

**Skills**  
Network

# Hands-on Lab 7: Using Pivot Tables

**Estimated time needed:** 30 minutes

In this lab, first you will learn how to format data as a table, how to create a Pivot Table and use fields to arrange data in a Pivot Table, and how to perform calculations using Pivot Table data. Next, you will learn some other features that we can use with Pivot Tables, including Recommended Charts, Filters, Slicers, and Timelines.

## Software Used in this Lab

The instruction videos in this course use the full Excel Desktop version as this has all the available product features, but for the hands-on labs we will be using the free ‘Excel for the web’ version as this is available to everyone.

Although you can use the Excel Desktop software if you have access to this version, it is recommended that you use Excel for the web for the hands-on labs as the lab instructions specifically refer to this version, and there are some small differences in the interface and available features.

## Dataset Used in this Lab

The dataset used in this lab comes from the following source: <https://www.kaggle.com/sudalairajkumar/indian-startup-funding> under a [CC0: Public Domain license](#).

Acknowledgement and thanks also goes to <https://trak.in> who were generous enough to share the data publicly for free.

We are using a modified subset of that dataset for the lab, so to follow the lab instructions successfully please use the dataset provided with the lab, rather than the dataset from the original source.

## Objectives

After completing this lab, you will be able to:

- Format data as a table
- Create a Pivot Table and use fields to arrange data in a Pivot Table
- Perform calculations using Pivot Table data
- Use the Recommended Charts feature (does not work with the ‘Basic’ Office for the web plan.)
- Use the Filters feature
- Use the Slicers feature
- Use the Timelines feature

# Exercise 1: Introduction to Creating Pivot Tables in Excel

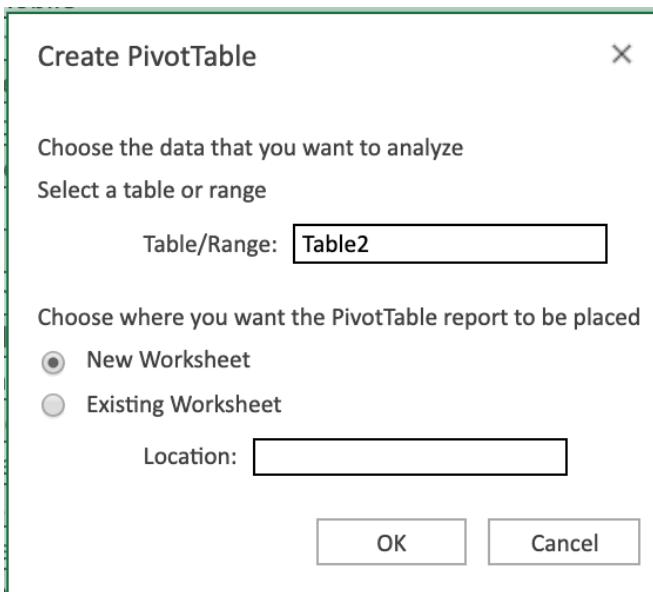
In this exercise, you will learn how to format data as a table, how to create a Pivot Table and use fields to arrange data in a Pivot Table, and how to perform calculations using Pivot Table data.

## Task A: Format data as a table

1. Download the file [indian\\_startup\\_funding\\_Lab7.xlsx](#). Upload and open it using Excel for the web.
2. Select cell **A2**.
3. On the **Home** tab, in the **Tables** group, click **Format as Table**.
4. Select **Light Gray, Table Style Medium 15**.

## Task B: Create a pivot table and use fields to arrange data in a pivot table

1. Select cell **D4**
2. On the **Insert** tab, click **PivotTable**.
3. Click **OK**.

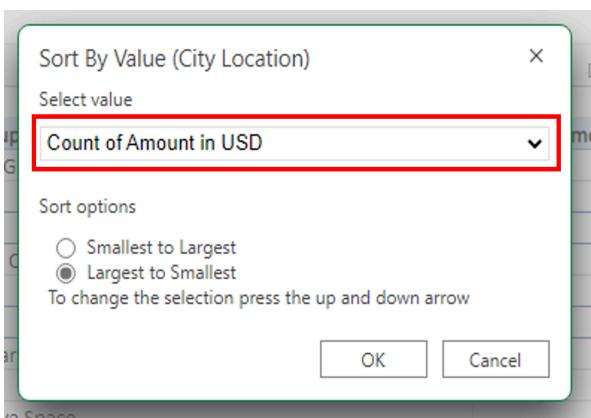


4. Double-click **Sheet1**, type **Pivot1** and click **OK**.
5. In the fields list, drag **Industry Vertical** to **Rows**.
6. In the fields list, drag **City Location** to **Rows** above **Industry Vertical**.
7. In the fields list, drag **Startup Name** to **Rows** below **Industry Vertical**.

