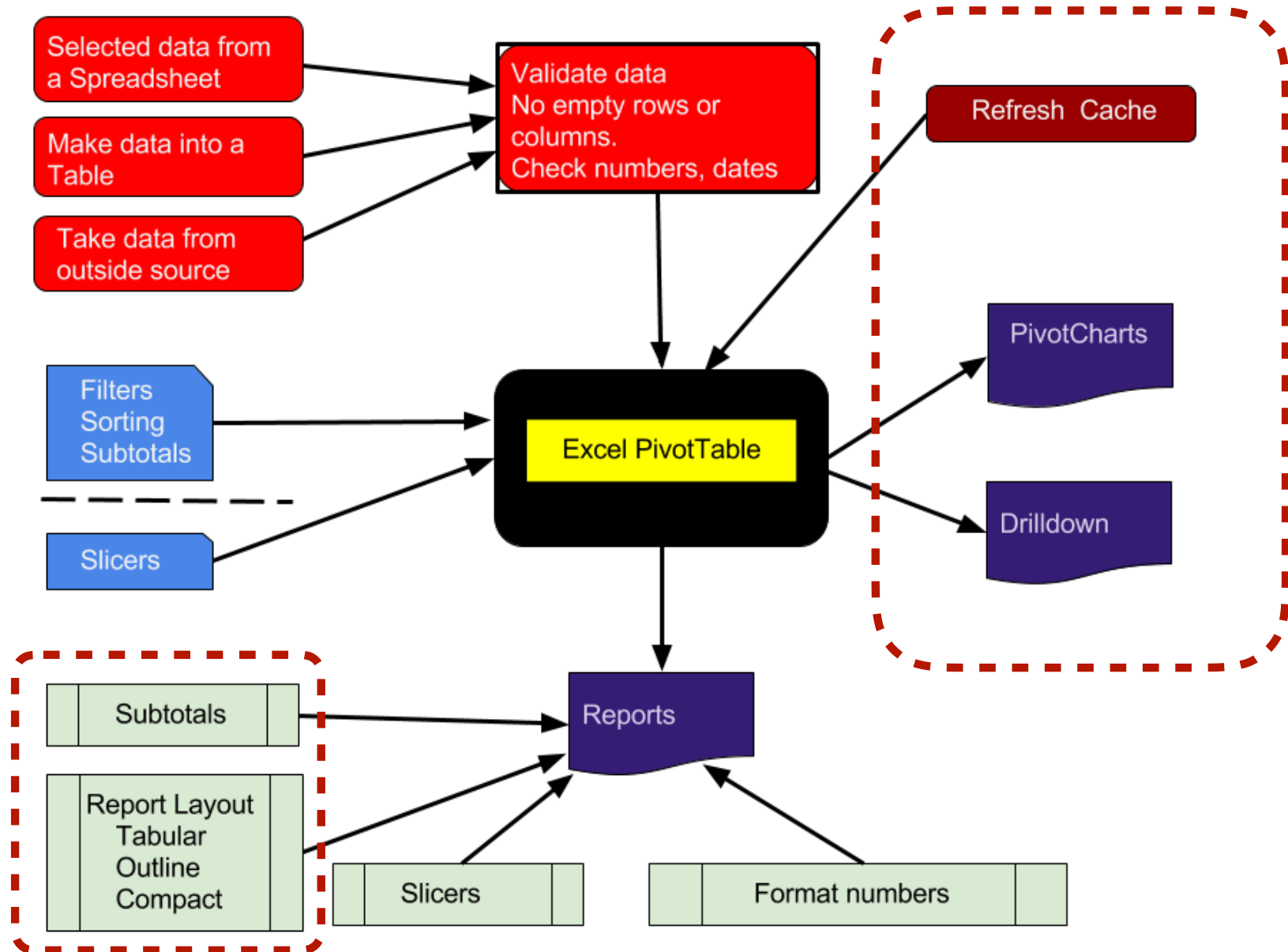# Pivot Table (ต่อ) (Charts & Dashboard)

ภาพประกอบส่วนใหญ่มาจากหนังสือ
Microsoft Excel 2016 PIVOT TABLE DATA CRUNCHING
โดย Bill Jelen, Michael Alexander และแหล่งอื่นอีกหลายแห่ง

