Udacity
Marketing Analytics

Nanodegree Program
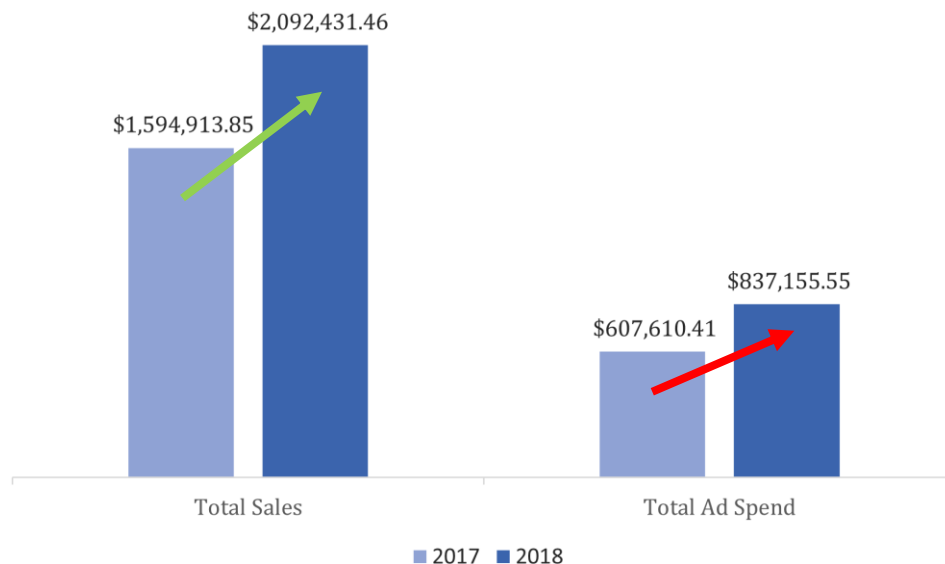## Project: Craft a Report

Objective Results

Increase total sales by 30% on Black Friday 2018 vs. Black Friday 2017. **Objective achieved**, sales in 2018 **increased by 31.19%.**

Decrease total ad spend by 30% from Black Friday 2017 to Black Friday 2018. Objective not achieved, the ad spends in 2018 **increased by 37.78%.**

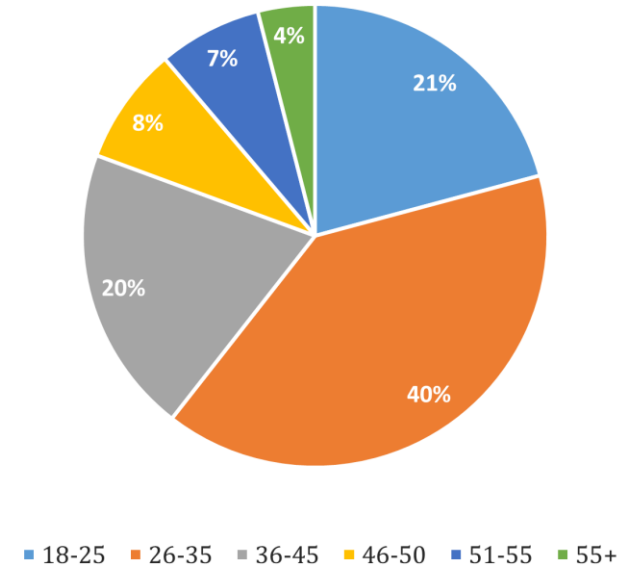Total Sales and Total Ad Spends for 2017 vs 2018

Evaluate the Audience

Q: Which Age-Range generated the most sales?

