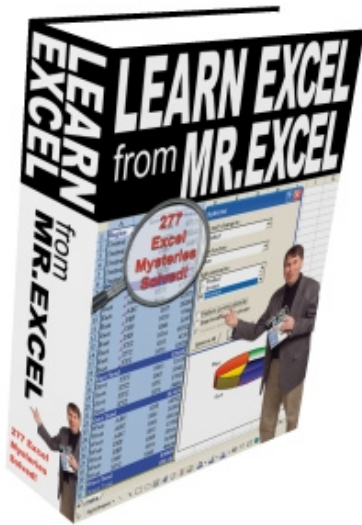




Free Preview – Week #19

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This Week: 6 more Tips for pivot tables.

UPDATE DATA BEHIND A PIVOT TABLE

Problem: You discovered that some of the underlying data in the pivot table is wrong. After correcting the number, the pivot table does not appear to include the change, as shown in Fig. 865.

	A	B	C	D	E	F
1	Drop Page Fields Here					
2						
3	Sum of Revenue	Region				
4	Product	East	Central	West	Government	Grand Total
5	ABC	703255	766469	631646	10290	2111660
6	DEF	891799	776996	494919		2163714
7	XYZ	897949	832414	712365	24685	2467413
8	Grand Total	2493003	2375879	1838930	34975	6742787
9						
10						
11						
12						
13						

Fig. 865

**Part
III**

Strategy: This is one of the important things to understand about pivot tables. When you create the pivot table, all of the data is loaded into memory to allow it to calculate quickly. When you change the data on the original worksheet, it does not automatically update the pivot table.

Select a cell in the pivot table. The PivotTable toolbar will appear. As shown in Fig. 866, choose the Red exclamation point on the toolbar to recalculate the pivot table from the worksheet data.



Fig. 866

Result: The pivot table is updated, as shown in Fig. 867.

	A	B	C	D	E	F
1	Drop Page Fields Here					
2						
3	Sum of Revenue	Region				
4	Product	East	Central	West	Government	Grand Total
5	ABC	703255	776759	631646		2111660
6	DEF	891799	776996	494919		2163714
7	XYZ	897949	832414	712365	24685	2467413
8	Grand Total	2493003	2386169	1838930	24685	6742787

Fig. 867

Additional Details: If you make changes to the underlying data, it could cause the table to grow. For example, if you re-classify some records from the East region to the Southeast region, be aware that choosing the Refresh button will cause the table to grow by one column. If there happens to be other data in that column, Excel will warn you and ask if it is OK to overwrite those cells, as shown in Fig. 868.

