

TheAnalyticsTeam

# **Sprocket Central Pty Ltd**

Data analytics approach

RJayant

# Agenda

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

# Introduction

## Target Customer Identification Strategy for Sprocket Central Pty. Ltd.



1

### Data Exploration

- Comprehensive Data Collection
- Descriptive Analytics
- Identify Patterns

2

### Model Development

- Feature Engineering
- RFM Analysis
- Model Validation

3

### Interpretation

- Predictive Insights
- Segment Analysis
- Recommendations

# Introduction

## Problem Outline

- Sprocket Central Pty Ltd. Is a company that specializes in high-quality bikes and accessories.
- The company is targeting 1000 new customers.
- The company is focused on maximizing profit through bike sales.

## Customer Analysis

- Age distribution
- Number of bike purchase in past 3 years
- Job industry category
- Wealth segments
- Number of cars own each states
- Customer profile

# Data Exploration

## Data Quality Assessment

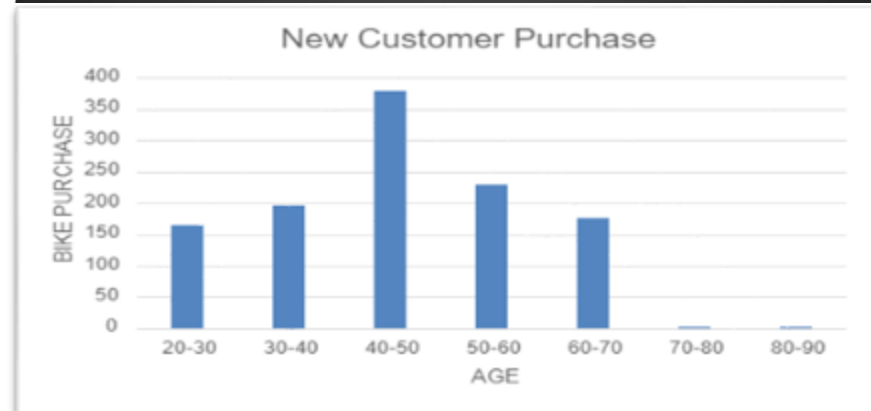
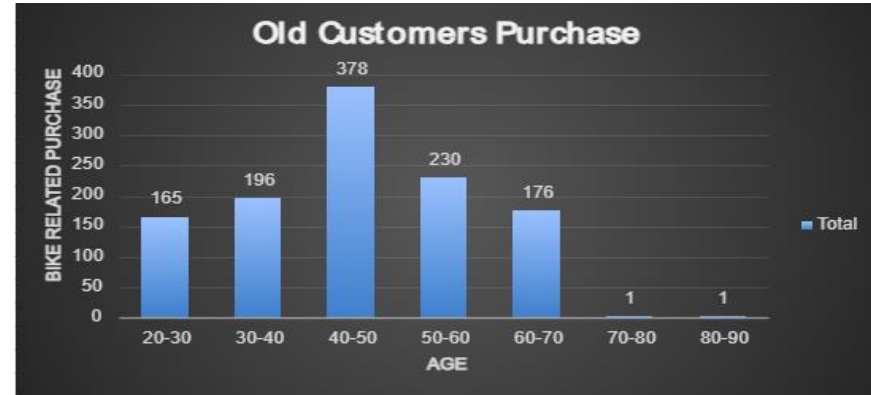
Data Quality issues identified in the Transaction, Customer demographic and Customer Address Dataset.

