MANAGEMENT REVIEW

A Study on the Consumer Perception for Branded Fuels with Special Reference to Xtrapremium Petrol of Indian Oil Corporation Limited in Coimbatore City

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Professor Department of Management Studies Madurai Kamaraj University Madurai – 625 021 Indian Oil's Xtrapremium Petrol is India's leading branded petrol boosted with new generation multifunctional additives known as friction busters that prevent deposition in the combustion chamber. Xtrapremium is custom designed to deliver higher mileage, more power, better pick-up, faster acceleration, enhanced engine cleanliness and lower emissions. In this study we have tried to assess the consumer awareness and usage pattern of Xtrapremium petrol and identify the best media of advertising for Xtrapremium petrol. We have given some suggestions to remove some myths from consumer mindset for a better product penetration and to thwart competition in the long run.

Introduction

Abstract

India's flagship national oil company and downstream petroleum major Indian Oil Corporation Limited (IOC) is the 18th largest petroleum company in the world. It is currently India's largest company by sales with a turn over of Rs.2,85,337 crore and a profit of Rs.2, 950 crore for the fiscal year 2008-2009. It is also the highest ranked Indian company in the prestigious Fortune 'Global 500' listing having moved up 11 places to the 105th position in 2009. Indian Oil and its subsidiaries account for approximately 48% petroleum products market share, 34% national refining capacity and 71% downstream sector pipelines capacity in India. With India's energy needs projected to grow by 40% in the next five years, the future is indeed full of promise for Indian Oil – a future the 31,700 strong Indian Oil team shall build as they fuel the dreams of over a billion of their countrymen. Indian Oil's products include Indane gas, auto gas, natural gas, petrol / gasoline, diesel, jet fuel, lubricants and greases, marine fuels and lubricants, kerosene, industrial fuels, bitumen, crude oil, and linear alkyl benzene besides special products like benzene, mineral turpentine oil, paraffin wax, raw petroleum coke, sulphur and toluene. Automotive petrol / gasoline is used in internal combustion spark ignition engines. Gasoline is a complex mixture of relatively volatile hydrocarbons and is derived from fractional distillation of crude petroleum with a further treatment mainly in terms of improvement of its octane rating. In view of the auto fuel policy issued by the Government of India, more and more stringent specifications (equivalent to EuroII, EuroIII & Euro IV) are being made applicable for the gasoline's being marketed in India. This has lead to a reduction of the environmentally polluting factors in gasoline.

Xtrapremium Petrol

Indian Oil's Xtrapremium Petrol is India's leading branded petrol boosted with new generation multifunctional additives known as friction busters that prevent

Keywords

Xtrapremium Petrol, consumer awareness, consumer perception, usage pattern

deposition in the combustion chamber. Xtrapremium is custom designed to deliver higher mileage, more power, better pick-up, faster acceleration, enhanced engine cleanliness and lower emissions. Xtrapremium is a most sought after fuel among discerning motorists and owners of new generation high performance cars have endorsed its unmatched performance. In terms of fuel system cleanliness, Xtrapremium is superior to any other alternative fuel in this segment. The friction modifier in this fuel drastically reduces friction in the non-lubricated engine area, thereby contributing to fuel economy. With the above advantages of Xtrapremium petrol, the potential for this product is huge but it needs more research on the consumer perception with respect to the price, awareness level of the advantages, usage method / pattern, satisfaction level and other factors that influence using the product regularly so that suitable strategies can be framed to position the product and hence this paper.

Objectives of the study

The following are the objectives of the study

- i. To assess the consumer awareness of xtrapremium petrol.
- ii. To assess the usage pattern of consumers for xtrapremium petrol.
- iii. To identify the best media of advertising for xtrapremium petrol.

- iv. To identify the most preferred factor that influences using xtrapremium petrol regularly and
- v. To assess the satisfaction level of regular users of xtrapremium petrol.

Research design

Descriptive research design is one that is concerned with describing the characteristics of a particular individual or a group of consumers who use the products. The descriptive study is typically concerned with determining the frequency with which something occurs.

Methodology and Data Collection

The present study is based on both primary and secondary data. Primary data was collected through personal interviews and field work using a structured questionnaire. Secondary data was collected from various journals, books and websites.

Sampling Process and Data Analysis

The researcher used Non-probability judgment sampling for selecting the sample respondents like professionals, business people and employees. The study consisted of 115 two wheeler and four wheeler users in Coimbatore city and was conducted in May 2011. Data obtained through questionnaire was compiled and tabulated. Percentages, weighted arithmetic mean and one way Anova were used to analyse the data.