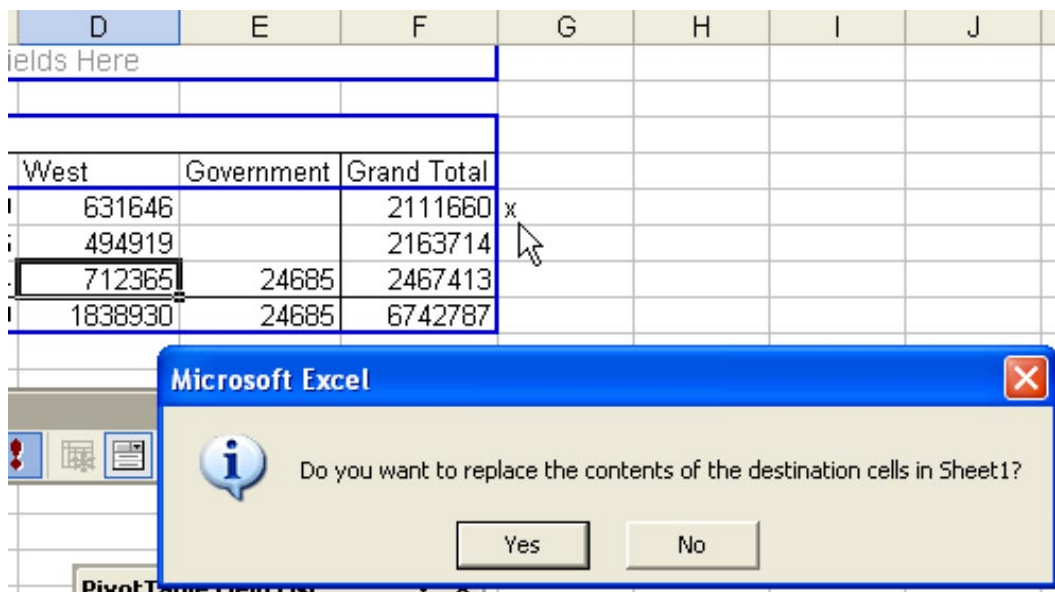


Fig. 868

Summary: Changes to the underlying data do not automatically get calculated in the pivot table. You must choose the red exclamation icon in the toolbar to have Excel re-read the original data.

Commands Discussed: Data – Pivot Table

REPLACE BLANKS IN A PIVOT TABLE WITH ZEROES

Problem: Since you had no sales of a particular product in a particular region, Excel leaves those cells in the pivot table blank, as shown in Fig. 869. This seems like a really bad idea. You've learned in this book that if your data has blanks instead of zeroes, Excel will assume that a column is a text column. It is really ironic that Microsoft would dare to use a blank cell in the middle of numeric results.

	A	B	C	D	E
1					
2					
3	Sum of Revenue	Product ▼			
4	Region ▼	ABC	DEF	XYZ	Grand Total
5	East	703255	891799	882724	2477778
6	Central	776759	776996	832414	2386169
7	West	631646	494919	712365	1838930
8	Government			24685	24685
9	Southeast	15225			15225
10	Grand Total	2126885	2163714	2452188	6742787
11					

Fig. 869

Strategy: When pivot tables first came out, there was no way to correct this. After much outcry from accountants everywhere, Microsoft gave us two ways to solve the problem.

Method 1: If you discover the problem after the fact in a completed pivot table, follow these steps.

- 1) Select one cell in the pivot table in order to display the PivotTable toolbar. From the toolbar, use the PivotTable dropdown and select the Table Options menu item, as shown in Fig. 870.

