Power Query #04

Unpivot Feature in Power Query & the Table.UnpivotOtherColumns Function

Table of Contents

What is a Cross Tabulated Table? 2

Why Cross Tabulated Tables are Not a Good Place to Store Data 3

Project Goals for Video 04 4

Download files 5

Example 1: Convert Cross Tabulated Table into Proper Table 5

Table.UnpivotOtherColumns Arguments 7

Example 2: Convert Cross Tabulated Table with Two Column Variables into Proper Table 12

Example 3: Table.UnpivotOtherColumns in Power BI Desktop 16

Import Excel Objects 17

Keyboard shortcuts seen in video 17

What is a Cross Tabulated Table?

1. A basic cross tabulated table has a row header variable and a column header variable with an associated intersecting value. As shown below, the column header variable is Product and the row header variable is Sales Rep. Each value in the cross tabulated table represents an AND Logical test where the value belongs to the row header AND the column header. In the picture below the units, 484, represents the total units for the Sales Rep, Vo Dat, AND the Product, Bellen.

Units by Product & Sales Rep

SalesRep/Product	Quad	Carlota	Sunshine	Sunset	Majestic Beaut	Aspen	Yanaki	Condor	Icarus	Bellen	Sunbell	FlatTop
Zulekhahma Gitui	508	499	503	1,680	504	523	993	1,754	1,651	539	987	522
Yazmin Nava	460	312	1,440	1,271	1,014	784	487	978	2,144	973	1,175	486
Yamada Shinji	971	361	688	1,271	486	436	482	749	1,662	793	1,063	512
Vo Dat	515	1,199	443	1,186	516	267	1,671	514	473	484	1,272	492
Treyton Gibbons	1,853	503	502	490	504	171	872	1,062	531	1,272		
Thaddeus Himes	489	878	2,128	1,043	1,725	491			418	498		
Somsri Yodying	1,873	482	716	1,833	1,457	498			523	1,790		
Sioux Radcoolinator	1,111	2,105	1,550	858	583	1,003			1,313	1,408	1,159	916
Rogelio Bui	1,117	1,647	1,184	948	1,382	737			1,282	479	845	686
Raylahema Wakirono	474	1,980	264	584	486	471			406	40	505	985
Phoenix Terrell	1,989	766	510	546	504	712			502	493	1,088	496
Oh Byung-ho	258	490	498	1,031	513	777			1,005	1,097	1,258	1,726
Neha Shah	2,054	1,088	546	506	528	561	450	496	959	110	523	1,248
Nakamura Naoki	140	521	1,331	509	1,006	495	851	1,276	506	2,113	495	497
Nakamura Haruto	1,071	488	1,369	1,228	513	522	680	516	506	1,948	1,040	421
Nahmafiyaa Miitheru	1,381	2,175	582	518	792	1,252	467	488	479	629	739	474
Mo Bui	1,513	349	496	493	759	469	838	813	488	1,162	1,370	1,661
Michele Leung	1,183	748	1,117	526	506	906	511	2,152	560	485	1,219	477
Micah Montalvo	524	1,018	790	1,338	943	820	501	779	1,058	486	327	574
Kimura Ichiro	514	1,004	1,039	2,096	500	1,512	476	2,149	1,204	469	1,596	497
Keegan Orozco	1,313	377	1,434	821	1,013	485	501	518	936	519	520	1,288
Kamilaima Makipo	34	500	507	146	1,252	453	491	973	10	497	342	817
Kaltunira Gitondungu	971	501	522	2,166	519	1,340	1,598	835	1,574	496	764	677
Imani Bales	47	63	1,620	994	2,183	478	515	491	654	919	513	489
Hong Chae-won	1,305	447	1,650	1,247	514	485	518	768	830	749	1,331	507
Hien Luong	1,292	1,770	1,708	1,297	491	1,201	558	1,613	1,368	2,095	492	521
Darien Clawson	509	609	1,358	602	520	1,993	500	460	839	1,296	1,523	1,110
Alma Estep	721	1,452	711	501	2,194	834	511	2,116	506	809	546	509

Units for
Sales Rep Vo Dat
AND
Product Bellen
(AND Logical Test)

Vo Dat row as a Proper Table =>

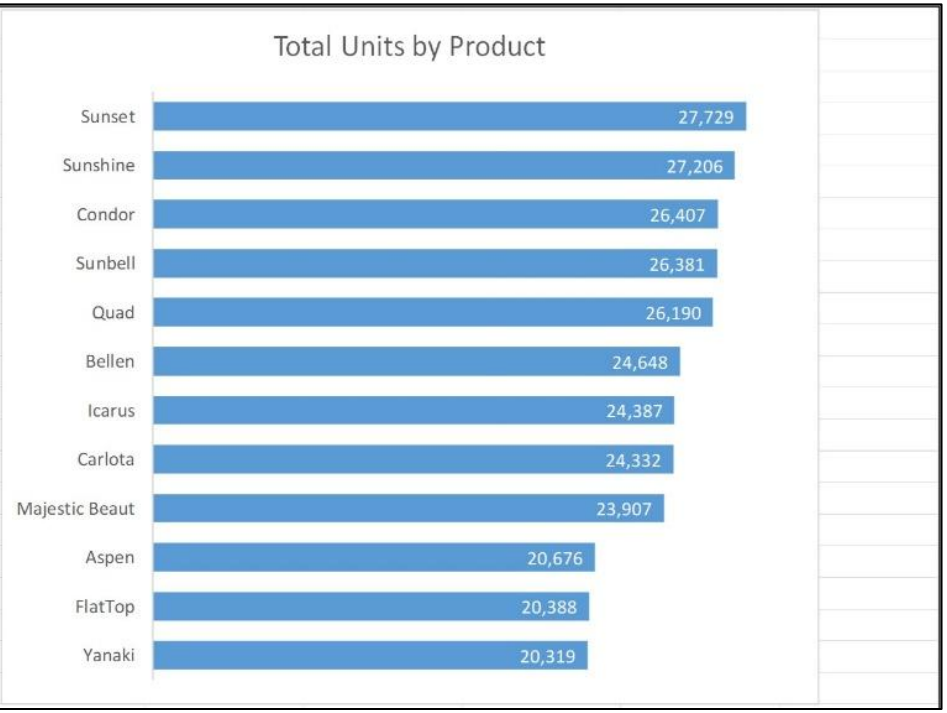
Sales Rep	Product	Units
Vo Dat	Quad	515
Vo Dat	Carlota	1199
Vo Dat	Sunshine	443
Vo Dat	Sunset	1186
Vo Dat	Majestic Beaut	516
Vo Dat	Aspen	267
Vo Dat	Yanaki	1671
Vo Dat	Condor	514
Vo Dat	Icarus	473
Vo Dat	Bellen	484
Vo Dat	Sunbell	1272
Vo Dat	FlatTop	492

Why Cross Tabulated Tables are Not a Good Place to Store Data

2. As shown to the right in the picture on the previous page, if you look at the row in the cross tabulated table for the Sales Rep Vo Dat, the 12 units numbers should be in a 12 record table with the three columns: Sales Rep, Product, and Units. For example, as shown above, the units, 484 should be part of a record with the Sales Rep Vo Dat and the Product, Bellen. The cross tabulated table, as shown above, is hard to analyze. As shown below, if you convert the cross tabulated table into a proper data set with the three columns SalesRep, Product, and Units, then analysis is much easier. For example, as shown below, you can sort by the units columns Z to A, build a Total Units by Product PivotTable, and create a column chart visual to show the total units biggest to smallest.

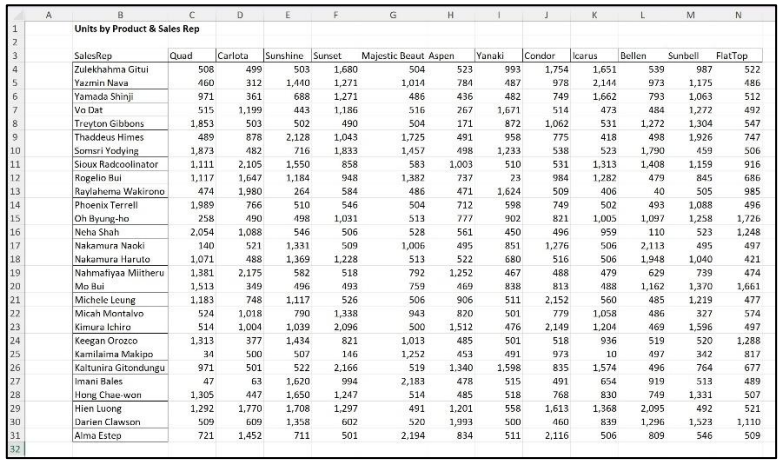
SalesRep	Product	Units
Alma Estep	Majestic Beaut	2194
Imani Bales	Majestic Beaut	2183
Nahmafiyaa Miitheru	Carlota	2175
Kaltunira Gitondungu	Sunset	2166
Michele Leung	Condor	2152
Kimura Ichiro	Condor	2149
Yazmin Nava	Icarus	2144
Thaddeus Himes	Sunshine	2128
Alma Estep	Condor	2116
Nakamura Naoki	Bellen	2113
Sioux Radcoolinator	Carlota	2105
Kimura Ichiro	Sunset	2096
Hien Luong	Bellen	2095
Neha Shah	Quad	2054
Darien Clawson	Aspen	1993
Phoenix Terrell	Quad	1989
Raylahema Wakirono	Carlota	1980
Nakamura Haruto	Bellen	1948
Thaddeus Himes	Sunbell	1926
Somsri Yodying	Quad	1873
Treyton Gibbons	Quad	1853

Product	Sum of Units
Yanaki	20,319
FlatTop	20,388
Aspen	20,676
Majestic Beaut	23,907
Carlota	24,332
Icarus	24,387
Bellen	24,648
Quad	26,190
Sunbell	26,381
Condor	26,407
Sunshine	27,206
Sunset	27,729
Grand Total	**292,570**



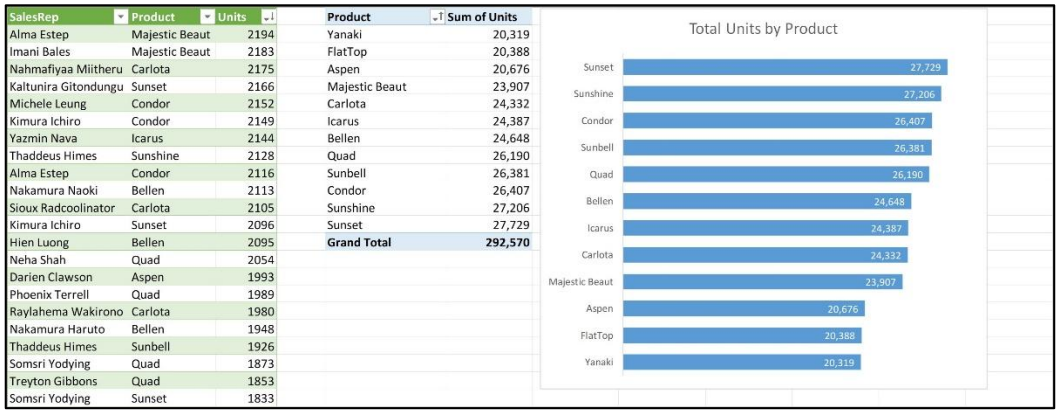
Project Goals for Video 04

1. The first task in this video is to take a cross tabulated table with one row header variable and one column header variable and convert it into a proper table so we can sort the Units column and build a PivotTable and column chart visual to show total units for each product, biggest to smallest.



