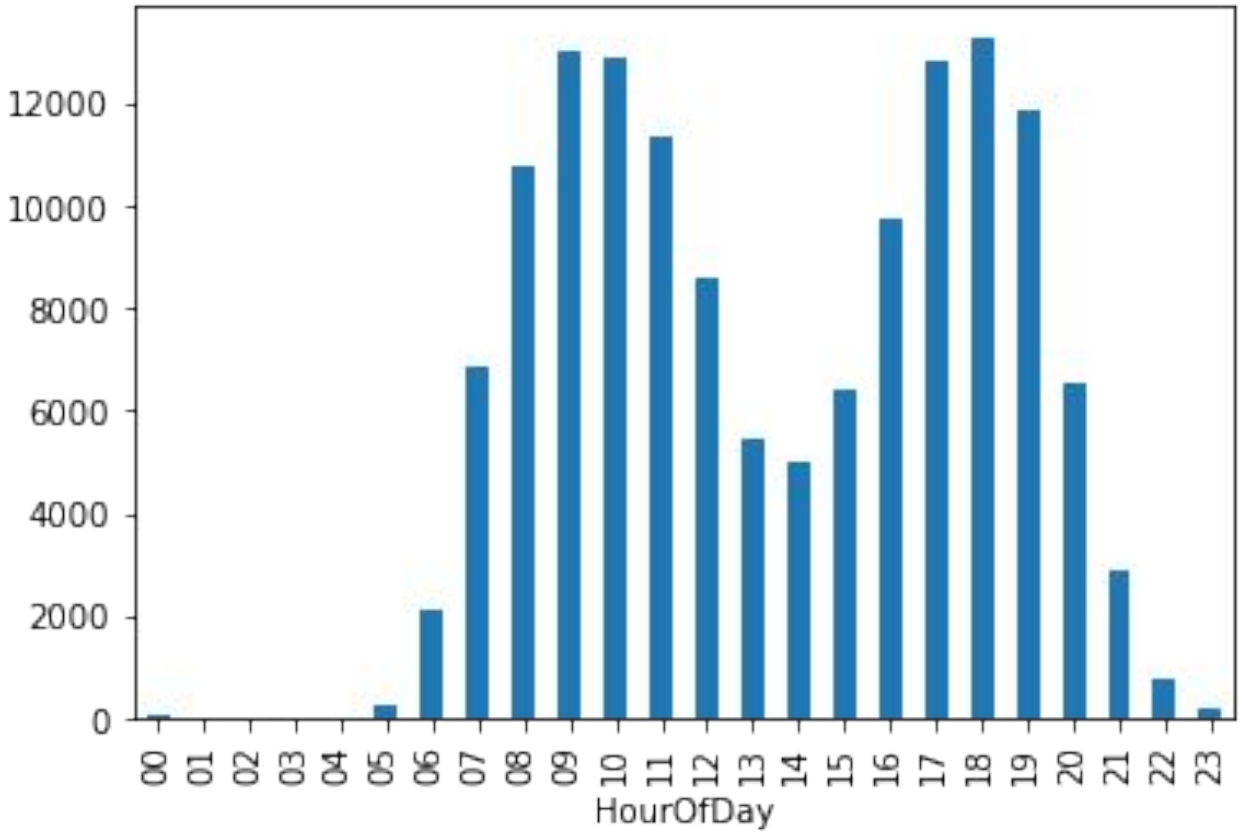
Data Exploration Summary

Tables	Data size	Comment
All Transactions	Data size : 141002 Zero Amount transaction : 58496 Non Zero Amount Transactions : 88534	Transaction Data is of one Day **15 May 2022**
Businesses	Active Businesses : 15302 Businesses in AllTransaction table : 12437	
Hierarchy levels	1. Service Type 2. Domain 3. Products	
Service Type	Total 6 Services available	Top Services: Financial Services, Booking, Billing
Domain	39 Domains available 20 of them are present in transaction table	
Products	Total no. of Products : 843 Active and Non Terminated Products : 711 Products for the transaction data : 97 Products for the paid transaction data : 88	Top Products: • AEPS Withdrawal Services • BC Money Transfer • Reliance Jio • MATM cash withdrawal • Airtel • Irctc
States, UTs and Cities	26 states and 329 cities	Top States : • Uttar Pradesh • West Bengal • Bihar • Maharashtra
Operators	90 operators	

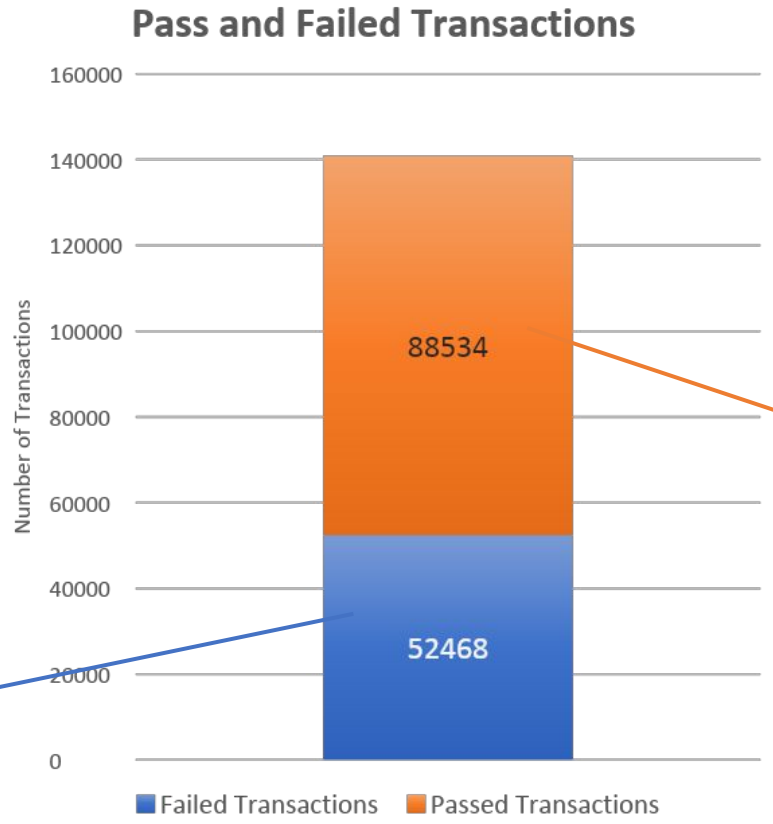
Transaction Time Statistics

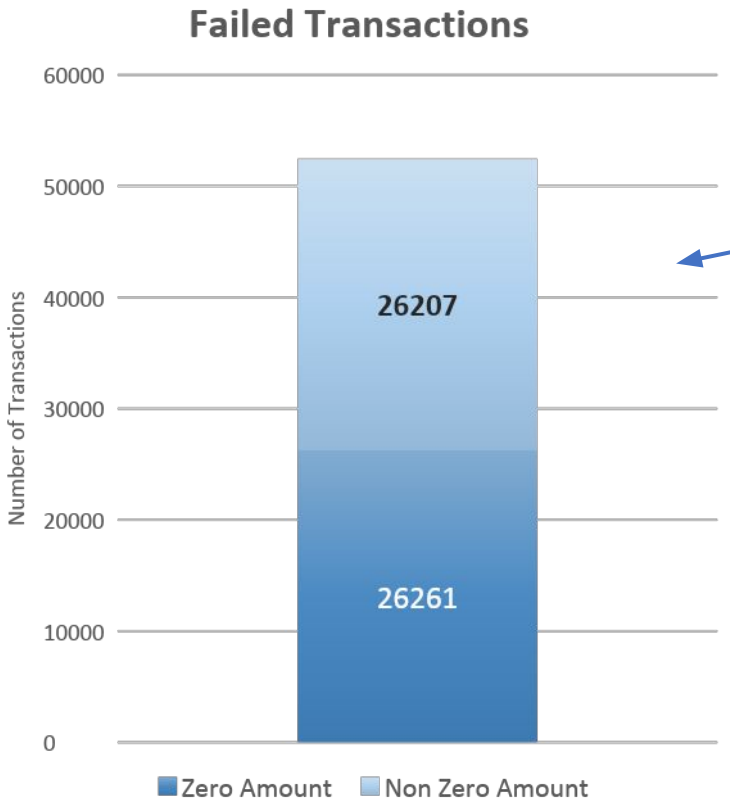
Peak hours in a day when most of the transactions are taking place is :

