List of Figures

List of Tables

Contents

1 Summary

1.1 Problem Setup

For this task, my job was to find pattern from the subscription data to solve a real-life problem.

This data consist of customer subscription data of 24 months from 2018-01-10 to 2019-12-02. Data consist of in total of 1300367 entries.

1.1.1 Facts

Dataset consist of total 133300 new subscription and a total of 89862 renewal.

There is a peak in monthly subscription amount in October and December 2018.

Subscription Status	**Frequency**
Suspended	601838
Subscribed	428563
UPGRADE	133365
RENEW	89806
Downgraded	37602
Unsubscribed	4879
ReSubscribed	2073
SubscribedAsFamily	1458
RemovedFromParent	783

Table 1: Frequency distribution of subscription status

There is a peak in monthly subscription amount in October and December 2018.

Amount of monthly subscription varies not only depending on month but also on retailer type. Express type retailer have the highest frequency.

Subscription status changes with time. Need further studies to find the reason and evaluate changes of subscription of every subscriber to find pattern among users.

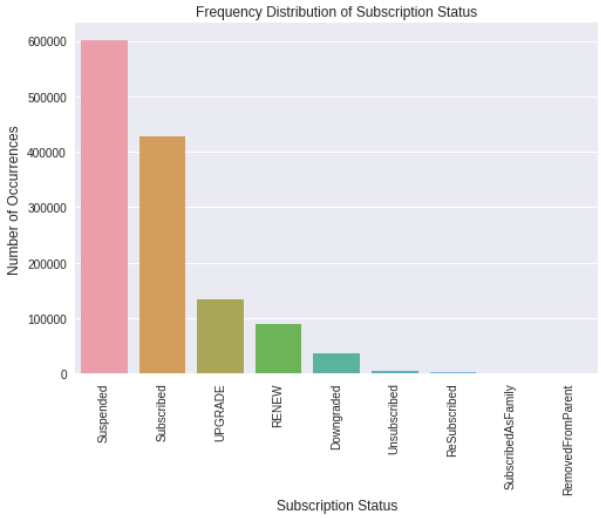

Figure 1: Subscription distribution

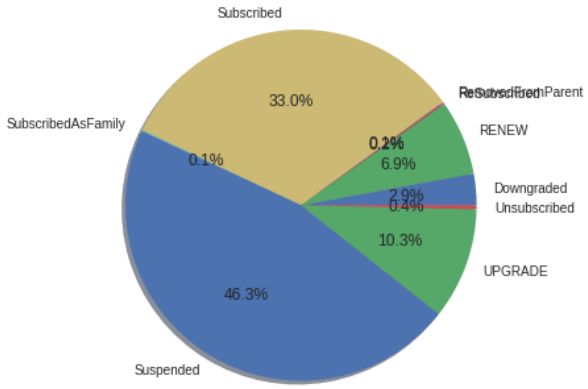

Figure 2: hart Pie Chart Subscription distribution

