

Data @ ANZ Internship

Exploratory Data Analysis

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Overall Insights:

1. From the location data provided in the dataset, we can see that a lot of the transactions have been made in the states of NSW and Victoria, which shows that these two states are the economic powerhouses of Australia. Also, we can see that most of the transactional activity is concentrated along the shoreline (see image 1 and image 2).
2. In Image 3, we can see the weekly spending trends by gender. It shows us that on average, men spend more money over the week, but they reach their peak on Saturdays, as compared to Fridays for women. In Image 4, we see the transactions by time of day. The spending is pretty consistent for both genders, with the exception of men who spend more in the late hours of the night.
3. In Images 5 and 6, we can see that the people who earn the most are also those who spend the most.
4. In Image 7, we see the top 10 customers that have a lot of Interbank transactions. Customers like these should be targeted for programs like BEEM IT, OSKO or NPP.
5. Image 8 shows us the top 10 customers who have a lot of savings. This attribute shows that they are fiscally responsible and these should be targeted for credit card or loan programs.

Australia Wide Transactions by State

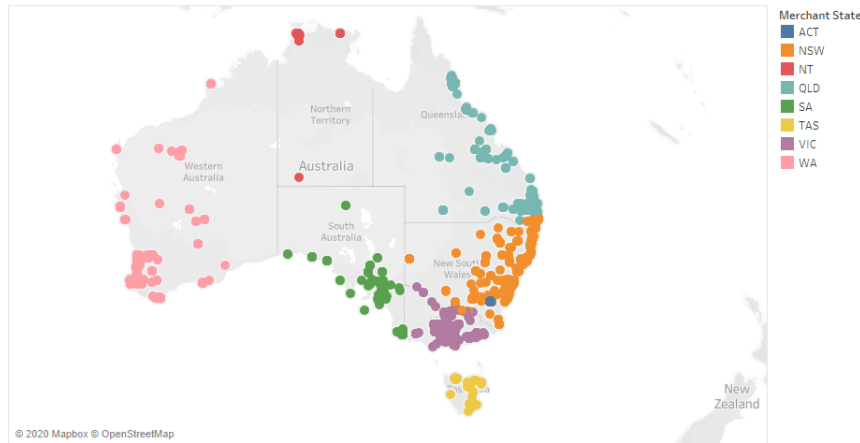


Image 1: Transactions by State

Spending by State

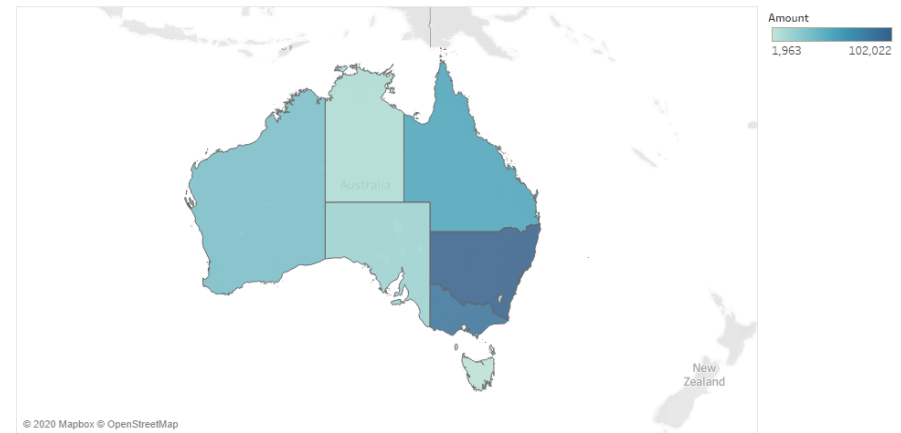


Image 2: Average Spending by State

Weekly Transaction Trends

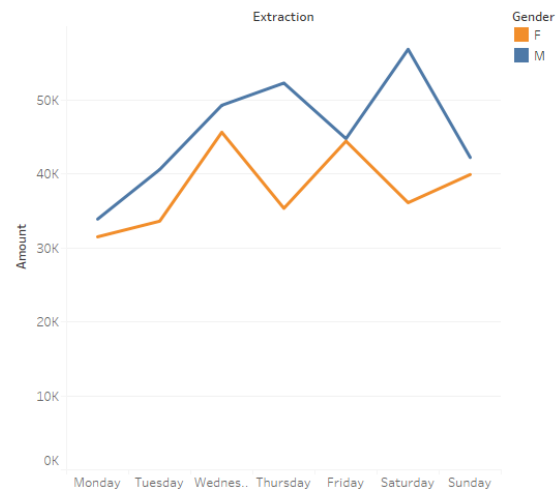


Image 3: Weekly Transactions by Gender

Transactions by Time of Day

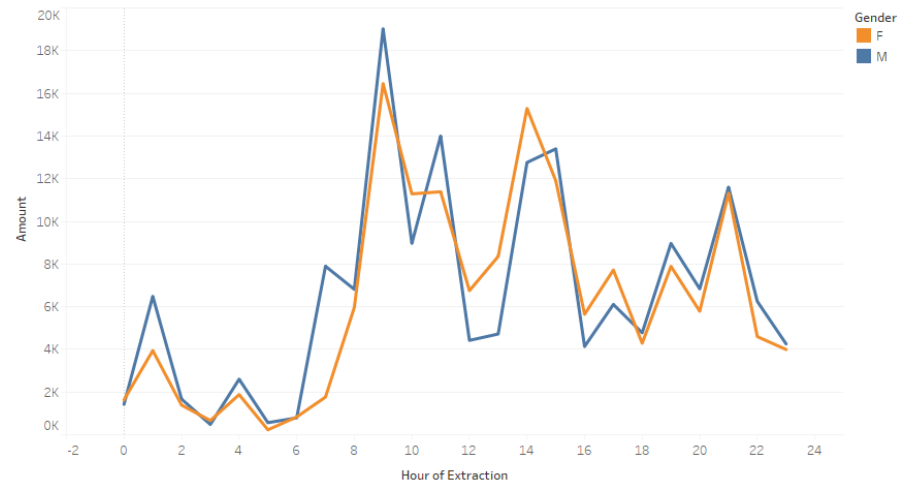


Image 4: Transactions by Time of Day

Top 10 Salaried Customers

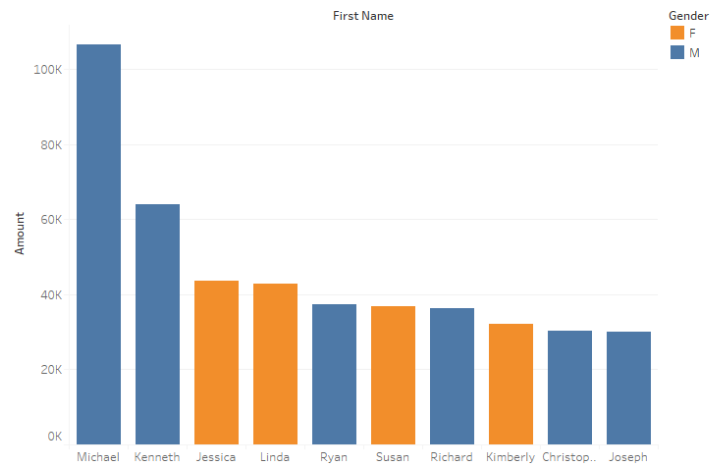


Image 5: Top 10 Salaried Customers

Top 10 Spenders

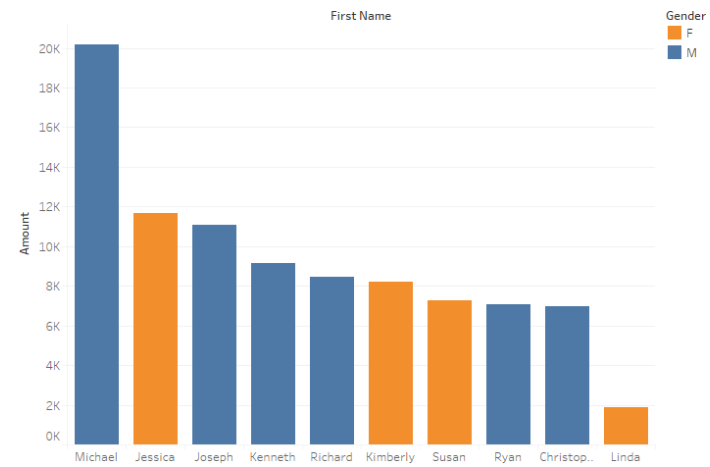


Image 6: Top 10 Spenders

Customers recommended for Beem IT or OSKO or NPP

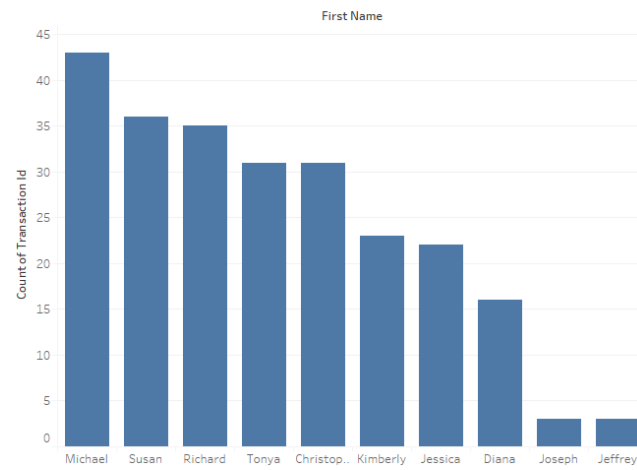


