Customer segmentation: Credit Cards

New Marketing Campaign
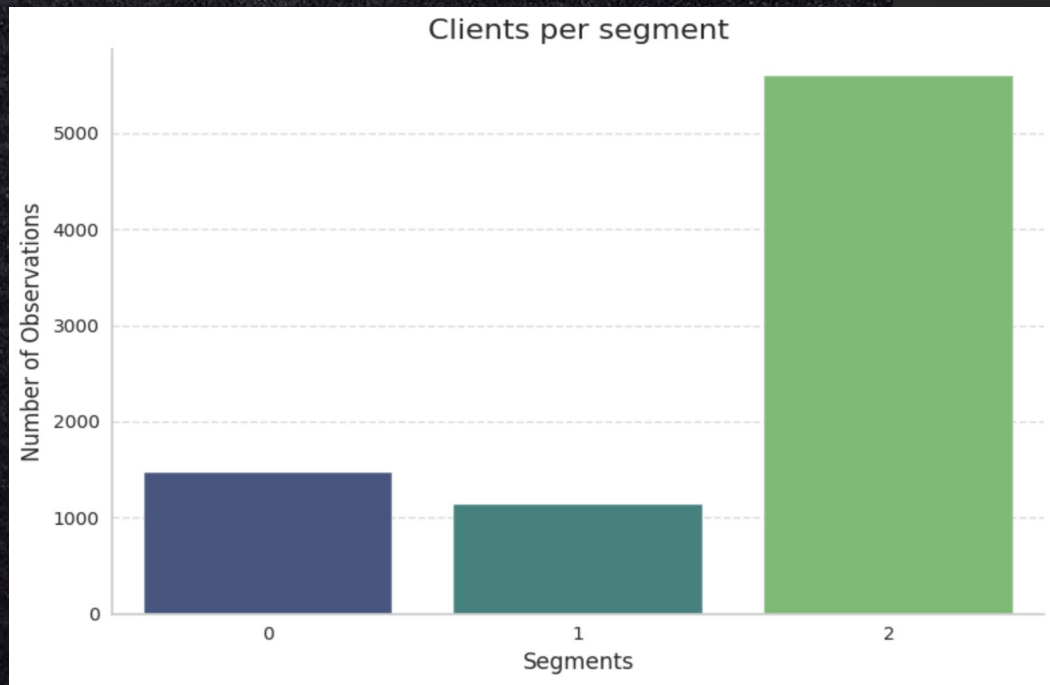
Step 1

Differentiate client segments

Step 3

