Total Sales
Bananas	756,649
Grand Total	756,649

Top 5 Vendors	Total Sales
Bob's Fruit	98,420
Fruit Direct	107,406
Fruitju	126,630
Orange U Glad	81,521
Whistlestop Fruit Stand	87,934



Pasting Linked Pictures of Pivot Tables

1 Select cells A1:B10 of the Region worksheet and then right-click and choose Copy.

2 Select cell A1 of the Dashboard worksheet.

3 Home

4 Paste

5 Excel 2007: Choose As Picture, and then Paste Picture Link.
Excel for Mac: Choose Linked Picture.

6 Copied cells are pasted as a linked picture.

Region	Total Sales
Mid GA	102,664
North GA	550,425
South GA	103,560
Grand Total	756,649



Assembling the Dashboard

Region	Total Sales	Vendors	Total Sales	Product	Total Sales
Mid GA	691,787	Bob's Fruit	403,746	Oranges	715,000
North GA	2,108,437	Fruit Direct	308,852	Bananas	756,000
South GA	449,414	Fruit R Us	318,912	Kiwi	643,000
Grand Total	3,249,638	Fruitju	372,053	Apples	614,000
		Middle Georgia Fruit	196,017	Mixed Berries	518,000
		Mountain Fruit	196,017	Whistlestop Fruit Stand	49,000
		Navel Orange	321,368	Bob's Fruit	214,041
		Orange U Glad	214,041		
		Oranges 'n Onions	214,041		

City	Total Sales
Atlanta	1,416,079
Blue Ridge	383,506
Durham	325,373

Product	Total Sales
Apples	614,000
Bananas	756,000
Kiwi	643,000
Mixed Berries	518,000
Oranges	715,000

Vendor	Total Sales
Bob's Fruit	403,746
Fruit Direct	308,852
Fruit R Us	318,912
Fruitju	372,053
Middle Georgia Fruit	196,017
Mountain Fruit	196,017
Navel Orange	321,368
Orange U Glad	214,041
Oranges 'n Onions	214,041

Product	Total Sales
Apples	614,000
Bananas	756,000
Kiwi	643,000
Mixed Berries	518,000
Oranges	715,000

Vendor	Total Sales
Bob's Fruit	403,746
Fruit Direct	308,852
Fruit R Us	318,912
Fruitju	372,053
Middle Georgia Fruit	196,017
Mountain Fruit	196,017
Navel Orange	321,368
Orange U Glad	214,041
Oranges 'n Onions	214,041

Product	Total Sales
Apples	614,000
Bananas	756,000
Kiwi	643,000
Mixed Berries	518,000
Oranges	715,000

Vendor	Total Sales
Bob's Fruit	403,746
Fruit Direct	308,852
Fruit R Us	318,912
Fruitju	372,053
Middle Georgia Fruit	196,017
Mountain Fruit	196,017
Navel Orange	321,368
Orange U Glad	214,041
Oranges 'n Onions	214,041

1 Copy and paste the remaining pivot tables as linked pictures.

2 Right-click on the slicer.

3 Cut

4 Right-click on a cell and choose Paste.

5 Right-click the pivot chart.

6 Move Chart...

7 Object in:

8 Dashboard

9 OK

Move Chart
Choose where you want the chart to be placed:

New sheet: Chart1

Object in: Dashboard

OK



Automatic Pivot Table Refresh

Pivot Table - Fruit - Excel

PivotTable Tools: Analyze, Design, Tell me, Share

File Home Insert Page Layout Formulas Data Review View **Analyze** Design Tell me Share

PivotTable Name: Table1
Active Field: Sum of Total Sale:
Field Settings

Options

Group Selection: Ungroup, Group Field

Filter: Insert Slicer, Insert Timeline, Filter Connections

Data: Refresh, Change Data Source

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

	A	B	C	D
1				
2				
3	Sum of Total Sales	Column Labels		
4	Row Labels	Apples	Bananas	Kiwi
5	Bob's Fruit	21910	98420	99670
6	Fruit Direct	82030	107406	58800
7	Fruit R Us	85106	75548	65500
8	Fruitju	107956	71747	65500
9	Middle Georgia Fru			
10	Mountain Fruit			
11	Navel Oranges & More	17772	23415	64669
12	Orange U Glad	31260	81521	43121
13	Oranges 'n Onions	61464	80145	11682
14	Whistleton Fruit Stand	108147	87934	68500

PivotTable Options

PivotTable Name: PivotTable1

Layout & Format | Totals & Filters | Display | Printing | **Data** | Alt Text

PivotTable Data

- Save source data with file
- Enable show details
- Refresh data when opening the file**

Retain items deleted from the data source

Number of items to retain per field: Automatic

What-If Analysis

- Enable cell editing in the values area

OK Cancel

4 Check this box if you want to refresh data when opening the file.



Refreshing All Pivot Tables

1 The first PivotTable Tools menu Refresh button only refreshes one pivot table at a time unless you extend the menu down and choose Refresh All.

