

Udacity

Marketing Analytics

Nanodegree Program
Project: Craft a Report

Objective Results

This is a campaign report based on the marketing analysis of Black Friday sales of 2017 and 2018.

✓ **Goal was met:** Increase total sales by 30%

on Black Friday 2018 vs. Black Friday 2017.

- The total sales increased by 31.2% in 2018.

✗ **Goal was not met:** Decrease total ad spend

by 30% from Black Friday 2017 to Black Friday 2018.

- The total ad spend increased by 37.8% in 2018
- To achieve the goal on ad spend, marketing costs has to be reduced.

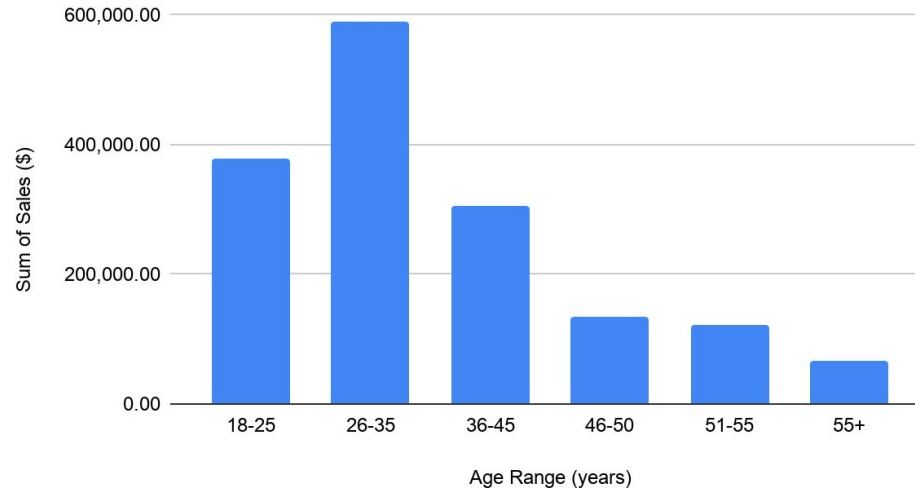
Year	Total Sales	Increase in Total Sales in 2018
2017	1,594,913.85	31.2%
2018	2,092,431.46	
Year	Total Ad Spend	Increase in Total Ad Spend in 2018
2017	607,611.59	37.8%
2018	837,156.72	

Evaluate the Audience

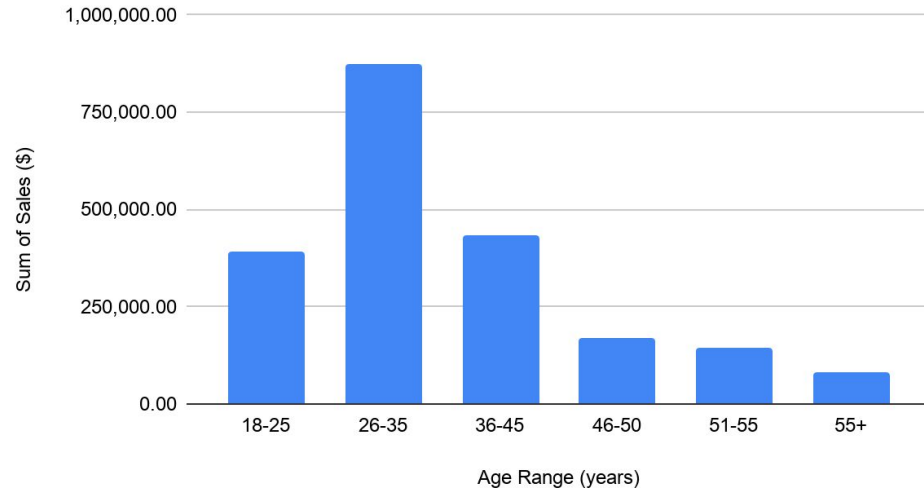
Required: Demonstrate sales by age range

- In both 2017 and 2018, customers aging 26 to 35 years generated the most sales.