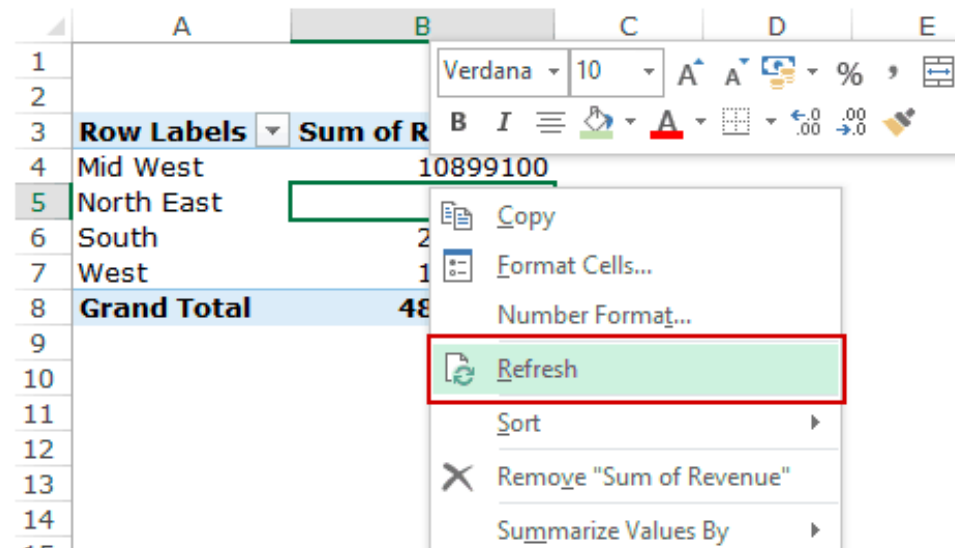# สรุปองค์ประกอบของ Pivot Table

Pivot Cache

- Once you have created a Pivot Table, it doesn't automatically refresh when you add new data or change the existing data.

- Since your Pivot Table is created using the **Pivot Cache,** when the existing data changes or when you add new rows/columns to the data, the Pivot Cache does not update itself automatically, and hence, the Pivot Table also does not update.

- You need to force a refresh every time there are changes. Once you force a refresh, the Pivot Cache gets updated, which is reflected in the Pivot Table.

Refresh Pivot Table

This option is best suited when there are changes in the existing data source and you want to refresh the pivot table to reflect these changes.

● Right-click on any cell in the Pivot Table

● Select Refresh.

หรือใช้คีย์ลัด ALT + F5 หลังจากคลิกเลือกเซลใดก็ได้ใน Pivot Table

Update Pivot Table by Changing the Data Source (1)

If you've added new rows/columns to the data source, you need to change the data source to make sure new rows/columns are a part of the dataset.
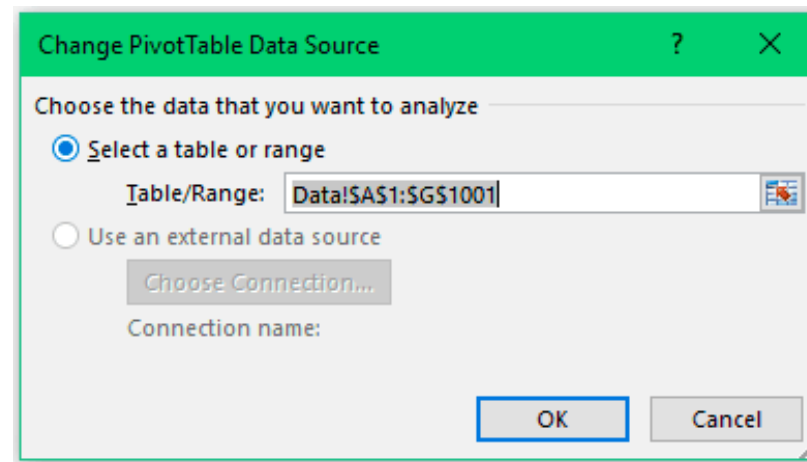
● Select any cell in the Pivot Table.

● Go to Analyze –> Data –> Change Data Source.

This will select the data source that you have used and will open the 'Change PivotTable Data Source' dialog box.

Update Pivot Table by Changing the Data Source (2)

- In the Change PivotTable Data Source dialog box, update the range to include new data.
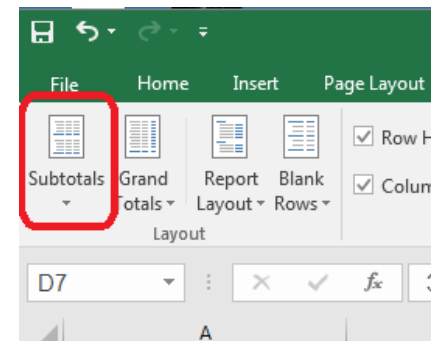

- Click OK

Note that if you use the Excel table to create the Pivot Table, you don't need to use the change data source option. You can simply refresh the Pivot Table and it'll account for the new rows/columns.

Subtotals

- Subtotal control allows you to toggle subtotals on and off, as well as place them at the top or bottom of the section

- PivotTable Tools->design->Subtotals

Report Layout

มี 3 แบบ

Compact Form
(default)

Outline Form

Tabular Form

To change the layout

1. Select a cell in the pivot table.

2. On the Ribbon, under the PivotTable Tools tab, click the Design tab.

3. At the left, in the Layout group, click the Report Layout command

4. Click the layout that you want to uses

Compact Form

Compact Form

Row Labels

- Each Row label is in a separate row.
- The Row field label is always above the labels for the inner fields
- Each Row label is slightly indented, from the field above it, to differentiate the fields
- The Row labels cannot be repeated.
- The indentation can be changed, in PivotTable Options, on the Layout & Format tab

Row Fields

- All the Row fields are in a single column.
- There is a generic heading, Row Labels, in the Row Field column

Subtotals

- Subtotals can be shown at the Top or Bottom of each group.
- This setting affects all the Row fields
- For Column fields, Subtotals are always shown at the Bottom
- The Row label remains at the top, even if Subtotals are at the bottom

The Compact Form layout may be useful when you want to reduce the pivot table width, and aren't concerned about the Row field headings.