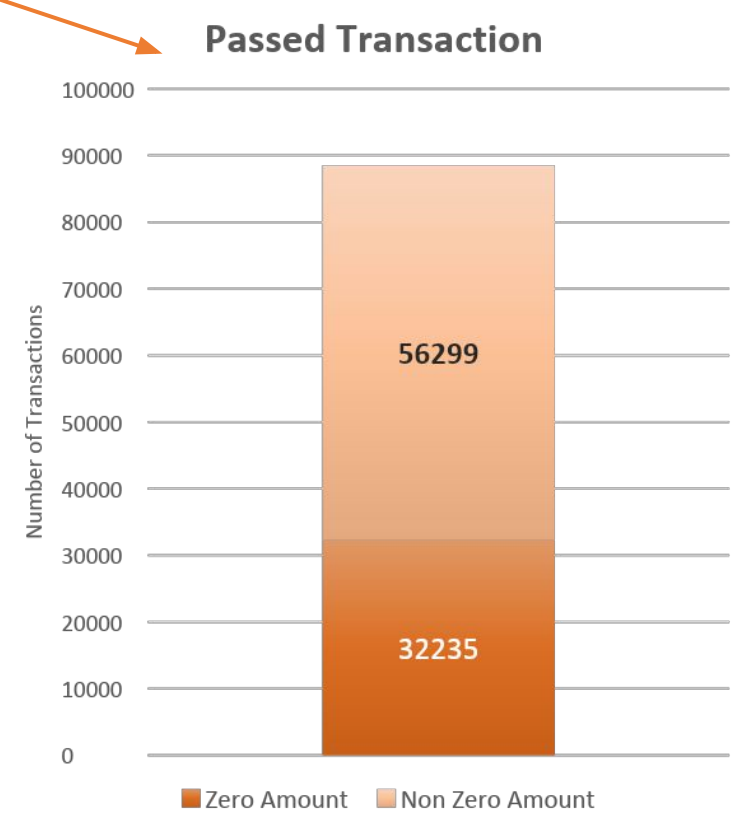
- Morning (8 AM) – 11:00 AM
- Evening (4 PM) – 7:00 PM



Transaction Statistics







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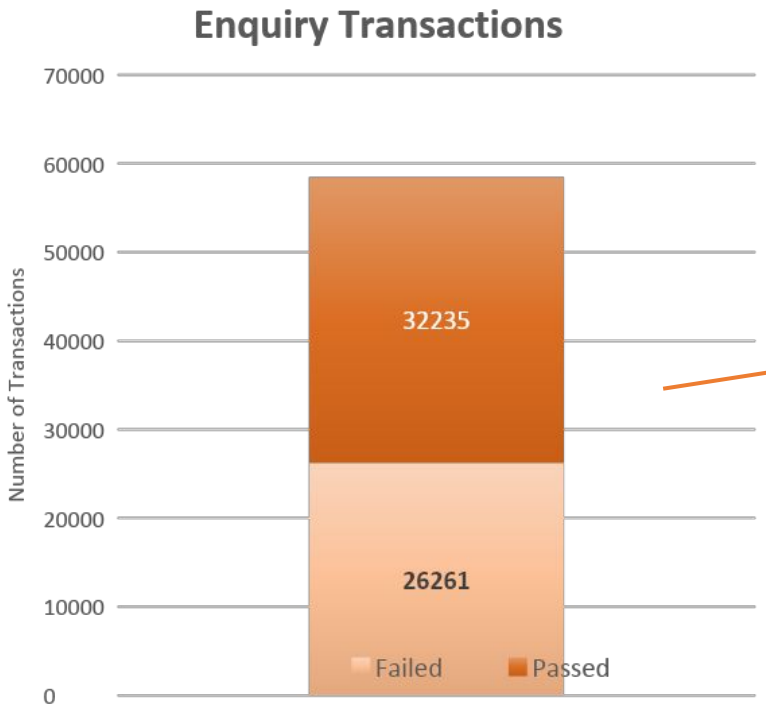
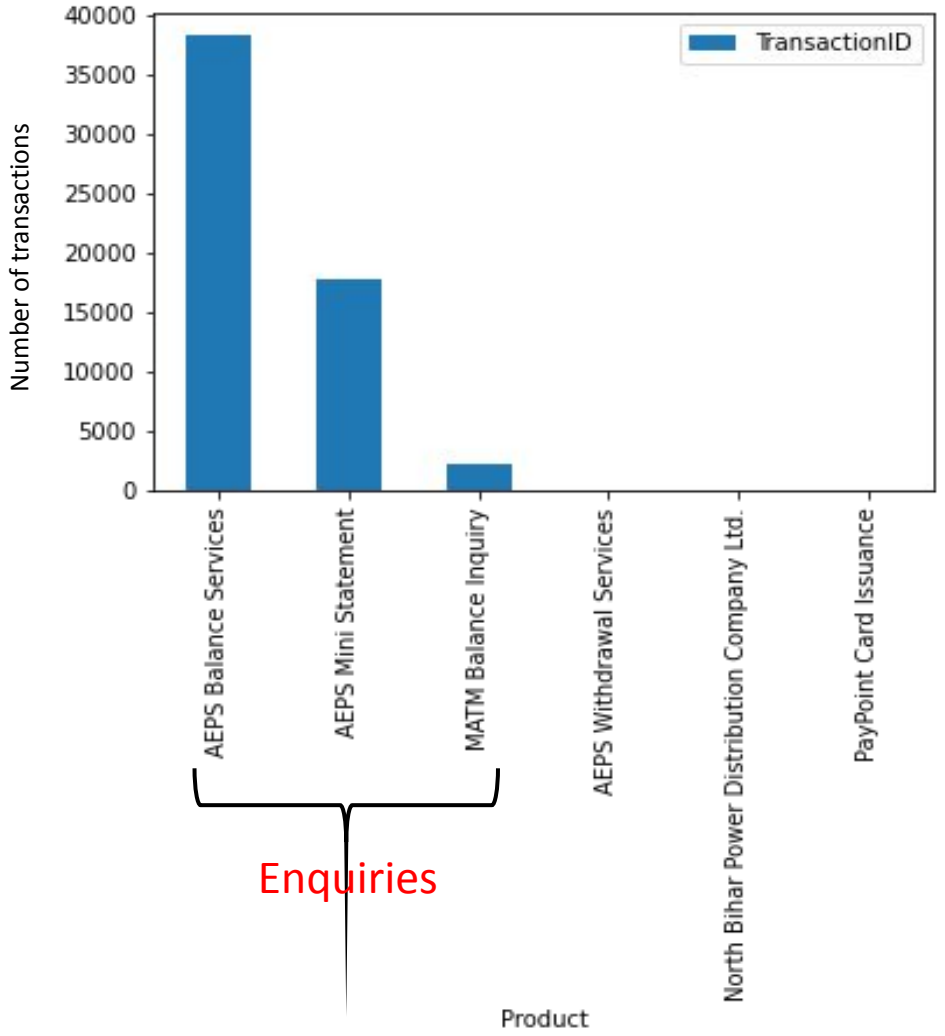
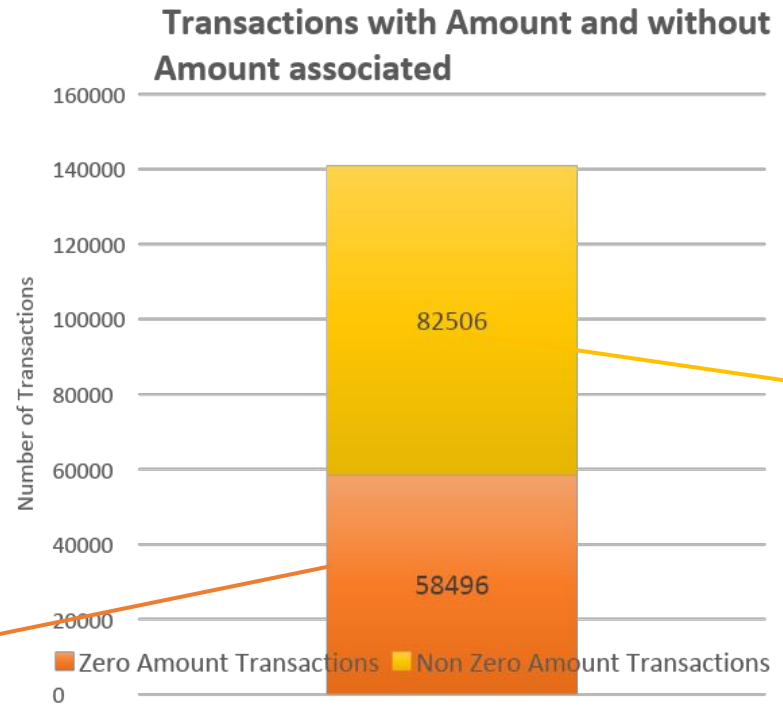
Transaction Statistics

