

Data visualization using in Excel Lab1

Outlines:

Objectives.....	2
Exercise 1 : Creating Column Charts and Area Charts in Excel.....	2
Task A : Create a Column Chart.....	2
Task B : Create an Area Chart.....	5
Exercise 2 : Create Bar Charts and Line Charts from a Pivot Table in Excel.....	7
Task A : Create a Bar Chart from a Pivot Table.....	7
Task B : Create a Line Chart from a Pivot Table.....	8
Link to completed work.....	8

Objectives

After completing this lab, you will be able to:

- Create a column chart.
- Create an area chart.
- Create a bar chart from a pivot table.
- Create a line chart from a pivot table.

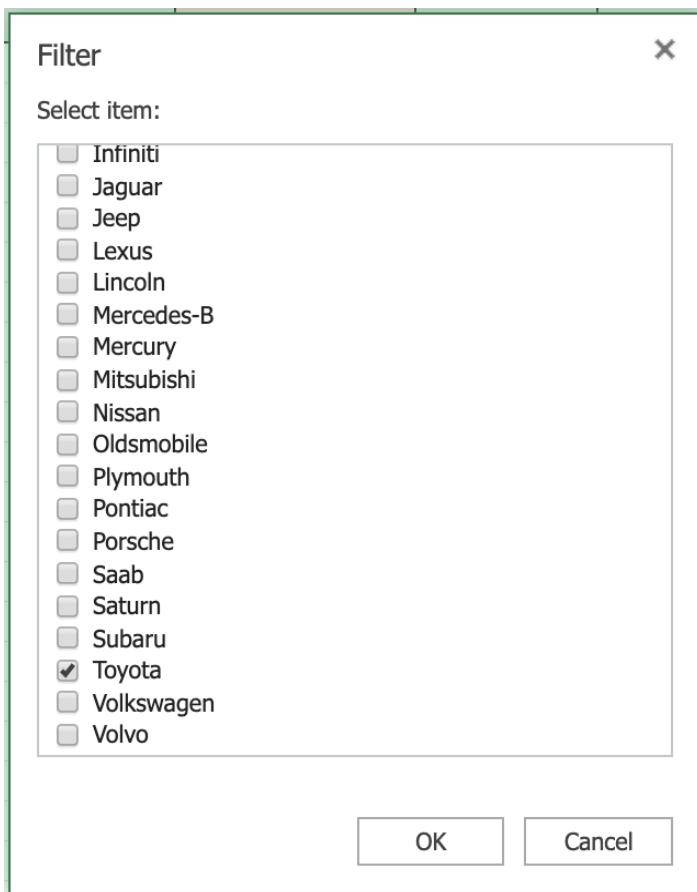
Exercise 1 : Creating Column Charts and Area Charts in Excel

In this exercise, you will learn how to create basic charts, such as column and area charts, in Excel.

Task A : Create a Column Chart

1. Download the file [Car_Sales_Kaggle_DV0130EN_Lab1_Start.xlsx](#). Upload and open it using Excel for the web.
2. Switch to the worksheet named **Column Chart**.
3. Click the **drop-down** arrow at the top of column A (Manufacturer)

4. In the list, only select **Toyota** and click **OK**.



5. Select column **B**, then hold **SHIFT** and select column **C**.

	A	B	C	D
1	Manufacturer	Model	Power Perf Factor	Unit Sales
136	Toyota	Corolla	47.96897242	142535
137	Toyota	Camry	54.37241965	247994
138	Toyota	Avalon	84.91189826	63849
139	Toyota	Celica	56.49603034	33269
140	Toyota	Tacoma	55.29711658	84087
141	Toyota	Sienna	78.02721947	65119
142	Toyota	RAV4	51.95510887	25106
143	Toyota	4Runner	62.35557713	68411
144	Toyota	Land Cruiser	102.5289842	9835
157				

