

TheAnalyticsTeam

# Sprocket Central Pty Ltd

Data analytics approach

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Data Analytics Consulting Virtual Intern

# Agenda

1. Introduction
2. Data Exploration
3. Model Development
4. Interpretation

# Introduction

## **New Customers Dataset**

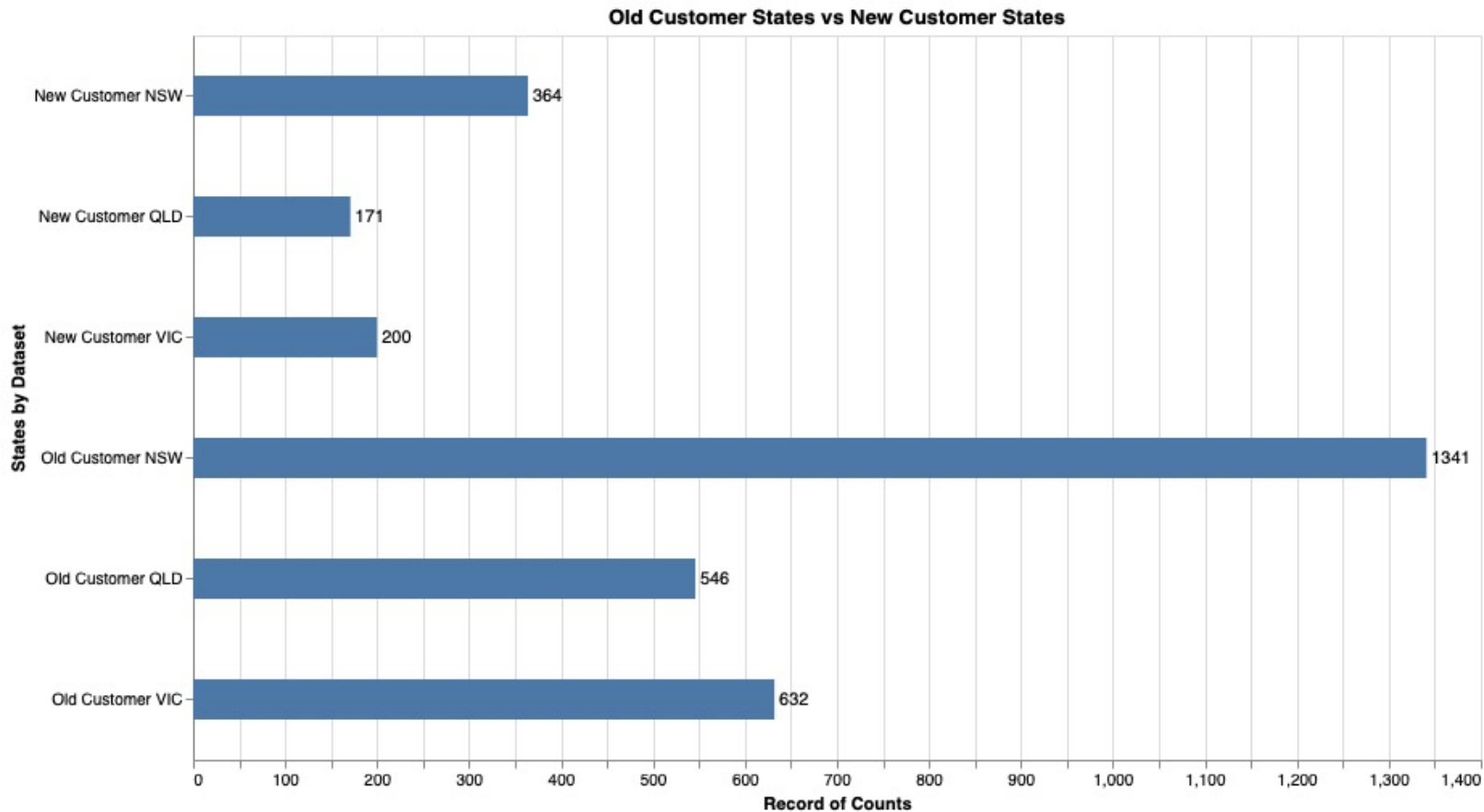
- Records with Missing Fields were Dropped except for the last name column
- Age column was created

## **Overall**

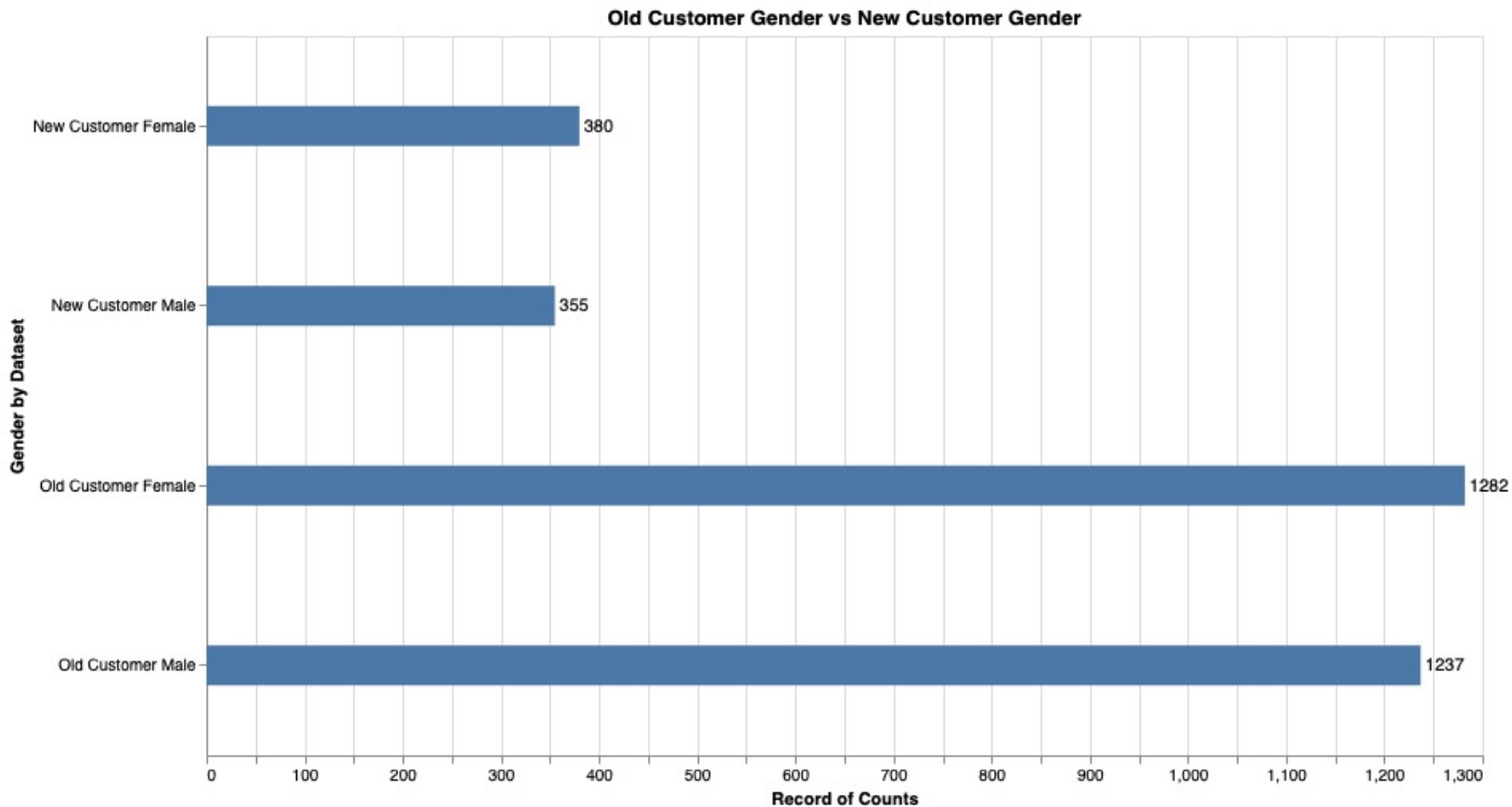
- Records for customers were dropped if it was not in all three datasets
- Customer Demographic and Customer Address datasets were joined together
- Customer Demographic, Customer Address, and Transaction datasets were joined together

