



Sprocket Central Pty Ltd

Last Update : December 2018

Presented By : Mahmoud Hassan

Agenda

1 Purpose statement(what are we talking about?)

2 Tell your story (with data)

3 Conclusion

4 Appendix

Purpose Statement

The marketing team is looking to boost business by analyzing
Its an existing customer dataset to determine customer trends and behavior.

Using the existing 3 datasets (Customer demographic,
customer address, and transactions) as a labeled dataset,
please recommend which of these 1000 new customers should be targeted to
drive the most value for the organization.

.what are we talking about ?.

1

Segmentation
Customers By
Age

We Will Discover What
Is The Highest Category
purchase By Age

2

Segmentation
By Wealth

We Will Discover What
Is The Highest Category
purchase By Wealth

3

Segmentation
By Job Industry

We Will Discover What
Is The Highest Category
purchase By Job Industry

4

Segmentation
By State

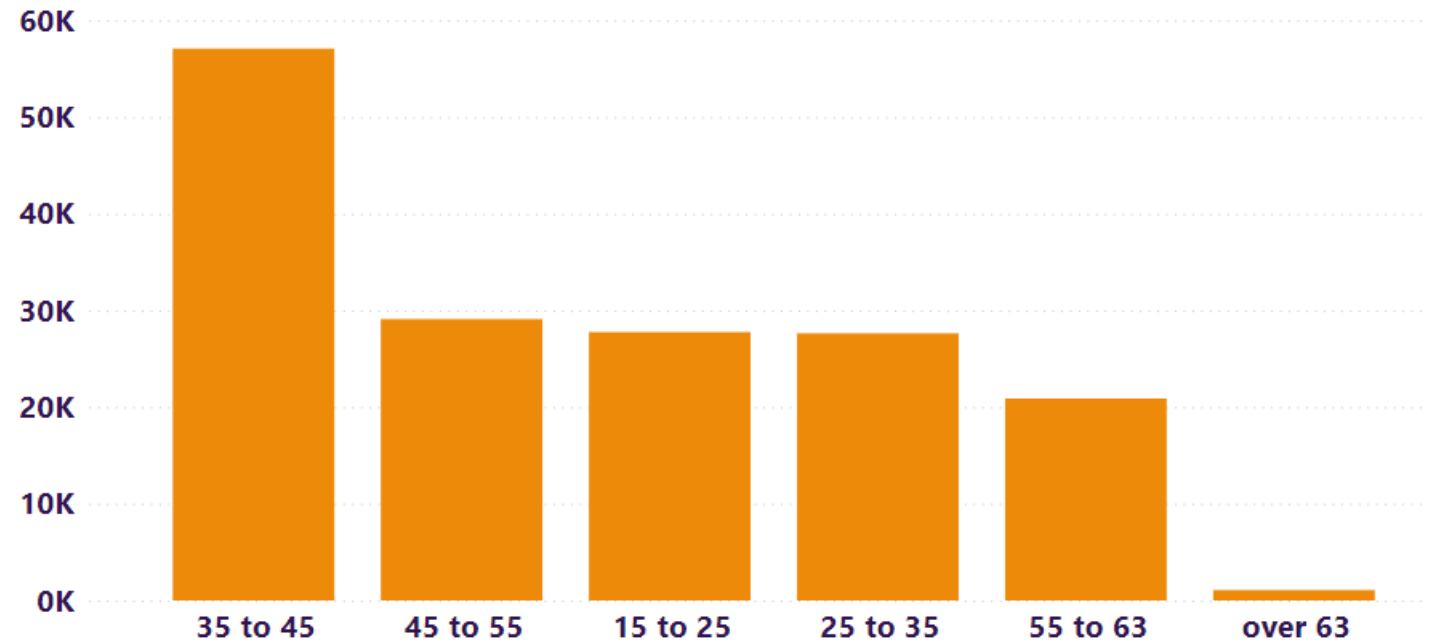
We Will Discover What
Is The Highest State For
The Purchase

Presented Data

Data Overview

- Our data shows the sum of the **purchase** last 3 years by **age category**.
- The age category was segmented into 6 categories every 10 years.
- The age category 35 to 45 is the highest purchase.

