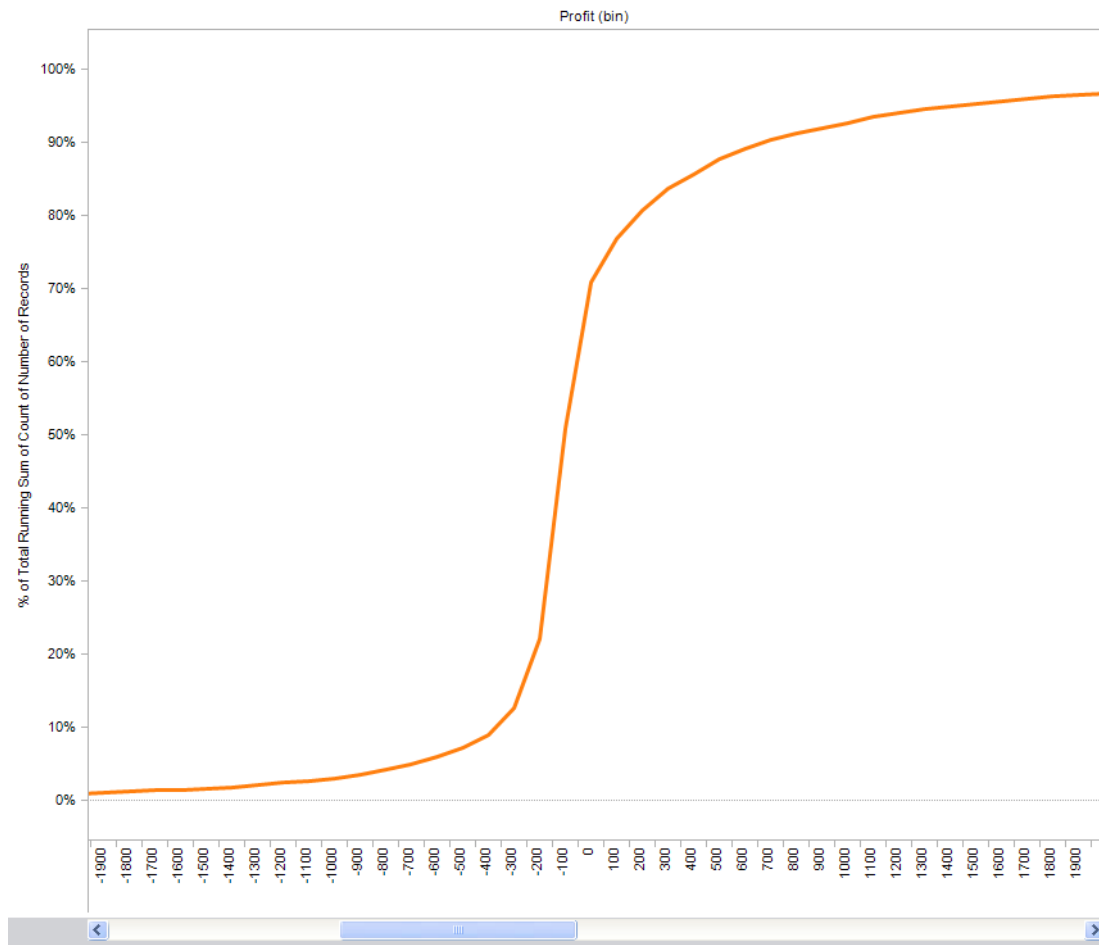


Cumulative Distributions

Cumulative Distributions are frequently used to analyze the trends of data across several dimensions. This document explains how to create a Cumulative Distribution.

Example:



Determine what you want to analyze. In this example, we want to determine what percentage of each record are within which Profit range.

Determine the dimension you want to analyze the values and the value within. In our example, we will analyze Profit per record.