Implement Plan

Step 2

Identify opportunities/risks
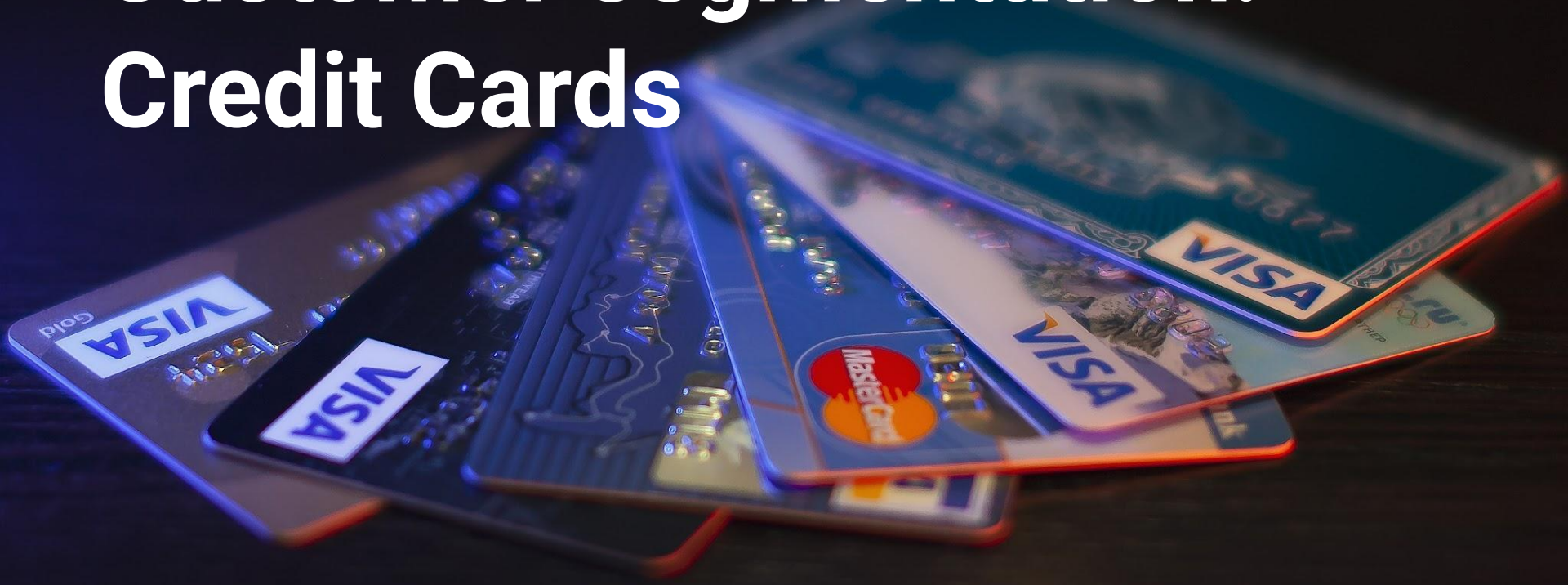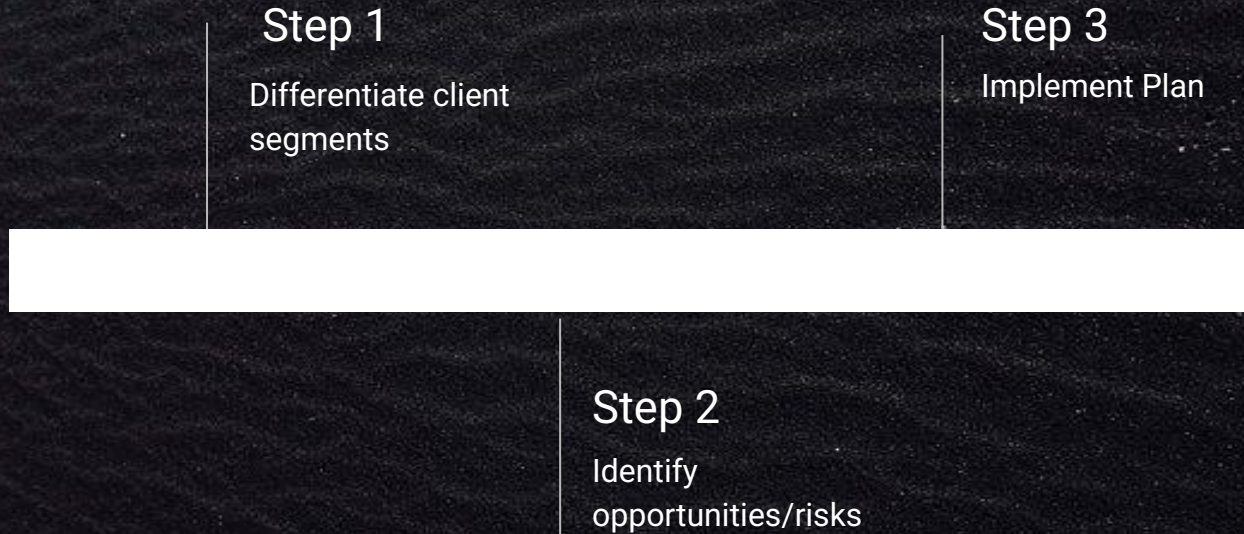
Our focus

