TheAnalyticsTeam

Sprocket Central Pty Ltd

Data analytics approach

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Agenda

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

Introduction

Analysis on the new customers datasets of Sprocket Central Pty Ltd.

To determine the long-term potential customers, our objective is to determine the customers from the given 1000 new customers.

We need to select the best features from the new customer dataset to determine the targeted customers. The analysis of the data will help boost strategies for the marketing team.

Total numbers of new customers: 1000

Total columns of data set: 'first_name', 'last_name', 'gender', 'past_3_years_bike_related_purchases', 'DOB', 'job_title', 'job_industry_category', 'wealth_segment', 'deceased_indicator', 'owns_car', 'tenure', 'address', 'postcode', 'state', 'country', 'property_valuation', 'Rank', 'Value'

Data Exploration

Feature Engineering

We can analyze the data distributions based on different features that allow to demonstrate underlying findings that can help build better model.
After cleaning the dataset, we can narrow down the most significant features that will yield the most crucial understanding of the customer behavior.

After analyzing and understand the most significant features from the data sets. We can also see the following features best describes customer behavior, customer segmentation, and customer's purchasing capability.

- Purchases made within 3 years
- DOB
- Property-valuation
- Job Category

Model Development

Property Valuation (Scale 1 to 12) and the recent purchases in 3 years of time

After calculating and analyzing the customer purchases within three-year period time based on customers property valuation:

- Total customers: **213**
- Maximum purchases: **99**
- Minimum purchases: **76**

The high volume of purchases made by customers who has the **property valuation** between the range of **5** and **10**
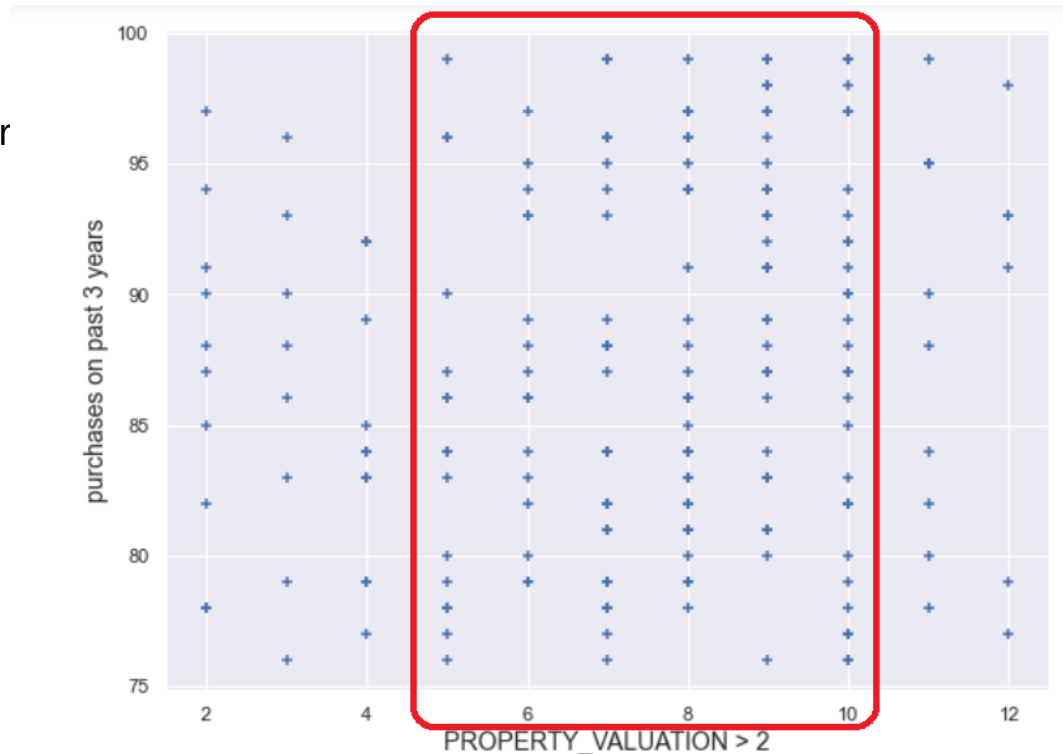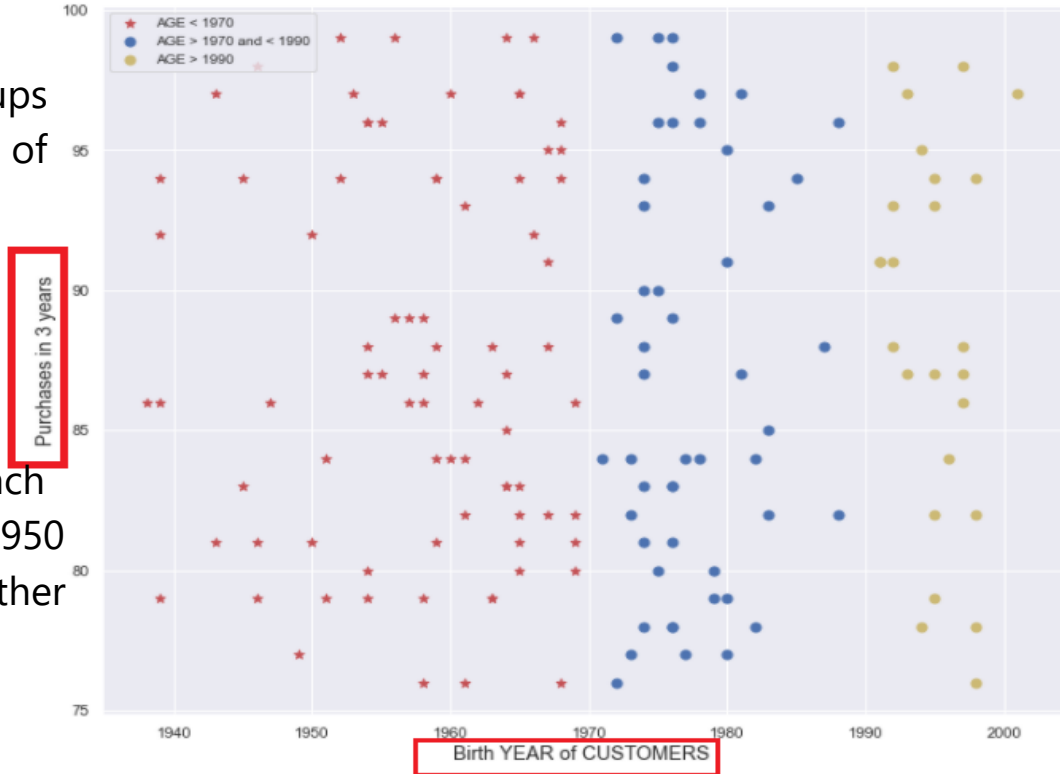
Customer Segmentation

