

Project: Bank

Participants:

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Project
Future

4ος ΚΥΚΛΟΣ

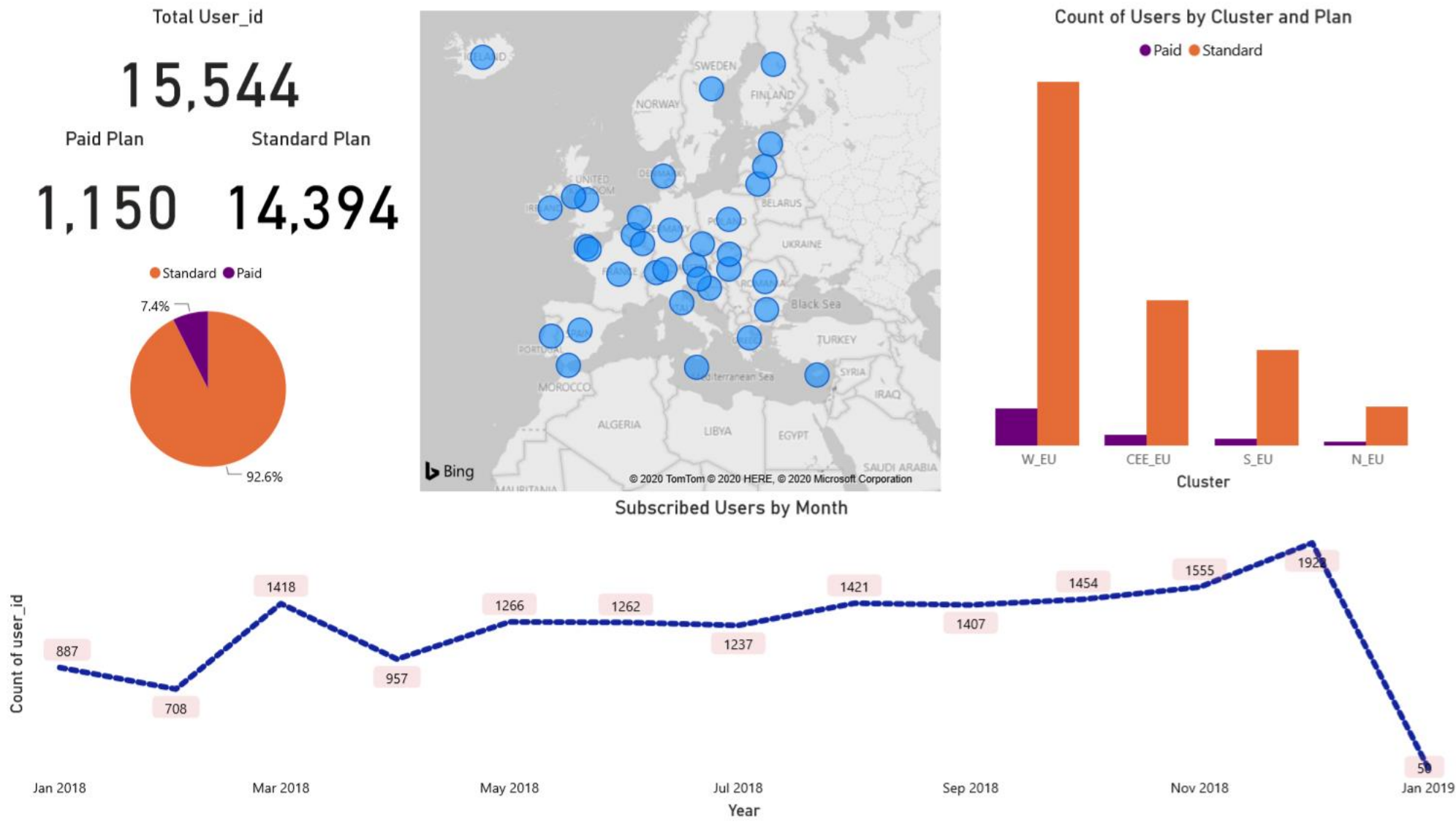
ΤΡΑΠΕΖΑ ΠΕΙΡΑΙΩΣ



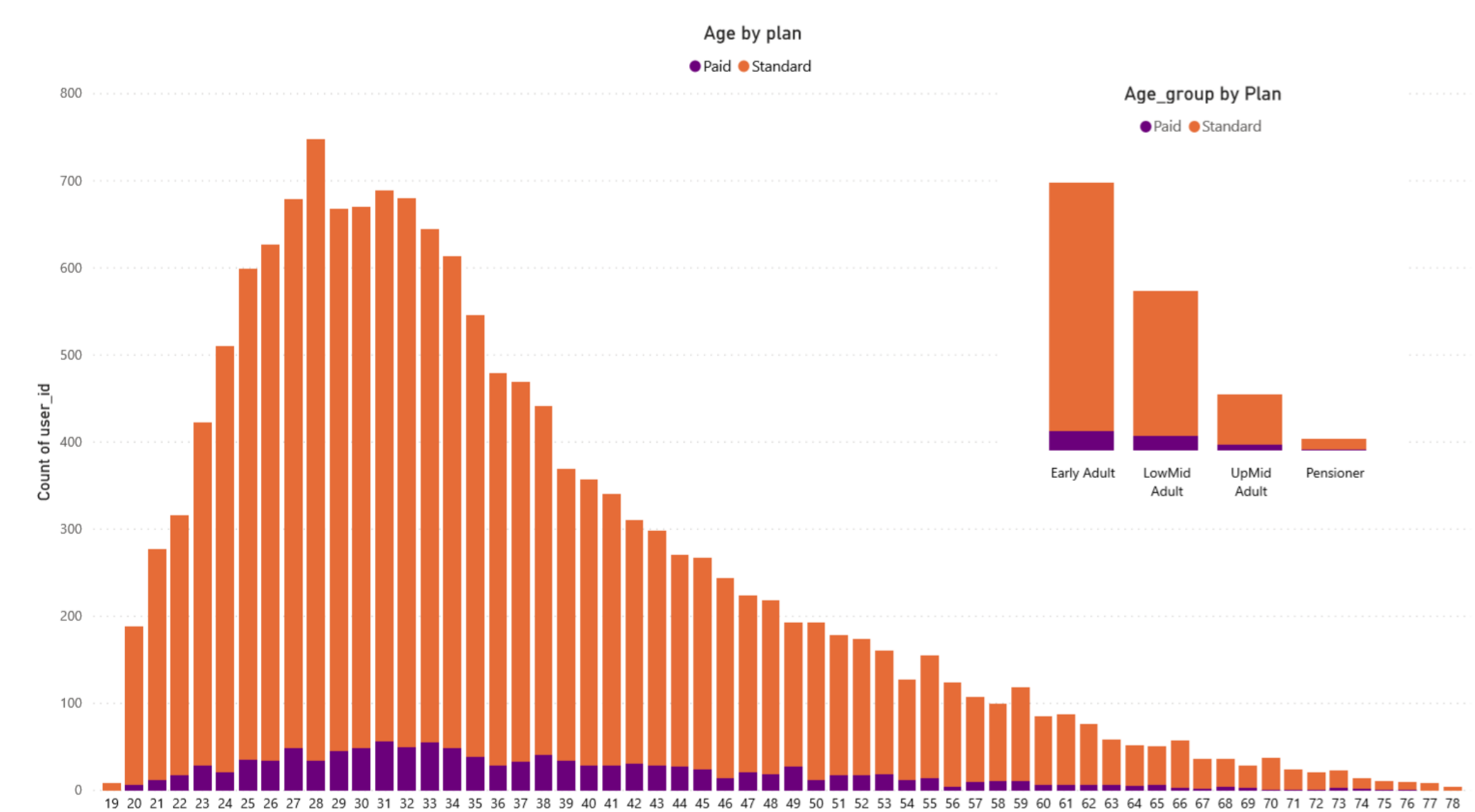
Code.Hub