>8k customers data

↓

3 client segments

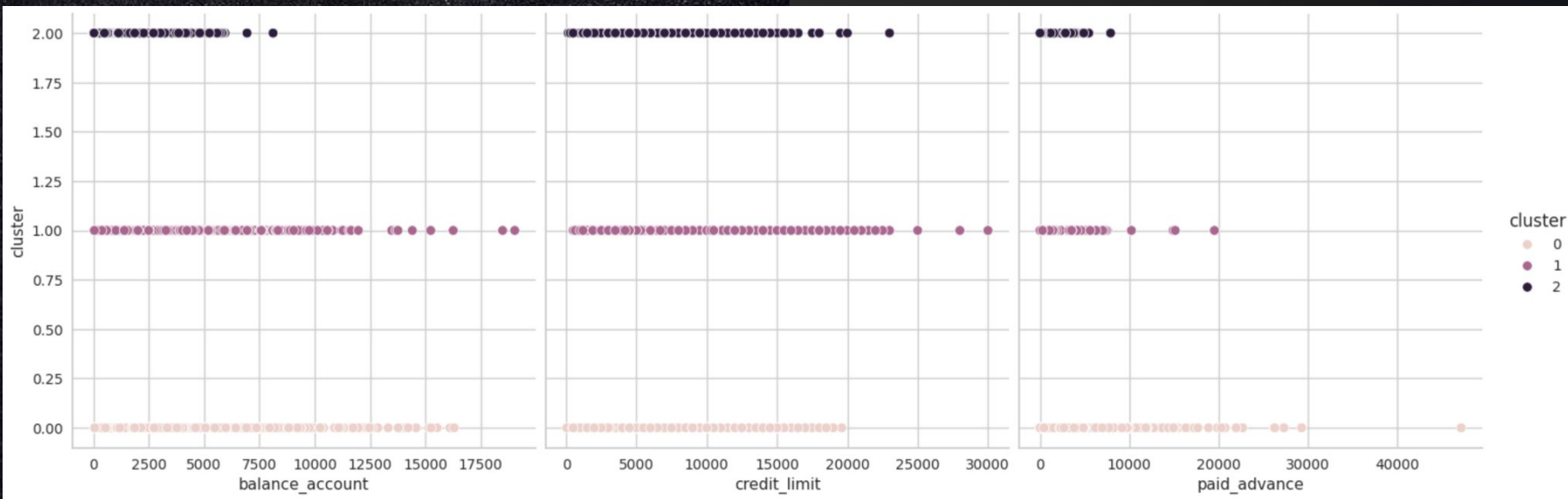

Clients per segment

6 KPIs

FOR →

2 targets

1. **Balance account**
2. **Purchases amount**
3. **Purchases frequency**
4. **Installments**
5. **Credit Limit**
6. **Paid Advance**
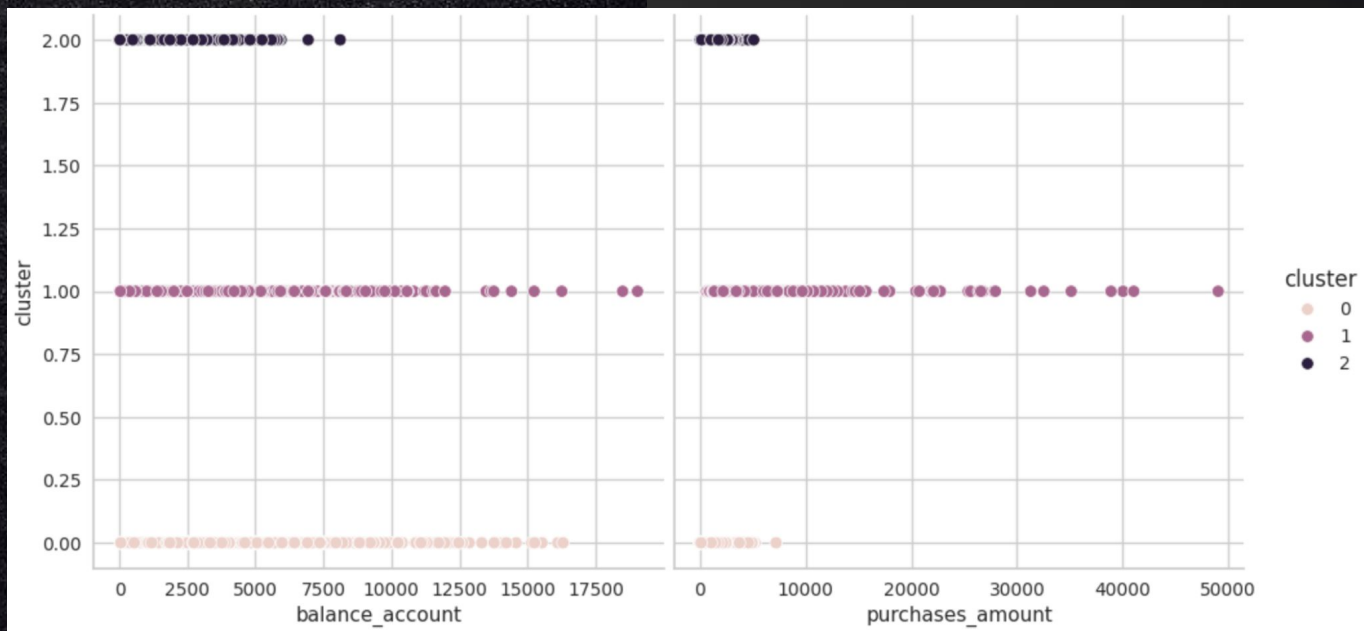
- Under financed
- Over financed

