



Nomis Solutions

e-Car

Eli

Agenda



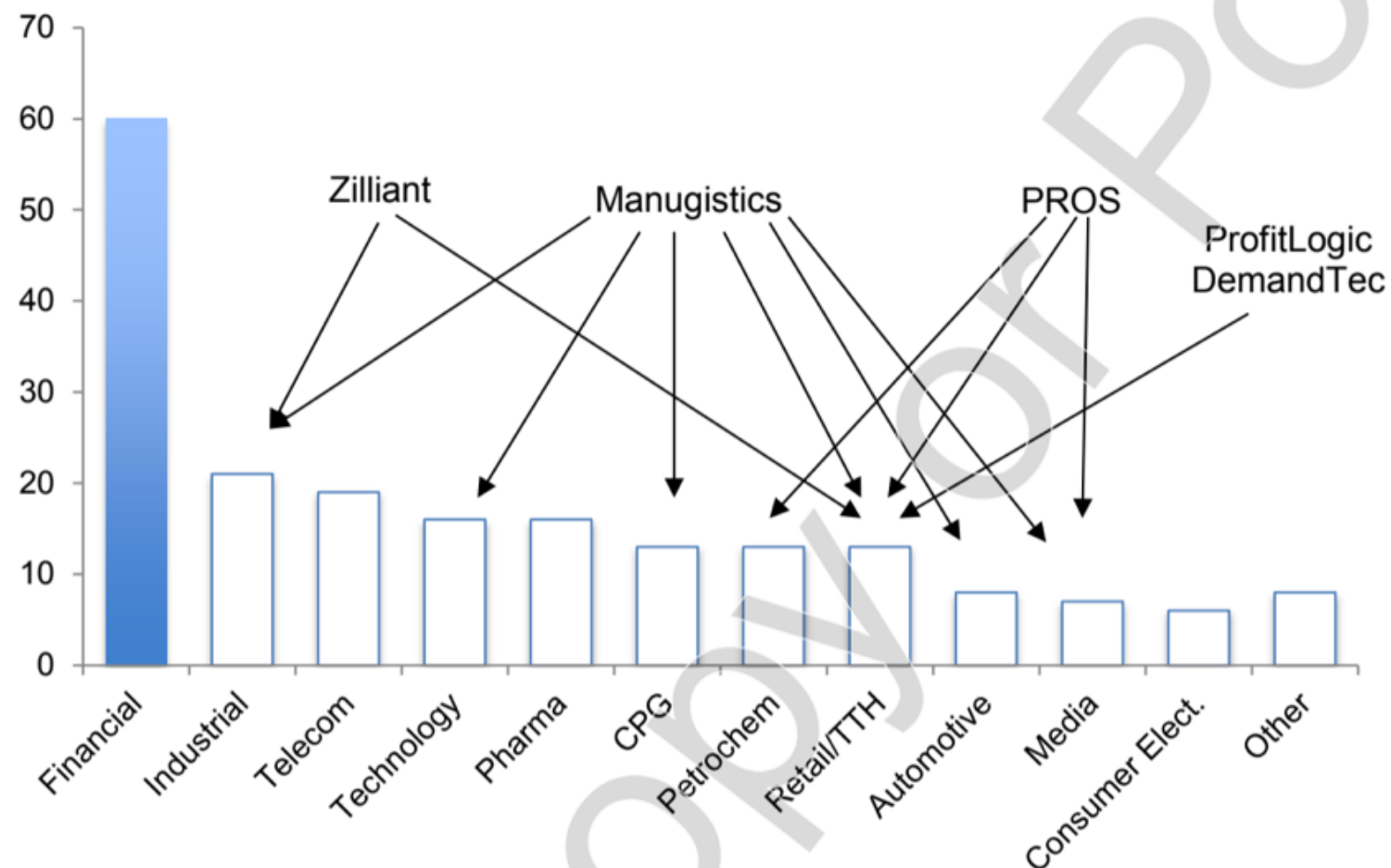
1. Business challenges
2. Data Science Techniques
3. Technique (i) - Identify Business Opportunities
4. Technique(ii) - Customer segmentation
5. Technique(iii) - Evaluate opportunities
6. Next Steps

