

TheAnalyticsTeam

Sprocket Central Pty Ltd

Data analytics approach

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Agenda

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

Introduction

Optimizing Customer Marketing

Considerations:

- Year of Birth
- Gender
- Wealth Segment
- Tenure
- Bike Related Purchases



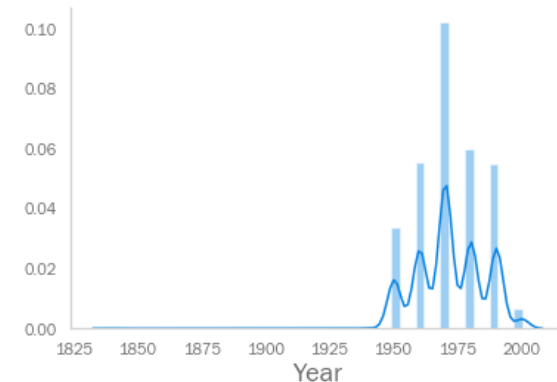
Data Exploration

Data Distributions

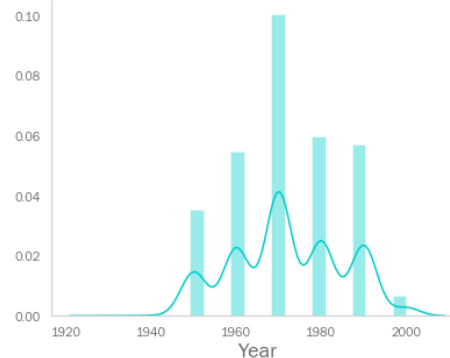
Age Distributions:

- The distribution of year born for males and females appears to follow a normal distribution.
- This will aid in model standardization and validity

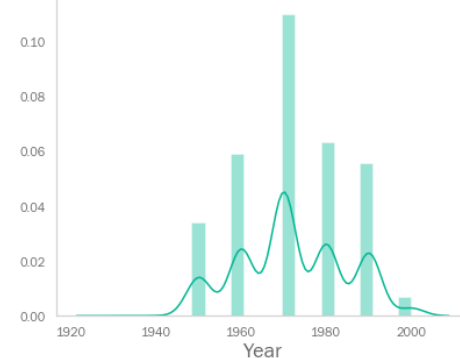
Distribution of Year born



Distribution of Year Born for Males



Distribution of Year Born for Females

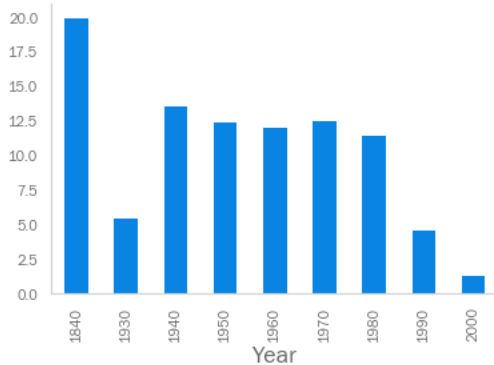


Data Exploration

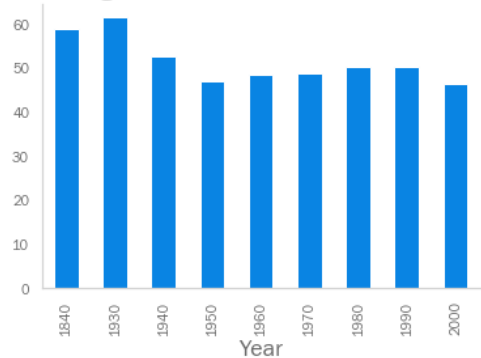
Data Relationships

- As expected, those who are older have a longer tenure.
- The elderly purchase more bike related products which may signal that they are a higher value customer.
- Wealth doesn't affect the amount of bike related purchases or tenure.

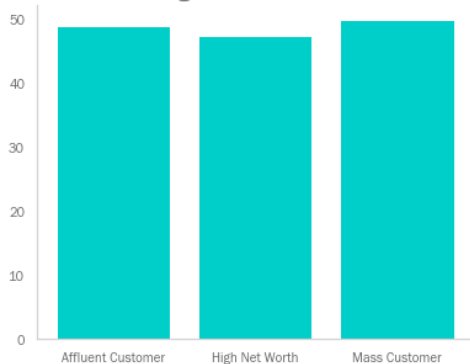
Average Tenure versus Decade Born



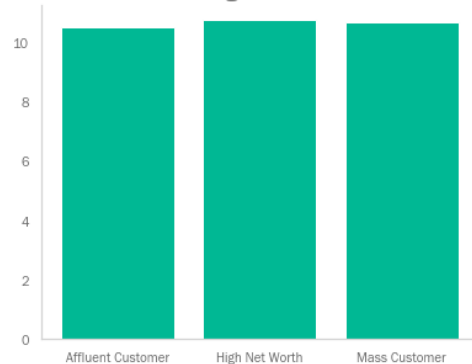
Average Bike Purchases vs Decade Born



Wealth Segment vs Bike Purchases



Wealth Segment vs Tenure



Model Development

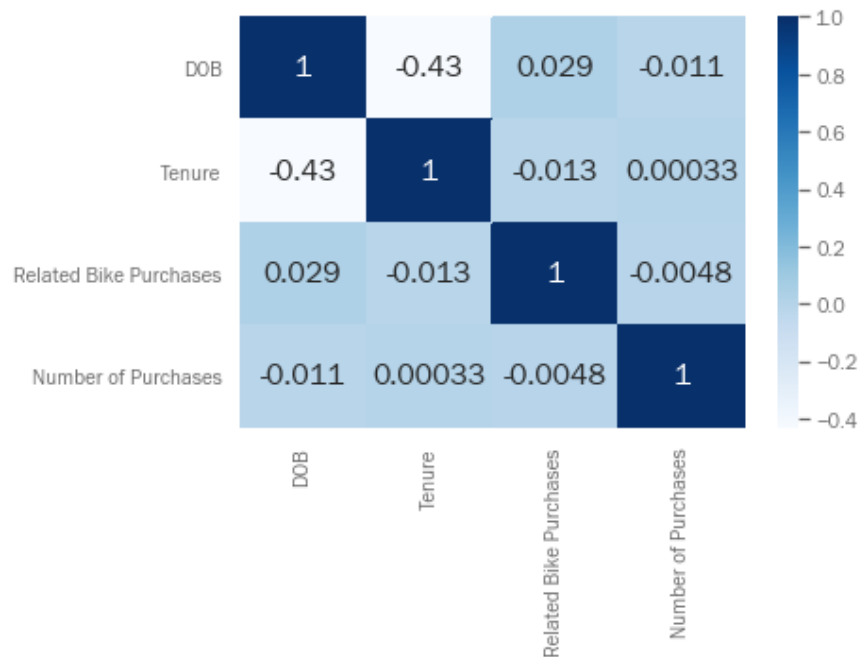
Examining Correlation for Model Development

Correlations with Number of Purchases:

Tenure = 0.00033

Related Bike Purchases = -0.0048

Year of Birth = -0.011



Interpretation

Results

Based on the correlation plot, age is the largest contributing factor that should be considered when marketing. As age increases, the customer's purchases also increase.

