

USA Online Sales

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Executive Summary

- This sales report outlines the data analysis and findings of **online sales** in the **United States** from October 10, 2020 to September 9, 2021
- Questions about sales, customer behavior and demographics will be answered
- A final conclusion will be made at the end of the report

Report

- This report contains the sales of online transactions in the United States
- Scope: sales data from October 10, 2020 to September 9, 2021
- It provides the answers to three sales questions/hypothesis, along with other meaningful insights founded in the dataset
- There will be shown graphs in order to support these answers given

Questions

- 1) Is there a correlation between age and expenditure?
- 2) Do discounted products influence the quantity a customer buys?
- 3) Which state has the youngest population?

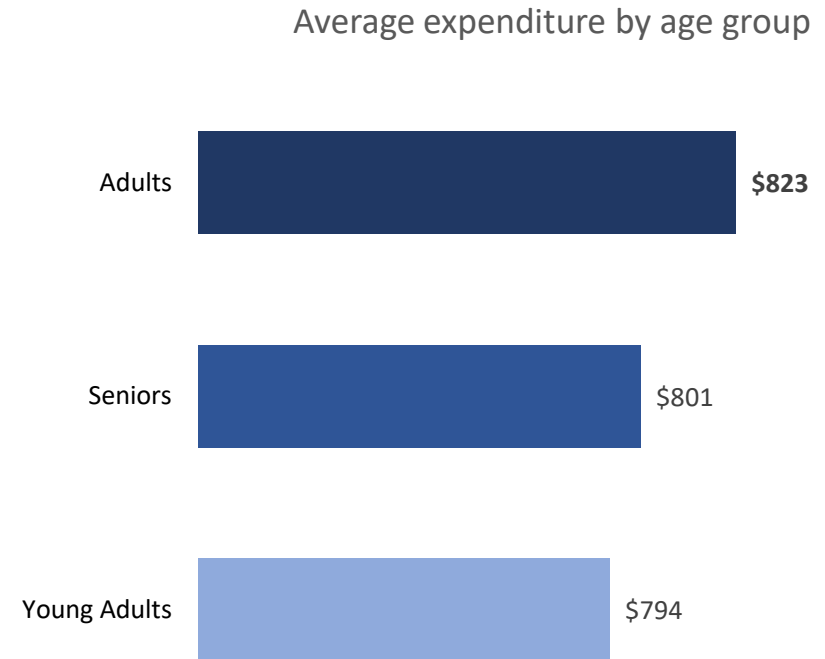
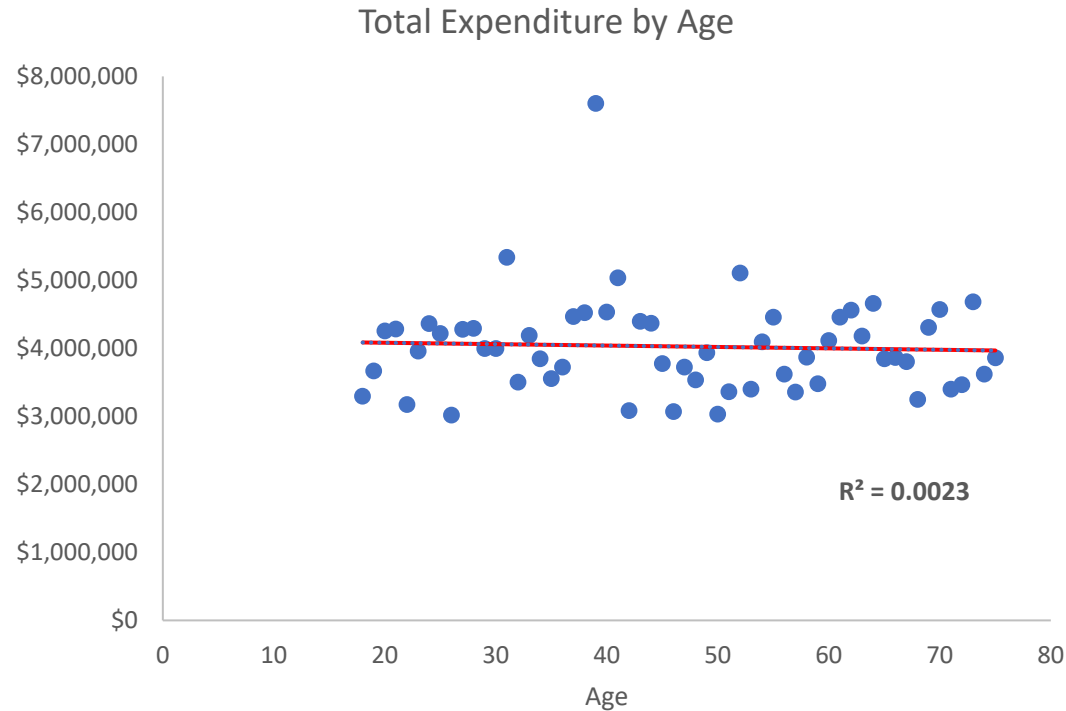
Approach & Analysis

