



RANKING TOP MERCHANTS

PROJECT BUY NOW, PAY LATER

Group 45 Presents



OUR TEAM



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- Jiqiang Chen
- Junkai Zhang
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Order by Alphabetical order

ACHIEVEMENTS



●
15+
Hours

Of working time in
each week



●
6
Checkpoints

With average 10+
hours of work



●
4
Areas

Of cross-subjects
knowledge



●
2
Methods

Of group discussion,
both online and
offline by Github,
Discord, Zoom

HOW TO RANK MERCHANTS WITH MAXIMUM BENEFIT

By converge the data of Merchant,
Customer Demographics,
Transaction and Business Trend
Prediction.



TOP
100

TABLE OF DATAS

The research time line of this project is from Feb 2021 to Aug 2022

01

Commercial data

Data about merchant, customers and transaction

02

Census Data

Data contains information of regional populatoin and economy

03

Turnover data

Data for annual business growth by business areas

04

Afterpay Report

Afterpay's annual report with financial outcome

OUR APPROACH

01

Security

02

Basic idea

03

Model attributes

04

Walk through

SECURITY

Data safety is our priority

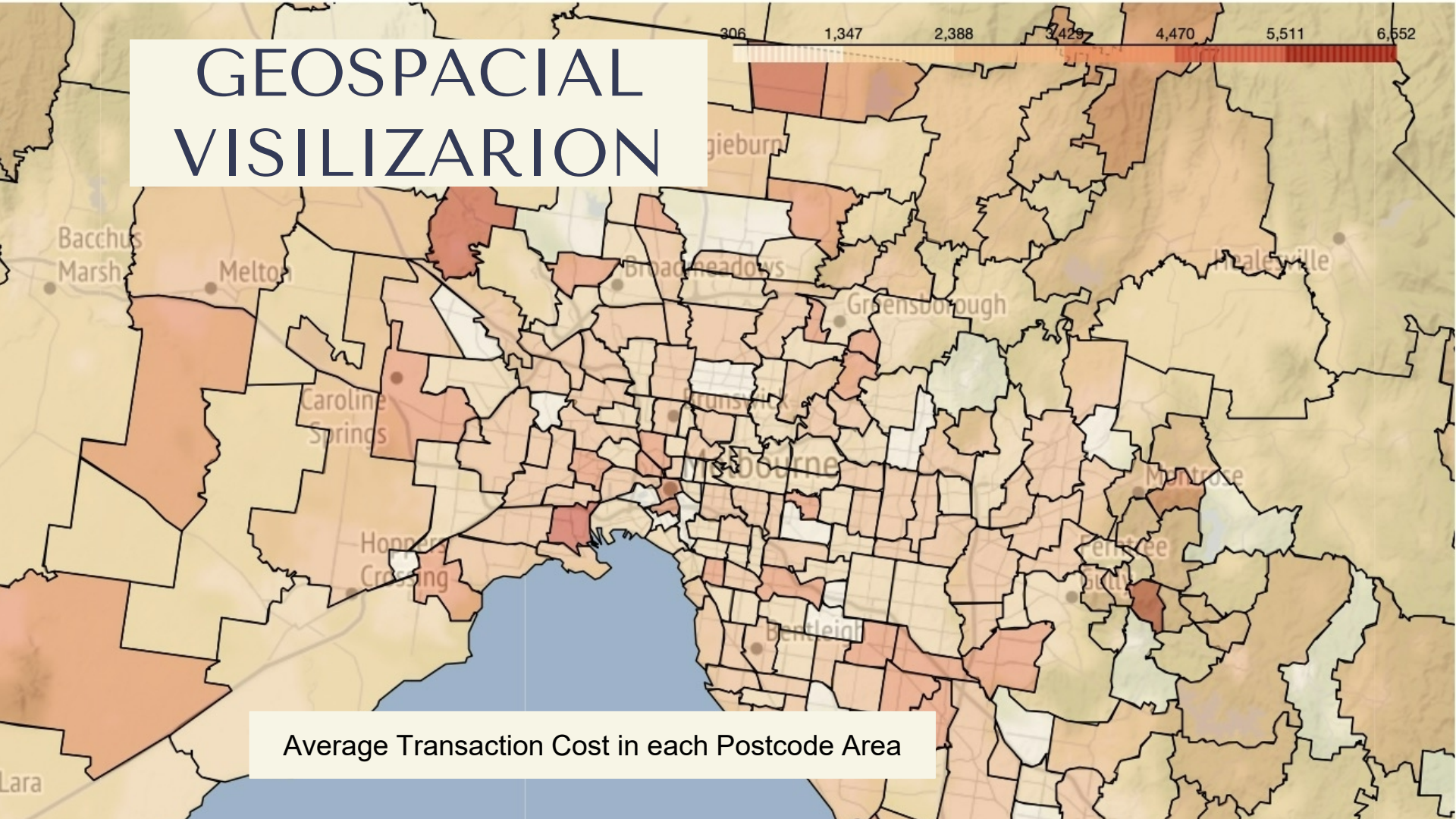
- **NO financial loss**
- **NO reputational harm**
- **NO consumer trust degradation**
- **NO brand erosion**