2519 Distinct Old Customers were Analyzed

# Data Exploration

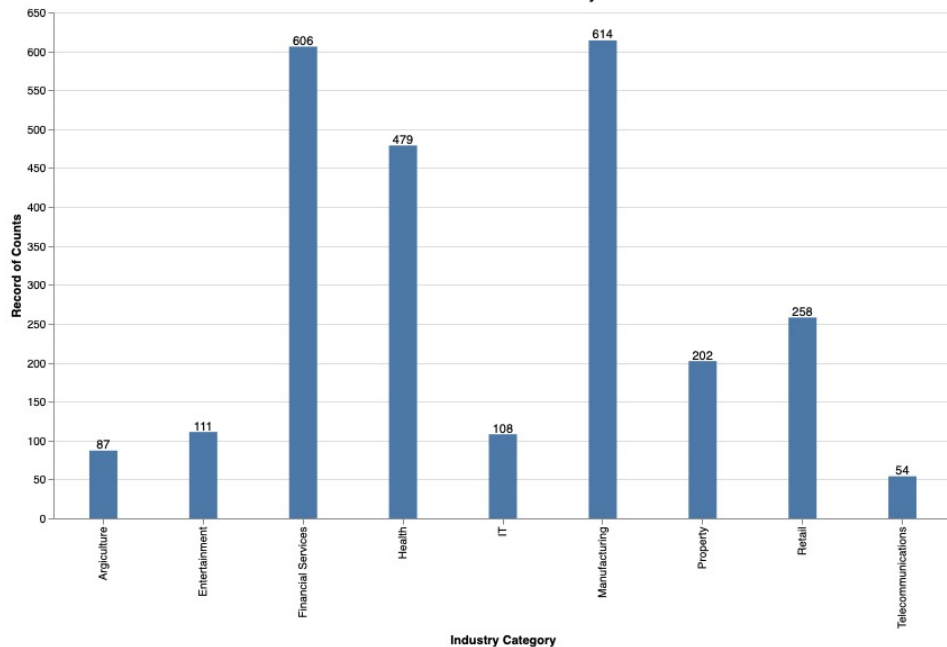


# Data Exploration

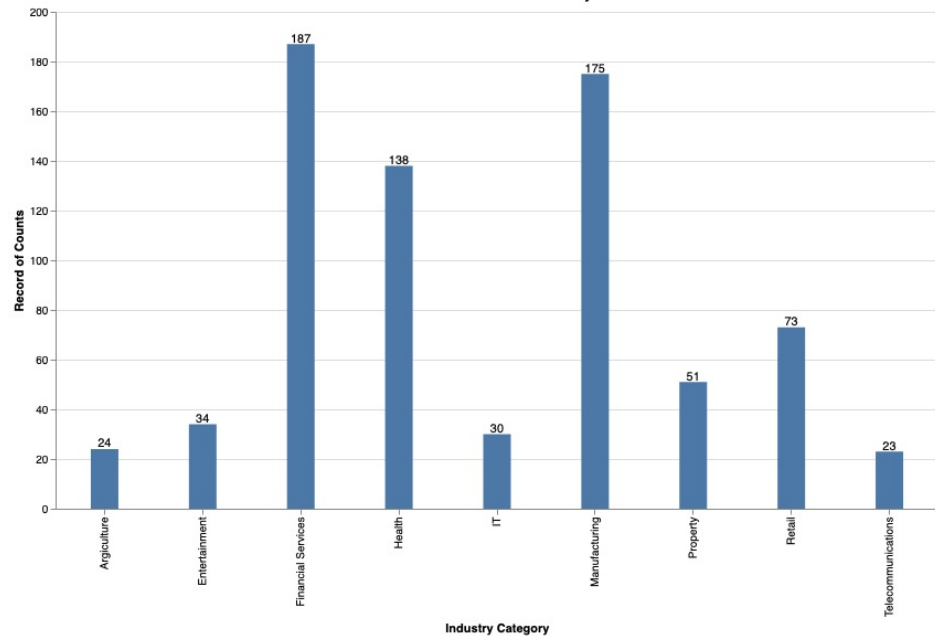


# Data Exploration

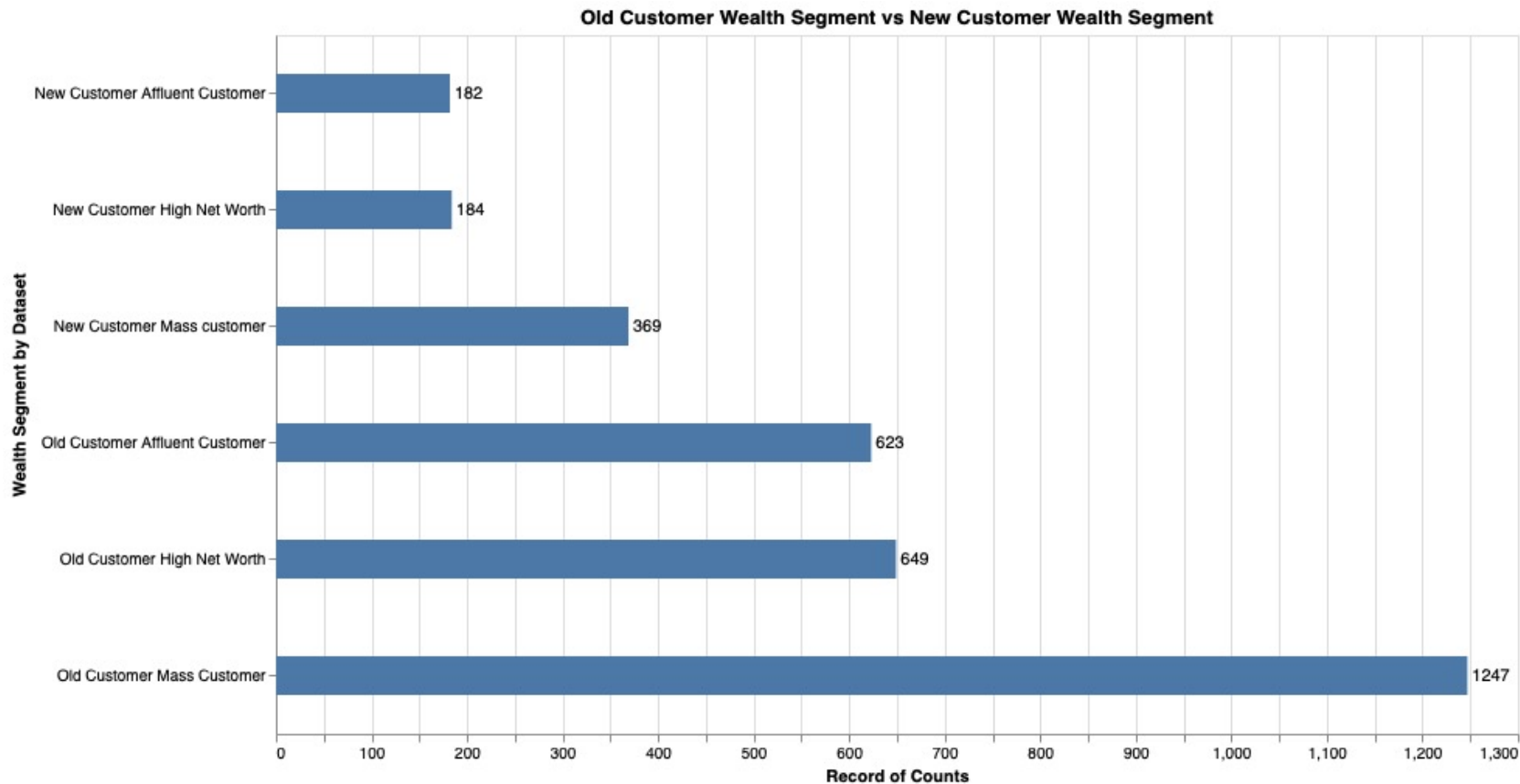
