

07. Perform data analysis and summarization using Pivot table and charts

Overview

To summarize, analyze, explore, and visualize summarized data, you can use Pivot Tables and Pivot Charts. They allow you to make comparisons, identify patterns and trends easily.

A PivotTable is an interactive way to quickly summarize large amounts of data. You can use a PivotTable to analyze numerical data in detail and answer unanticipated questions about your data.

Pivot Charts provide graphical representations of the data in their associated PivotTables. Pivot Charts are also interactive. When you create a PivotChart, the PivotChart Filter Pane appears. You can use this filter pane to sort and filter the PivotChart's underlying data. Changes that you make to the layout and data in an associated PivotTable are immediately reflected in the layout and data in the PivotChart and vice versa.



[Overview of PivotTables and PivotCharts](https://support.microsoft.com) – support.microsoft.com



Activity 07.1

Candy Pvt Ltd is a company that sells confectionery items in Sri Lanka. You have been provided with the sales report which includes the details about customers, locations, products, and revenue related to 2024 in “Activity 07.1” sheet of 07 Activities_ Perform data analysis and summarization using pivot_Dataset.xlsx. Answer the given questions using the knowledge about pivot charts and pivot tables.

1. Find out the total revenue based on each salesperson in each province using pivot tables. You should be able to filter different product categories according to your requirement.
2. Use the slicer tool to find the total revenue based on each salesperson in Sabaragamuwa and North Central province. Use pivot table to visualize your result.
3. Find the total revenue in each customer city within Colombo district using pivot tables.
4. Find out the total quantity sold out for Anthony (Pvt) Ltd under beverages .
5. Find out the total quantity sold out from cinnamon powder in North Central and Southern.
6. Find out the total number of transactions made by each salesperson.

7. By using pivot charts analyze the total revenue generated by each product category based on the salesperson's province.
8. By using pivot charts analyze total revenue based on customer district.
9. By using pivot charts analyze customers who contributed to the top three revenue values.
10. By using pivot charts visualize sales trend for the year 2024.
11. Create a sales dashboard to display the visualizations above (Questions 7- 10). All these charts should be displayed in a single sheet and should be able to control by a slicer to visualize details based on the salesperson's province.



Self-Learning Activity

Activity 07.2

Crezant is a chain of hotels which is operating in Sri Lanka. During the ongoing tourism season, they have received a large number of reservations for their hotel rooms. A sample extracted from the reservations is available in the "Activity 07.2" sheet of 07 Activities_ Perform Data analysis and summarization using pivot_Dataset.xlsx. The hotel chain is expecting your assistance to present their reservation details to the top management. Their final target is to prepare a dashboard to be prepared at the board meeting. You are required to perform the following activities to provide your assistance for them.

1. Display the number of reservations in each resort using a Pivot Table.
2. Display the total earnings of each resort using a Pivot Chart.
3. Display the number of reservations in each resort based on the package selected.
4. Display the number of child and adult guests arrived to each resort using a Pivot Chart. You should insert a slicer to filter the resort.
5. Create a dashboard using the Pivot Charts you created.