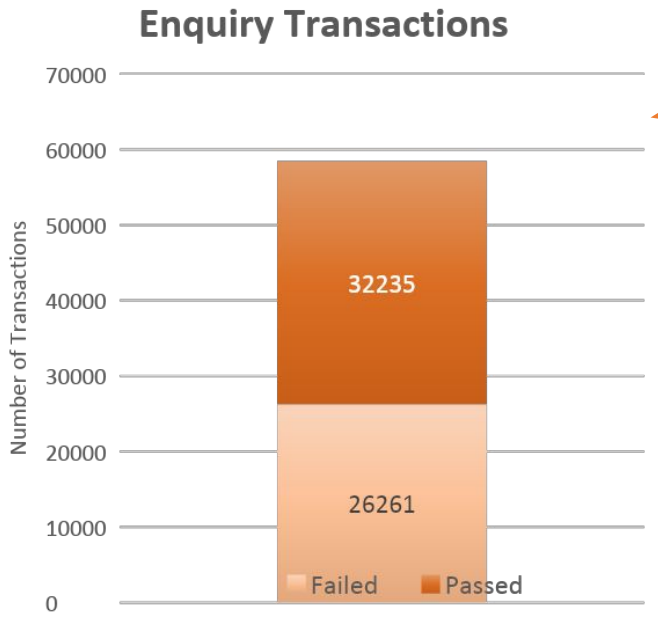


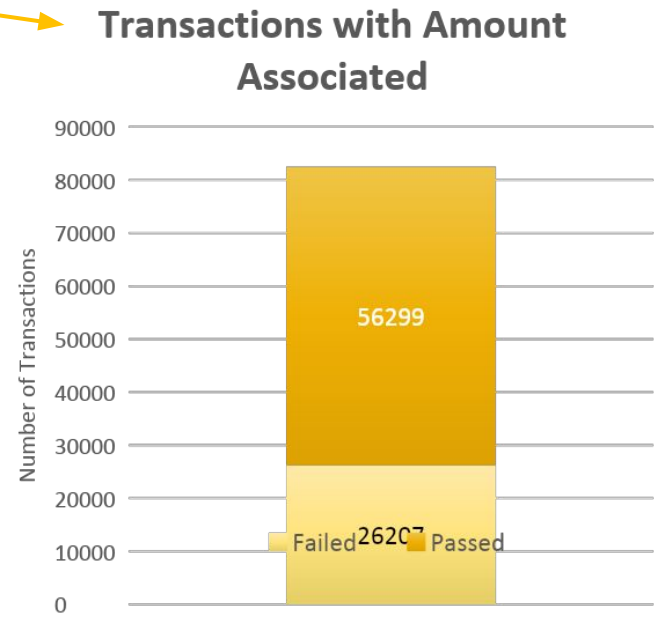


Zero amount transaction comprises of mostly Enquiry type transactions

Transaction Statistics

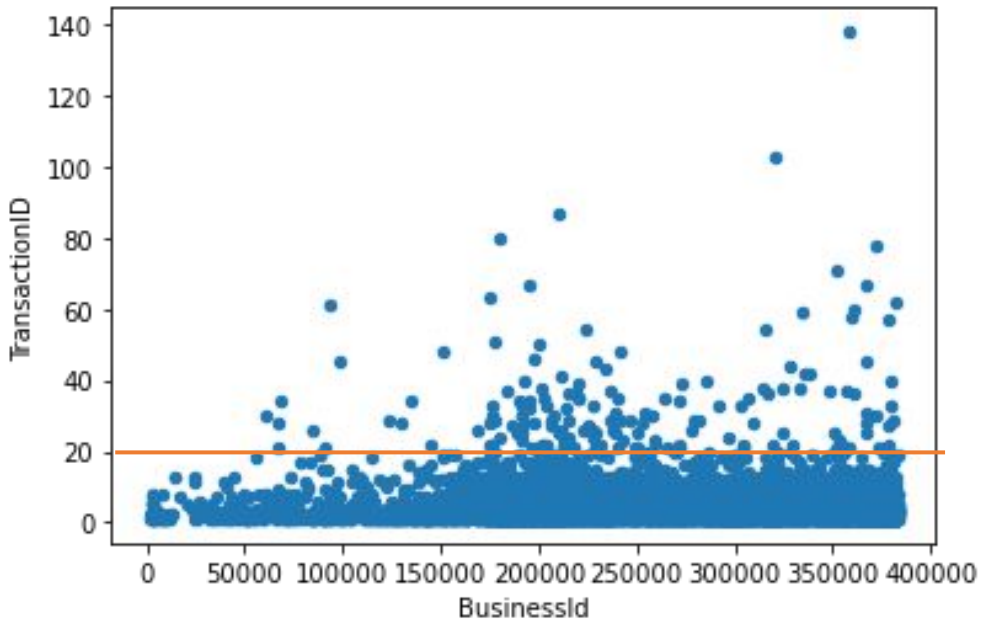






Failed Transactions Statistics

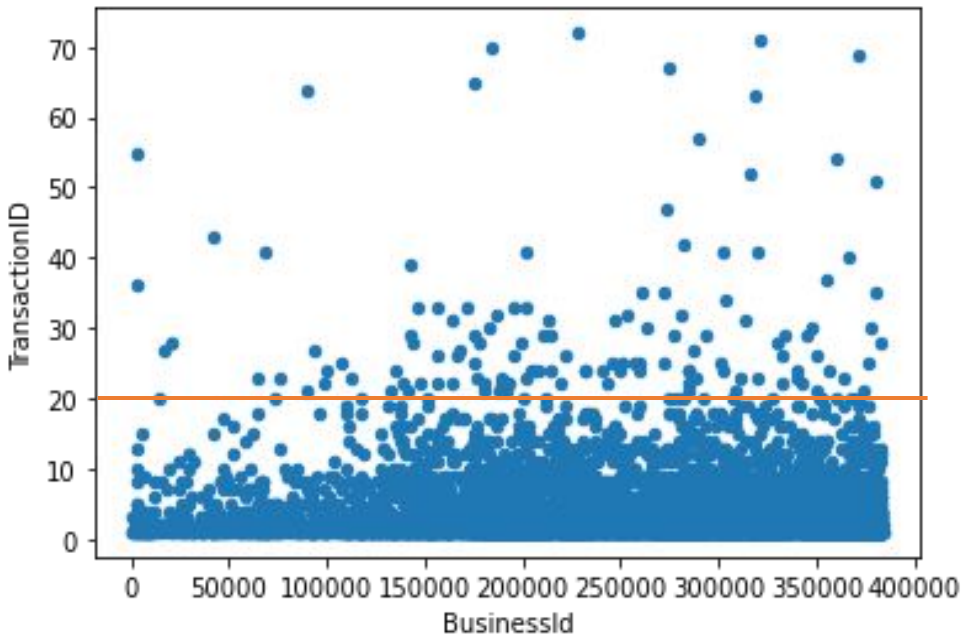
Enquiry Type Failed Transactions per Businesses



97% of Businesses have done less than 20 failed **enquiry type transactions** on 15/05/2022

- Total Businesses = 5225
- Below 20 and at = 5064
- Above 20 = 161
- **Mean failed** transactions = 5

Amount Associated, Failed Transactions per Businesses

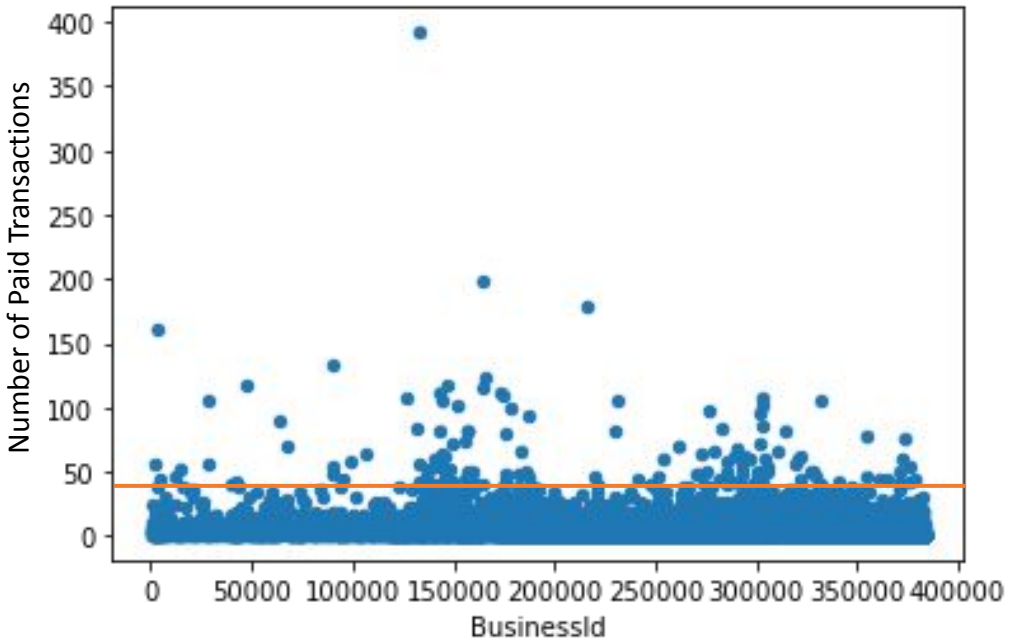


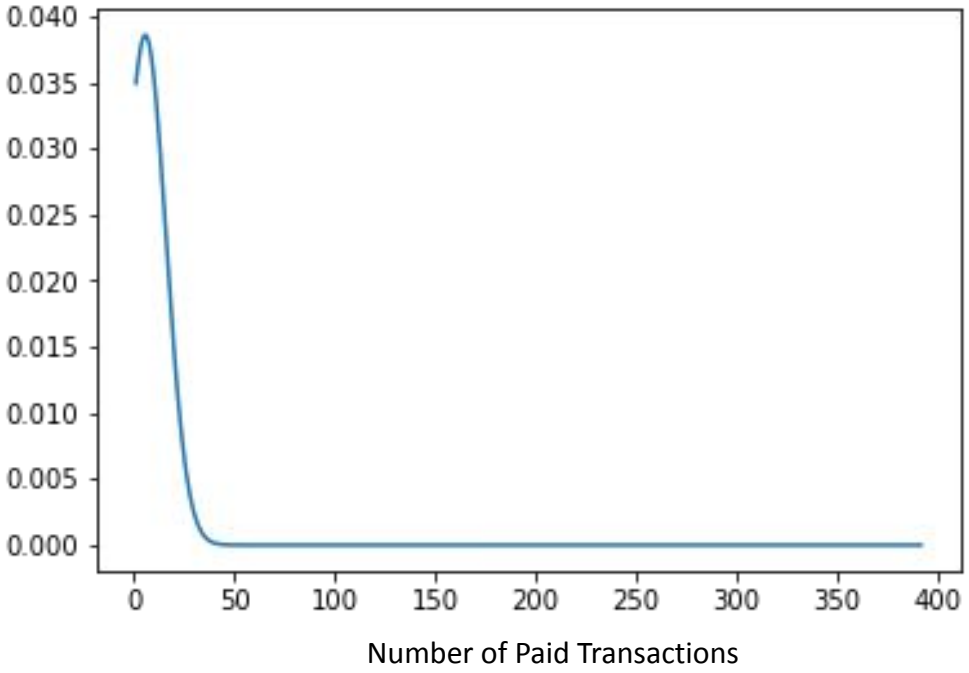
97% of Businesses have done less than 20 failed **Amount involving transactions** on 15/05/2022