Old Customer Job Industry



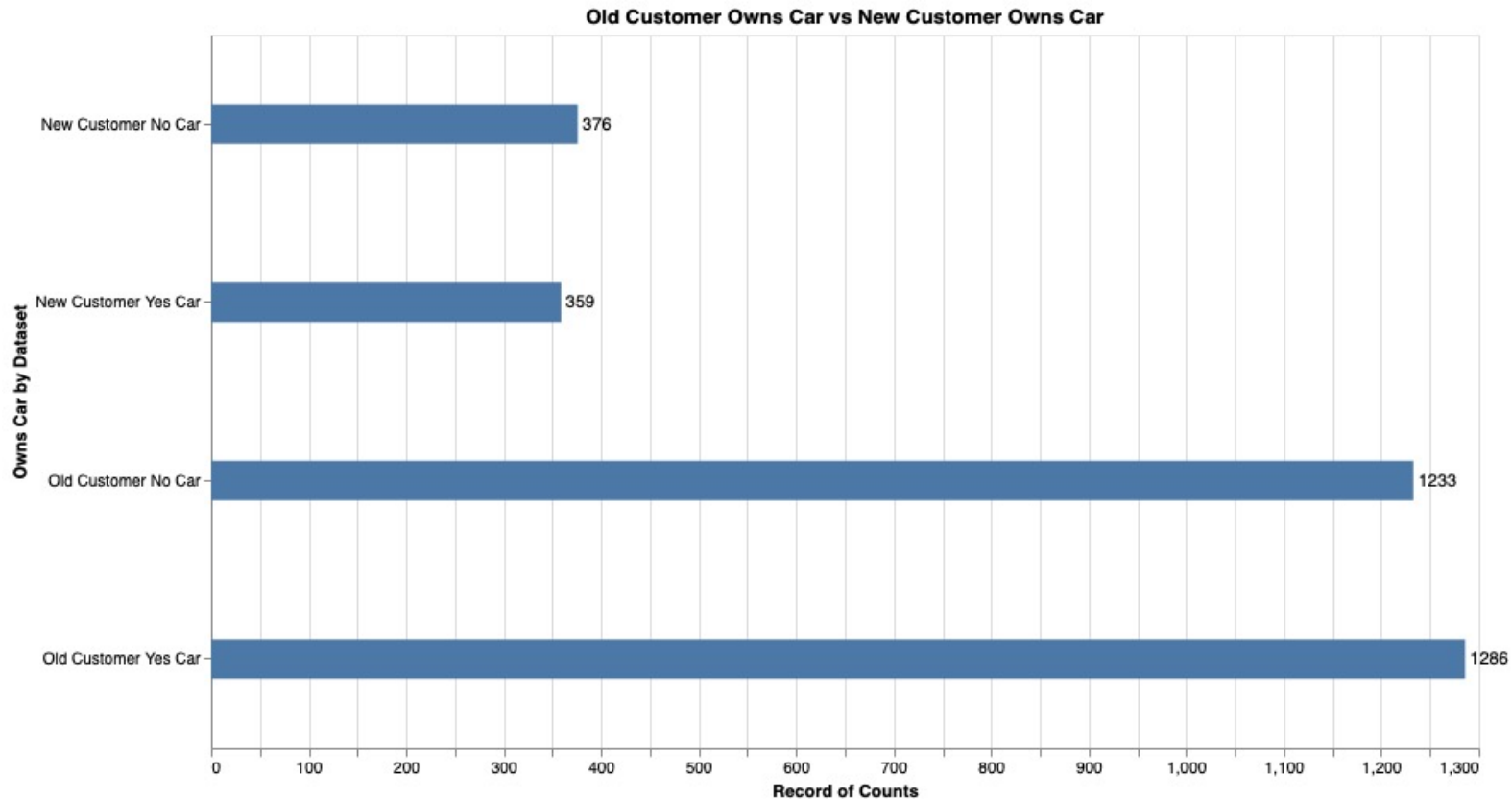
New Customer Job Industry



# Data Exploration

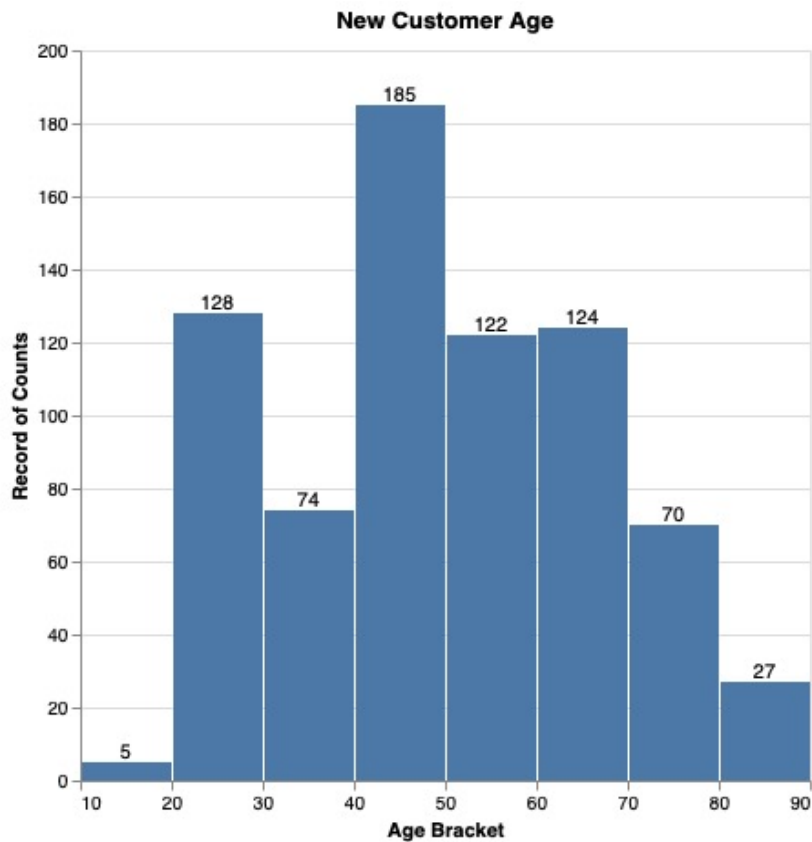
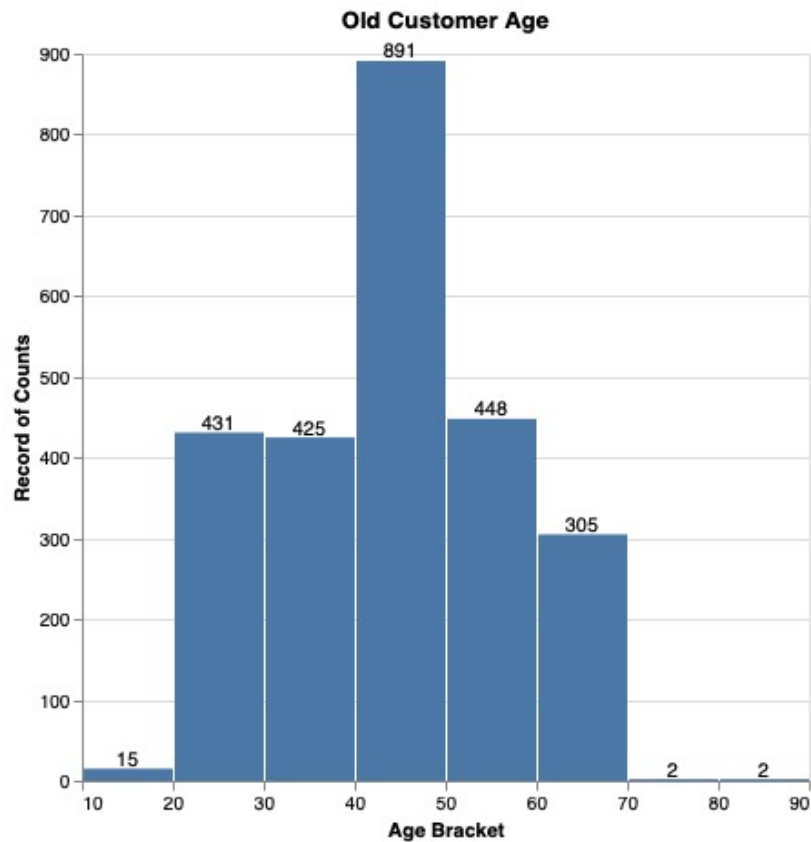


