



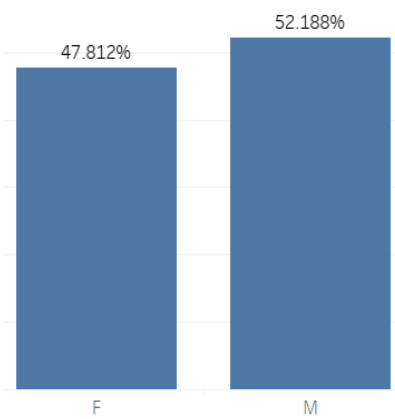
ANZ VIRTUAL INTERNSHIP TASK 1

BY: TANISHA JAIN

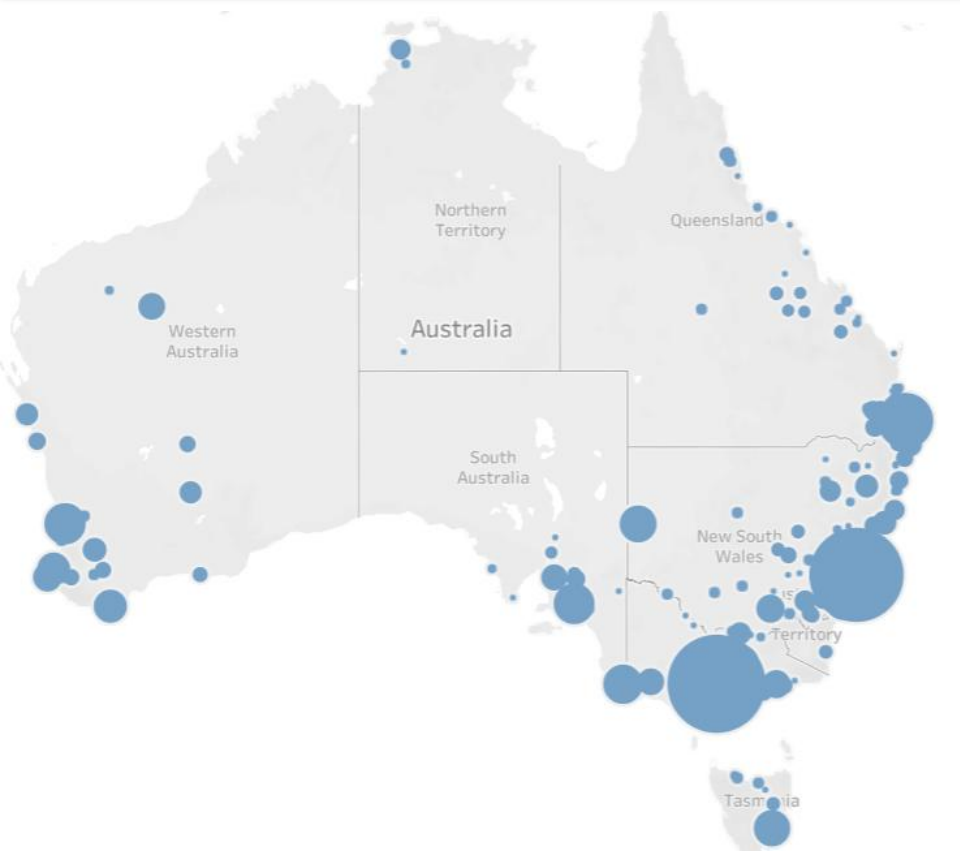
GITHUB: <https://github.com/tanjaingit>

CUSTOMER DEMOGRAPHICS

