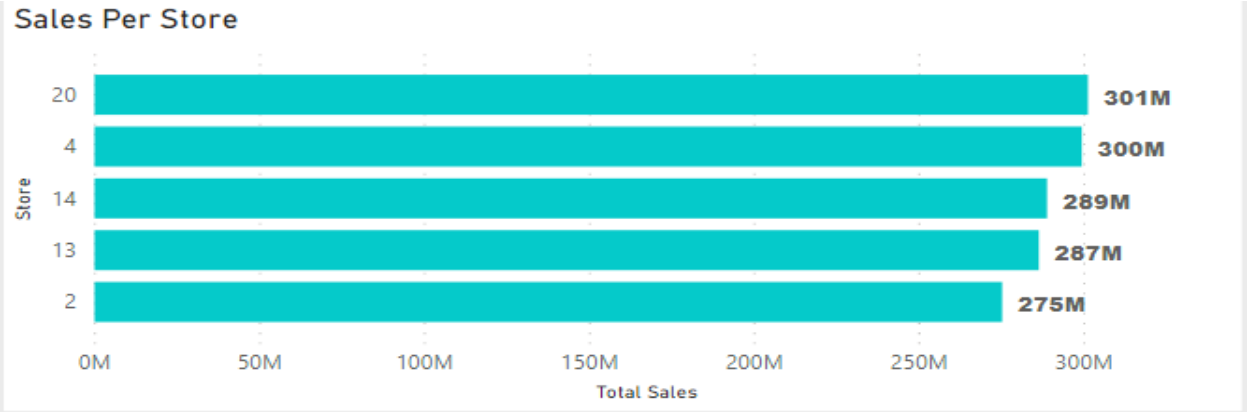
Retail Dashboard

Dashboard summary

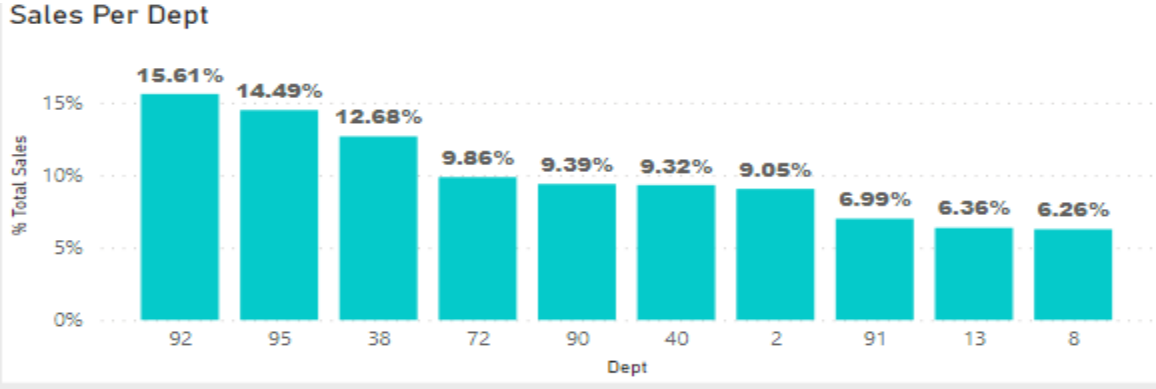
The dashboard has designed in order to track the sales performance in terms of the { Amount & Count of TRXs }, alongside there have been analytical questions asked and answered which I will present.

Q.1: Which store has the highest Sales?



The above image, Shows the top 5 stores and the highest of of them is *store 20* with an amount of **301M** which contribute to a percentage of **20.76%** of the overall "Total Sales"