- Total Businesses = 5859
- Below and at 20 = 5730
- Above 20 = 129
- **Mean failed** Transaction = 4.5

Paid Transaction Statistics

Paid Transactions = Amount Associated Successful Transactions





- 99% of businesses are doing less than 30 Paid transactions (Passed).
- Distribution has a long right-side tail, suggesting the existence of outliers.
- Mean Paid transaction per businesses = 5 - 6

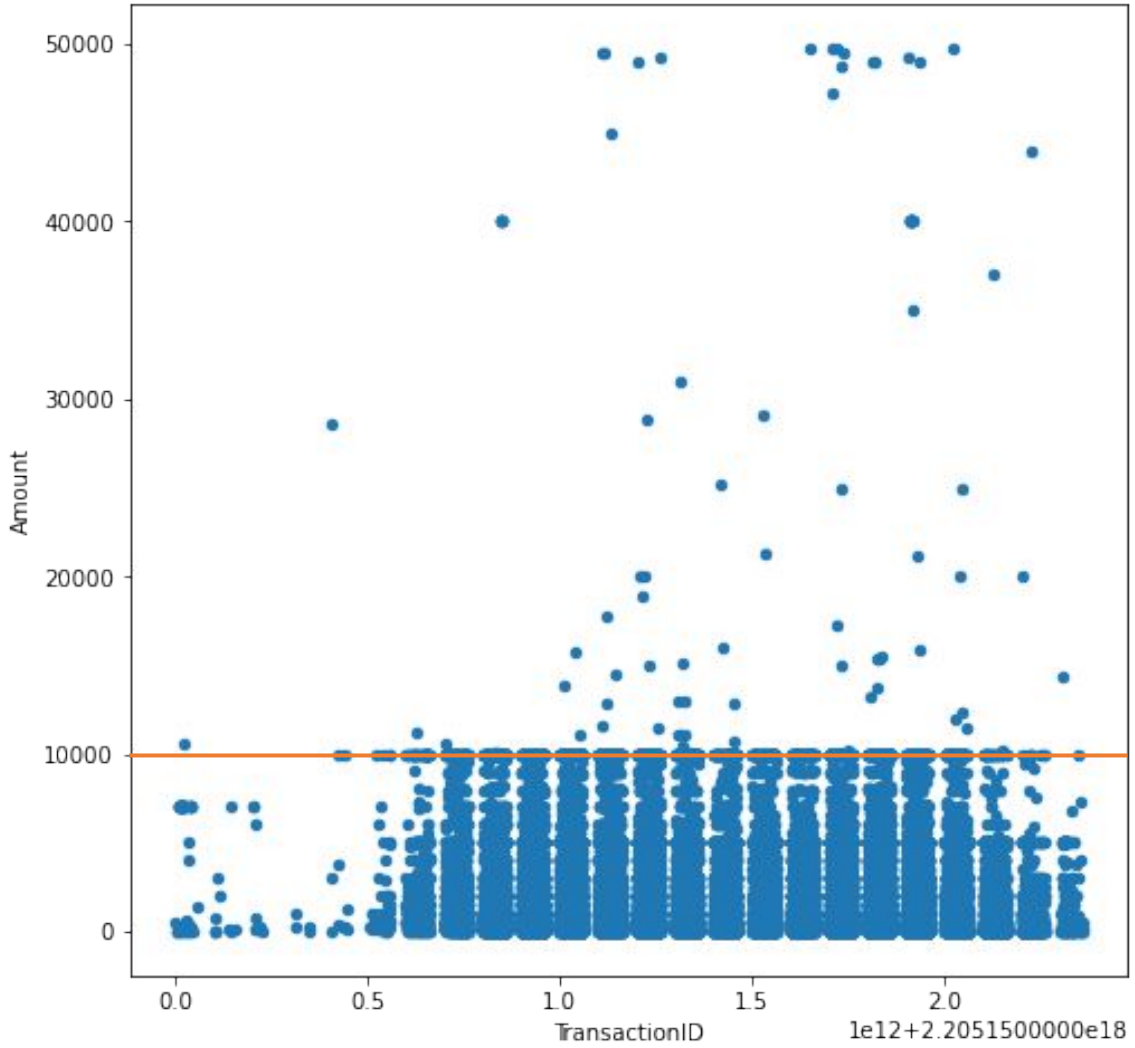
Transaction wise Business distribution, shows the huge stacking of transaction in smaller range however there are transactions happening in high volume too, but quite rarely.

Paid Transaction Statistics

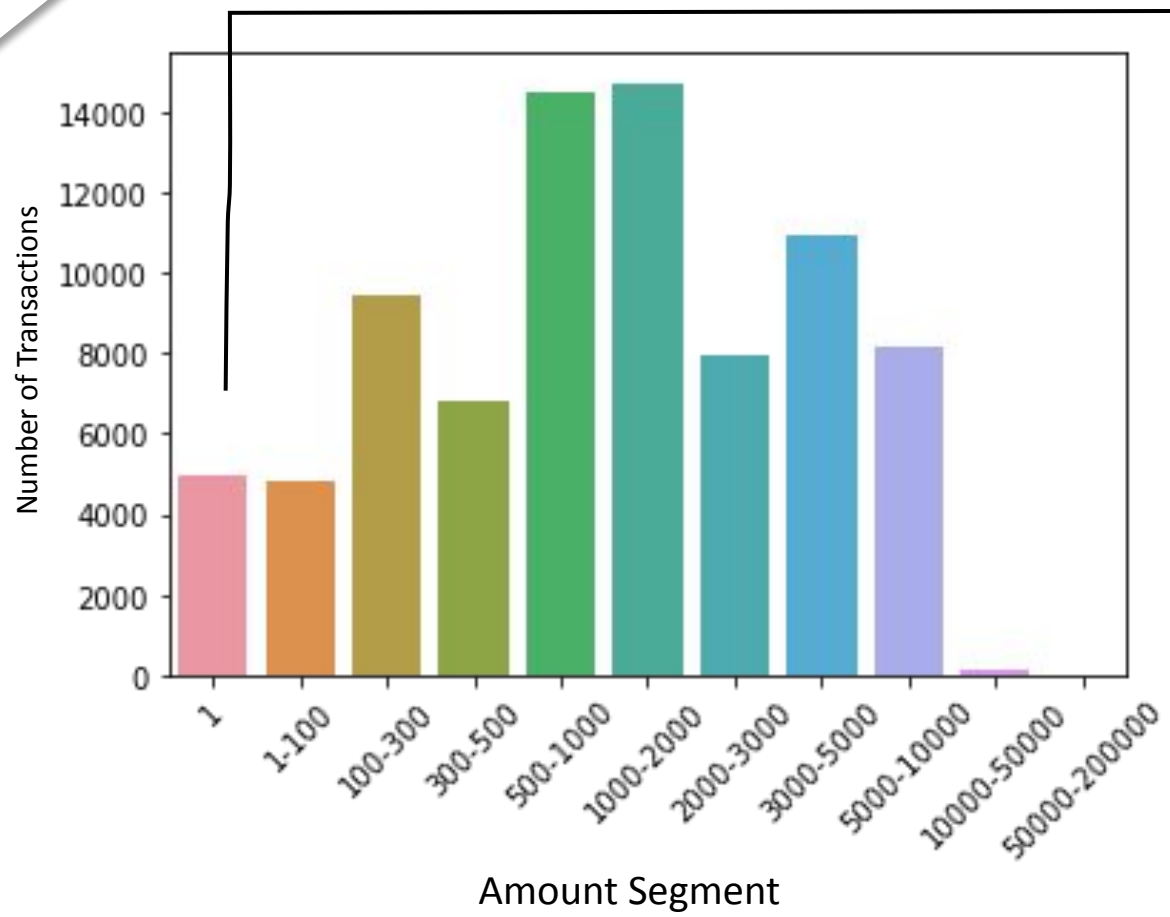
Paid Transactions = Amount Associated Successful Transactions

