

# Microsoft Power BI Dashboards

# Step by Step







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- Expand to Next Level To drill down all fields at once by one level, click the Expand to Next Level button (see numeral 2 in Figure 3-9). This shows all available fields in the next hierarchy. For example, suppose you have a visual that contains country, state and province, and postal code data. Suppose further that the visual contains data about two countries: the US and Canada. If you click Expand to Next Level, the visual will change to show all states and provinces in the US and Canada. If you click it again, the visual will change again to show all the postal codes in each state and province.
- Drill Up After you click Drill Down or Expand to Next Level, you can click Drill Up (see numeral 3 in Figure 3-9) to go back up one level.
- Expand Down Click this option (see number 4 in Figure 3-9) to expand all levels at once.

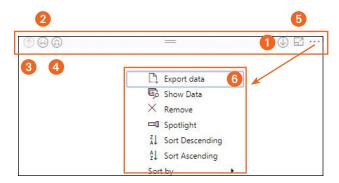


FIGURE 3-9 Features represented in Power BI visuals.

**TIP** To view a visual in full-screen mode for better visibility and easier navigation, click the Focus Mode button, shown in screen 5 in Figure 3-9.

### Apply filters in Power BI reports

Power BI enables you to apply filters to reports to adjust what data they contain depending on your needs. The following types of filters are available:

 Visual-level filter Suppose you have a bar chart, a pie chart, and a table in your report, and you want to filter the data only in the bar chart. In that case, you'd apply a visual-level filter to that chart.

- Page-level filter Maybe your report has 10 pages, but you want to apply a filter to just one of those pages. In that case you could apply a page-level filter.
- Report-level filter To apply a filter to your entire report, you use a report-level filter.
- Drill-through filter This filter enables you to drill through the data in a report much as you would data in a visual. For example, suppose your report contains a table. You could apply the drill-through filter to that table to analyze a piece of data in that table in depth. (See screen 1 in Figure 3-10.) To return to the table, you simply click the Back button (highlighted in screen 2 of Figure 3-10).

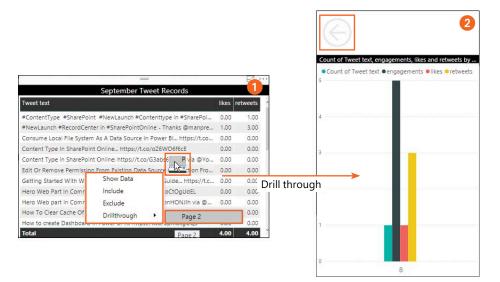


FIGURE 3-10 Using the drill-through filter on a table in Power BI.

#### Slicers

A slicer is a type of visual that enables you to filter data based on different fields or properties. When you select a value in the slicer, the entire report containing the slicer is filtered based on that value. For example, consider a year-by-year analysis of school attendance. You could create a slicer visual that enables you to filter data to show only a specific year. (See image 1 in Figure 3-11.) You could configure the slicer to show the data in list mode (see image 2 in Figure 3-11) or drop-down mode (see image 3 and image 4 in Figure 3-11.) You could also adjust the orientation of the slicer to horizontal mode. (See screens 5 and 6 in Figure 3-11.)

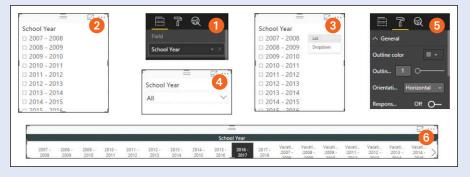


FIGURE 3-11 Using a slicer to filter data.

## Skills review

#### In this chapter, you learned about:

- An overview of visuals in Power BI
- Power BI visuals available out of the box
- Obtaining Power BI visuals from third parties
- Drilling through data in Power BI
- Using filters in Power BI

#### Chapter 3



## Practice tasks

This section provides a simple case study for you to study and solve using information from this chapter. This section also contains a series of practice questions for you to answer.

#### Case study

Suppose you work for a company that manufactures hair products and has broad expertise in various channels of the cosmetic industry. You have been given data collected across different dimensions of the business over the preceding five years.

Consider the following scenarios and determine what type of visual would work best in each case.

• Scenario 1 You want to analyze sales data for various products by region.

Solution Use a map visual.

 Scenario 2 You want to view overall sales data for all categories for each month over the past 13 months to identify trends.

Solution Use a line chart.

 Scenario 3 You want to compare sales volume data for all products in a region against a sales trend analysis data for that region

Solution Use an area chart.

• Scenario 4 You want to compare sales trends for various shampoo brands.

Solution Use a bar or column chart.

 Scenario 5 You want to compare sequential data with its running total to assess profitability over time.

Solution Use a waterfall chart.

#### Practice questions

- 1. What are visuals?
- 2. What type of visual is best for comparing categorical data?
- 3. What type of visual is best for comparing sequential data?
- 4. What type of visual might you use to depict volume-based data?
- 5. What type of visual is best for representing time-based data?
- 6. Why would you use a pie or donut chart?
- 7. What type of visual is best-suited for depicting geographical data?
- 8. Which type of map is provided by ESRI?
- 9. What type of chart best depicts progress toward a goal?
- 10. What does KPI stand for?
- 11. What are the uses and benefits of cards and multi-row cards?
- 12. Under what circumstance might you use a matrix?
- 13. Why might you use a treemap?
- 14. What type of visualization helps filter data?
- 15. How do you import a third-party visual from within Power BI?
- 16. What is visual-level filter in Power BI?
- 17. What is a page-level filter in Power BI?
- 18. What is a drill-through filter in Power BI?
- 19. True or false: To filter data for an entire report, you use the report-level filter.
- 20. What is the difference between a page-level filter and a report-level filter?

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