Characteristics of registered bank users

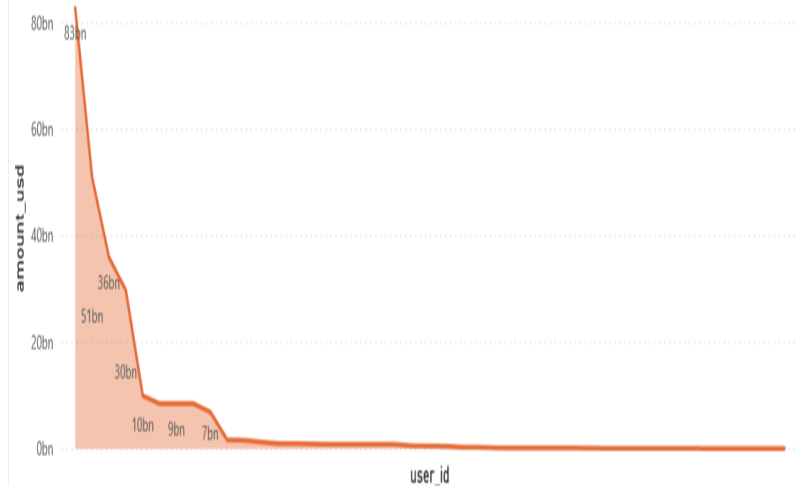


Users Age



Users Transactions

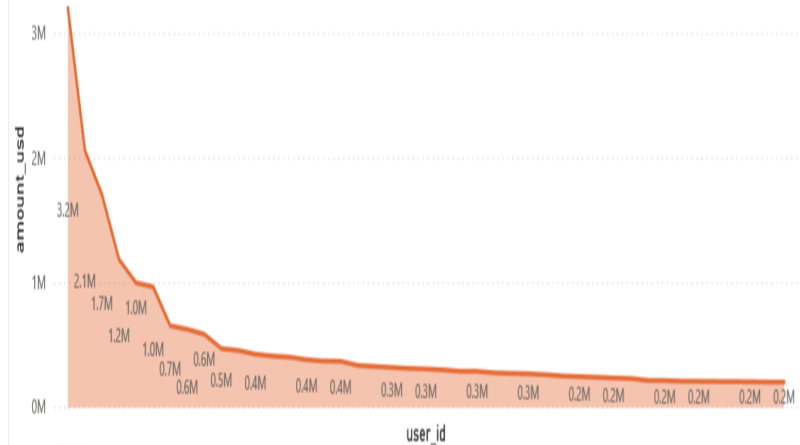
All Transactions_State



15,012

Count of Users

Only "Completed"