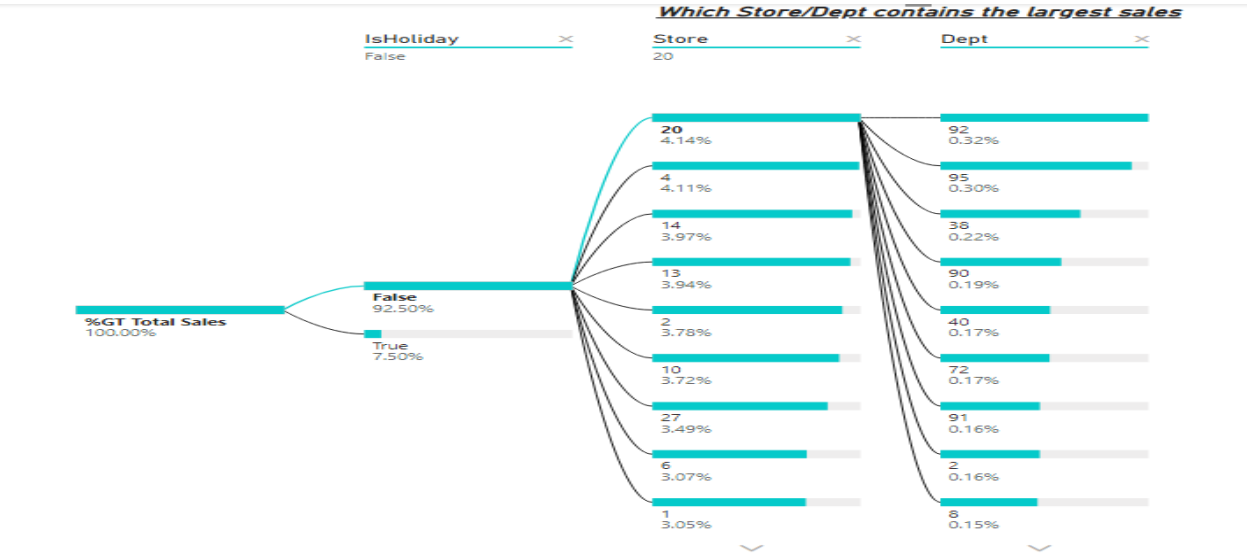
Q.2: Which department has the highest sales?



Department 92 which cornubites with a percentage of **15.61%** of the overall "Total Sales"

I've created a Decomposition tree which shows the highest total sales in terms of {Store – Dept} besides weather if the total sales amount has been transacted in a holiday or not

Q.3: Which Store/Dept contains the largest breaking down by if the day is a holiday or not?



According to the above image, The amount of sales have been converted to represent the grand total sales in order to facilitate the data readability.

And as shown, The Decomposition tree is divided into two categories {False – True},

False to represent the day wasn't a holiday which contributed with a percentage of **92.50%** of the overall "Total Sales"

True to represent the day is a holiday which contributed with a percentage of **07.50%** of the overall "Total Sales"

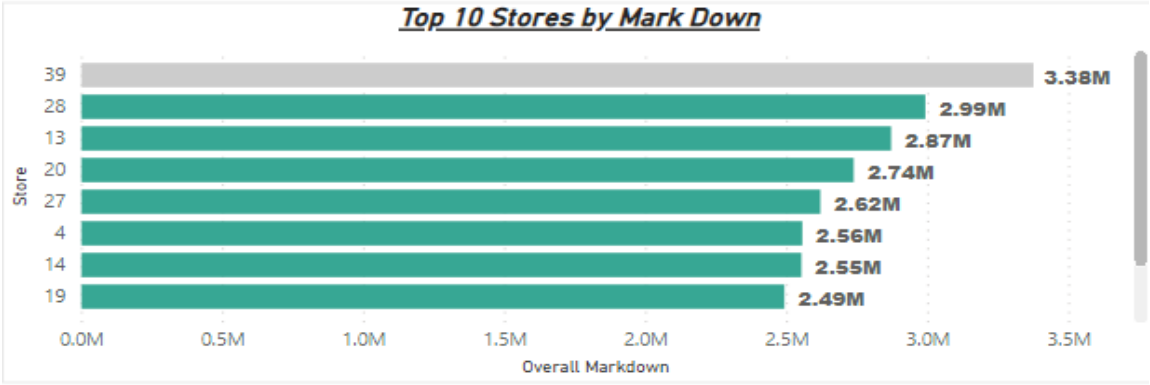
Store 40 is the highest one by **4.14%** of the total sales and regarding *the department* is *92* with a percentage of **0.32%** of the overall total sales

Q.4: Is there a correlation between Fuel Price and The Temperature?

The above image shows whenever the Temperature goes up the fuel price intend to *increase by 0.15* and vise versa if the temperature goes down the price of the fuel indent to *decease by 0.24*, however, there was another factor which is impacting the fuel price

If the day was a normal day that means the price of the fuel indenting to increase and vice versa if the day is a holiday

Q.5: The top 10 stores which has the largest mark down?