Customer demographics based on different Age Group

Customers based on different age groups and the purchases made within 3 years of time.

- Age <1970
- Age between 1970 and 1990
- Age > 1990

Findings suggests that age group of each customers between the age group of 1950 and 2000 have purchased more than other age group.
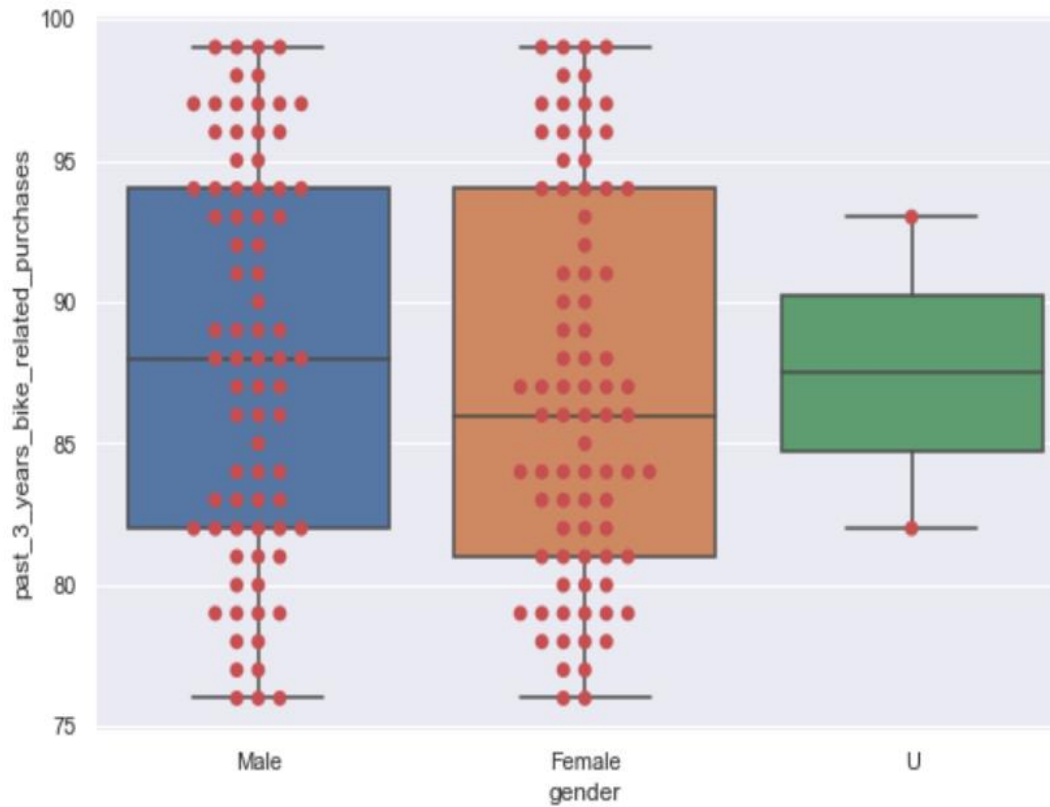
Customer Segmentation

Customer purchases in three years based on Gender

Based on the customer segmentation by the dataset, we can analyze that the purchases made by each gender demographics. This includes:

- Male
- Female
- U- Unidentified

Interpretation

Potential and Long-term customers without job title and job industry category

There are handful of customers who have been purchasing the products throughout the years. But these few customers don't hold any job title or they have any job category.

However, based on the spending criteria and property valuation, these customers have been spending and purchasing the products in large volumes.

first_name	year	property_valuation	past_3_years_bike_related_purchases
Brooke	1961	5	76
Marcelia	1946	8	81
Andrea	1938	6	86
Launce	1939	9	86

Appendix