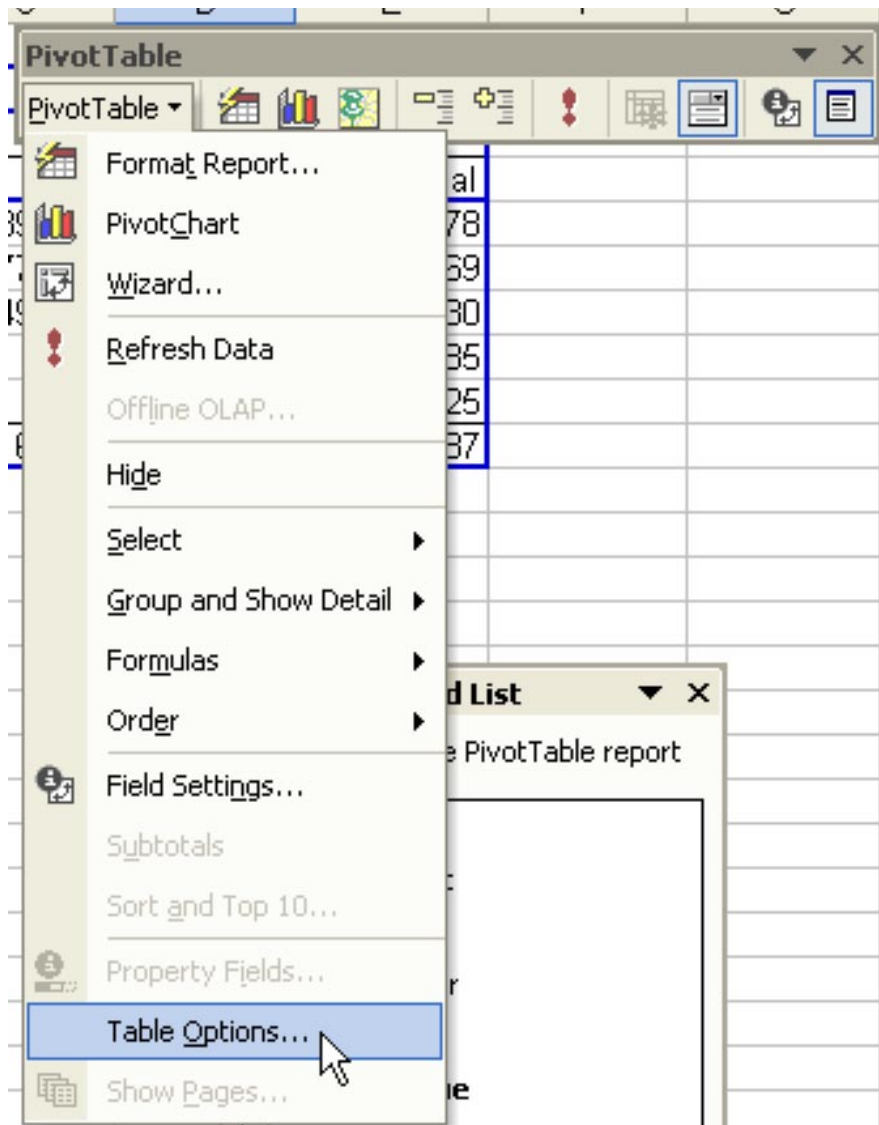


Fig. 870

- 2) In the Table Options dialog, on the right side, locate the field called For Empty Cells, Show:, as shown in Fig. 871.

