



# Power BI

## Power BI Basics

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Part 4

### **Line Charts and Area Charts**

These show values linearly, and Area can be used to show the volume or net magnitude.

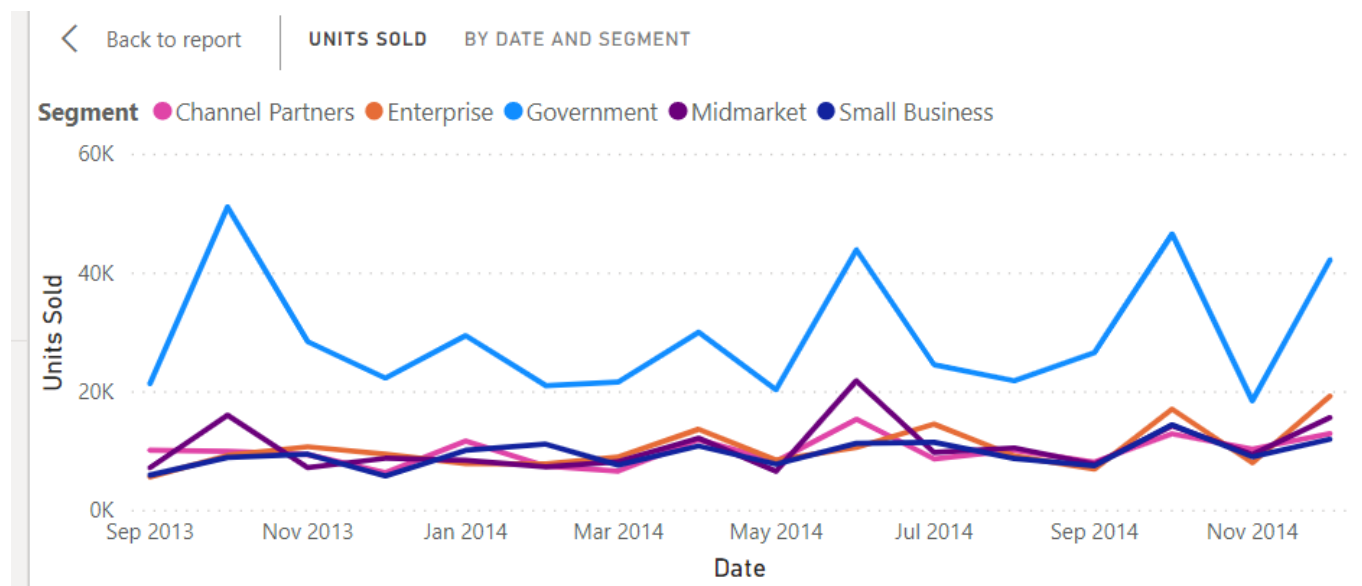
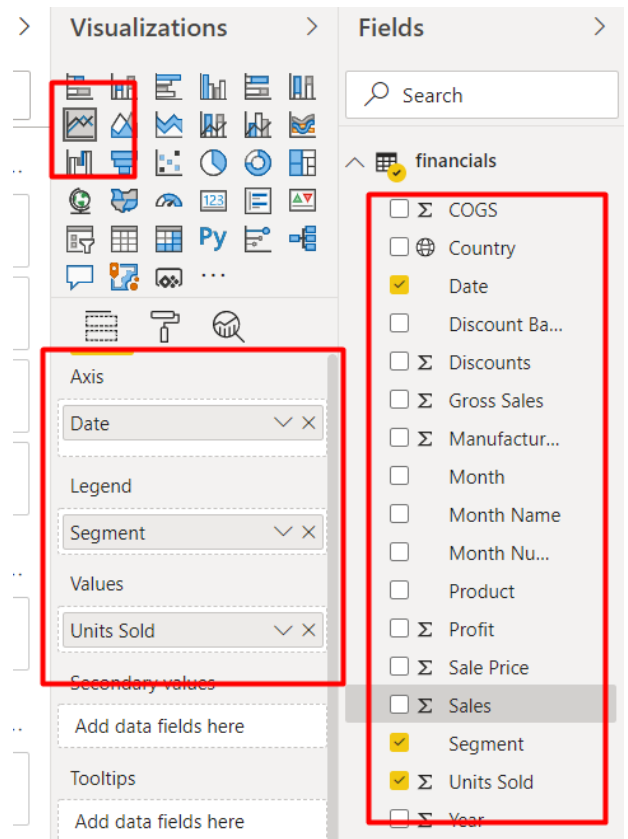
Line charts are usually for discussing trends over a certain time. The Y axis shows numeric values and the X axis represents some key measurements. Line charts are clear and easy to understand since you can see the specific trend for individual data group. For example, X axis can be time and Y can be the value of stock of a company.