Business Challenges at e-Car



- Customer Segmentation
- Balancing profit margins

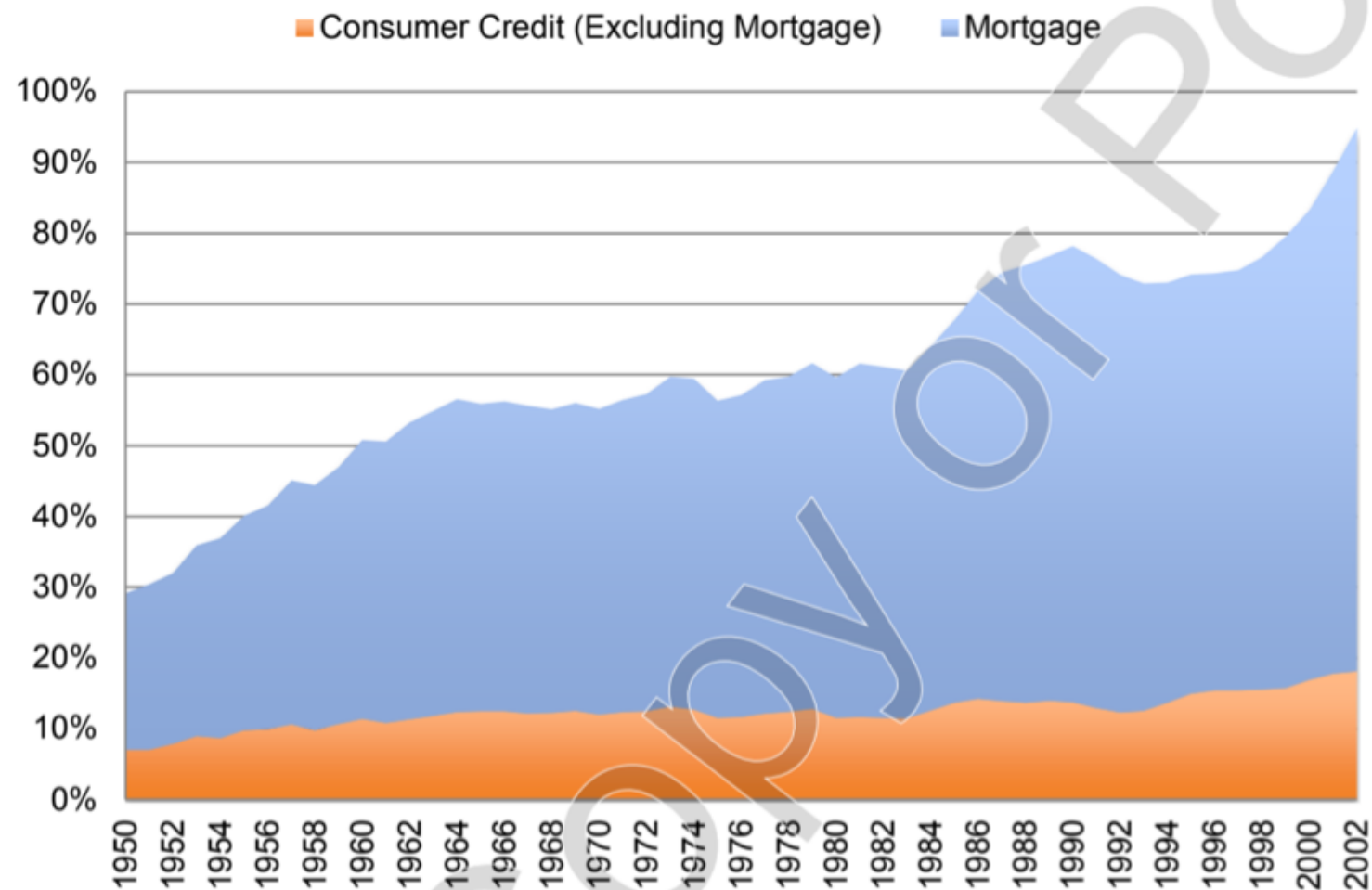
Existing Price Optimization Companies and their Industries of Focus (2002)



Source: Nomis Solutions.

Exhibit 4

Consumer Credit as Percentage of GDP in the United States, 1950 – 2002

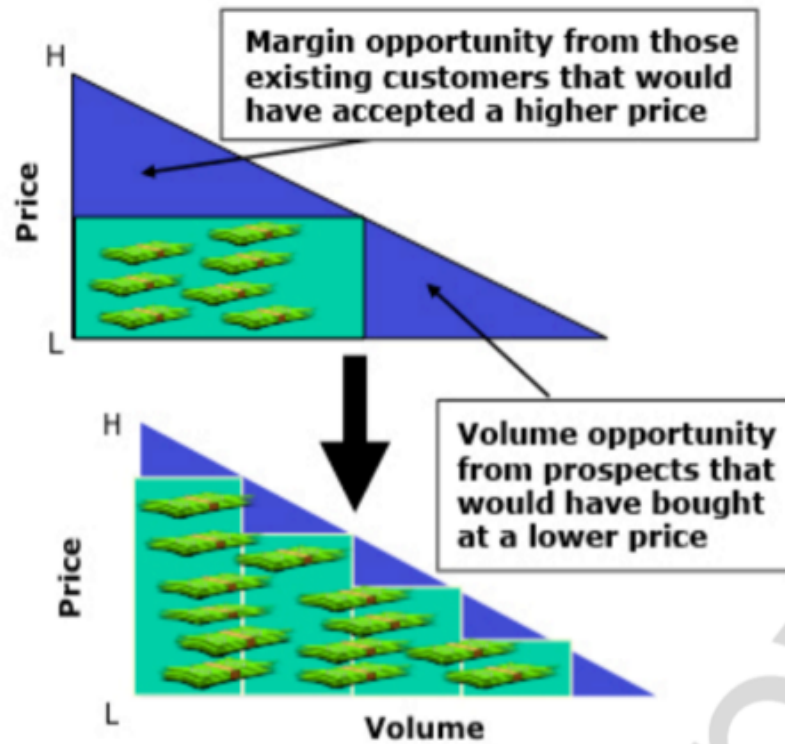


Source: Federal Reserve System data (accessible at www.federalreserve.gov).

