

Udacity

Marketing Analytics

Nanodegree Program
Project: Craft a Report

Objective Results

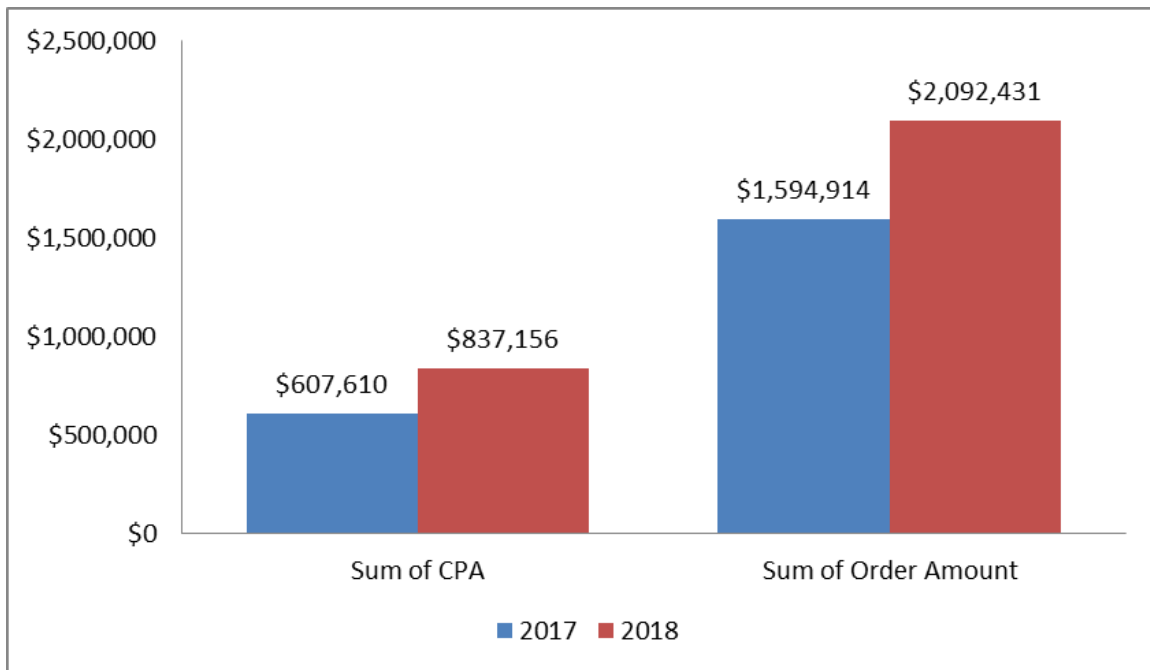
The Objectives are listed below, your job is to assess the data and report on the performance against the objectives:

Increase total sales by 30% on Black Friday 2018 vs. Black Friday 2017.

Decrease total ad spend by 30% from Black Friday 2017 to Black Friday 2018.

Objective Results

Total sales & Total ads spend in years 2017 and 2018



Increment / Decrement	
Sales	31%
Ads	38%

Two main targets we set :

- The first was to increase the total sales by 30% in 2018.