Sales by Age Range in 2017



Sales by Age Range in 2018

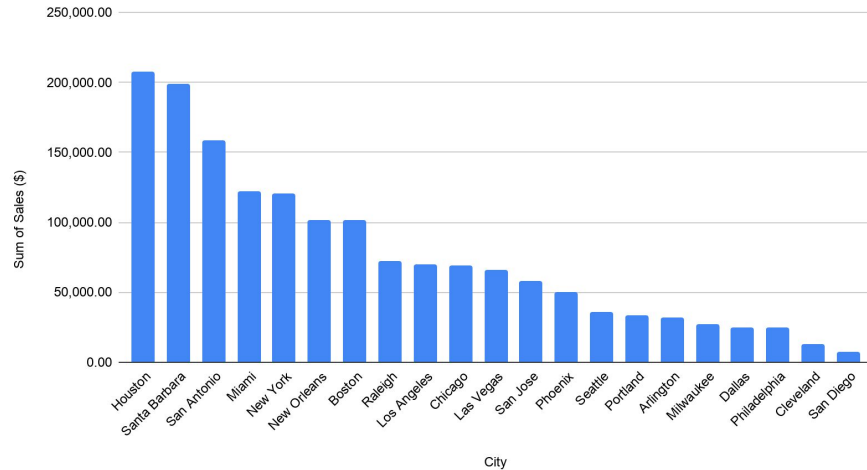


Evaluate the Audience

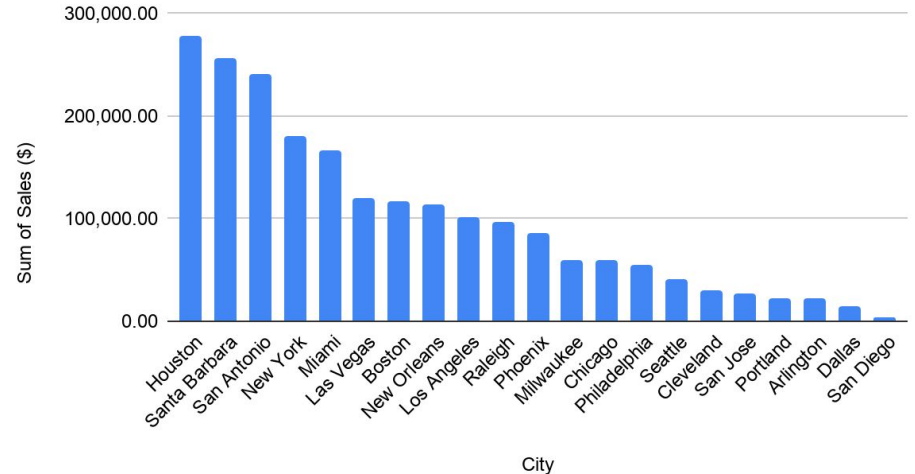
Question 2: Which City generated the most sales?

- Houston generated the most sales in 2017 and 2018.

Sales vs. City in 2017



Sales vs. City in 2018



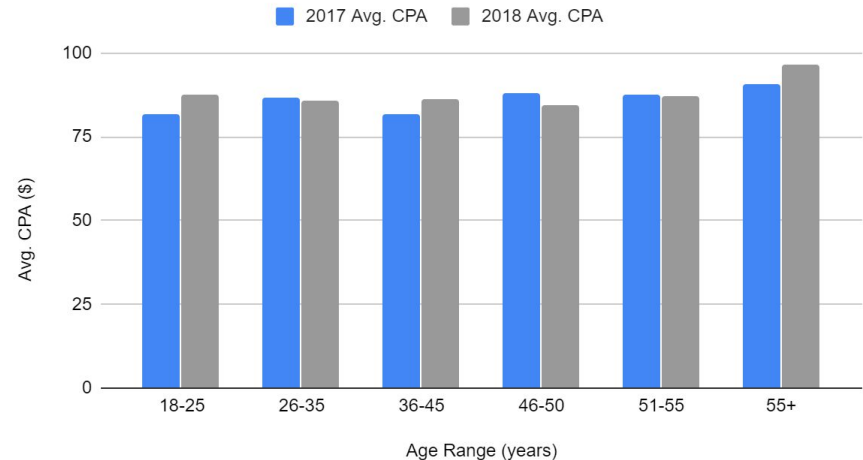
Evaluate the Marketing

Required: Was the ROI on our Paid Channel positive or negative? What was it? Which age-range had the best CPA?

- ROI on the paid channel was positive in 2017 and 2018.
- ROI were 8% and 6.7% in 2017 and 2018, respectively.
- 26 to 35 years age-range had the best avg. CPA in 2017 (\$86.8) and 2018 (\$85.6). Because this group generated the most sales in both 2017 and 2018 Black Friday events.