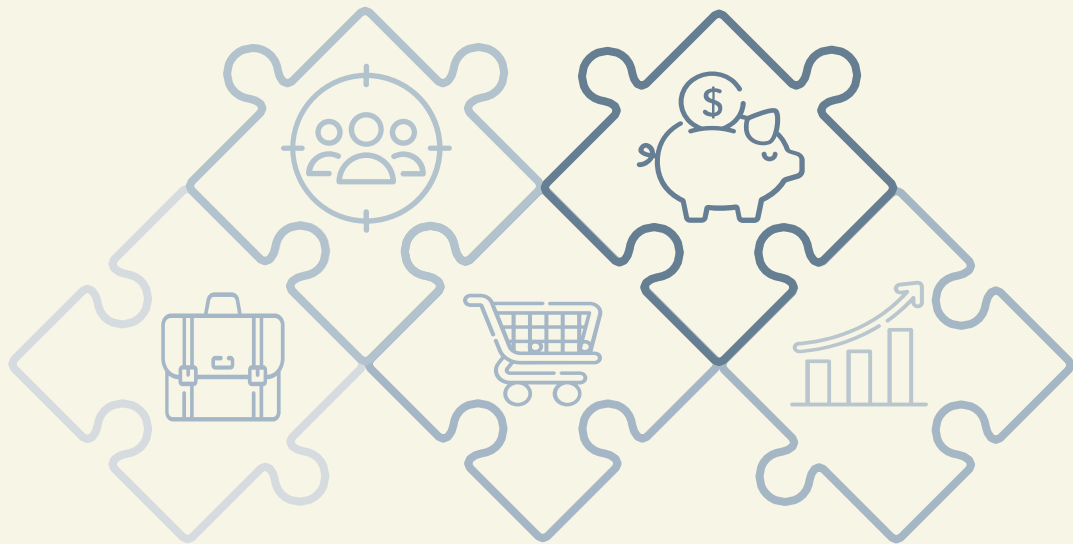
How we keep our client data safe

- All data are kept locally and will be deleted after