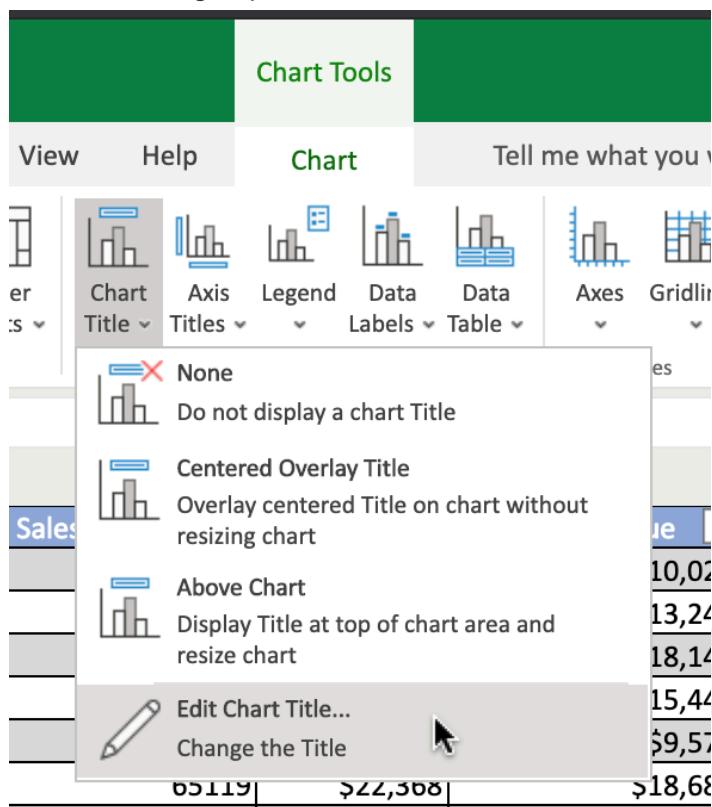
6. On the **Charts** group of the **Insert** tab, click **Column** Chart and choose **Clustered Column** from the **2-D Column** category.

The screenshot shows the Microsoft Excel ribbon with the 'Insert' tab selected. In the 'Charts' group, the 'Column' icon is highlighted, and a dropdown menu titled '2-D Column' is open, showing three clustered column chart options. A floating chart preview for 'Clustered Column' is overlaid on a table of car data. The table has columns for Model, Power Perf Factor, Unit Sales, Resale Value, and Retention. The preview shows a clustered column chart with blue and grey bars corresponding to the data in the table.

Model	Power Perf Factor	Unit Sales	Resale Value	Retention
Corolla	47.96897242	1247994	\$10,025	
Camry	54.37241965	247994	\$13,245	
Avalon	84.91189826	638191	\$18,140	
Celica	56.49603034	33269	\$15,445	
Tacoma	55.29711658	100000	\$19,575	
Sienna	78.02721947	65000	\$18,689	
RAV4	51.95510887	25106	\$13,325	
4Runner	62.35557713	68411	\$19,425	
Land Cruiser	102.5289842	9835	\$34,080	

7. Click on the floating chart area to access the **Chart** tab in the ribbon.

8. On the **Labels** group of the **Chart** tab, click **Chart Title** and select **Edit Chart Title....**



9. In the text input area of the dialog box **Edit Title**, write “**Power Perf Factor of Toyota Cars**” and click **OK**.

Task B : Create an Area Chart

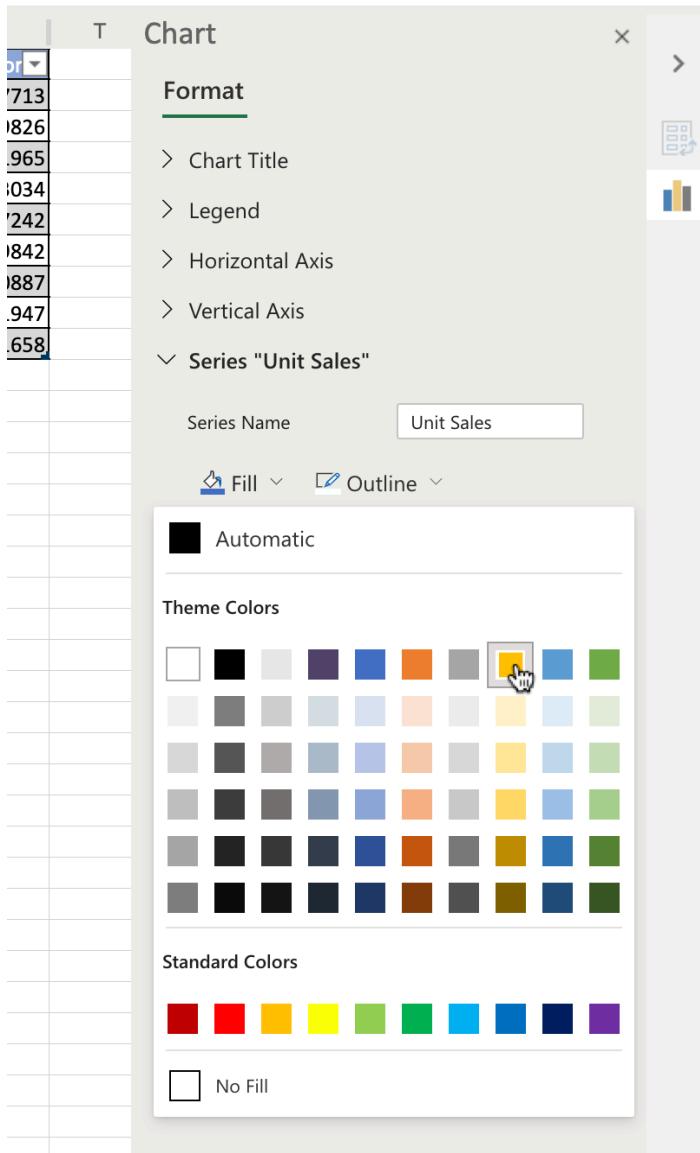
1. Switch to the worksheet named **Area Chart**.
2. Click the **filter drop-down** in column A (**Manufacturer**), and select **Filter....**
3. In the list, only select **Toyota** and click **OK**.
4. Select column B, then hold **SHIFT** and select column C.