Data Set	Accuracy	Completeness	Relevancy	Validity	Consistency
Transaction	Profit: missing	Online orders & Brands	Product First Sold Date	List Price	-
Customer Demographic	Age: missing	Last name, Job title, Job industry	Default	-	Gender
Customer Address	-	-	-	-	State
New Customer	-	First name, Last name, Job title, Job industry	-	-	Gender

# Data Exploration

## Bike related purchase based on the age of customers.

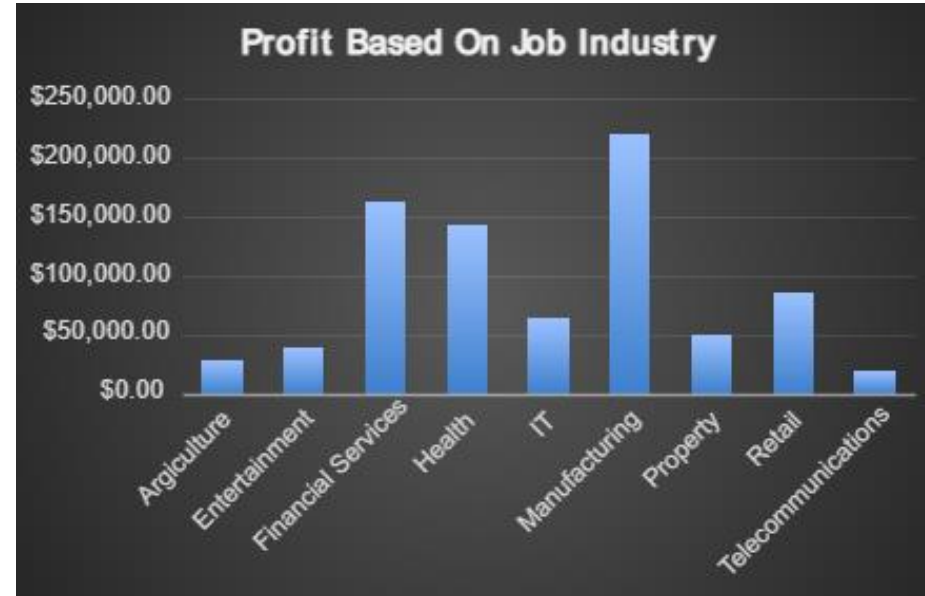
- Most of the bikes related purchase are made by customer between the age of 40 and 50.
- In the new customer purchase visual most purchases are from the age between 40 and 50, also between the age of 50 and 60.
- The data show that middle aged customers are one of the most potential customers.



# Model Development

## Bike related purchase based on Job Industry

- Manufacturing, financial and health are the top 3 profit generating industries, followed by retail, IT and property.



# Model Development

## Profit in each wealth segment by age

- The highest profit is obtained from customers of the age between 40 to 50.
- At the age of 40 to 50, Mass Customers have the highest profit, followed by High-Net-Worth customers and finally Affluent Customers.

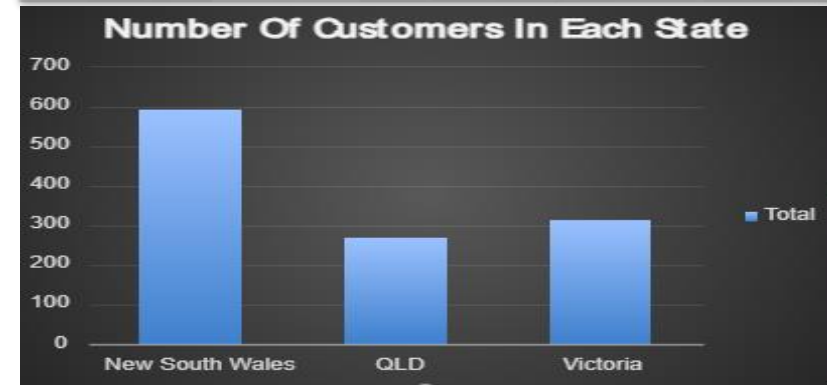
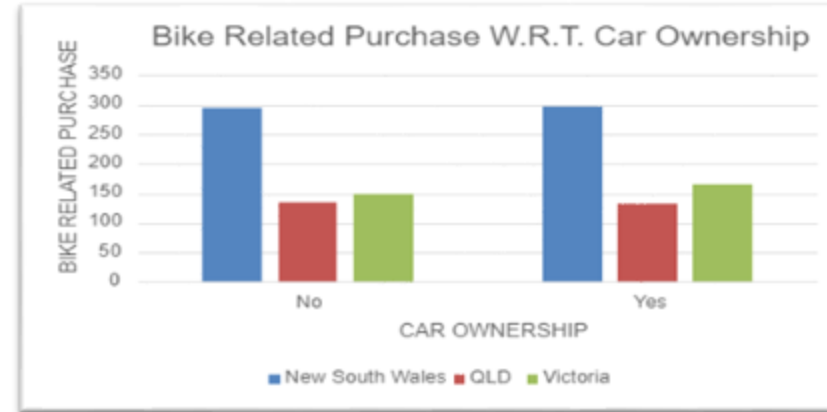