- Hide all sensitive data

GEOSPACIAL VISILIZARION



APPROACH



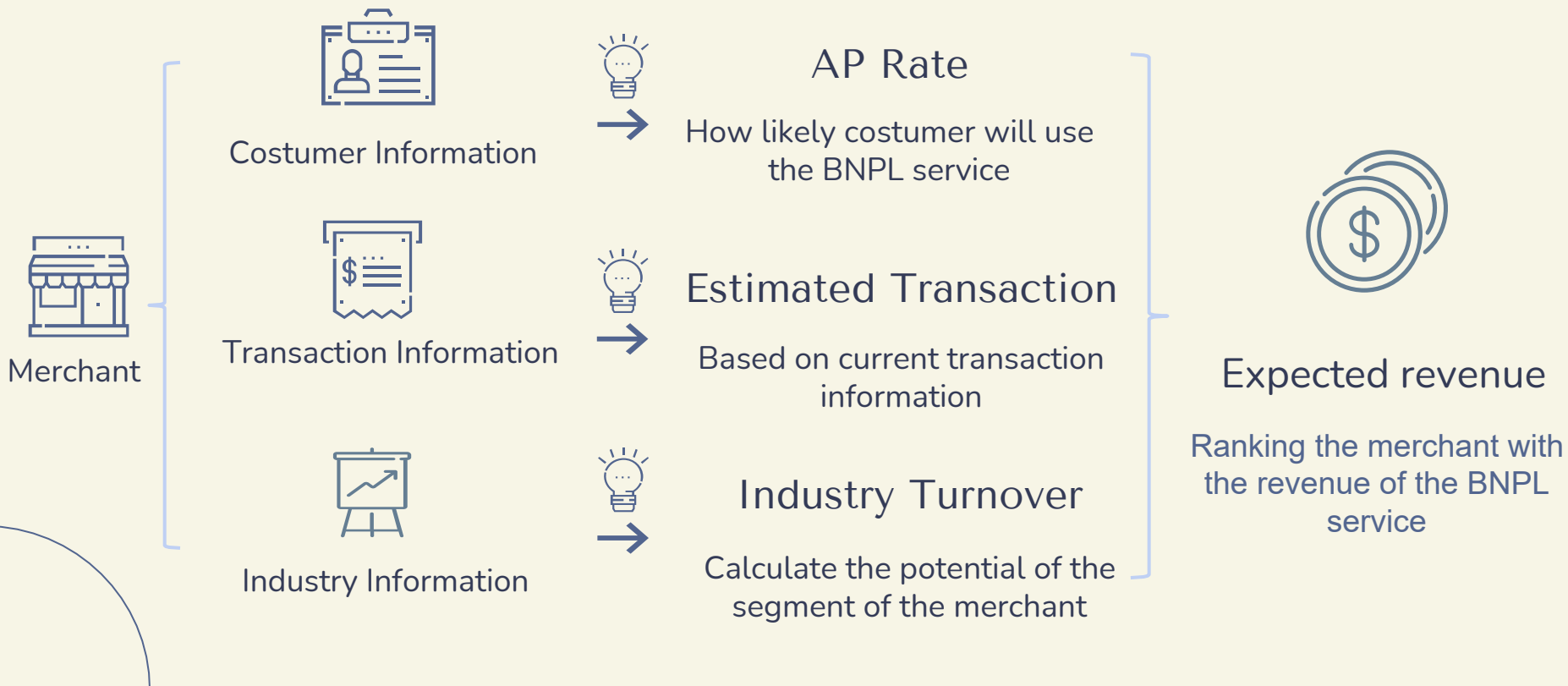
Data

Money is what we used to rank !