- The dataset is downloaded from www.kaggle.com (unknown source)
- The csv file is cleaned and formatted using the Power Query Editor
- Columns/Fields used to answer the hypothesis are: *age, total, discount_percent* and *state*
- Development of Pivot Tables along with visualizations in Excel for later exposition

Visualizations

Question 1

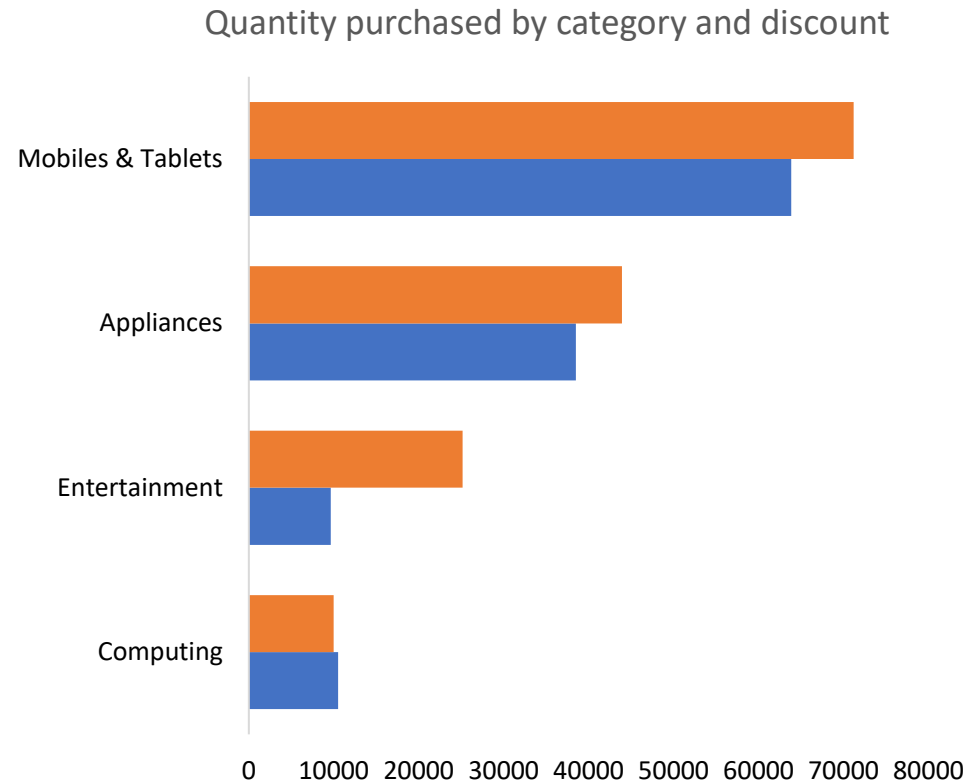
Is there a correlation between age and expenditure?



- Left hand side graph shows the **total expenditure by all ages**
- Right hand side graph shows the **average expenditure by age group**

Question 2

Do discounted products influence the quantity a customer buys?

