

**The analytics team**

**Sprocket Central Pty Ltd**

Data analytics approach

# Agenda

The approach will be implemented in three stages :

- ❑ Data Exploration
- ❑ Model Development
- ❑ Interpretation

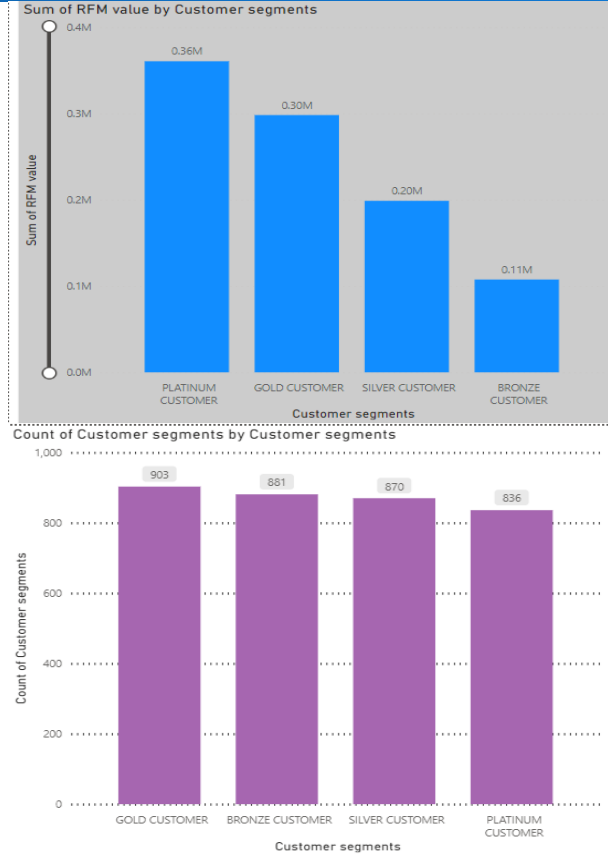
# Agenda

## Approach for New Customer Data analysis :

- ☐ Recency, Frequency and Monetary
- ☐ Age distribution
- ☐ Job industry and Gender
- ☐ Number of cars owned
- ☐ States and wealth segment
- ☐ Past 3 years bike related purchase by state and brand

# Data Exploration : RFM analysis

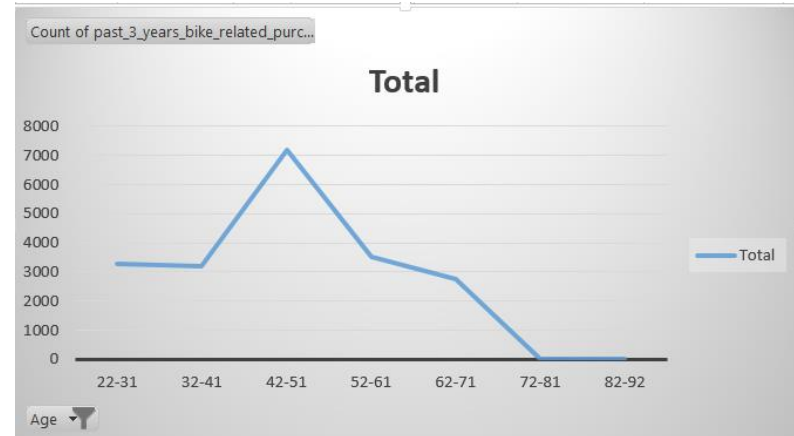
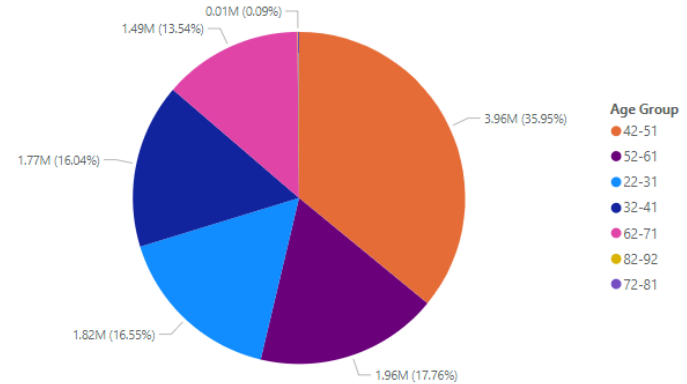
- ❑ On performing the RFM- Recency, Frequency and monetary analysis for the customer segmentation, it is seen that platinum customers contribute to the most of the profit for the organization.
- ❑ Also, they are present in lesser amount than gold and silver customers. Hence the target is to retain as many platinum customers and also the company should try measures in converting the other categories of customers to platinum customers.