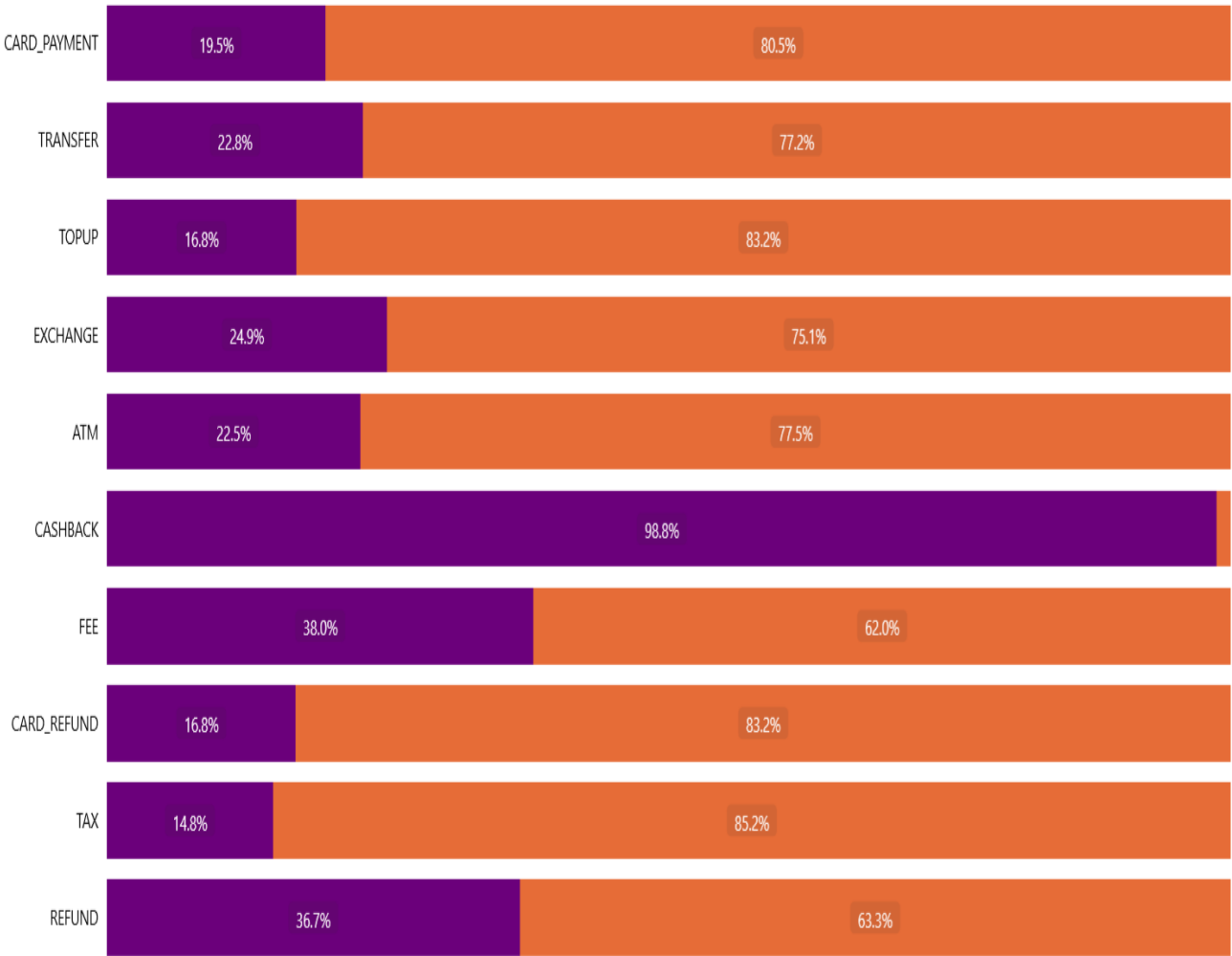


14,821

Count of Users

% Transactions_type by Plan

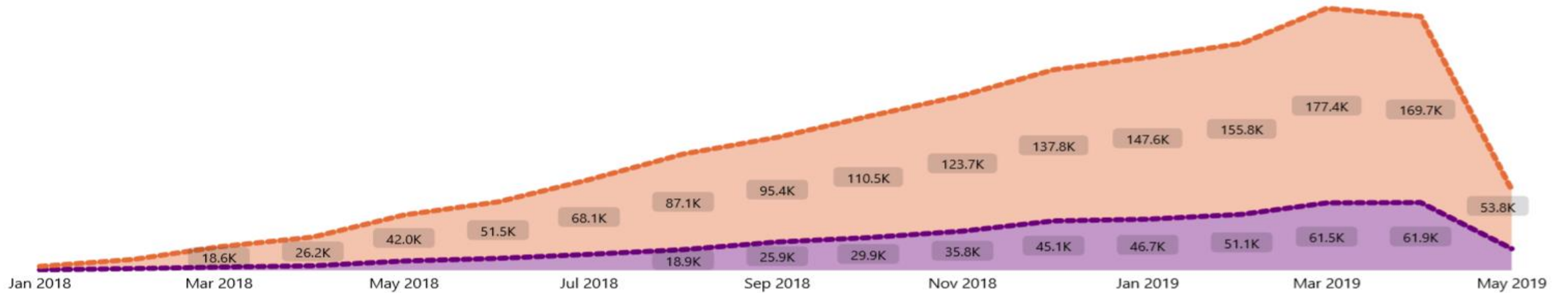
● Paid ● Standard



Transaction vs Notification

