

The Analytics Team

Sprocket Central Pty Ltd

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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. *(However, these customers do not have prior transaction history with the organisation.)*

Our goal:

The marketing team at Sprocket Central Pty Ltd want to know about useful customer insights which could help 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 → Cleaned for better quality
- Data Transformation → Merged the *transactions, customer demographic, customer address*
- Data Exploration → Explore the data to reveal insights

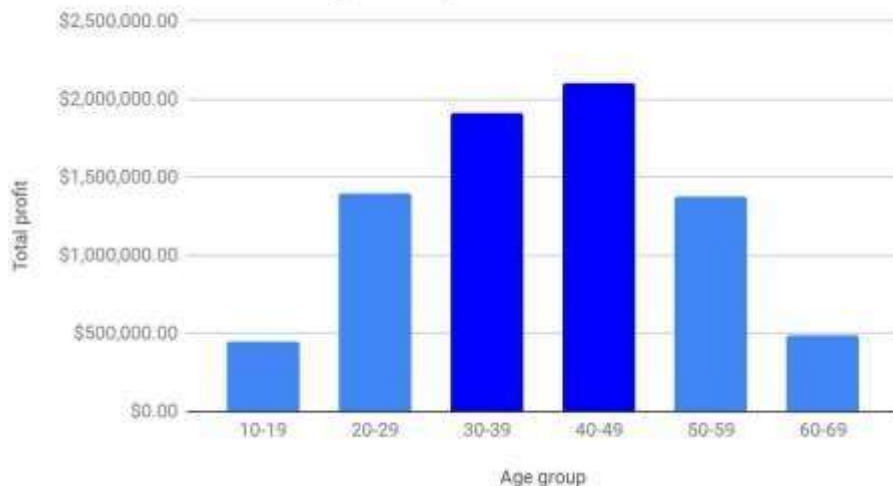
Data Exploration

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.

Total Profit based on Age Group



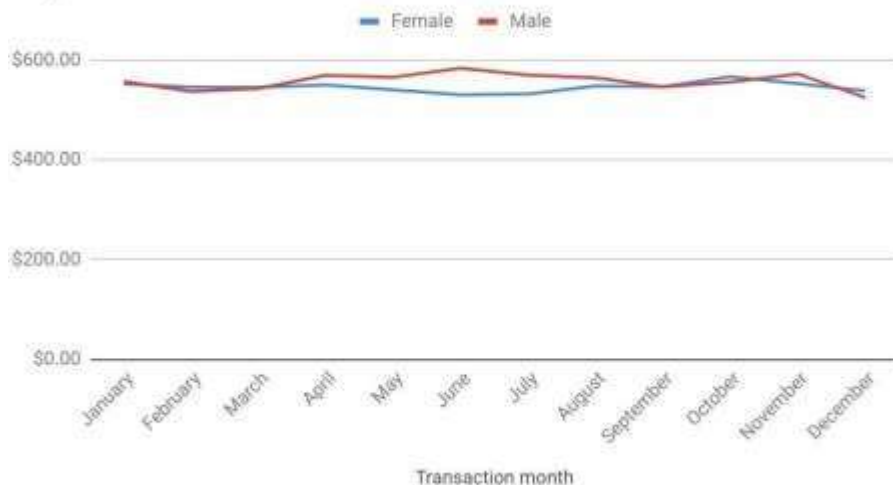
Data Exploration

Average Profit in the year 2017 by Gender

Insights:

Male customers are more profitable in the between the mid year i.e. April - July while female customers are showing slight peak around October.

Avg. Profit in 2017 based on Gender



Data Exploration

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**.