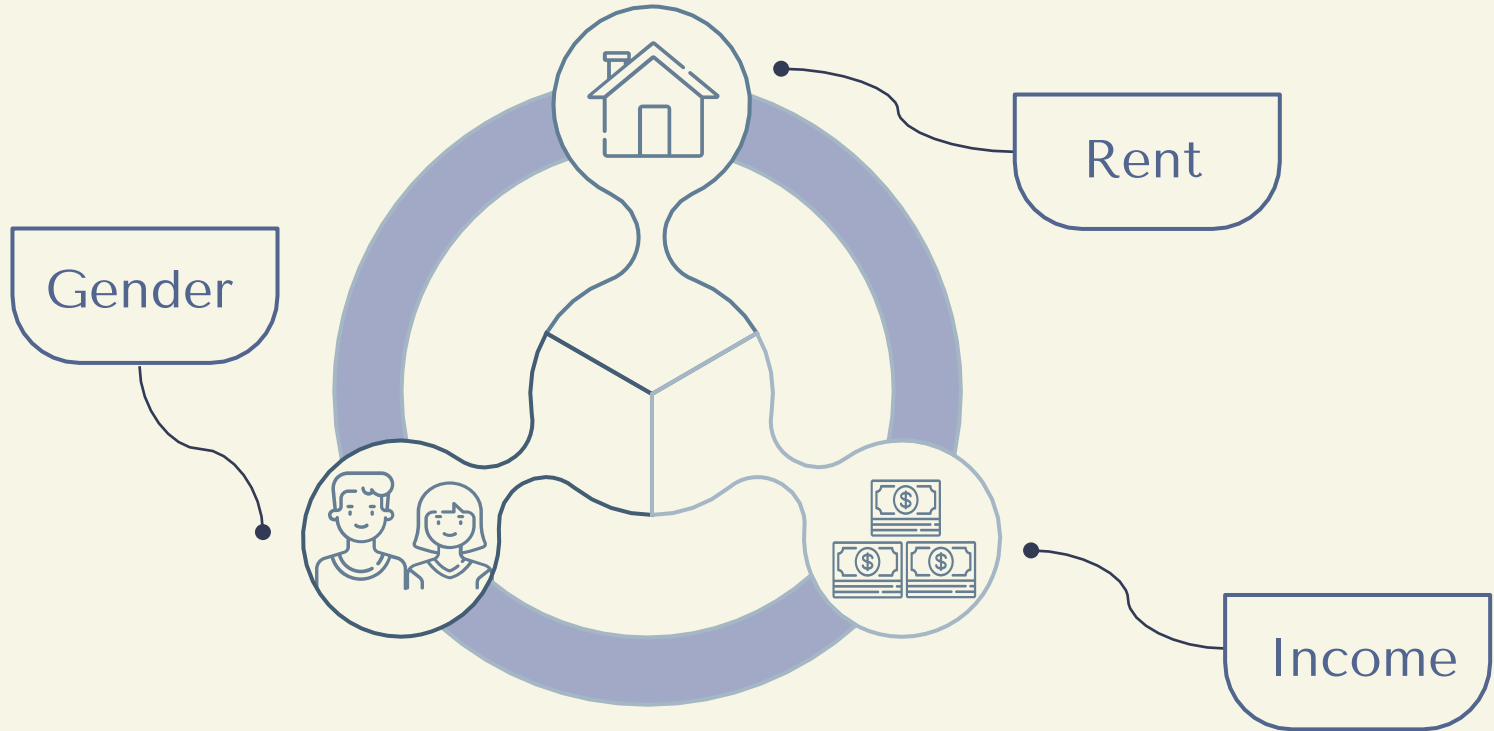
Expected Earning

HOW WE RANK THE MERCHANT



AP RATE

The portion that the customers from a merchant using the BNPL service



ESTIMATED TRANSACTION NUMBER



Total Transaction

the transaction records
from each merchant



Transaction Growth

the percentage growth after
join BNPL from prior
knowledge

TURNOVER INDICATOR

- Divide merchant by different industry areas
- The annually turnover rate from different industry