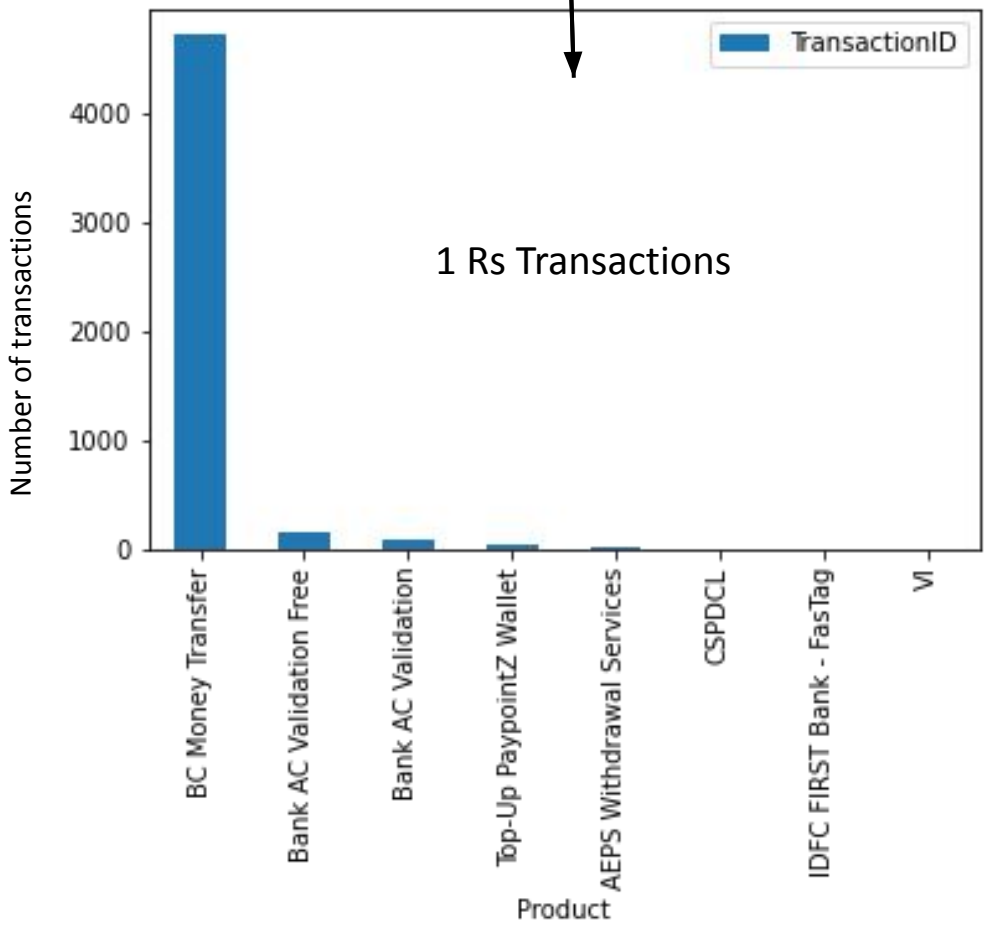
Most of the Transaction Amounts lie under10000 Rs range

- Under 10000 = **56212** transactions
- Above 10000 = Only **87** transactions
- Mean = 2020 Rs



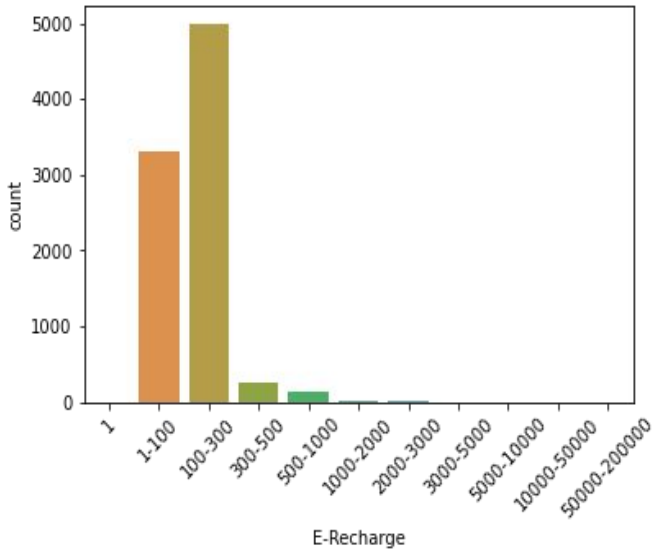
Amount Segment Statistics

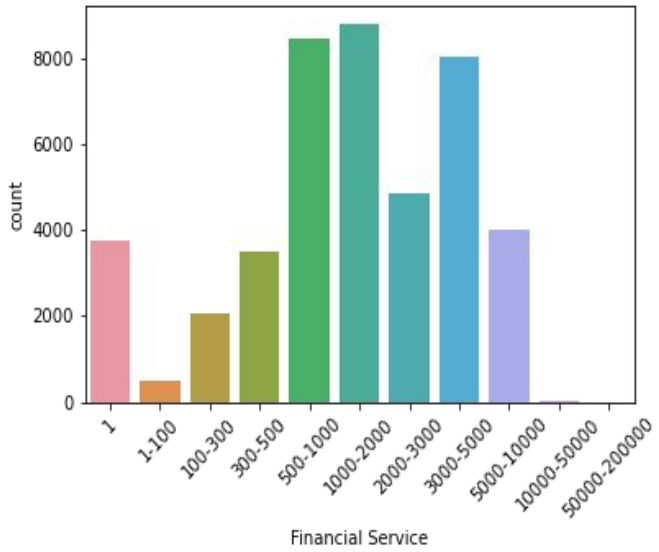


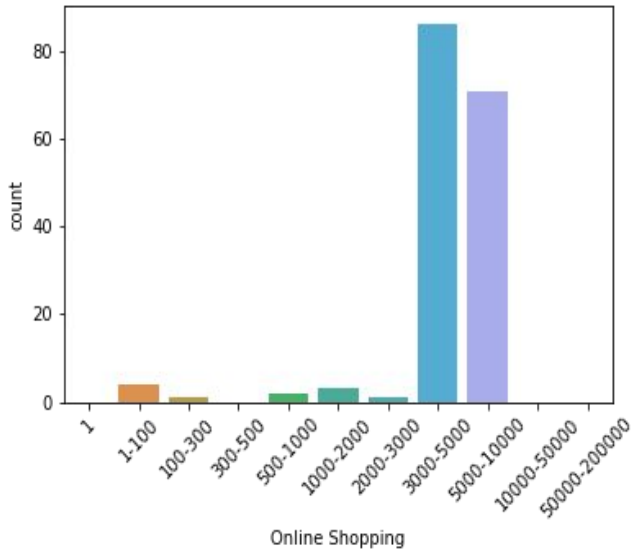


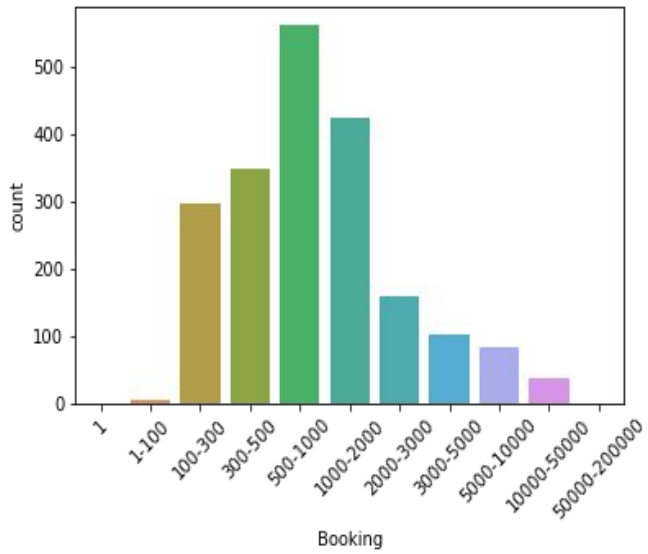
There are about 5000 transactions of Rs 1, which mostly comprises of BC Money Transfer product