Image 7: Top 10 Customers with Bank to Bank Transactions

Top 10 Savers (Potential Credit Card/Loan Customers)

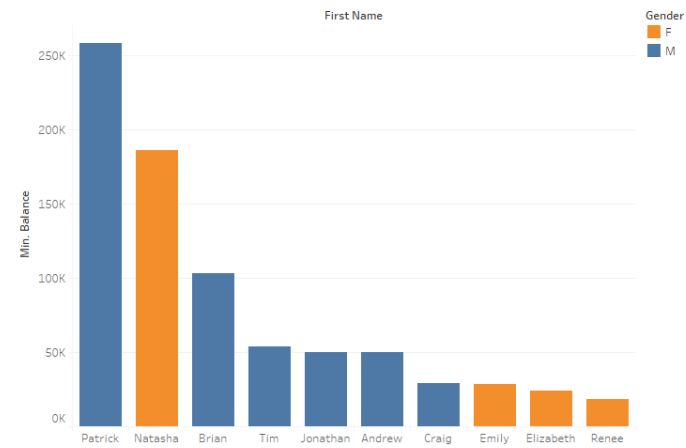


Image 8: Top 10 Fiscally Responsible Customers

Demographics-based Insights (Gender, Age, Location):

1. In Image 9, we can see that most of the spending is done in Sydney and Melbourne followed by South Brisbane (where the Gold Coast is located) and Mascot (Where Sydney Airport is located).
2. Image 10 shows us a pretty consistent spread of transactions by both genders all across Australia.
3. Image 11 shows us that on average, men earn more than women. There isn't enough information to comment on this inference in terms of the gender wage gap.
4. Image 12 shows the average salary by gender. It shows us that women earn more when they are younger and men earn more as they get older.
5. Image 13 shows us the spending by both genders. This is almost consistent across the board.
6. Image 14 (below) is for Information Only. It shows the bank's customer spread by age and gender.