8. In the fields list, drag **Amount in USD** to **Values**.

9. Use the drop down arrow for the **City Location** and Sort By Value in descending order (Largest to smallest) by the **Count of Amount in USD**.

The screenshot shows the 'PivotTable Fields' pane. The 'City Location' field is selected and highlighted with a red box. A context menu is open next to it, with the 'Sort By Value...' option highlighted by another red box.



10. In the ribbon, select the **PivotTable** tab, click **Settings**, then in the **PivotTable Settings** pane, under **Layout**, select **Single column**.

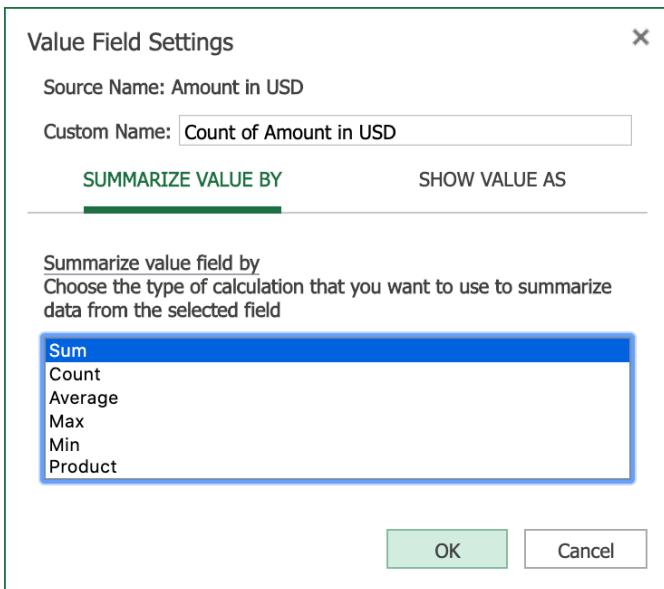
11. Right-click on the row label Amritsar and select **Expand/Collapse** and **Collapse Entire Field**.

The screenshot shows the Excel ribbon with the 'PivotTable' tab selected. A context menu is open over the 'Amritsar' row label, with the 'Expand/Collapse' option highlighted by a red box. Another red box highlights the 'Collapse Entire Field' option in the same menu.

## Task C: Perform a simple calculation in a pivot table

1. In the **PivotTable Fields** pane, in the **Values** section, click the drop-down arrow next to **Count of Amount in USD**, and click **Value Field Settings**.

2. Select **Summarize value field by > Sum**.



3. Click **OK**.
4. Select the column called **Sum of Amount in USD** and then on the **Home** tab, select **Accounting Number Format > \$ English (United States)**.

## Exercise 2: Pivot Table Features

In this exercise, you will learn some other features that we can use with Pivot Tables, including Recommended Charts, Filters, Slicers, and Timelines.

**Note:** The ‘Recommended Charts’ feature only works with ‘full’ Office for the web plans (those plans that come with an Office 365 subscription). Recommended Charts do not work with the ‘basic’ plan that comes with a Microsoft Account.

### Task A: Use of the Recommended Charts feature (Optional: If you have a full Office for the web plan)

1. Switch to worksheet **indian-startup-funding**.
2. Select column F (**City Location**).
3. On the **Insert** tab, select **Recommended Charts**.
4. Click + **Insert PivotChart**.

The screenshot shows a PivotTable on the left with columns 'City Location' and 'Investors Name'. A 'Recommended Charts' dialog box is open on the right, displaying a horizontal bar chart titled 'Count of City Location'. The chart shows that Bengaluru has the highest count at approximately 32, followed by Mumbai (~15), Gurgaon (~12), and Faridabad (~10). Below the chart are buttons for '+ Insert PivotChart' and 'Is this helpful?'.

City Location	Investors Name
Faridabad	SoftBank Vision Fund
Bengaluru	Paytm, NPTK, Sabre Partners and Neoplux
Bengaluru	Vertex Growth Fund
Mumbai	
Bengaluru	Ruizheng Investment
Gurgaon	SAIF Partners, Spring Canter Investment Lt
Pune	Sathguru Catalyst Advisors
Noida	Manipal Education and Medical Group (M
Gurgaon	Ping An Global Voyager Fund
Bengaluru	Mumbai Angels, Ravikanth Reddy
Noida	Vijay Shekhar Sharma
Gurgaon	FinTech
San Jose,	Altimeter Capital, Sutter Hill Ventures
Delhi	Amour Infrastructure

5. Switch to worksheet **indian-startup-funding** again.
6. Select column **C, D, E**.
7. On the **Insert** tab, select **Recommended Charts**.
8. Choose the recommended chart, and click **+ Insert PivotChart**.