# Data Exploration

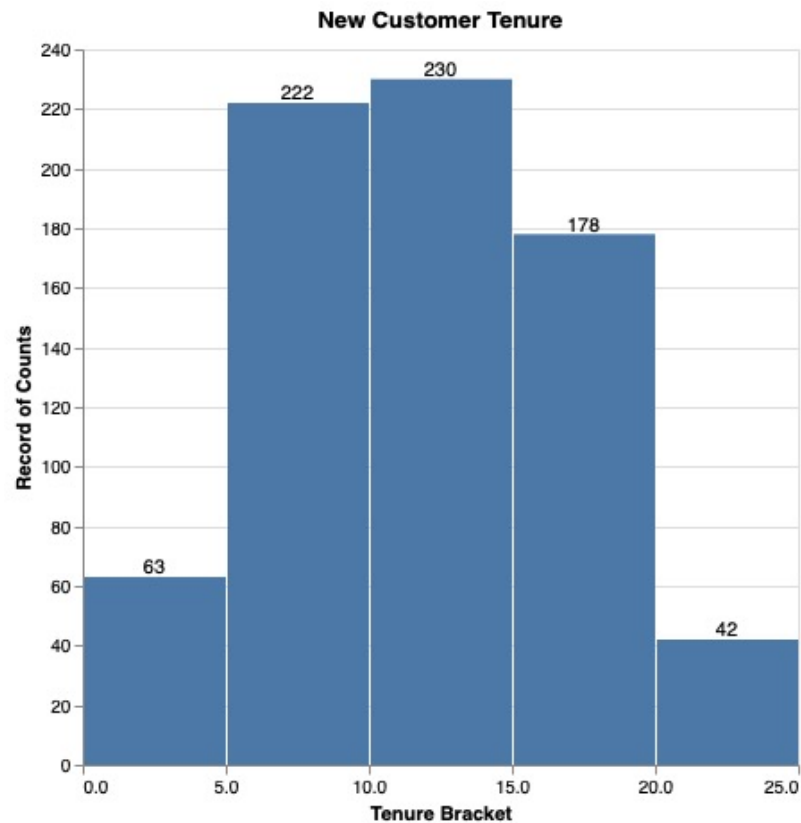
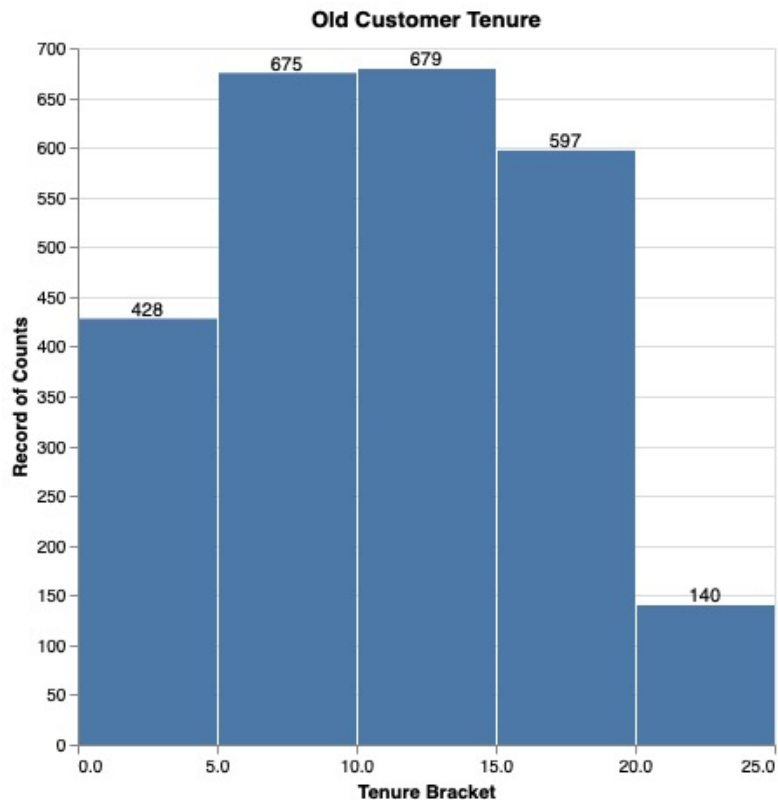




