

Customer Segmentation Analysis Report

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1. Clustering Results:

Number of clusters: 8

Davies-Bouldin Index: 1.749

Silhouette Score: 0.158

Calinski-Harabasz Score: 22.449

2. Cluster Sizes:

Cluster 0: 11 customers (5.53%)

Cluster 1: 23 customers (11.56%)

Cluster 2: 23 customers (11.56%)

Cluster 3: 24 customers (12.06%)

Cluster 4: 36 customers (18.09%)

Cluster 5: 14 customers (7.04%)

Cluster 6: 29 customers (14.57%)

Cluster 7: 39 customers (19.60%)

3. Cluster Characteristics:

Cluster 0 Profile:

Total_Spend:

- Mean: 651.12

- Std: 394.72

Avg_Transaction_Value:

- Mean: 563.36
- Std: 357.39

Transaction_Count:

- Mean: 1.18
- Std: 0.40

Unique_Products:

- Mean: 1.18
- Std: 0.40

Days_on_Platform:

- Mean: 380.18
- Std: 288.22

Cluster 1 Profile:

Total_Spend:

- Mean: 2838.40
- Std: 1039.30

Avg_Transaction_Value:

- Mean: 738.51
- Std: 216.40

Transaction_Count:

- Mean: 3.91
- Std: 1.04

Unique_Products:

- Mean: 3.78
- Std: 1.09

Days_on_Platform:

- Mean: 582.78

- Std: 325.56

Cluster 2 Profile:

Total_Spend:

- Mean: 5930.78

- Std: 1595.47

Avg_Transaction_Value:

- Mean: 701.53

- Std: 170.67

Transaction_Count:

- Mean: 8.52

- Std: 1.31

Unique_Products:

- Mean: 8.13

- Std: 1.36

Days_on_Platform:

- Mean: 564.78

- Std: 324.25

Cluster 3 Profile:

Total_Spend:

- Mean: 5500.11

- Std: 1058.46

Avg_Transaction_Value:

- Mean: 857.47

- Std: 188.30

Transaction_Count:

- Mean: 6.58

- Std: 1.35

Unique_Products:

- Mean: 6.21

- Std: 1.18

Days_on_Platform:

- Mean: 688.88

- Std: 289.60

Cluster 4 Profile:

Total_Spend:

- Mean: 3100.66

- Std: 1003.99

Avg_Transaction_Value:

- Mean: 649.82

- Std: 214.66

Transaction_Count:

- Mean: 5.03

- Std: 1.61

Unique_Products:

- Mean: 5.03

- Std: 1.61

Days_on_Platform:

- Mean: 459.33

- Std: 350.14

Cluster 5 Profile:

Total_Spend:

- Mean: 1014.85

- Std: 600.23

Avg_Transaction_Value:

- Mean: 351.37

- Std: 137.97

Transaction_Count:

- Mean: 2.93

- Std: 1.33

Unique_Products:

- Mean: 2.86

- Std: 1.35

Days_on_Platform:

- Mean: 645.50

- Std: 284.24

Cluster 6 Profile:

Total_Spend:

- Mean: 2889.35

- Std: 811.48

Avg_Transaction_Value:

- Mean: 642.65

- Std: 147.48

Transaction_Count:

- Mean: 4.62

- Std: 1.40

Unique_Products:

- Mean: 4.55

- Std: 1.38

Days_on_Platform:

- Mean: 592.52
- Std: 327.77

Cluster 7 Profile:

Total_Spend:

- Mean: 3577.35
- Std: 1310.26

Avg_Transaction_Value:

- Mean: 768.76
- Std: 235.11

Transaction_Count:

- Mean: 4.79
- Std: 1.49

Unique_Products:

- Mean: 4.74
- Std: 1.55

Days_on_Platform:

- Mean: 543.69
- Std: 326.45