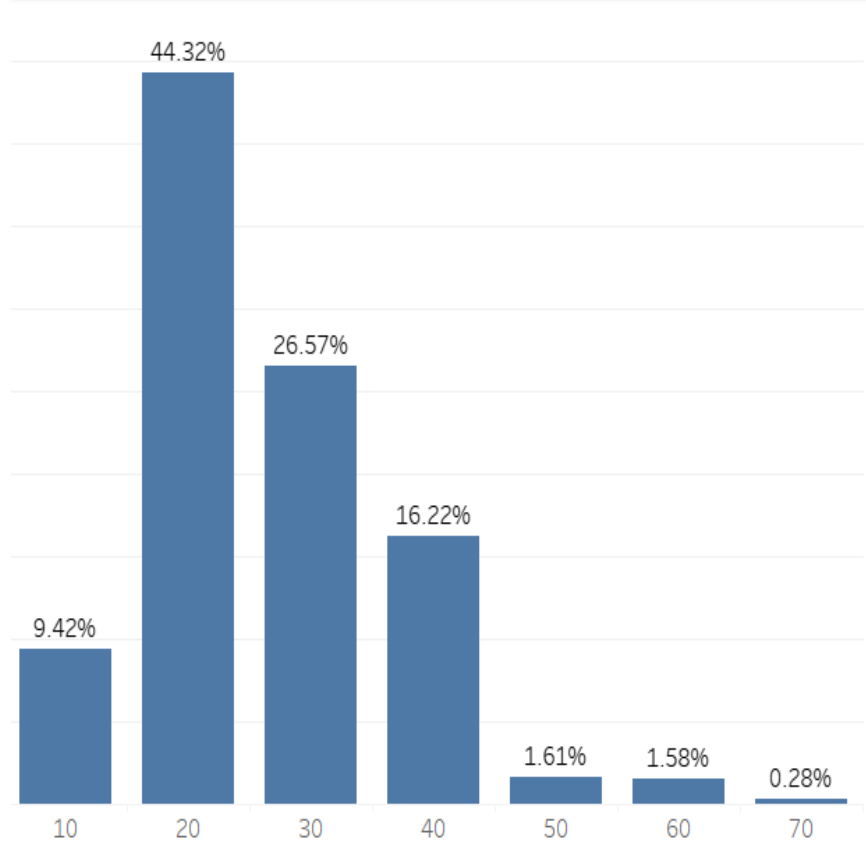
GENDER DISTRIBUTION



CUSTOMER DISTRIBUTION BY CITIES



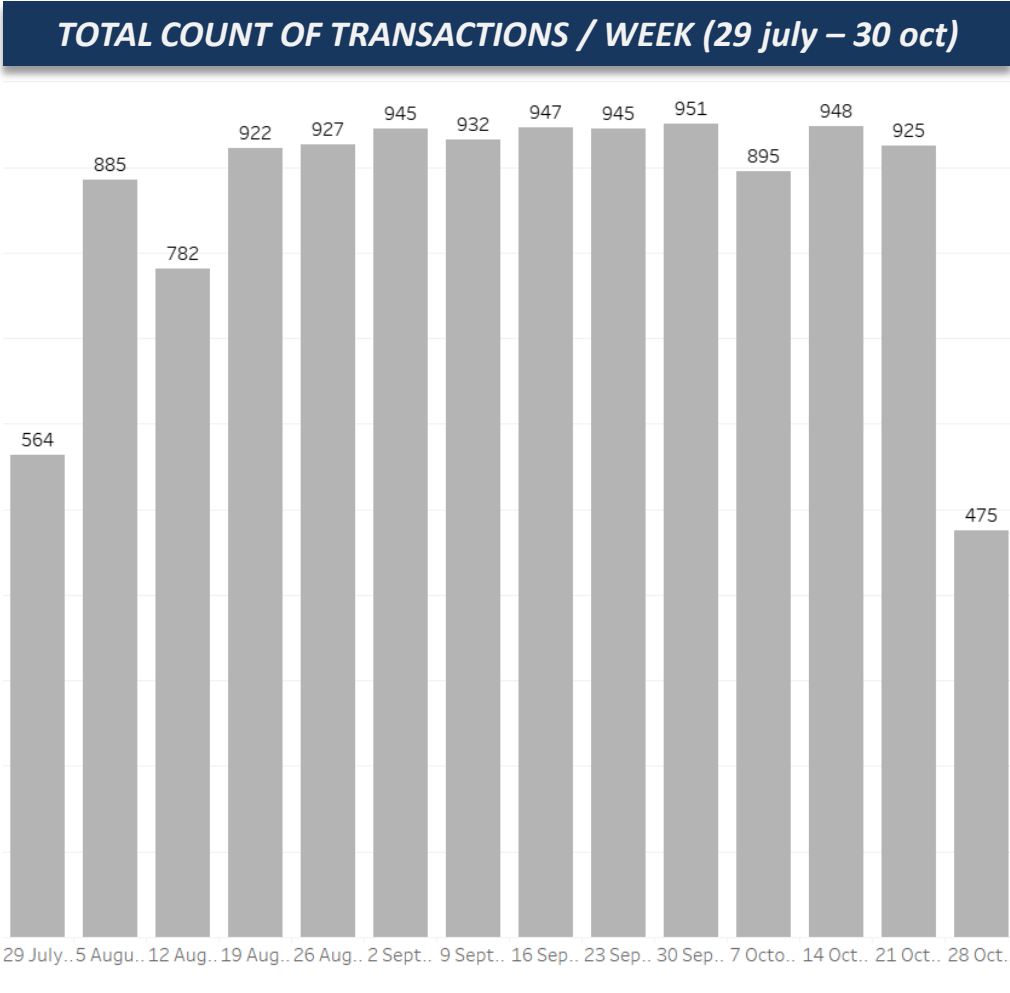
AGE DISTRIBUTION (age bin of 10 years)