The above image, shows the top 10 stores which has the largest discounts overall, *Store 39* is the highest one with a total amount of **3.38M** and it contribute to a percentage of **12.49%** of the overall **"Mark Down"**

However, *Store number 39* was the highest one in 2013 and the second highest one in 2012 therefore it is considered to be the highest one Overall

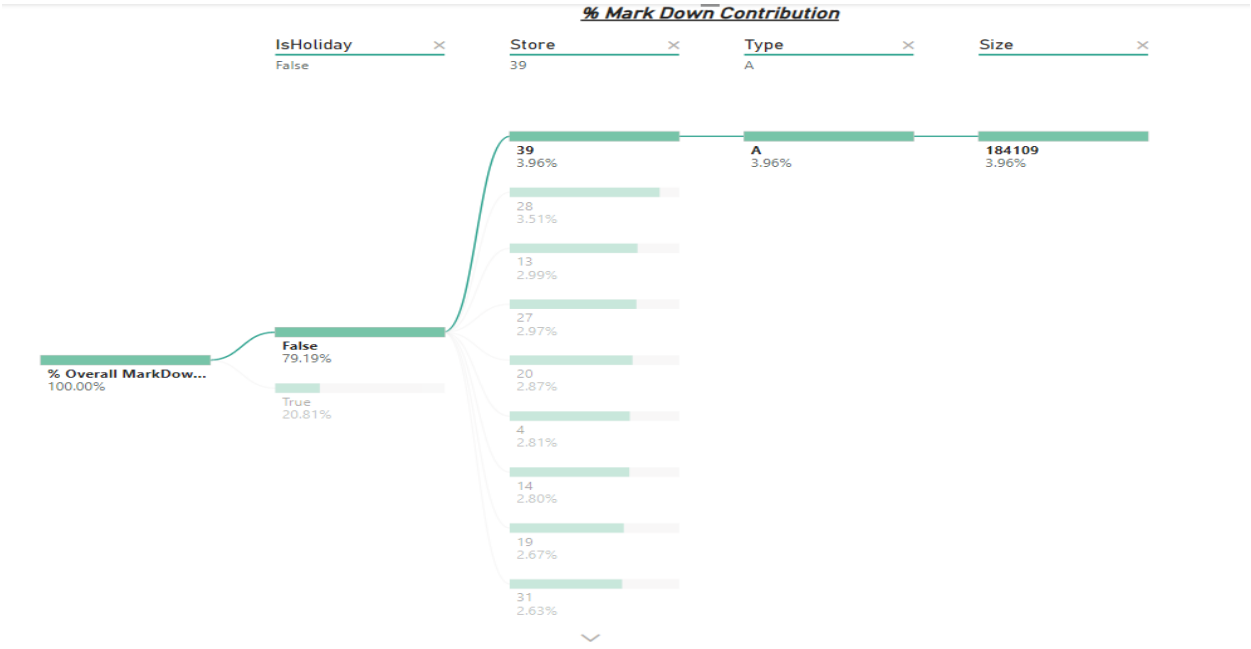
Q.6: Breaking down the top Store "Mark Down" by Department to see which one has the largest impact?

Top 5 Depts by Total Sales & Net Profit

Dept	Total Sales	Net Profit
92	15,748,047.97	12,371,682.56
95	14,734,256.27	11,357,890.86
90	11,246,883.46	7,870,518.05
2	9,629,395.40	6,253,029.99
91	8,635,238.90	5,258,873.49
Total	**59,993,822.00**	**56,617,456.59**

The top store is number 39 according to the previous image and the above table shows net profit for the top 5 department after deducting the mark down *therefore department 92* is the highest department which was impacted by the markdown

Q.7: What's the Contribution for mark down for all stores alongside its type and based on modeling the holidays?

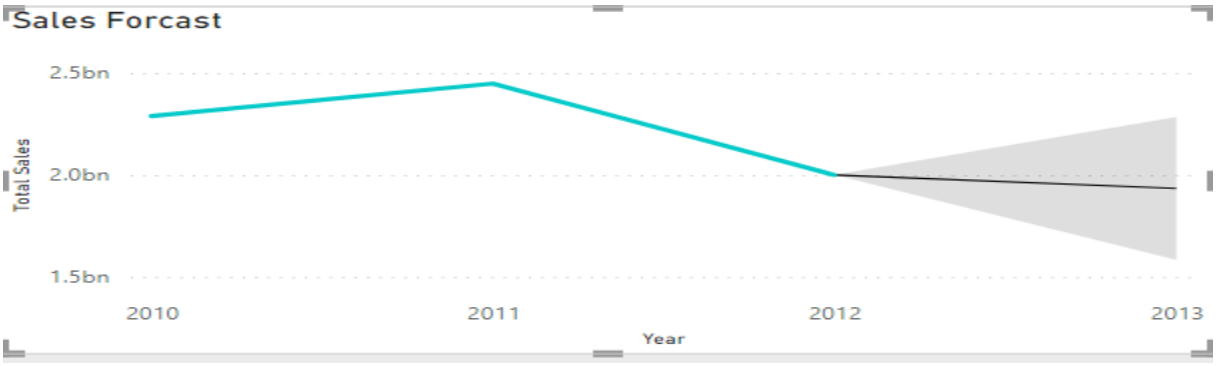


The overall Mark down has been converted to be represented as the grand total in order to read the data