2

3 The Data menu has a Refresh All button that refreshes all pivot tables at once in a workbook.

4

5 You can also right-click any cell within a pivot table.

6 This refresh only refreshes a single pivot table.

Row Labels	Sum of Cases Sold
North GA	173,289
Atlanta	118,952
Bobcat	1,185
Kivi	967
Apple	842
Orange	993
Apricot	818
Apple	565
Blueberries	169
Bananas	868
Oranges	168
Apples	079
Kivi	058
Miscellaneous	996
Fruit Sales	487
Bananas	442
Apples	704
Grand Total	



Pivot Table Drill-Down

Division	Employee	Salary
DivisionB	Employee1	81317
DivisionB	Employee2	101226
DivisionB	Employee5	97275
DivisionA	Employee6	46326
DivisionB	Employee7	114040
DivisionA	Employee8	106273
DivisionB	Employee9	35357

1 Select any cell within the list.

2

3

4 Click OK.

Create PivotTable

Choose the data that you want to analyze

Select a table or range

Range: Sheet1!\$A\$1:\$C\$16

PivotTable Fields

Choose fields to add to report:

Search

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Drag fields between areas below:

Filters

Columns

Rows

Values

Division

Sum of Salary

Defer Layout Update

Update

Row Labels	Sum of Salary
DivisionA	636725
DivisionB	605251
Grand Total	1241976

7 Double-click any number within the pivot table.

Division	Employee	Salary
DivisionA	Employee14	109907
DivisionA	Employee2	101226
DivisionA	Employee12	99910
DivisionA	Employee4	82602
DivisionA	Employee10	90481
DivisionA	Employee6	46326

8 A new worksheet appears with salary details.



Blank Cell within Data

1 Type N/A in cell J2. In most versions of Excel a blank cell will cause the same behavior that a single cell containing text causes.

Product	Cases Sold	Total Sales
Oranges	6168	N/A
Apples	6079	85106
Kiwi	9967	99670
Bananas	9842	98420

2 Right-click.

3 Refresh

4 Click the checkbox for Total Sales. In most versions of Excel will appear in Rows. Drag if there if it appears in Values.

5 Drag Total Sales into the Values section. If the records show a Sum instead of a Count, click Count of Total Sales, choose Field Settings, and then double-click Count.

6 Right-click any count.

7 Remove "Count of Total Sales"

8 Sum



Filling Blank Cells with Zeros for Pivot Tables

1 Select a range that includes blank cells.

2 Choose Find & Select on Excel's Home Menu.

3 Go To Special...

4 Double-click Blanks to skip the OK button.

5 Type 0 (zero) and then press Ctrl-Enter.

6 All previously blank cells contain zeros.

Account	Debit	Credit
10100 · Checking	55,641.39	
10300 · Petty Cash	43,410.19	
10400 · Prepaid Insurance	500.00	
11000 · Accounts Receivable	83,547.91	
12000 · Undeposited Funds	0.00	
12100 · Inventory Asset	27,872.63	
12800 · Employee Advances	770.00	
13100 · Pre-paid Insurance	0.00	
13400 · Retainage Receivable	5,418.02	
15000 · Furniture and Equipment	34,326.00	
15100 · Vehicles	78,936.91	
15200 · Buildings and Improvements	325,000.00	
15300 · Construction Equipment	15,300.00	
16900 · Land	90,000.00	
17000 · Accumulated Depreciation		110,344.60
18700 · Security Deposits	1,720.00	
20000 · Accounts Payable		58,345.02
20500 · QuickBooks Credit Card		25.00
20600 · CalOil Credit Card		436.80
24000 · Payroll Liabilities		841.00
24000 · Payroll Liabilities		1,293.79



Pivot Table Enable Show Details Option

The image illustrates the steps to enable the 'Show Details' option for a PivotTable in Excel. The process is shown in two panels: the PivotTable Options dialog box and the Protect Sheet dialog box.

- Right-click on the pivot table.** A context menu is shown over the PivotTable, with 'PivotTable Options...' selected.
- PivotTable Options dialog box:**
 - The **Data** tab is selected.
 - The **Enable show details** checkbox is checked.
 - The **OK** button is clicked.
- Protect Sheet dialog box:**
 - The **Use PivotTable & PivotChart** checkbox is checked.
 - The **OK** button is clicked.

Additional annotations include a callout box stating 'Optional: provide a password.' in the Protect Sheet dialog box, and a yellow callout box in the PivotTable Options dialog box stating 'Optional: provide a password.'

Thank you for attending!

I'm happy to hear from you. In particular let me know if you did not receive the handouts for this presentation.

David Ringstrom, CPA



ask@davidringstrom.com



www.twitter.com/excelwriter



www.linkedin.com/in/davidringstrom

Is there something you were hoping to learn today but didn't?
Please let me know. You can ask me anything about Excel.