Segments Profiles

- Seg.2 Riskier
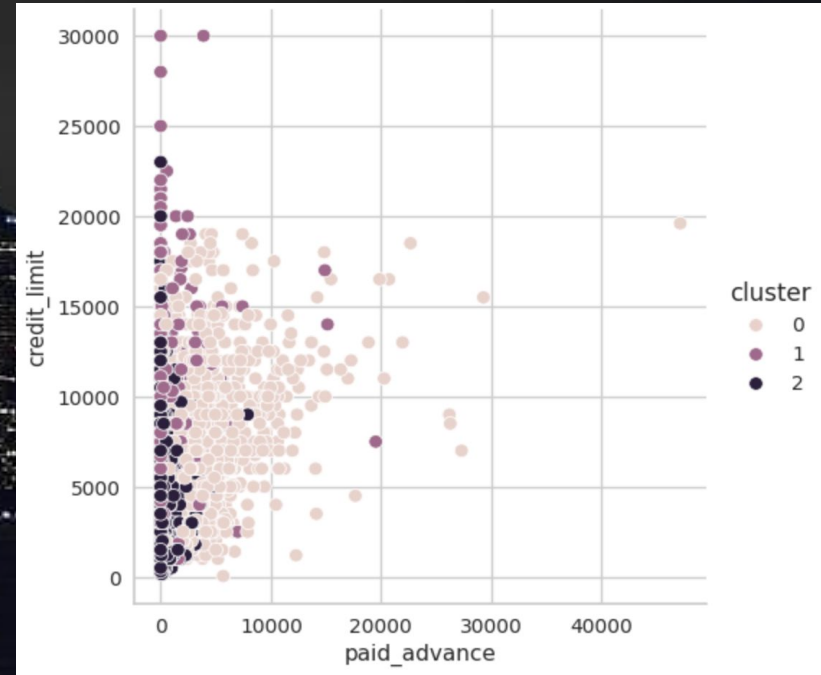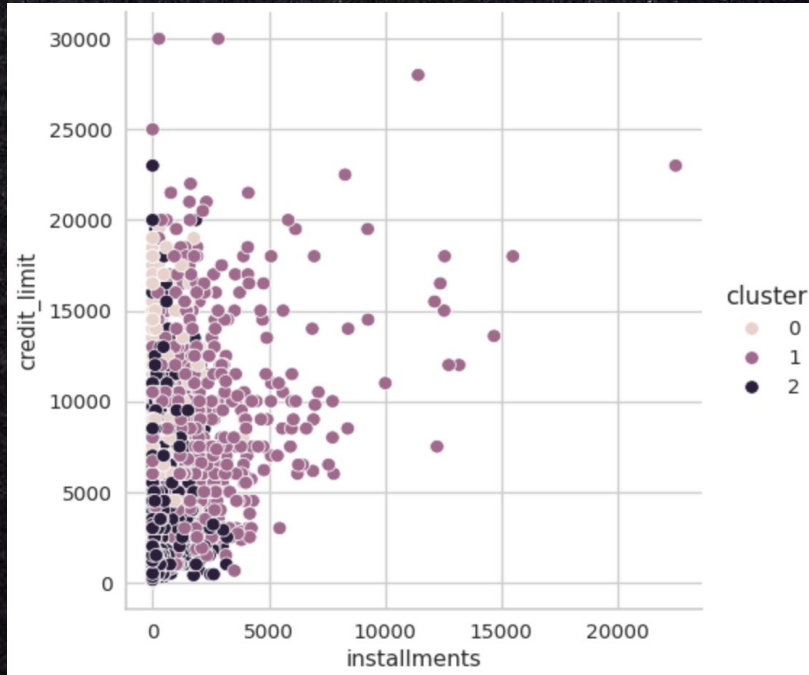- Seg. 0/1 Under-use