Avg. Profit by Weeks based on Gender



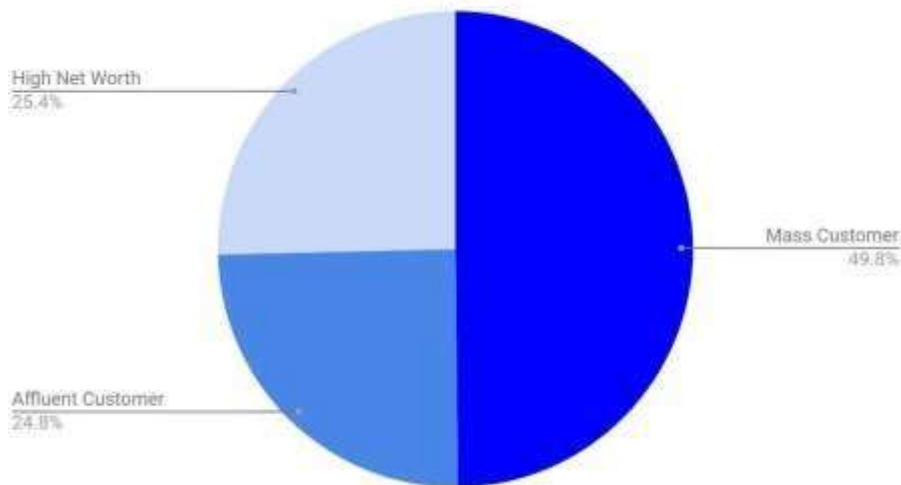
Data Exploration

Total Profit based on Wealth Segment of customers

Insights:

The **mass customer** are the most profitable segment among the three segments as **nearly 50% of the profit** is made by this segment.

Total Profit based on Wealth Segment

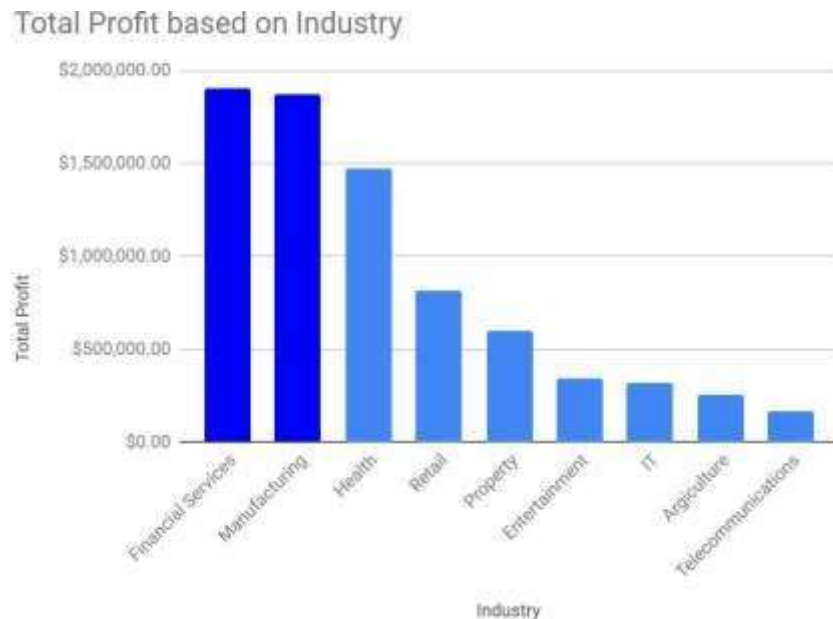


Data Exploration

Total Profit based on customers Industry

Insights:

The customers related to [Financial Service](#) and [Manufacturing](#) showing most profit with 20 lacs + profit.