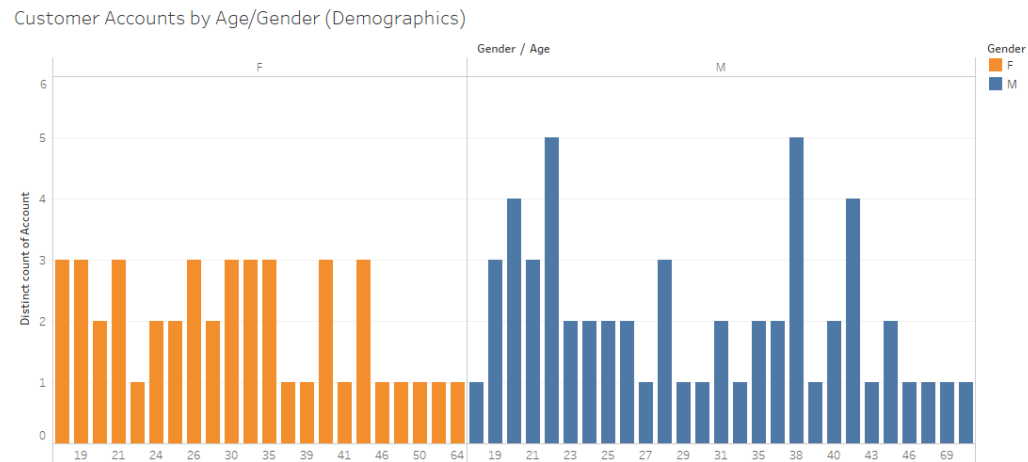


Image 14: Customer Spread (Information Only)

Top Spending Suburbs

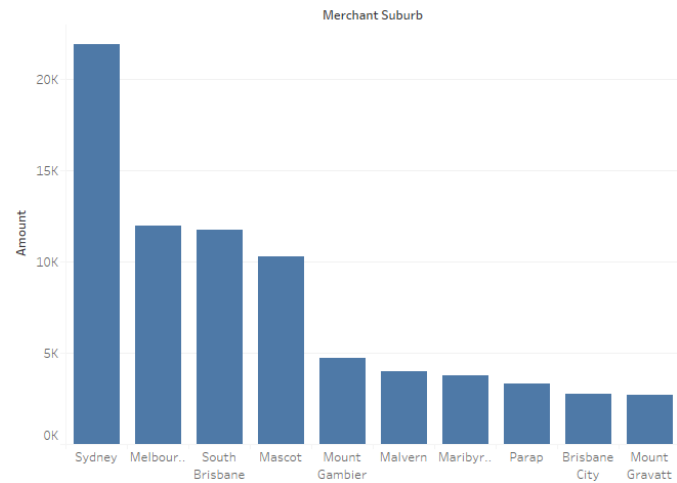


Image 9: Top Spending Suburbs

Customer Transaction Spread by Gender/Location (Demographics)

