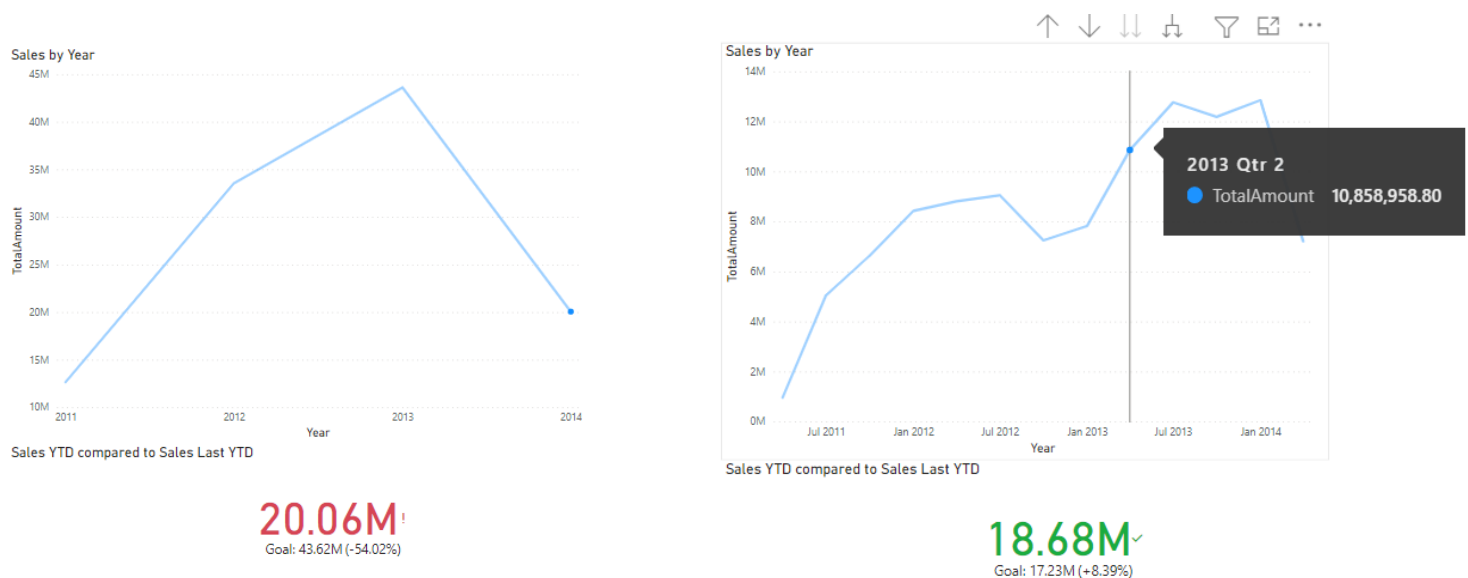


Visualization

1. Elisabeth wants to see how profitable AdventureWorks is throughout the year.

For the visualization of Year Profitability, the best option is a **Line chart**. The line shows if the sales go up or down. For more specifications about the sales, the chart has a drill-down option - the sales by quarter, month and day can be seen for the specific year. To be even more thorough, 2 new measures were created: TotalAmount YTD and TotalAmount Last YTD using DAX. Those were used in a **KPI**, that shows the sales compared to the same period last year and if the sales are going up or down. The KPI is useful to stimulate the person to see if the sales made throughout the year are better than the last year by being green if they are up, and red if they are going down.



The left photo shows sales by year (KPI showing for 2014), and the right photo shows sales for year and quarter(drill down). KPI showing for Q2 of 2013

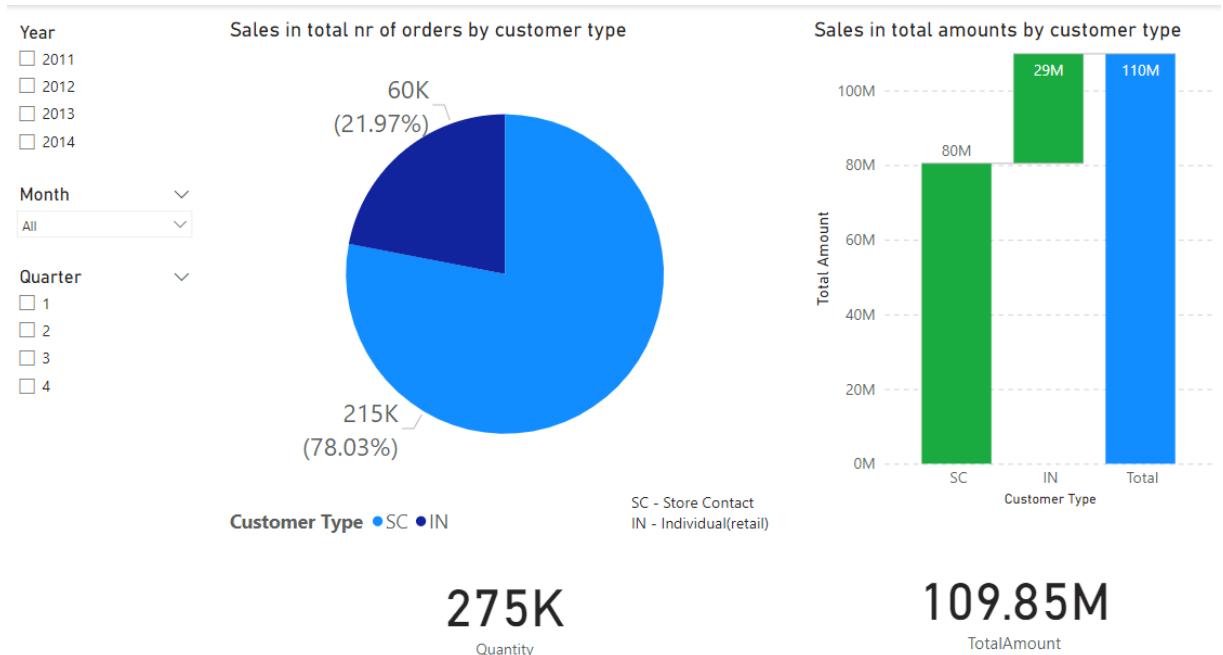
2. Elisabeth needs to know if there is a difference with respect to the number of items a wholesale customer(SC) orders compared to a private consumer(IN). It would also be nice to see the sales to individuals(IN) vs to stores(SC) in total amounts because she has to report this to the CEO.