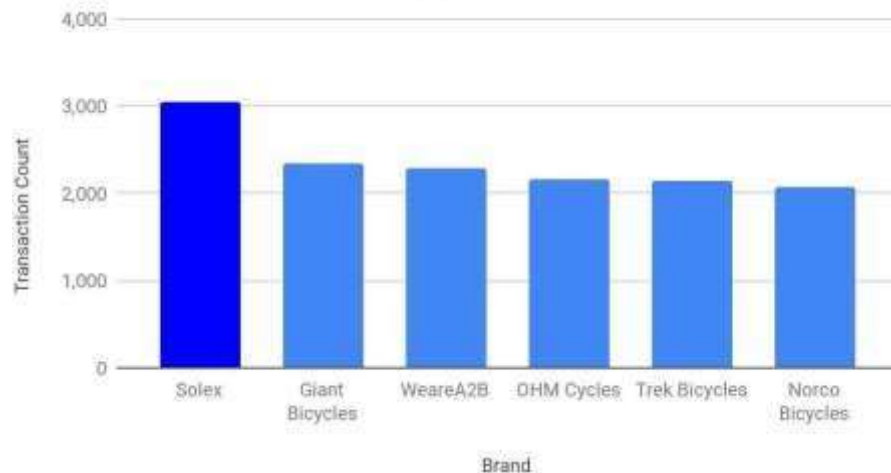
Data Exploration

Most purchased brands among customers

Insights:

Customers buy more **Solex brand** among the other brands with transaction count of more than 3000.

Most purchased Brand among customers



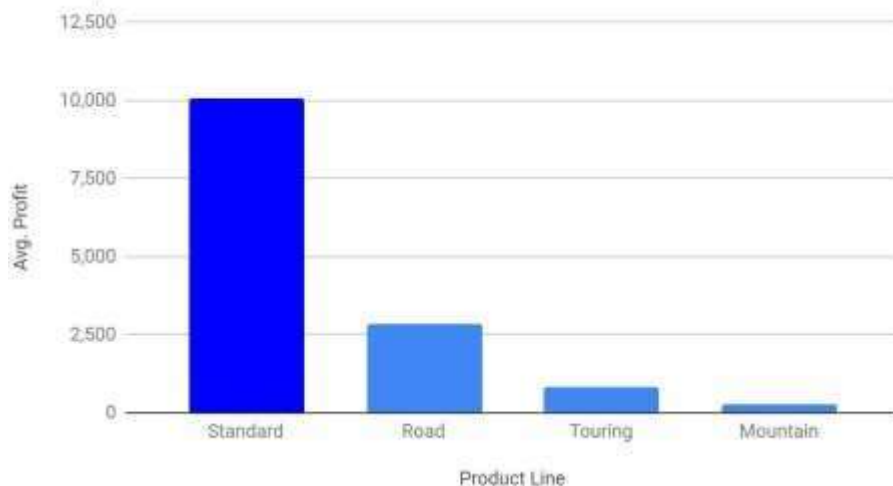
Data Exploration

Most purchased products among customers

Insights:

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

Most purchased Products



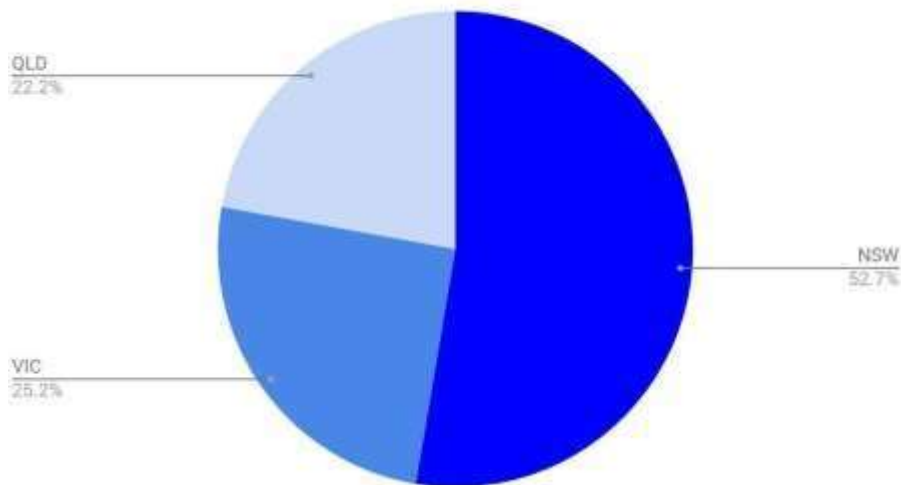
Data Exploration

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 States



Model Development

Marketing team should deploy the targeted model based on -

- Customer between **age 30 to 49**.
- Female customers **around october** and in the start of the weekend, **Saturday**.
- Customers in the **Mass Consumer** Segment.
- Customers related to **Financial Services** and **Manufacturing Industries**.
- **Solex** brand and **Standard** product as the top priority.
- Customers living in **New South Wales**.