EXPLORATION OF ANZ TRANSACTION DATASET I

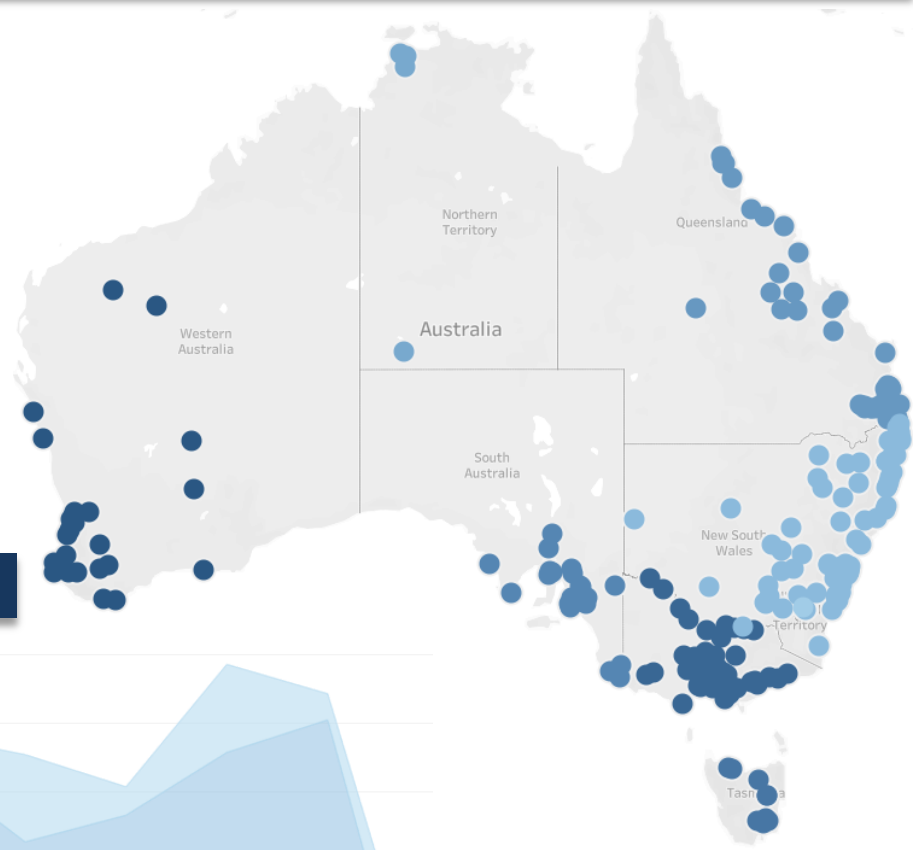
Count of account	12,043
Distinct count of account	100

% OF TOTAL COUNT OF TRANSACTION TYPES			
credit	PAY/SALARY	883	7.33%
debit	INTER BANK	742	6.16%
	PAYMENT	2,600	21.59%
	PHONE BANK	101	0.84%
	POS	3,783	31.41%
	SALES-POS	3,934	32.67%
Grand Total		12,043	100.00%

