

TheAnalyticsTeam

Sprocket Central Pty Ltd

Data analytics approach

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Agenda

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

Introduction

Identify & Recommend High Value Customers

Outline of Problem

- Sprocket Central is a company that specialize in high-quality bikes and accessories.
- The Marketing team is looking to boost sales.
- To target 1000 new customers that will drive the highest value for organization.

Approach for Data Analysis

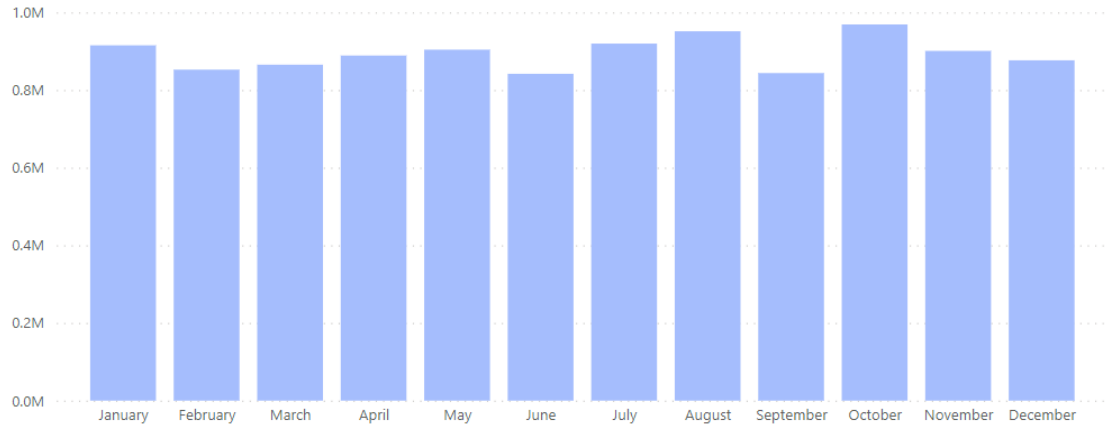
- Wealth Segment by Age Group.
- Profit attributed by States.
- Top Industries generating the highest profit and bike related sales.
- Profit attributed by Car owners.
- Customer classification.

Introduction

Profit will be used as a **metric** to define which group of customer should be targeted

Overall, the organization generated a steady profit in the months through 2017.

Profit by Months

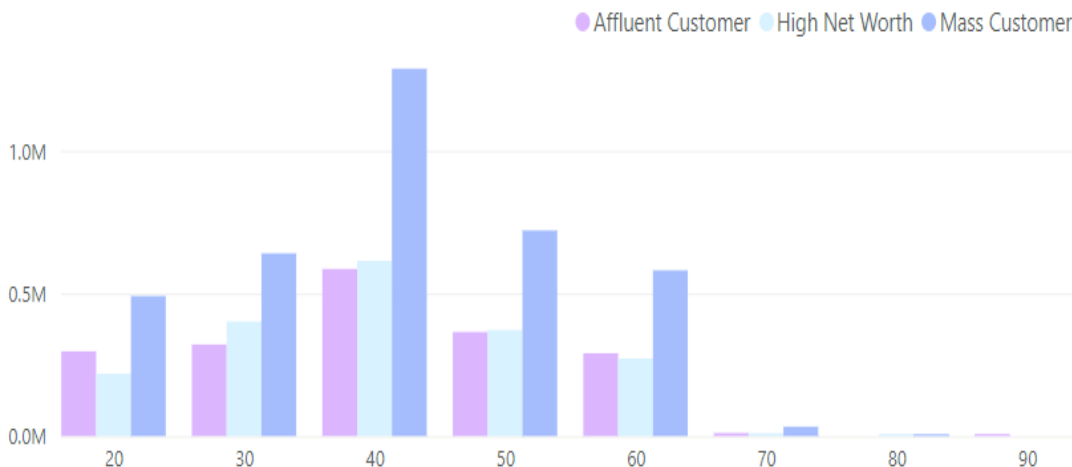


Data Exploration

Customers in **the age from 35-45** made the **highest profit** for organization

In this age group, **Mass customers** made profit **2 times larger** than both High Net Worth and Affluent customers

Profit by Age Group & Wealth Segment

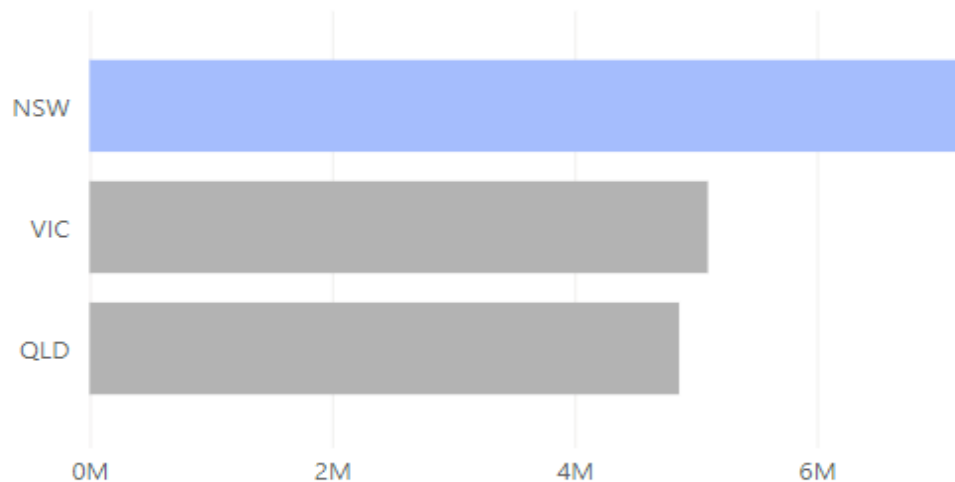


Data Exploration

By state, customers from **New South Wales (NSW)** generated the **most profit** for the organization

Profit generating from **NSW** counts for **70%** of total profit in the year 2017

Sum of Profit by state

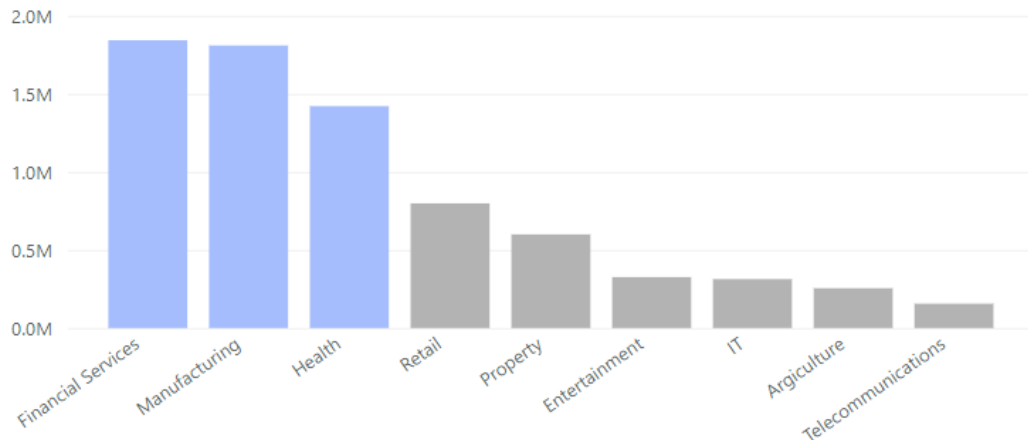


Data Exploration

By industry, customers working in **Financial Services, Manufacturing and Health** sector are likely to buy bikes and accessories the most

From New Customer dataset, Customers working in these 3 sectors also make up the **top 3** in terms of **number of new customers**

Profit by Industry

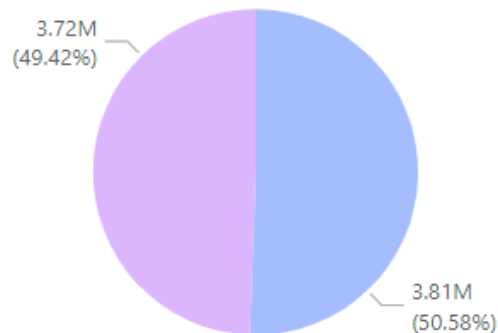


Data Exploration

For gender and car-owning customers or not, the profit generated is **quite balanced**

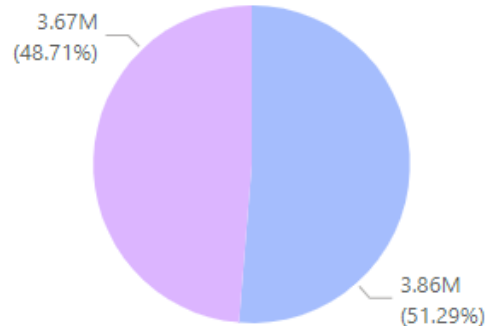
Profit by Gender

● F ● M



Profit by Car Owners & Non-Owners

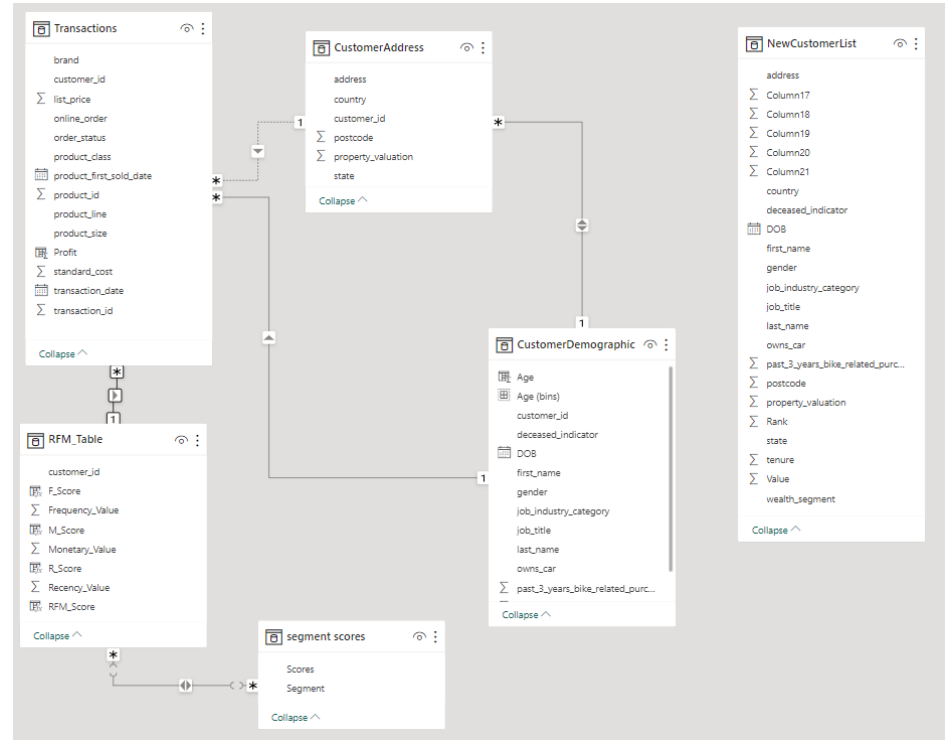
● Yes ● No



Model Development

For customer segment analysis, based on transaction data of customers, **RFM Model** will be used to classify customer into different segments

RFM Model based on **Recency**, **Frequency**, and **Monetary** score of each customer



Interpretation

This table is an **example of RFM model** after calculating scores based on transaction data

Customers will be scored on a **5-point scale** based on the **percentile distribution**

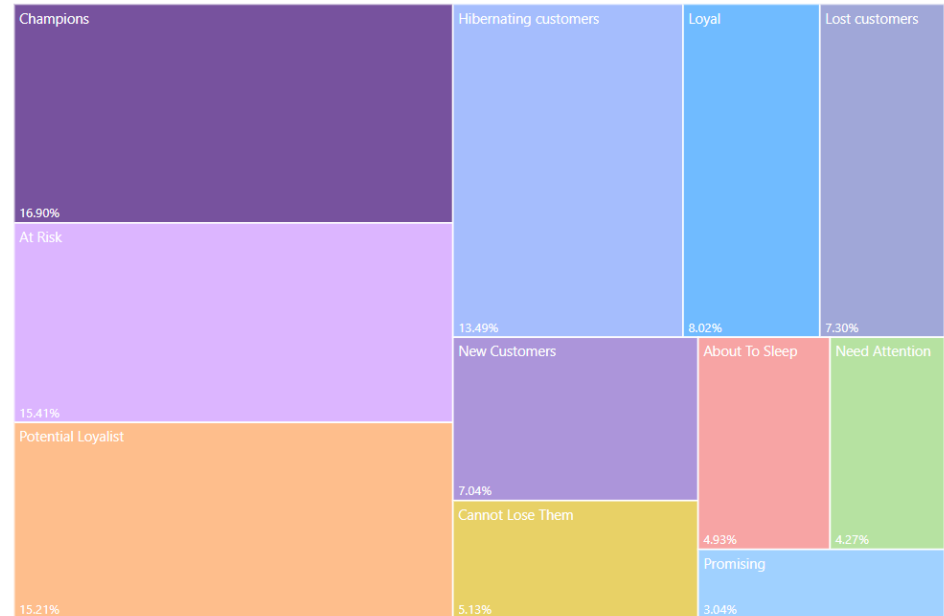
customer_id	Recency_Value	Frequency_Value	Monetary_Value	R_Score	F_Score	M_Score	RFM_Score
1	2038	11	3018.09	1	1	3	113
2	2159	3	2226.26	5	5	4	554
3	2133	7	3290.21	4	2	3	423
4	2226	2	220.57	5	5	5	555
5	2047	6	2394.94	2	3	4	234
6	2095	5	3946.55	4	4	2	442
7	2284	3	220.11	5	5	5	555
8	2053	9	5364.39	2	1	1	211
9	2109	6	2353.11	4	3	4	434
10	2074	5	3358.28	3	4	2	342
11	2077	5	3091.56	3	4	3	343
12	2098	6	3540.03	4	3	2	432
13	2058	7	4337.38	2	2	2	222
14	2078	3	1713.9	3	5	4	354
15	2066	6	1728.39	3	3	4	334
16	2130	5	4521.84	4	4	1	441
17	2031	5	2015.61	1	4	4	144
18	2165	7	3543.38	5	2	2	522
19	2311	2	1736.45	5	5	4	554
20	2062	4	3608.28	2	5	2	252
21	2037	5	4229.41	1	4	2	142
22	2128	8	5159.84	4	1	1	411
23	2041	6	4376.15	1	3	2	132
24	2048	7	3689.35	2	2	2	222
25	2036	12	5333.66	1	1	1	111
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Interpretation

This is the result after applying RFM model to classify customers into **11 different segments**

- “Champions” segment count for the **highest percentage** of total number of customers, it means that organization has a large part of mass and loyal customers.
- Customers classified as “At Risk” segment also count for large part, and it should be considered when planning marketing strategies.

% Count of Customer by Segment



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Thank You