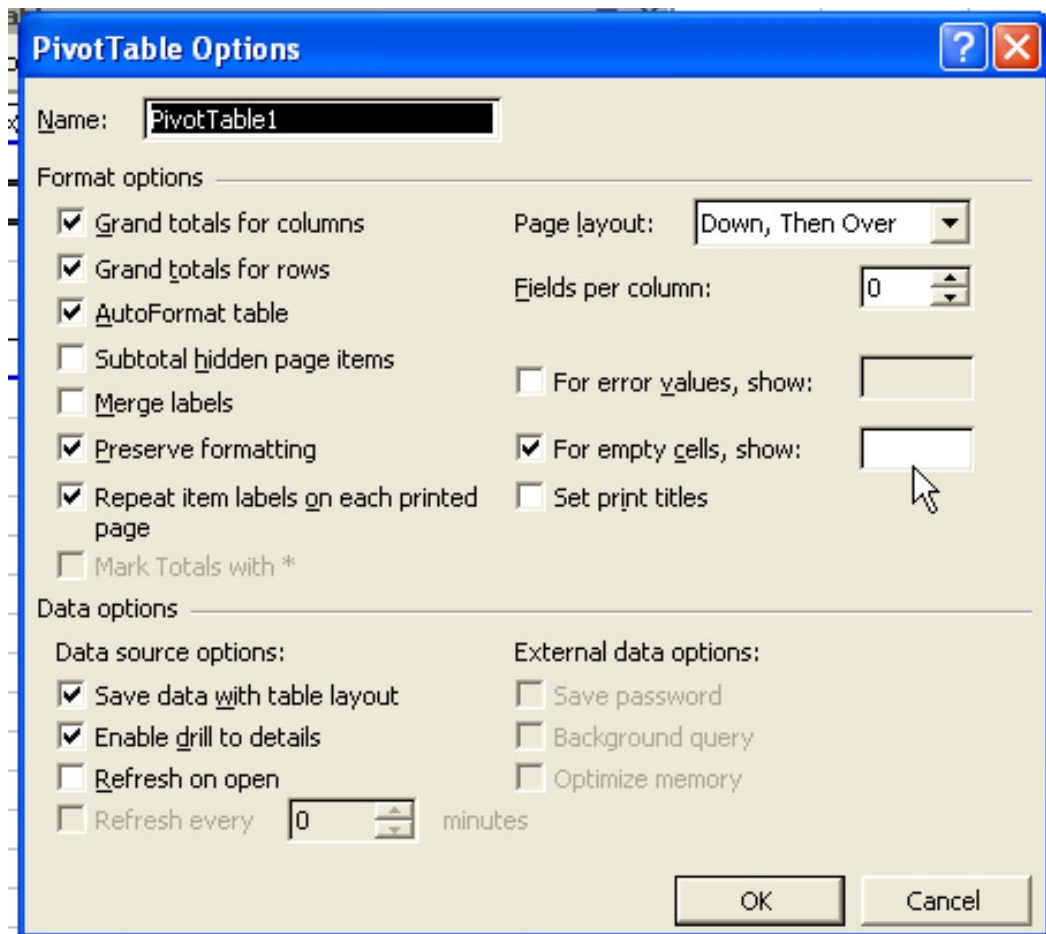


Fig. 871

- 3) By default, this setting is blank. Type a zero in the textbox and choose OK, as shown in Fig. 872.

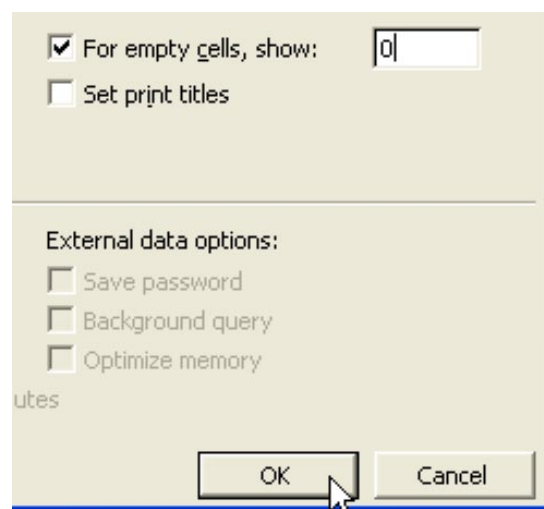


Fig. 872

Result: As you see in Fig. 873, blanks in the data section of the pivot table are shown as zeroes.

	A	B	C	D	E
1					
2					
3	Sum of Revenue	Product			
4	Region	ABC	DEF	XYZ	Grand Total
5	East	703255	891799	882724	2477778
6	Central	776759	776996	832414	2386169
7	West	631646	494919	712365	1838930
8	Government	0	0	24685	24685
9	Southeast	15225	0	0	15225
10	Grand Total	2126885	2163714	2452188	6742787
11					

Fig. 873

Method 2: The other method for having zeroes appear is to use the Options button in Step 3 of the PivotTable Wizard, as shown in Fig. 874. This button will open the same Options dialog as shown above.

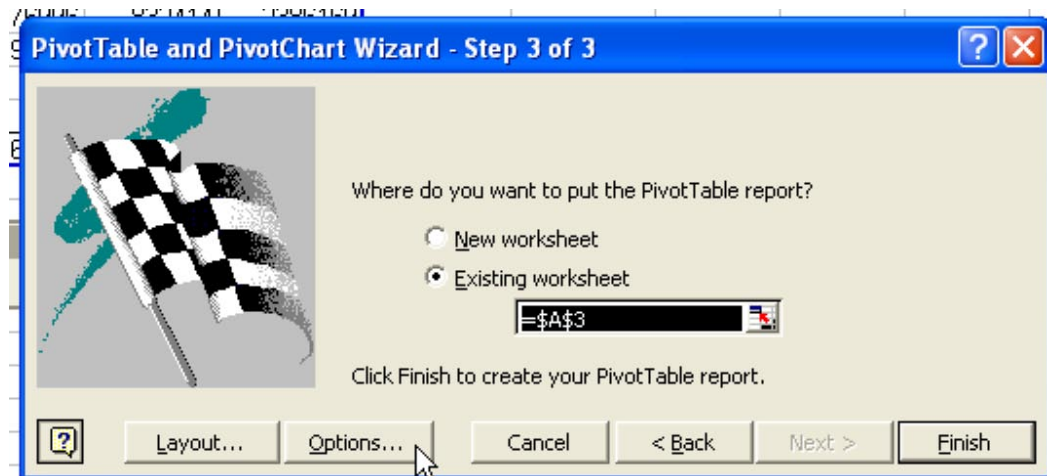


Fig. 874

Summary: Make sure to use the Options dialog to display empty cells as zeroes instead of blanks.