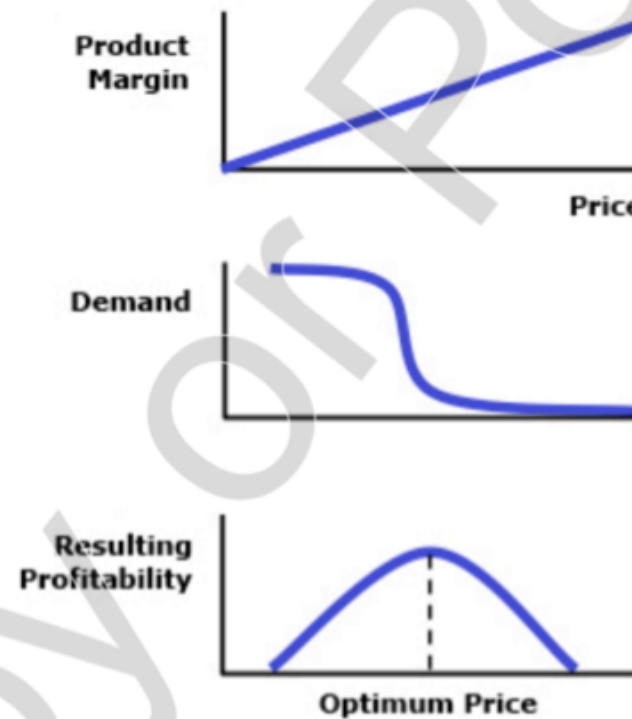
Exhibit 5

Optimizing Prices for Consumer Credit

Segmentation: benefits increase with the number of segments



Precision: small errors in pricing cause large reductions in profitability

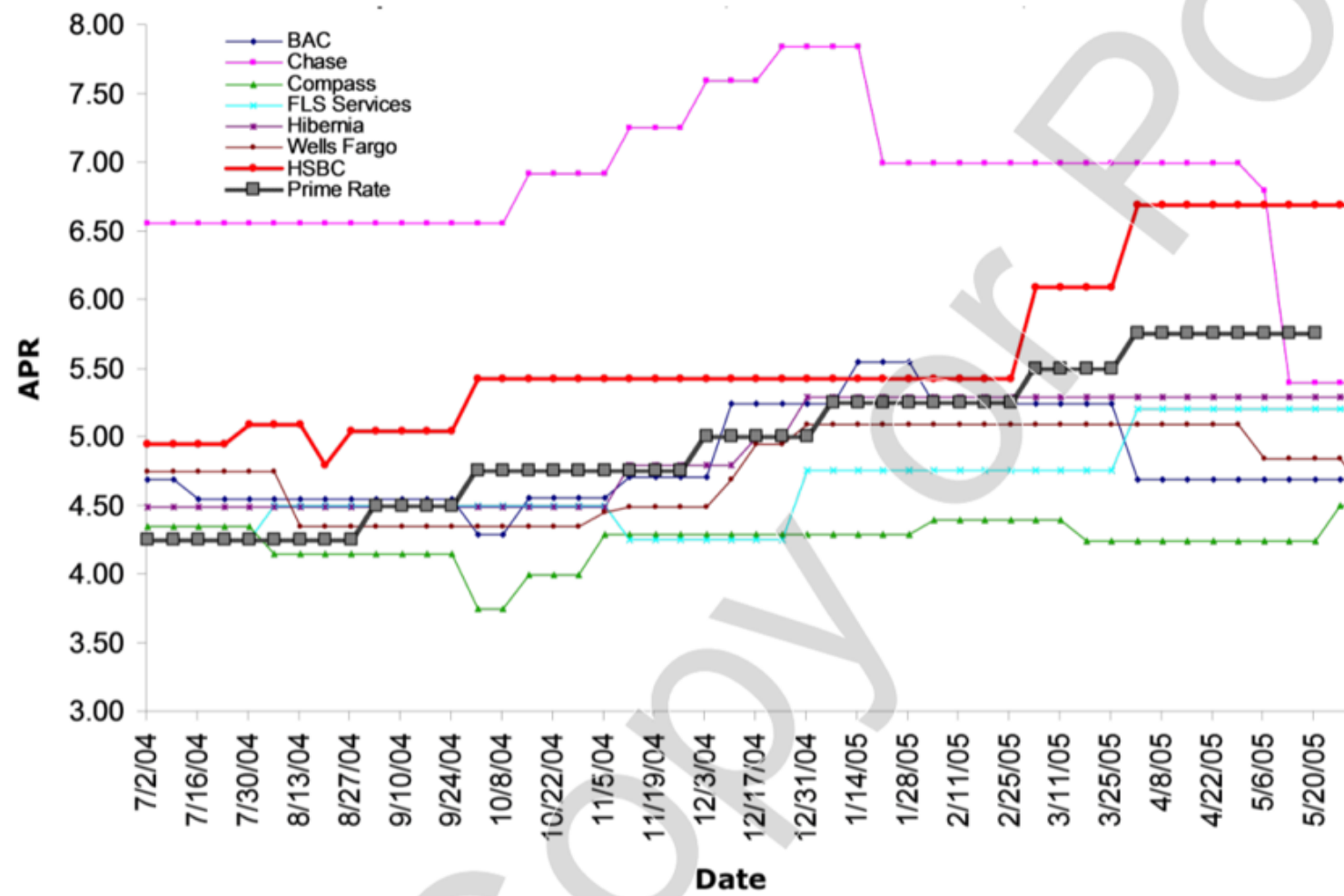


Note: Nomis Solutions fine-tunes prices to customers' willingness to pay and optimizes the trade-off between volume and margin.

Source: Nomis Solutions.