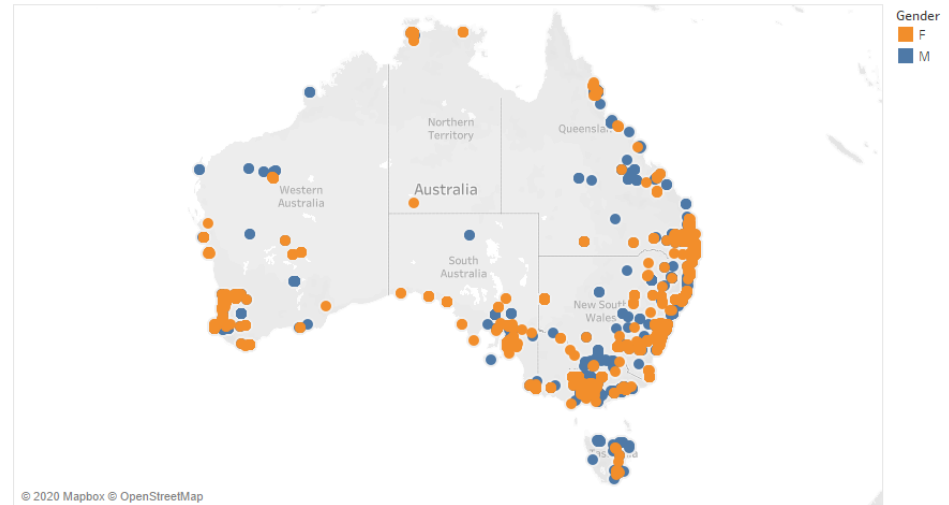


Image 10: Transaction Spread by Gender

Average Salary by Gender

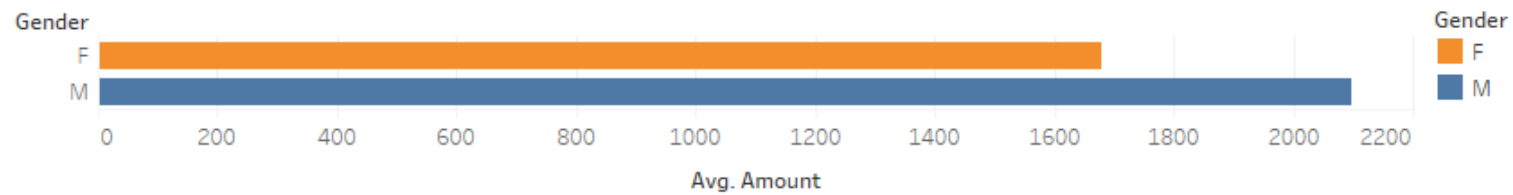


Image 11: Average Salary by Gender

Average Salary by Age/Gender

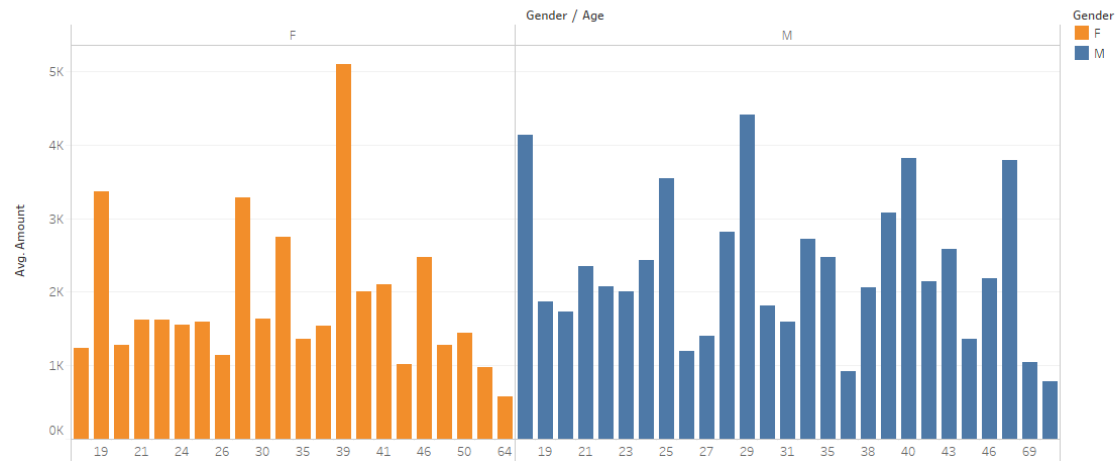


Image 12: Average Salary by Gender

Spending by Age/Gender

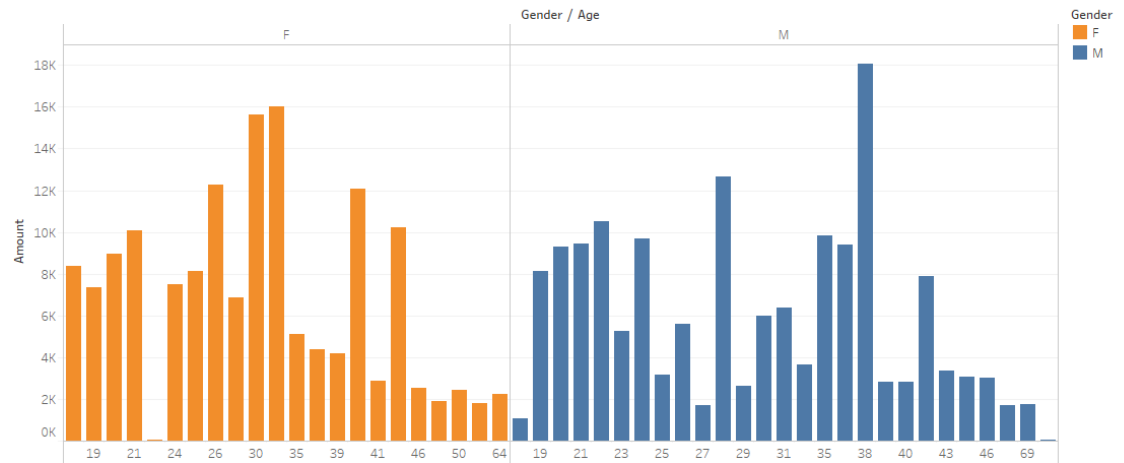


Image 13: Average Spending by Gender

Bonus Insight:

In Image 15, we can see that the top 10 spenders transact in almost all the states in Australia. This could indicate that they are business travellers or love vacation travel.