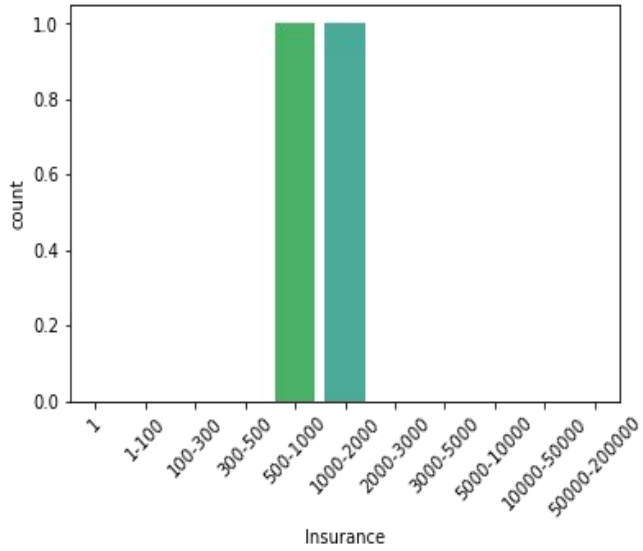
Service wise Amount Segmentation

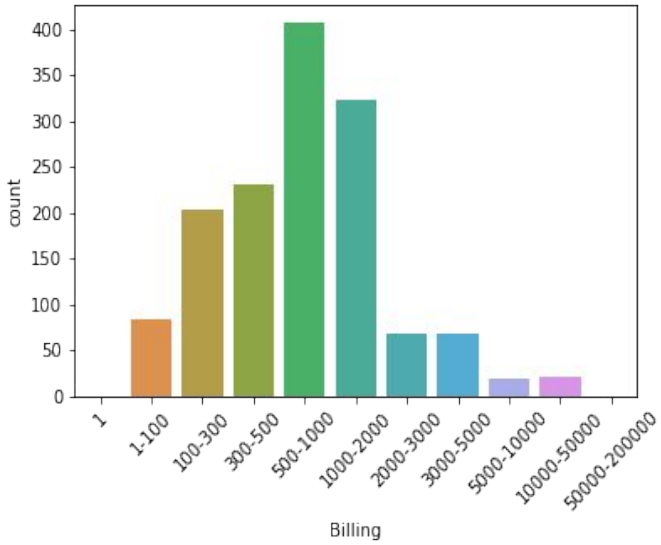












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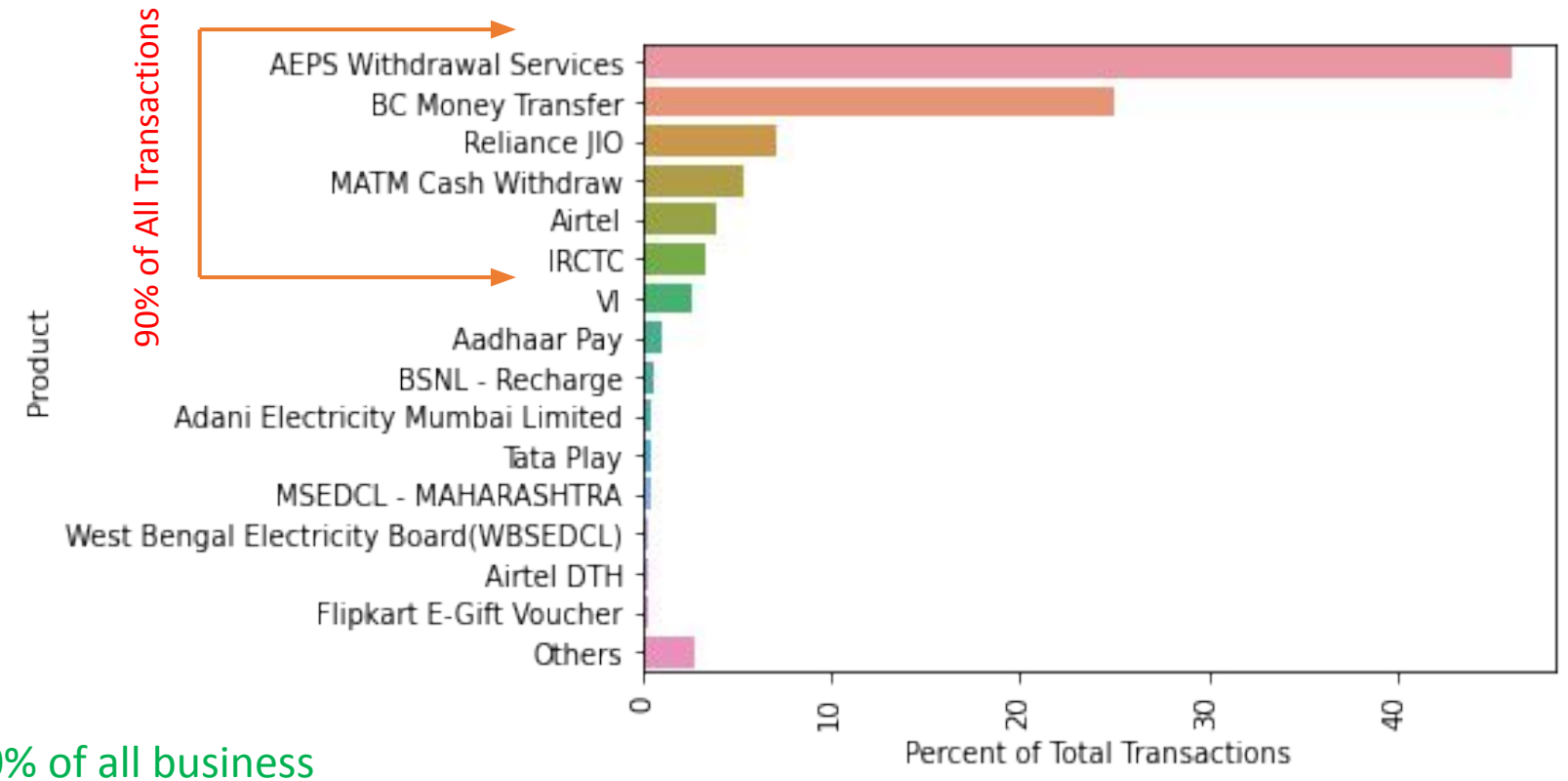
Product wise number of Transaction Statistics

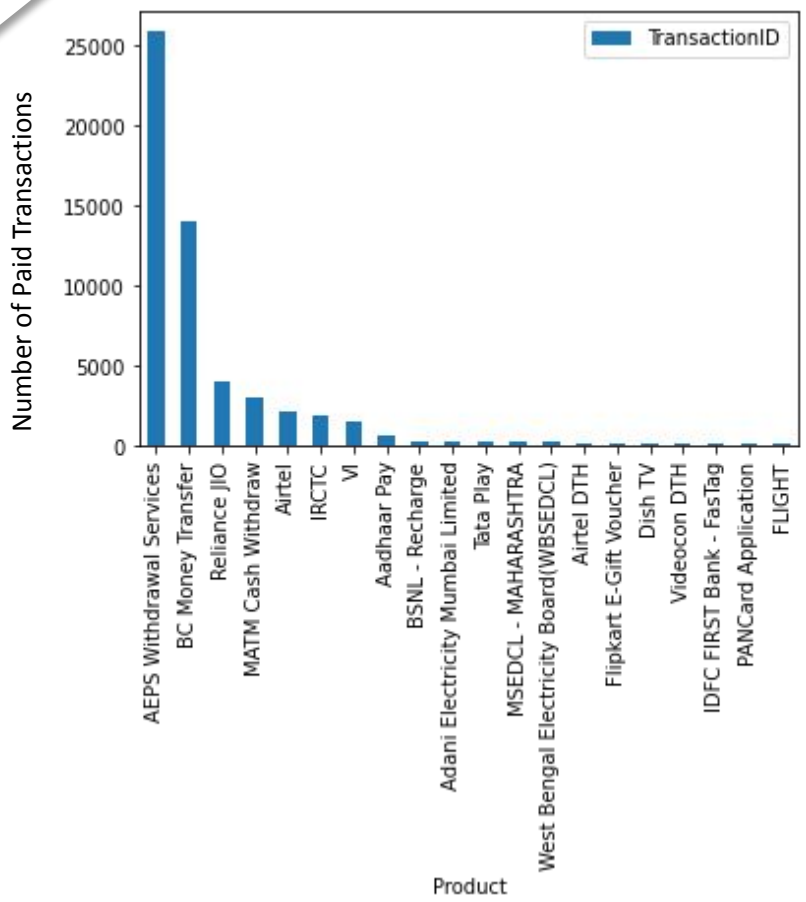
Percentage of Transactions happening per product

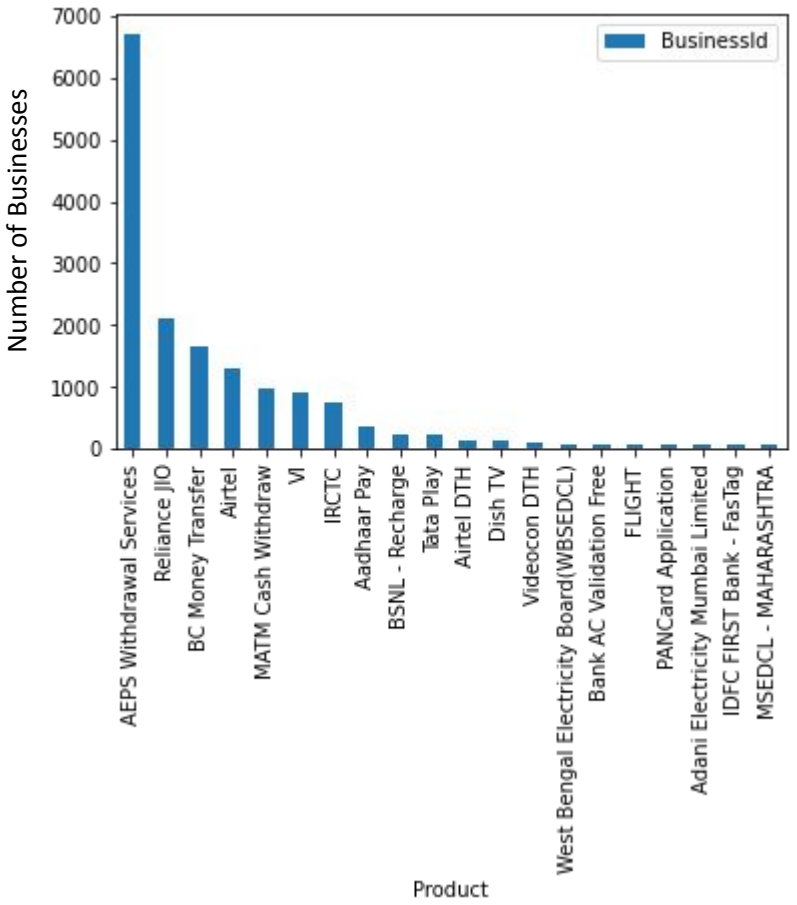
- AEPS Withdrawal service comprises of almost 50% of paid Transactions
- BC Money transfer for about 25%
- All other products drops down to less than 10% of transactions.