Sum Purchase By Age

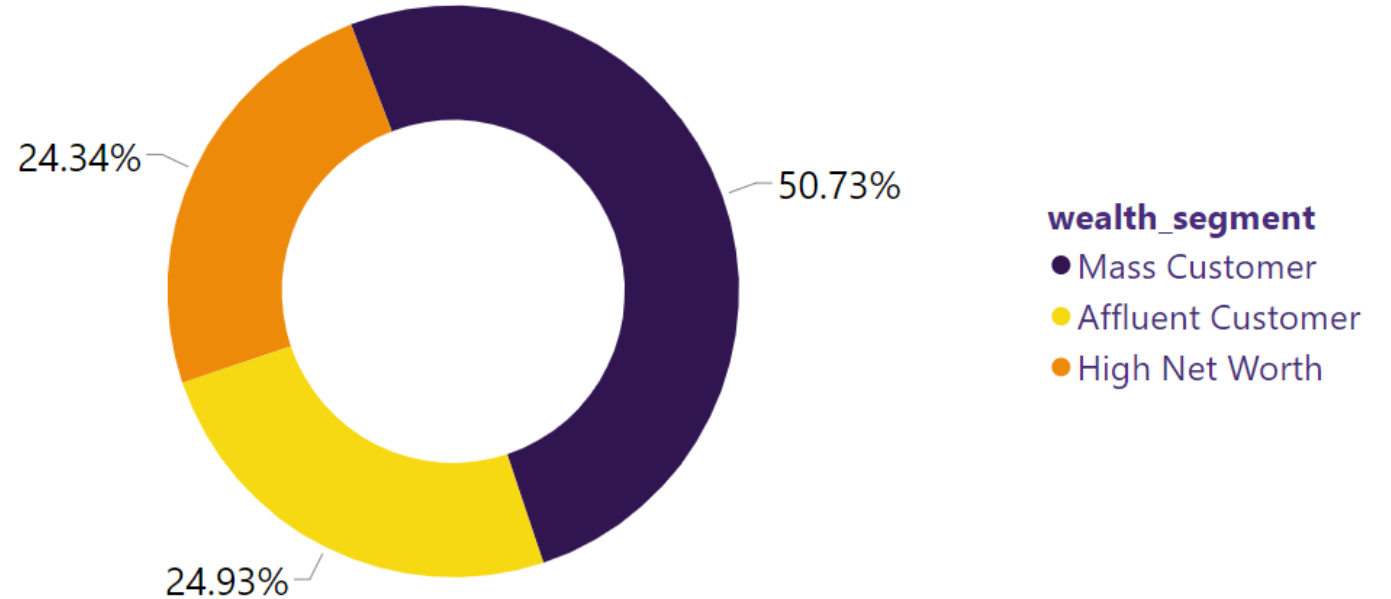


Presented Data

Data Overview

- Our data shows the sum of the purchase last 3 years by **Wealth Segment**.
- **Wealth Segment** was segmented into 3 categories.
- **Mass Customer** is the highest **wealth segment**