Interpretation

Filtered Targeted Customers from New Customer List

first_name	last_name	gender	past_3_years_bike_related_purchase	DOB	Age	job_title	job_industry_category	wealth_segment	deceased_indicator	owns_car	tenure	address
Rutledge	Halt	Male	23	1976-10-06	46	Compensat	Financial Services	Mass Customer	N	No		8 7 Nevada C
Sybilla	MacCart	Female	88	1987-01-15	35	Paralegal	Financial Services	Mass Customer	N	Yes		7 74 Welch F
Martelle	Tuppeny	Female	52	1981-02-03	41	Marketing /	Manufacturing	Mass Customer	N	No		9 261 Grayhu
Esther	Rooson	Female	14	1981-02-22	41		Financial Services	Mass Customer	N	No		5 5186 Main
Ricki	Dobrowski	Male	13	1975-03-10	47	Civil Engine	Manufacturing	Mass Customer	N	Yes		9 8 Eggendar
Nowell	Preddy	Male	29	1985-07-23	37		Manufacturing	Mass Customer	N	No		9 932 Glend
Daryl	Pauncefort	Female	12	1979-06-18	43	Community	Financial Services	Mass Customer	N	Yes		12 0 Dexter P
Feodor	Vickers	Male	60	1989-11-18	33	VP Quality (Financial Services	Mass Customer	N	Yes		4 40809 Truz
Harlin	Mazin	Male	34	1974-03-25	48	Computer S	Manufacturing	Mass Customer	N	Yes		13 735 Westri
Dorian	Stollen	Male	78	1980-02-16	42	Statistician	Financial Services	Mass Customer	N	Yes		18 72922 Carr
Sunny	Christescu	Female	90	1975-03-12	47	Cost Accou	Financial Services	Mass Customer	N	No		11 6668 Blue
Theresa	Cowper	Female	99	1976-08-24	46	Accountant	Manufacturing	Mass Customer	N	No		3 88 Miffin I
Biddie	Gorce	Female	68	1988-01-30	34	Senior Finai	Financial Services	Mass Customer	N	Yes		5 2116 Conti
Dodi	Kiggel	Female	5	1980-08-15	42		Financial Services	Mass Customer	N	Yes		13 05 Everett
Freddi	Litherborough	Female	46	1989-01-14	33	Product Enj	Financial Services	Mass Customer	N	No		7 7873 Mead
Sherill		Female	33	1991-12-18	31	Information	Financial Services	Mass Customer	N	No		3 53 Moulton
Tristram	Larose	Male	70	1985-01-29	37	VP Account	Financial Services	Mass Customer	N	No		17 9645 Moor
Alexina	Mabley	Female	72	1975-10-12	47	Web Design	Manufacturing	Mass Customer	N	Yes		10 9 Rieder Ju
Kathleen	Arnault	Female	6	1976-11-24	46	VP Product	Manufacturing	Mass Customer	N	Yes		13 540 Farrag
Inglebert	Aspinal	Male	4	1973-10-13	49	Financial A	Financial Services	Mass Customer	N	No		11 612 Annan
Amabel		Female	71	1981-09-14	41	Chief Desig	Financial Services	Mass Customer	N	Yes		9 3128 Malk
Ajay	Worham	Female	80	1979-09-30	43	Computer S	Manufacturing	Mass Customer	N	Yes		12 5 Homewo
Aldin	Newsome	Male	24	1981-07-06	41	Financial A	Financial Services	Mass Customer	N	No		17 058 Morn
Brendis	Pineaux	Male	12	1978-01-15	44	Mechanical	Manufacturing	Mass Customer	N	No		5 43030 Carl
Shepperd	Leonards	Male	17	1981-04-14	41	Chemical E	Manufacturing	Mass Customer	N	Yes		5 38 Nobel L

Appendix

Appendix

Thank You