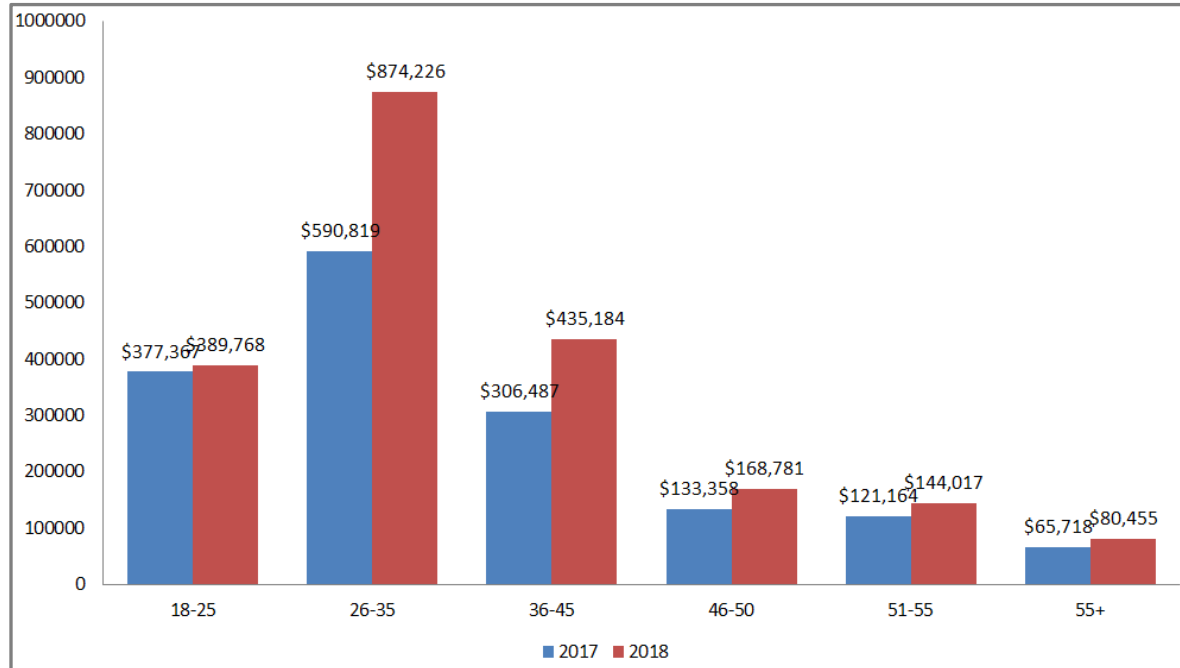
This goal was met as we reach increment of about 31%.

- The second was to decrease the total ads spent by 30% in 2018.

This goal wasn't achieved as the total ads increment to reach 38%

Evaluate the Audience : Sales by Age Range.

Total Sales Amount by Categorized Age Range



- What age does most of the sales come from ?

As seen in the Graph the most targeted age will certainly be 26-35 after that we have age range from 18-25 & 36-45

So, if we want to focus on audience age it will be from 20 - 40

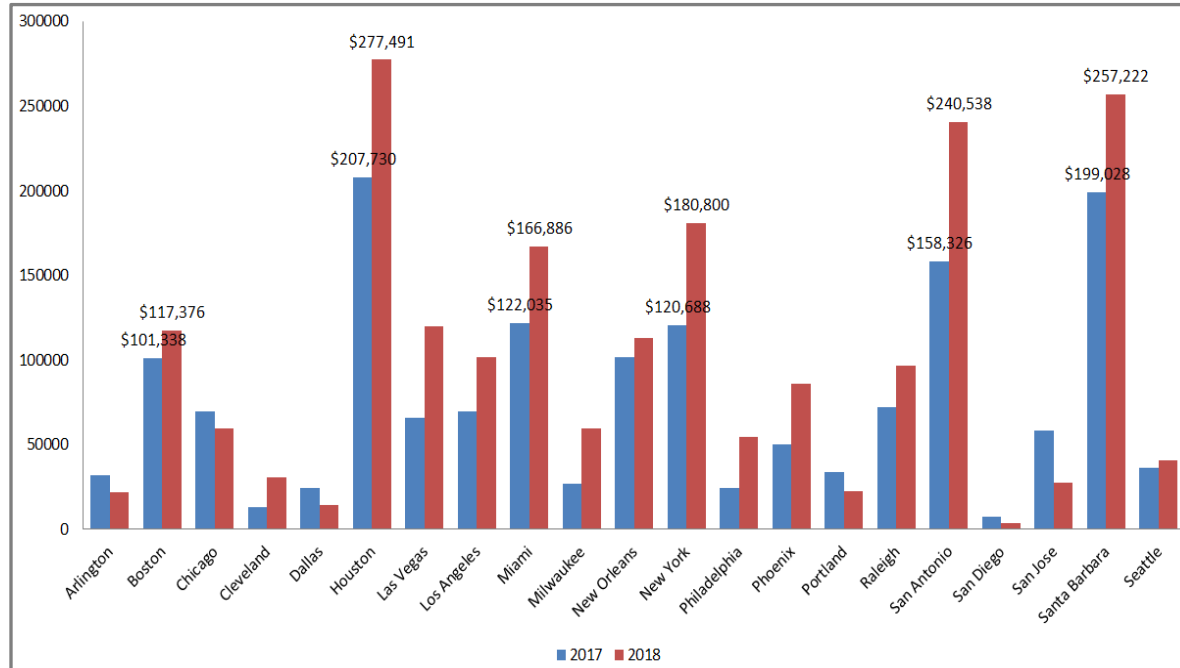
- Does it changes from one year to another or not?

