



Hult International Business School

A2: Marketing Report

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Marketing Analytics - DAT-6033 - SFO1

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Introduction

Shiva Tourist Dhaba, a well-known highway restaurant on NH24 in Uttar Pradesh, has carved a niche as a hygienic, family-friendly, and affordable vegetarian stopover. Known for its signature Dal Makhni, personal touch from founder Mama Yadav, and smart pricing, it attracts a diverse mix of travelers. But with the rise of branded QSRs and customers has become more challenging.

This report analyzes customer loyalty using SPSS-based Discriminant Analysis and offers strategic recommendations to help Mama Yadav fine-tune his restaurant's positioning for long-term success.

Methodology

Customers were classified into three loyalty groups based on visit frequency:

- Low: 1 visit
- Medium: 2 visits
- High: 3 visits

We used Multiple Discriminant Analysis (MDA) to identify which of the 9 positioning variables significantly differentiated these groups. These included Advertisement, Price, Place, Food Quality, Service Quality, Variety, Servicescape, Parking Facility, and Gifts to Drivers.

Discriminant Analysis is ideal because it models the relationship between a categorical dependent variable (loyalty group) and metric independent variables (Likert-scaled perceptions).

Key Findings from SPSS

1. Tests of Equality of Group Means: All 9 variables significantly differentiate between groups ($p < .001$).

Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
Ads	.121	1811.685	2	497	<.001
Price	.046	5097.922	2	497	<.001
F_Quali	.223	868.289	2	497	<.001
Place	.102	2184.145	2	497	<.001
S_Quali	.212	923.047	2	497	<.001
Varie	.040	6036.210	2	497	<.001
S_scape	.206	957.032	2	497	<.001
P_Faci	.046	5135.215	2	497	<.001
Gifts	.048	4981.118	2	497	<.001

2. Structure Matrix (Function 1 – Loyalty Driver Strength):

Group Statistics					
Loyalty		Mean	Std. Deviation	Valid N (listwise)	
				Unweighted	Weighted
Low	Ads	1.14	.349	100	100.000
	Price	1.00	.000	100	100.000
	F_Quali	1.60	.492	100	100.000
	Place	1.00	.000	100	100.000
	S_Quali	1.66	.476	100	100.000
	Varie	1.00	.000	100	100.000
	S_scape	1.67	.473	100	100.000
	P_Faci	1.00	.000	100	100.000
	Gifts	1.00	.000	100	100.000
Medium	Ads	1.73	.627	196	196.000
	Price	1.93	.600	196	196.000
	F_Quali	2.28	.826	196	196.000
	Place	2.07	.641	196	196.000
	S_Quali	2.29	.799	196	196.000
	Varie	2.00	.000	196	196.000
	S_scape	2.24	.805	196	196.000
	P_Faci	2.00	.000	196	196.000
	Gifts	2.00	.000	196	196.000
High	Ads	4.36	.481	204	204.000
	Price	5.00	.000	204	204.000
	F_Quali	4.45	.498	204	204.000
	Place	4.64	.481	204	204.000
	S_Quali	4.50	.501	204	204.000
	Varie	4.64	.481	204	204.000
	S_scape	4.53	.500	204	204.000
	P_Faci	4.52	.501	204	204.000
	Gifts	4.47	.500	204	204.000

3. Canonical Discriminant Functions:

Box's Test of Equality of Covariance Matrices

Log Determinants

Loyalty	Rank	Log Determinant
Low	4	. ^a
Medium	6	. ^a
High	8	. ^a
Pooled within-groups	9	-17.756

The ranks and natural logarithms of determinants printed are those of the group covariance matrices.

a. Singular

4. Classification Results:

Summary of Canonical Discriminant Functions

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	62.470 ^a	99.8	99.8	.992
2	.124 ^a	.2	100.0	.332

a. First 2 canonical discriminant functions were used in the analysis.

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	.014	2103.971	18	<.001
2	.889	57.738	8	<.001

Interpretation of Loyalty Segments

High-loyalty customers perceive variety, price, parking, and rewards extremely positively and are highly engaged with the brand.

Medium-loyalty customers show moderate satisfaction and are reachable with targeted offerings.

Low-loyalty customers rate most features poorly but respond better to advertising and servicescape.

Strategic Recommendations

- 1. Launch “Thali Tailored” - Customizable Meal Experience

Introduce a station with build-your-own thalis featuring regional specialties and health-conscious options.

- 2. Premium Parking Pass and Family Service Pods

Offer fast-lane parking, shaded zones, valet service, and clean restrooms to elevate convenience.

- 3. Driver+ Loyalty Tracker

Digitally track visits with automated tiered rewards and referral incentives.

- 4. “Dhaba Stories” Ad Campaign

Use geo-targeted reels featuring Mama Yadav and customers to build emotional connection.

- 5. Servicescape Makeover + Cultural Nights

Introduce folk-themed decor and live music on weekends to enhance ambiance.

Deeper Insights into Loyalty Segments

The Discriminant Analysis shows a strong ability to segment customers based on their perceptions of the restaurant's value offerings. High-loyalty customers are deeply engaged due to consistent satisfaction across key factors like food variety, parking convenience, and pricing. Their positive experience is reinforced by functional benefits (parking, gifts) and emotional connection (familiarity, tradition). This signals the importance of bundling tangible benefits with sentimental branding.

