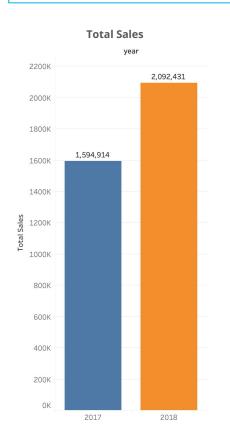
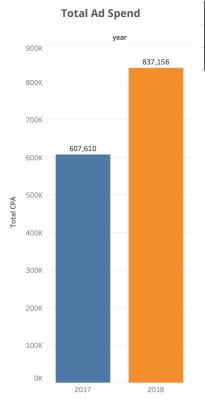
Udacity Marketing Analytics

Nanodegree Program Project: Craft a Report

Objective Results



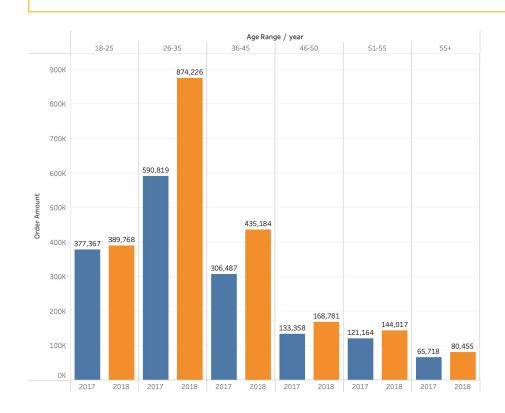


Year of Black Friday	2017	2018	Growth	Target
Total Sales	1,594,913.85	2,092,431.46	31.19%	30%
Total Ad Spend	607,610.41	837,155.55	37.78%	-30%

Increase total sales by 30% on Black Friday 2018 vs. Black Friday 2017. The total sales during Black Friday 2018 exhibited a notable increase of 498k from last year's total sales, surpassing the predefined goal of a 30% growth rate.

Decrease total ad spend by 30% from Black Friday 2017 to Black Friday 2018. The actual spending increased by nearly 40% compared to the previous year's expenditure. This outcome indicates a deviation from the intended cost reduction goal.

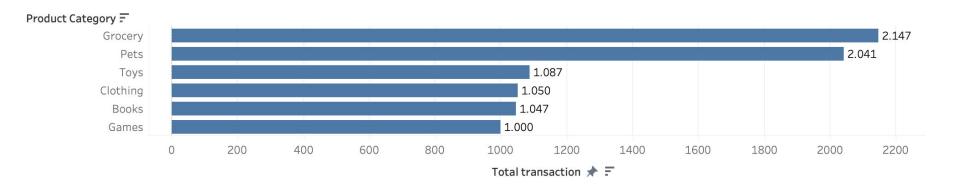
Evaluate the Audience



Which Age-Range generated the most sales?

The chart illustrates the distribution of total sales across different age range groups during **Black Friday 2017 and 2018.** It clearly depicts that **the age range of 26-35** made **the highest contribution** to the sales numbers in both years (~>= 600k), while **the age range of 55 and above** had **the lowest contribution (65k and 80K, respectively)**.

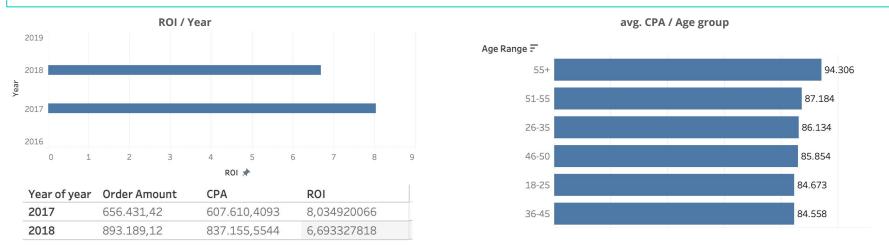
Evaluate the Audience



Which product category was least popular to 18-25 year olds?

The presented chart displays the total transactions for different product categories among the age range of 18-25 year-olds. It is evident that the grocery category recorded the highest number of transactions, with a total of 2150. On the other hand, the game category was the least favored among this age group, with only 100 transactions. This data indicates a strong preference for grocery products among 18-25 year-olds, while games garnered less interest in comparison.

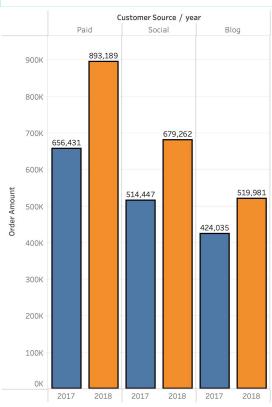
Evaluate the Marketing



Was the ROI on our Paid Channel positive or negative? What was it? Which age-range had the best CPA? The return on investment (ROI) for paid channels demonstrated positive values in both years, with an ROI of 8 %in 2017 and 6.7% in 2018.

The average Cost Per Acquisition (CPA) for the age group 55+ was the highest (94.3), indicating a relatively higher cost associated with acquiring customers in this demographic. On the other hand, the average CPAs for the age groups 18-25 and 36-45 were relatively similar, around 84.

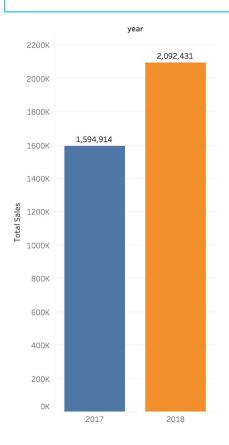
Evaluate the Marketing



Which channel was the biggest driver in sales for 2017? For 2018?

Paid channels consistently served as the primary driver for sales in both years, delivering significant results. In 2017, paid channels generated a total of 656k in sales, which further increased to 893k in 2018. On the other hand, the blog channel had the least contribution to the total sales, indicating a relatively lower influence on the overall sales performance.

Evaluate the Sales



How much revenue was generated in 2017 & 2018?

The revenue in 2018 exceeded the revenue generated in 2017 by one-third, amounting to \$15,000k. The 1/3 higher revenue demonstrates a positive trend and indicates successful efforts in driving sales and increasing profitability.

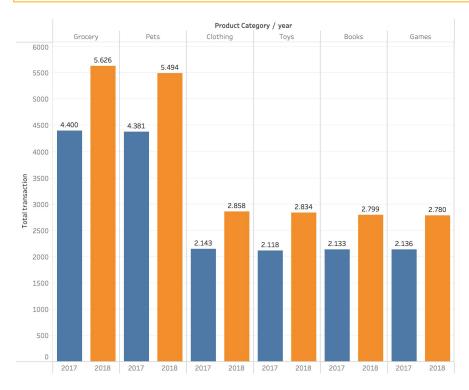
Evaluate the Sales



What was our average order amount in 2017 vs 2018?

The average order amount showed a modest increase of 1.4%, rising from \$92.1 to \$93.5. This slight growth indicates an upward trend in the average value of orders placed.

Evaluate the Product Categories



Which product category was most popular in 2017 & 2018?

The grocery category emerged as the most popular product category, recording 4,400 and 5,626 transactions in 2017 and 2018, respectively. Following closely behind grocery, the pets category experienced substantial growth, with transaction numbers increasing from 4,381 in 2017 to 5,494 in 2018.

Evaluate the Product Categories



Average CPA by product category

The average Cost Per Acquisition (CPA) per product category exhibited variations between 2017 and 2018. Games had the highest average CPA in 2017, while clothing took that spot in 2018. Conversely, grocery consistently had the lowest average CPA in both years. On the other hand, the average CPA for the book category remained relatively stagnant, indicating a consistent level of cost associated with acquiring customers for this particular product category.