Commands Discussed: Data – Pivot Table

ADD OR REMOVE FIELDS FROM AN EXISTING PIVOT TABLE

Problem: You've seen how easy it is to rearrange an existing pivot table, swapping Region and Product fields, as shown in Fig. 875. Now, what if you want to replace the Region field with the Customer field?

	A	B	C	D	E
1	Drop Page Fields Here				
2					
3	Sum of Revenue	Product ▼			
4	Region ▼	ABC	DEF	XYZ	Grand Total
5	East	703255	891799	882724	2477778
6	Central	776759	776996	832414	2386169
7	West	631646	494919	712365	1838930
8	Government	0	0	24685	24685
9	Southeast	15225	0	0	15225
10	Grand Total	2126885	2163714	2452188	6742787
11					

Fig. 875

Strategy: In order to remove the Region field from the pivot table, click on the gray Region button and drag it off the pivot table, as shown in Fig. 876. The mouse pointer will eventually change to include a red X, which is synonymous with Delete.

2		
3	Sum of Revenue	Product ▼
4	Region ▼	① C
5	East	703255
6	Central	776759
7	West	631646
8	Government	0
9	Southeast	15225
10	Grand Total	2126885
11		
12		
13		
14		

Fig. 876

This will remove the Region field from the pivot table, as shown in Fig. 877.

	A	B	C	D	E
1	Drop Page Fields Here				
2					
3	Sum of Revenue	Product ▼			
4		ABC	DEF	XYZ	Grand Total
5	Total	2126885	2163714	2452188	6742787
6					

Fig. 877

Select any cell in the pivot table and the PivotTable Field List will appear. This list is one of the things that look different in various versions of Excel. In Excel 2002 and 2003, the list is a floating box, as shown in Fig. 878, that appears when you select a cell in the pivot table.

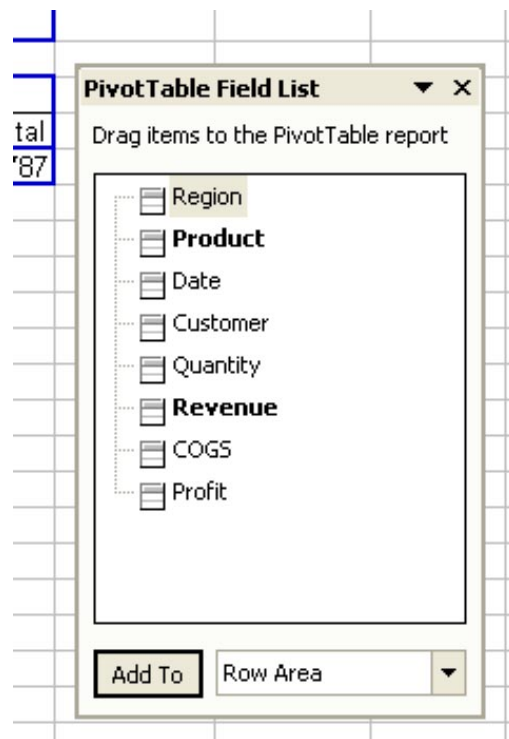


Fig. 878

In Excel 2000 and earlier versions, the Field List appears as a part of the PivotTable toolbar, as shown in Fig. 879. The toolbar expands whenever you select a cell in the pivot table.

	A	B	C	D	E	F
1	Drop Page Fields Here					
2						
3	Sum of Revenue	Product				
4		ABC	DEF	XYZ	Grand Total	
5	Total	2126885	2163714	2452188	6742787	
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

PivotTable

PivotTable

Region Product Date Customer Quantity
Revenue COGS Profit

Fig. 879

**Part
III**

To add the customer field, drag the field from the Field List and drop it in the correct area on the pivot table, as shown in Fig. 880.