Sum Purchases By Wealth Segment

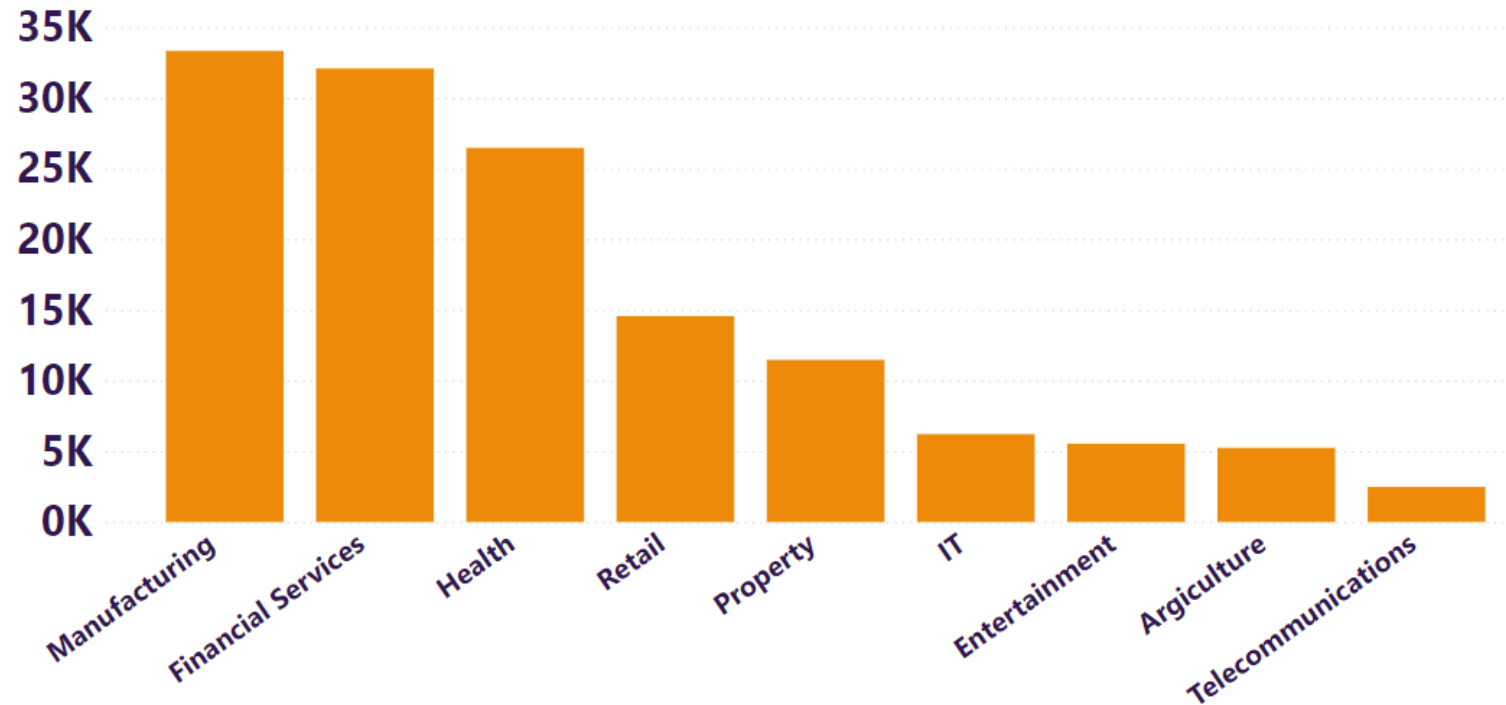


Presented Data

Data Overview

- Our data shows the sum of the purchase last 3 years by Job Industry Category.
- The job Industry Category was segmented into 9 categories.
- Manufacturing, Financial Services, and Health are the highest job Industry Category purchase.