Count of Transactions by Month

● Paid ● Standard

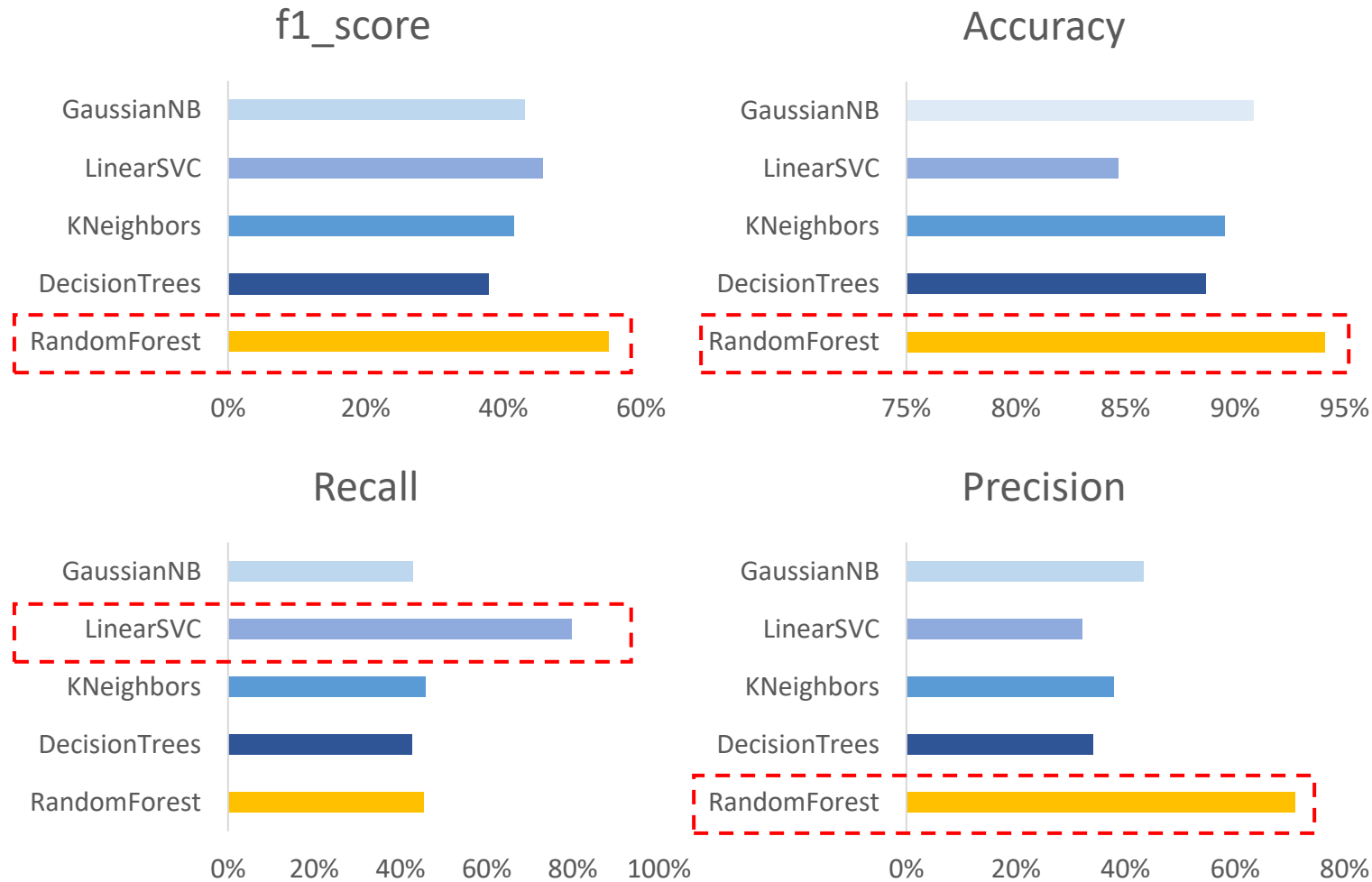


Count of Notifications by Month

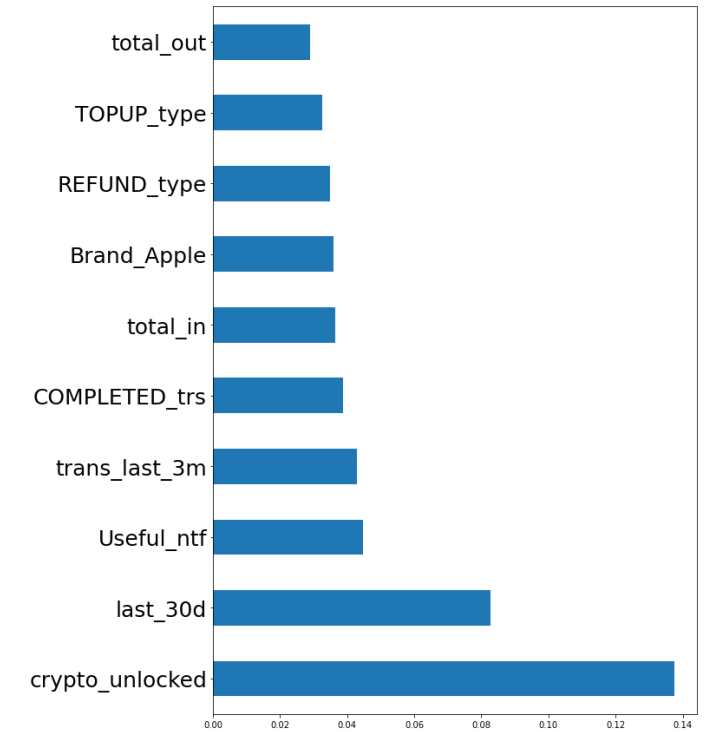
● Paid ● Standard



Classifier choice