# Model Development

## Bike related purchases with respect to car ownership in each state

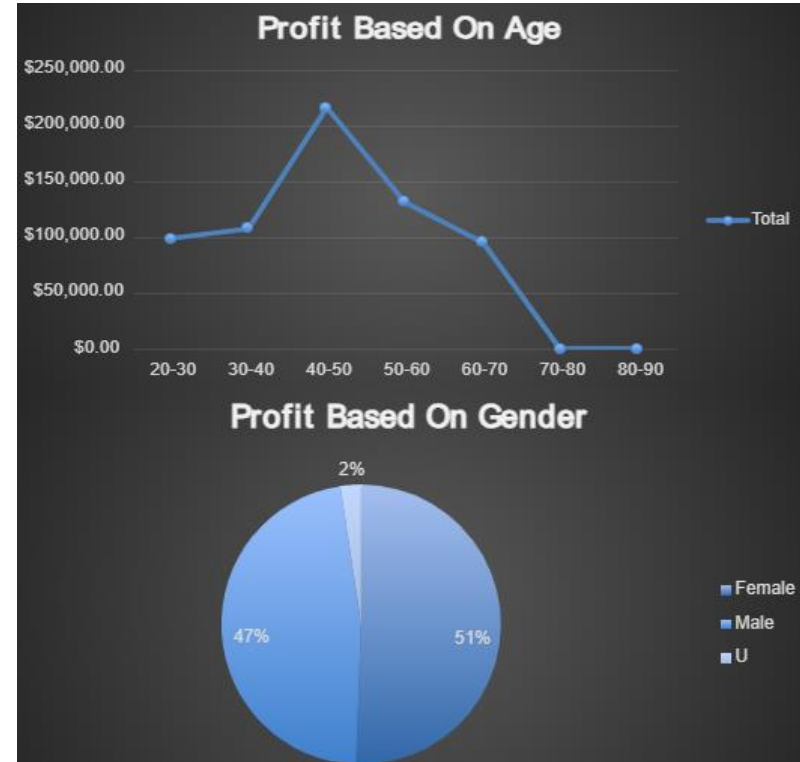
- Most of the bike related purchases are from customers of New south wales who own cars. NWS also has the highest population of customers of 600.
- For those customers who don't own cars, most purchases are also from NSW, followed by Victoria and QLD state.
- Bike related purchases and the number of customers in each state are directly proportional.



# Model Development

## Profit based on the total number of Customer age and Gender

- Maximum profits is received from customers from the age of 40 to 50.
- From the data, the highest number of customers are female followed by male.



# Model Development

## RFM Analysis and customer profile

- Based on the recency of purchase of customers, frequency of their purchases and monetary from the purchase made a customer profile visuals was generated.
- Most of the customers are platinum customers with minimum RFM value 421.
- Gold customers being in the second place in terms of number, followed by silver and bronze customer.



# Interpretation

## Customer classification - targeting high value customers

Based on the data analysis and visual generated, these are high value customers that should be targeted:

- Customers between the age of 40 and 50.
- Customers who work in the manufacturing, financial and health industry.
- Customers who are currently living in New South Wales and Victoria states.
- Most of the highly value customers are female.
- Most of the high value customers are of the mass wealth segment.



**Thank you**