Outline Form

Outline Form

Row Labels

- Each Row label is in a separate row.
- The Row field label is always above the labels for the inner fields
- The Row labels can be repeated.

Row Fields

- Each Row field is in a separate column.
- Each Row field shows its name in the column heading

Subtotals

- Subtotals can be shown at the Top or Bottom of each group.
- This setting affects all the Row fields
- For Column fields, Subtotals are always shown at the Bottom
- The Row label remains at the top, even if Subtotals are at the bottom

The Outline Form layout may be useful when you want to show all the field names as heading labels and aren't concerned about the width of the pivot table

Tabular Form

▲	A	B	C	D
1	Years	(All) ▼		
2				
3	**Customer** ▼	**Date** ⊥	**Sum of Qty**	
4	⊟Corner Cabin	Jan	251	
5		Feb	638	
6		Mar	69	
7	**Corner Cabin Total**		**958**	
8	⊟Food Franchise	Jan	318	
9		Feb	156	
10		Mar	517	
11	**Food Franchise Total**		**991**	
12	⊟Mega Market	Jan	220	
13		Feb	253	
14		Mar	127	
15	**Mega Market Total**		**600**	
16	**Grand Total**		**2549**	
17				

Tabular Form

Row Labels
- Row labels for the outer fields are on the same row as the first label for the related inner fields.
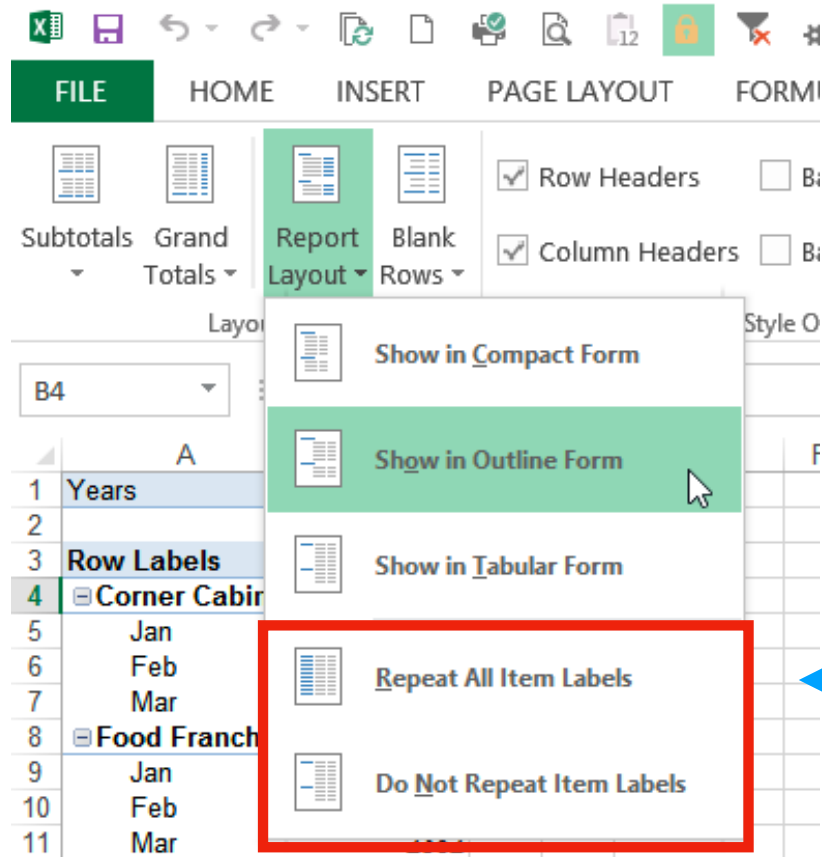- The Row labels can be repeated.

Row Fields
- Each Row field is in a separate column.
- Each Row field shows its name in the column heading

Subtotals
- Subtotals can only be shown at the Bottom of each group.
- This setting affects all the Row fields
- For Column fields, Subtotals are always shown at the Bottom

The Tabular Form layout may be useful when you want to show all the field names as heading labels and aren't concerned about the width of the pivot table but want to reduce the number of rows

