

Lot-A-Spirit

Sheralee Lovejoy



Objective

Hank Jr., owner of Lot-A-Spirit, has 2 children in high school (soon to be in college) and wants to increase sales so he can hire a store manager. This will allow him to spend less time at work and more with his family.



Methodology

Data: 9K Iowa liquor store and marketing campaign from Kaggle

Tools: Python, Google Sheets, Tableau

Metrics: Sales Revenue, Net Profit

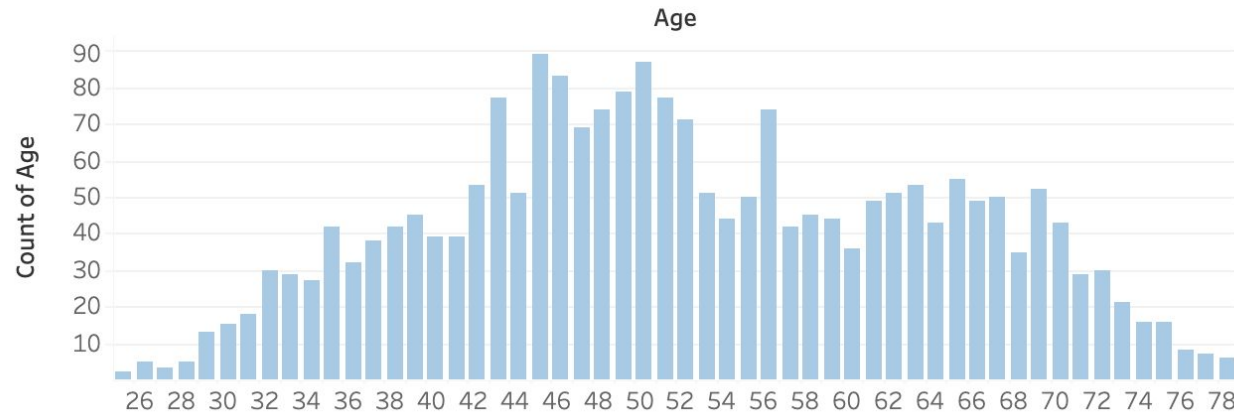
Features: number bottles sold, wholesale cost, retail cost, item description, age, income



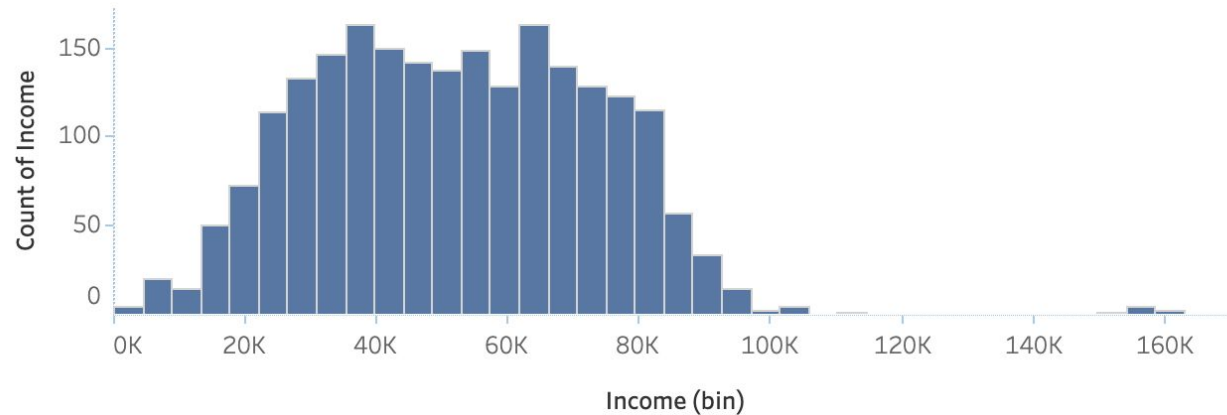
Impact Hypothesis

Improving alcohol selection and identifying opportunity within customers will increase net profit to support hiring a store manager.

Customer Age Distribution



Customer Income Distribution



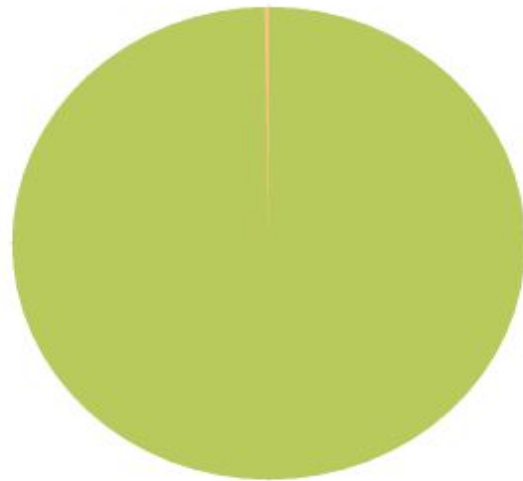
Solution Path

- ❖ Clean/Analyze/Interpret Data
- ❖ Determine which age group/income level visits are more recent (understand what they like)
- ❖ Identify what products are selling most/least
- ❖ Calculate if spirit selection could be improved

Profit Lost

\$16,302

Less than 8
Bottles Sold



Findings

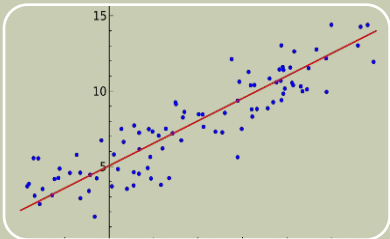
- ❖ 155 products selling less than 8 bottles in the given year
- ❖ Spending About \$31K
- ❖ Revenue About \$15k
- ❖ Customers Age 40s to early 50s
- ❖ Customer Income \$30k to \$60k
- ❖ Margin Cost 1.5X

Solutions



Customer Segmentation

- Income
- Age



Demand Forecasting

- Regressions
- Time Series
- Eliminating products that sold less than 8 bottles



Other

- 1% Margin Increase
- \$30,457.59



Measurement of Success

◆ Technical:

- Model should predict demand of each product
- RMSE

◆ Non-Technical:

- Increase Sales by \$33K
- ZipRecruiter average manager salary is \$32,907

Risk & Assumptions

- What is the potential cost of losing customer
- What impact does owner working less have on store sales
- Assuming 12 bottles per case & number cases (plus 1 for remainder)
- Assuming same sales following year

Future Work

1. Improve marketing campaign to get more data
2. Identify any relationships between age/income and days since last visit
3. Evaluate/compare customers transactions of other years
4. How many cases sold vs not sold
5. Build regression model



Thank you!

Email: Sheralee.lovejoy1@gmail.com