Medium-loyalty customers are likely at a decision point — they perceive some value but may lack novelty, emotional resonance, or incentives to continue. They're the most

vulnerable to competitor poaching, especially from high-visibility QSR brands.

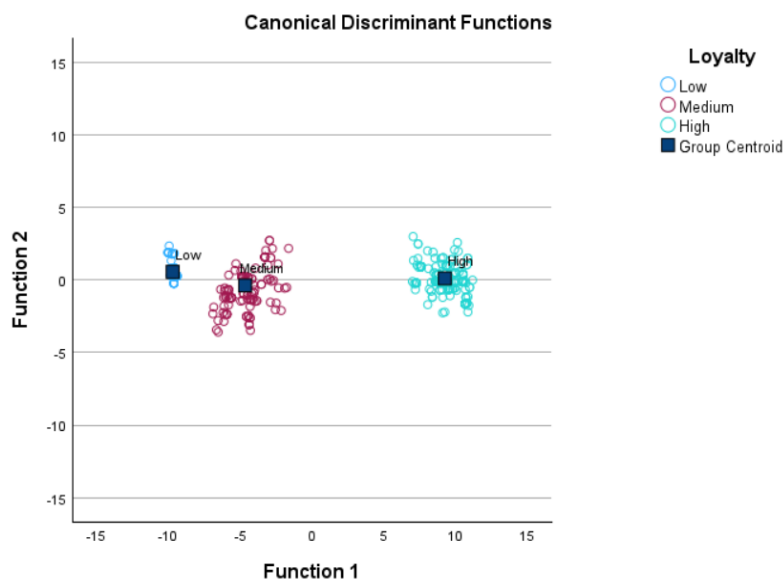
Low-loyalty customers represent either first-timers or dissatisfied past users. Their relatively higher response to advertisement and servicescape suggests initial curiosity or interest, but poor follow-up experience (price sensitivity, lack of personalized rewards) may be causing drop-off. The brand needs to capture these customers by addressing expectation-reality gaps and turning curiosity into habit.

6. Launch Seasonal Promotions (Linked to: Variety & Advertising)

- The case mentions **peak vs. off-peak seasons**.
- Offer **seasonal specials** during low-traffic months (e.g., winter milk-based drinks, summer coolers).
- Use menu innovation to maintain interest among Medium-loyalty customers.

7. Improve Waiting Experience with Live Updates (Linked to: Service Quality)

- The graph shows **clear separation of loyalty groups**.
- Use this to **design targeted messaging**:
 - High-loyalty → “Thank You” campaigns, insider offers.
 - Medium-loyalty → Conversion incentives, personalized SMS.
 - Low-loyalty → First-visit discounts, retargeted ads.
- SPSS classification results can guide **CRM segmentation**.



Conclusion

Discriminant Analysis revealed that loyalty is driven by variety, pricing, parking, and rewards. Low-loyalty customers are drawn by ads and ambiance but not retained. By applying these findings, Shiva Tourist Dhaba can convert casual visitors into loyal patrons and stand out among highway competitors.

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Structure Matrix (Function 1)

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Canonical Discriminant Functions and Centroids

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Group Means

Structure Matrix

	Function	
	1	2
Varie	.624 [*]	-.120
P_Faci	.575 [*]	-.240
Price	.573 [*]	.428
Gifts	.566 [*]	-.290
Place	.375 [*]	-.233
S_Quali	.244 [*]	.243
F_Quali	.236 [*]	.156
Ads	.340	.626 [*]
S_scape	.248	.363 [*]

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions
Variables ordered by absolute size of correlation within function.

*. Largest absolute correlation between each variable and any discriminant function

Eigenvalues and Canonical Correlation

Pooled Within-Groups Matrices

		Ads	Price	F_Quali	Place	S_Quali	Varie	S_scape	P_Faci	Gifts
Correlation	Ads	1.000	.466	.493	.363	.547	.127	.454	.302	.285
	Price	.466	1.000	.370	.497	.321	.000	.298	.000	.000
	F_Quali	.493	.370	1.000	.351	.702	.168	.728	.250	.235
	Place	.363	.497	.351	1.000	.307	.232	.213	.211	.179
	S_Quali	.547	.321	.702	.307	1.000	.223	.652	.269	.279
	Varie	.127	.000	.168	.232	.223	1.000	.300	.285	.335
	S_scape	.454	.298	.728	.213	.652	.300	1.000	.222	.236
	P_Faci	.302	.000	.250	.211	.269	.285	.222	1.000	.612
	Gifts	.285	.000	.235	.179	.279	.335	.236	.612	1.000

Group Means for Loyalty Segments

Functions at Group Centroids

Loyalty	Function	
	1	2
Low	-9.700	.554
Medium	-4.659	-.385
High	9.231	.099

Unstandardized canonical
discriminant functions evaluated
at group means

References

Malhotra, N. K., & Dash, S. (2010). Marketing research: An applied orientation (6th ed.). Pearson Education.

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