An area chart combines the line chart and bar chart to show how one or more groups' numeric values change over the progression of a second variable, typically that of time. An area chart is distinguished from a line chart by the addition of shading between lines and a baseline, like in a bar chart.

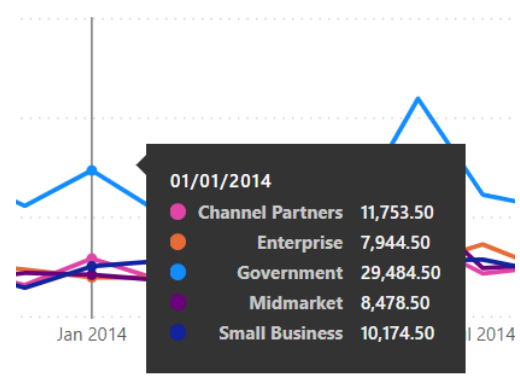
## Line Chart

We will try to analyze the Units Sold according to the segment over the dates.

Line Charts are very useful for plotting such relations with respect to time.

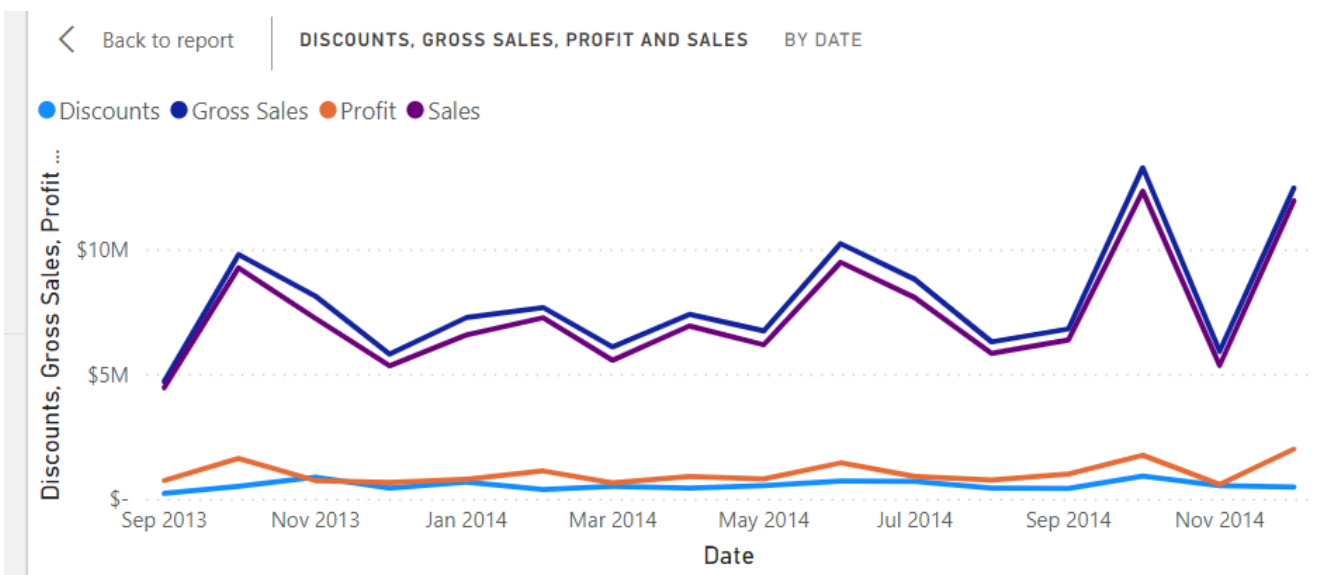
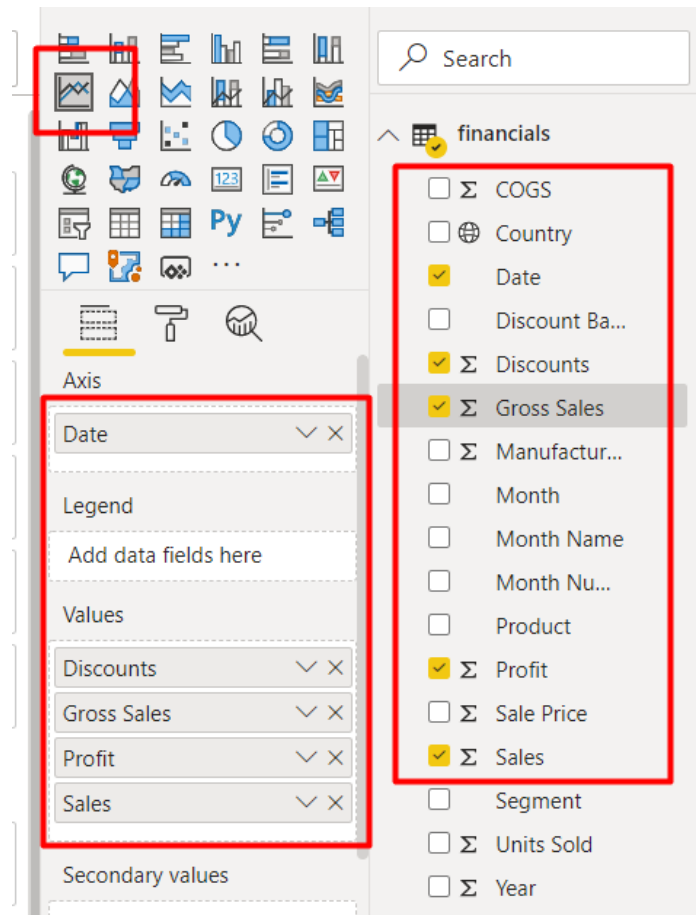


