The Analytics Team

Sprocket Central Pty Ltd

Agenda

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

Introduction

Problem Statement:
Sprocket Central Pty Ltd , a medium size bikes & cycling accessories organisation, has given us a new list of 1000 potential customers with their demographics and attributes.

Our goal:
The marketing team at Sprocket Central Pty Ltd wants to know about useful customer insights which could help to optimise resource allocation for targeted marketing. Hence, improve performance by focusing on high value customers.

About Dataset:
Sprocket Central Pty Ltd provided us 3 datasets:
- Customer Demographic
- Customer Addresses
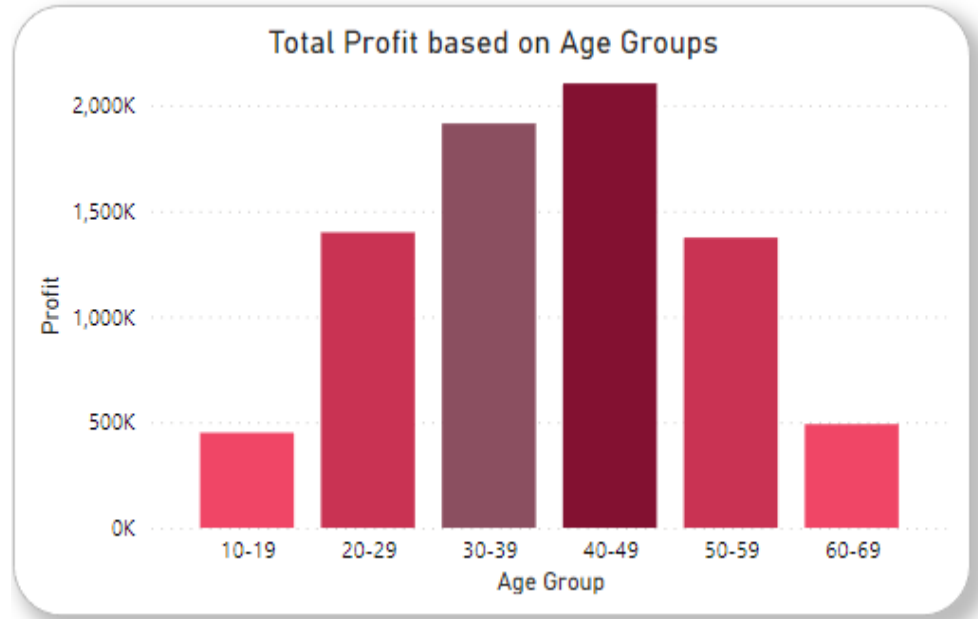- Transactions data
- New Customer List *(which is the target data)*

Steps Taken:
- Data Cleaning → Remove incorrect, incomplete, inaccurate, irrelevant data.
- Data Transformation → Merged the **transactions, customer demographic, customer address**
- Data Exploration → Explore the data to reveal insights

# Total Profit based on different Age Groups

Insights:

The customers between 30 to 49 age are the most profitable in terms of recent transaction history with more than 19 lacs profit.

# Average Profit in the year 2017 by Gender

Insights:

Male customers are more profitable in mid year i.e. April - July while female customers are in October.

Average Profit by Transaction Month
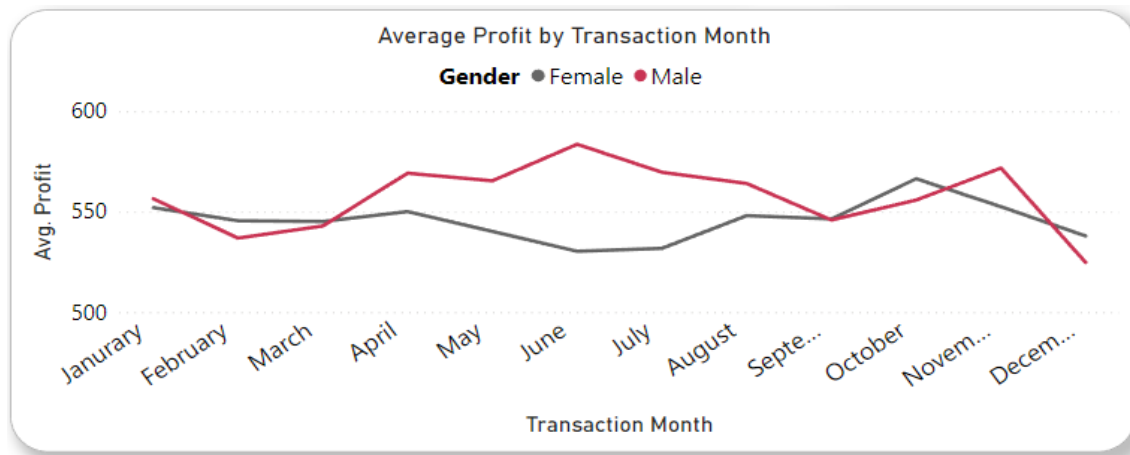
# Average Profit by Week based on Gender