The age 26-35 is the highest in both years .

Total sales amount was:
590,819\$ in 2017 &
874,226\$ in 2018.

Evaluate the Audience: Cities of Most & Least Sales.

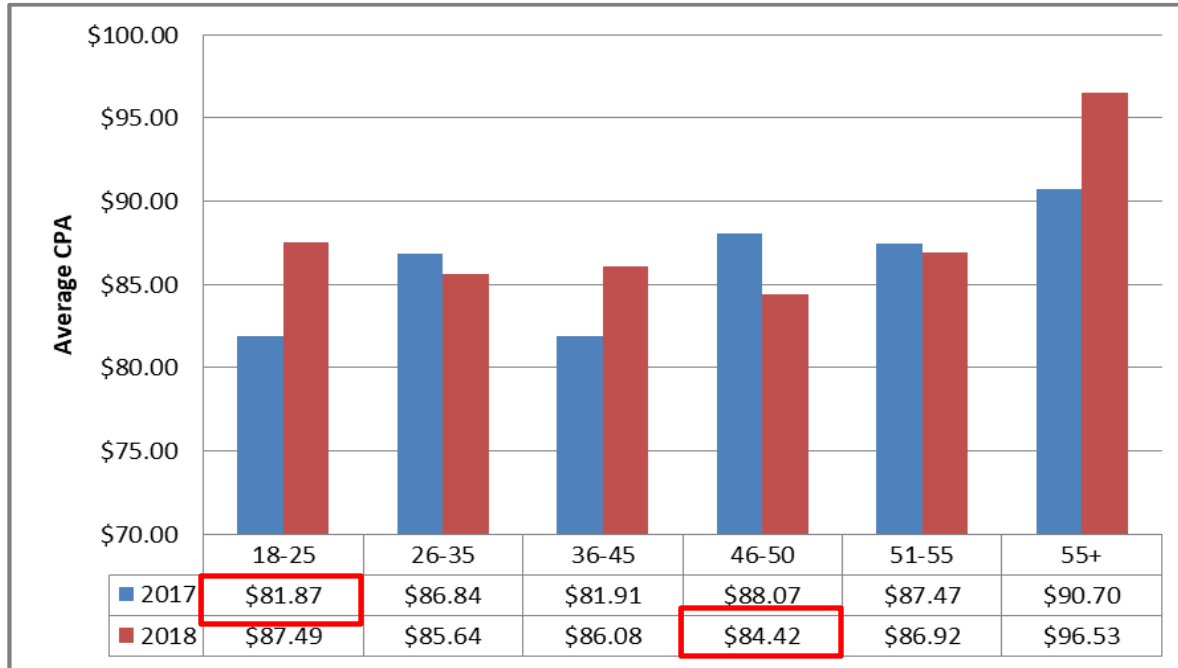
Total Sales Amount Categorized by City



- Which city have the highest and the lowest sales amount?
As seen in the Graph the most highest city was **Houston** & the lowest one was **San Diego**.
- Does it changes from one year to another or not?
They aren't changed in both years as Houston have sales equal to **207,730\$ in 2017 & 277,491\$ in 2018**.
Same as San Diego with sales **7,2\$ in 2017 & 3,7 in 2018**.