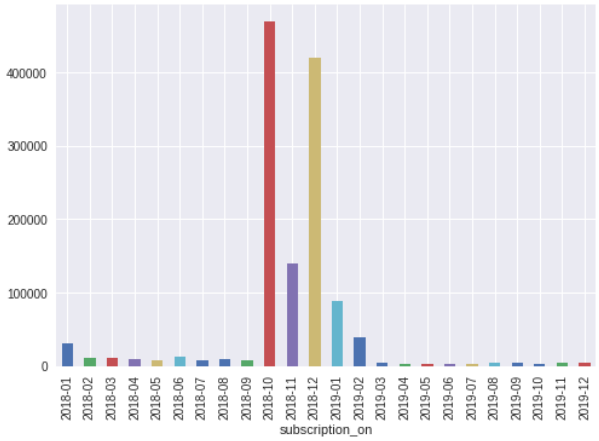

Figure 3: Monthly subscription frequency

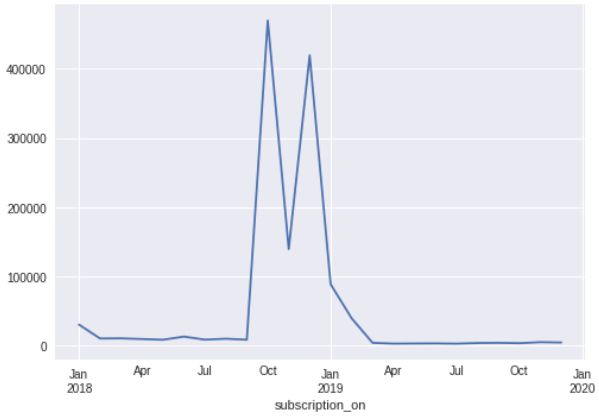

Figure 4: Monthly subscription trend

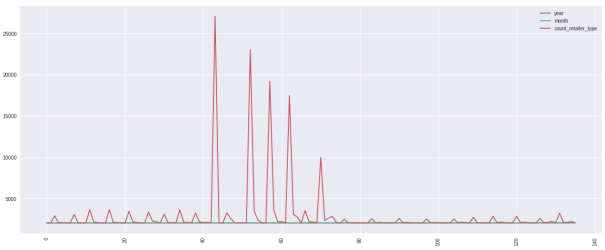

Figure 5: Monthly retailer trend

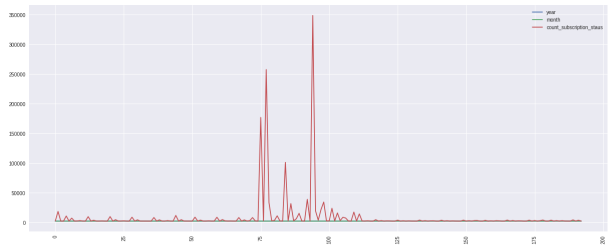

Figure 6: Monthly Subscription status trend

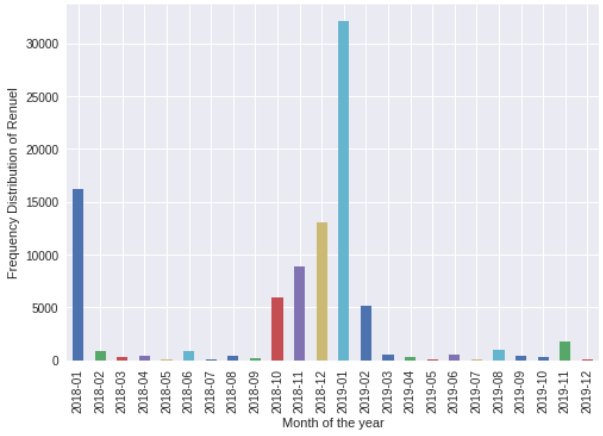

Figure 7: Monthly Renewal trend

Most of the renewal happened on January 2018 and between October 2018 to January 2019. Where maximum subscription happened in the month of October 2018 and December 2018. Maximum renewal happened on Jan 2019 (more than 30000)

From Figure : 7 and 8 it seems like there is a Gaussian distribution in Monthly Renewal.

More than 18000 subscriber Downgraded from paid to free product in the month of January 2019.

Most of the transaction happened during October 2018 to February 2019.

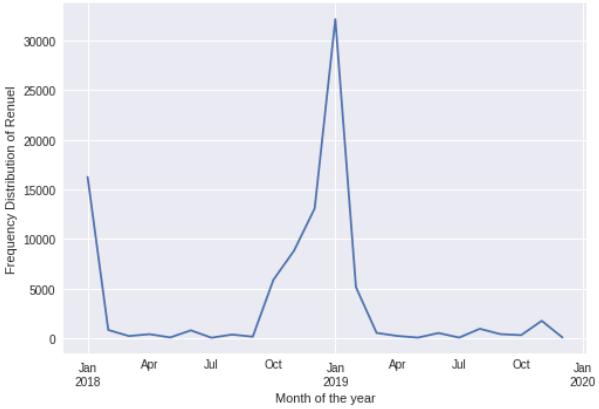

Figure 8: Monthly Renewal trend-2

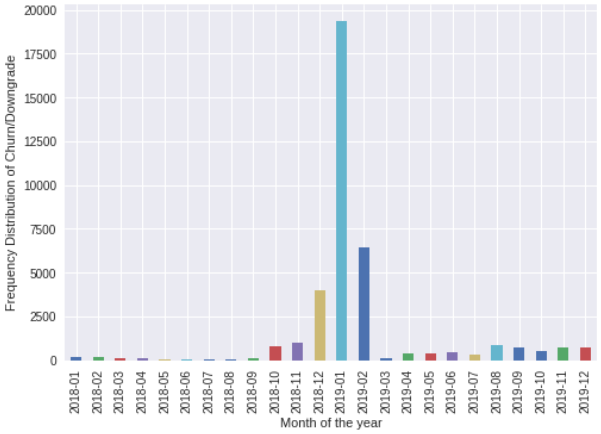

Figure 9: Churn/Downgrade trend

Figure 10: Transaction trend

1.2 Conclusion

Gaussian distribution can be found in this data set. Period October 2018 to February 2019 has the highest amount of transaction. Further study needs to be done in which this period should be point of interest.