FRAUD RATE

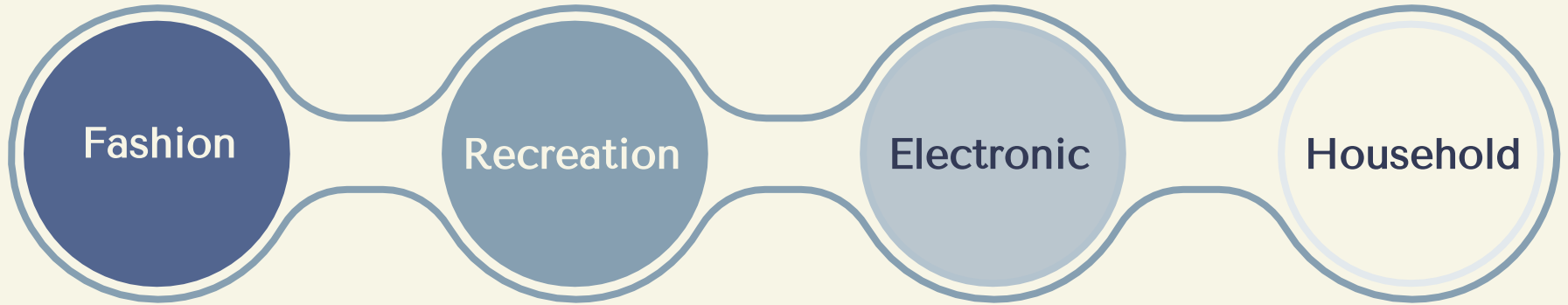


Mark all possible fraud transactions in dataframe

Calculate fraud rate for each merchant

Derive the valid transaction of each merchant by fraud rate

BUSINESS SEGMENT





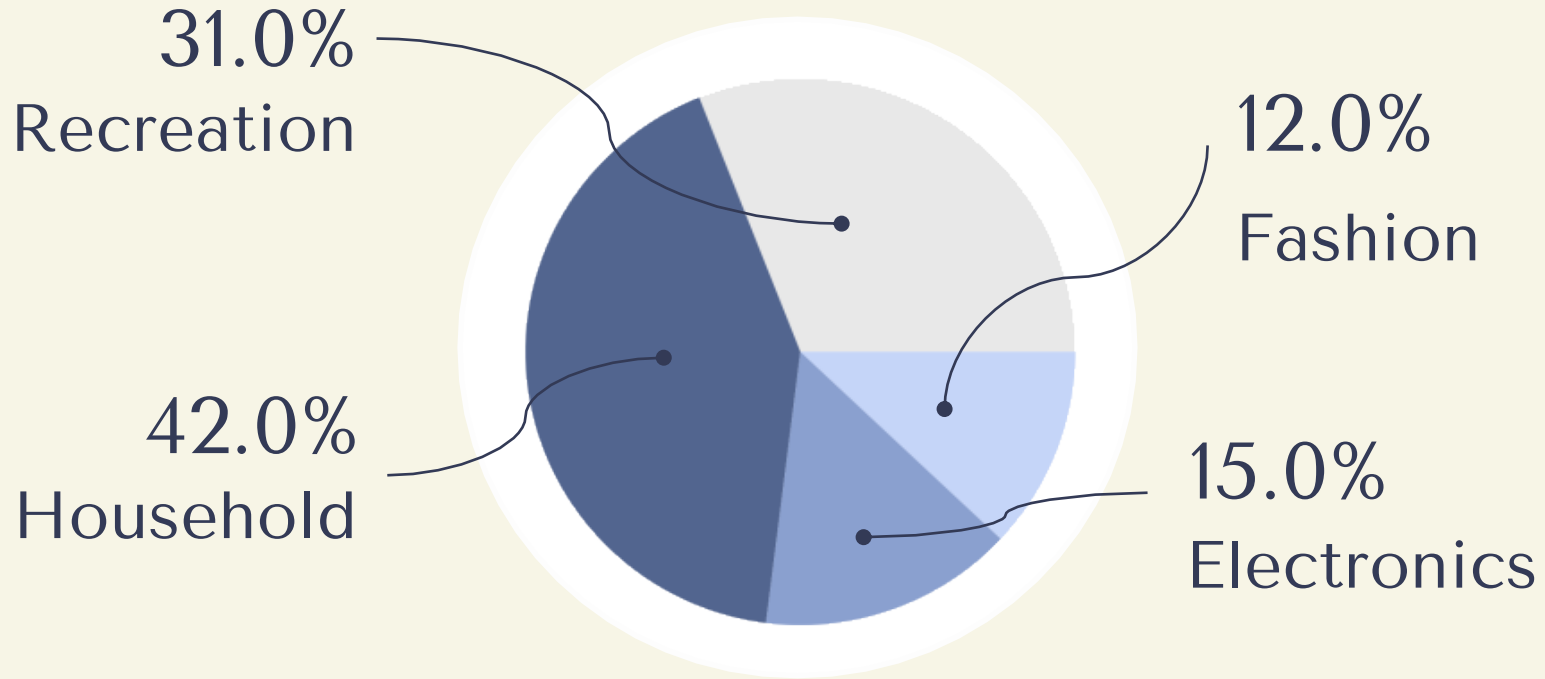
RESULTS & DISCUSSION