# Data Exploration : Age Distribution

- ❑ There are more number of customers and the major contribution of profit is provided by the age group between 42-51 followed by 52-61 & 22-31.
- ❑ Fewer customers are from 82-92 and 72-81.
- ❑ Data shows age group **42-51** has high count in terms of purchase made in last 3 years.
- ❑ Since they depict a higher level of purchase rate, the target has to be made to retain them and also improve the purchase rate for other categories.

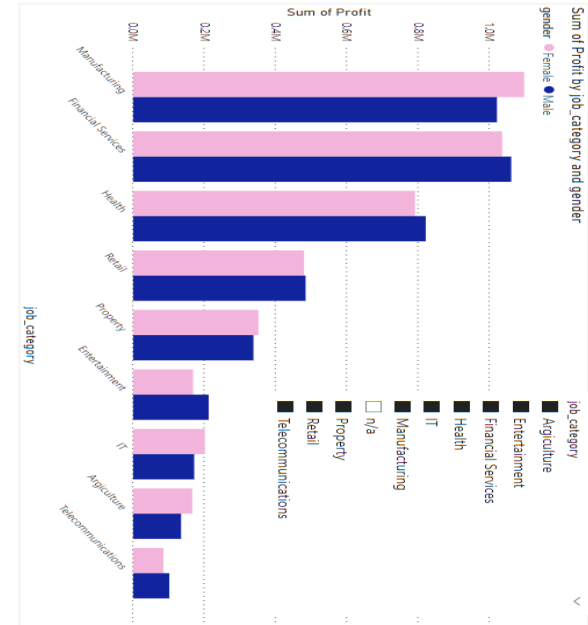
Sum of Profit by Age Group



# Data Exploration : Job Industry and gender

- ❑ Manufacturing, financial services and Health are the three sectors that play a huge role in profit generation.
- ❑ The proportion of women and men contribution corresponding to the profit generated by each industry is merely the same, however women depict slightly higher percentage of profit than men.
- ❑ The target is to retain the female customers and customers belonging to eh top 3 job sectors.

gender	Sum of Profit
Female	4,373,616.27
Male	4,341,955.66
Total	8,715,581.93



# Data Exploration : State and wealth segment

- ❑ New South wales seems to have high potential customers than the other states.
- ❑ The presence of affluent, mass and High net worth customers are more in this area.
- ❑ All the three categories of customers in the area contribute in a greater extent to the profit of the organization.
- ❑ Also, mass customers are present more in numbers than the other division of customers. Hence NSW is the target having high valued customers.



wealth_segment	NSW	QLD	VIC	Total
Affluent Customer	1,324,392.41	607,329.86	674,630.78	2,606,353.05
High Net Worth	1,492,945.58	552,268.67	683,452.68	2,728,666.93
Mass Customer	2,659,195.03	1,129,200.36	1,376,394.24	5,364,789.63
Total	5,676,533.02	2,288,798.89	2,734,477.70	10,699,809.61

wealth\_segment

☐ (Blank)

☒ Affluent Customer

☒ High Net Worth

☒ Mass Customer

state

☐ (Blank)