The highest sales were generated by customers **aged 26-35** with **40%** and total of **$1,465,045.33.**

Total Sales by Age Range 2017-2018

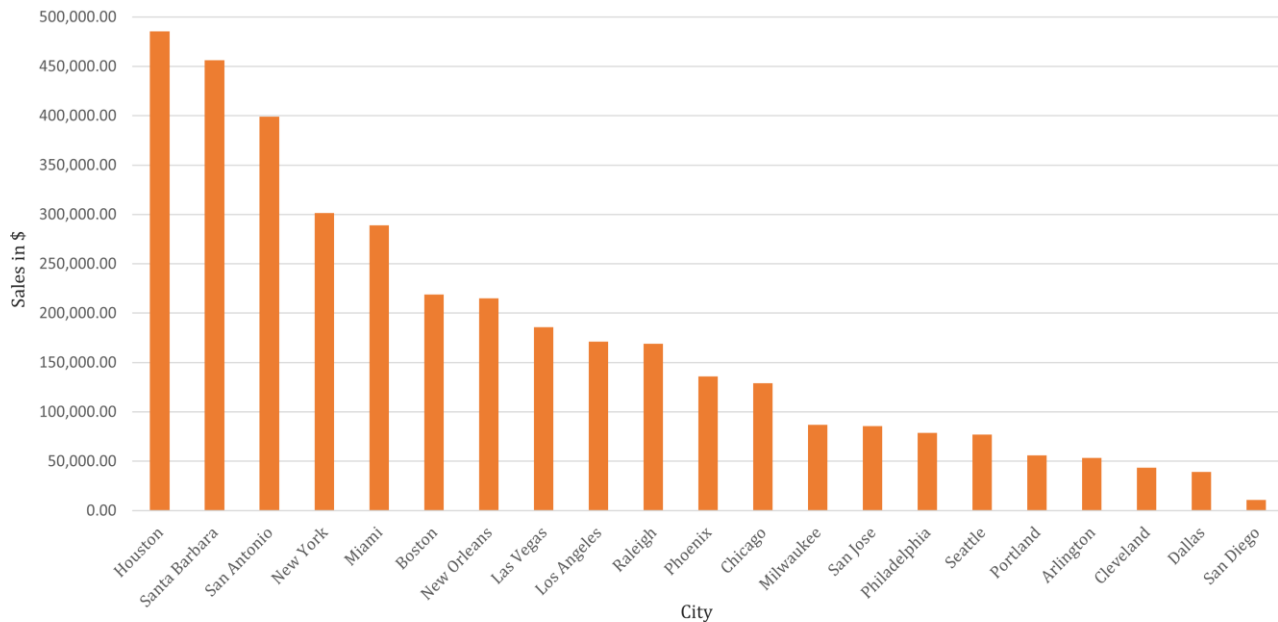Legend: 18-25, 26-35, 36-45, 46-50, 51-55, 55+

Evaluate the Audience

Q: Which City generated the most sales?

The highest sales were generated by customers who live in **Houston city** with total of **$485,220.74.**

Total Sales by Cities 2017-2018

Evaluate the Marketing

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

The ROI on the paid channel is **positive** with **7.26%.**

Calculated using formula: ROI=(Total sales-Total cost)/Total sales.

Age range **36-45** had the **best CPA with $84.56.**

	Total Sales (Paid Channels)	Total CPA	ROI
2017	$ 656,431.42	$ 607,610.41	
2018	$ 893,189.12	$ 837,155.55	
Total	$ 1,549,620.54	$1,444,765.96	7.26%