Units by Product & Sales Rep

SalesRep	Quad	Carlota	Sunshine	Sunset	Majestic Beaut	Aspen	Yanaki	Condor	Icarus	Bellen	Sunbell	FlatTop
Zulekhahma Gitui	508	499	503	1,680	504	523	993	1,754	1,651	539	987	522
Yazmin Nava	460	312	1,440	1,271	1,014	784	487	978	2,144	973	1,175	486
Yamada Shinji	971	361	688	1,271	486	436	482	749	1,662	793	1,063	512
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Treyton Gibbons	1,853	503	502	490	504	171	872	1,062	531	1,272	1,304	547
Thaddeus Himes	489	878	2,128	1,043	1,725	491	958	775	418	498	1,926	747
Somsri Yodying	1,873	482	716	1,833	1,457	498	1,233	538	523	1,790	459	506
Sioux Radcoolinator	1,111	2,105	1,550	858	583	1,003	510	531	1,313	1,408	1,159	916
Rogelio Bui	1,117	1,647	1,184	948	1,382	737	23	984	1,282	479	845	686
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Neha Shah	2,054	1,088	546	506	528	561	450	496	959	110	523	1,248
Nakamura Naoki	140	521	1,331	509	1,006	495	851	1,276	506	2,113	495	497
Nakamura Haruto	1,071	488	1,369	1,228	513	522	680	516	506	1,948	1,040	421
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Somsri Yodying	Quad	1873
Treyton Gibbons	Quad	1853
Somsri Yodying	Sunset	1833

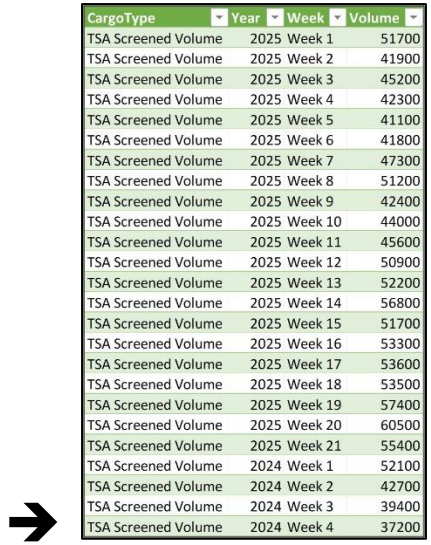
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Quad	26,190
Sunbell	26,381
Condor	26,407
Sunshine	27,206
Sunset	27,729
Grand Total	292,570

2. The second task in this video is to take a cross tabulated table with one row header variable and two column header variables and convert it into a proper table.



* Week number is determined by the first Sunday of the month
EX: Week 1 of 2022 includes December 26, 2021 - January 1, 2022

	TSA Screened Volume	TSA Screened Volume	TSA Screened Volume	TSA Screened Volume	TSA Screened Volume	TSA Screened Volume	TSA Screened Volume	Aircraft operations	Aircraft operations	Aircraft operations	Aircraft operations	Aircraft operations	Aircraft operations	Aircraft operations
	2025	2024	2023	2022	2021	2020	2019	2025	2024	2023	2022	2021	2020	2019
Week 1	51,700	52,100	42,000	38,800	20,800	49,300	49,300	1,100	1,050	1,010	700	840	1,200	1,170
Week 2	41,900	42,700	42,400	34,100	17,000	42,500	41,900	1,040	940	970	880	810	1,360	1,130
Week 3	45,200	39,400	38,600	32,800	14,700	44,500	44,700	1,030	890	1,010	940	780	1,110	1,110
Week 4	42,300	37,200	38,400	27,600	13,300	43,600	43,100	1,030	940	1,010	900	770	1,130	1,110
Week 5	41,100	40,200	37,900	27,700	12,900	41,500	42,300	1,030	980	1,000	910	770	1,150	1,110
Week 6	41,800	42,200	40,100	28,700	14,700	41,600	41,100	1,000	990	1,020	930	800	1,140	1,010
Week 7	47,300	48,200	47,400	32,500	19,300	49,100	46,700	1,020	1,000	1,010	960	740	1,160	1,030
Week 8	51,200	49,100	48,200	40,000	21,800	48,800	50,200	1,050	1,050	1,020	960	820	1,170	1,140
Week 9	42,400	44,500	42,400	41,700	19,500	43,400	46,000	1,070	1,060	1,020	970	900	1,170	1,130
Week 10	44,000	45,200	43,200	36,900	21,000	37,900	46,200	1,090	1,060	1,030	960	900	1,170	1,140
Week 11	45,600	50,000	48,800	37,500	21,900	28,100	48,600	1,100	1,090	1,040	980	920	1,160	1,160
Week 12	50,900	51,500	48,600	42,900	25,900	13,700	53,500	1,120	1,110	1,050	1,010	920	1,070	1,160
Week 13	52,200	52,400	50,700	43,700	27,200	5,400	56,000	1,150	1,110	1,000	1,040	930	760	1,160
Week 14	56,800	58,800	55,600	45,300	31,800	3,400	58,700	1,150	1,100	1,060	1,020	950	540	1,170
Week 15	51,700	54,800	52,000	50,500	34,700	2,800	52,400	1,160	1,130	1,080	1,030	960	420	1,170
Week 16	53,300	48,900	48,600	45,300	29,600	2,600	49,200	1,190	1,150	1,090	1,040	980	390	1,180
Week 17	53,600	51,300	48,700	44,800	29,000	3,100	53,300	1,210	1,170	1,090	1,040	980	380	1,180
Week 18	53,500	52,500	48,600	45,200	29,300	3,700	52,800	1,220	1,200	1,100	1,070	990	370	1,210
Week 19	57,400	54,900	52,300	45,000	31,500	4,600	53,200	1,260	1,190	1,120	1,050	1,000	380	1,230
Week 20	60,500	57,300	54,000	47,100	33,100	5,500	55,900	1,290	1,220	1,130	1,070	1,020	390	1,240
Week 21	55,400	59,300	54,300	48,300	34,200	6,900	57,800	1,310	1,270	1,150	1,090	1,050	420	1,250
Week 22		54,200	50,000	47,600	37,200	7,300	53,400		1,260	1,150	1,090	1,070	440	1,240
Week 23		57,200	54,300	44,600	36,900	8,800	55,100		1,310	1,190	1,090	1,090	500	1,280
Week 24		65,000	63,700	48,800	38,200	10,600	61,900		1,350	1,220	1,150	1,160	580	1,360
Week 25		69,500	66,400	54,800	44,900	13,100	69,000		1,380	1,250	1,150	1,180	630	1,370
Week 26		72,200	67,400	57,300	49,000	14,500	68,200		1,390	1,240	1,160	1,190	650	1,370
Week 27		65,200	61,300	56,100	48,000	15,500	62,800		1,330	1,210	1,130	1,180	670	1,330
Week 28		69,500	65,200	51,400	47,900	16,500	67,100		1,390	1,230	1,150	1,180	730	1,390



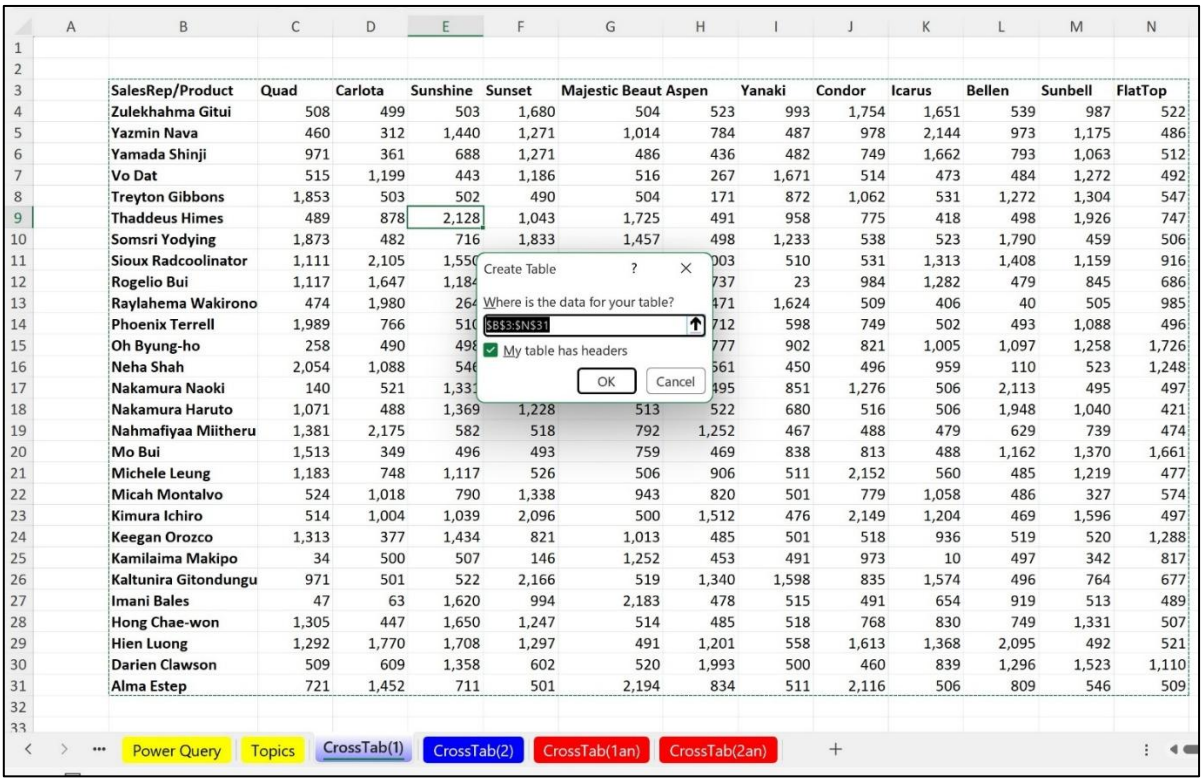
CargoType	Year	Week	Volume
TSA Screened Volume	2025	Week 1	51700
TSA Screened Volume	2025	Week 2	41900
TSA Screened Volume	2025	Week 3	45200
TSA Screened Volume	2025	Week 4	42300
TSA Screened Volume	2025	Week 5	41100
TSA Screened Volume	2025	Week 6	41800
TSA Screened Volume	2025	Week 7	47300
TSA Screened Volume	2025	Week 8	51200
TSA Screened Volume	2025	Week 9	42400
TSA Screened Volume	2025	Week 10	44000
TSA Screened Volume	2025	Week 11	45600
TSA Screened Volume	2025	Week 12	50900
TSA Screened Volume	2025	Week 13	52200
TSA Screened Volume	2025	Week 14	56800
TSA Screened Volume	2025	Week 15	51700
TSA Screened Volume	2025	Week 16	53300
TSA Screened Volume	2025	Week 17	53600
TSA Screened Volume	2025	Week 18	53500
TSA Screened Volume	2025	Week 19	57400
TSA Screened Volume	2025	Week 20	60500
TSA Screened Volume	2025	Week 21	55400
TSA Screened Volume	2024	Week 1	52100
TSA Screened Volume	2024	Week 2	42700
TSA Screened Volume	2024	Week 3	39400
TSA Screened Volume	2024	Week 4	37200

Download files

1. As we learned in the last video, download the zipped folder below Video #4, then unzip it in the same location you used for the previous video.