Repeat All Item Labels

ปกติจะไม่แสดงรายการที่มีชื่อเหมือนกันซ้ำกัน
แต่ถ้าต้องการให้แสดงให้เลือก
"Repeat All Item Lables"
ถ้าไม่ต้องการให้แสดงซ้ำเลือก
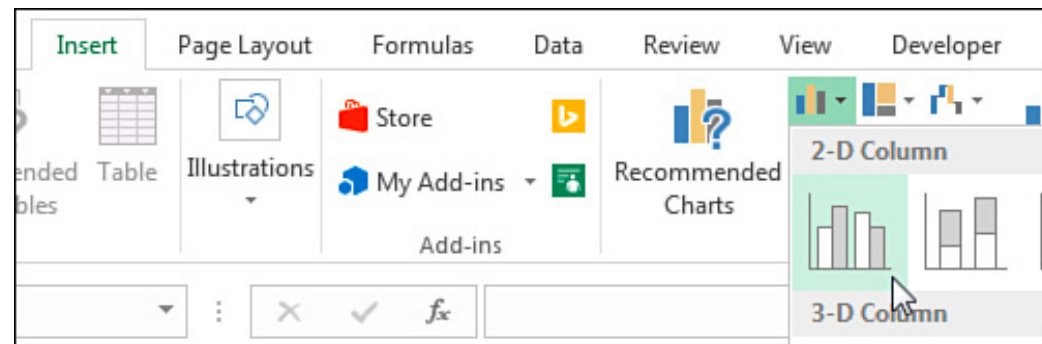"Do not Repeat Item Labels"

Drill Down

- double click on a Value Field, Excel will generate a new sheet listing all the components in that fields.

Pivot Chart

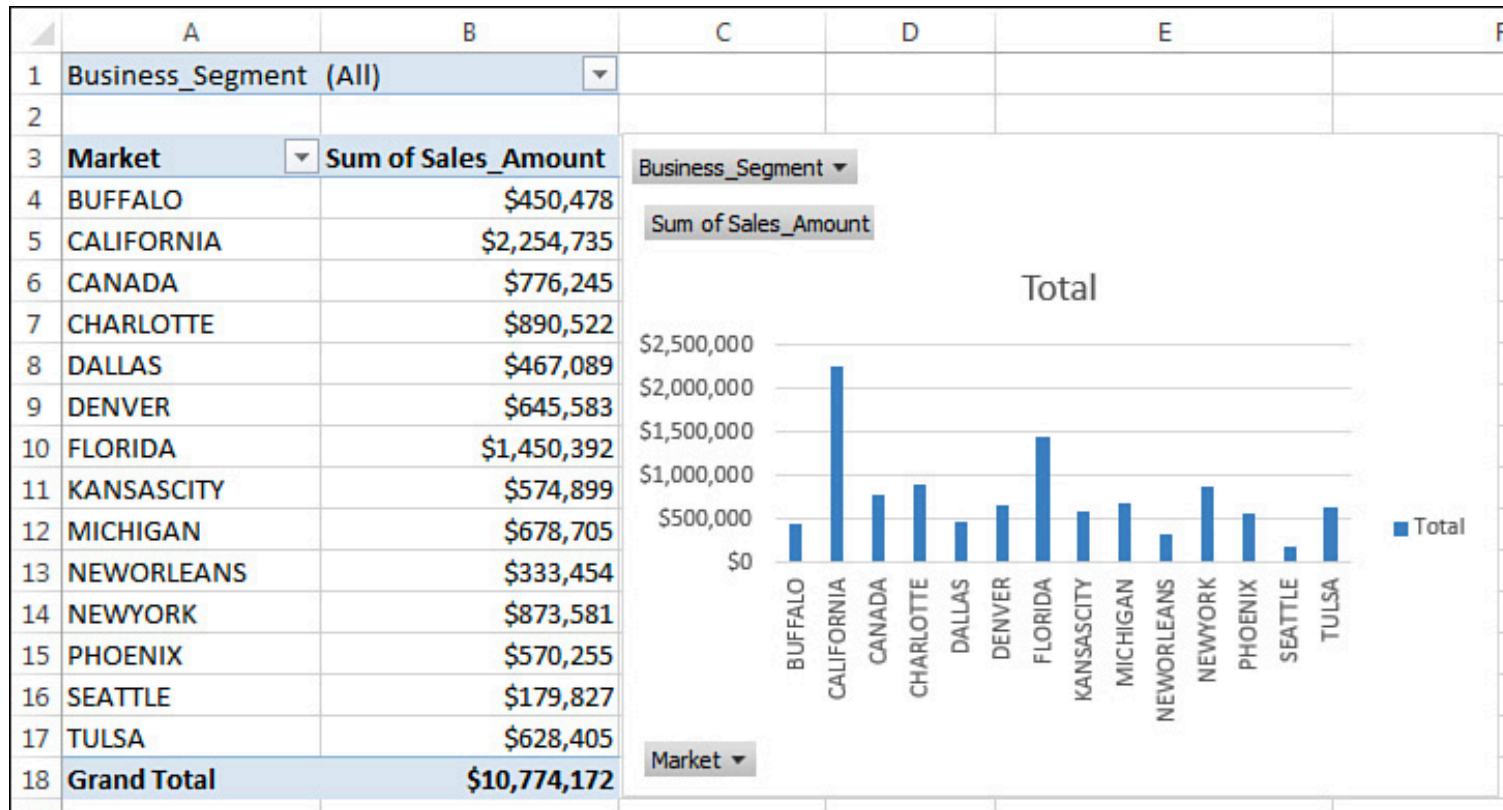A pivot chart is a graphical representation of the data in a pivot table.