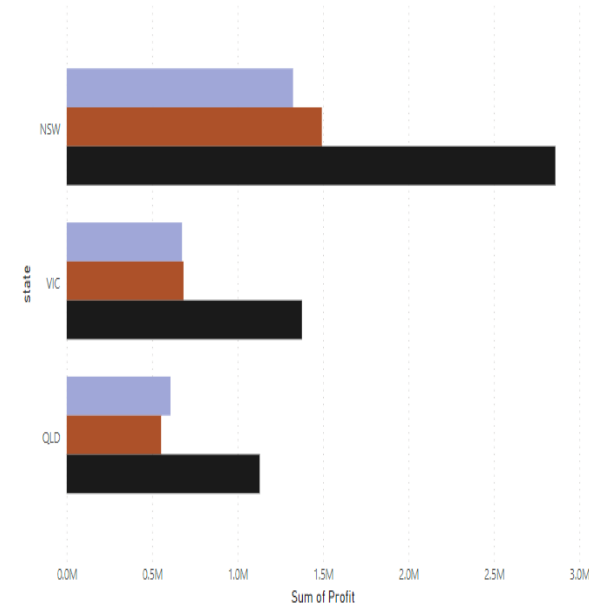
☒ NSW

☒ QLD

☒ VIC

Sum of Profit by state and wealth\_segment

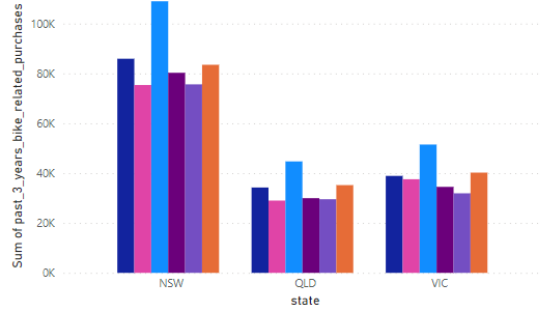
wealth\_segment ● Affluent Customer ● High Net Worth ● Mass Customer



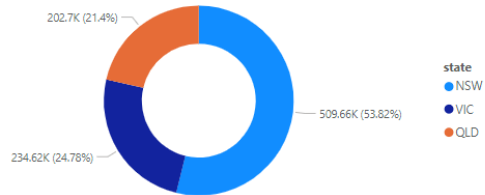
# Data Exploration : Past 3 year purchase, state and brand

Sum of past\_3\_years\_bike\_related\_purchases by state and brand

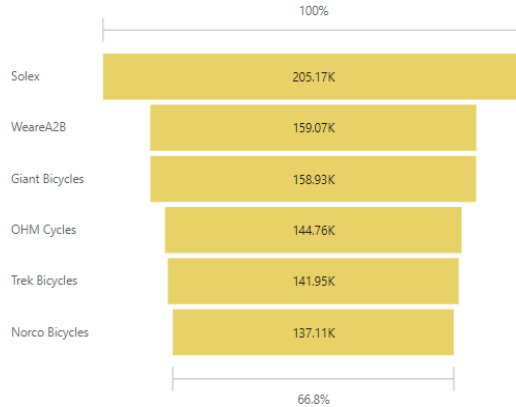
brand ● WeareA2B ● Trek Bicycles ● Solex ● OHM Cycles ● Norco Bicycles ● Giant Bicycles



Sum of past\_3\_years\_bike\_related\_purchases by state



Sum of past\_3\_years\_bike\_related\_purchases by brand



state  
□ (Blank)  
■ NSW  
■ QLD  
■ VIC

□ The total number of purchase that has been made in the last 3 years is higher for the brand Solex and WeareA2B. This can signify that our target customers are set to have a high affinity towards this brand.