Evaluate the Marketing

Average CPA Categorized by Age Range



Year	Total sale	Total CPA	ROI
2017	\$ 656,431.42	\$ 607,610.14	8%
2018	\$893,189.2	\$ 837,155.55	7%

- What is the ROI & is it positive or negative?

$$\text{ROI} = (\text{Sales} - \text{CPA}) / \text{CPA}$$

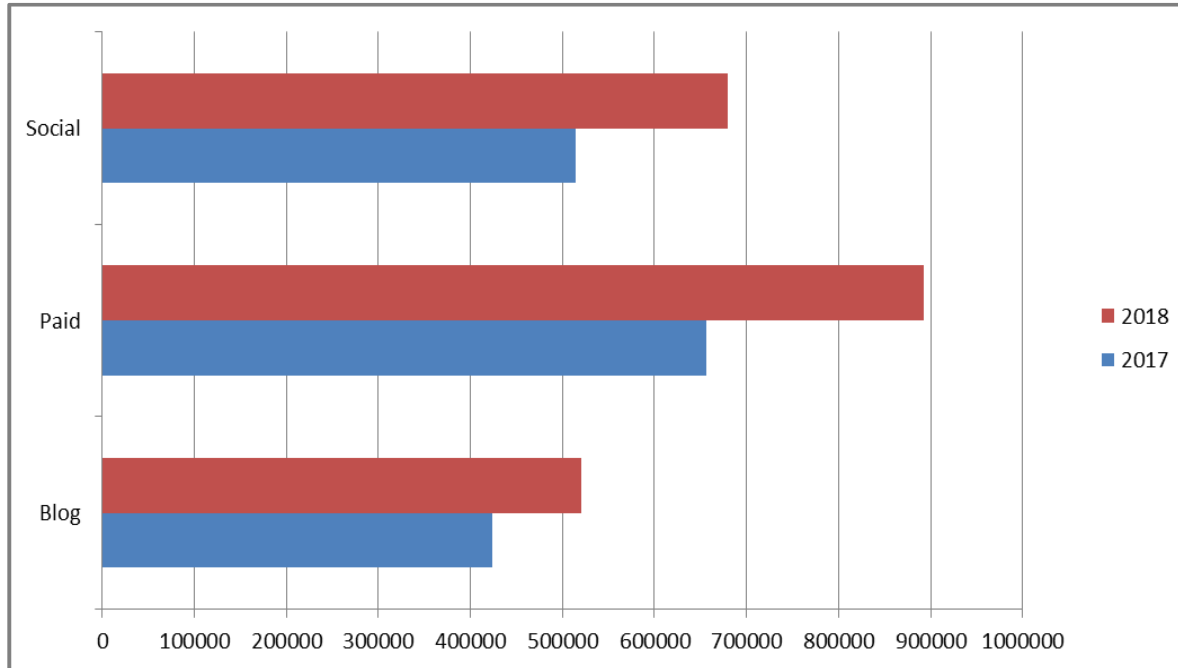
positive and equal to 8% & 7% in years 2017 & 2018 respectively.

- What age does the average CPA is the better?

the better will be the smallest number this will have a **Higher Return On Investment**.

Evaluate the Marketing:Sales by Channel.

Total Sales Categorized by Channel



- Which channel has the highest and lowest sales amount?

As seen in the Graph the most highest sales channel is the **paid channel** & the lowest sales channel is the **blog channel**.

- Does it changes from one year to another or not?