Segments Profiles

- Seg. 0 low vol
- Seg. 0 & 2 small exp./purchase
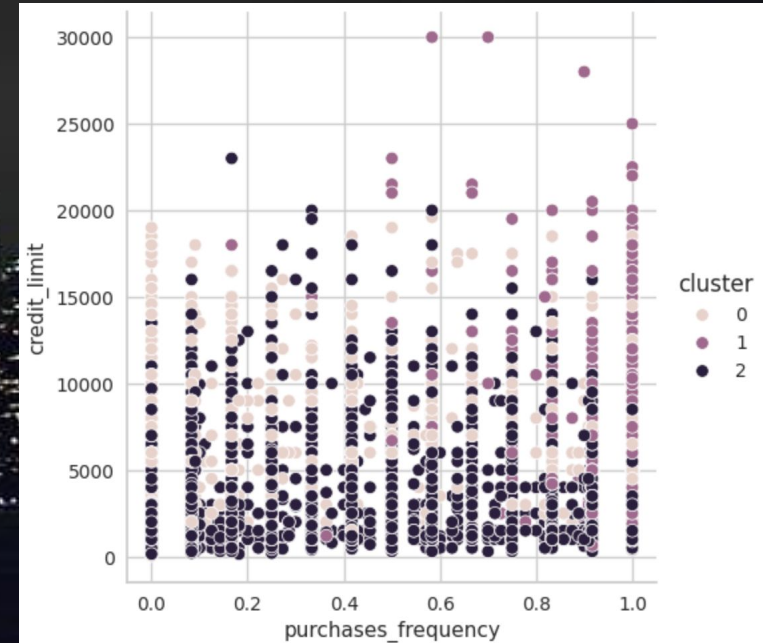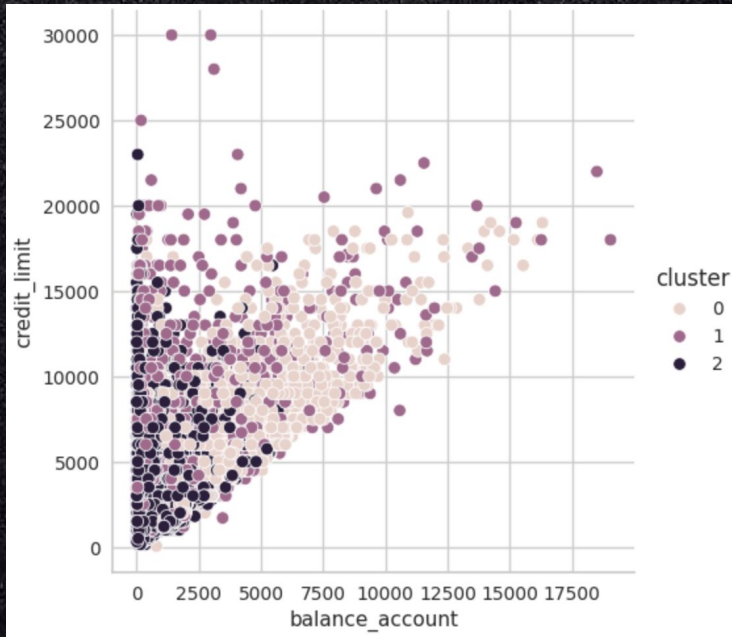- Seg.1 more exp. C. limit var.?