Year	ROI (%)
2017	8%
2018	6.7%

Avg. CPA by Age Range in 2017 & 2018

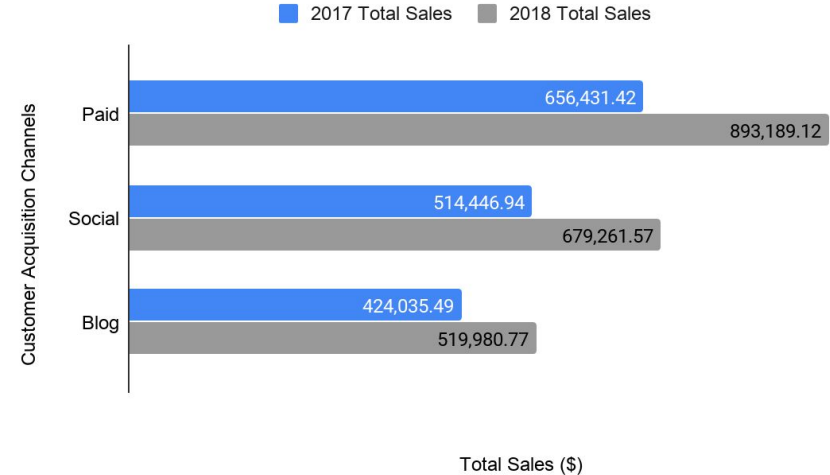


Evaluate the Marketing

Question 2: Demonstrate Total Sales by Channels

- Paid channels generated the most sales in 2017 and 2018.
- Total ad spend was 37.8% higher in 2018 from 2017, which generated 36% more sales from paid channels in 2018 than in 2017.
- Customer acquisition from social media and blogs were organic with zero ad spend.

Total Sales by Channels



Evaluate the Sales

Required: How much revenue did we generate in 2017? In 2018?

- Revenue indicates the total sales.
- The total sales was 31.2% higher in 2018 from 2017.

Year	Revenue
2017	1,594,913.85
2018	2,092,431.46

Evaluate the Sales

Question 2: What was our average order amount in 2017 vs 2018?

- Average order amounts were \$92.1 in 2017 and \$93.5 in 2018.
- Although the total order amount increased 31.2% in 2018 from 2017, the average order amounts were found almost the same.

Year	Avg. Order Amount
2017	92.13
2018	93.45

Evaluate the Product Categories

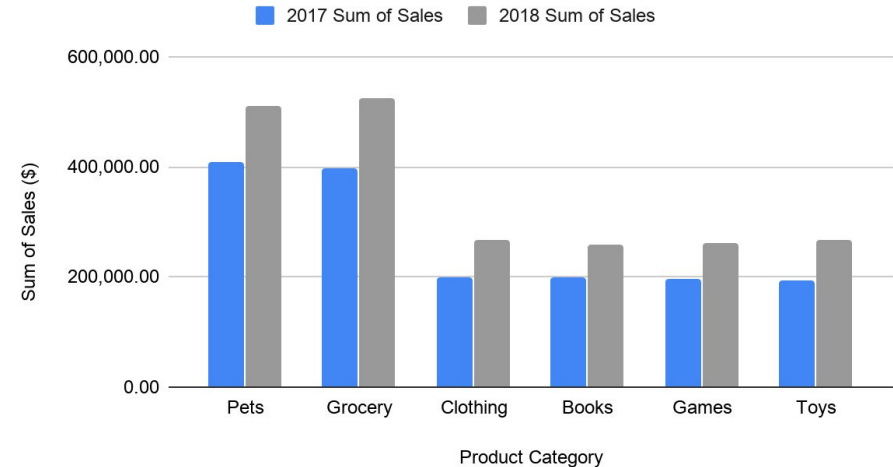
Required: Which product category was most popular in 2017 & 2018?

- Pets was the most popular product category in 2017. Grocery followed closely.
- Grocery was the most popular product category in 2018, followed by Pets.

Question 2: Demonstrate sales by product category

- In 2017, Pets generated the most sales, closely followed by Grocery.
- In 2018, Grocery generated the most sales, while Pets brought in the second most sales.

Sales by Product Categories in 2017 & 2018



Evaluate the Product Categories

Question 3: Demonstrate CPA by Product Categories

- CPA was accounted for the paid channels only.
- In 2017, average CPA for all six product categories were between \$84 to \$87.
- In 2018, avg. CPA for the product categories were ranging from \$83 to \$89.
- Games had the highest avg. CPA in 2017 and Clothing was the highest in 2018 for the same.
- However, the highest sales were generated by Pets and Grocery, despite of their lower avg. CPA.

CPA by Product Categories in 2017 & 2018