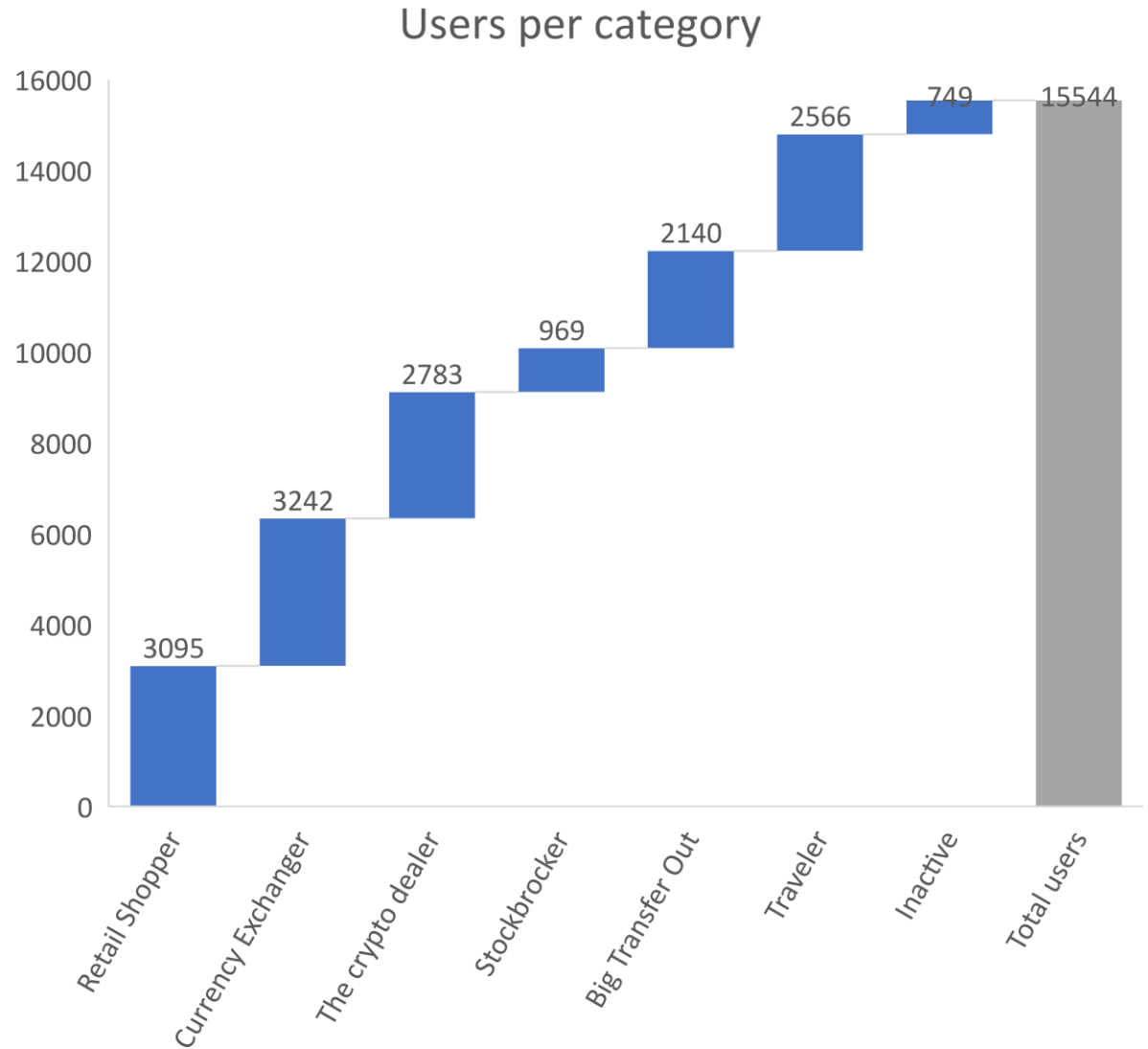
Random Forest Feature Importance



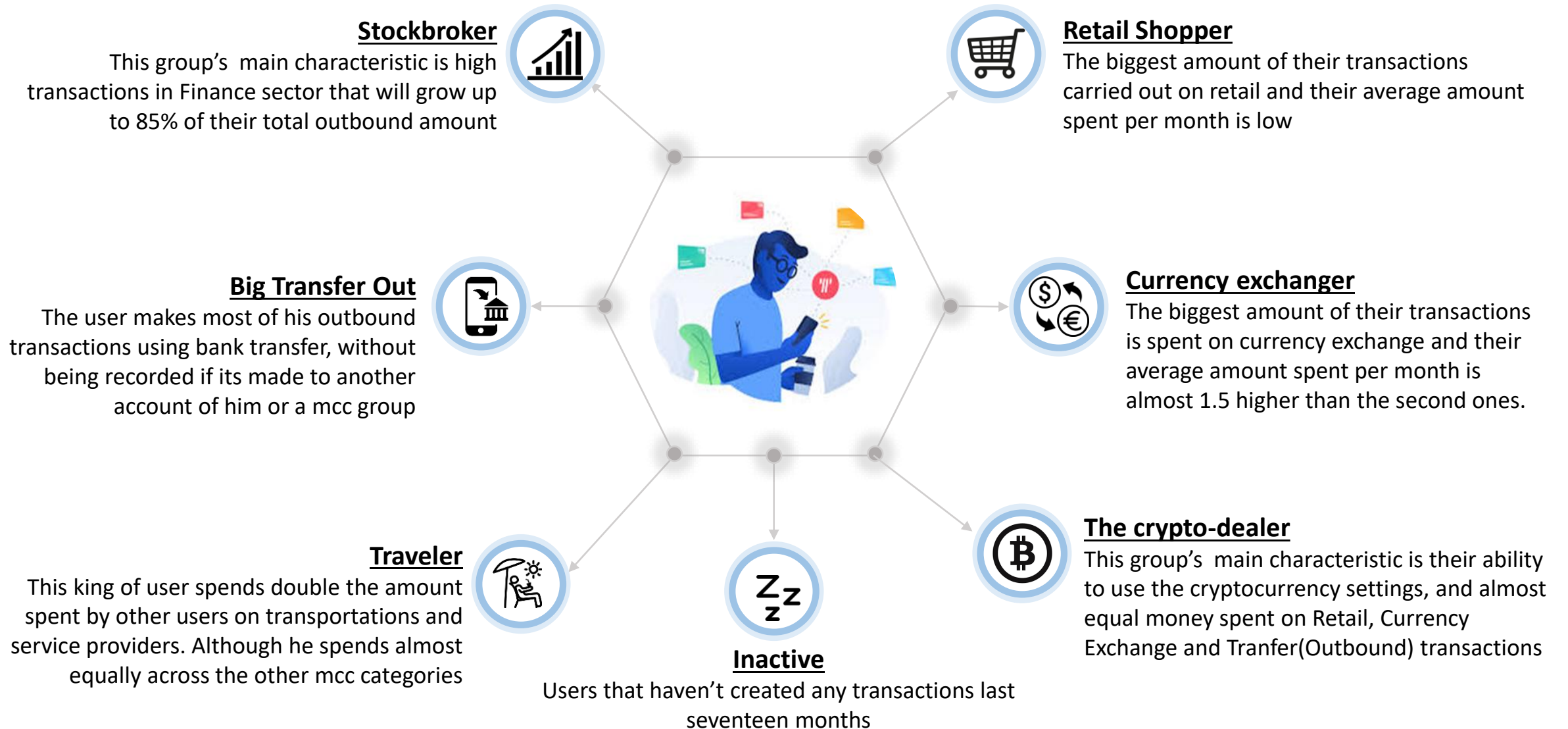
User modelling

User characteristics:

- MCC type of outbound transactions