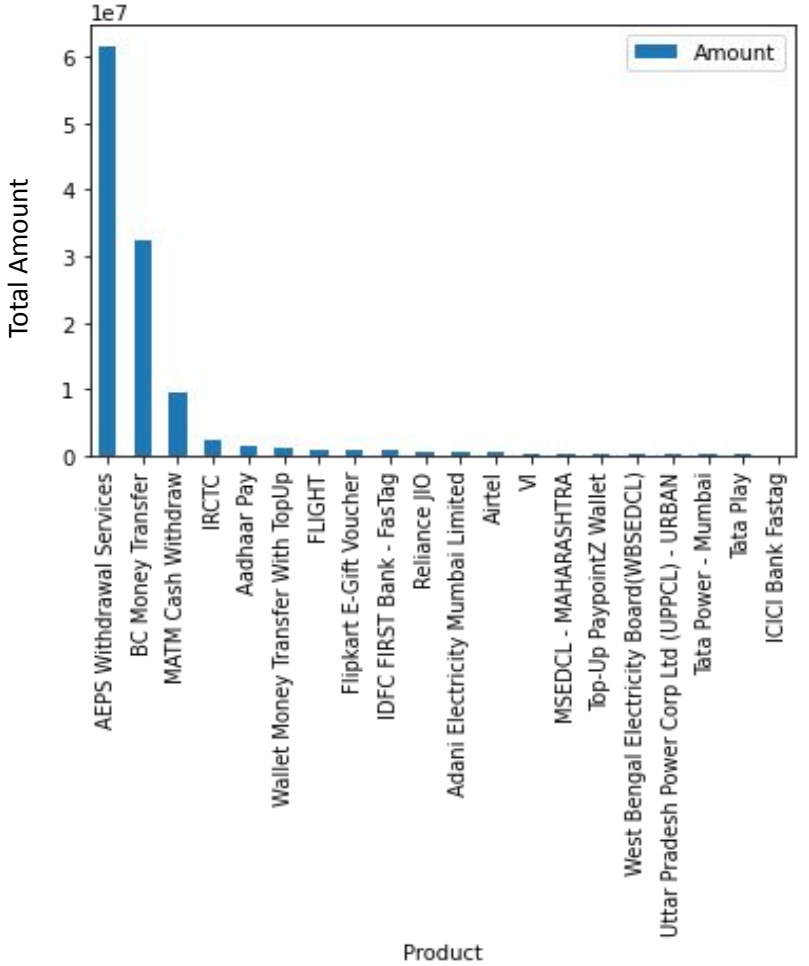


- These top 6 Products comprises of 90% of all business transactions.
- Priority should be given on improving these product's services.

Paid Transaction Statistics



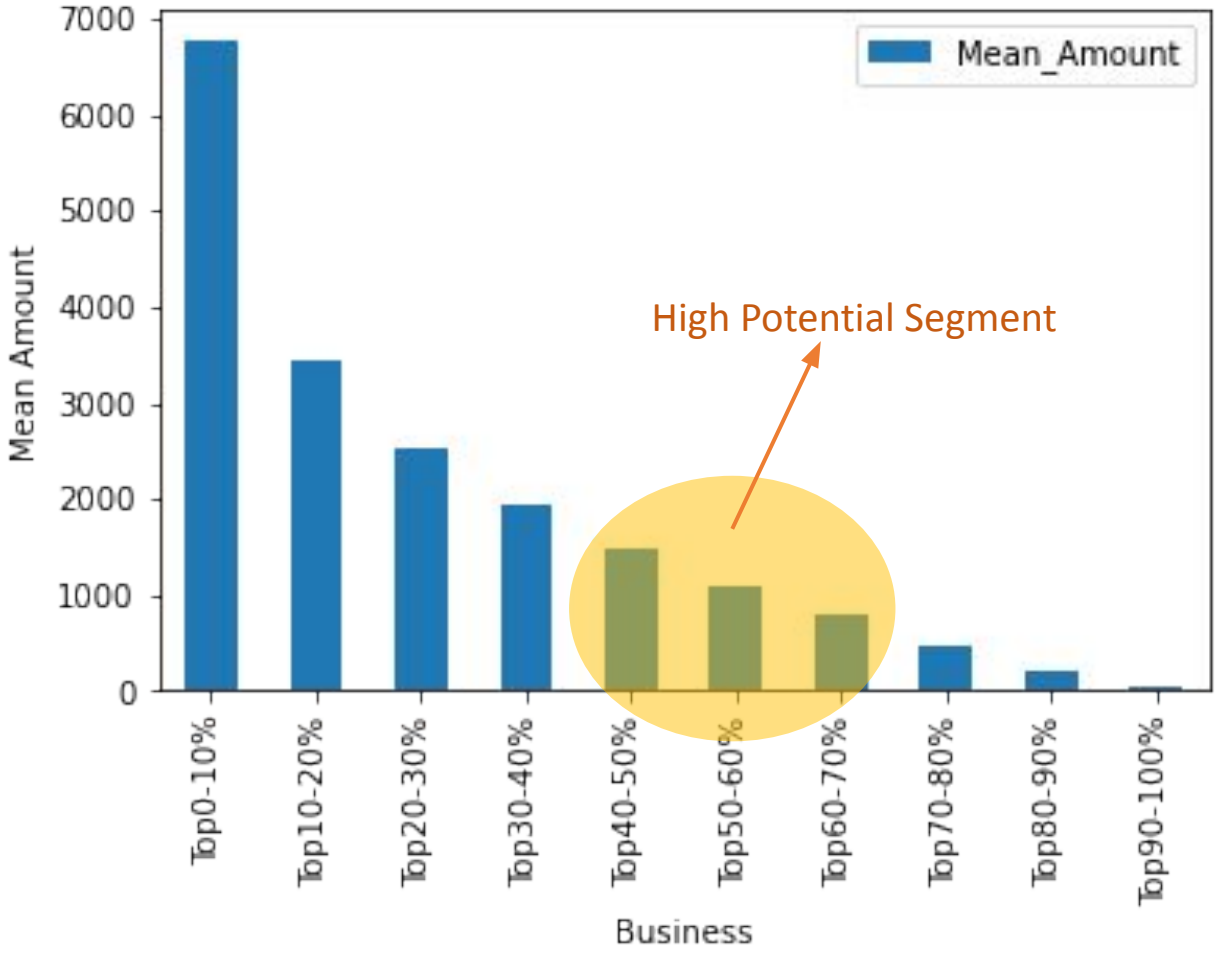




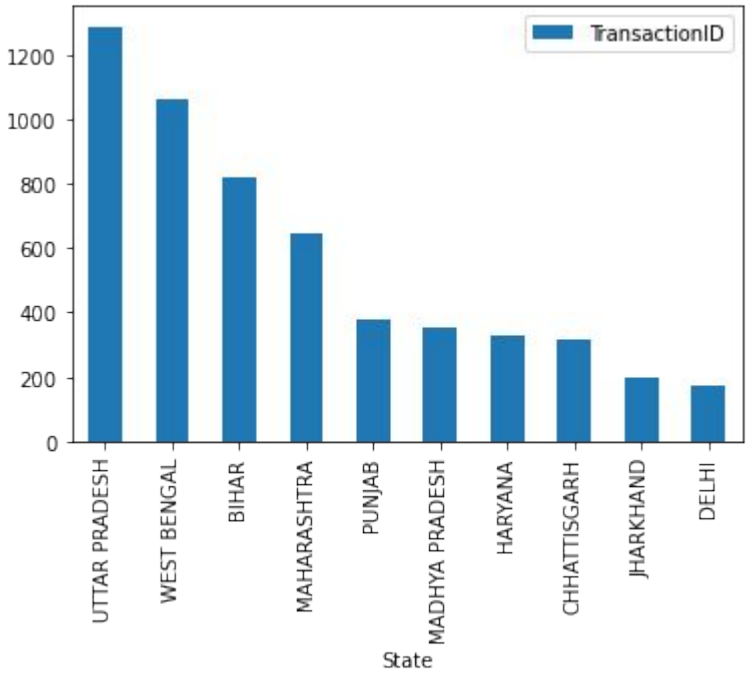
- Number of businesses can be optimized for a place according to transaction Amount Volume and Geography.