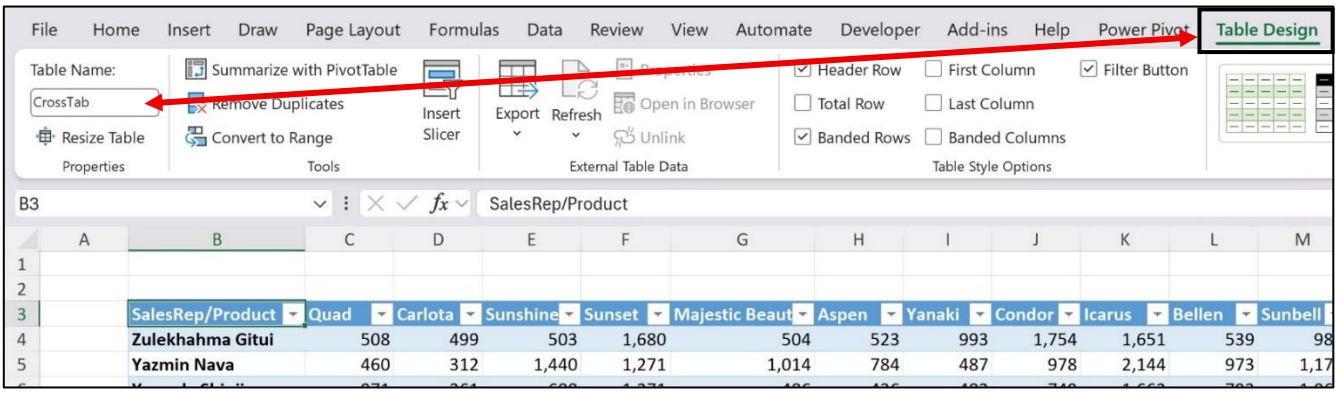
Example 1: Convert Cross Tabulated Table into Proper Table

1. Before you can bring a table of data from the Excel worksheet into the Power Query Edttior, you must convert the table to an official Excel Table. Why? Because tools like Power Query and Power Pivot require that the source data be dynamic with the ability to add or remove records.
2. To convert a table in the worksheet to an Excel Table, select one cell and then use the keyboard **Ctrl + T**. As shown below, leave the "My table has headers" checkbox selected, then click OK, as shown below.



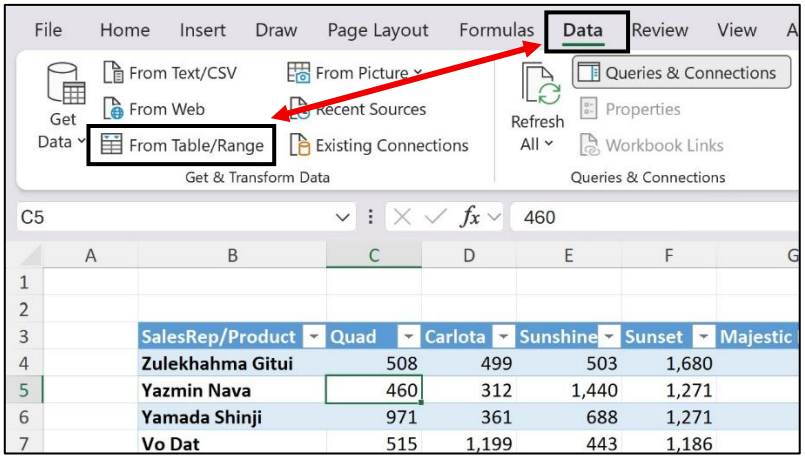
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Yamada Shinji	971	361	688	1,271	486	436	482	749	1,662	793	1,063	512
Vo Dat	515	1,199	443	1,186	516	267	1,671	514	473	484	1,272	492
Treyton Gibbons	1,853	503	502	490	504	171	872	1,062	531	1,272	1,304	547
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Sioux Radcoolinator	1,111	2,105	1,550			003	510	531	1,313	1,408	1,159	916
Rogelio Bui	1,117	1,647	1,184			737	23	984	1,282	479	845	686
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Oh Byung-ho	258	490	498			777	902	821	1,005	1,097	1,258	1,726
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Nakamura Naoki	140	521	1,331			495	851	1,276	506	2,113	495	497
Nakamura Haruto	1,071	488	1,369	1,228	513	522	680	516	506	1,948	1,040	421
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Kimura Ichiro	514	1,004	1,039	2,096	500	1,512	476	2,149	1,204	469	1,596	497
Keegan Orozco	1,313	377	1,434	821	1,013	485	501	518	936	519	520	1,288
Kamilaima Makipo	34	500	507	146	1,252	453	491	973	10	497	342	817
Kaltunira Gitondungu	971	501	522	2,166	519	1,340	1,598	835	1,574	496	764	677
Imani Bales	47	63	1,620	994	2,183	478	515	491	654	919	513	489
Hong Chae-won	1,305	447	1,650	1,247	514	485	518	768	830	749	1,331	507
Hien Luong	1,292	1,770	1,708	1,297	491	1,201	558	1,613	1,368	2,095	492	521
Darien Clawson	509	609	1,358	602	520	1,993	500	460	839	1,296	1,523	1,110
Alma Estep	721	1,452	711	501	2,194	834	511	2,116	506	809	546	509

3. As shown below, in the Table Design tab, Properties group, use the Table Name text box to name the Excel Table CrossTab. With a cell selected in the Excel Table, you can use the keyboard: Alt, J, T, A to rename the table. After you name it, enter the name with the Enter key.

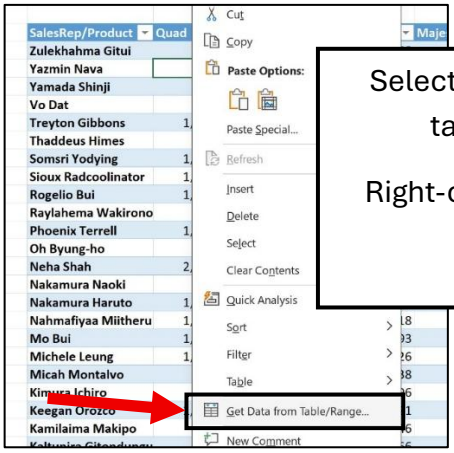


SalesRep/Product	Quad	Carlota	Sunshine	Sunset	Majestic Beaut	Aspen	Yanaki	Condor	Icarus	Bellen	Sunbell
Zulekhahma Gitui	508	499	503	1,680	504	523	993	1,754	1,651	539	98
Yazmin Nava	460	312	1,440	1,271	1,014	784	487	978	2,144	973	1,17

4. As shown below, with a cell selected in the Excel Table, you can import the Excel Table into the Power Query Editor by going to the Data tab, Get & Transform group and then clicking the From Table Range button. Or you can import the Excel Table by pressing the Right-click Key, then press the G Key.



OR

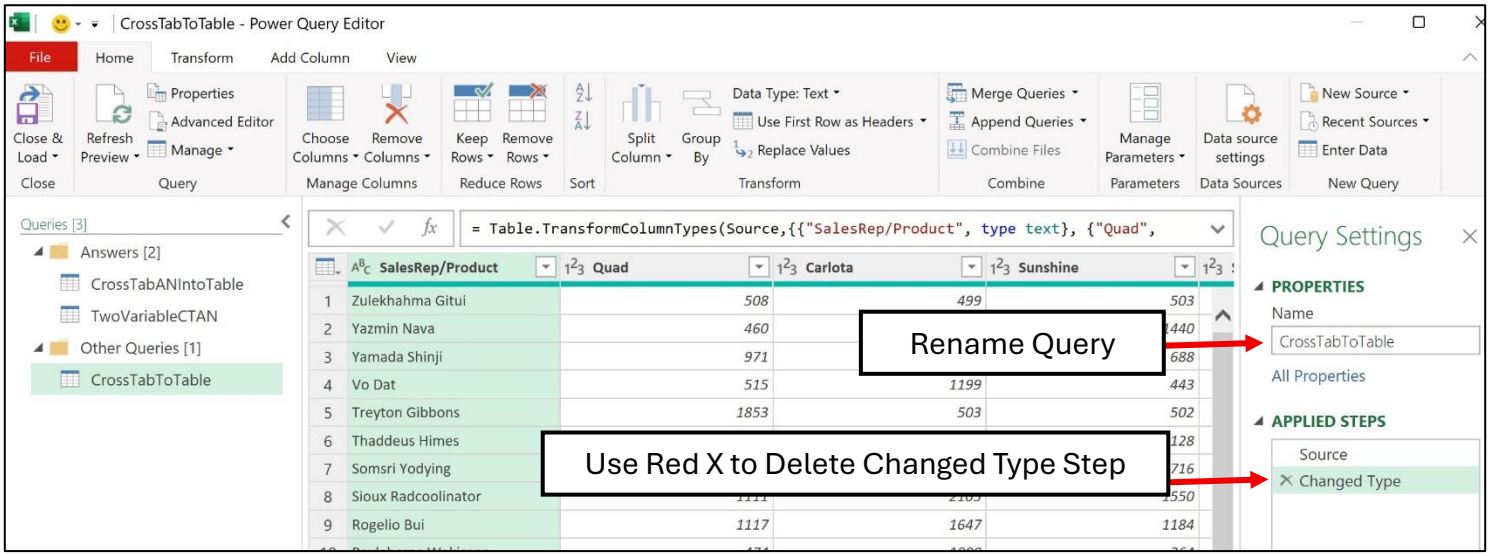


Select a cell in table,

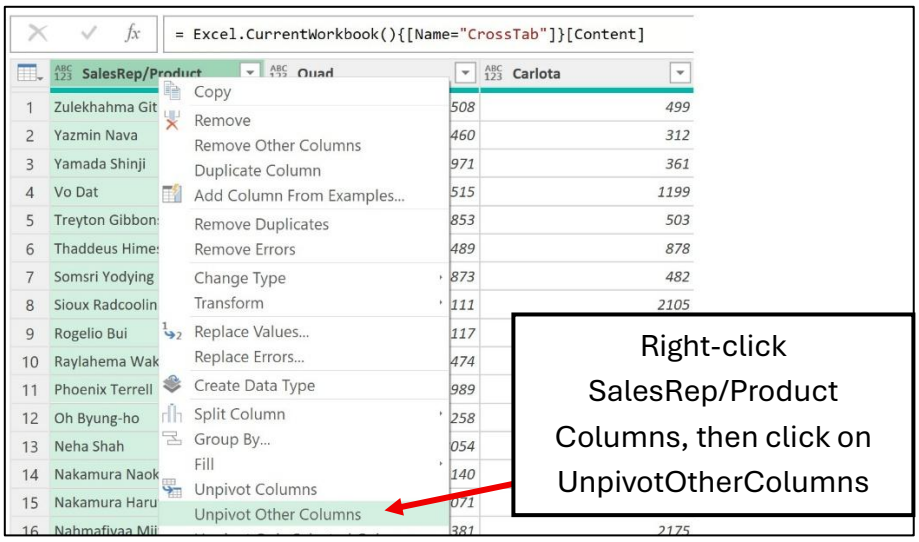
Right-click Key,

G

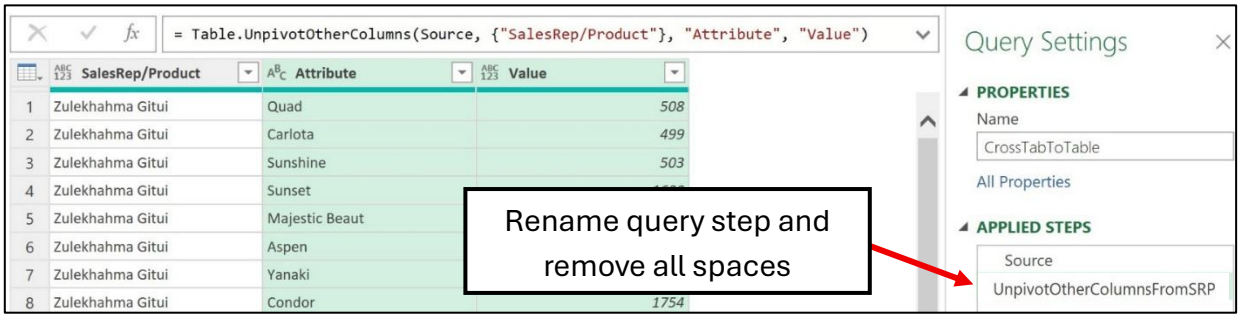
5. As shown below, In the Power Query Editor, rename the query to CrossTabToTable, and remove the automatic Changed Type query step by using the red X to the left of the query step name.