	A	B	C	D	E	F	G
1	Drop Page Fields Here						
2							
3	Sum of Revenue	Product					
4		ABC	DEF	XYZ	Grand Total		
5	Total	2126885	2163714	2452188	6742787		
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

PivotTable Field List
Drag items to the PivotTable

- Region
- Product**
- Date
- Customer**
- Quantity
- Revenue**
- COGS
- Profit

Fig. 880

Result: The new field is added to the pivot table, as shown in Fig. 881.

	A	B	C	D	E
1	Drop Page Fields Here				
2					
3	Sum of Revenue	Product ▼			
4	Customer ▼	ABC	DEF	XYZ	Grand Total
5	Ainsworth	177382	190533	200936	568851
6	Air Canada	5859	2358	22804	31021
7	Bell Canada	15104	18064	18072	51240
8	Chevron	26406	20610	7032	54048
9	Compass	17750	1280	17670	30750

Fig. 881

Summary: It is easy to remove or add fields to the pivot table by using the mouse to drag the field off or on the table.

Commands Discussed: Data – Pivot Table

SUMMARIZE PIVOT TABLE DATA BY THREE MEASURES

Problem: You want to summarize data by Region, Product, and Customer. How can a two-dimensional report show three dimensions of data?

Strategy: Several views of the data are possible. From the PivotTable Field List, drag the Region field and drop it in the Row area of the pivot table, to the left of the Customer field, as shown in Fig. 882.

	A	B	C	D	E	F
1	Drop Page Fields Here					
2						
3	Sum of Revenue		Product ▼			
4	Region ▼	Customer ▼	ABC	DEF	XYZ	Grand Total
5	East	Ainsworth	61660	90978	79438	232076
6		Air Canada	0	2358	0	2358
7		Bell Canada	0	14004	0	14004
8		Chevron	8116	0	0	8116
9		Compaq	0	4380	0	4380
10		Compton Petroleum	0	2029	0	2029
11		Exxon	60556	98295	70789	229640
12		Ford	27550	75977	72440	175967
13		General Motors	69040	132844	58279	260163
14		Gildan Activewear	0	18552	0	18552
15		HP	17840	0	21015	38855
16		IBM	39273	60637	65860	165770
17		Kroger	1819	0	2538	4357
18		Lucent	0	14497	0	14497
19		Molson, Inc	69991	82029	93061	245081
20		Nortel Networks	89960	14580	99350	203890
21		P&G	0	17757	0	17757
22		Phillip Morris	0	10760	0	10760
23		SBC Communications	14440	0	24420	38860
24		Sears	0	4282	0	4282
25		Sears Canada	5532	0	18264	23796
26		Shell Canada	9635	0	16936	26571
27		State Farm	0	21730	0	21730
28		Sun Life Financial	75912	51445	72625	199982
29		Texaco	7136	0	9152	16288
30		Verizon	64527	18577	101459	184563
31		Wal-Mart	80268	156088	77098	313454
32	East Total		703255	891799	882724	2477778

Fig. 882

Another option is to drag the third measure to the Column area of the pivot table, as shown in Fig. 883.

	A	B	C	D	E	F	G
1							
2							
3	Sum of Revenue	Region ▼	Product ▼				
4		East			East Total	Central	
5	Customer ▼	ABC	DEF	XYZ		ABC	DEF
6	Ainsworth	61660	90978	79438	232076	77683	49816
7	Air Canada	0	2358	0	2358	0	0
8	Bell Canada	0	14004	0	14004	0	4060
9	Chevron	8116	0	0	8116	0	20610
10	Compaq	0	4380	0	4380	0	0
11	Compton Petroleum	0	2029	0	2029	0	11220
12	Exxon	60556	98295	70789	229640	136774	57857
13	Ford	27550	75977	72440	175967	90995	67173
14	General Motors	69040	132844	58279	260163	135028	47373

Fig. 883

Even with this view, the report looks different if you move the Region field and drop it to the right of the Product field, as shown in Fig. 884.