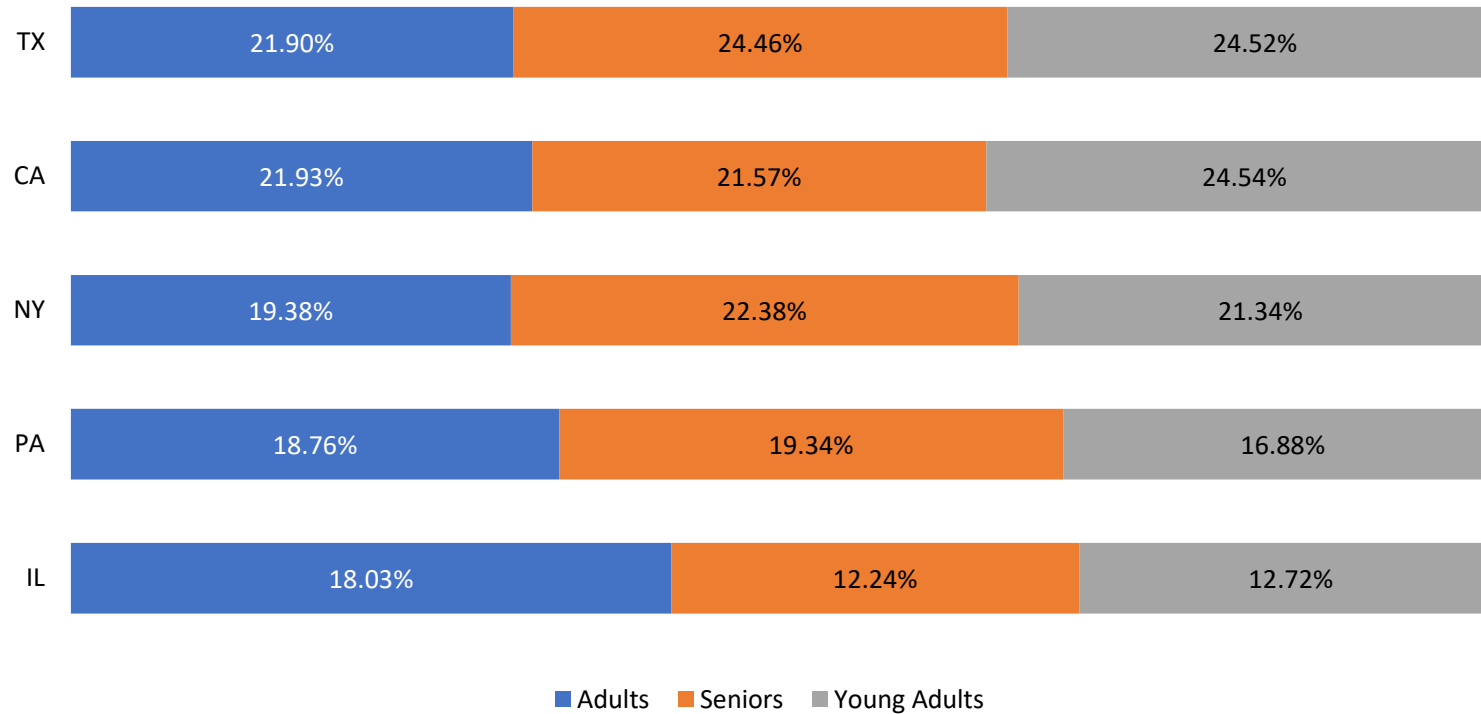


- The left hand side graph shows categories *Mobile & Tablets*, *Appliances*, *Entertainment* and *Computing* as the **only categories with an increase in quantity and having discount**
- The right hand side graph shows the rest of the categories with quantity purchased **not affected by discount**

Question 3

Which state has the youngest population?

Top 5 states by customer population



- Texas has the 1st place on percentage of **young adults** and **adults** population, slightly surpassing California which is the 2nd one
- **Illinois** customers are mostly **adults**

Conclusion

- 1) Age doesn't have a correlation in customer expenditure
- 2) **Entertainment, appliance, mobile and computing** are usually more bought under discounts
- 3) **Texas** and **California** has the higher quantity of young customers population