Insights:

Male customers do more transactions in mid-week i.e. around Thursday while female customers are showing more profit during Saturday.

Average Profit by Transaction Day
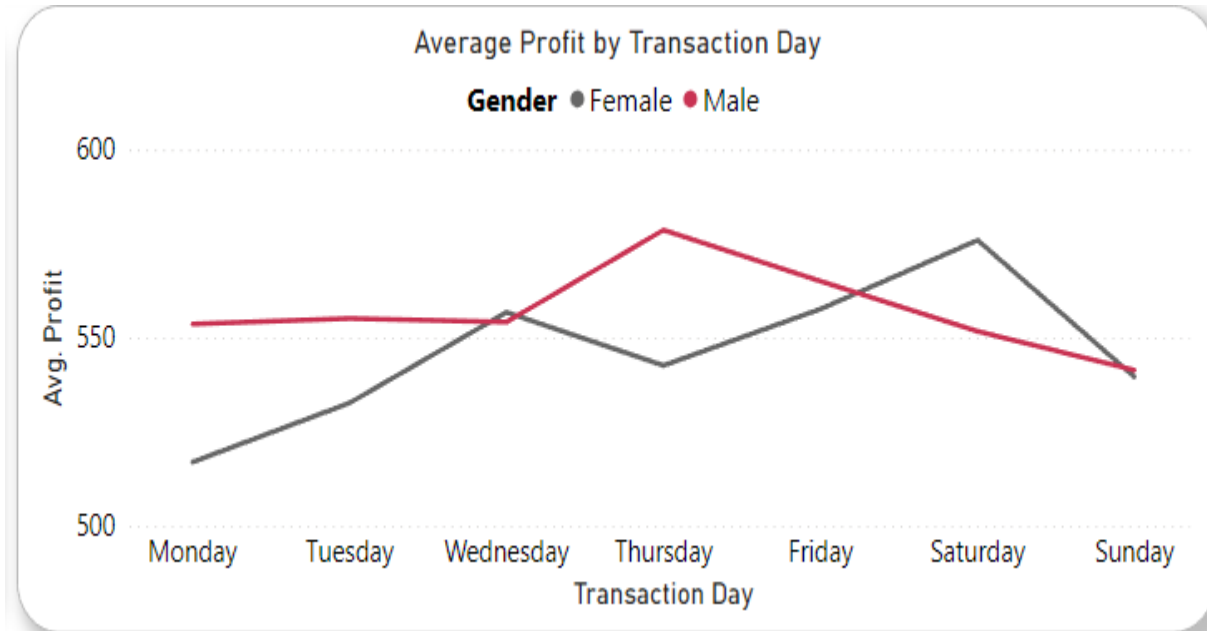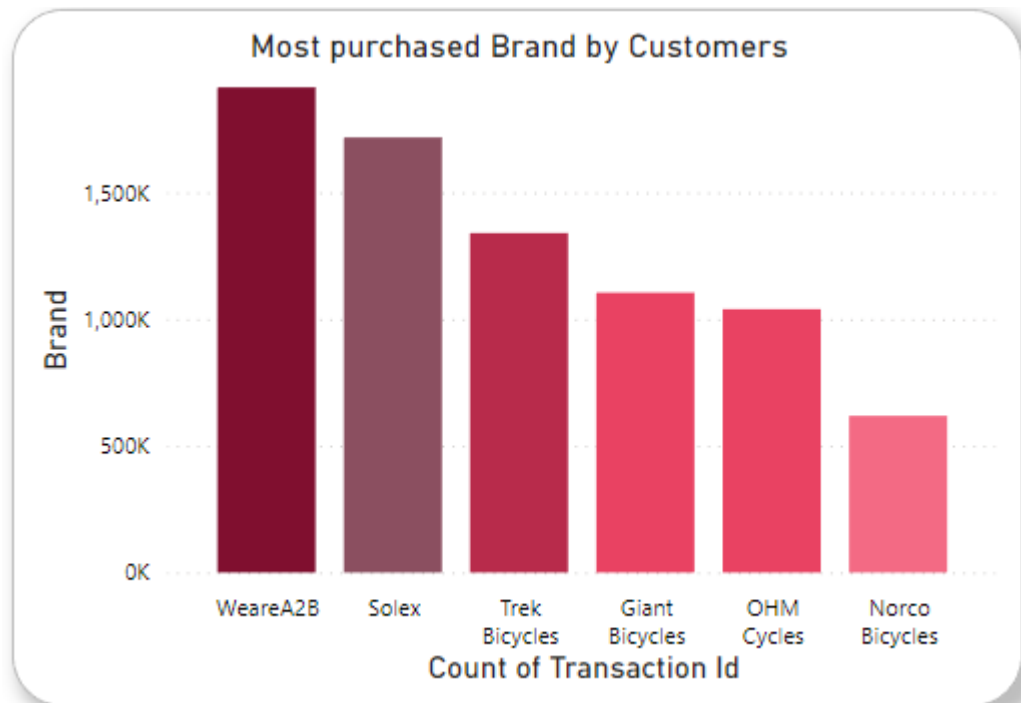
Total Profit based on customers Industry

