

BUSINESS ANALYTICS

DATA EXPROLATION, ANALYSIS & VISUALIZATION TECHNIQUES

PRACTICAL 4 PIVOT TABLE & CROSS TABULATION [EXCEL & POWER BI]

A PivotTable is a powerful tool to calculate, summarize, and analyze data that lets you see comparisons, patterns, and trends in your data. PivotTables work a little bit differently depending on what platform you are using to run Excel.

What is the difference between a table and a pivot table in Excel?

An Excel table is basically just a very simple database, consisting of one table. It has data elements (columns) and a set of members having those data elements (rows). It is detailed at the row level. A Pivot Table is a reporting and summation tool that gives you information *about* an Excel table.

Dataset

Income Collections by Date

Collection	Day	Status
40,000	January 1, 2023	Fair
4,000	January 2, 2023	Bad
67,000	January 3, 2023	Good
10,000	January 4, 2023	Bad
40,000	January 5, 2023	Fair
500,000	January 6, 2023	Excellent
650,000	January 7, 2023	Excellent
550,000	January 8, 2023	Excellent
400,000	January 9, 2023	Excellent
40,000	January 10, 2023	Fair
230,000	January 11, 2023	Excellent
110,000	January 12, 2023	Excellent
120,000	January 13, 2023	Excellent
1,500,000	January 14, 2023	Excellent
120,000	January 15, 2023	Excellent

```
=IF(B2<=10000,"Bad",  
IF(B2<=50000,"Fair",  
IF(B2<=100000,"Good",  
IF(B2<=5000000,"Excellent"  
,"Undefined"))))
```

PIVOT TABLE 1

- ✓ Select a range
- ✓ Click 'insert' tab and choose pivot

Day	(All)
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Drag fields between areas below:

▼ FILTERS Day	 COLUMNS Status
☰ ROWS Region	Σ VALUES Sum of Collection

☐ Defer Layout Update

Sum of Collection	Column Labels				
Row Labels	Bad	Excellent	Fair	Good	Grand Total
Arusha				67,000	67,000
Dodoma	10,000	1,620,000	40,000		1,670,000
Kagera		550,000			550,000
Kigoma			40,000		40,000
Kilimanjaro			40,000		40,000
Mwanza	4,000	770,000			774,000
Pwani		400,000			400,000
Shinyanga		110,000			110,000
Singida		230,000			230,000
Tanga		500,000			500,000
Grand Total	14,000	4,180,000	120,000	67,000	4,381,000

Change the table to 'count' metrics

- ✓ Click on field area e.g. 'values'
- ✓ Choose value fields settings
- ✓ Select count()

NB: remove grand Total

- ✓ Select the pivot table
- ✓ Click 'design' tab
- ✓ Choose 'don't show grand or subtotal'

NB: metric details:

- ✓ Double click on entire cell e.g. Pwani or its row data

Drag fields between areas below:

▼ FILTERS Day	 COLUMNS Status
☰ ROWS Region	Σ VALUES Sum of Collection

☐ Defer Layout Update

Day	(All)
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Count of Region	Column Labels				
Row Labels	Bad	Excellent	Fair	Good	Grand Total
Arusha				1	1
Dodoma	1	2	1		4
Kagera		1			1
Kigoma			1		1
Kilimanjaro			1		1
Mwanza	1	2			3
Pwani		1			1
Shinyanga		1			1
Singida		1			1
Tanga		1			1
Grand Total	2	9	3	1	15