6. To create a proper table with all the Product names from the column field names, right-click SalesRep/Product Column, then from the drop down menu, click the UnpivotOtherColumns option, as shown in the picture on the next page.



7. The result of the Unpivot is shown below. If an automatic Changed Type step appears, use the Red X to delete it. Remove all spaces from query step name. I named my query step: UnPivotOtherColumnsFromSRP.

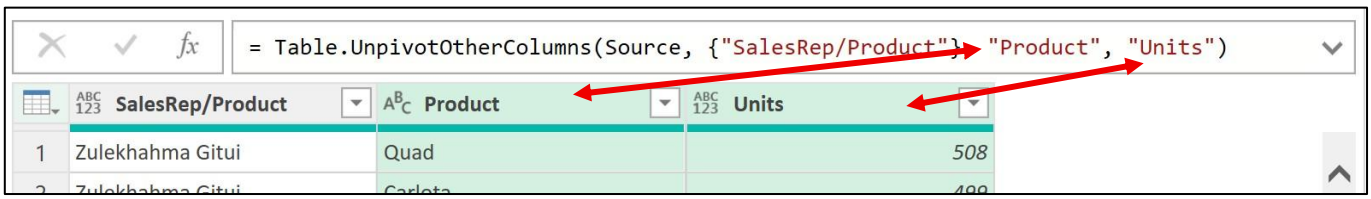


8. As shown above in the formula bar, the Table.UnpivotOtherColumns creates the proper table from a cross tabulated table. This M Code function has these four arguments:

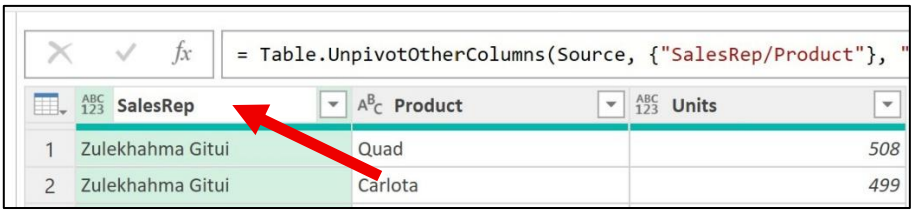
Table.UnpivotOtherColumns Arguments

Table.UnpivotOtherColumns(
table as table,
pivotColumns as list,
attributeColumn as text,
valueColumn as text
) as table

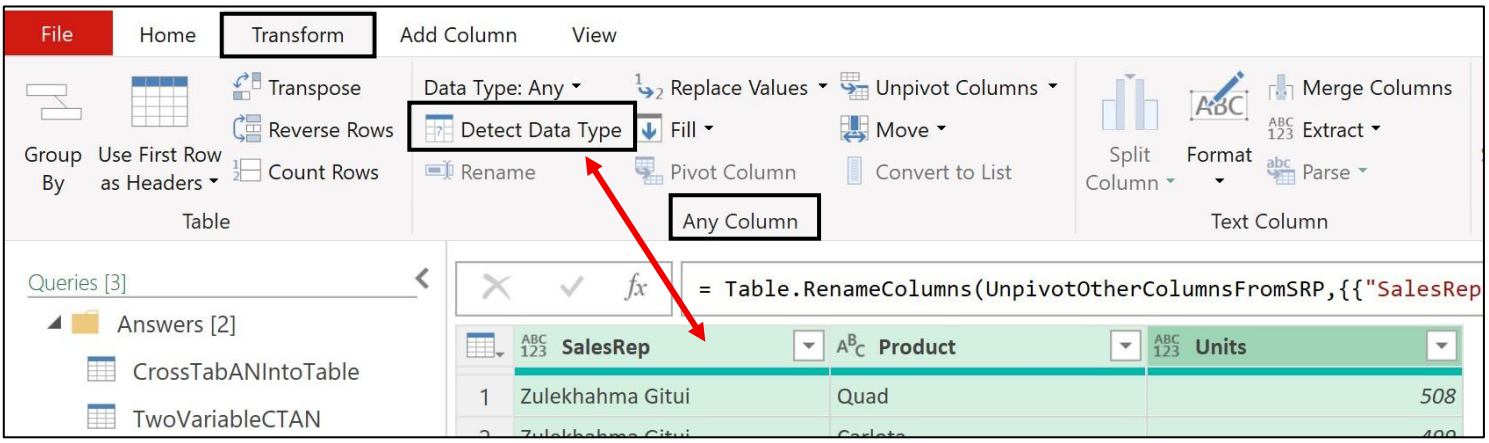
9. As shown below, with the unpivot query step selected in the Applied Step list, in the formula bar use the 3rd argument of the Table.UnpivotOtherColumns function to rename the attribute column "Product" and then use the 4th argument to rename the value column "Units".



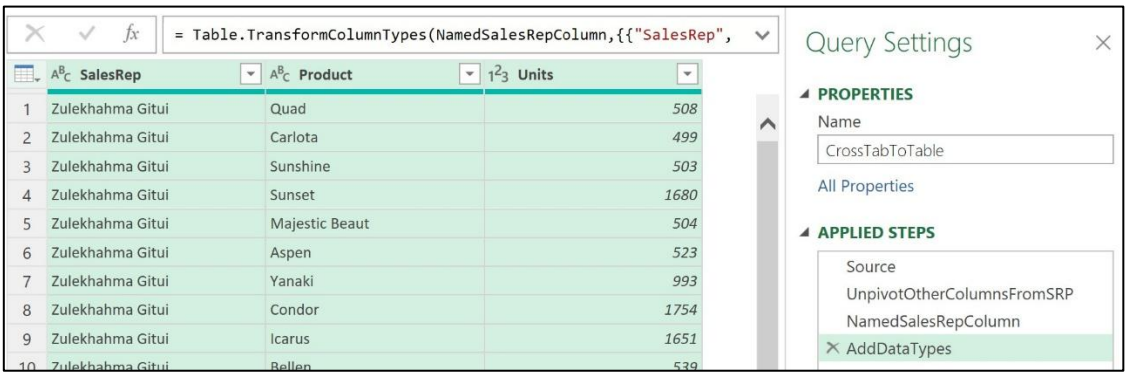
10. As shown below, to rename the first column, double-click the field name and type the new name SalesRep. Remove all spaces from the new query step name. I named my query step: NamedSalesRepColumn.



11. As shown below, select the three column field names, go to the Transform tab, then in the Any Column group, click the Detect Data Type button to apply data types to each column. Remove all spaces from new query step name. I named my query step: AddDataTypes.



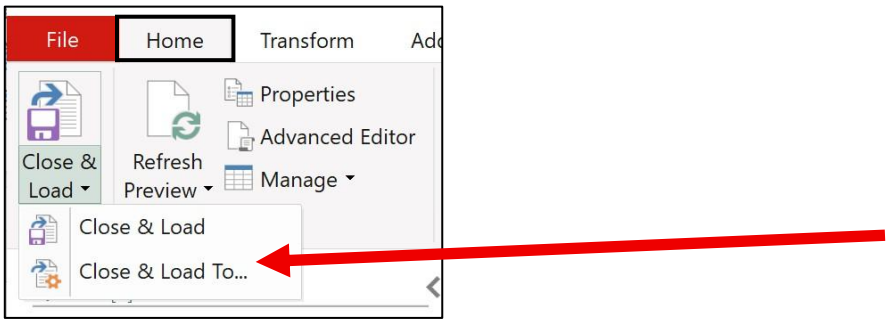
12. The finished query is shown below.



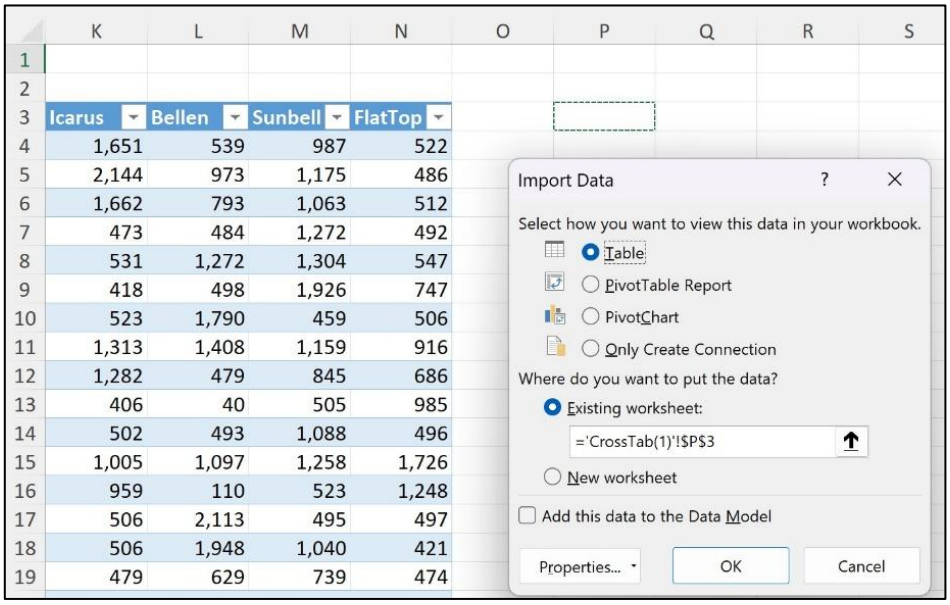
13. You can view the completed let expression in the Advanced Editor, as shown below.



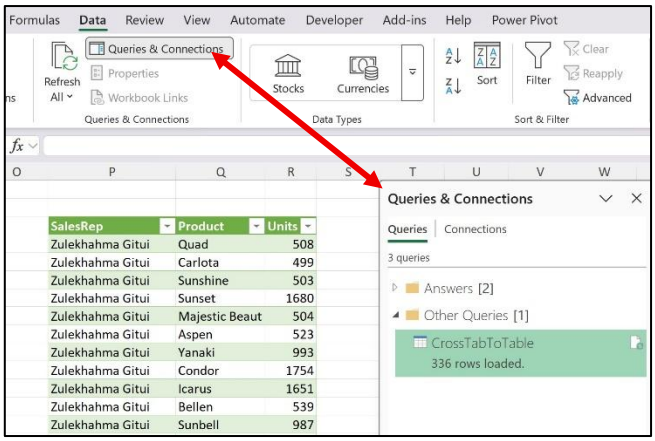
14. As shown below, To load the query to the worksheet, in the Home, Close group, click the Close & Load dropdown arrow, then select Close & Load To...