5. On the **Charts** group of the **Insert** tab, click **Area Chart** and choose **Area** from the **2-D Area** category.

Model	Unit Sales	Price	Year Resale Value	Condition	Score
4Runner	68411	\$22,288	\$19,425	GOOD	3.5
Avalon	63849	\$25,545	\$18,140	GOOD	2.2
Camry	247994	\$17,518	\$13,245	76%	1.8
Celica	33269	\$16,875	\$15,445	92%	1.8
Corolla	142535	\$13,108	\$10,025	76%	1.8
Land Cruiser	9835	\$51,728	\$34,080	66%	4.7
RAV4	25106	\$16,888	\$13,325	79%	2
Sienna	65119	\$22,368	\$18,689	84%	3
Tacoma	84087	\$11,528	\$9,575	83%	2.4

6. Click on the floating chart area to access the **Chart** tab in the ribbon.
 7. On the **Labels** group of the **Chart** tab, click **Data Labels** and select **Show**.
 8. On the **Format** group of the **Chart** tab, click **Format**.

9. On the right side menu bar **Format**, select **Series "Unit Sales" > Fill > Gold, Accent 4.**



Exercise 2 : Create Bar Charts and Line Charts from a Pivot Table in Excel

In this exercise, you will learn how to create basic charts, such as bar and line charts, using a pivot table in Excel.

Task A : Create a Bar Chart from a Pivot Table

1. Switch to the worksheet named **Bar Chart**.
2. Click the **filter drop-down** in column A, and select **Manufacturer > Filter....**

3. In the list, only select **Toyota** and click **OK**.
4. Double-click cell **A4** to expand entire field.
5. On the **Charts** group of the **Insert** tab, click **Bar Chart** and choose **Clustered Bar** from the **2-D Bar** category.
6. Click on the floating chart area to access the **Chart** tab in the ribbon.
7. On the **Labels** group of the **Chart** tab, click **Data Labels** and select **Inside End**.

Task B : Create a Line Chart from a Pivot Table

1. Switch to the worksheet named **Line Chart**.
2. Click the **filter drop-down** in column **A**, and select **Manufacturer > Filter....**
3. In the list, only select **Acura, Honda, Infiniti, Lexus, Mitsubishi, Nissan, Subaru, Toyota** and click **OK**.
4. Click any cell of the pivot table.
5. On the **Charts** group of the **Insert** tab, click **Line Chart** and choose **Line with Markers** from the **2-D Line** category.
6. Click on the floating chart area to access the **Chart** tab in the ribbon.
7. On the **Labels** group of the **Chart** tab, click **Chart Title** and select **Edit Chart Title....**
8. In the text input area of the dialog box **Edit Title**, write “**Average Retention % of Japanese Auto Manufacturers**” and click **OK**.
9. On the **Labels** group of the **Chart** tab, click **Data Labels** and select **Below**.
10. On the **Labels** group of the **Chart** tab, click **Legend** and select **None**.

Link to completed work

Please download this file for better accessibility as the hyperlinks do not work in Github.

- <https://1drv.ms/x/c/e9e9f77ba9bf99d2/IQCBkt6q3XBZTZN0fDfhKXO4AWu73p-52kQvanV7tG41cnE?e=1F8USU>