Insights:

The customers related to Financial Service and Manufacturing showing most profit with 18 lacs + profit.

Total Profit based on Customers Industry
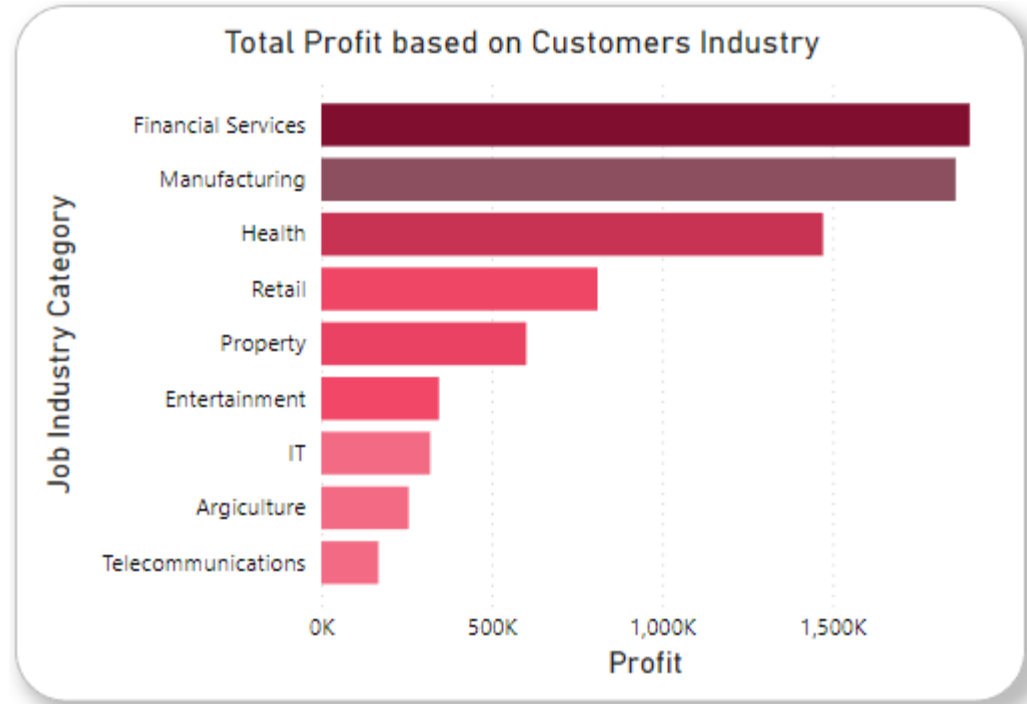
Most purchased brands among customers