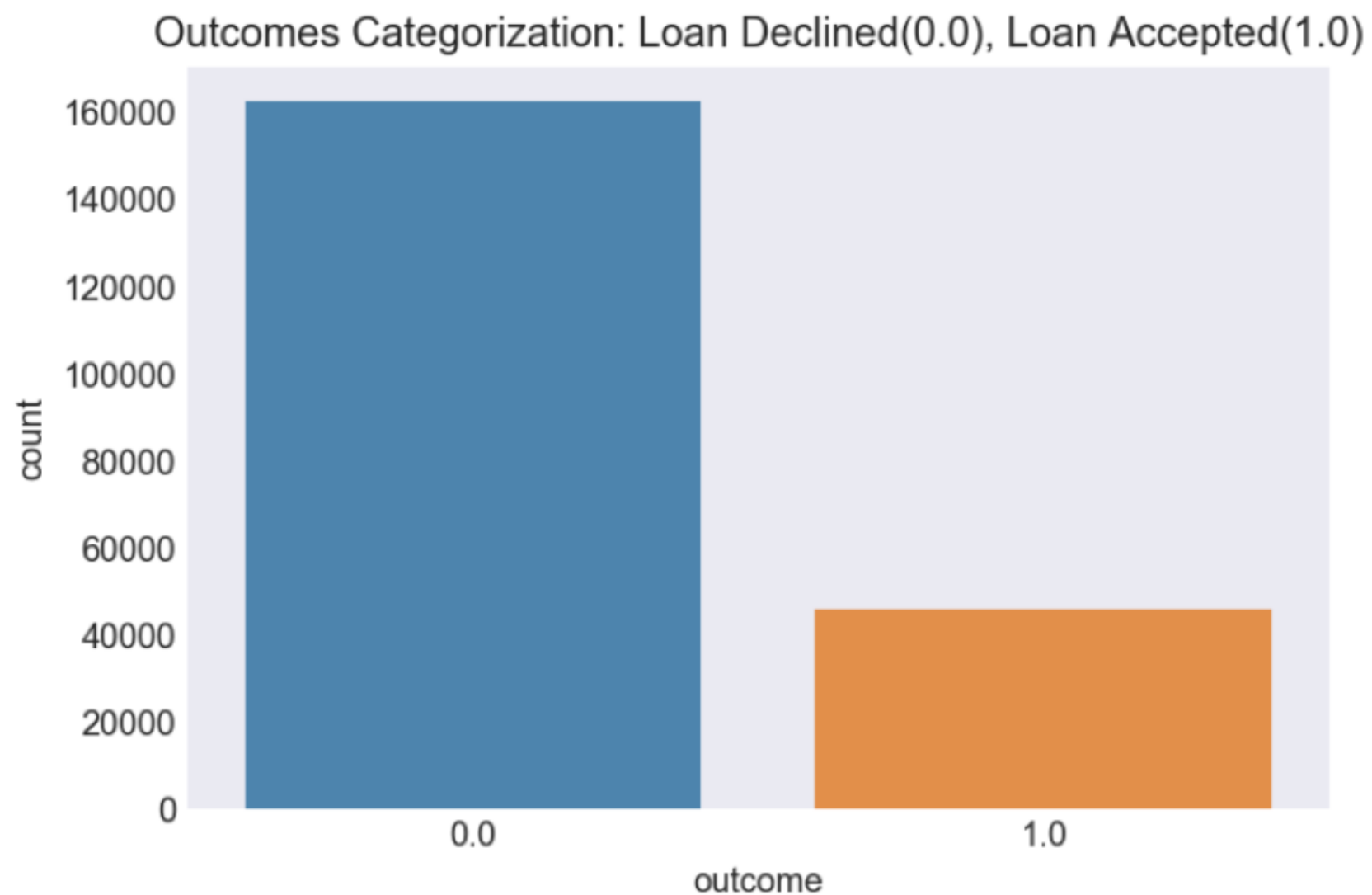
Exhibit 6

Auto Loan Pricing in Houston Market, mid-2004 to mid-2005*