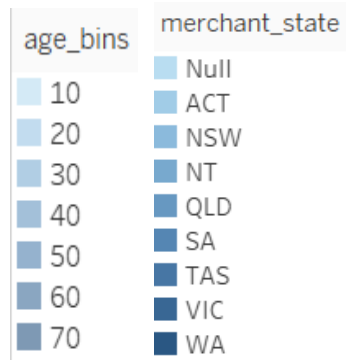
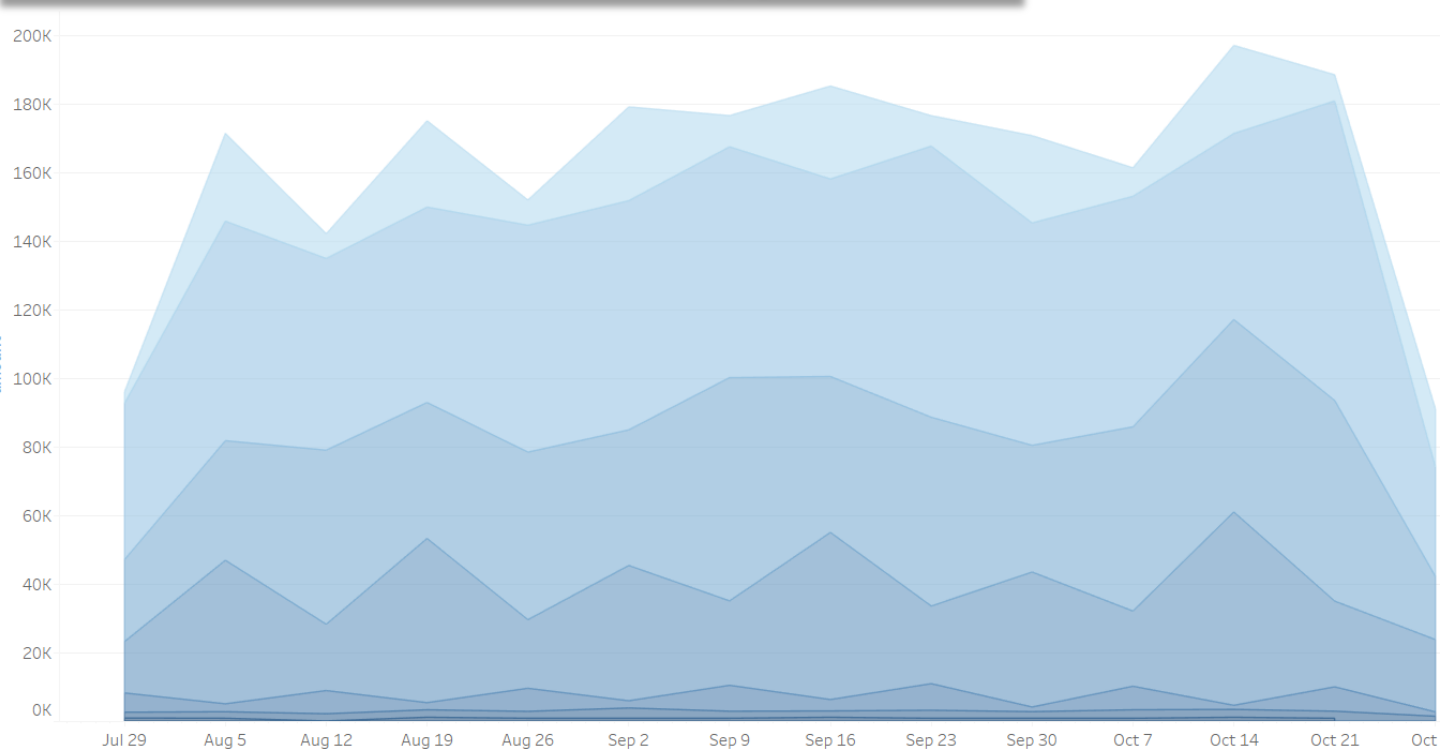


EXPLORATION OF ANZ TRANSACTION DATASET II

STATE-WISE MERCHANTS OF POS & SALES-POS



TRANSACTION AMOUNT EACH WEEK (age wise)



MONTHLY AVGERAGE TRANSACTION VOLUME AND AMOUNT

```
tran_vol = df.amount.groupby(df.account)
#(29-july-2018 - 30-oct-2018)
print('Total no. of transactions: ',tran_vol.count().sum())
print('Avg no. of transactions/ month: ',int(tran_vol.count().sum()/3))
print('Max vol of transactions by an account: ',tran_vol.count().max())
print('Max transaction amount an account: ',int(tran_vol.mean().sum()))
```