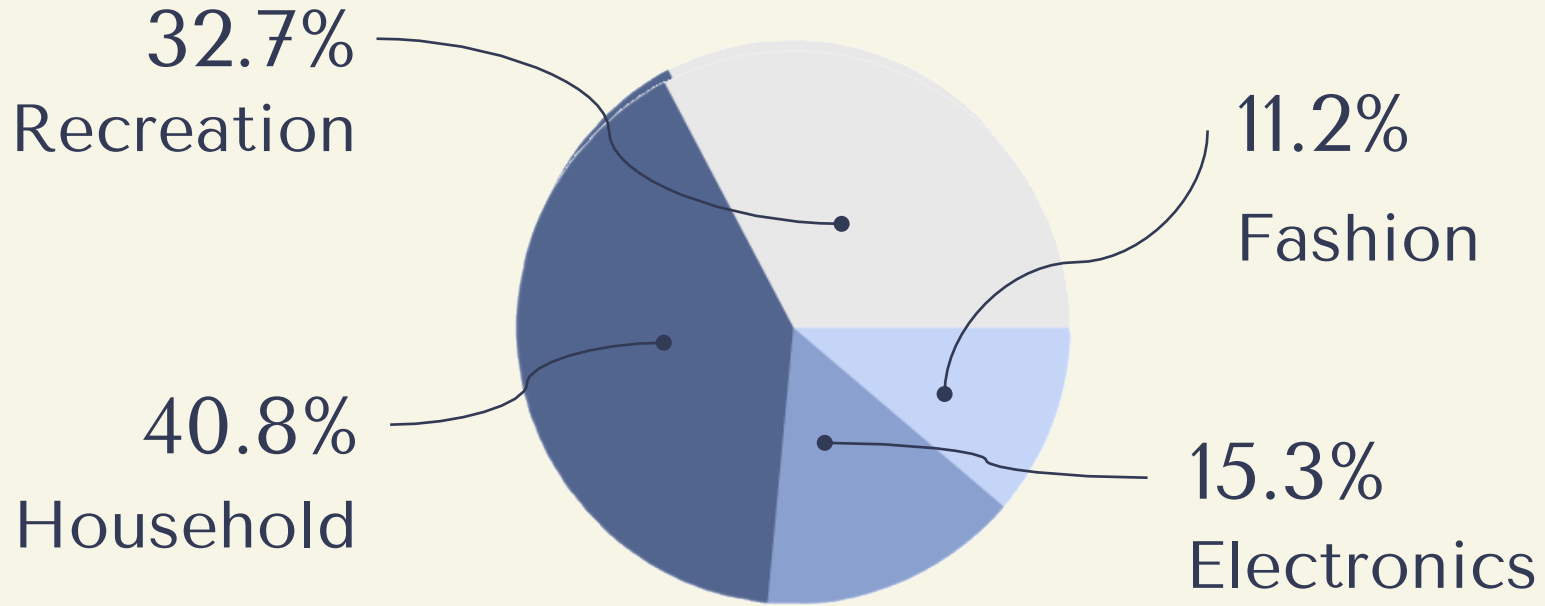
RANKING RESULT: TOP 5

Merchant Name	Business Segment	Expected Income (AUD)
Orci In Consequat Corporation	Recreation	43766.742
Lacus Consulting	Recreation	42207.578
Ornare Limited	Household	39728.917
Mauris Non Institute	Electronics	39120.004
Est Nunc Consulting	Household	38512.820

