Price Perception & Customer Segmentation

Most Expensive Pack Based on Packaging:

most_expensive_pack

Fusion   79

Vector   75

Mach 3   56

bsc   54

Guard   36

Name: count, dtype: int64

Least Expensive Pack Based on Packaging:

least_expensive_pack

Fusion   72

bsc   69

Mach 3   59

Guard   55

Vector   45

Name: count, dtype: int64

Switch Brand if Competitor Has Better Packaging:

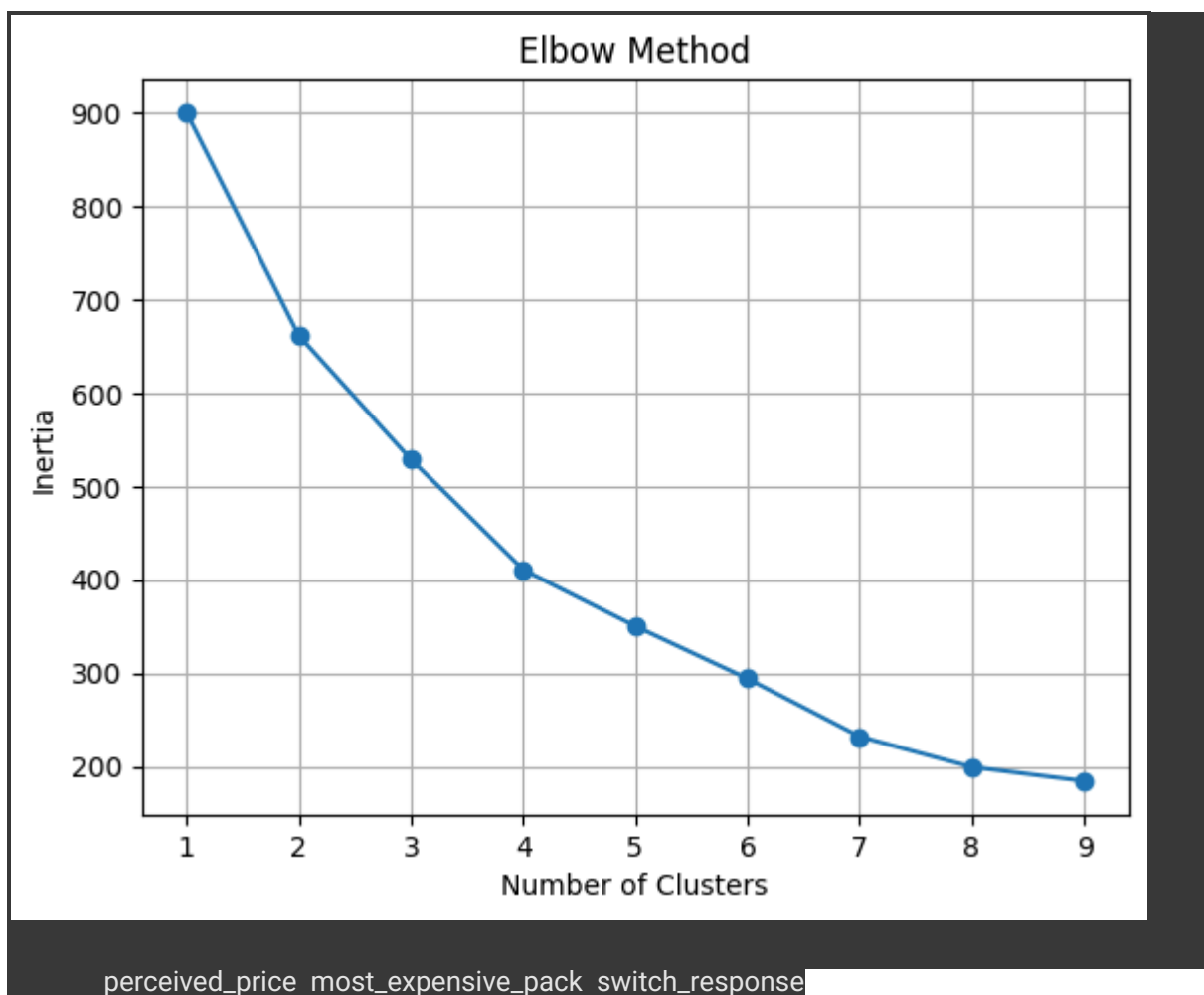switch_response

Yes   133

Maybe   103

No   64

Name: count, dtype: int64

✅ Rows used for clustering: 0

⚠️ No usable rows after cleaning. Please check for missing or
unmappable values.

Rows used for clustering: 300

    perceived_price most_expensive_pack switch_response

price_cluster

0	0.882353	2.294118	1.000000
1	0.583333	1.805556	0.282407
2	2.511111	2.644444	0.577778

Classification Report:

	precision	recall	f1-score	support
Fusion	0.22	0.74	0.33	19
Guard	0.00	0.00	0.00	15
Mach 3	0.00	0.00	0.00	20
Vector	0.12	0.16	0.14	19
bsc	0.00	0.00	0.00	17
accuracy			0.19	90
macro avg	0.07	0.18	0.09	90
weighted avg	0.07	0.19	0.10	90

Confusion Matrix:

[[14 0 0 5 0]

[10 0 0 5 0]

[13 0 0 7 0]

[16 0 0 3 0]

[12 0 0 5 0]]

Price Influence on Brand Choice (Logistic Regression Coefficients):

        perceived_price

Fusion   0.030739

Guard   0.020681

Mach 3   -0.131549

Vector   -0.073082

bsc   0.153211