	A	B	C	D	E	F	G
1							Drop
2							
3	Sum of Revenue	Product ▼	Region ▼ ⓘ				
4		ABC			ABC Total	DEF	
5	Customer ▼	East	Central	West	Southeast	East	
6	Ainsworth	61660	77683	38039	0	177382	90978
7	Air Canada	0	0	5859	0	5859	2358
8	Bell Canada	0	0	15104	0	15104	14004
9	Chevron	8116	0	18290	0	26406	0
10	Compaq	0	0	17250	0	17250	4380
11	Compton Petroleum	0	0	4158	0	4158	2029
12	Exxon	60556	136774	96808	0	294138	98295
13	Ford	27550	75977	72440	0	175967	90995
14	General Motors	69040	132844	58279	0	260163	47373

Fig. 884

Summary: You can use more than one field along either the row or column axis of the pivot table to produce more complex summaries.

Commands Discussed: Data – Pivot Table

MAKE PIVOT TABLES BE TALLER THAN WIDE

Problem: An Excel worksheet has 256 columns and 65,536 rows. As you start adding fields to a pivot table, it is possible to quickly run out of columns, as shown in Fig. 885. If you want a report with products, customers and regions, it can quickly get large. Three Regions x 10 Products x 300 customers would require 900 columns.

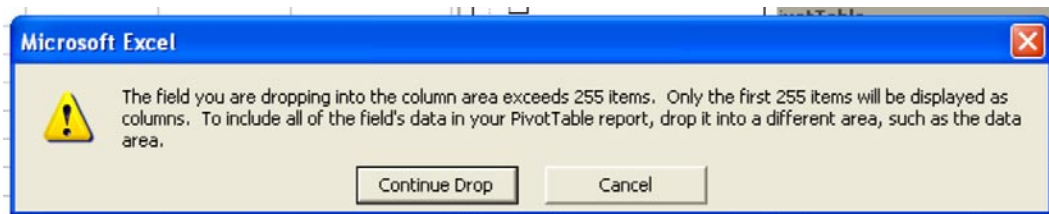


Fig. 885

Strategy: Make your pivot tables tall instead of wide. If you have most of the measures in the Row area of the pivot table, it is far less likely that you will run out of room for the table.

**Part
III**

As shown in Fig. 886, this 668-row table fits fine going down the rows, but would fail if we tried to have it going across the columns.

	A	B	C	D
657			30-May-04	19152
658			5-Jun-04	4264
659			2-Jul-04	22716
660			6-Jul-04	8580
661			2-Oct-04	12760
662			4-Oct-04	24070
663			6-Oct-04	15715
664			19-Dec-04	18560
665			24-Dec-04	4690
666	XYZ Total			288409
667	Wal-Mart Total			869454
668	Grand Total			6742787

Fig. 886

Summary: If you are going to have a combination of fields that will be larger than 255 columns, build the table to have these fields going down the rows.

Commands Discussed: Data – Pivot Table

MANUALLY RESEQUENCE THE ORDER OF DATA IN A PIVOT TABLE

Problem: A Pivot Table organizes data alphabetically by default. For the Region field, this means that the data is organized with Central first, East second, and West third, as shown in Fig. 887. Your manager wants the regions to appear in the order of “East, Central, West”. Unless you can convince the company to change the name of the Central region to the Middle region, the regions will not appear in the proper order. After unsuccessfully lobbying to have the Central region renamed to Middle, you need to find a way to have the following table sequenced with the East region first.

	A	B	C	D	E
1					
2					
3	Sum of Revenue	Region			
4	Product	Central	East	West	Grand Total
5	ABC	776759	703255	631646	2111660
6	DEF	776996	891799	494919	2163714
7	XYZ	832414	882724	712365	2427503
8	Grand Total	2386169	2477778	1838930	6702877

Fig. 887

Strategy: It is amazing that this trick works.

- 1) Select cell B4 in the pivot table, as shown in Fig. 888.