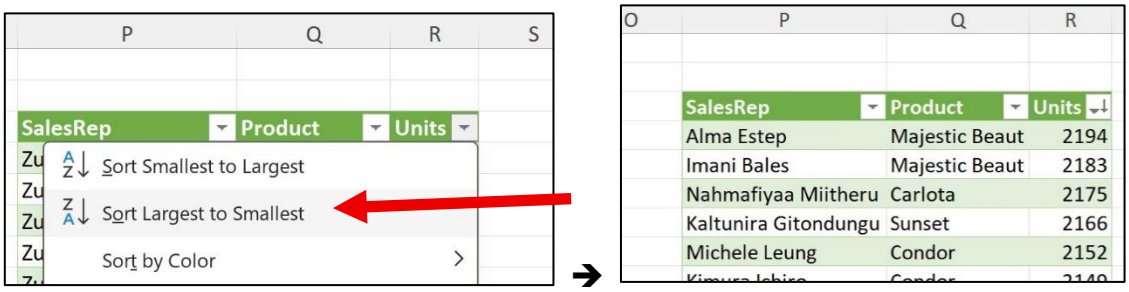
15. As shown below, in the Import Data dialog box, under "Select how you want to view this data in your workbook," select "Table." This loads the query as an Excel Table with the same name as the query. Under "Where do you want to put the data?", select "Existing worksheet," navigate to the worksheet "CrossTab(1)," select cell P3, and then click OK.



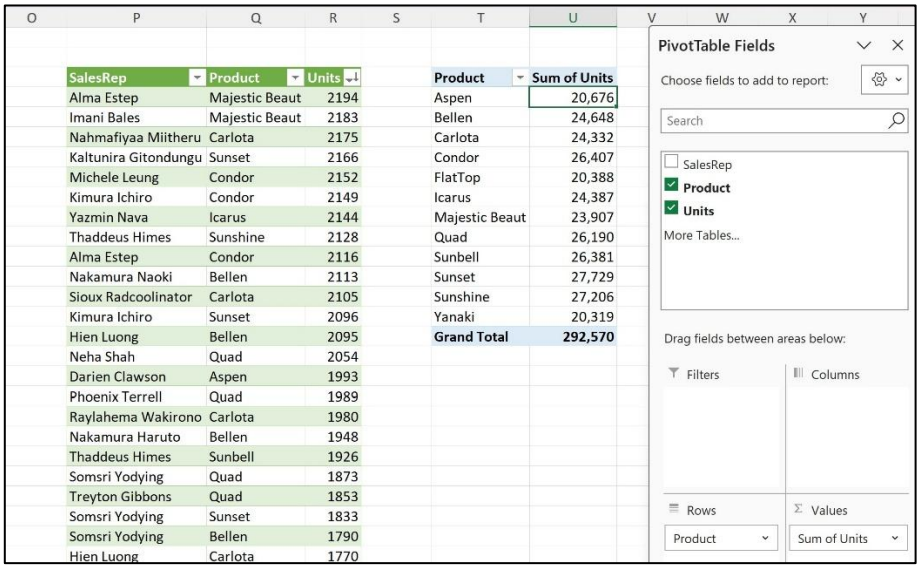
16. As shown below, the proper table is now loaded to the worksheet. When you load, the Queries & Connections task pane should appear on the right. If it does not, in the Data tab, Queries & Connections group, click the Queries & Connections button.



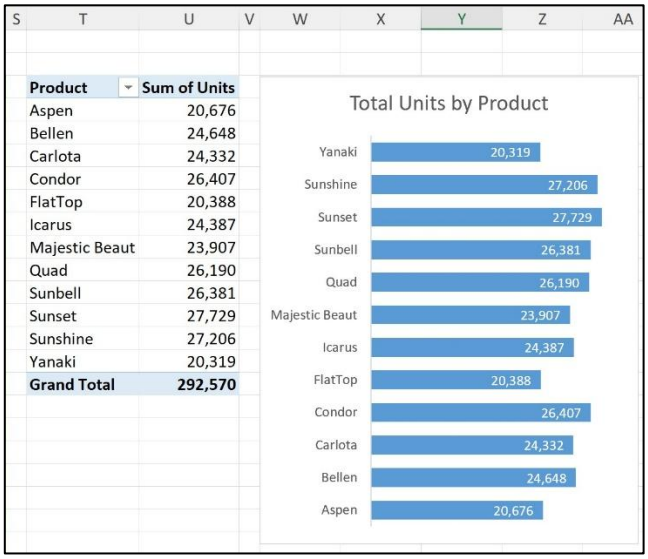
17. To analyze the new properly structured table, as shown below, sort the Units column from Z to A.



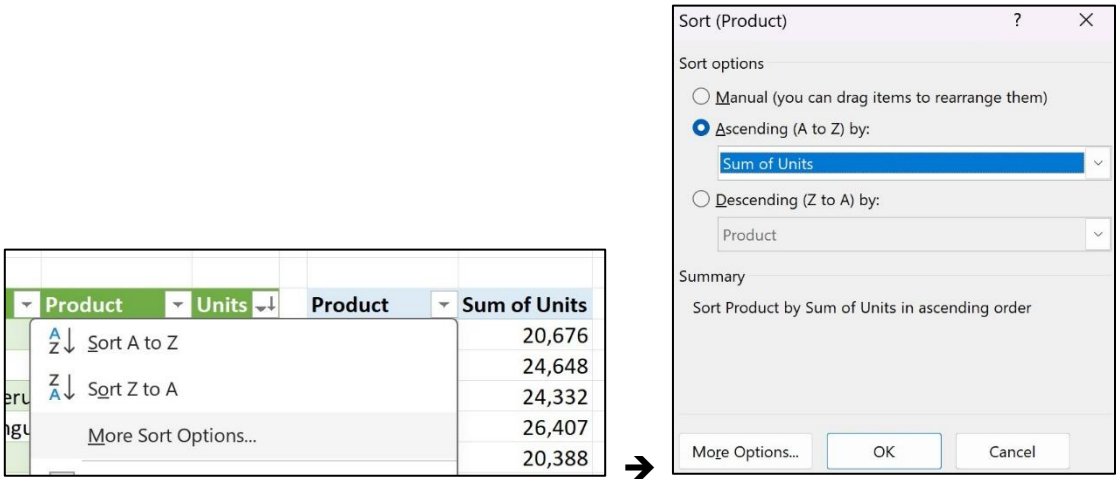
18. To analyze the new properly structured table, as shown below, create a PivotTable to summarize units by product.



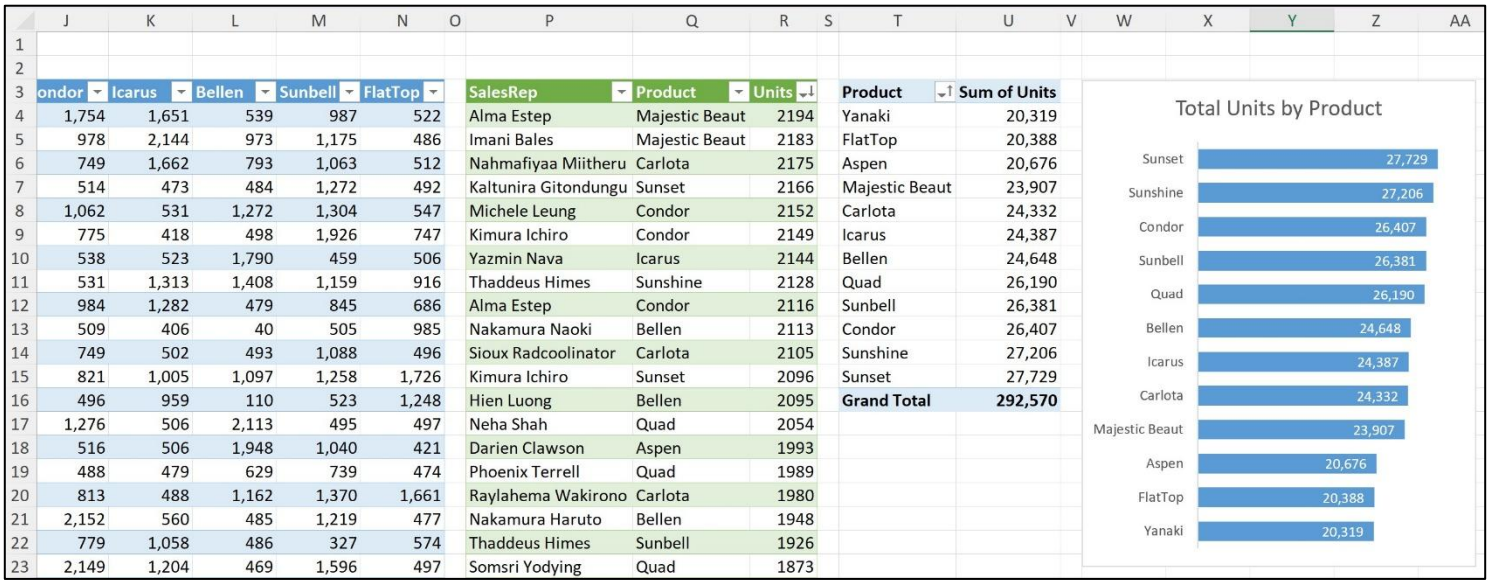
19. To analyze the new properly structured table, as shown below, from the PivotTable create a visualization that shows differences across categories. The column or bar charts are the most effective visualizations for differences across categories. I chose a bar chart to give breathing room to the product labels.



20. As shown below, rather than sorting the chart, we can sort the PivotTable and both the PivotTable and chart will become sorted. In a PivotTable if you use the filter sort button above the Product field in the Row Area of the PivotTable, it sorts the product names only. Our goal is to sort the Units in the Values Area of the PivotTable. To do this, click the filter sort button above the Product field in the Row Area of the PivotTable, then click on More Sort Options…. Then as shown below on the right, select the Ascending option and from the dropdown in the Ascending textbox, select Sum of Units.



21. The right-side of the cross tabulated table, the resulting Table.UnpivotOtherColumns function proper table and the analysis is shown below.