Segments Profiles

- Seg. 0 Target
- Seg. 1 > monitor
- Link c.limit to adv. pay.?
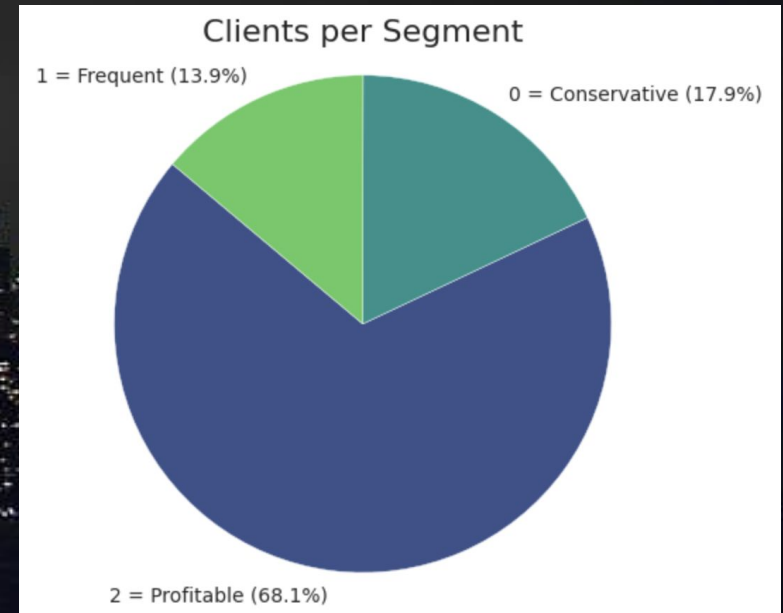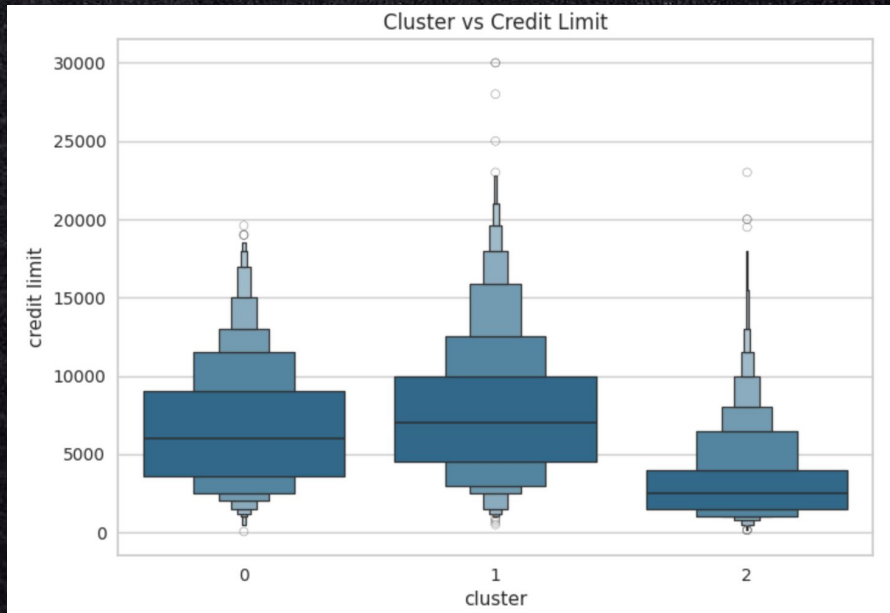
Segments Profiles

- Seg. 2 <? Credit limit
- Seg. 1 buys most freq.
- Seg. 0 not very freq.

Segments Profiles

- Credit limits actively managed
- Seg. 2 deserves focus

Cluster vs Credit Limit

Clients per Segment

1 = Frequent (13.9%)
0 = Conservative (17.9%)
2 = Profitable (68.1%)

Focus Recommendations

1. *> credit limit Seg. 0 + send reminders*
2. *> vol purchases Seg. 0 + shops deals*
3. *> installments Seg. 0 + positioning*
4. *> frequency Seg. 0 + visibility / adds*
5. *<? credit limit Seg. 2 vs small purchases*
6. *monitor installments Seg. 1*
7. *Seg. 1 award its freq.? + discounts*
8. *Offers for Seg. 1 large purchases*

Thanks

Appendix Methodology

- *Data cleaning: isnull, duplicates, deleted ID column,info, desc*
- *Feature engineering*
- *Correlation / heatmap*
- *Distribution plotting*
- *StandardScaler + Boxplot*
- *Clustering: K-Means*
- *Data plot K vs the SS error*
- *Elbow Method*

- *Silhouette Method*
- *Silhouette Score for each value of K.*
- *Visualizing Clusters using PCA*
- *Merging clusters with data*
- *Plot # observations by cluster*
- *K-Means clustering pairplot*
- *pairplots/boxplots/pie chart*