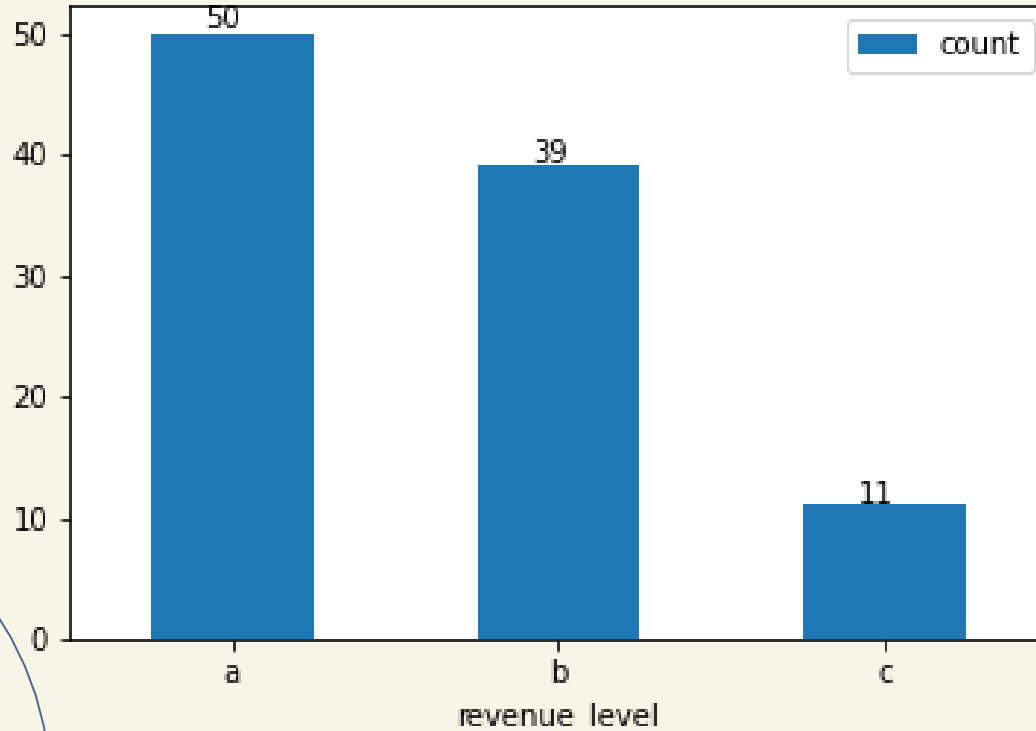
TOP 100 MERCHANTS: BUSINESS SEGMENT DISTRIBUTION