(mccs categorized based on ISO 18245:2003)
- Transaction type
(only completed transactions)
- Total amount in USD spent during this period
- Minimum transaction amount in USD
- Maximum transaction amount in USD
- Mean transaction amount in USD

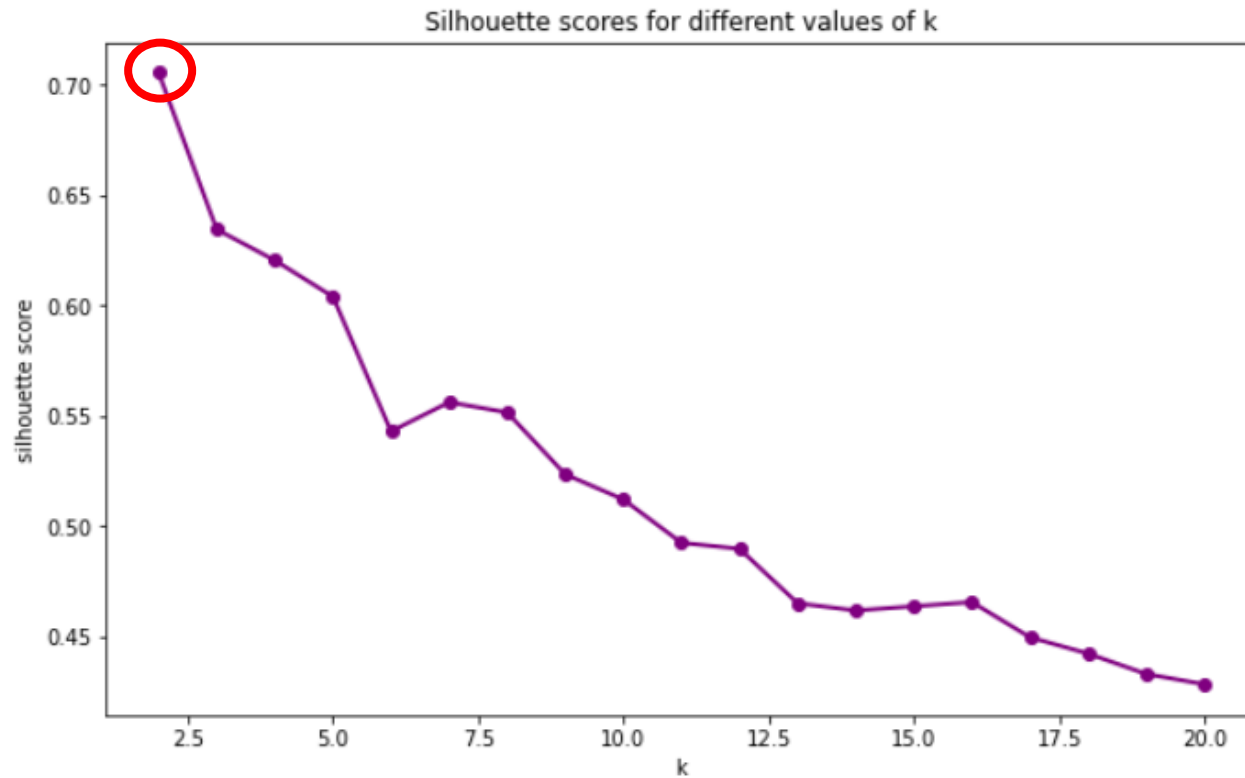


User categories



Churned Users

Clustering with KMeans: k=2-20



The centroids for k=2:

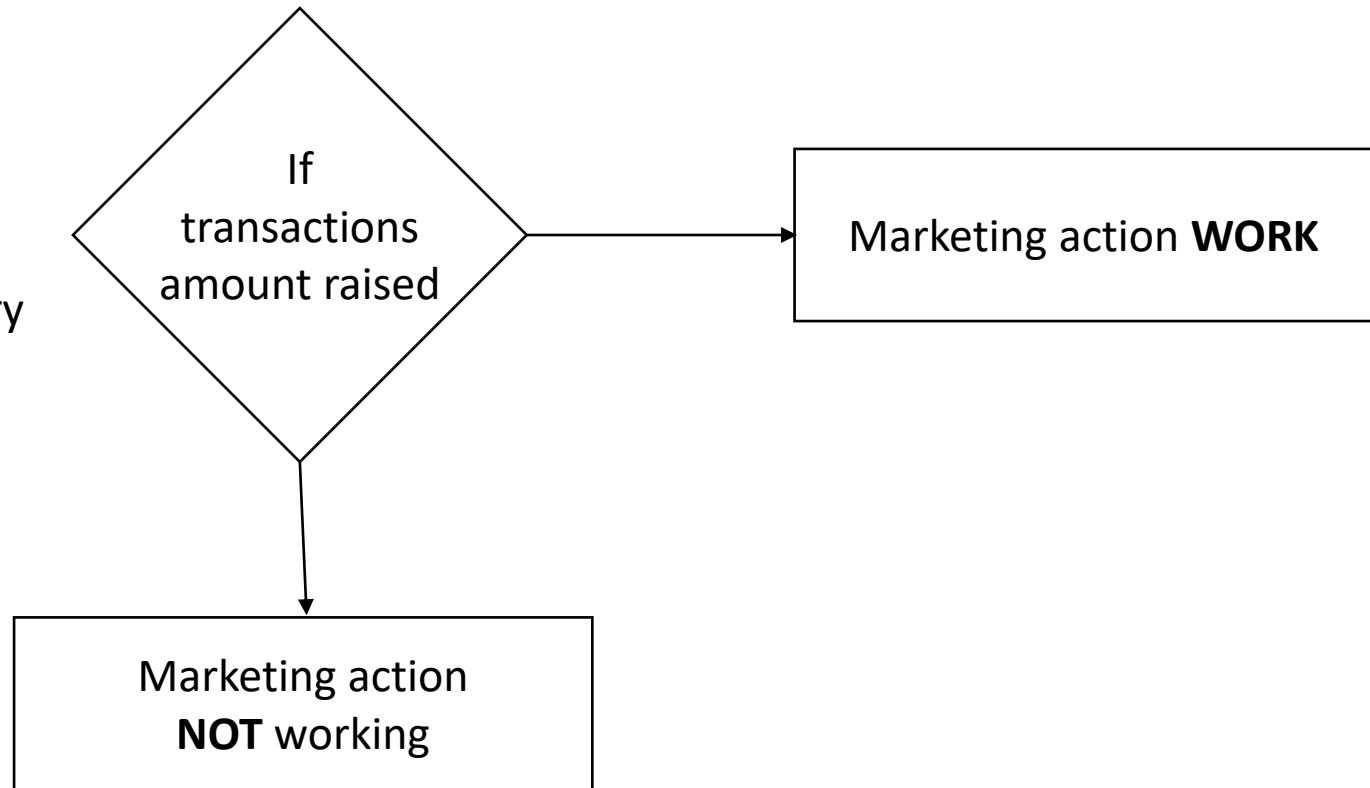
	total sum	total count	days_last_trans
0	10077.64	156.73	27.28
1	1349.58	18.74	254.23

Engaged users (0)	11875
Unengaged users (1)	2946

Actions to reduce churned

Marketing actions to unengaged users :

- Discount on subscription plan
- Free 1-month paid plan
- Promo notification based on user category
- Paid plan with benefits based on amount spent



```
print("Questions")
```