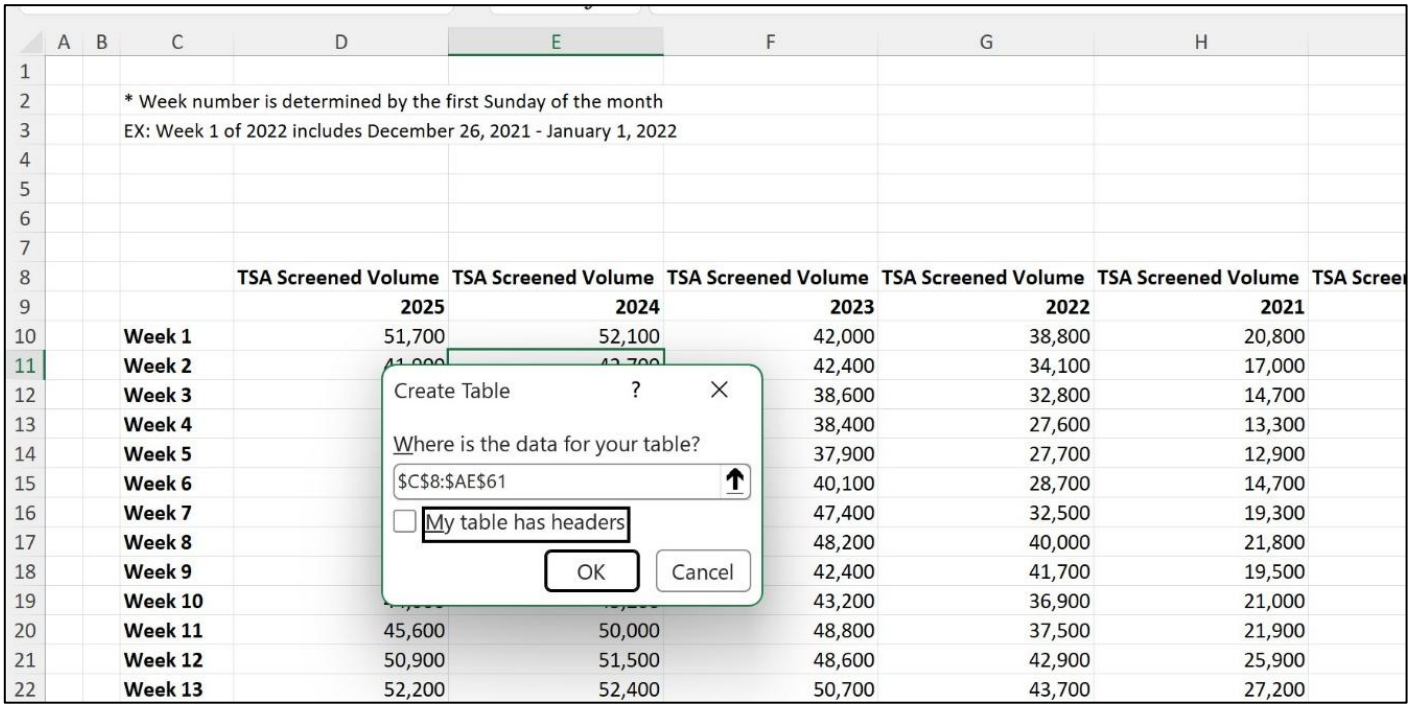
ondor	Icarus	Bellen	Sunbell	FlatTop
1,754	1,651	539	987	522
978	2,144	973	1,175	486
749	1,662	793	1,063	512
514	473	484	1,272	492
1,062	531	1,272	1,304	547
775	418	498	1,926	747
538	523	1,790	459	506
531	1,313	1,408	1,159	916
984	1,282	479	845	686
509	406	40	505	985
749	502	493	1,088	496
821	1,005	1,097	1,258	1,726
496	959	110	523	1,248
1,276	506	2,113	495	497
516	506	1,948	1,040	421
488	479	629	739	474
813	488	1,162	1,370	1,661
2,152	560	485	1,219	477
779	1,058	486	327	574
2,149	1,204	469	1,596	497

SalesRep	Product	Units
Alma Estep	Majestic Beaut	2194
Imani Bales	Majestic Beaut	2183
Nahmafiyaa Miitheru	Carlota	2175
Kaltunira Gitondungu	Sunset	2166
Michele Leung	Condor	2152
Kimura Ichiro	Condor	2149
Yazmin Nava	Icarus	2144
Thaddeus Himes	Sunshine	2128
Alma Estep	Condor	2116
Nakamura Naoki	Bellen	2113
Sioux Radcoolinator	Carlota	2105
Kimura Ichiro	Sunset	2096
Hien Luong	Bellen	2095
Neha Shah	Quad	2054
Darien Clawson	Aspen	1993
Phoenix Terrell	Quad	1989
Raylahema Wakirono	Carlota	1980
Nakamura Haruto	Bellen	1948
Thaddeus Himes	Sunbell	1926
Somsri Yodying	Quad	1873

Product	Sum of Units
Yanaki	20,319
FlatTop	20,388
Aspen	20,676
Majestic Beaut	23,907
Carlota	24,332
Icarus	24,387
Bellen	24,648
Quad	26,190
Sunbell	26,381
Condor	26,407
Sunshine	27,206
Sunset	27,729
Grand Total	**292,570**

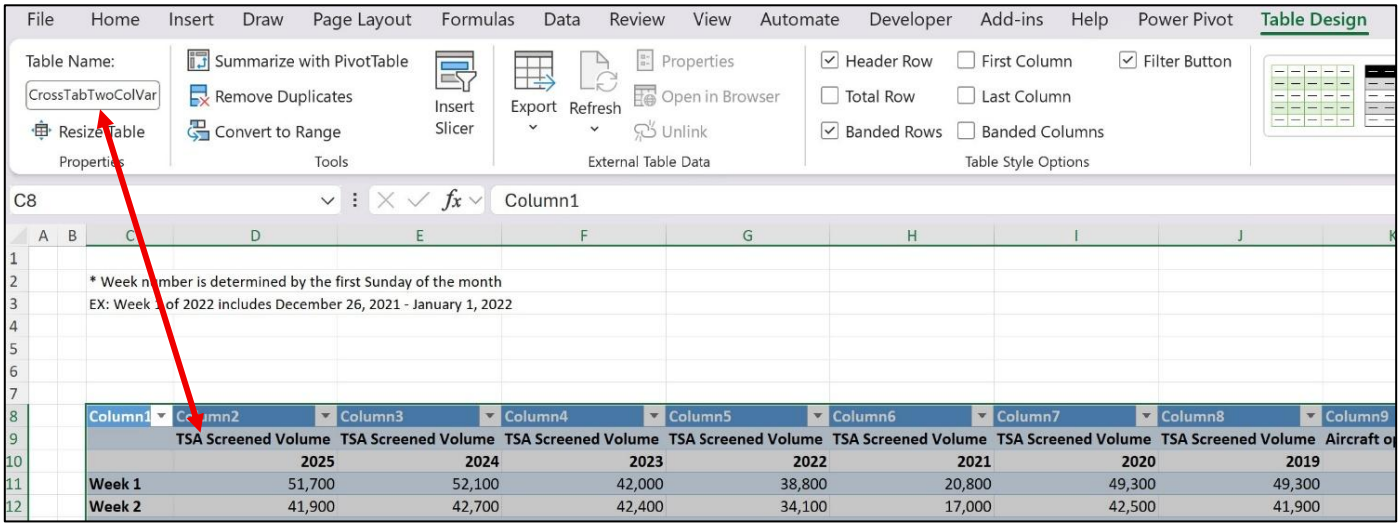
Example 2: Convert Cross Tabulated Table with Two Column Variables into Proper Table

1. As shown below, when you have two column header variables in a cross tabulated table, when you convert the cross tab to an Excel Table, you must uncheck the My table has headers checkbox. This is because we want the default Column1, Column2, and so on field names. This allows the two column header variables to remain in the first two rows of the Excel Table so that we can use Power Query to transpose the table and convert the first two rows to columns.



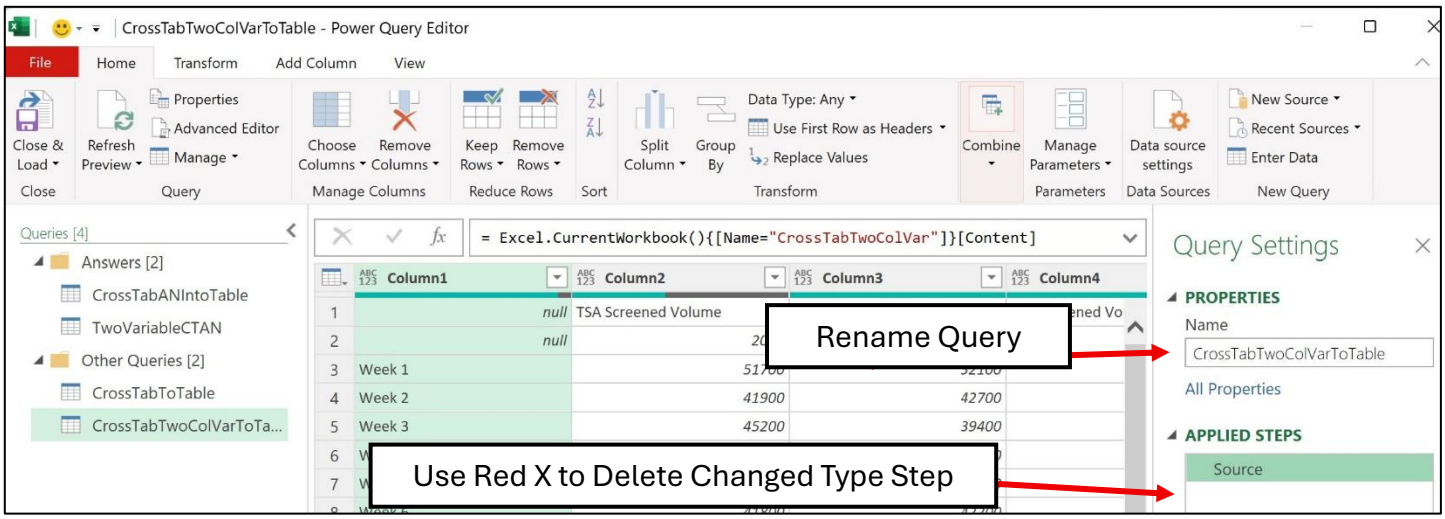
	TSA Screened Volume 2025	TSA Screened Volume 2024	TSA Screened Volume 2023	TSA Screened Volume 2022	TSA Screened Volume 2021	TSA Scree
Week 1	51,700	52,100	42,000	38,800	20,800	
Week 2			42,400	34,100	17,000	
Week 3			38,600	32,800	14,700	
Week 4			38,400	27,600	13,300	
Week 5			37,900	27,700	12,900	
Week 6			40,100	28,700	14,700	
Week 7			47,400	32,500	19,300	
Week 8			48,200	40,000	21,800	
Week 9			42,400	41,700	19,500	
Week 10			43,200	36,900	21,000	
Week 11	45,600	50,000	48,800	37,500	21,900	
Week 12	50,900	51,500	48,600	42,900	25,900	
Week 13	52,200	52,400	50,700	43,700	27,200	