TOP 100 MERCHANTS: REVENUE DISTRIBUTION

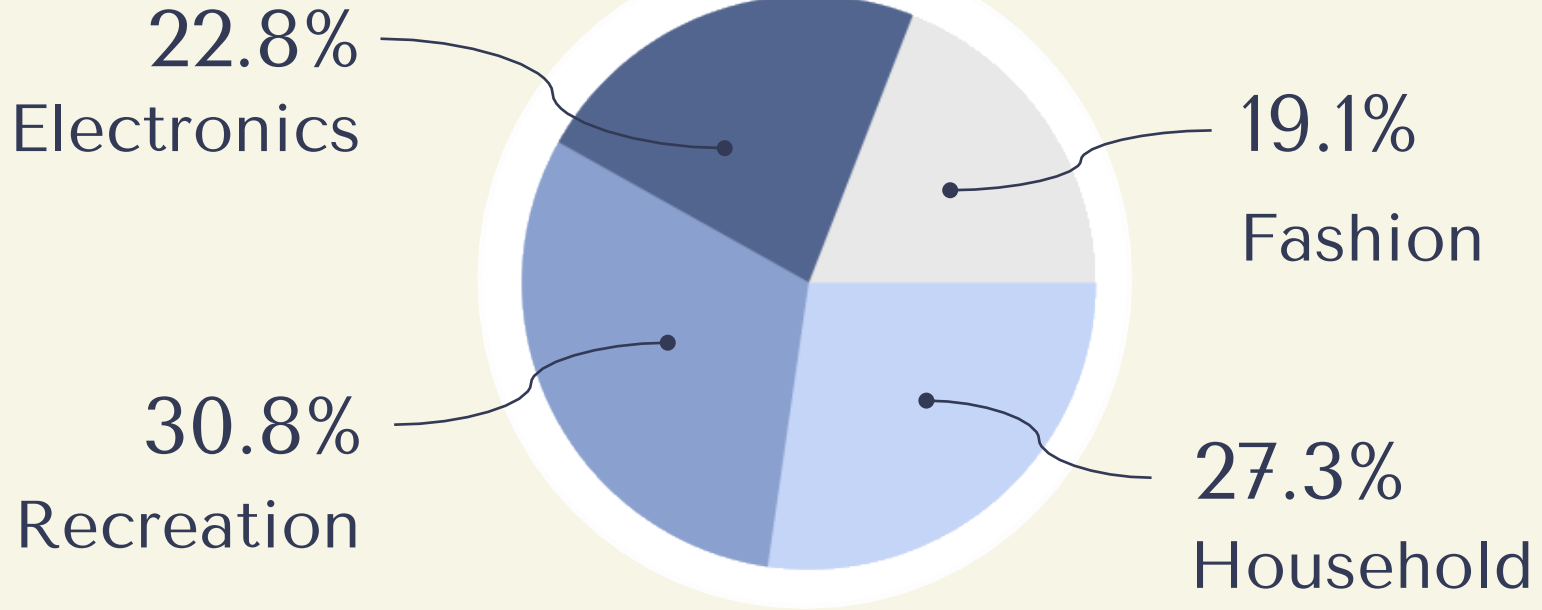


Top 100 Merchants: DISTRIBUTION OF REVENUE LEVELS



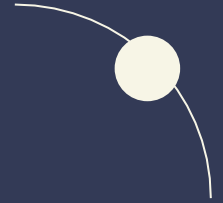
- Majority Merchant revenue level: a & b
- BNPL Expected revenue: \$2,200,000

Top 10 FOR ALL BUSINESS SEGMENTS: REVENUE DISTRIBUTION





RECOMMENDATIONS & LIMITATIONS



BUSINESS RECOMMENDATION



High-Risk, High -Return

- Top 100 Merchants From All Business Segments of Merchants
- Expected Revenue of \$2,200,000



Low-Risk, Low-Return

- Top 25 From Each of the 4 Business Segments of Merchants
- Expected Revenue of \$2,055,000

LIMITATIONS



Forecast

Uncertainties In Real
Life



Probability

Spare Money
Assumption

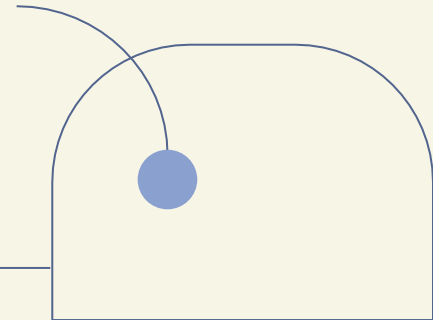


Credit

People with Unlimited
Credit & “Good” Credit
Assumption

IMPROVEMENTS

- More Detailed Consumer Information: e.g., age, credit, earning, etc.
- BNPL Internal Business Area Report: increase in transaction for different business area
- More Detailed Merchant Information: e.g., Online vs. Brick-and-Mortar Stores, location, etc.



IS IT WORTH PURSUING?



- The project already shows significant financial benefit per investment in six weeks work.
- The resultant ranking system is already applicable for BNPL company to maximize their profit.



REFERENCES

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