Top 10 Spenders by Location

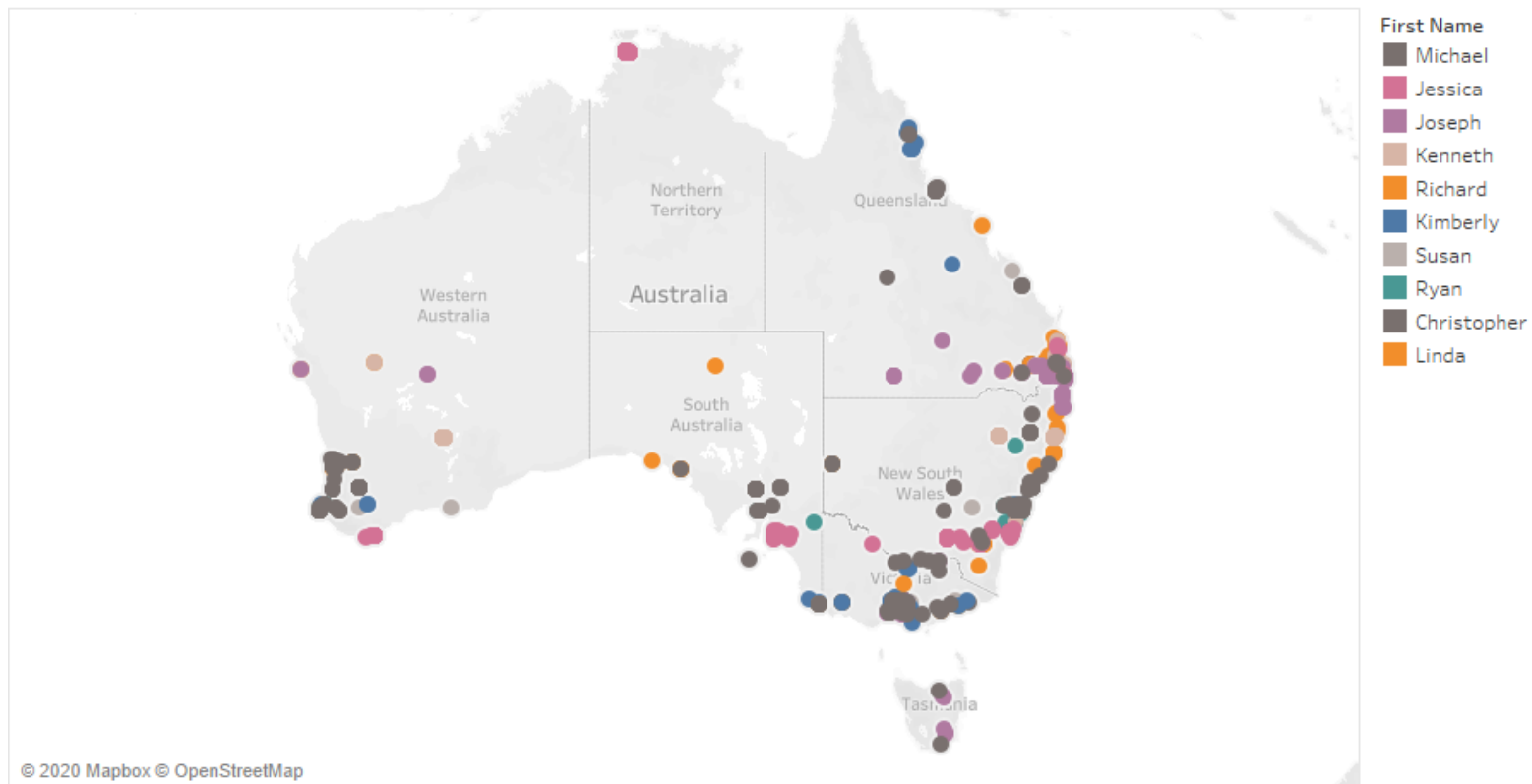


Image 15: Top 10 Spenders and their transaction locations