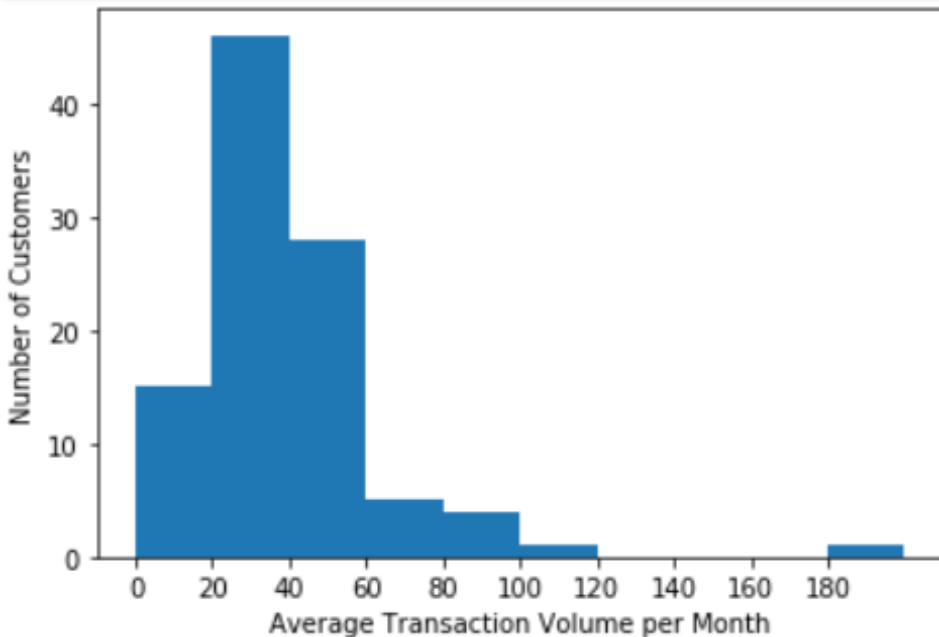
Total no. of transactions: 12043

Avg no. of transactions/ month: 4014

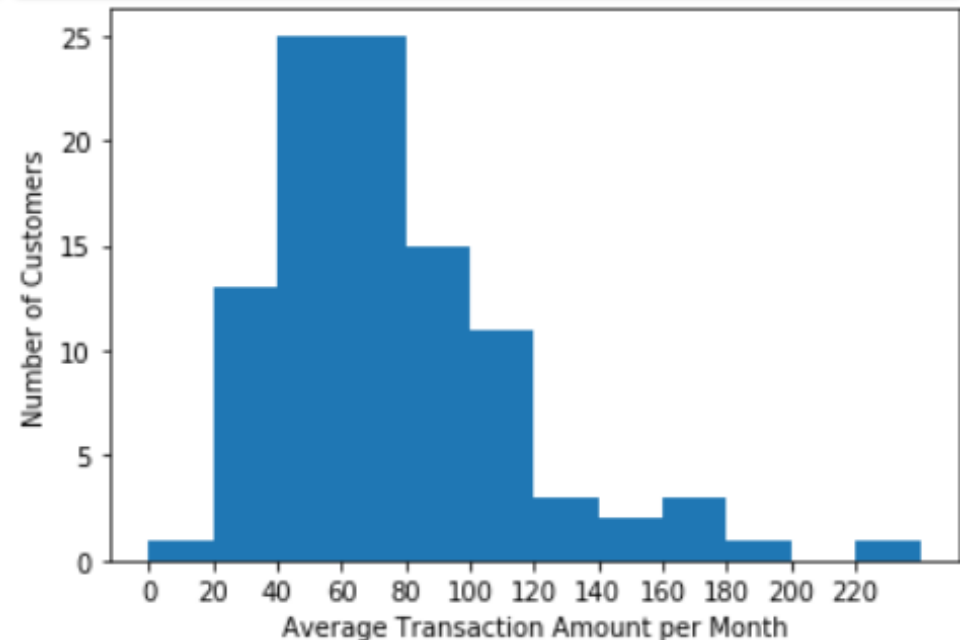
Max vol of transactions by an account: 578

Max transaction amount an account: 22886

MONTHLY AVG. TRANSACTION VOL.



MONTHLY AVG. TRANSACTION AMNT.



OUTLIERS – MAY NEED FURTHER INVESTIGATION

•There are a total of 5 transaction which seems suspicious and needs further inspection because they are very small transaction amounts.

Txn Description	Min. Amount	Count
POS	0.100	2.000
SALES-POS	0.100	3.000

•There are 20% (758/3,783) of POS and 19% (765/3,934) SALE-POS transactions flagged 0.
Can be because of suspicious activities. Needs further inspection.

0	POS	758
	SALES-POS	765
1	POS	3,025
	SALES-POS	3,169

Min & Max VALUES OF movement/ txn_description

debit POS Max: 7,081 Min: 0.1	debit PAYMENT Max: 1,981 Min: 15.0	credit PAY/SALARY Max: 8,836 Min: 576.0
	debit INTER BANK Max: 1,956 Min: 16.0	
debit SALES-POS Max: 4,233 Min: 0.1	debit PHONE BANK Max: 1,916 Min: 21.0	

COUNT OF DIFF. FALGGED VALUES

card_prese.. txn_description		
Null	INTER BANK	0
	PAY/SALARY	0
	PAYMENT	0
	PHONE BANK	0
0	POS	758
	SALES-POS	765
1	POS	3,025
	SALES-POS	3,169