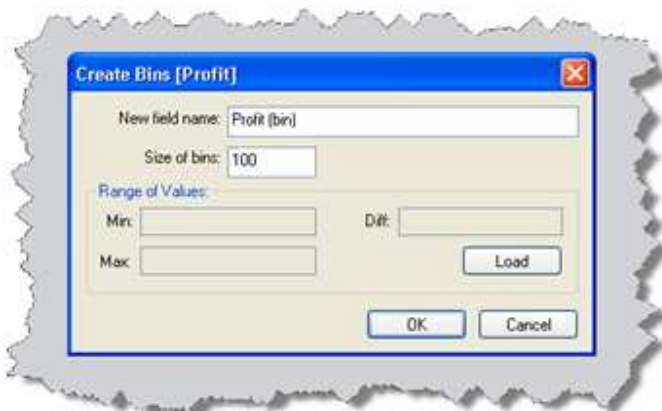
First, you will need to setup the histogram and add the table calculations necessary to create the Cumulative Distribution. You can then setup additional options to make the view more detailed

Setting up a Histogram

1. Right click on the value and choose **Create Bins**.



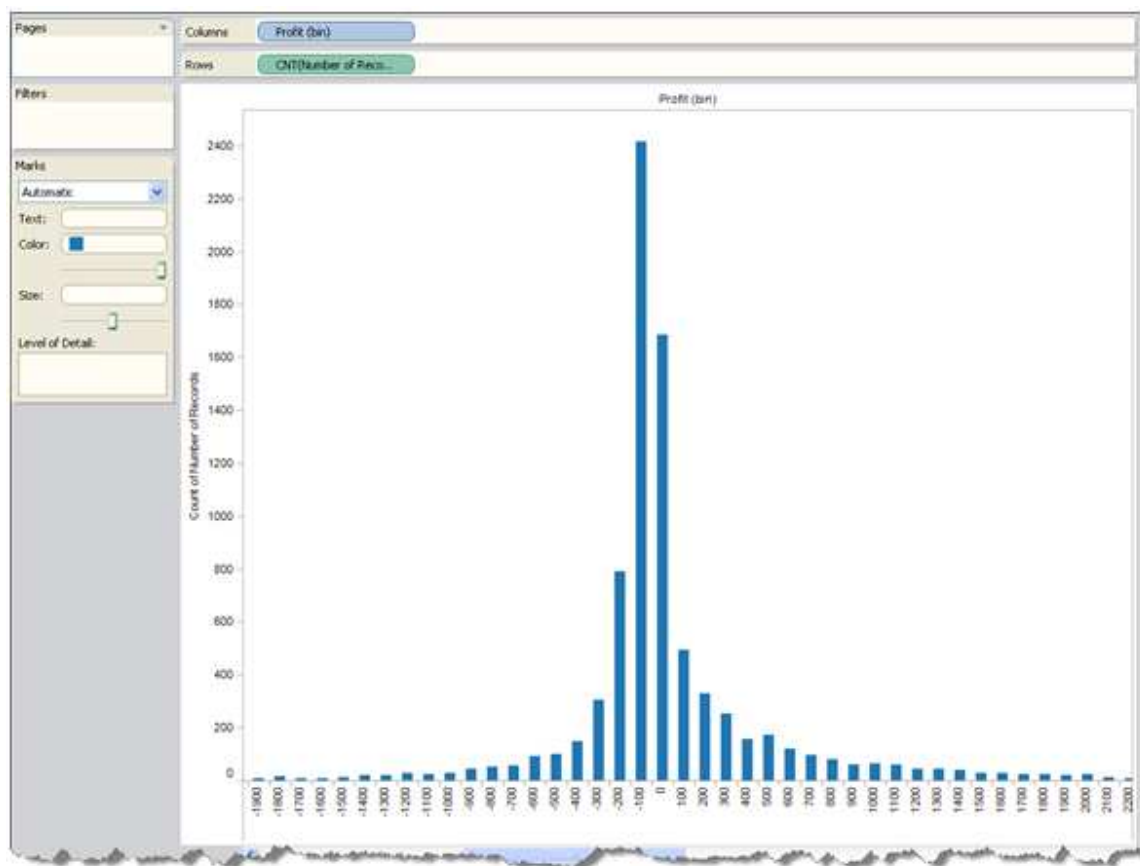
2. Enter the size of each bin



3. Click ok.

4. Put the Profit (bin) on the Column shelf
5. Put the Number of Records on the Rows shelf.

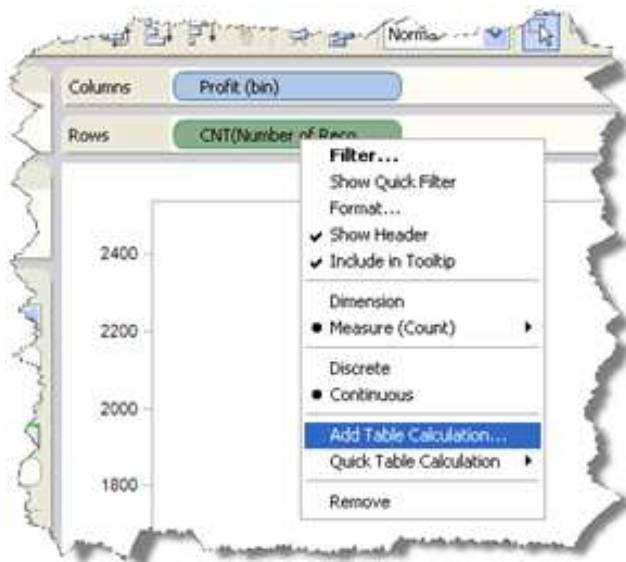