Creating a Pivot Chart

- Click any cell inside pivot table

- Click the Insert tab on the ribbon

- On the Insert tab, you can see the Charts group displaying the various types of charts you can create

- choose the chart type you would like to use for your pivot chart

For this example, click the Column chart icon and select the first 2-D column chart
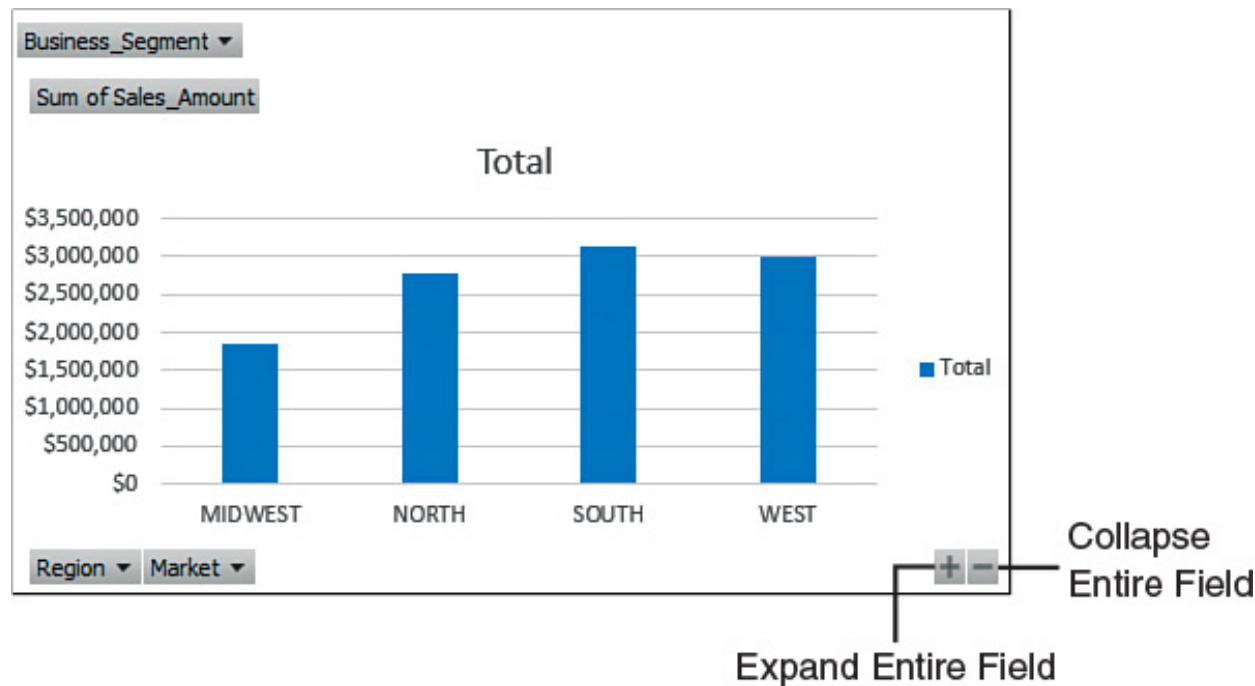
Creating a Pivot Chart

Excel creates your pivot chart on the same sheet as your pivot table.

You can easily change the location of a pivot chart by right-clicking the chart (outside the plot area) and selecting Move Chart. This activates the Move Chart dialog, in which you can specify the new location.
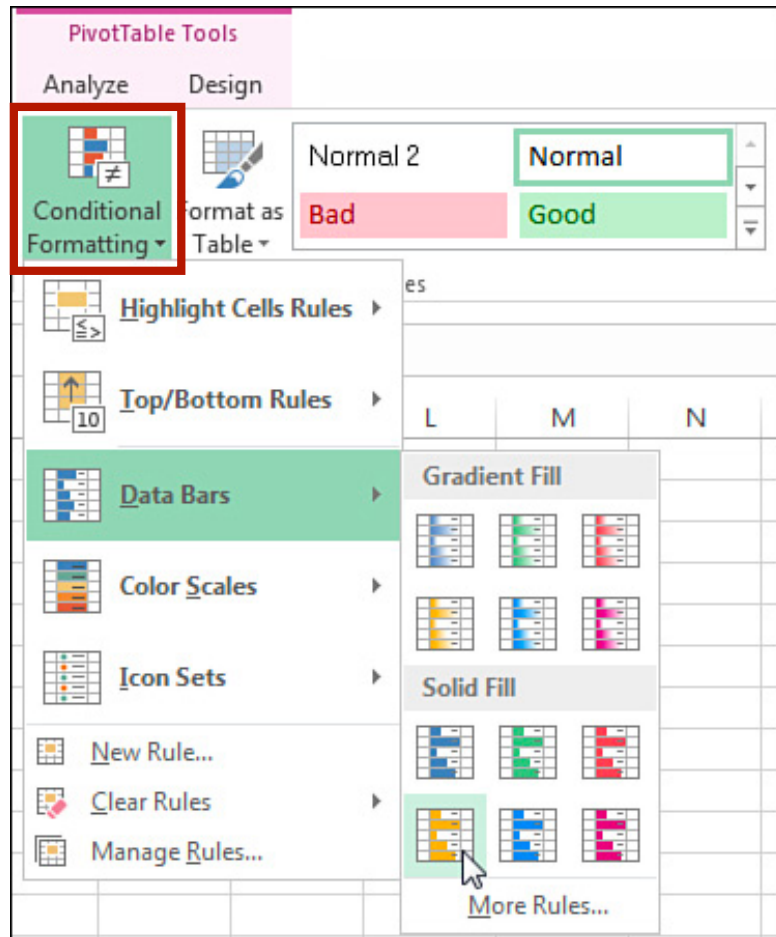
Pivot Field Buttons