2. As shown below, name the Excel Table CrossTabTwoColVar.

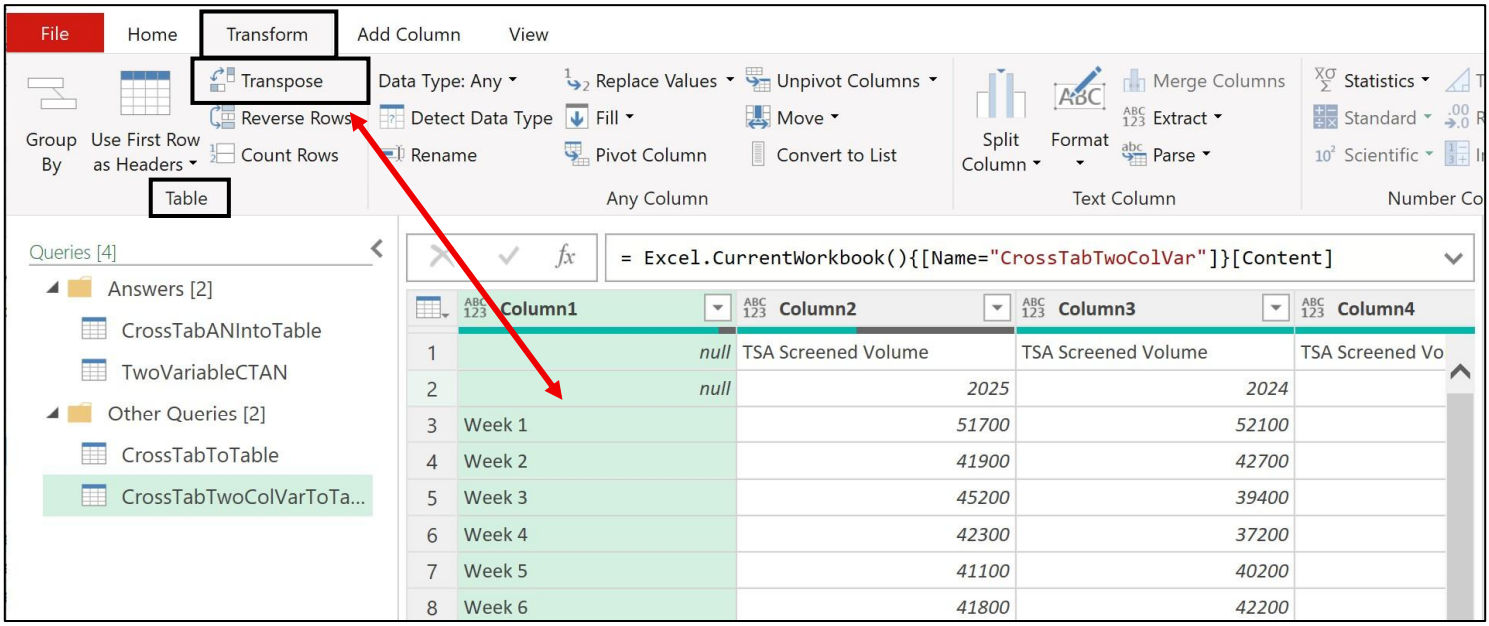


Column1	Column2 TSA Screened Volume 2025	Column3 TSA Screened Volume 2024	Column4 TSA Screened Volume 2023	Column5 TSA Screened Volume 2022	Column6 TSA Screened Volume 2021	Column7 TSA Screened Volume 2020	Column8 TSA Screened Volume 2019	Column9 Aircraft o
Week 1	51,700	52,100	42,000	38,800	20,800	49,300	49,300	
Week 2	41,900	42,700	42,400	34,100	17,000	42,500	41,900	

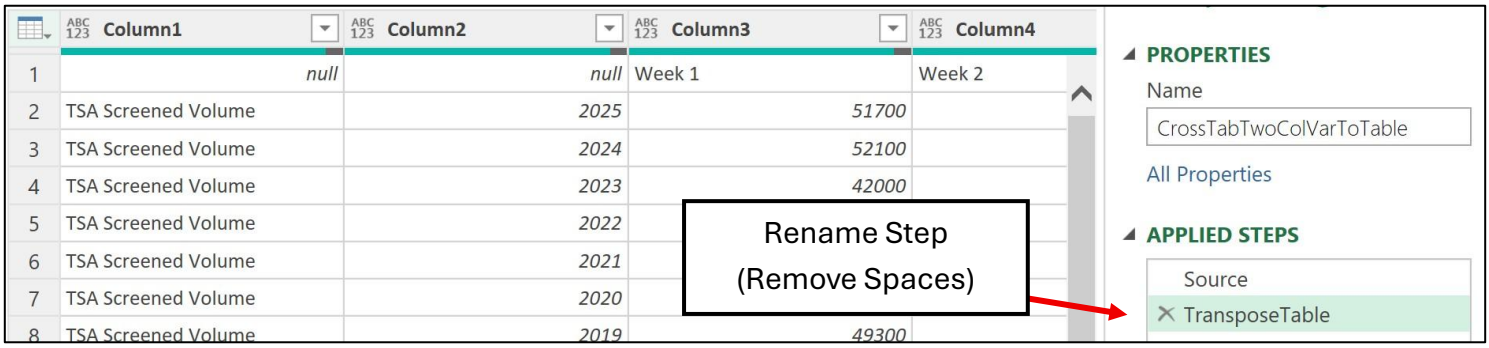
3. As in the picture on the next page, rename the query to CrossTabTwoColVarToTable, and remove the automatic Changed Type query step by using the red X to the left of the query step name.



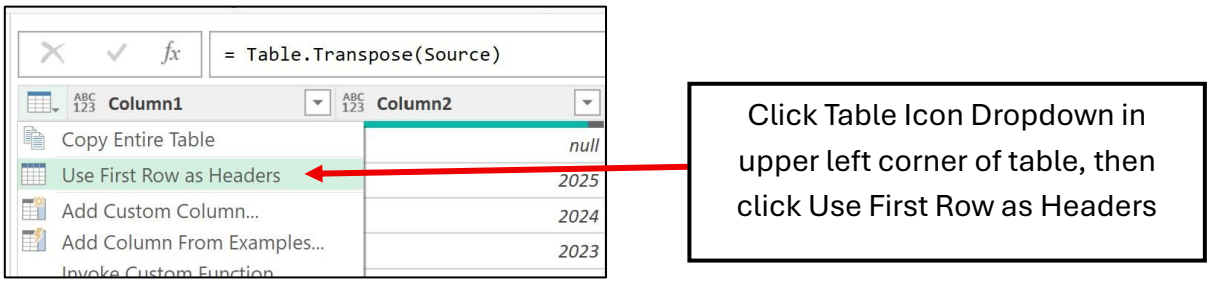
4. To transpose the table (change rows to columns and columns to rows), in the Transform tab, Table group, click the Transpose button. The results are shown below.



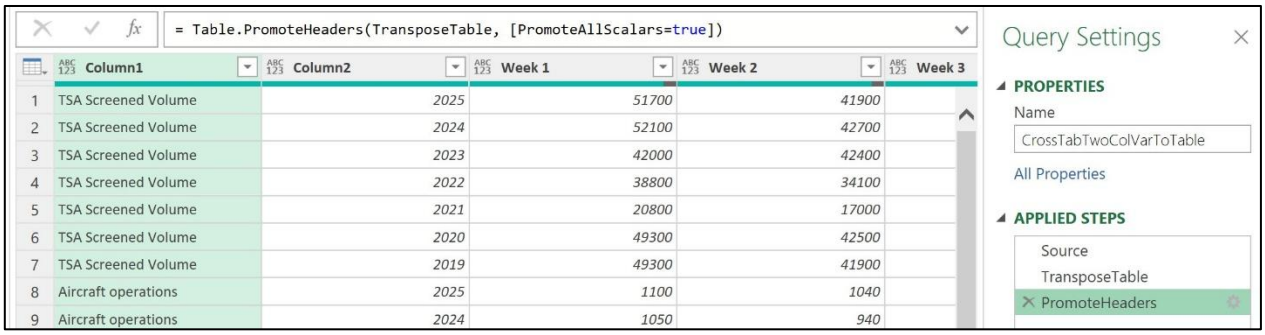
5. Remove all spaces from the new query step name. I named my query step: TransposeTable. Notice that the Week variable is now in the first row of the table. In order to use the Table.UnpivotOtherColumns function, we next need to promote the first row of the table to headers.



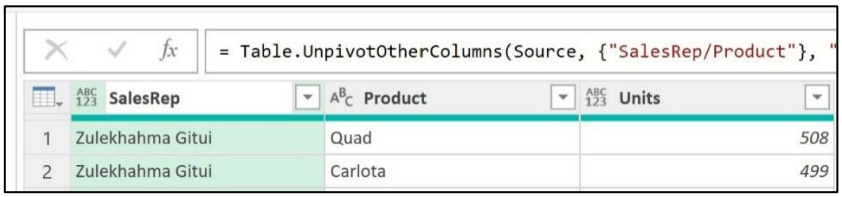
6. As shown below, to promote the first row of the table to headers, click the table Icon dropdown in upper left corner of table, then click Use First Row as Headers.



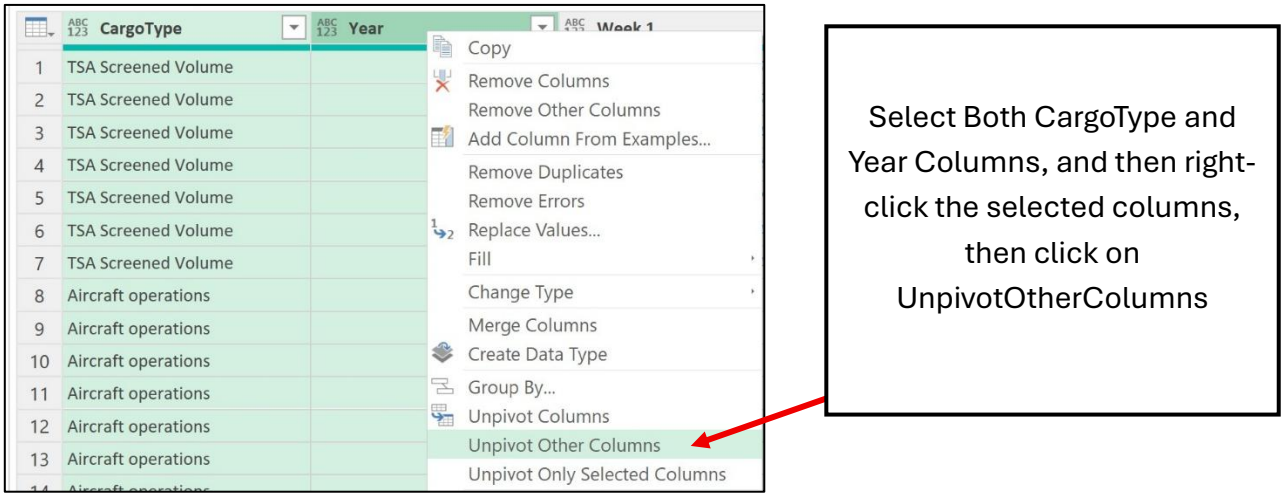
7. As shown below, remove all spaces from the new query step name. I named my query step: PromoteHeaders.



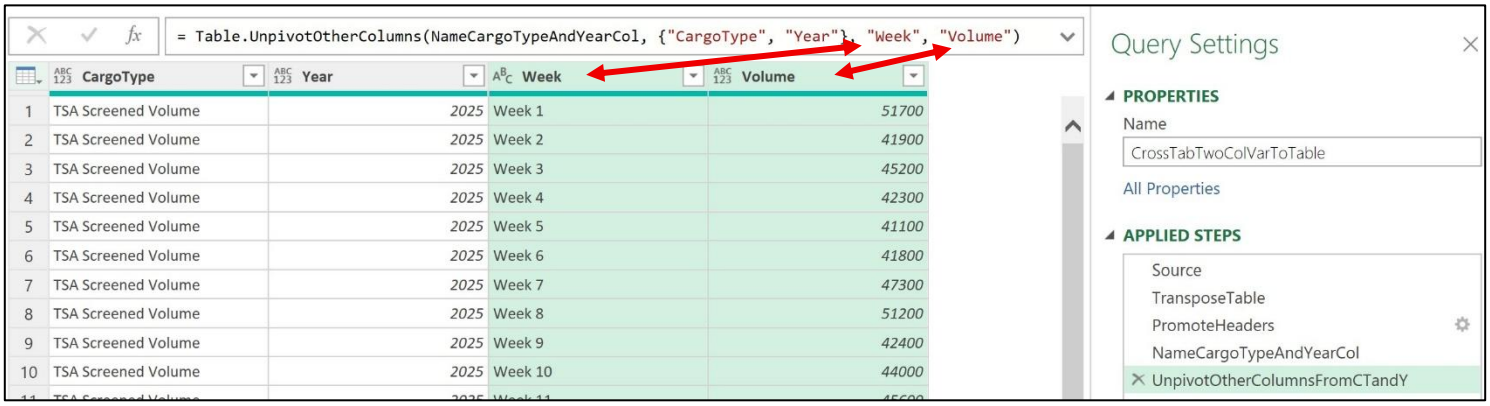
8. As shown below, Rename Column 1 to become SalesRep and Column2 to become Year. Name the new query step NamedSalesRepColumn.