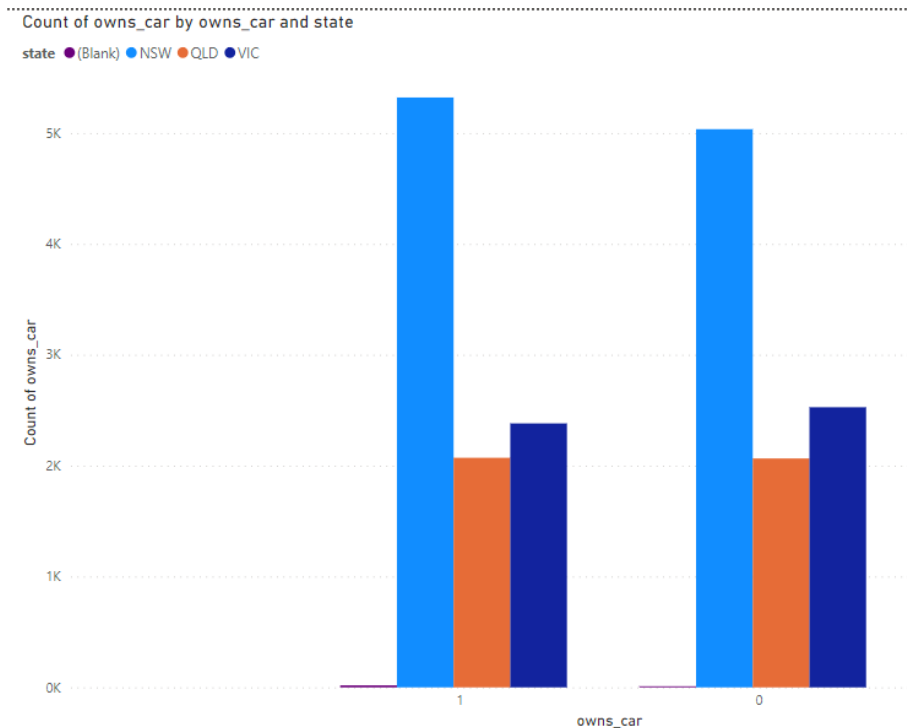
□ Again the customers belonging to the NSW has made a significant amount of purchases in the last 3 years.

□ Hence the target is now set for the customers who are inclined towards buying these specific brands and those who belong to NSW.



## Data Exploration : cars owned and state

The total number of customers  
Owning and not owning cars  
are equal in number in the state  
NSW. Hence there is a great  
Chance to find the potential  
Customers in this state.



# Model Development

## CUSTOMER CLASSIFICATION – *Targeting High Value Customers*

**The following are the high-value clients to target from the new list :**

- ☐ Aged between 40 – 50.
- ☐ Most of the high value customers are female compared to male
- ☐ Working in Financial Service, Manufacturing and Health.
- ☐ Who are currently living in New South Wales and Victoria.

A sample of High value customers are shown below

## HIGH-VALUE CUSTOMER SUMMARY TABLE

online_ord	order_stat	list_pri	standard_cc	customer_id	past_3_years_bike_related_purchase	wealth_segment	gender	state	Age	owns_c	p	brand	job_category
1	1	774.53	464.72	2332	99	High Net Worth	Male	NSW	46	1	86	Norco Bicycles	Property
1	1	1292.84	13.44	3035	98	High Net Worth	Male	NSW	43	0	15	WeareA2B	Health
1	1	1842.92	1105.75	576	98	Mass Customer	Male	NSW	46	1	71	Solex	Retail
1	1	688.63	612.88	262	97	High Net Worth	Male	NSW	46	1	56	Norco Bicycles	Health
0	1	290.62	215.14	1674	97	High Net Worth	Female	NSW	46	0	0	Trek Bicycles	Manufacturing
1	1	742.54	667.4	355	97	Mass Customer	Female	NSW	44	1	9	OHM Cycles	Retail
0	1	1765.3	709.48	1507	97	High Net Worth	Male	NSW	46	1	12	Giant Bicycles	Manufacturing
0	1	1362.99	57.74	2156	96	Mass Customer	Male	NSW	46	1	89	WeareA2B	Retail
1	1	1362.99	57.74	2422	96	High Net Worth	Female	NSW	45	0	17	WeareA2B	Entertainment
0	1	290.62	215.14	2156	96	Mass Customer	Male	NSW	46	1	84	Trek Bicycles	Retail
1	1	1198.46	381.1	226	96	Mass Customer	Male	NSW	46	0	88	Norco Bicycles	Manufacturing
0	1	441.49	84.99	226	96	Mass Customer	Male	NSW	46	0	45	Solex	Manufacturing
0	1	792.9	594.68	3251	95	High Net Worth	Female	NSW	47	1	84	Giant Bicycles	Financial Services
1	1	1538.99	829.65	1686	95	Mass Customer	Male	NSW	43	1	25	Giant Bicycles	Agriculture

# THANK YOU