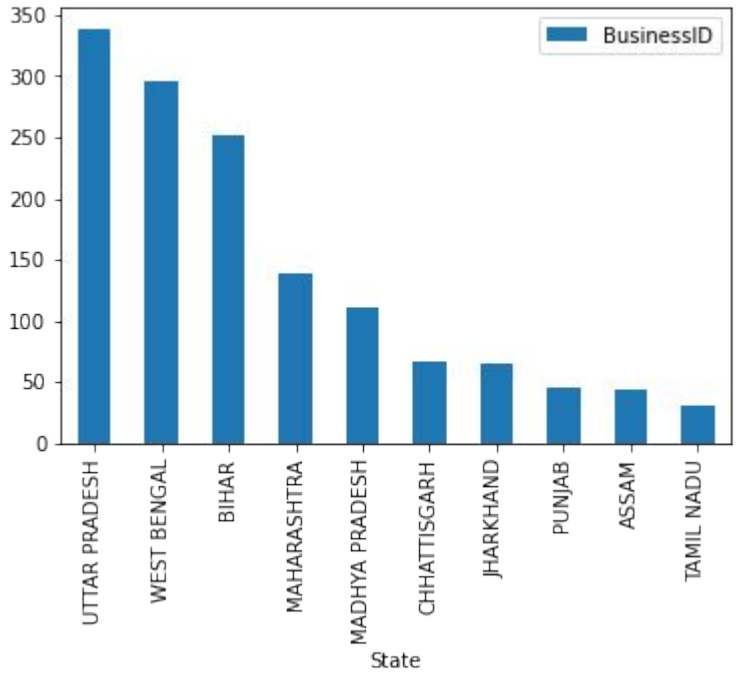
Amount wise segmentation of top Business

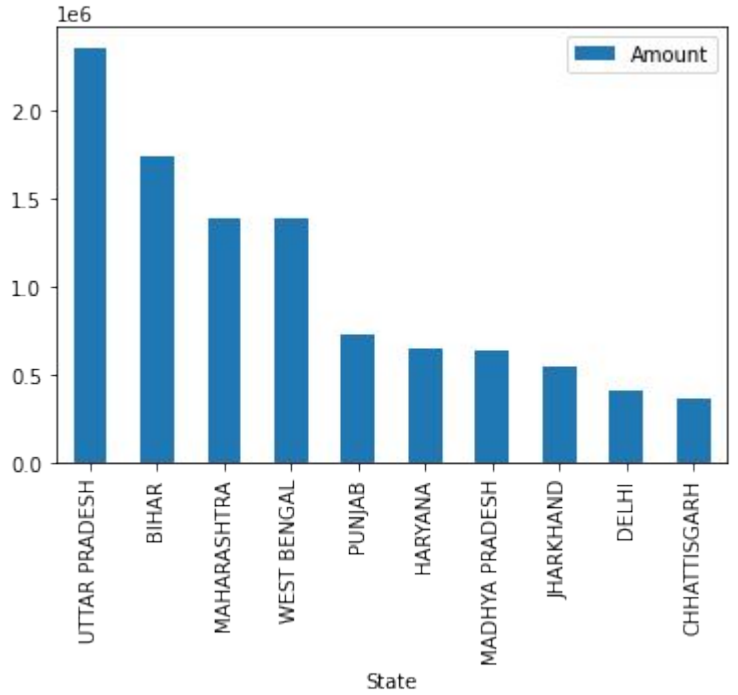
- Mean Transaction Amount for Top 10% of businesses is about 2 times higher than the second segment of top 10-20%.
- Apart from Top 10%, remaining segments are showing fairly linear characteristic.
- **We can expect 10 % increase in Business Volume, using ML based Segmentation and targeted Recommendation.**



Address (State and City) Statistics



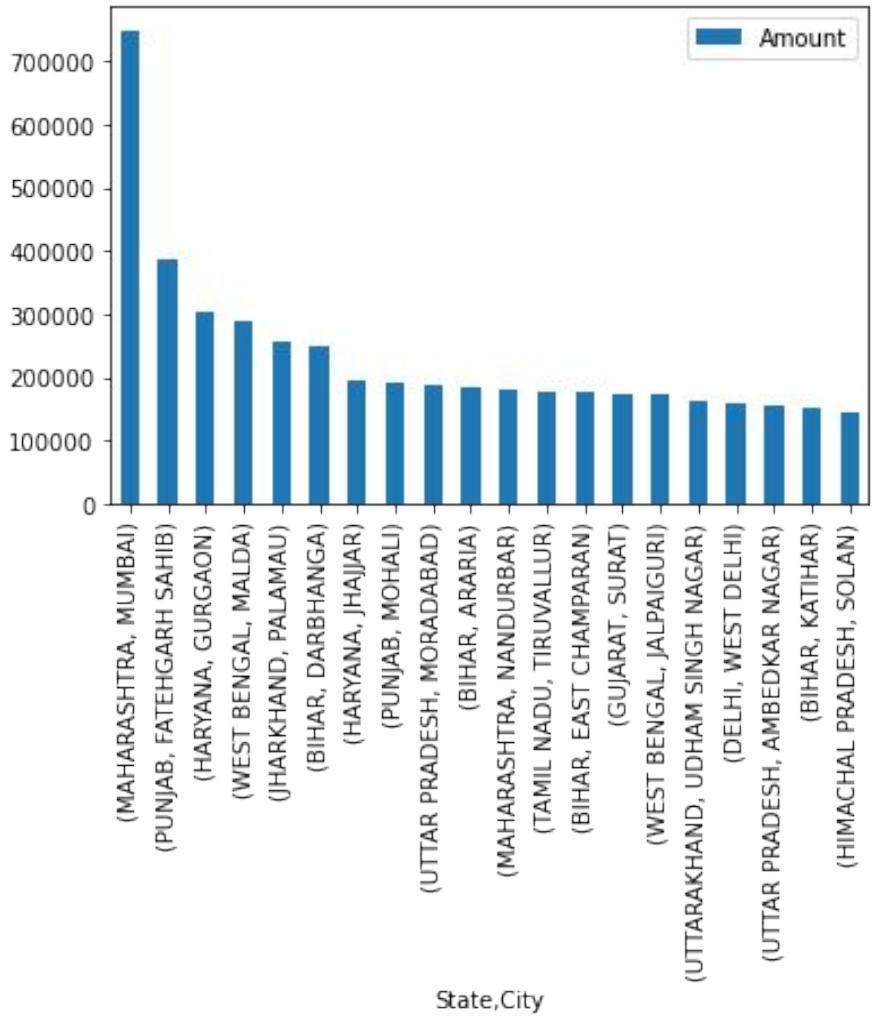




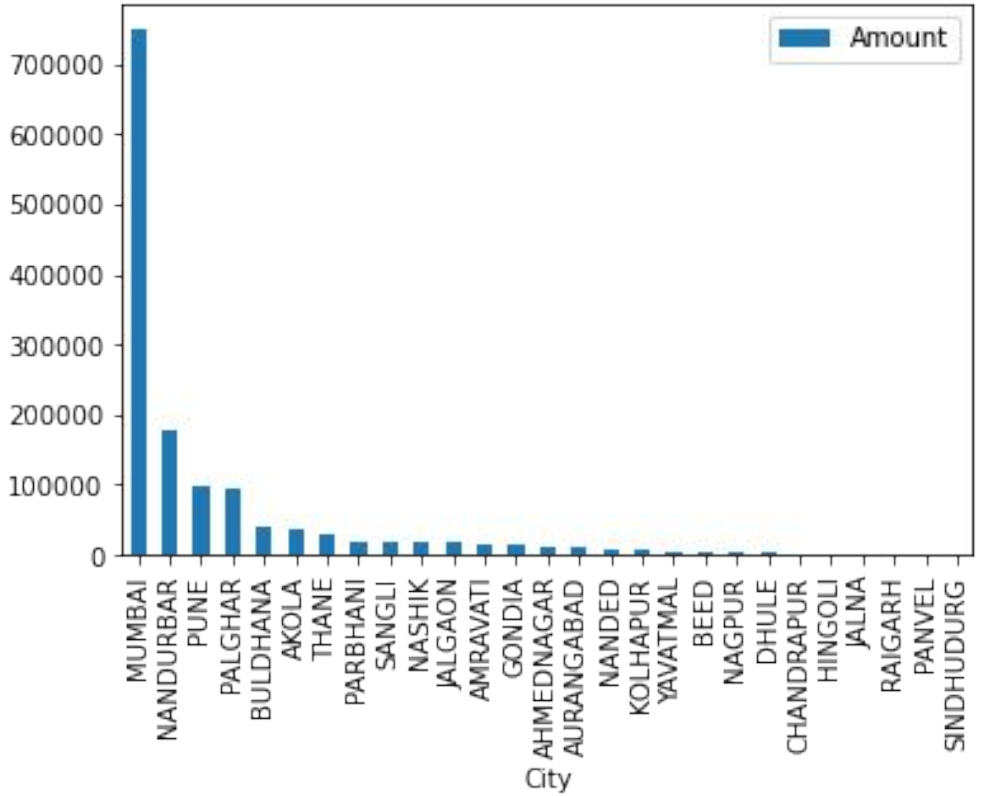
- Top 5 States for the businesses are Uttar Pradesh, West Bengal, Bihar, Maharashtra, Punjab

- Though West Bengal is having more transactions and businesses compare to Bihar and Maharashtra. Bihar and Maharashtra transacted more Amount Volume.

City Wise Amount volume Statistics



- Out of 632 cities, above Top 20 cities comprises of the ~ 40% Amount transacted



- For Maharashtra, Mumbai is Having very high transaction Amount Volume, However cities with equal potential like Pune are lagging behind.
- Targeted marketing with area segmentation can be utilized in similar cities effectively

Proposal

- Categorization of Businesses based on performance.
- Segmentation of Businesses to detect high potential Businesses.
- Top products for launching and developing in new areas.
- Area Segmentation to detect high potential Areas to focus on.
- Developing a recommendation model to reach out to new customers through existing businesses.

MACHINE
LEARNING

- Model Development
- Testing of Model on real time data
- Deployment of the model

Thanks Everyone