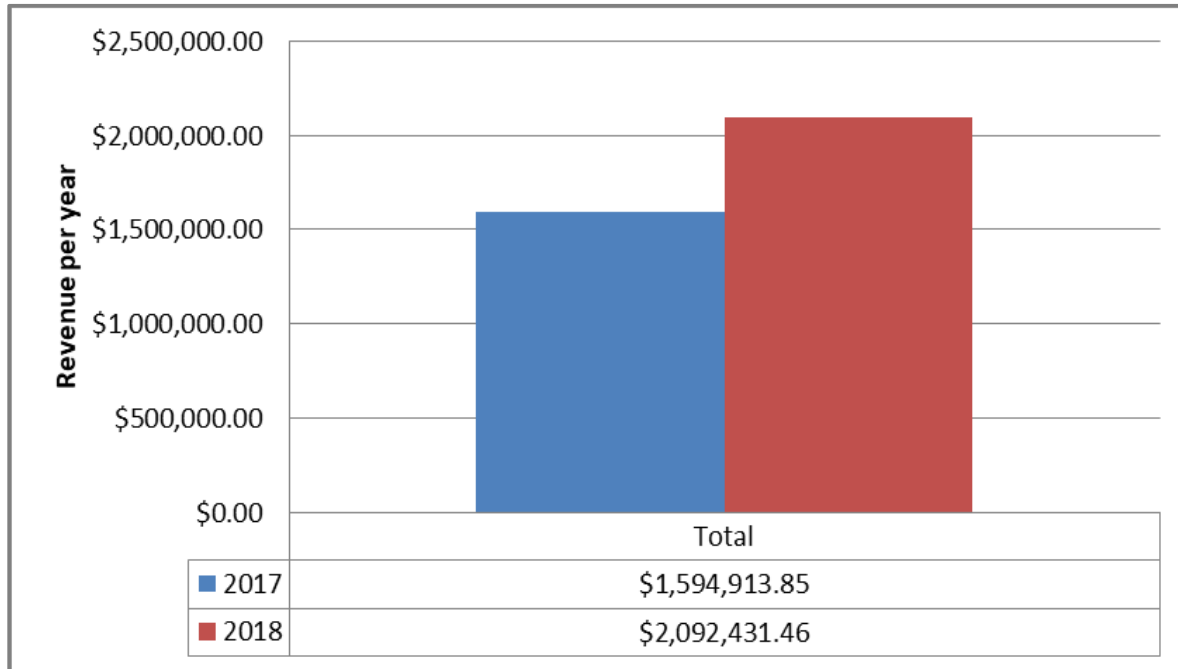
They aren't changed in both years as Paid channel have sales equal to

656,431\$ in 2017 & 893,189\$ in 2018.

Same as Blog channel with sales **424,035\$ in 2017 & 519,980\$ in 2018.**

Evaluate the Sales:Revenue in Years 2017 & 2018.

Revenue per years 2017 and 2018



- How much revenue was achieved in both of years 2017& 2018?

As seen in the Graph the total revenue for year 2017 was equal to:

1,594,913\$

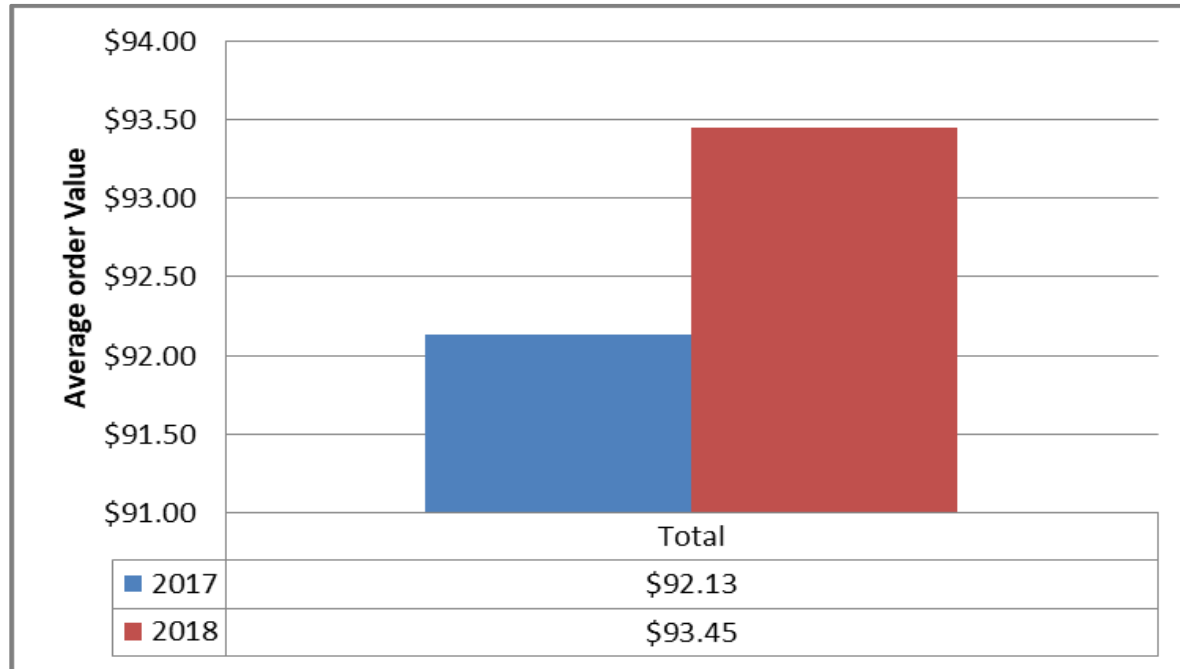
And for year 2018 was equal to:

2,092,431

Which means that revenue has increased in 2018 by about 500,000\$.

Evaluate the Sales: Average Order Amount per Year.

Average Order Amounts per Years 2017 and 2018



- What was the average order amount in both of years 2017 & 2018?

As seen in the Graph the average revenue for year 2017 was equal to:

92\$

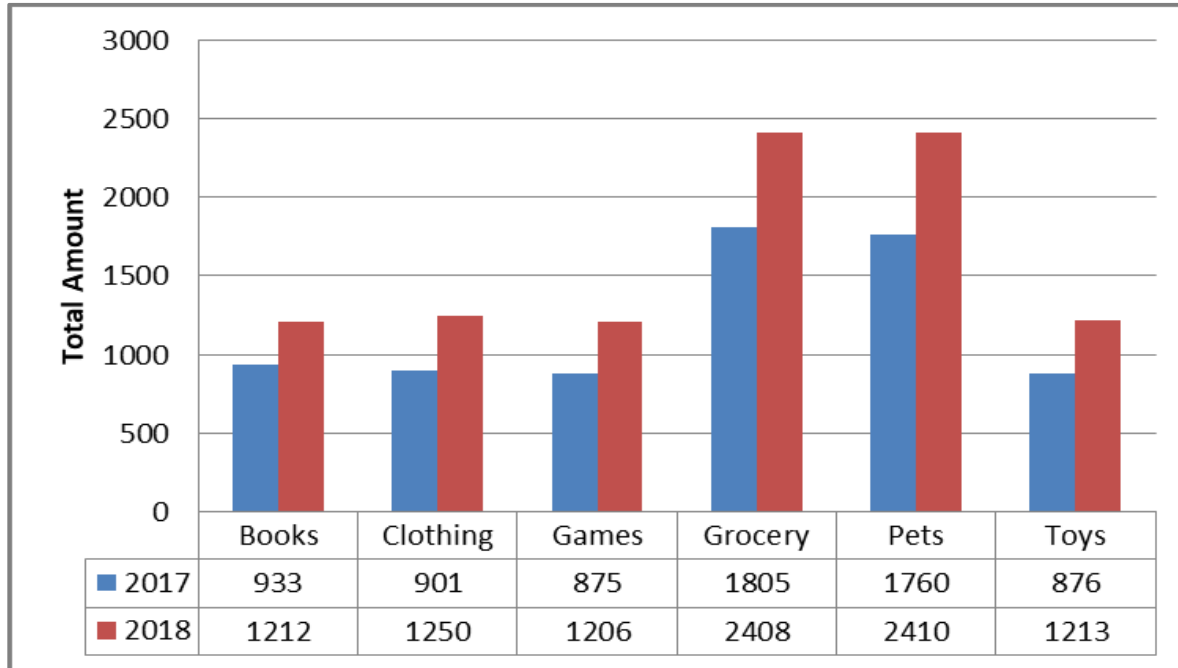
And for year 2018 was equal to:

93\$

Which means that the average order amount hasn't change in the two years.