Insights:
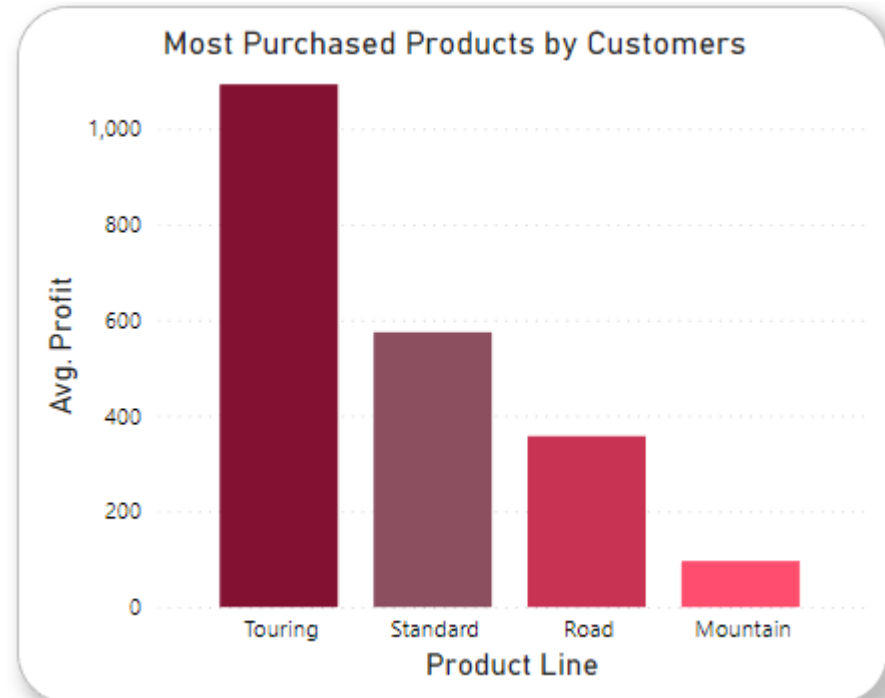Among all the brands Solex are more in demand with transaction count of more than 3000.

Most purchased Brand by Customers

Most purchased products among customers

Insights:

Standard product are the most buyable products by customers among the other products with more than 10000 + transactions.

Total Profit based on Wealth Segment of customers

Insights:

The mass customer are the most profitable segment among the three segments. Nearly 50% of the profit are from this segment.

Total Profit based on Customer Segment

Affluent Customer 1922K

Mass Customer 3863K

High Net Worth 1966K
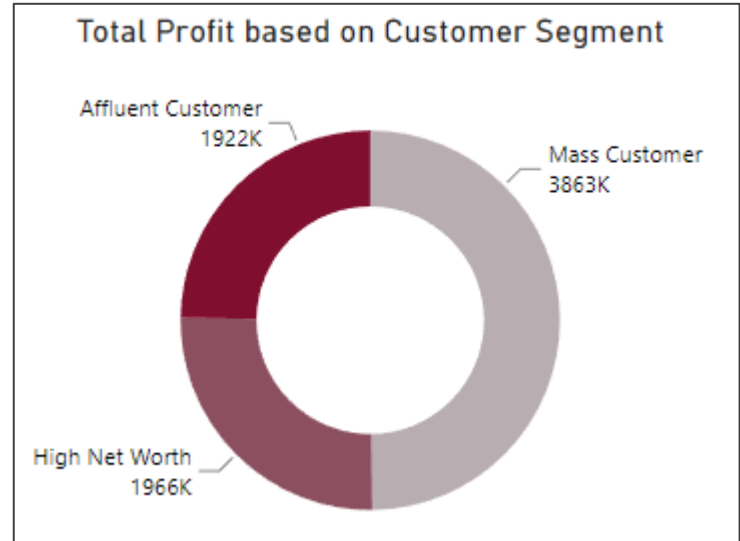
Total Profit based on States in Australia

Insights:

Customers living in New South wales are the most profitable customers with more than 50% profit among the other States.