Average CPA by Group Age for 2017-2018

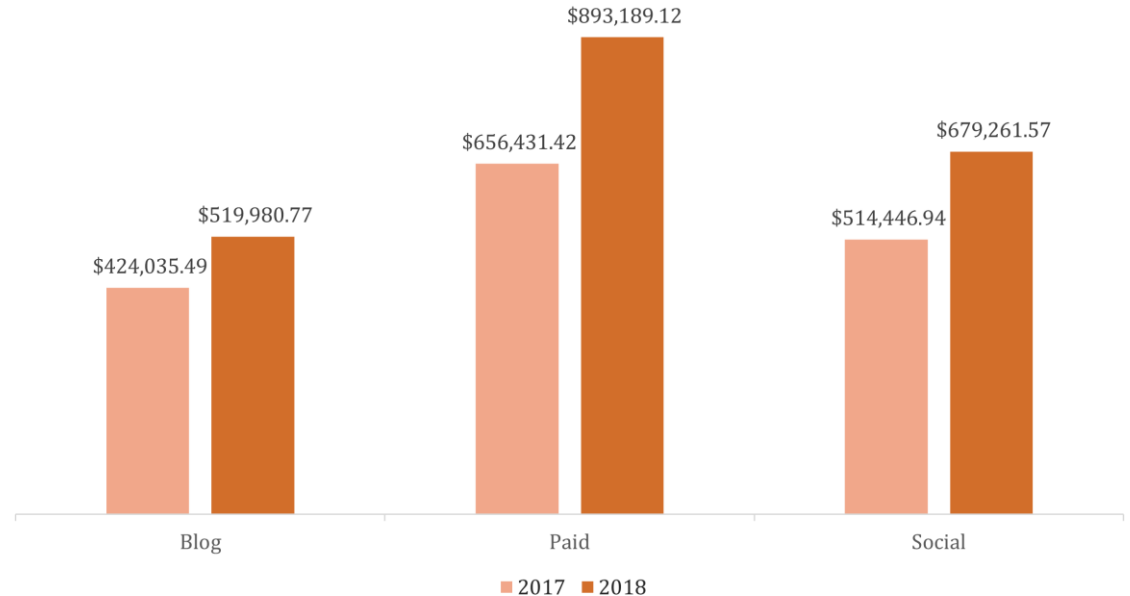| Age Group	Average CPA
55+	$94.31
51-55	$87.18
46-50	$85.85
36-45	$84.56
26-35	$86.13
18-25	$84.67
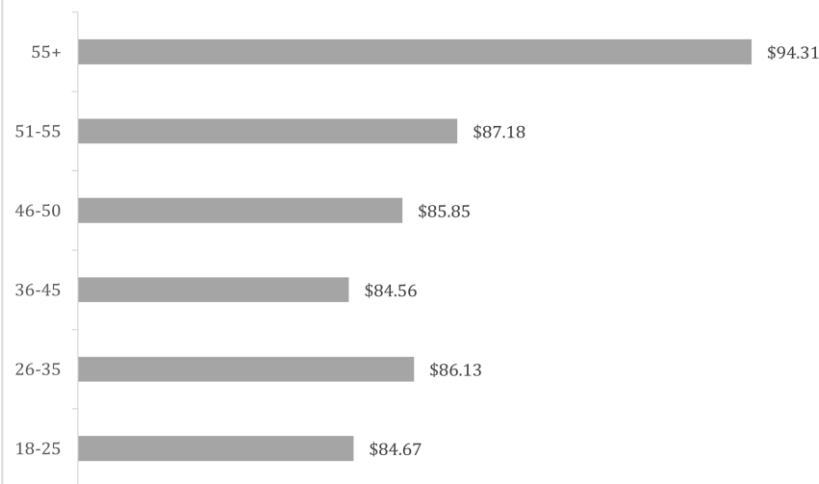
Evaluate the Marketing

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

The highest sales were generated through **paid channels,** with **$656,431.42 in 2017** and **$893,189.12 in 2018**.

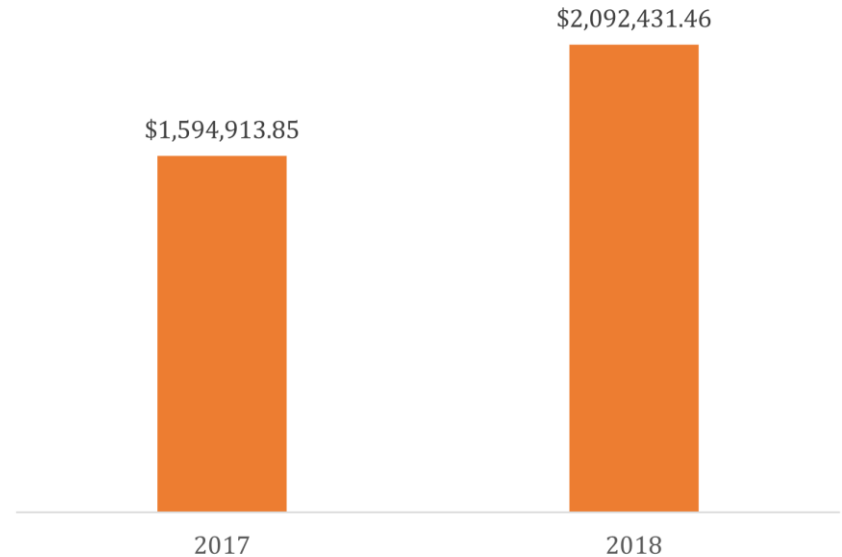### Total Sales by Channels for 2017-2018