Clicking Collapse Entire Field (−) on the chart collapses the data series and aggregates the data points.
You can click Expand Entire Field (+) to drill back down to the Market level.
These buttons enable you to interactively drill down or roll up the data shown in pivot charts.

You can also use slicers with pivot charts. Simply click a pivot chart, select the Analyze tab, and then click the Insert Slicer icon to take advantage of all the benefits of slicers with your pivot chart.

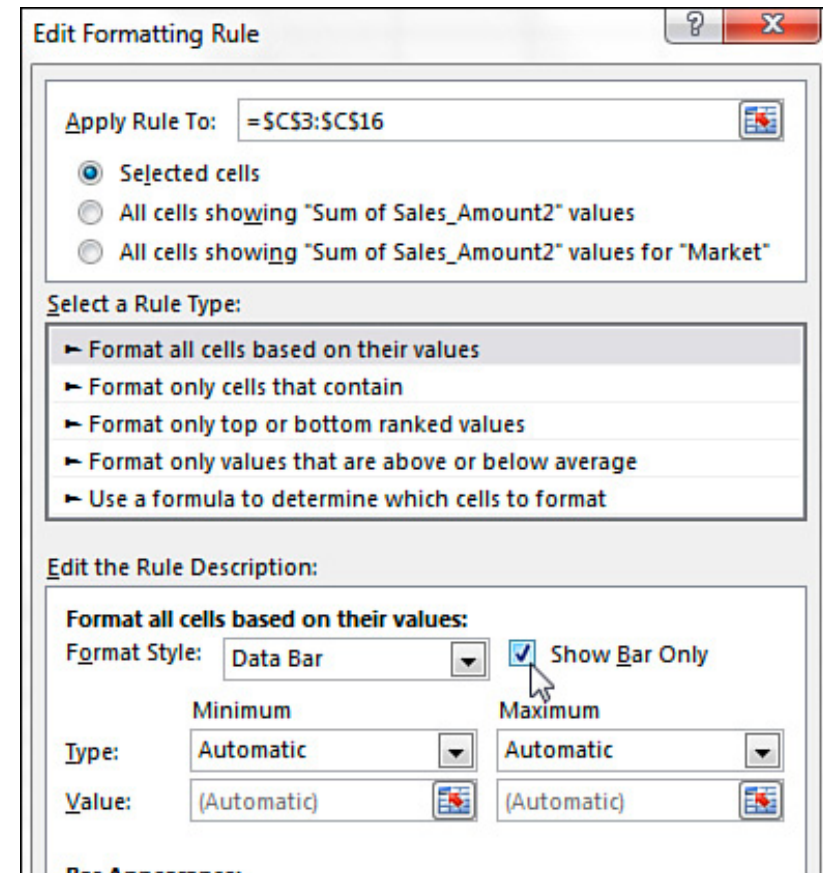# Using Conditional Formatting with Pivot Tables

ตัวอย่างนี้ เลือกการจัดรูปแบบตามเงื่อนไข
แบบ Data Bars

Using Conditional Formatting with Pivot Tables

ปกติจะแสดงค่าข้อมูลควบคู่กับกราฟ
ถ้าต้องการแสดงแต่กราฟ สามารถทำได้
ดังนี้

1. คลิก Conditional Formatting
   drop-down บนแท็บ Home
2. เลือก Manage Rules
3. ที่ Rules Manager Dialog ให้
   เลือก data bar และเลือก Edit
   Rule
4. คลิก check box "Show Bar
   Only"

Using Conditional Formatting with Pivot Tables

	A	B	C
1			
2	**Market** ▾	**Sum of Sales_Amount**	**Sum of Sales_Amount2**
3	BUFFALO	$450,478	
4	CALIFORNIA	$2,254,735	
5	CANADA	$776,245	
6	CHARLOTTE	$890,522	
7	DALLAS	$467,089	
8	DENVER	$645,583	
9	FLORIDA	$1,450,392	
10	KANSASCITY	$574,899	
11	MICHIGAN	$678,705	
12	NEWORLEANS	$333,454	
13	NEWYORK	$873,581	
14	PHOENIX	$570,255	
15	SEATTLE	$179,827	
16	TULSA	$628,405	
17	**Grand Total**	**$10,774,172**	10,774,172