Total Profit based on Customer State

- QLD 1716K
- VIC 1950K
- NSW 4078K
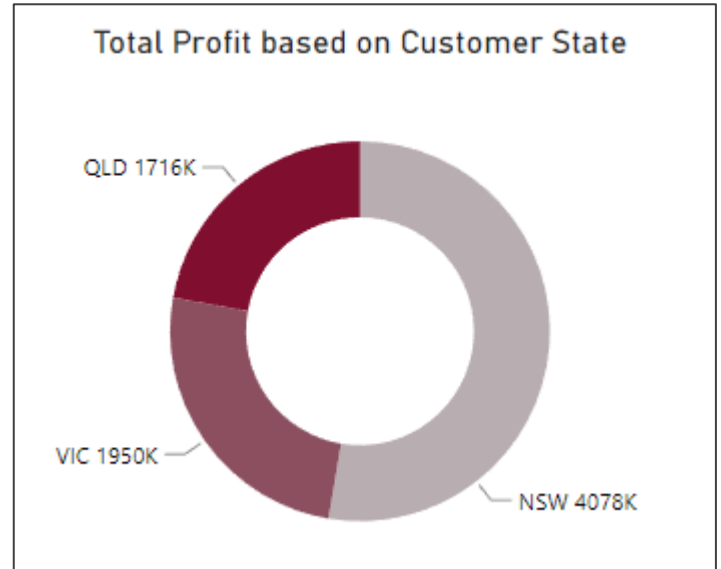
Marketing team should deploy the targeted model based on -

- Customer between the age 30 to 49.
- Male customers in the mid-year i.e April - July and in the midweek around Thursday.
- Female customers around October and in the start of the weekend Saturday.
- Customers related to Financial Services and Manufacturing Industries.
- Solex brand and Standard product as the top priority.
- Customers in the Mass Consumer Segment.
- Customers living in New South Wales.

After filtering the targeted customers from the New Customer List, it will look like below

Gender	Age	Job Title	Job Industry Category	Wealth Segme	State	Country
Male	41	Compensation Analyst	Financial Services	Mass Customer	NSW	Australia
Male	45	Speech Pathologist	Manufacturing	Mass Customer	NSW	Australia
Male	49	Programmer I	Manufacturing	Mass Customer	NSW	Australia
Female	30	Paralegal	Financial Services	Mass Customer	NSW	Australia
Female	36	Marketing Assistant	Manufacturing	Mass Customer	NSW	Australia
Female	45	Computer Systems Analyst IV	Manufacturing	Mass Customer	NSW	Australia
Male	42	Civil Engineer	Manufacturing	Mass Customer	NSW	Australia
Female	38	Community Outreach Specialist	Financial Services	Mass Customer	NSW	Australia
Male	48	VP Sales	Financial Services	Mass Customer	NSW	Australia
Male	43	Computer Systems Analyst I	Manufacturing	Mass Customer	NSW	Australia
Male	37	Statistician I	Financial Services	Mass Customer	NSW	Australia
Female	42	Cost Accountant	Financial Services	Mass Customer	NSW	Australia
Female	41	Accountant III	Manufacturing	Mass Customer	NSW	Australia
Male	49	Senior Sales Associate	Manufacturing	Mass Customer	NSW	Australia
Female	46	Business Systems Development Analyst	Financial Services	Mass Customer	NSW	Australia
Male	32	VP Accounting	Financial Services	Mass Customer	NSW	Australia
Female	42	Web Designer IV	Manufacturing	Mass Customer	NSW	Australia
Female	41	VP Product Management	Manufacturing	Mass Customer	NSW	Australia
Male	44	Financial Analyst	Financial Services	Mass Customer	NSW	Australia

You can check the [cleaned dataset](#) here.

Thank You