You have the histogram below:



Adding the Table Calculation

After setting up the histogram, you must change the count of records to a percentage. To do this, setup a table calculation.

1. Right click on the CNT(Number of Records) in the Rows shelf
2. Choose **Add Table Calculation**

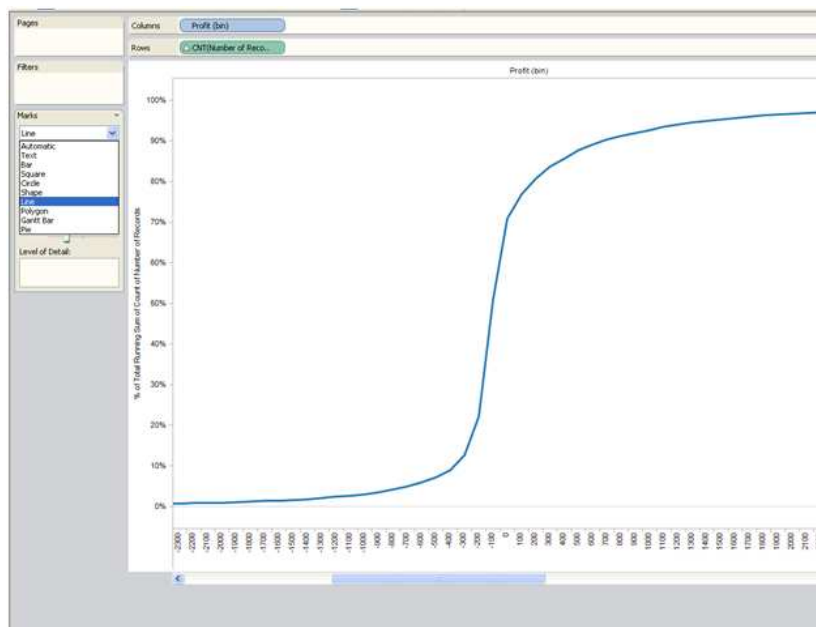


3. Set the **Calculation Type** to **Running Total**
4. Set the **Running within** to the bin field.
5. Check **Perform a secondary calculation on the result**
6. Set the **Secondary Type:** to **Percent of Total**