These visualizations are interactive, hovering the cursor over any point will show the details very precisely.



Now we will analyze the Discounts, Gross Sales, Profit and Sales over the dates.

The following settings are done.

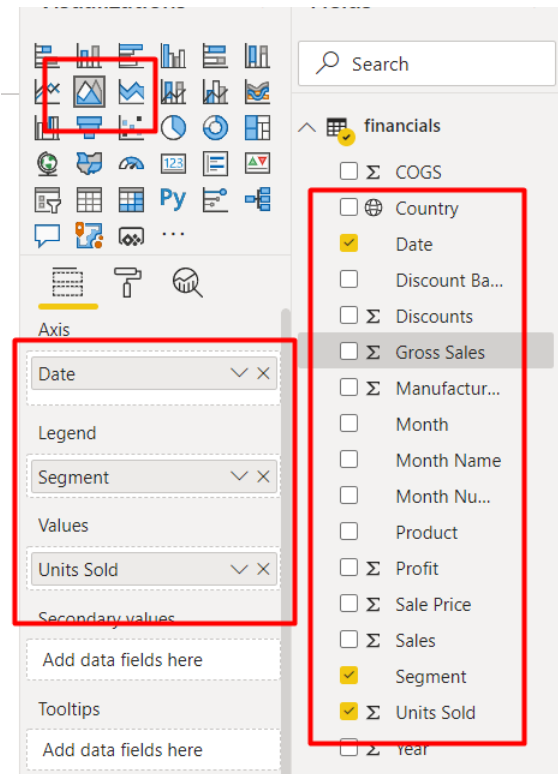


The plot is made, and we can see that the analysis is very clear.