The screenshot shows a PivotTable on the left with 'Row Labels' as 'Industry Vertical' and 'Count of Startup Name' as the value. A 'Recommended Charts' dialog box is open on the right, displaying a horizontal bar chart titled 'Industry Vertical'. The chart shows that E-Commerce is the most frequent industry at 18, followed by FinTech (~9), Finance (~8), and Health and Wellness (~5). Below the chart are buttons for '+ Insert PivotChart' and 'Is this helpful?'.

Industry Vertical	Count of Startup Name
E-Commerce	18
FinTech	9
Finance	8
Health and Wellness	5
EdTech	5
Food and Beverage	5
SaaS	4
Technology	3
Transport	3
Transportation	3
Information Technology	3
Waste Management Service	2
Consumer Goods	2
Tech	2
Last Mile Transportation	2
Digital Media	2
Automobile	2
Services	2
Education	2

## Task B: Use of the Filters feature

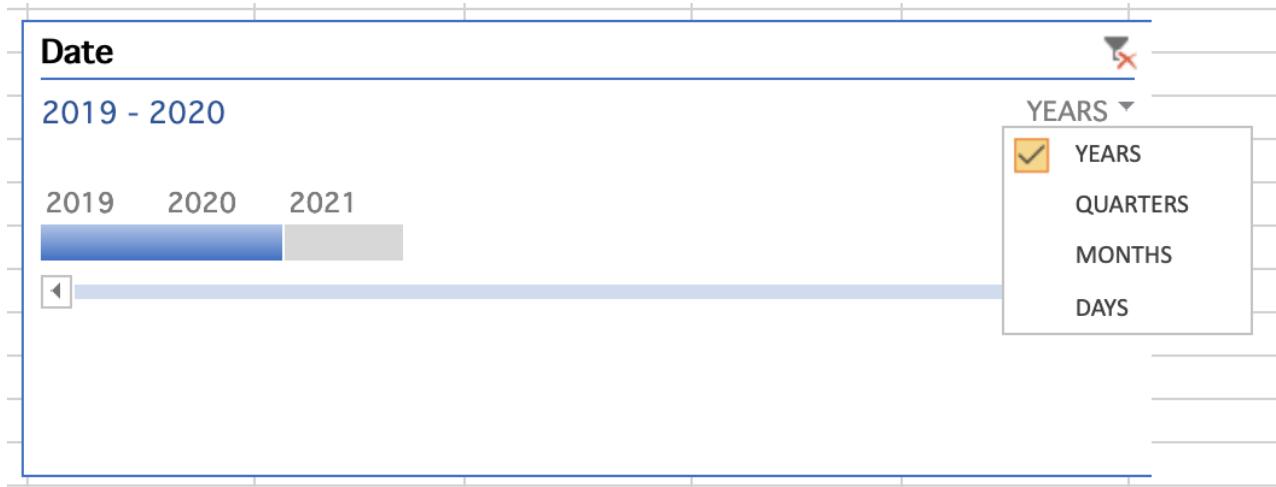
1. Switch to worksheet **Pivot1**.
2. In the Pivot Table, click the **Row Labels** arrow.
3. Select **City Location**, then **Filter....**
4. Just select **Burnsville**, **Delhi**, **New York**, then click **OK** to display the amounts for startups in these three cities only.
5. In the Pivot Table, click the **Row Labels** arrow.
6. Select **City Location**, then click **Clear Filter From 'City Location'** to display the startups in all cities again.

## Task C: Use of the Slicers feature

1. Download the file [indian\\_startup\\_funding\\_Lab7\\_with\\_slicers\\_timelines.xlsx](#). Upload and open it using Excel for the web.
2. Switch to worksheet **Pivot1** if you are not there.
3. In the **City Location** slicer, select **Burnsville**, then **Delhi**, then **New York**.
4. To filter by multiple selection in the **City Location** slicer, with **New York** still selected, press **CTRL** and select **Burnsville**, and then **Delhi**.
5. To filter using more than one slicer, in the **Investors Name** slicer, select **Amour Infrastructure**, then press **CTRL** and select **Westbridge Capital**, and then **Breakthrough Energy Ventures**.
6. In the **City Location** slicer, click the **Clear Filter** button, then in the **Investors Name** slicer, click the **Clear Filter** button.

## Task D: Use of the Timelines feature

1. In the Date timeline, click **top right drop-down** and select **YEARS**, then scroll **left and right**.



2. In the Date timeline, click **top right drop-down** and select **QUARTERS**.
3. In the Date Timeline, select **2019 Q1**, then drag **2019 Q1** to **2019 Q3**.
4. In the Date timeline, click the **Clear Filter** icon.
5. In the Date timeline, click **top right drop-down** and select **YEARS**, then select **2020** only.

**Congratulations! You have completed Lab 7, and you are ready for the next topic.**

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