

Card Decline Report

Business Case

The company is trying to understand card decline which has caused poor user experience and loss of potential revenue. It has also caused involuntary churn.

Business Objective

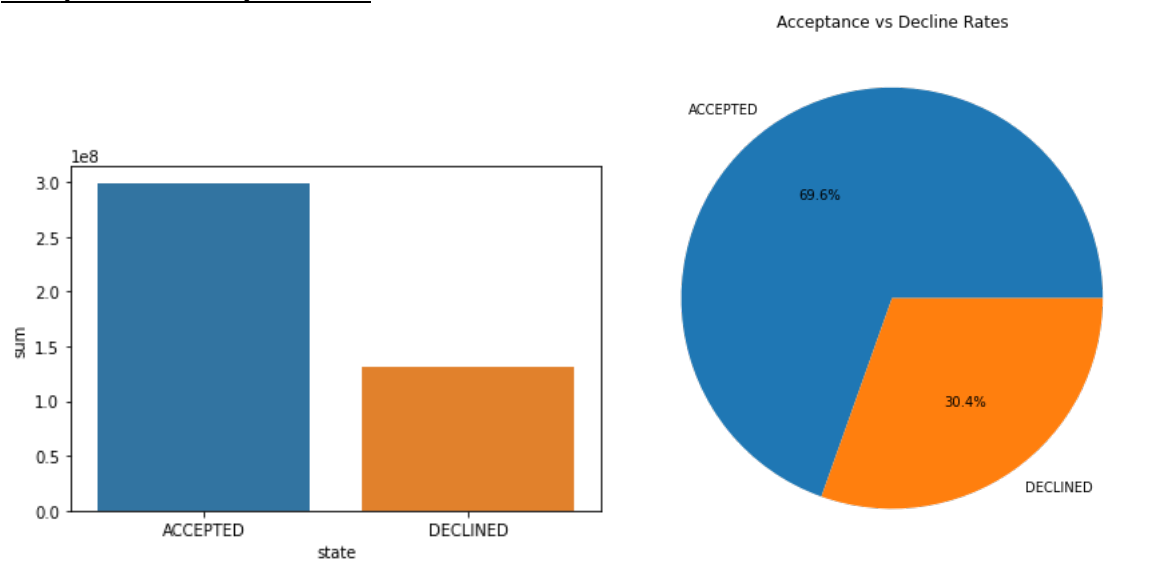
1. To understand the volume of declined cards in USD.
2. To analyze the root cause of declined cards.
3. To Understand what the acceptance rate has been over time.
4. To understand which countries had high volume in amounts of declined transactions.
5. To investigate transactions with missing chargeback data.

Summary

1. **Acceptance rate:** The acceptance rate stands at **69.6%** and decline rate stands at 30.4%
2. **Highly declined countries:** FR, UK, AE, and US had declined transactions of over \$25M USD in declined transactions.
3. **Monthly Acceptance rate:** April had the lowest monthly acceptance rate compared to the other months from Jan to June.
4. **Acceptance rate amount:** Transactions in the range of \$100 to \$1000 USD had the highest acceptance rate.

Observations

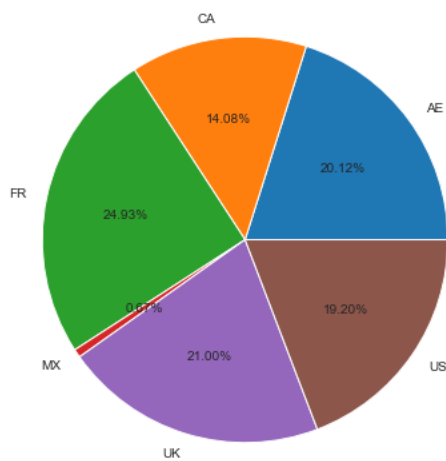
Acceptance rate by Amount



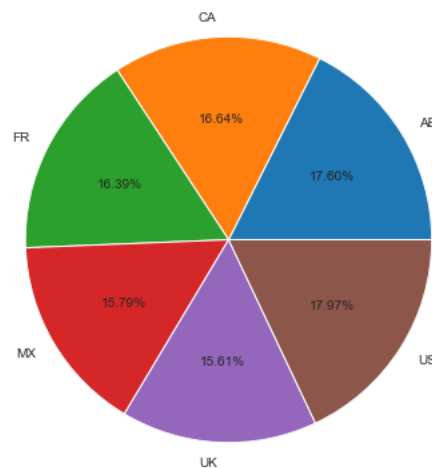
The total declined amount was USD 130.8M accounting for 30.4% of the transactions and the total accepted amount was \$299.3M USD accounting for 69.6%.

Acceptance rate by Country

Percentages of Declined transaction in USD by country

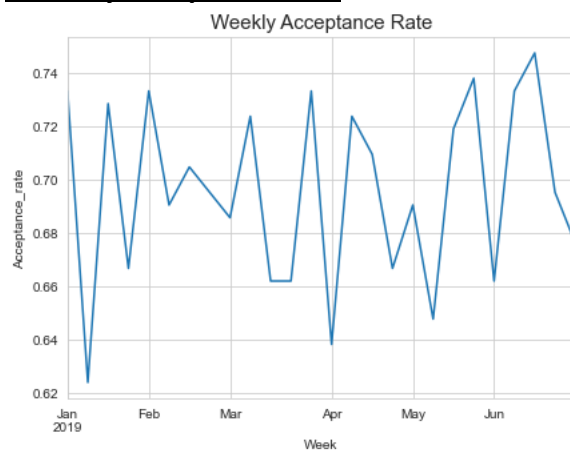


Percentages of Declined transaction count by country



FR has the highest declined transaction amount. The count of declined transaction is almost proportional for all the countries.

Monthly Acceptance rate



April had the lowest acceptance rate. The acceptance rate decreased from Feb to April.

Recommendations

1. Further investigate why the was low acceptance rate in April.
- 2.

Next Steps/Future Work

1. What time of day are transactions most successful.
2. Implement a ML Decision tree to predict if the transaction will be declined or accepted.
3. Implement feature importance to see which features had the highest contribution to a card being declined or accepted.
4. investigate churn caused by declined cards.

Appendix

1. Data

This analysis uses data from Jan-2019 to june-2019

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