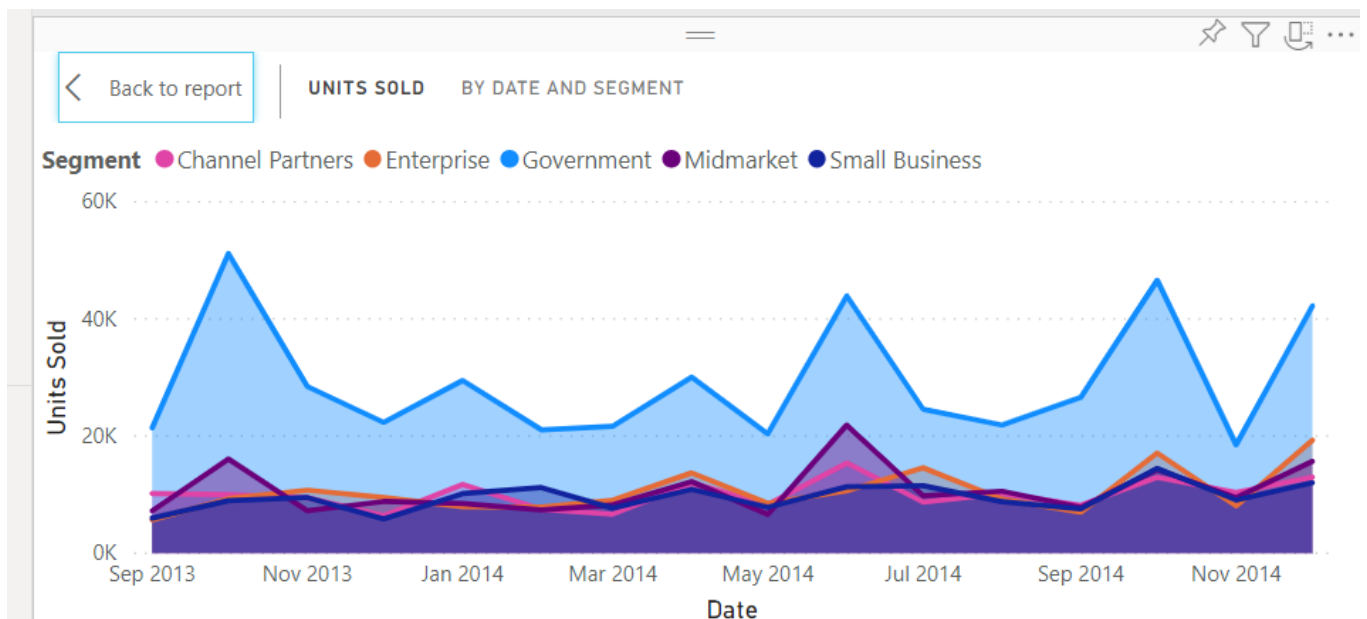
## Area Chart

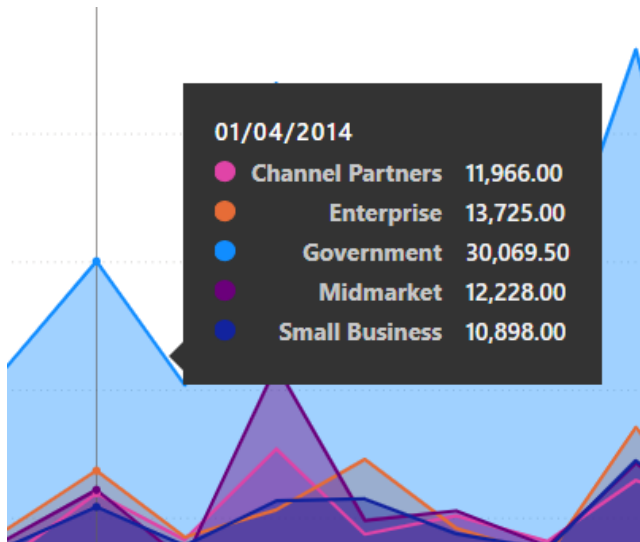
An area chart represents the change in one or more quantities over time. It is like a line graph. In both area charts and line graphs, data points are plotted and then connected by line segments to show the value of a quantity at several different times. Area charts are different from line graphs, however, because the area between the x axis and the line is filled in with color or shading.