$424,035.49	$656,431.42	$514,446.94
$519,980.77	$893,189.12	$679,261.57
Blog	Paid	Social

■ 2017 ■ 2018

Evaluate the Sales

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

The highest generated revenue is **$2,092,431.46 in 2018,** compared to the revenue in **2017 with $1,594,913.85.**

Total Sales for 2017 vs 2018

$2,092,431.46
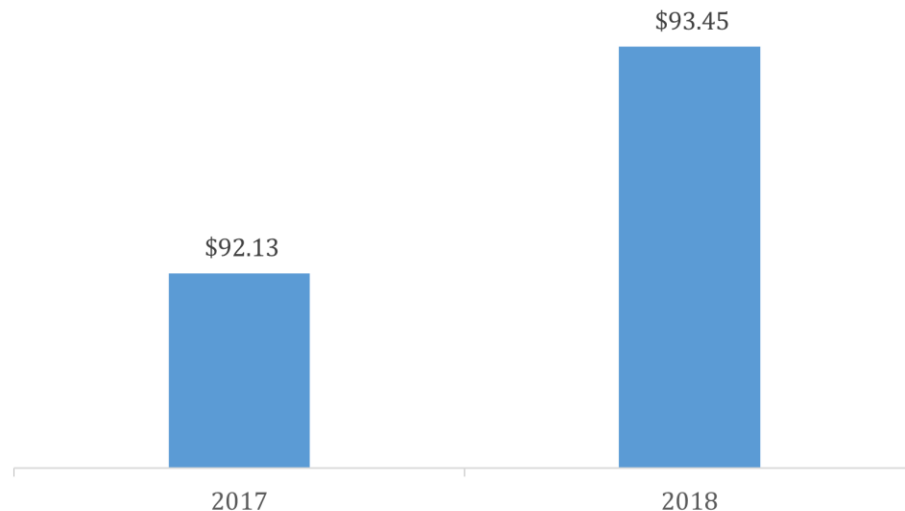
$1,594,913.85

2017   2018

Evaluate the Sales

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

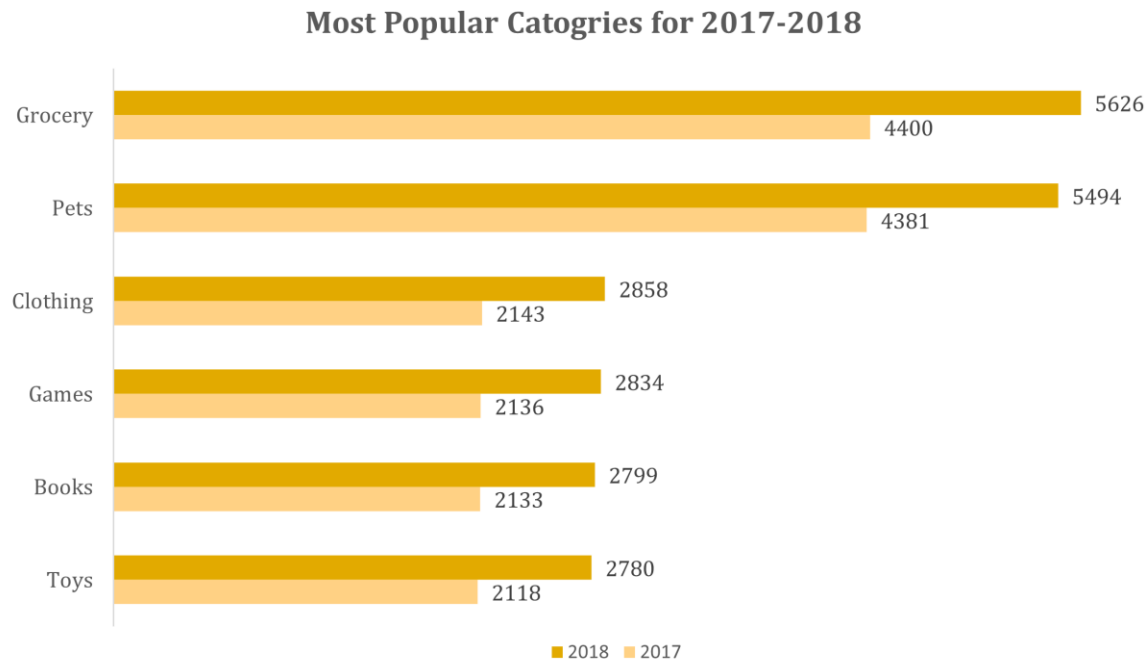The average order amount is **$93.45 in 2018**, which is higher than the average amount **$92.13 in 2017.**