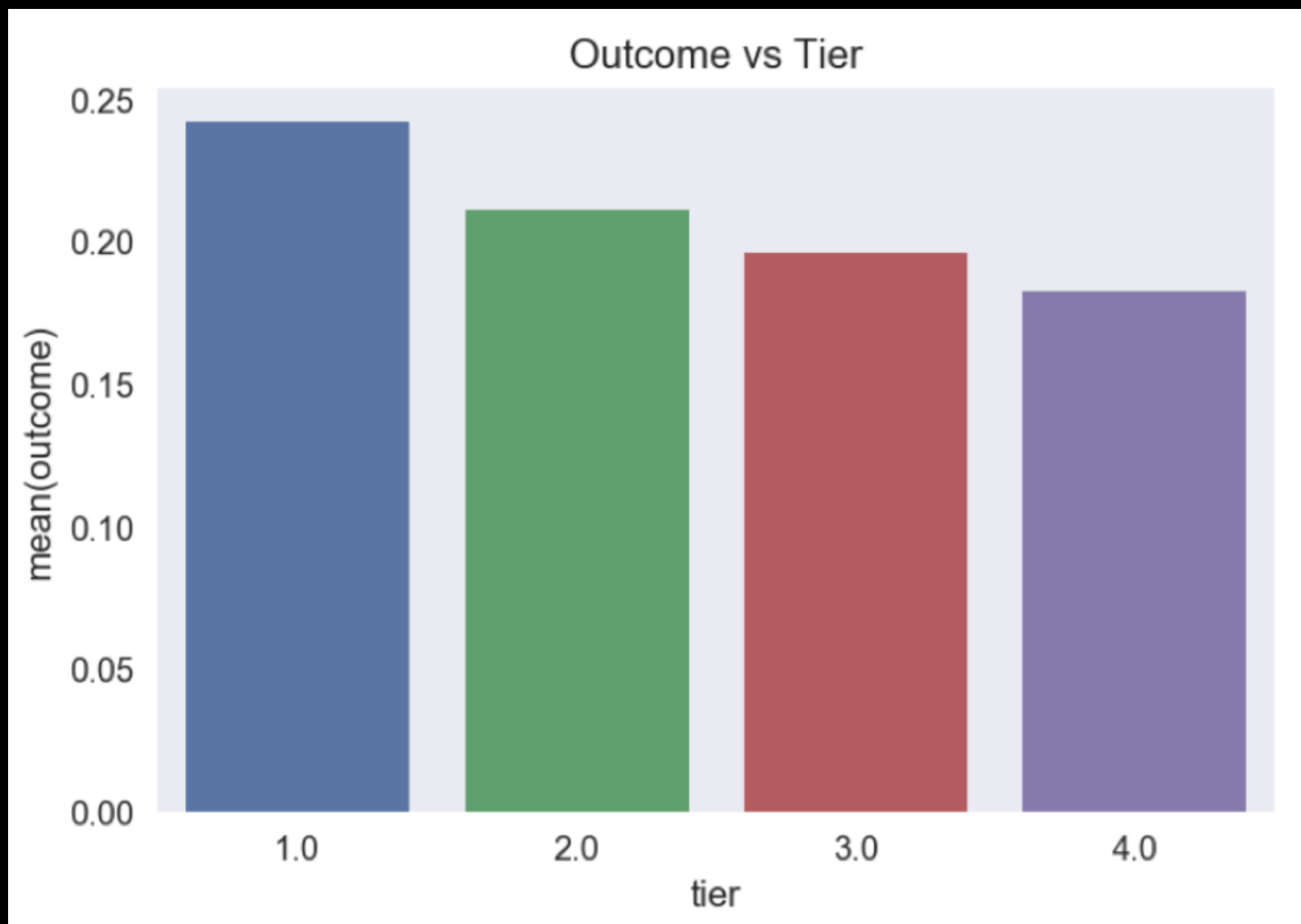
Data Science Techniques

EDA-Exploratory Data Analysis



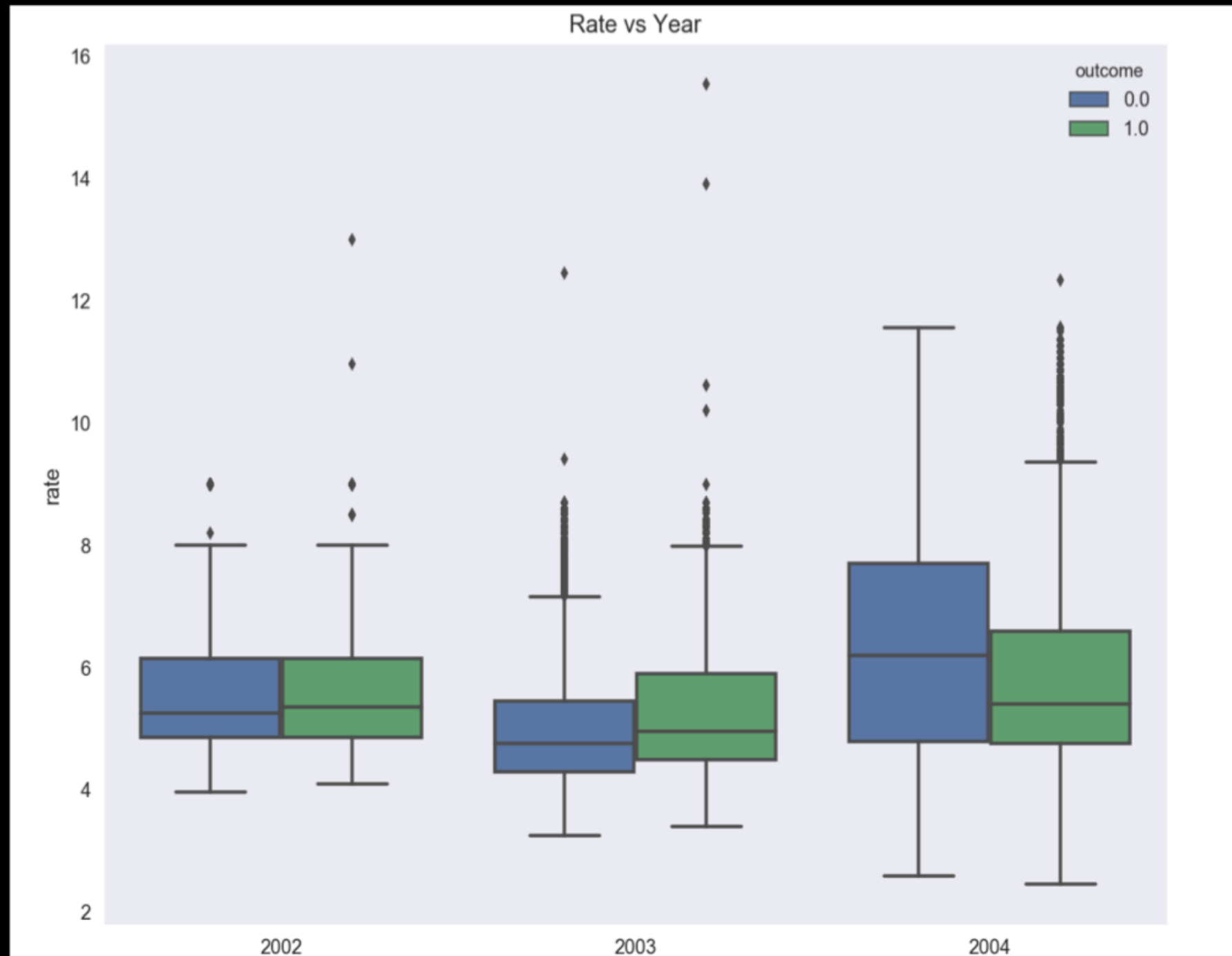
Declined = 162292
Accepted = 45785

EDA-Exploratory Data Analysis



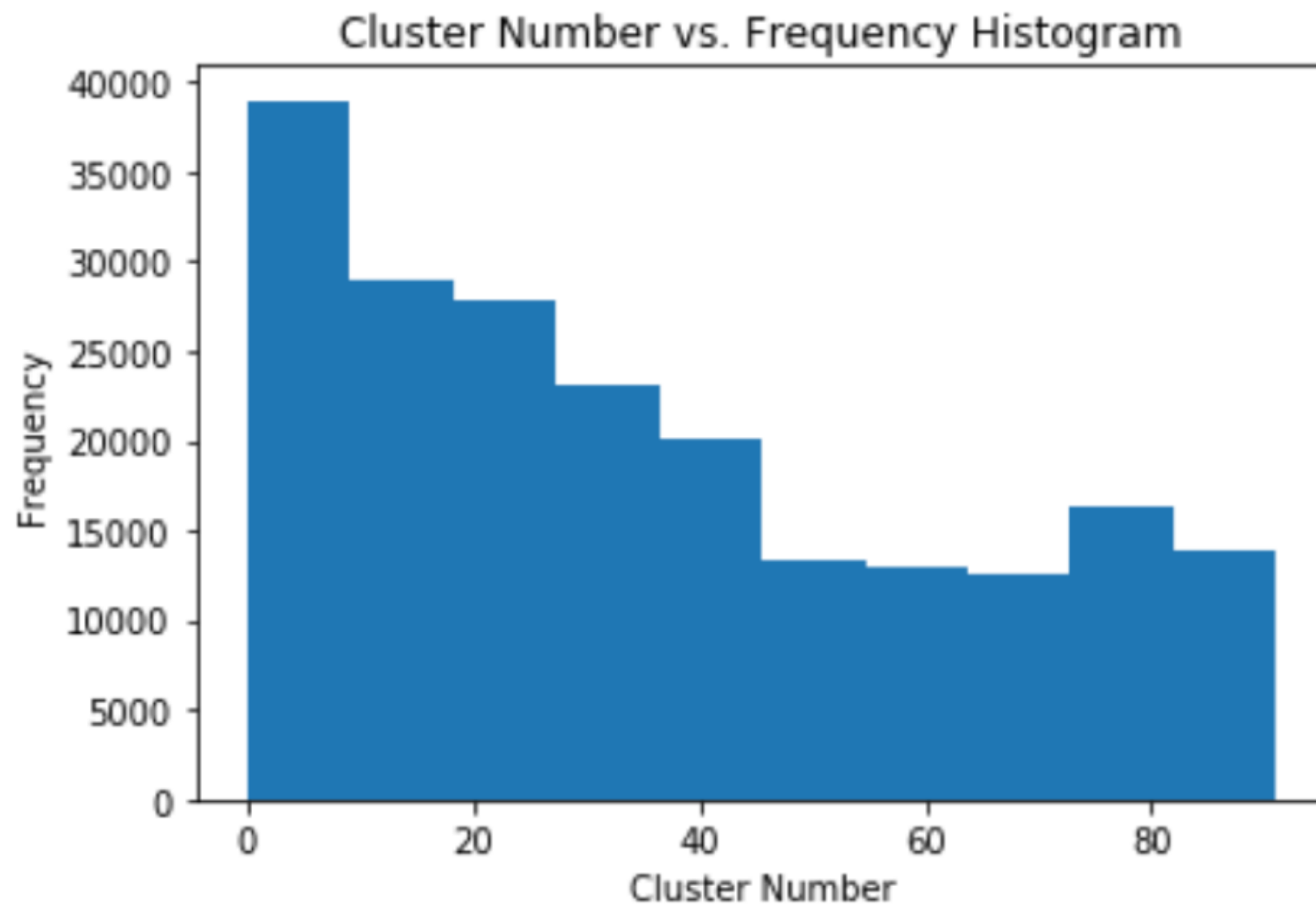
Risky band/Tier I = 76000@5.6%APR

EDA-Exploratory Data Analysis



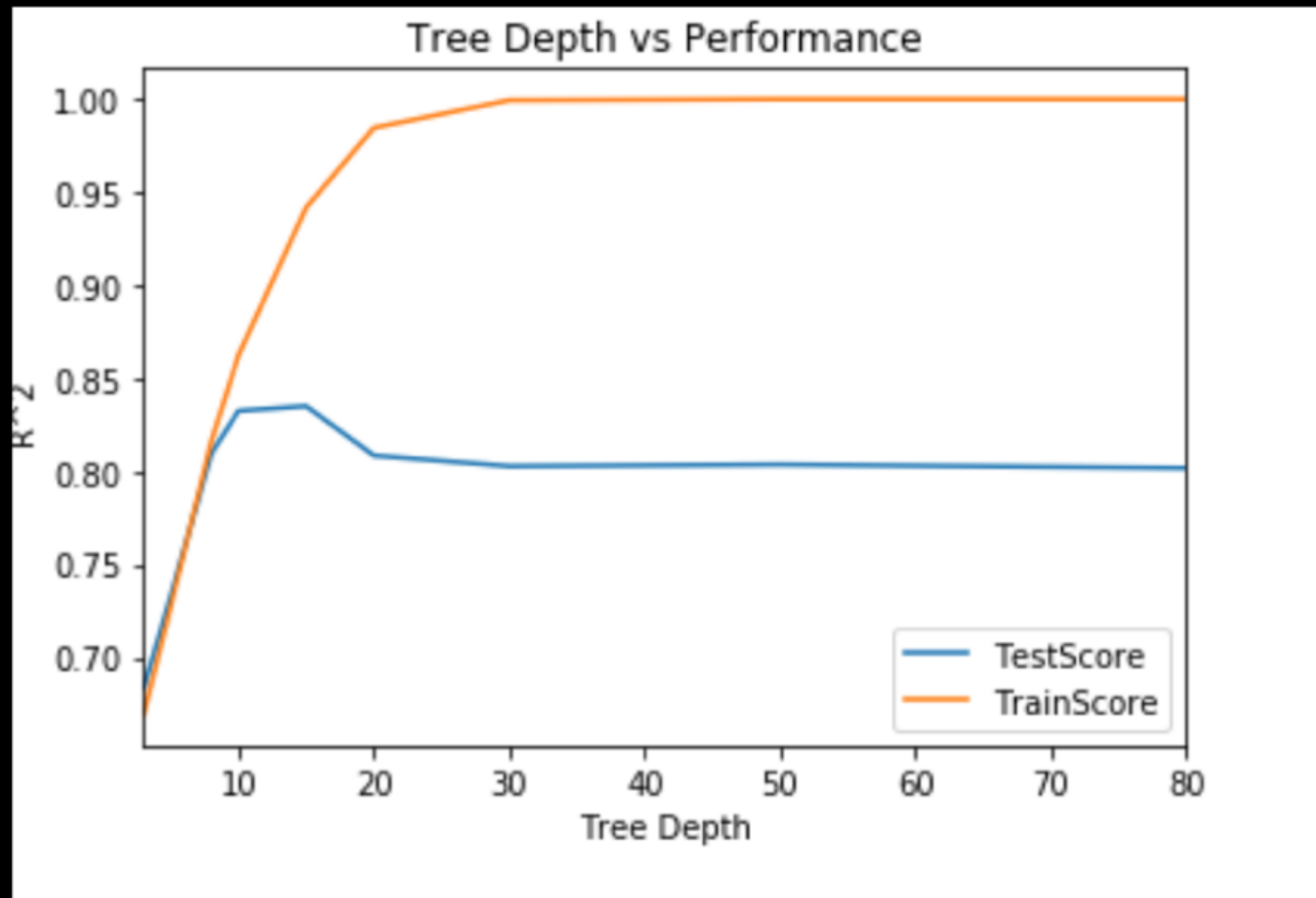
Outcome 0 = Declined
Outcome 1 = Accepted

Clustering



No. of clusters = 92

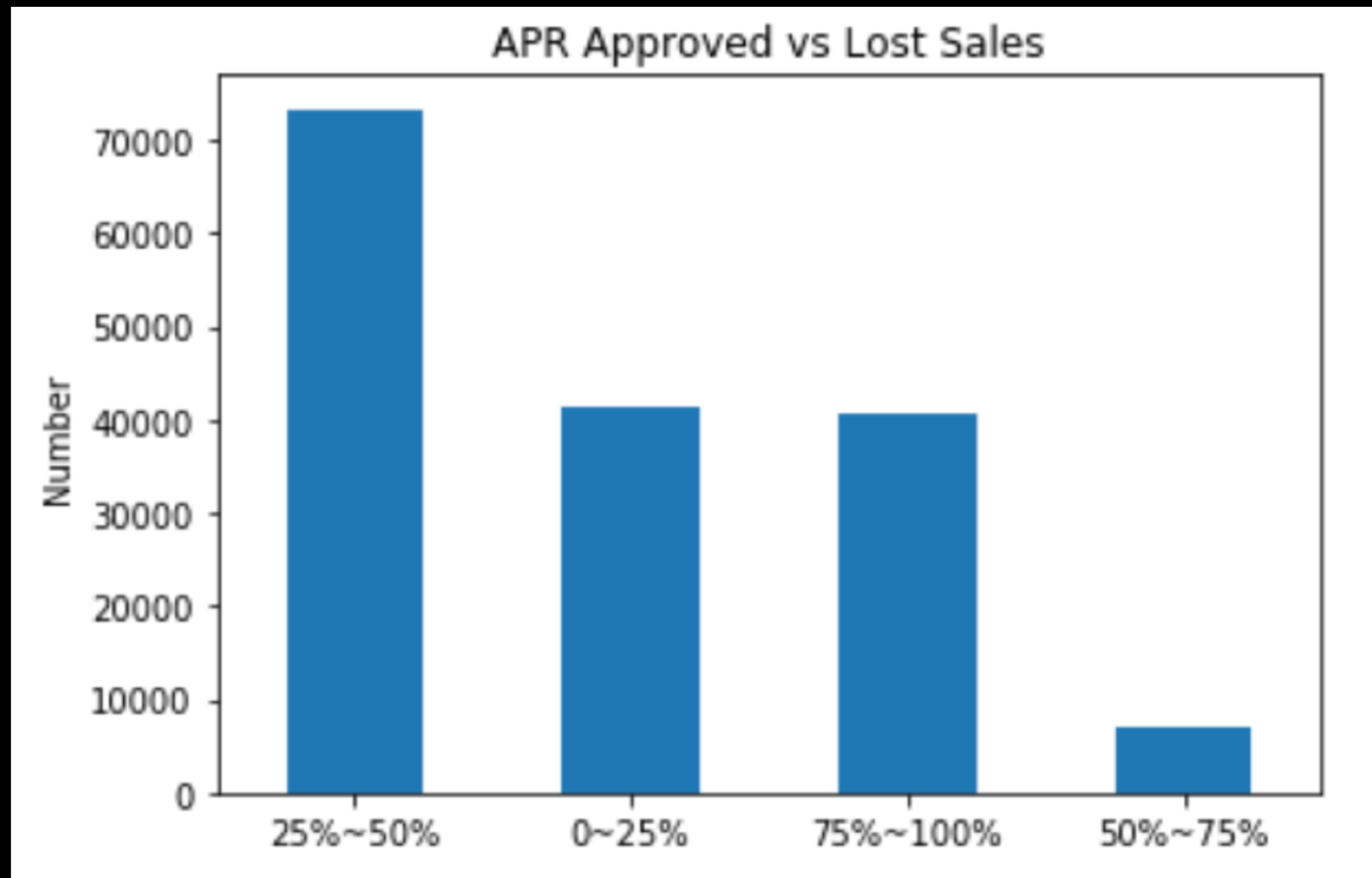
Decision Tree Modeling



Train Score = Score on available data

Test Score = Score on real life data

Decision Tree Modeling

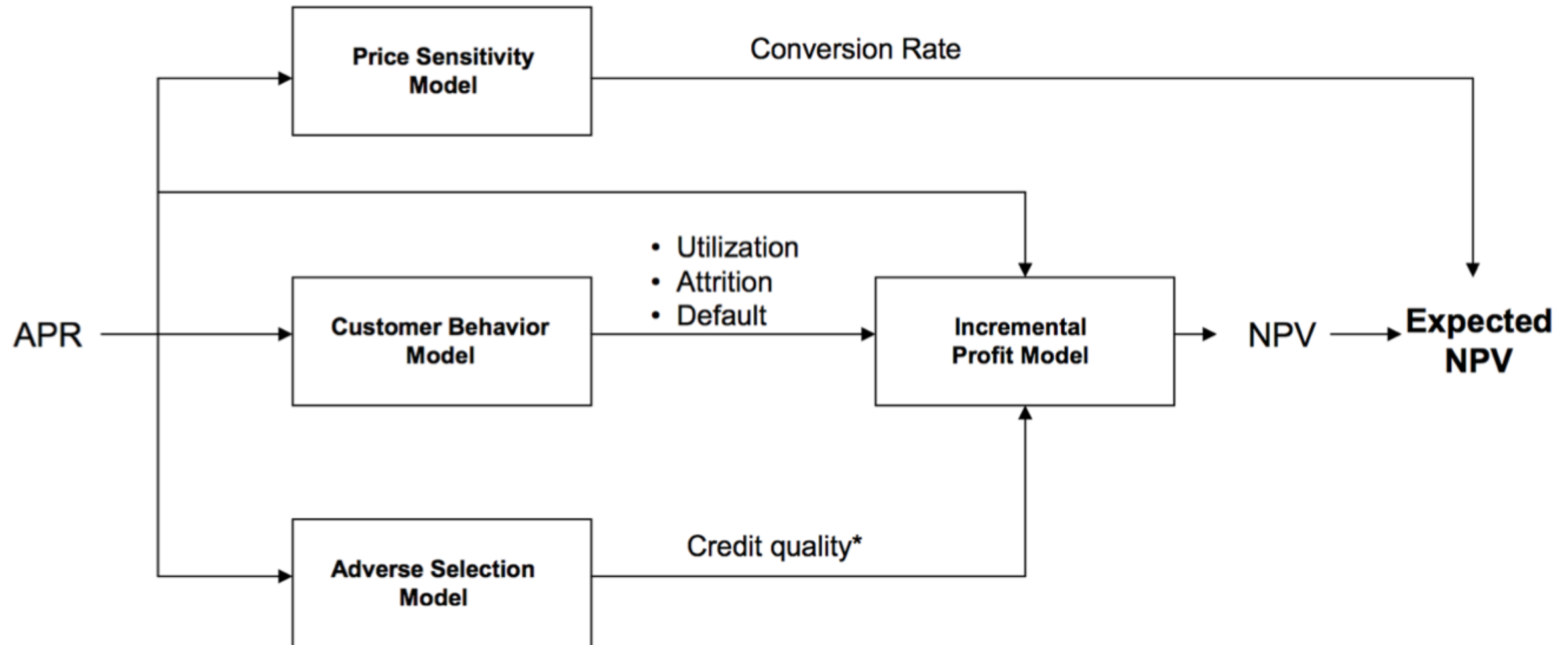


Next Steps



1. Principal Component Analysis
2. Demographics - Age, race, gender, geography, industry
3. Exploring the benefits of advertising and marketing channels on sales
4. Setting customer prices post inquiry

Next Steps



Thank you!