Now, we shall try to analyze the units sold, according to the segments, over the date axis. The following settings are made.

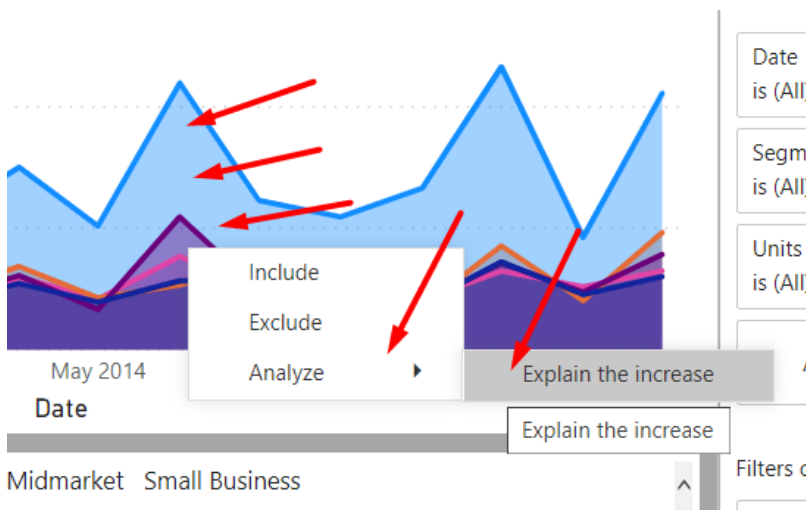


This is the visual obtained.





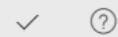
Hovering at the point gives the exact values of the visual at the point. Let us try to do more analysis.



At the sharp increase point, we try to understand the increase.

Area charts are a good choice to use when you want to show a trend over time. Here we had a view of how the units sold varied over time.

Here's the analysis of the 44.64% increase in Units Sold between 01/05/2014 00:00:00 Small Business and 01/06/2014 00:00:00 Small Business



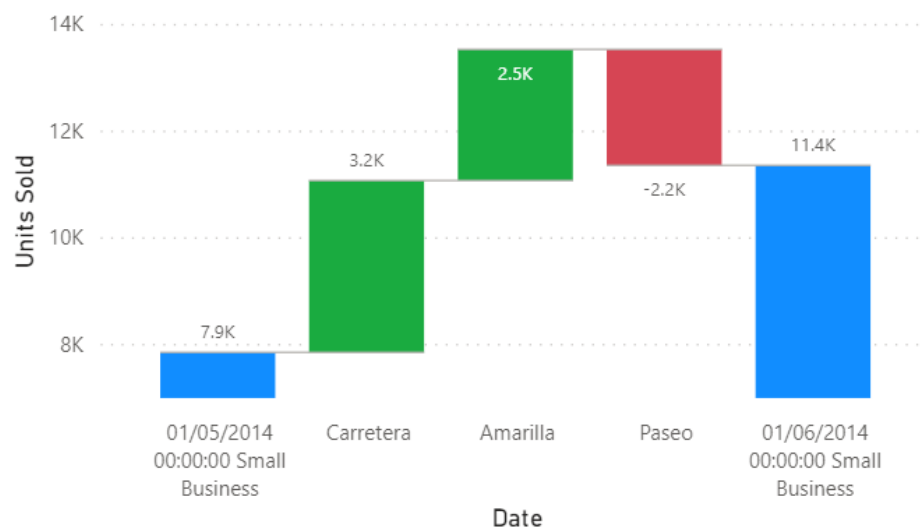
### Units Sold

BY DATE, SEGMENT AND PRODUCT



'Carretera' accounted for the majority of the increase among Product, offsetting the decrease of 'Paseo'. The relative contribution made by 'Paseo' changed the most.

● Increase ● Decrease ● Total ● Other



This and similar windows come up and they give the co-relation between data and try to explain why the thing happened (in this case, the increase).