



### EXERCISE 03: Creating Line Charts Over Time

As an analyst, the category manager of your company would like you to create a chart so that they can look at the total profit across all the categories since 2016. They do not have a favorite chart type, but they do prefer a minimal look for their charts. In this exercise, you will tackle this stakeholder request as you go step by step in detail on how to make the best use of line charts and how adding color or changing the level of detail in the view adds incredible value to your charts.

Perform the following steps to complete the exercise:

- 1) Load the **Orders** table from the sample **Superstore** dataset in your Tableau instance, if you haven't already.
- 2) Similar to the steps for the bar chart, drag one of the measures to the **Rows** shelf. In this exercise, drag **Profit** to the **Rows** shelf.
- 3) Next, add **Order Date** to the **Columns** shelf. As soon as you add the **Date Time** dimension to your view, Tableau automatically creates a line chart (which you also saw previously in your bar chart view).

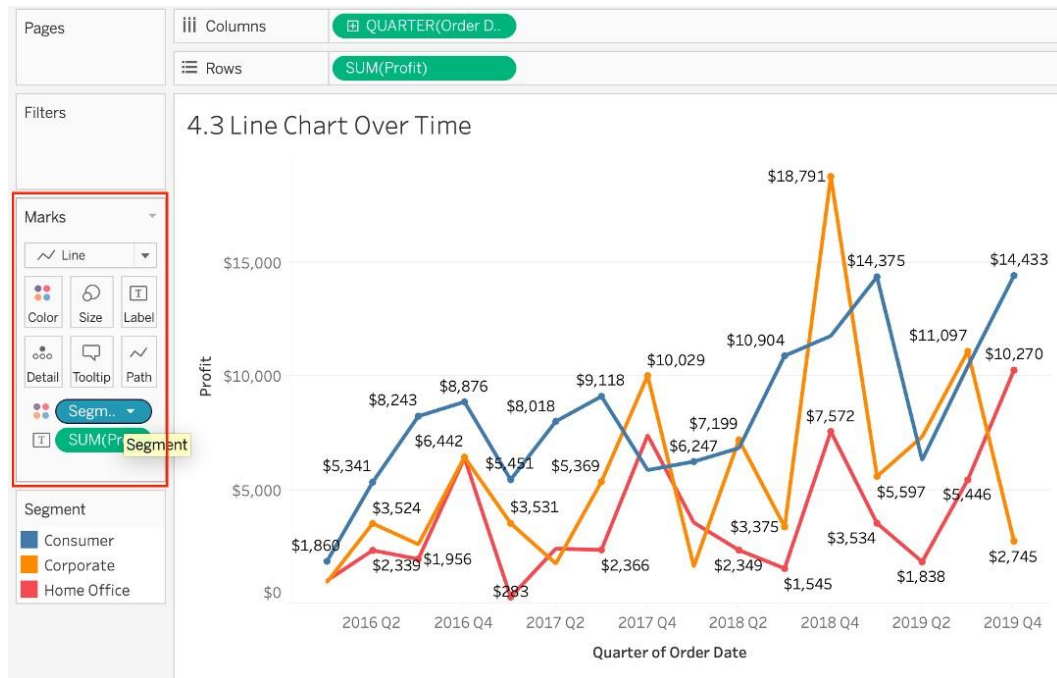


In the chart, you have plotted profit by year and connected those points using a line. The profit grew from **\$50,000** in **2016** to almost **\$100,000** in **2019**.

That is a basic line chart for you, but as previously mentioned, the goal is to learn more than just the basics of Tableau. So, let's explore some of the options for more context or details for your line chart.



- 4) Add a **Profit** label to your line chart by dragging **Profit** from the **data** pane to **Label Marks** card in your view.
- 5) To have the line chart show your sales by quarter instead of by year so it is more granular and helps decision-making for your stakeholders, click on the **+** sign or click the arrow on the dimension in your **YEAR(Order Date)** dimension on the **Columns** shelf and change the granularity from **YEAR(Order Date)** to **QUARTER(Order Date)**.
- 6) To make your view even more granular, add **Segment** to your **Color** or **Detail Marks** shelf. Your data will be split by segment with a corresponding color for each segment, as observed here:



In the preceding figure, you can see that the profit for the **Consumer** segment has grown at a higher rate when compared to other segments. The line chart clearly illustrates the trend by segment across multiple years.

This wraps up our coverage of line charts. This section discussed line charts over time, the difference between discrete dates and continuous dates, and how you can add more color or contextual details to your line charts.