ผลลัพธ์ที่ได้ ความยาวของกราฟแท่ง
จะสัมพันธ์กับค่าข้อมูล ตัวอย่างนี้แค่
จัด format แต่ยังไม่ได้ตั้งเงื่อนไข
ในการแสดง

Preprogrammed Scenarios for Condition Levels

- Top N^{th} Items

- Image Top N^{th} %

- Image Bottom N^{th} Items

- Image Bottom N^{th} %

- Image Above Average

- Image Below Average

Creating Custom Conditional Formatting Rules

- ถ้าต้องการสร้างเงื่อนไขในการจัดรูปแบบเอง

- วาง cursor ไว้บนคอลัมน์ที่ต้องการ

- คลิกแท็บ Home

- เลือก Conditional Formatting

- เลือก New Rule

- จะปรากฏ New Formatting Rule dialog ให้ตั้งค่าต่าง ๆ

Creating Custom Conditional Formatting Rules

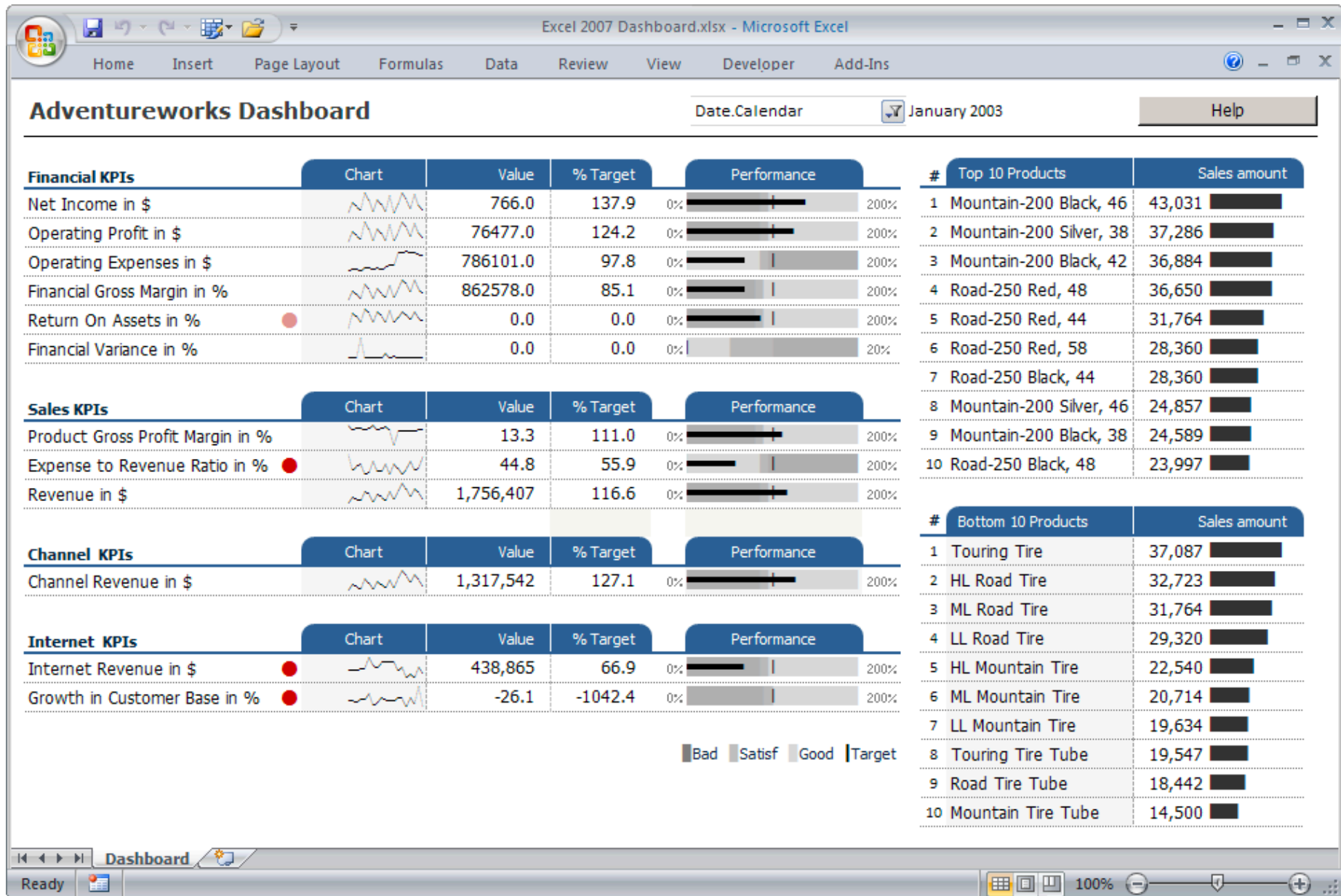# Dashboard

What is a dashboard?