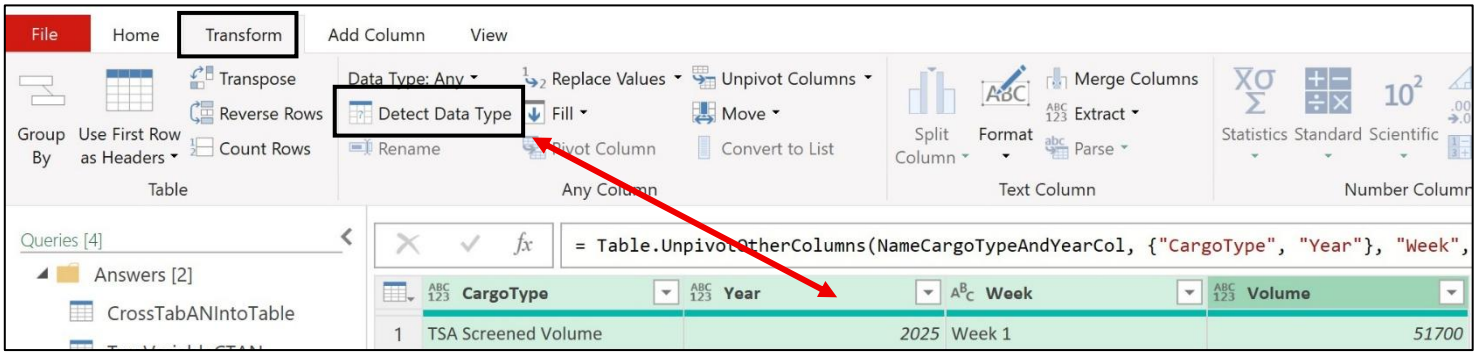
9. With the PromoteHeaders step selected, select the columns CargoType and Year, right-click the selected columns, then from the drop down menu click the UnpivotOtherColumns option, as shown in the picture below.



10. As shown below, rename the two new columns: Week and Volume.



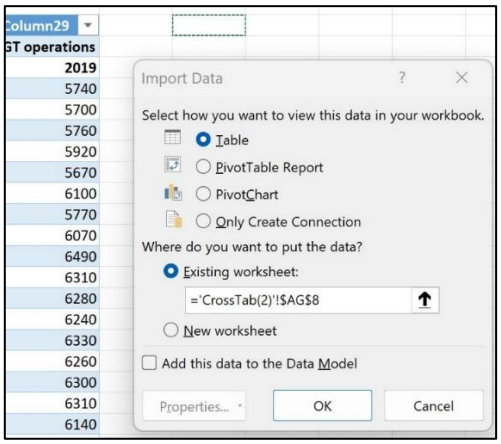
11. As shown below, add data types to the columns in the table. Name the new query step AddDataTypes.



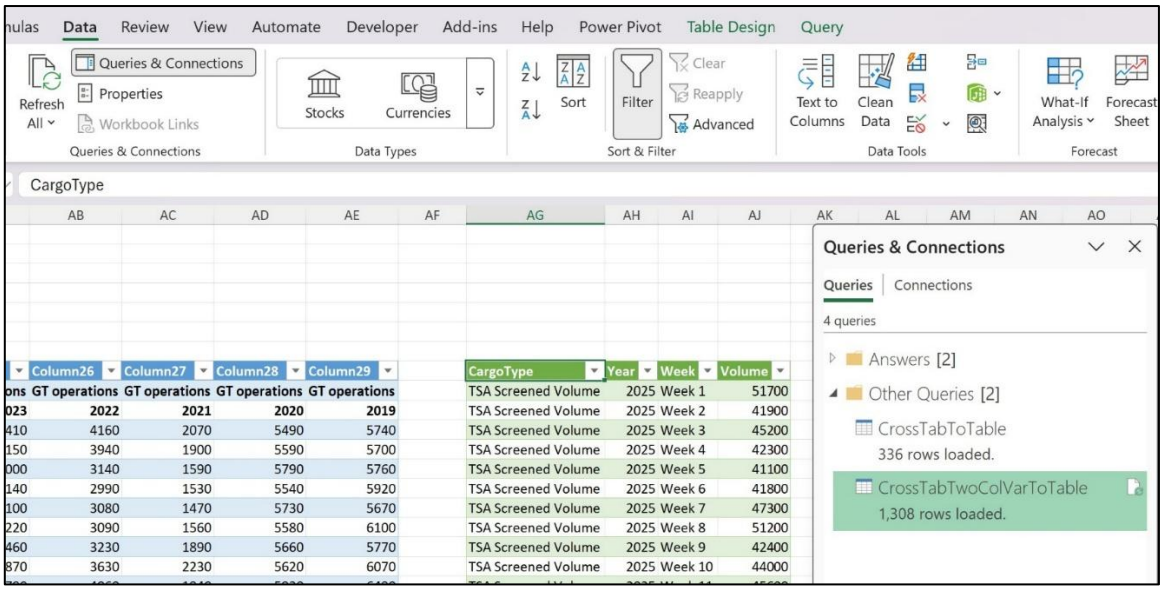
12. As shown below, you can view the let expression in the Advanced Editor.



13. Close & Load the table to cell AG8 on the worksheet CrossTab(2). The Import Data dialog box is shown below.



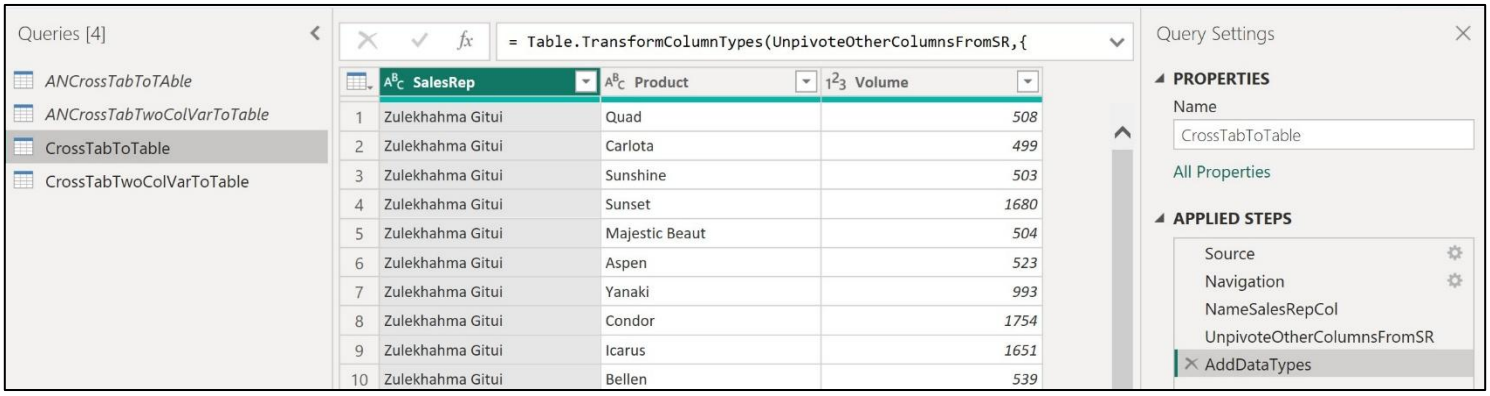
The loaded table and Queries & Connections task pane are shown in the picture below.



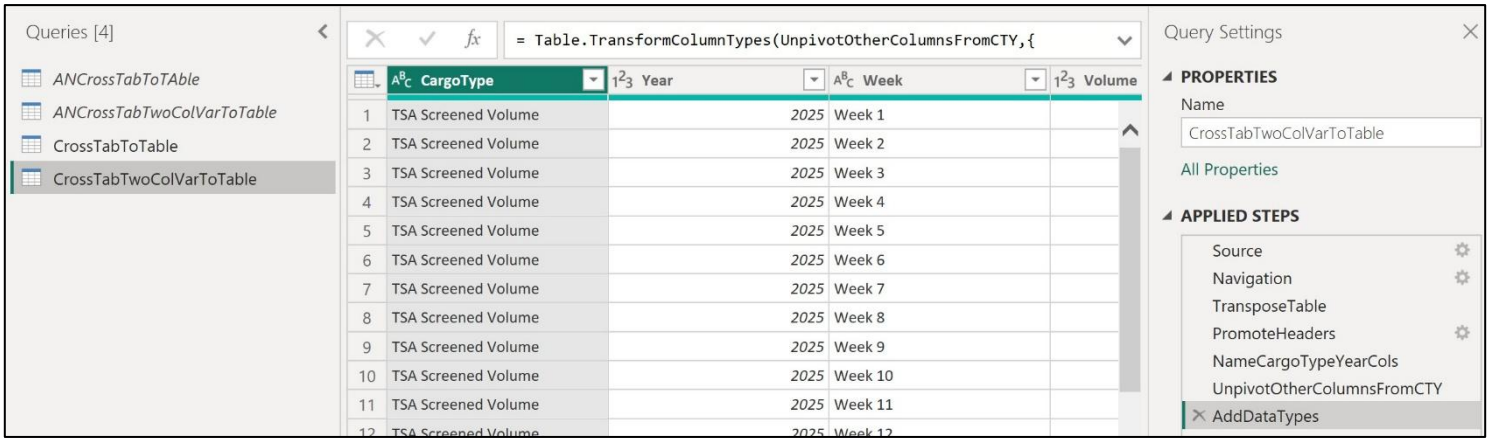
Example 3: Table.UnpivotOtherColumns in Power BI Desktop

In the video we saw how to import cross tabulated Excel Tables from an Excel file. The query steps and M Code to unpivot and create a proper table were the same in Power BI Desktop as they were in Excel. Below are the final Power Query created proper tables for the two examples in the video:

Example 1 with a cross tabulated table with 1 column header variable and 1 row header variable.



Example 2 with a cross tabulated table with 2 column header variables and 1 row header variable.



Import Excel Objects

Excel.CurrentWorkbook function imports all objects (except sheets) from within the current Excel file. The function is only in Excel.)

Excel.Workbook function imports all objects from an external Excel workbook file. The function is in Excel & Power BI.

Keyboard shortcuts seen in video

1. Open Windows Explorer: **⊞ + E**
2. In the Power Query Editor to rename an identifier, such as a query step or query name use: **F2**
3. Convert table to Excel Table: **Ctrl + T**
4. Rename Excel Table: **Alt, J, T, A**
5. Bring Excel Table into the Power Query Editor: **Right-Click Key, G**
6. Rename multiple fields in the Power Query Editor after double-clicking the first field name: **Enter, Right Arrow, F2, Enter**