Filters: Filters for the year, month and quarter have been added to help visualize the customer's contribution at a particular point in time.

Pie Chart: The Pie Chart was used to show the performance of a specific customer type because it is easy to read and shows right away the impact. In this way, the total number of orders fulfilled by the two types of customers, as well as their percentage contribution, can be seen.

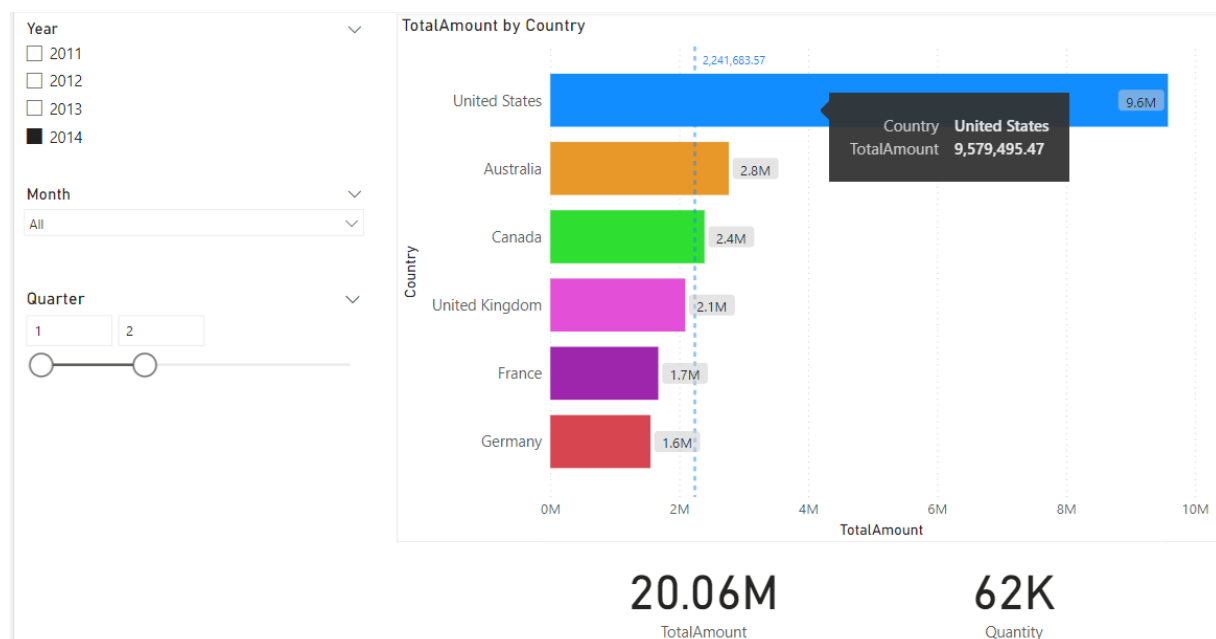
Waterfall chart: The waterfall chart was used to visualize how the 2 different types of customers contribute to the sales total amount.

Card: The card was used to display critical values such as the total orders(quantity) and sales total amount.



3. Wants to compare AdventureWorks different geographical locations in terms of total sales in order to track which markets are performing and which are not.

In order to see which country has been performing better, a **bar chart** was used since this type of chart uses bars to show comparisons between categories of data, in this case the sales total amount by country. Values of the data labels highlight the total amounts and the medial line shows the middle value of the total amount across all the markets. Filters for the year, month and quarter were added to easily visualize the data in a particular period of time as well as for comparison. Lastly, the **card** was used in order to present a single value such as the total amount and the quantity in terms of the geographical market.



4. She wants to be able to look at the sales performance of different sales personnel with respect to both the total amount and number of items sold across product categories

For the visualization of total sales per personnel, a **column chart** along with **filters** by category, year, month and quarter were used. It makes it easier to compare how different sales representatives perform in different time frames and it even shows the total amount they made. To show the middle value of the total amount a median line was used. The filter drop-down selector provides an easy way to quickly visualize the number of products sold without having the need for a separate diagram. Having different columns and colours for each personnel makes it easier to compare their performance. Lastly, two **cards** - one for the total amount and one for the quantity, are used to show the sales and how many products a personnel has sold.