"a dashboard is a visual display of the most
important information needed to achieve one or
more objectives; consolidated and arranged on a
single screen so the information can be monitored
at a glance." Stephen Few

Dashboards are just a compilation of data, analysis and charts
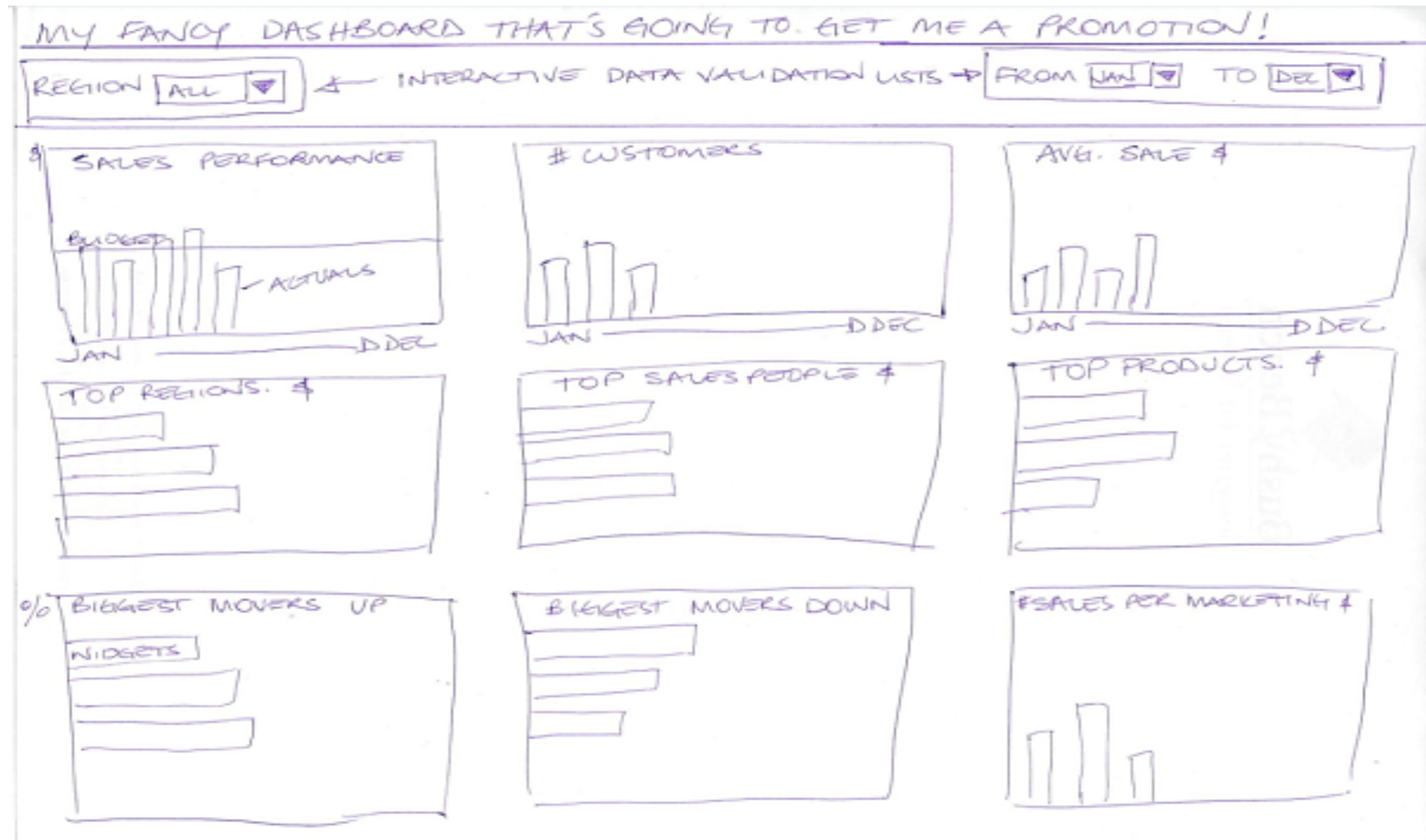
ตัวอย่าง dashboard

ตัวอย่าง dashboard

Planning

- Research your requirements:
    - –Dashboard Purpose
    - –Audience
    - –KPI's (Key Performance Indicators)
    - –Time Period
    - –Data Source
    - –Frequency & Delivery

Mock-up

สร้าง dashboard ด้วย Excel

นำ chart/Table หลายชิ้นมาวางไว้ใน worksheet ให้แสดงผล
ใน 1 หน้าจอ   ทำ dashboard ใช้ทักษะอะไรบ้าง

- Excel Tables

- Formulas

- PivotTables

- Charting

- Formatting

ดูคำอธิบายวิธีทำที่
 https://exceldashboardschool.com/create-kpi-dashboard/
https://www.powerusersoftwares.com/single-post/2016/10/17/How-to-create-impressive-Excel-dashboards

ดาวน์โหลดตัวอย่าง Template ที่
https://www.geekdashboard.com/best-kpi-dashboard-excel-template/#1-Executive-Dashboard-Template