Sum Purchase By Job Industry Category

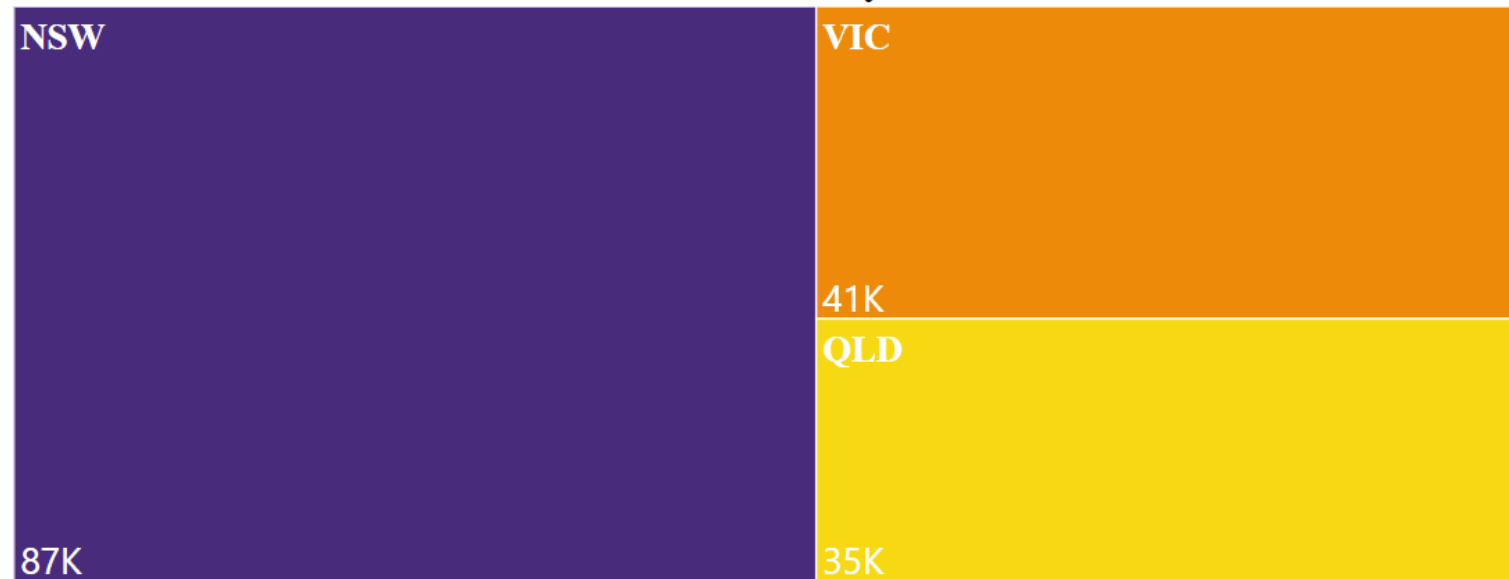


Presented Data

Data Overview

- Our data shows the sum of the purchase last 3 years by **State**.
- There are 3 States **New South Wales, Queensland, and Victoria**
- .
- **New South Wales** is the highest state purchase

Sum Purchases By State



Conclusion

1

Segmentation
Customers By
Age

The age category
35 to 45 is the highest
purchase

2

Segmentation
By Wealth

Mass Customer is the
highest wealth segment

3

Segmentation
By Job Industry

Manufacturing, Financial
Services, and Health are
the highest job Industry
Category purchase

4

Segmentation
By State

NSW is the highest state
purchase

Recommendations

1

The marketing team should target The age category 35 to 45

2

Targeting the Mass Customer category in the wealth segment

3

Targeting Manufacturing, Financial Services, and Health in the job Industry Category

4

Targeting New South Wales state



Appendix

Attributions

- I used Sprocket Central Pty Ltd data to analyze and identify customer trends.
- Data source [link](#)

- last Update Data was December 2018

Cleaning and processing data

In the Customer Demographic dataset there are some problems:

1. Last_name column has 250 cells are null values
2. The Gender column has :
(20228 cells Male and 1 cell M) for male
(One cell F, 26075 cells Female and one cell Femal) for female
(348 cells U)
3. past_3_years_bike_related_purchases column has:
 - 38 cells value = 0
 - One cell value = 1843-12-21 this is unallowable data
 - 38 cells are null values
4. job_title column has 506 cells null values.
5. job_industry_category has 656 cells value =n/a ambiguous abbreviation.
6. default column has irrelevant data.
7. tenure column has 87 cells are null values.

Customer
Demographic
Dataset

Cleaning and processing data

In the transactions dataset there are some problems:

1. transaction_date column has 360 cells are null values.
2. Brand, product_line, product_class, product_size, list_price, standard_cost, and Product_first_sold_date columns have 195 cells are null values.
3. standard_cost and list_price columns have Inconsistent data types for the same attribute.
4. product_first_sold_date was converted to date type.

Transactions
Dataset

Cleaning and processing data

In the Customer Address dataset there are some problems:

- state column has an Inconsistent data type for the same attribute (e.g. Victoria being represented as "V", "Vic" and "Victoria")
1021 " Victoria ",
86 " New South Wales "

Customer
Address
dataset



Thank You