7. Set **Compute the total within:** to the bin field.



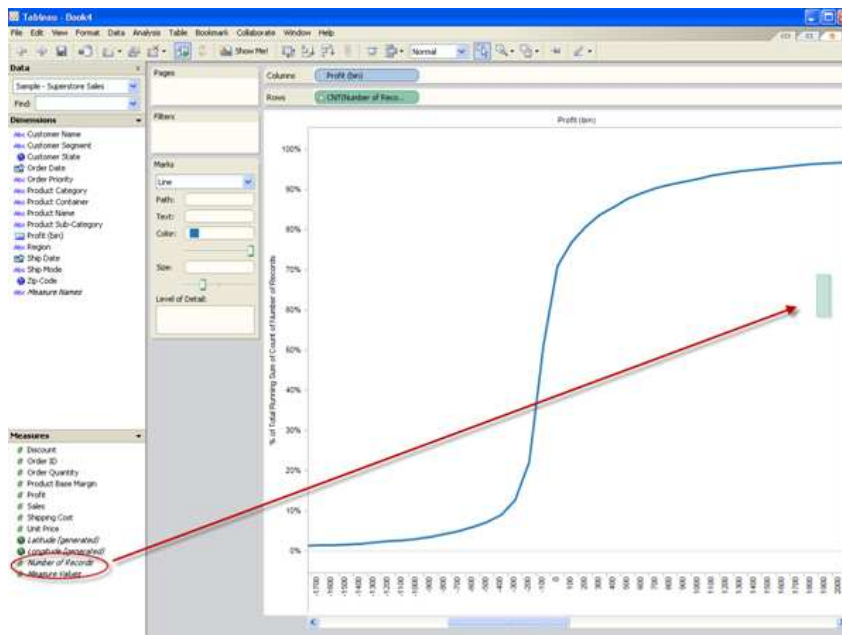
8. Change the **Mark type** to **Line**



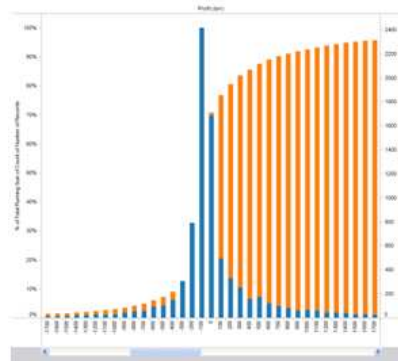
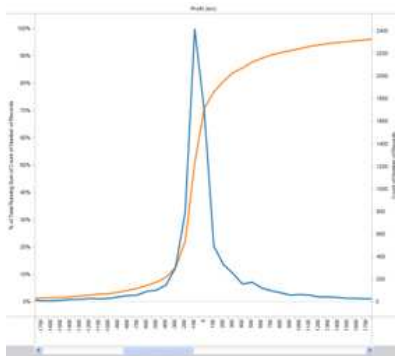
Additional analysis

After completing analysis, you can add a second line or bar indicating the original values