Evaluate the Product Categories: Most Popular Items.

Products Amounts Categorized by Popularity



- Which Products has the highest and lowest popularity?

As seen in the Graph the most highest demanded product is the **Grocery** & the lowest demanded product is the **Games**.

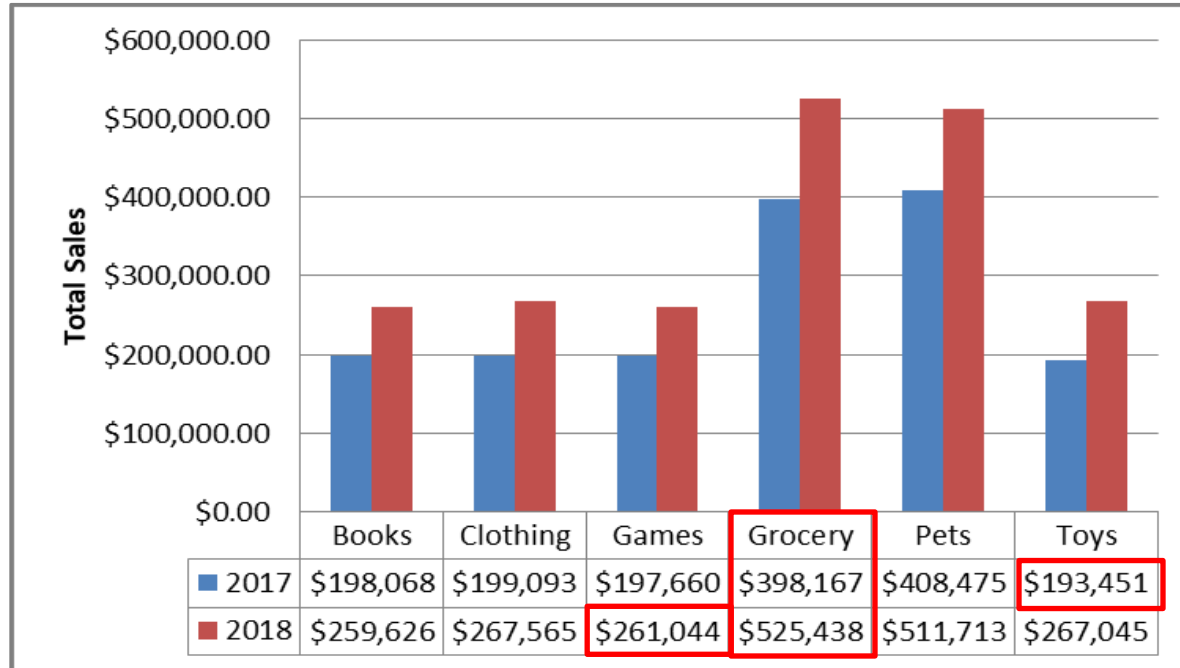
- Does it changes from one year to another or not?

They aren't changed in both years as Grocery items equal to **1805 in 2017 & 2408 in 2018**.

Same as Games items equal to **875 in 2017 & 1206 in 2018**.

Evaluate the Product Categories: Most Sold Items.

Total Sales Categorized by Product



- Which products has the highest and lowest sales amount?

As seen in the Graph the most highest product is the **Grocery** & the lowest product is the **Toys and Games**.

- Does it changes from one year to another or not?

They is changed in least paid items that differs from 2017 to 2018

But is the most items sold it is the highest in both years.

Everything Else

Link to the dataset :

<https://docs.google.com/spreadsheets/d/17as-K-mNyxk5mVWW8RBuUb4Nt4rTkGEskIb7tQC1YQs/edit?usp=sharing>