# Data Exploration

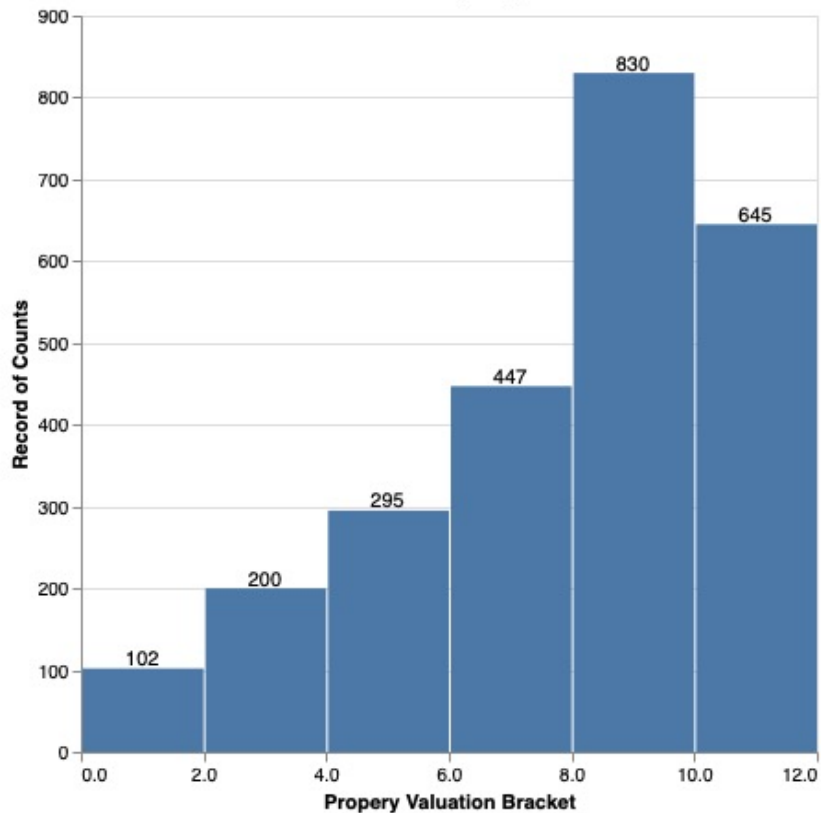


# Data Exploration

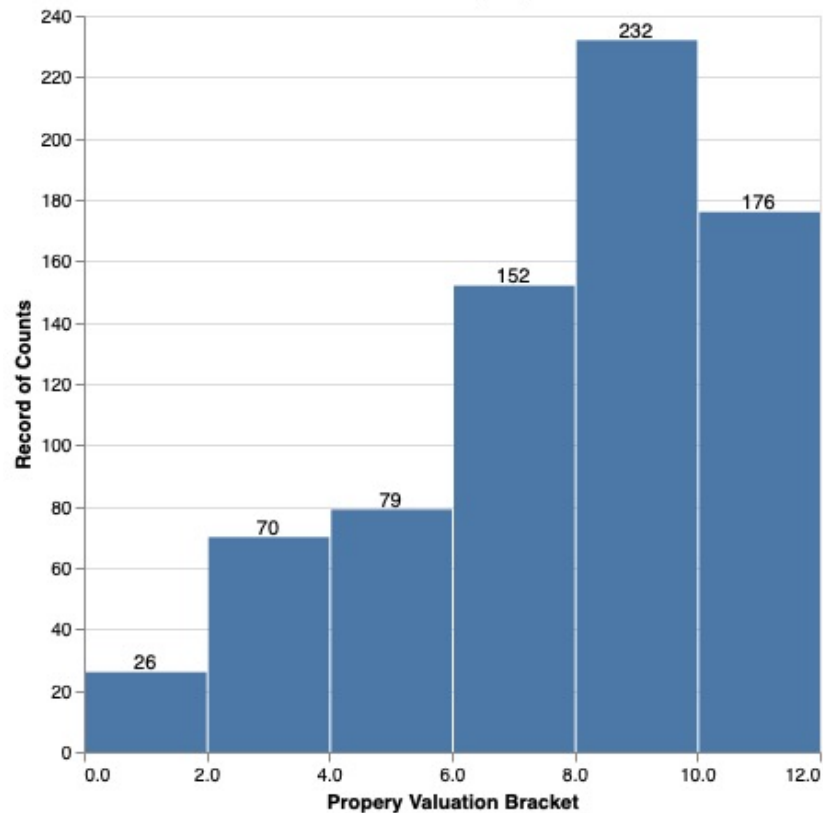


# Data Exploration

**Old Customer Property Valuation**



**New Customer Property Valuation**

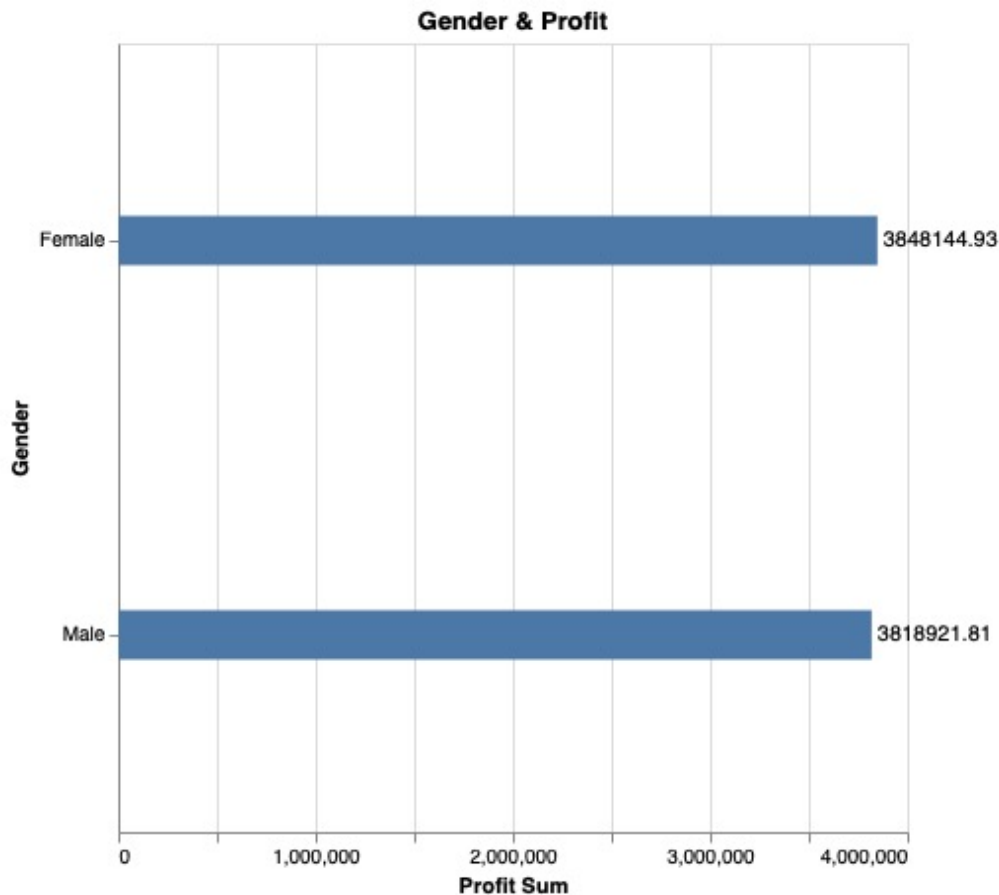


# Model Development

## **Differences between Old and New Customers**

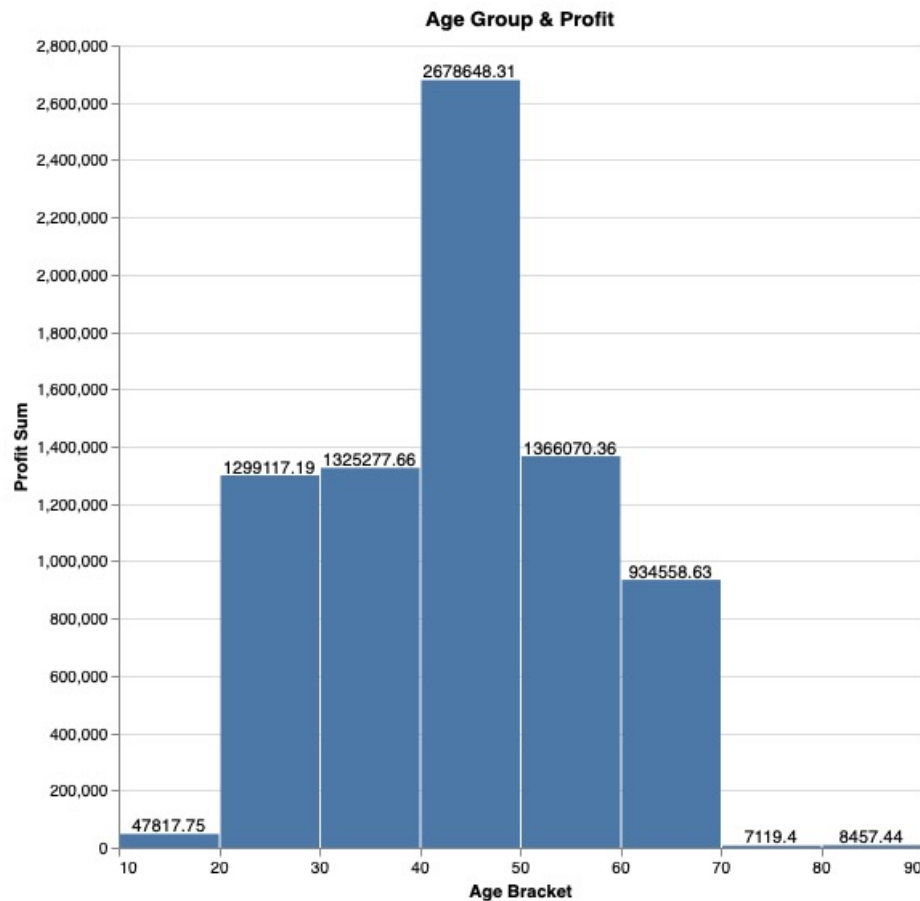
- New Customers are older
  - Slight increase in ownership of cars for New Customers
- 
- By studying the relationship between transactions and different characteristics of the old customers, we can properly determine marketing strategies for the potential new customers

# Model Development



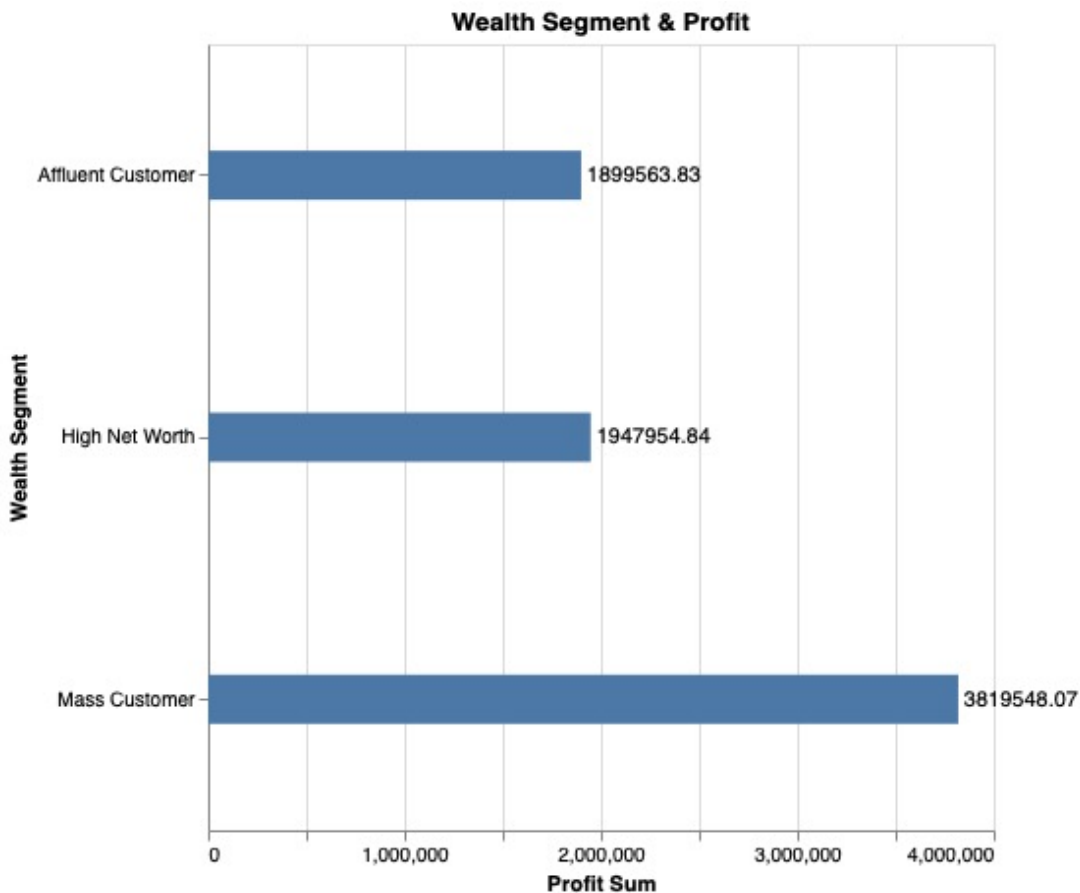
Profit is slightly higher among  
Females

