# WALMART SALES

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### **EXECUTIVE SUMMARY**

The report below analyses and shows what factors affect the increase in the sales of Walmart.

The data is collected for 45 stores. For each store, it has collected regarding the temperature, CPI, Fuel prices, and Unemployment.

Here is the data analysis made from the factors which influence the payments

### **Observations:**

- 1. Among the data collected from 45 stores, Store 1 has the maximum sales from 2010-12-11 to 2011-01-04. At the start of 2010 the sales then they started to increase till mid and then at the end they started to decrease.
- 2. Store 4 has the highest recorded average but it has the most dispersed data which shows outliers.
- 3. Among the data collected from 45 stores, Store 1 had the maximum sales from 2010-12-11 to 2011-01-04. At the start of 2010 the sales then they started to increase till mid and then at the end they started to decrease.
- 4. Store 3 & Store 4 have the least average of sales and less number of outliers.
- 5. The average temperature was around 65F and the upper limit of temperature was 100F with the lowest value of temperature being 0F
- 6. The average fuel price for all the stores combined is 3.40 while the upper limit of temperature is 4.48 and 2.4 is the lowest temperature.
- 7. Unemployment has a mean value of nearly 7 with upper and lower limits of 10.5 and 4.5 respectively.

- 8. Store 14 has the highest sales when compared to stores 4 and 20.
- 9. 76.73 and 39.72 are the highest and least temperatures recorded by store 33 and Store 7 respectively.
- 10. Unemployment is highest in Store 12 with an average of 13.116 and least in Store 40 with 4 7
- 11. Stores 14 and 20 nearly have the same amount of sales.
- 12. Store 12 has noted the highest average fuel price at 3.60 and store 36 has the least average at 3.20
- 13. The average Customer Price Index is at 171.5. 219.63 is the highest average CPI recorded by Store 9. Store 44 has recorded the least CPI with 128.68
- 14. The average weekly sales are 1050369.4. Store 20 has the highest average of 2,107,677 and store 33 has the most petite average of 2,59,862.

# **Factors Affecting Walmart Sales:**

- 1. The sales are low when the temperatures are very low. So, temperature plays a direct relationship in the sales of Walmart.
- 2. Sales are high during the month of December i.e; the holiday season.
- 3. Unemployment rate is high in the month of January and low during the months of October, and November.
- 4. Fuel prices don't have any linear relation with sales. In some weeks even though the fuel prices are high, sales are high and also low.
- 5. Consumer Price Index(CPI) increases the prices of the products so the sales go high. CPI and sales have a positive correlation.

### **Recommendations:**

- 1. When the temperatures are low as the sales most of people prefer delivery so giving offers on delivery would increase sales.
- 2. When CPI is high customers prefer not to buy luxury goods and stick to daily needs goods, consumers should get attracted to such goods by giving discounts.
- 3. Stocking the stores based on the location, stores located in remote areas should be stocked based on the highest-selling products.

4. Customer feedback is always an important factor to improve in any business. So taking customer recommendations should also be considered.

## **References:**

- <a href="https://ycharts.com/companies/WMT/revenues\_annual">https://ycharts.com/companies/WMT/revenues\_annual</a>
- https://www.rdocumentation.org/packages/mi/versions/0.04-5/topics/lm.mi