Average order amount for 2017 vs 2018

$93.45

$92.13

2017

2018

Evaluate the Product Categories

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

The most popular product category is **Grocery**, with count of **4400 order in 2017** and **5626 order in 2018.**

Most Popular Catogries for 2017-2018

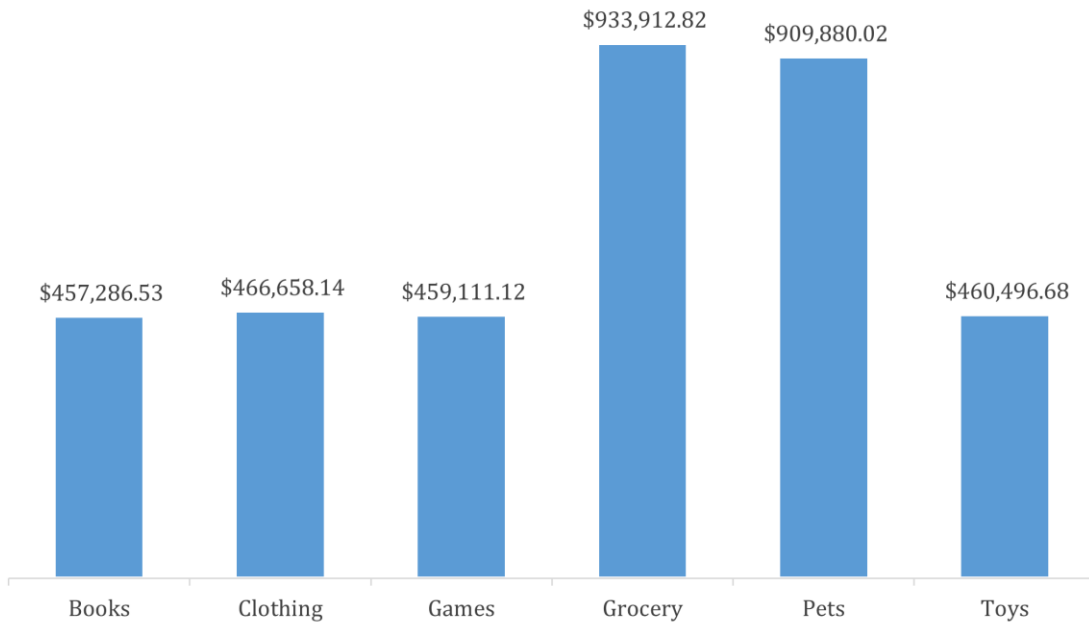| Category	2018	2017
Grocery	5626	4400
Pets	5494	4381
Clothing	2858	2143
Games	2834	2136
Books	2799	2133
Toys	2780	2118

■ 2018 ■ 2017

Evaluate the Product Categories

Q: Which product category generated the most sales in 2017 & 2018?

The category that generated the highest sales is **Grocery**, with total of **$933,912.82** for **2017 and 2018**.

Total Sales by Categories for 2017-2018

Books	Clothing	Games	Grocery	Pets	Toys
$457,286.53	$466,658.14	$459,111.12	$933,912.82	$909,880.02	$460,496.68

Everything Else

- The [link](#) to dataset used for this report.

- This report made using Microsoft Excel.

- [ROI](#) marketing formula.