# Model Development



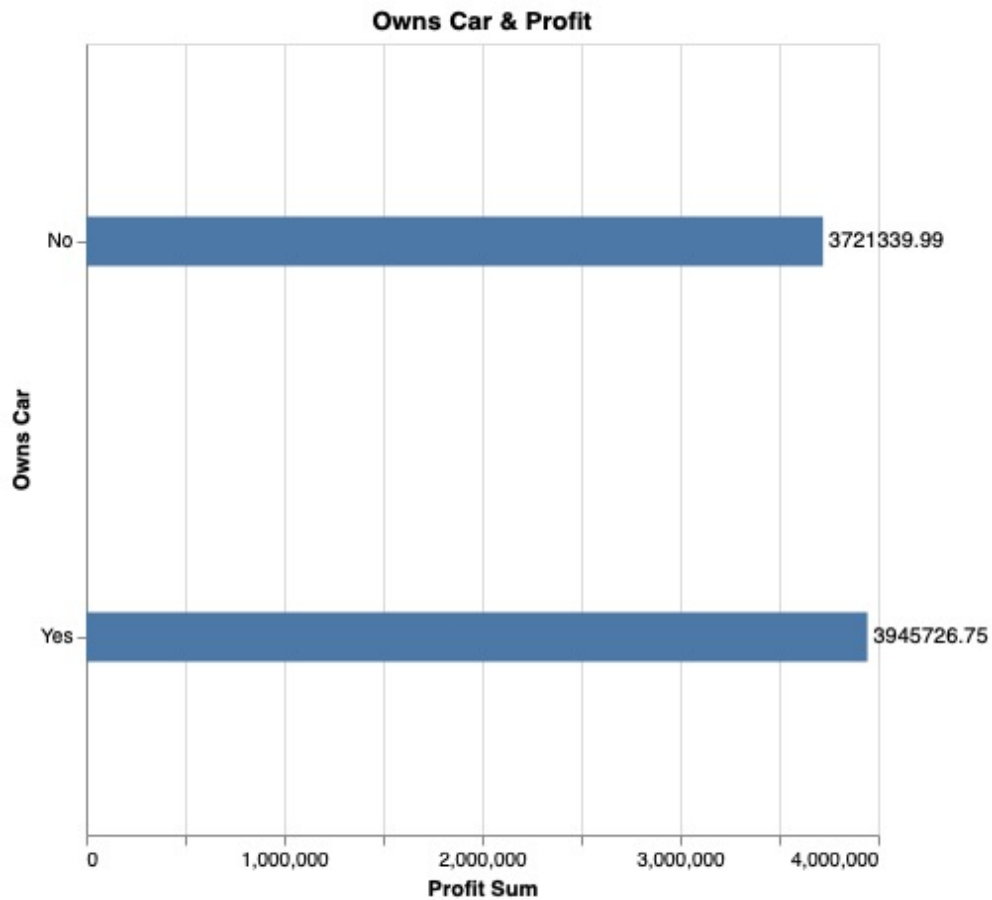
Profit is greatest in the  
40-50 age bracket