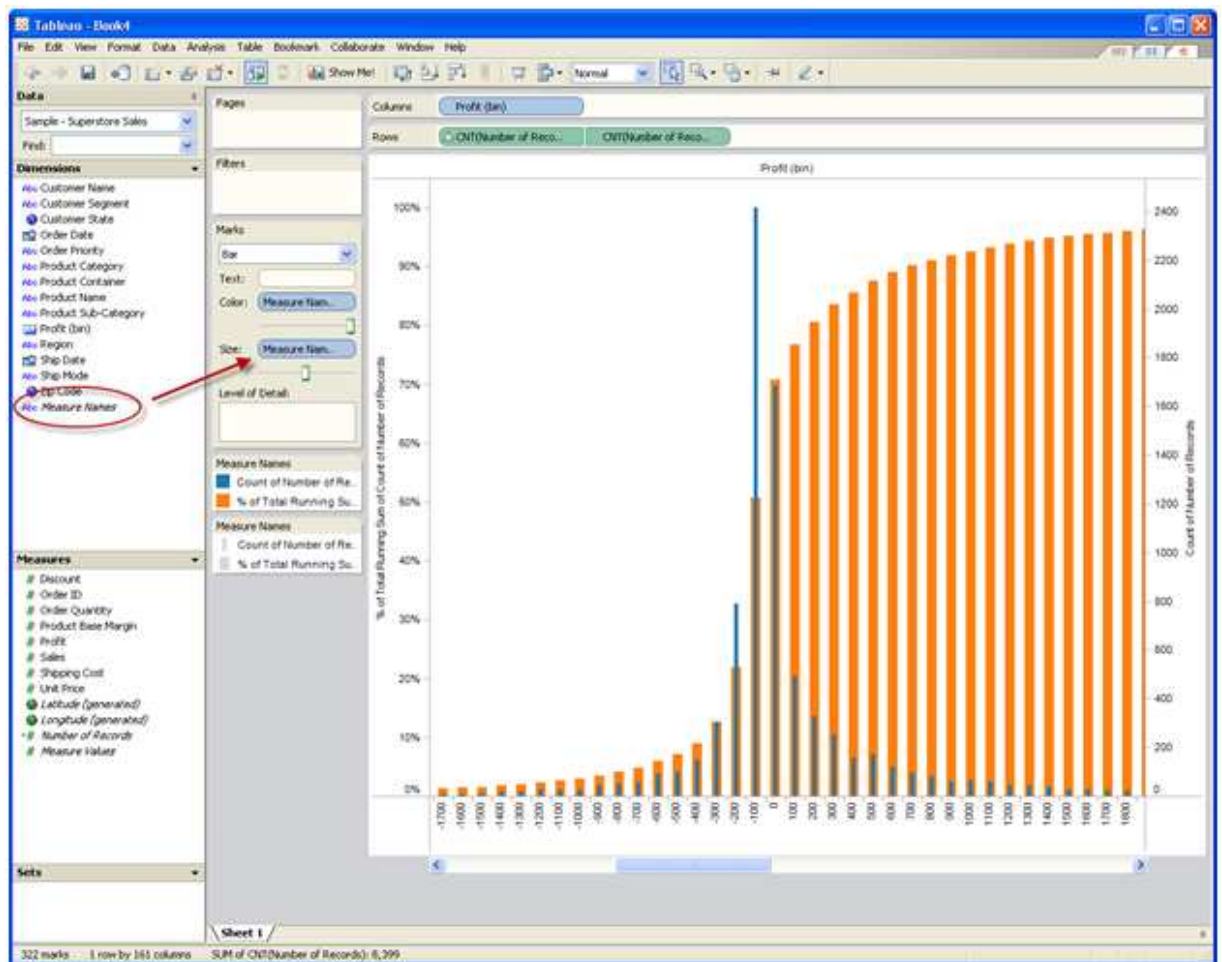
1. Drag the original field to the right side of the chart to create a secondary axis.



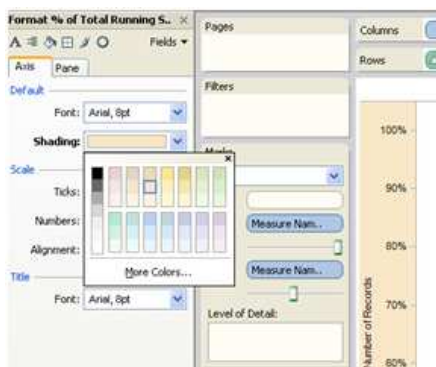
2. Change the **Mark type** to **Bar** or **Line**



If you choose to use a bar chart, you can also move the **Measure Names** to the **Size shelf**



To improve the formatting, you can shade the axis to reflect the color of the mark. To shade the axis, right click on the axis and choose **Format**. In the **Format window**, change the value of the **Default > Shading**.



Your result will be:

