TheAnalyticsTeam

Sprocket Central Pty Ltd

Data analytics approach

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Agenda

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

Introduction

Problem Specification

❑ Sprocket Central Pty Ltd is a company that key target is selling high-quality bikes.

❑ The company is looking to increasing their sell to the target customer

❑ 3 dataset is provided with last transaction history to analyze the dataset to find the insights.

Dataset Summary

- Purchases history for last 3 years

- Job and job industry distribution

- Customer Age

- Wealth & Vehicle status

- RFM Analysis

Data Exploration

Data Quality Assessment

Key Issues :
- Accuracy
- Completeness
- Consistency
- Currency
- Relevancy
- Validity
- Uniqueness

-Details in the email solution
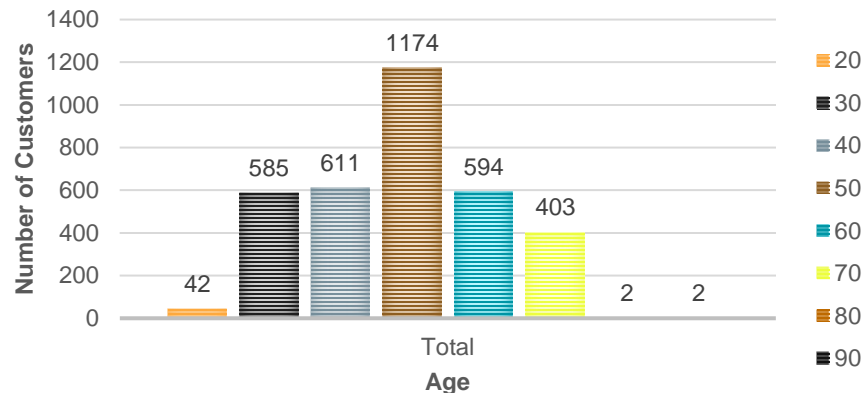
Data Exploration

Customers' Age Distribution

- The difference between new and old customers value is quick significate.
- The greatest number of customers are in age to 40-50
- The young customer based is gradually increasing
- New customer list is quite high in middle age people
- New Customer list suggest that whose age is 70+ getting deceased
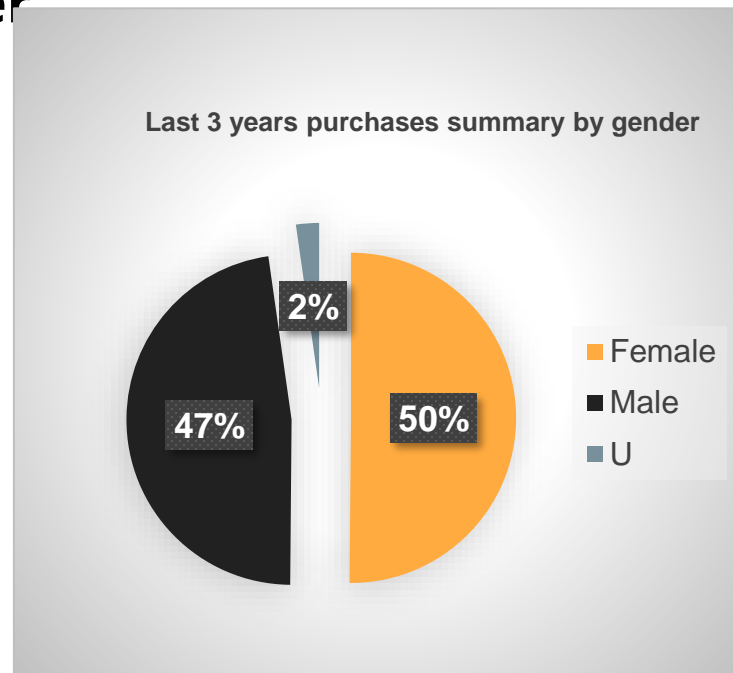

OLD CUSTOMER BY AGE
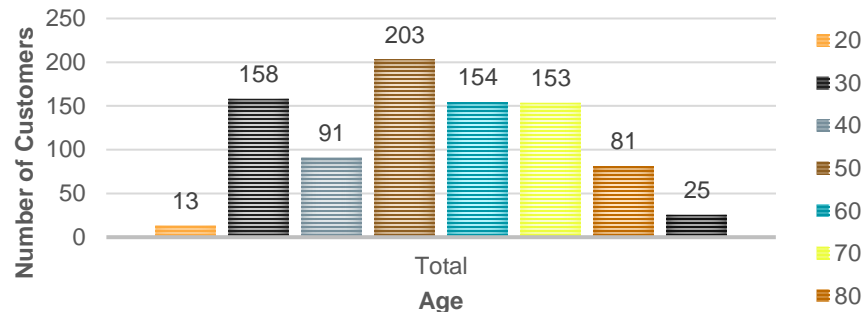
NEW CUSTOMER BY AGE

Data Exploration

Last 3 years purchases summary by gender

- From last 3 years of purchases it slows that male customer is 50% and female customer in 49%.
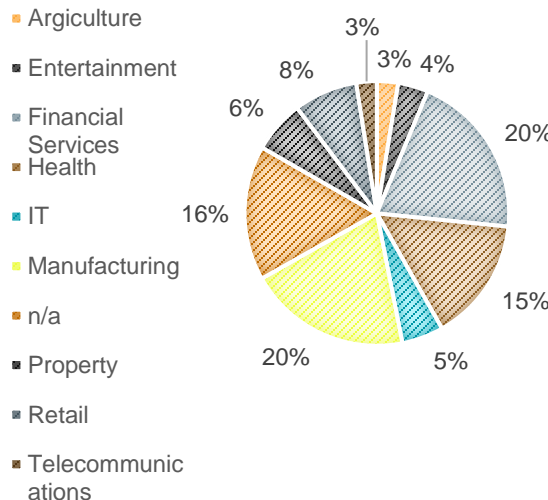- 2% is customer have unknown value.

Last 3 years purchases summary by gender
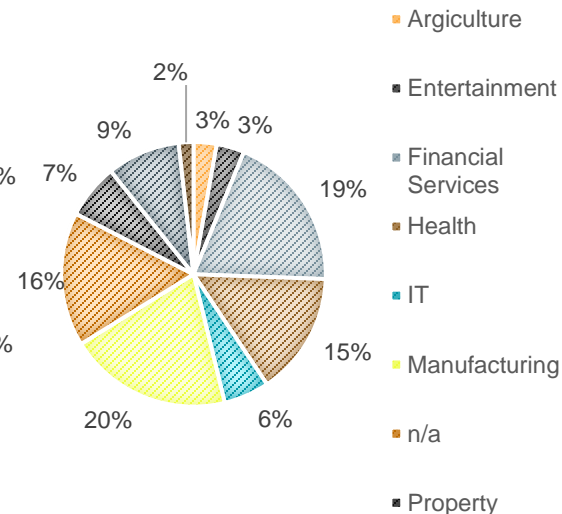
Data Exploration

Job Distribution

- From dataset it is slowing that 21% customer is from financial services

- 20% from manufacturing

- 15% from Health Industry

- In respect of job industry, most of the customer remain same. Not any notable change.

NEW CUSTOMER

Legend:
- Argiculture
- Entertainment
- Financial Services
- Health
- IT
- Manufacturing
- n/a
- Property
- Retail
- Telecommunications

Values: 3%, 3%, 4%, 8%, 6%, 20%, 16%, 15%, 5%, 20%

OLD CUSTOMER

Legend:
- Argiculture
- Entertainment
- Financial Services
- Health
- IT
- Manufacturing
- n/a
- Property

Values: 2%, 3%, 3%, 9%, 7%, 19%, 16%, 15%, 6%, 20%

Data Exploration

Car Status Distribution

- NSW is the largest number of customer who do not owned car. However, the customer number is NSW in higher than other state.

- In Victoria, Almost same number of people who owned car or who does not.

- Queensland car owned customer number higher than who does have any personal car.

Car Status Distribution
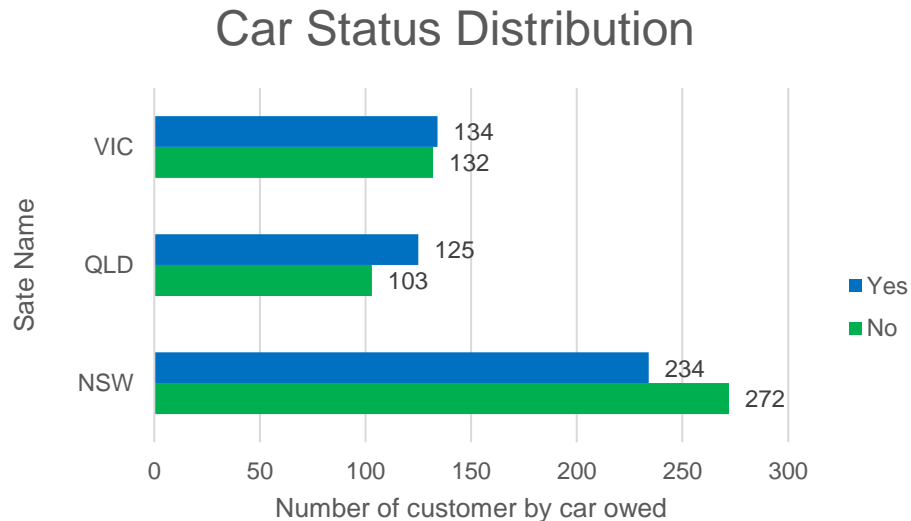
Model Development

RFM Analysis

- **RFM** (recency, frequency, monetary) **analysis** is a marketing technique used to determine quantitatively which customers are the best ones by examining recent purchased, frequency of purchased and customer spending.


CHART TITLE
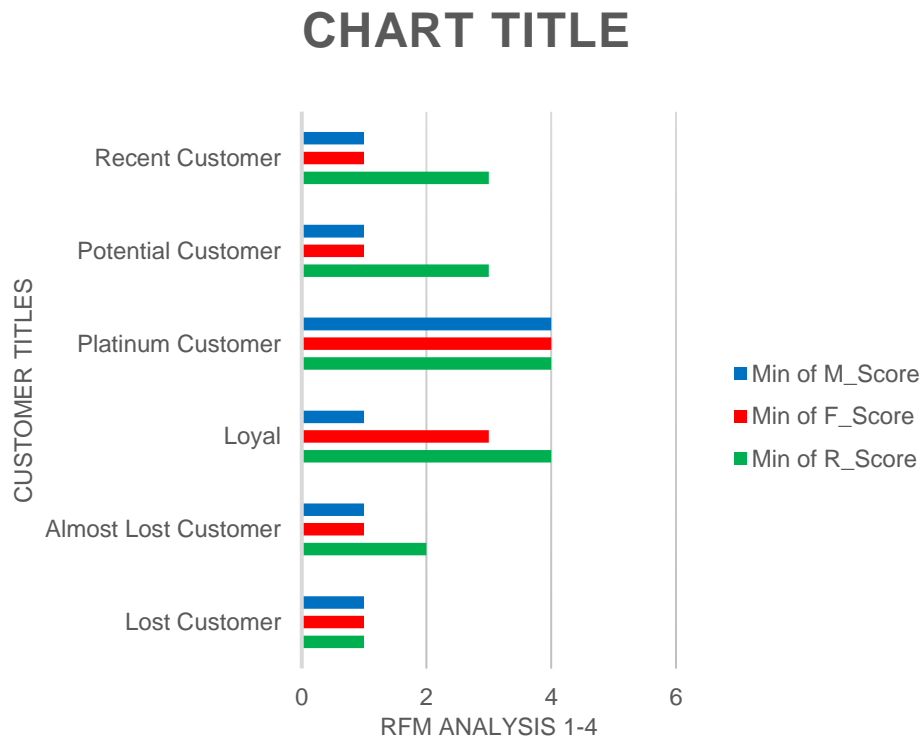
Model Development

Customer Titles in according RFM value

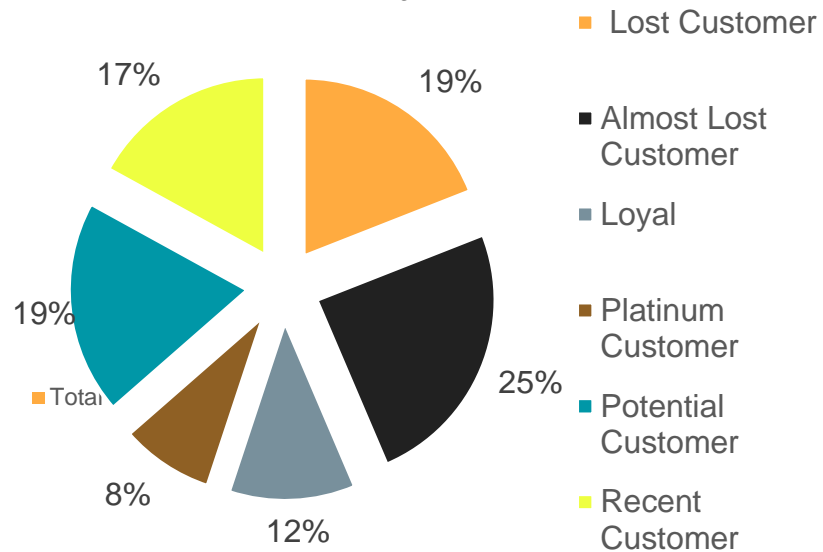| Rank	Customer Titles	Description	RFM Value
1	Platinum Customer	Customer who engagement regularity and spend most	444
2	Loyal	Customer who buy quite frequently and spend regularly	433
3	Recent Customer	Customer who recently purchase and purchase before but not very frequent	344
4	Potential Customer	Customer who purchase for the first time	311
5	High Risk Customer	Customer who spend after a while	251
6	Almost Lost Customer	Customer who low frequency, but purchase before	151
7	Lost Customer	Customer who purchase occasionally and never come back	111

Model Development

Customer Title Distribution

CUSTOMER DISTRIBUTION
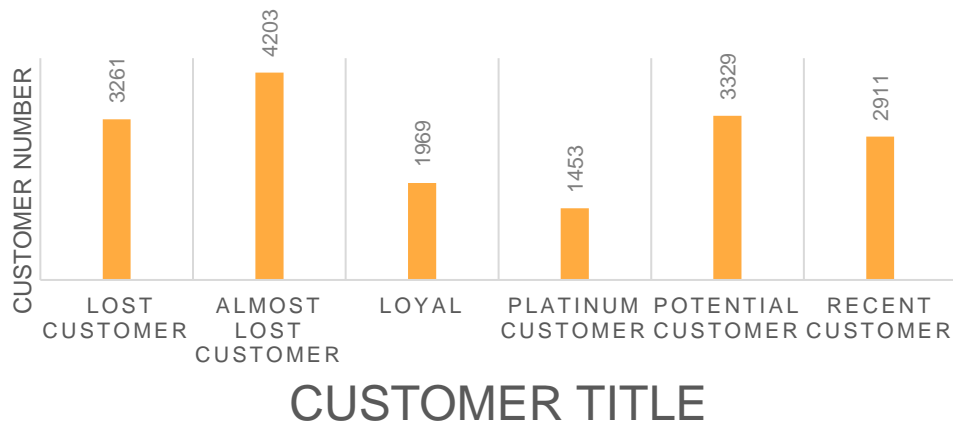
Customer Title Distribution By %

Interpretation

Target Top 1000 Customer

Rank	Customer Title	Description	Customer Numbers
1	Platinum Customer	Customer who engagement regularity and spend most	1453
2	Loyal	Customer who buy quite frequently and spend regularly	1969
3	Recent Customer	Customer who recently purchase and purchase before but not very frequent	2911
4	Potential Customer	Customer who purchase for the first time	3329
5	Almost Lost Customer	Customer who low frequency, but purchase before	4203
6	Lost Customer	Customer who purchase occasionally and never come back	3261

- Focus Top 1000 Potential Customer who purchase recently

Appendix