# Model Development



Profit is greatest among Mass Customers

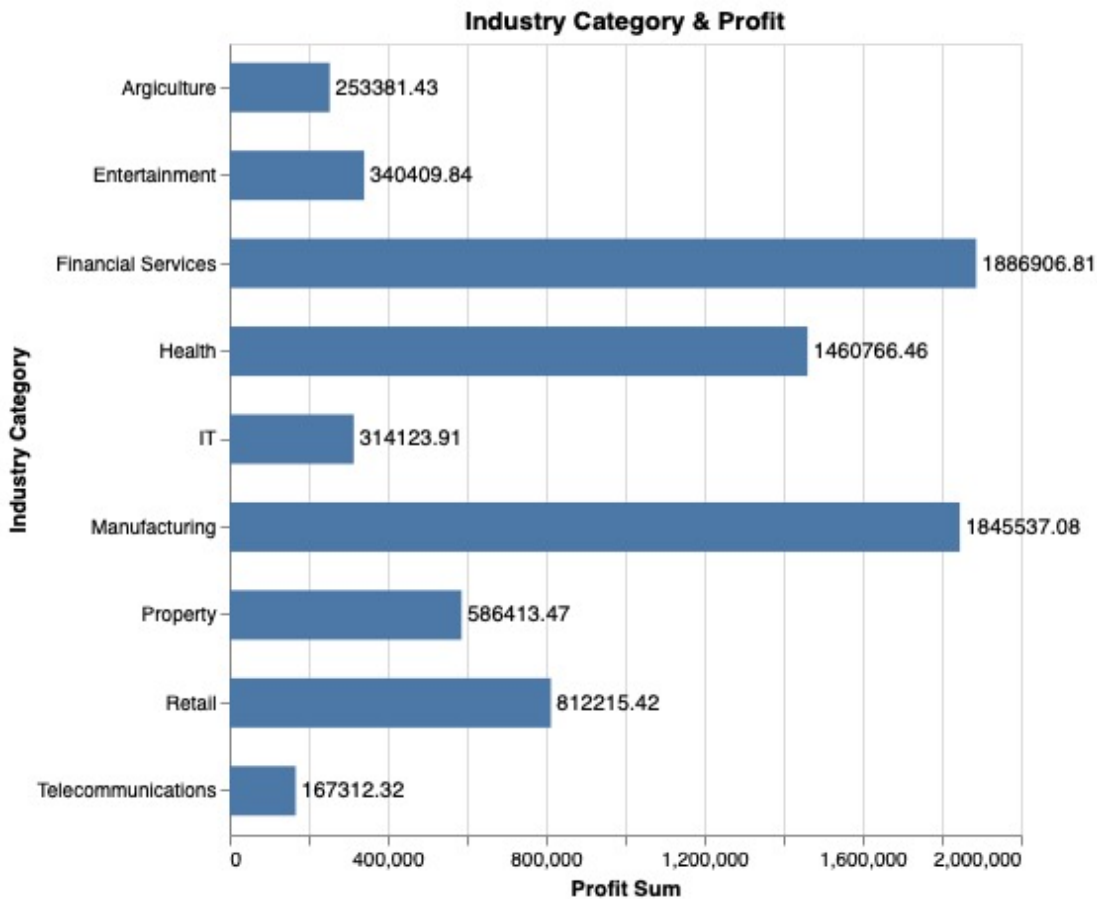
# Model Development



Profit is slightly higher among those that own a car

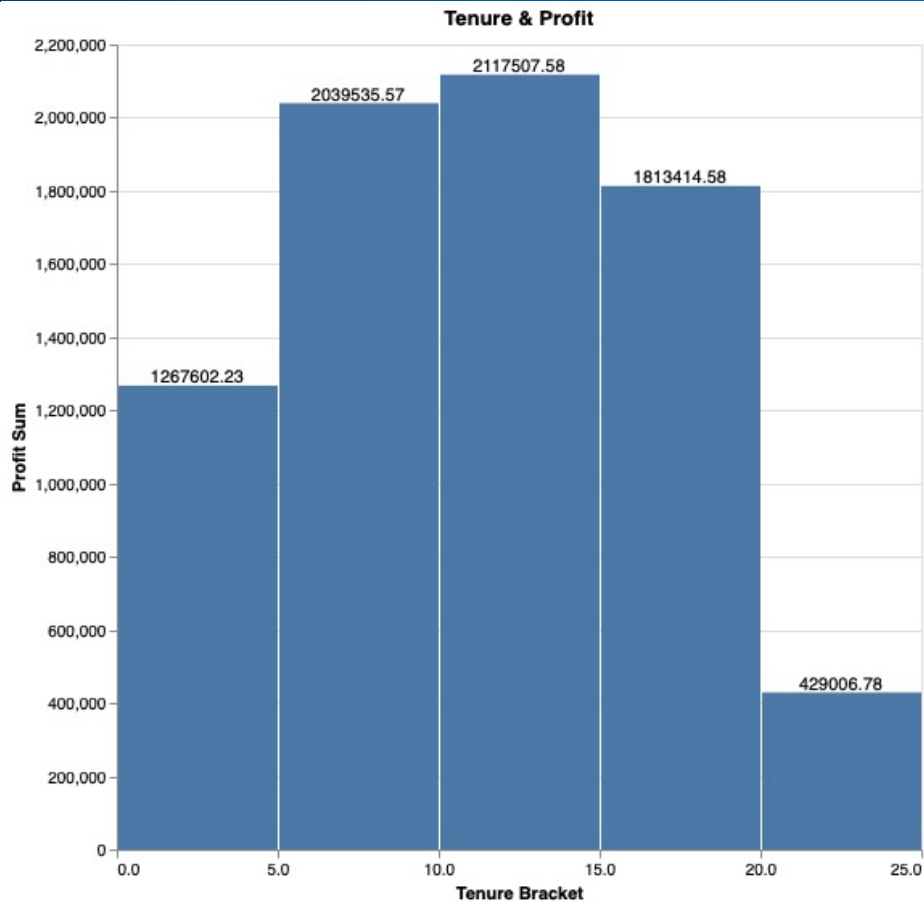


# Model Development



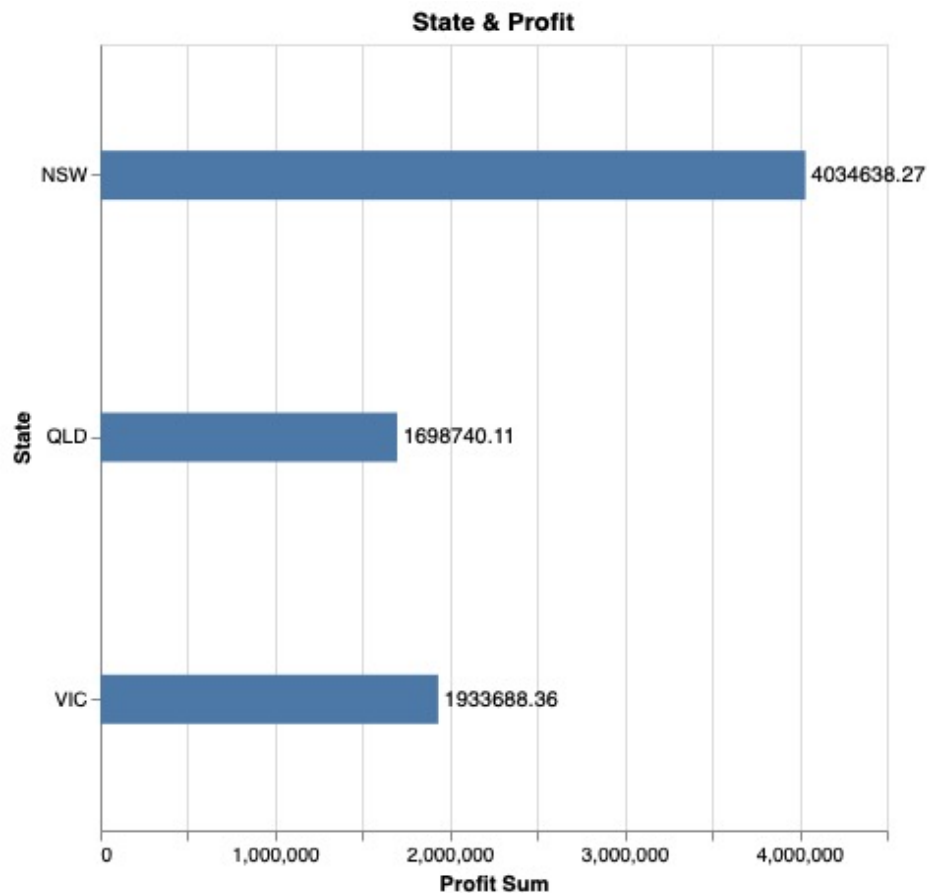
Profit is highest among customers working in Financial Services and Manufacturing

# Model Development



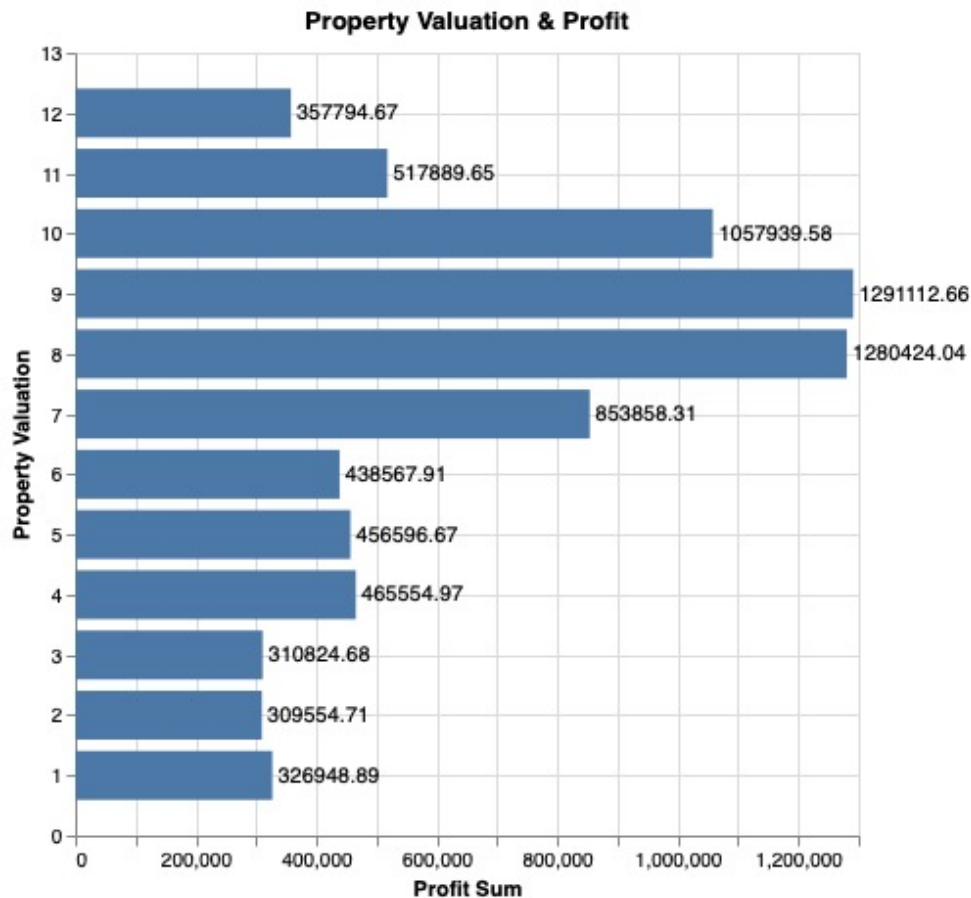
Profit is greatest among those in their jobs for between 5-20 years