	A	B	C
1			Drop Page Field
2			
3	Sum of Revenue	Region	
4	Product	Central	East
5	ABC	776759	703
6	DEF	776996	891

Fig. 888

- 2) Right in cell B4, start typing the word “East”, as shown in Fig. 889.

	A	B	C
1	Drop Page Fields H		
2			
3	Sum of Revenue	Region ▼	
4	Product ▼	East	East
5	ABC	776759	703255
6	DEF	776996	891799

Fig. 889

- 3) When you hit Enter, Excel senses what you are trying to do. All of the data from the East region moves to Column B. Excel automatically moves the Central region heading and data to column C, as shown in Fig. 890.

	A	B	C	D	E
1					
2					
3	Sum of Revenue	Region ▼			
4	Product ▼	East	Central	West	Grand Total
5	ABC	703255	776759	631646	2111660
6	DEF	891799	776996	494919	2163714
7	XYZ	882724	832414	712365	2427503
8	Grand Total	2477778	2386169	1838930	6702877

Fig. 890

You can easily use this trick to resequence the fields into whatever order is necessary.

Additional Details: The technique shown above will only change the Region sequence in a single pivot table. If you would like to change the sequence in all future pivot tables, create a custom list.

- 1) In a blank area of the worksheet, type your regions in the desired order in a column. Enter East in one cell, Central in the next cell, and West in the next cell. Select these three cells.

- 2) From the menu, select Tools – Options. Go to the Custom Lists tab. At the bottom of the Custom Lists tab, there is a section called Import List from Cells. Your selected range will be in this field. As shown in Fig. 891, choose the Import button to add a custom list of East, Central, West.

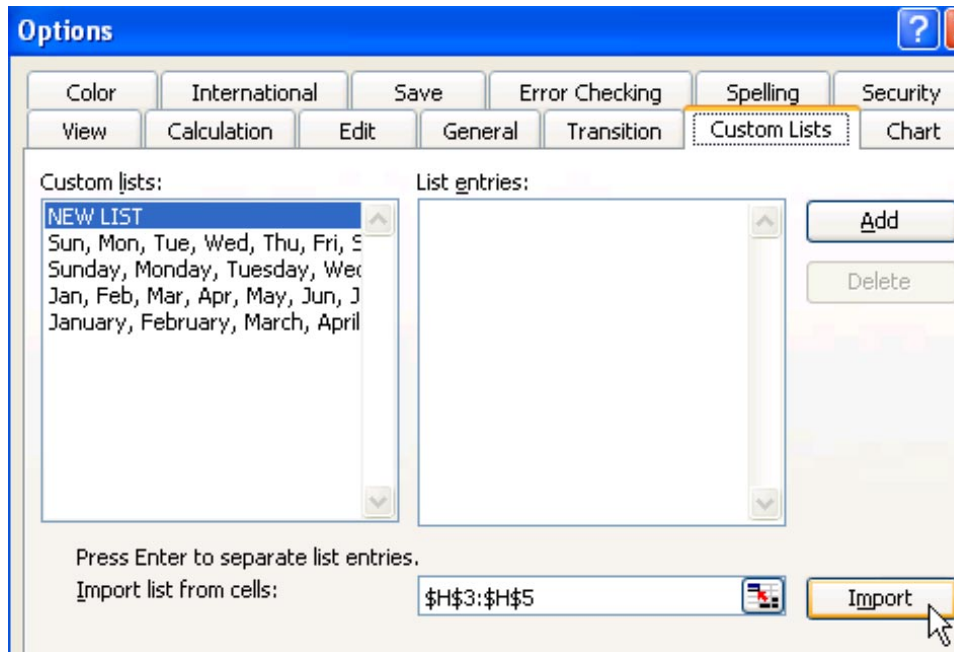


Fig. 891

All future pivot tables will automatically sort into Central, East, West sequence.

Summary: The manual sort feature of a pivot table is astounding. Simply type a heading in a new place to have Excel turn on manual sequencing of the data.

Commands Discussed: Data – Pivot Table