The image above, shows the highest store contribution, *Store 39* with a percentage of **3.96%** of the overall **"Mark Down"**

And the lowest Store contribution, *store 44* with a percentage of **0.16%**

Q.8: What's the forecast for sales for the following year?



The forecast shows a decease in the sales for the following year as the confidence interval was adjusted to be **95%**

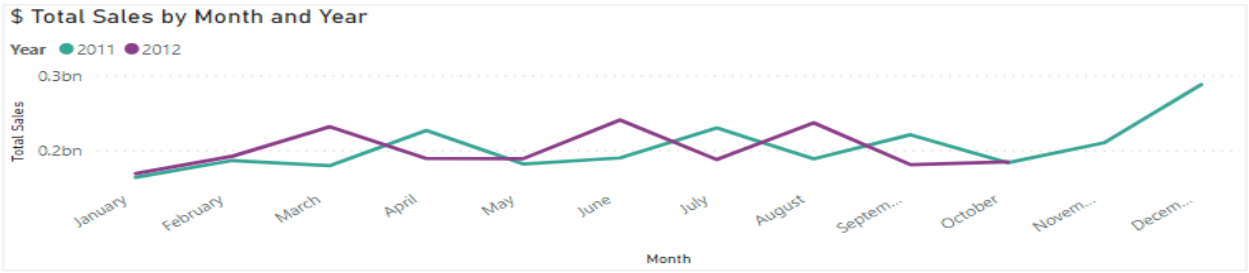
And the **upper Bound** is: 2,284,696,847

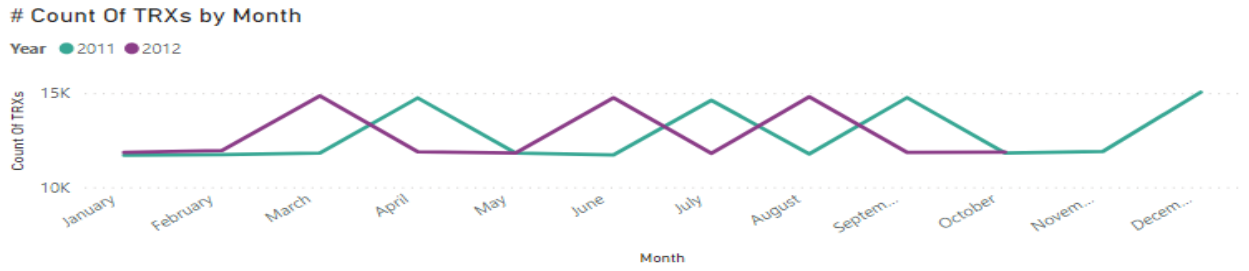
The **lower Bound** is: 1,583,762,262

Which means the forecast number for the following year is a number which lies in between the upper and the lower bound

And that number will be **87%** chance lower than the previous year since at year 2012 the total sales *estimated to be 2,284,696,847*

Q.9: What's the performance for total sales across the month over month in terms of {Count & Amount}





The above images, shows the Count & Amount for month over month and it will be demonstrated below:

1. In 2011 our *total sales estimated to be 2.45bn* while on the other hand in 2012 our *total sales estimated to be 2.00bn*
2. In 2012 we didn't have sales in the last 2 months {November – December}

Q.10: What's the influence over Mark Down, what makes it Increase or Decrease?

I had to see whether the Mark Down is *increasing in the Holidays or not*, and the above image shows that, there is a correlation between the holidays and the mark down **that comes positive**

When the day is a holiday that means the overall *Mark Down is going to increase by 25.49K* and vise versa if the day is a normal day that means the Mark Down is going to decrease

- The actions that need to be adjusted with placed on largest business impact

    1. The overall Mark Down estimated to be **72.74M** in the given period therefore we could decrease the Mark Down
    2. There was a correlation between the sales amount and the size of the store whenever the size of the store is bigger the more sales amount it gains, therefore we could invest in big stores which will eventually become profitable for us