# Model Development



Profit is greatest from customers  
living in NSW

# Model Development



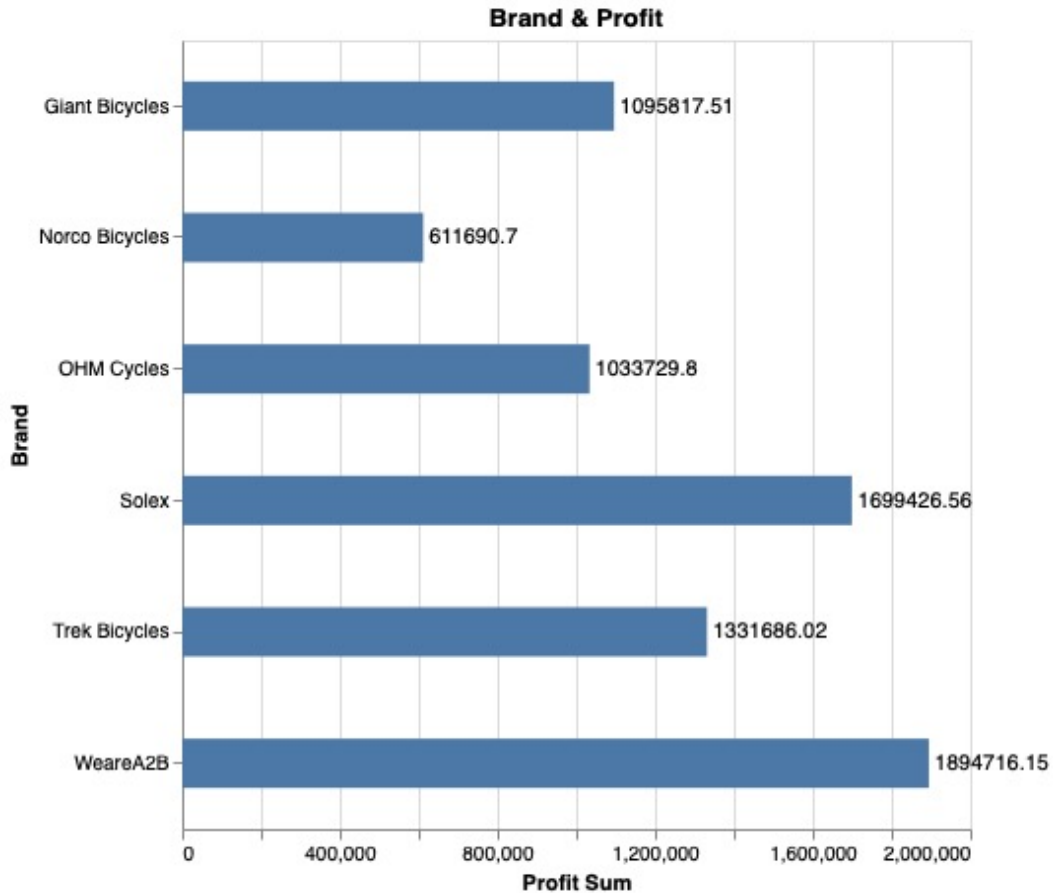
Profit is greatest among those that have a Property Valuation of 8 or 9

# Model Development



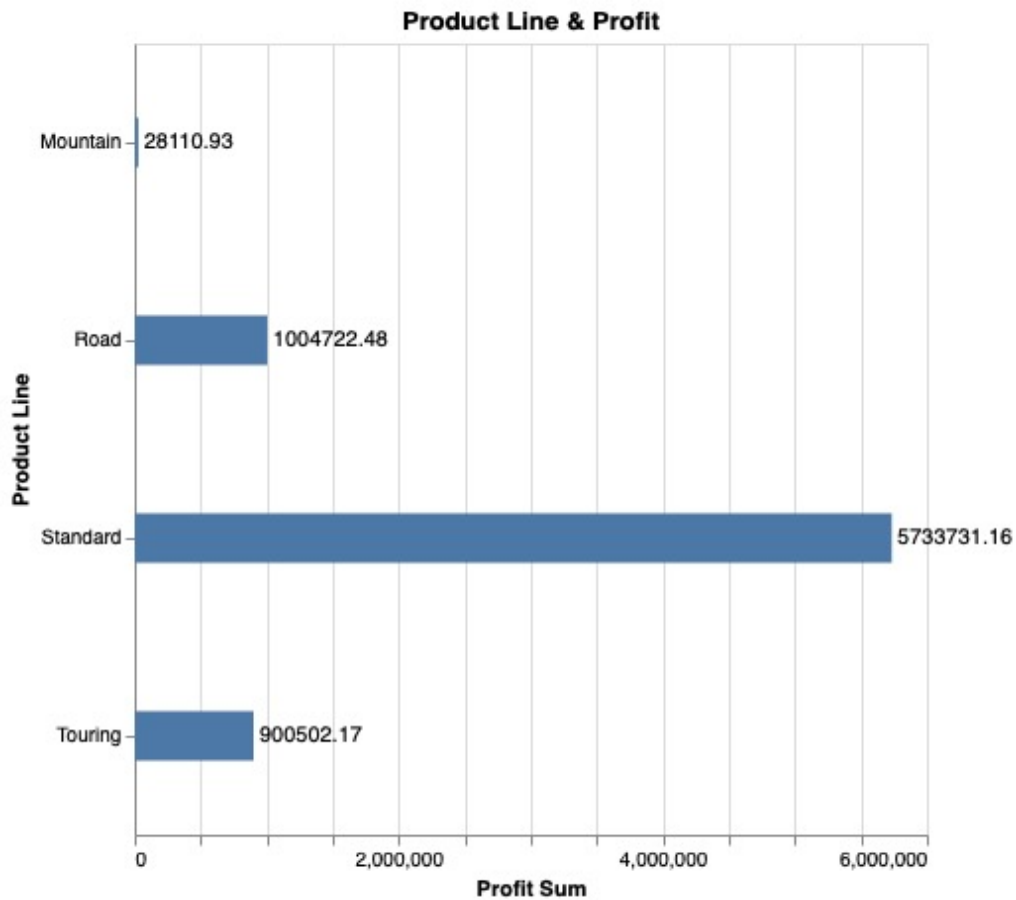
Profit is slightly greater among in store purchases

# Model Development



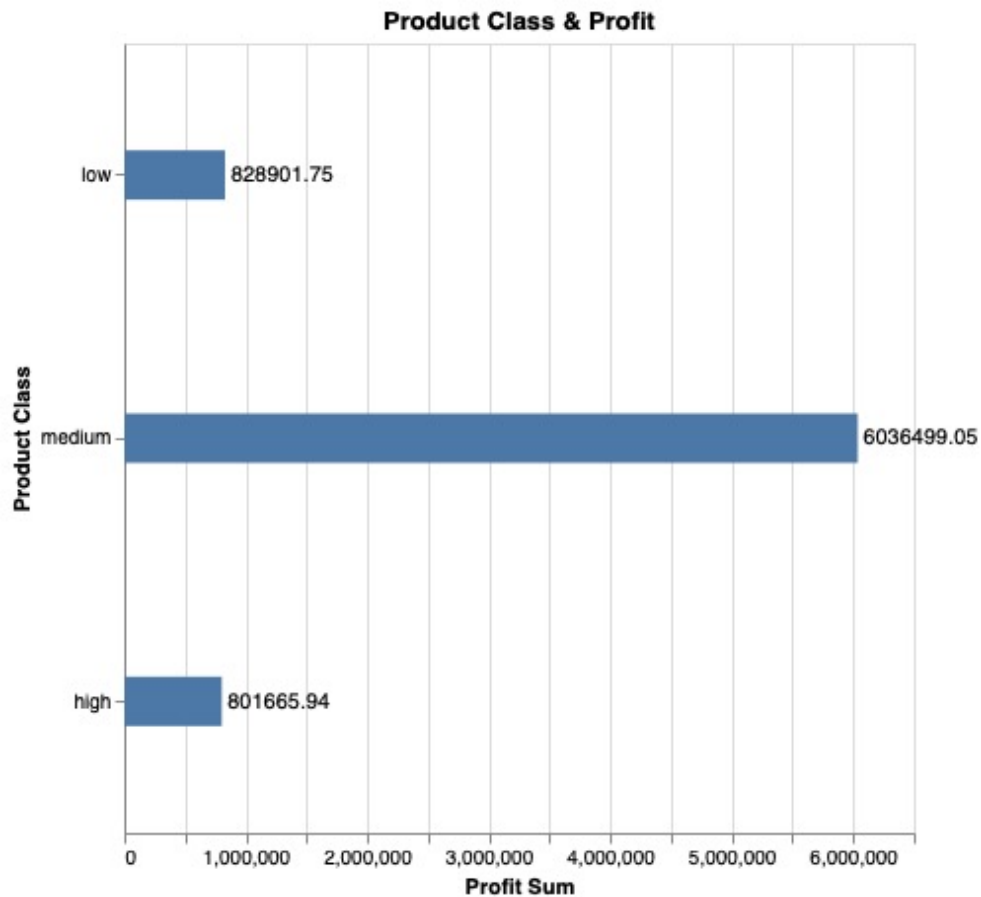
Profit is greatest among WeareA2B and Solex brands

# Model Development



Profit is greatest among Standard bikes

# Model Development



Profit is greatest among Medium Class bikes



# Model Development



Profit is greatest among Medium bikes

# Interpretation

- Since the Old Customer Demographic and the New Customer Demographic is roughly the same, focusing marketing strategies on characteristics that make the most profit will result in the most value for the organization

## Characteristics of Customers that were Most Profitable

- Female
- 40 – 50 age bracket
- Mass Customer
- Owns a Car
- Financial Services
- 10 – 15 Tenure
- NSW
- Property Valuation 9
- In Store Purchases