Data Analysis and Interpretation

Data Analysis and interpretations are presented below:

Table 1: Preference of the respondents for fuels from different Companies

SI. No	Companies	No. of Respondents	Percentage
1.	Indian Oil Corporation (IOC)	62	53.92
2.	Bharath Petroleum Corporation(BPC)	38	33.04
3.	Hindustan Petroleum Corporation(HPC)	15	13.04
	Total	115	100

It is inferred from the above table that 53.92% of the respondents prefer IOC, 33.04% prefer BPC and 13.04% prefer HPC.

Chart 1

Preference of the respondents for fuels from different Companies

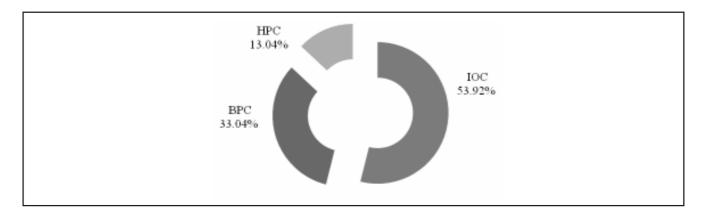


Table 2
Type of Petrol used by Non-IOC Customers

SI. No	Type of Petrol	No. of Respondents	Percentage
1.	Ordinary petrol	41	77.36
2.	Branded petrol	12	22.64
	Total	53	100

It is found from the above table that 77.36% of non – IOC customers prefer ordinary petrol and 22.64% prefer branded petrol.

Chart 2 Type of petrol used by non-IOC customers

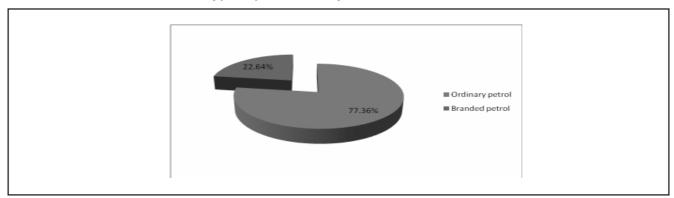


Table 3General awareness of Xtrapremium Petrol

SI. No	AWARENESS	No. of Respondents	Percentage
1.	Aware	104	90.43
2.	Not Aware	11	9.57
	Total	115	100

It is inferred from the above table that 90.43% of the respondents are aware of xtrapremium petrol and 9.57% are not aware.

Chart 3 General awareness of Xtrapremium petrol

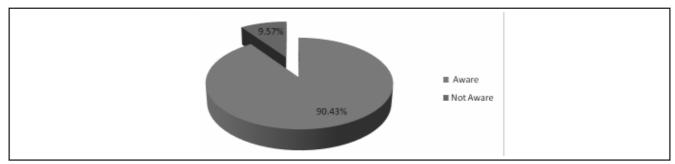


Table 4Mode of awareness of Xtrapremium Petrol

SI. No	Mode of Awareness	No. of Respondents	Percentage
1.	Petrol outlets	58	55.80
2.	TV ads	24	23.00
3.	Newspaper ads	13	12.50
4.	Magazine ads	3	2.90
5.	Friends	6	5.80
	Total	104	100

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It is inferred from the above table that 55.8% of the respondents became aware of xtrapremium petrol through

petrol outlets, 23% through TV ads, 12.5% through newspaper ads, 2.9% through magazine ads and 5.8% through friends.

Chart -4 Mode of Awareness of Xtrapremium Petrol

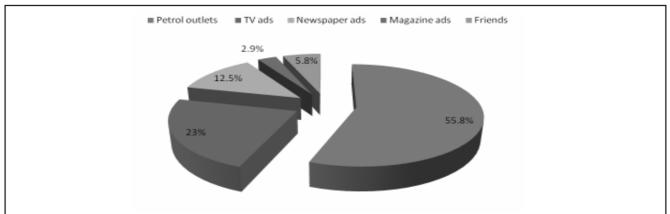


Table 5Usage Pattern of Xtrapremium Petrol

SI. No	Usage Pattern	No. of Respondents	Percentage
1.	Regular user	22	35.48
2.	Irregular user	19	30.65
3.	Not a user	21	33.87
	Total	62	100

It is found from the above table that 35.48% of IOC 30.65% are irregular users and 33.87% are non-users. customers are regular users of xtrapremium petrol,

Chart 5 Usage Pattern of Xtrapremium Petrol

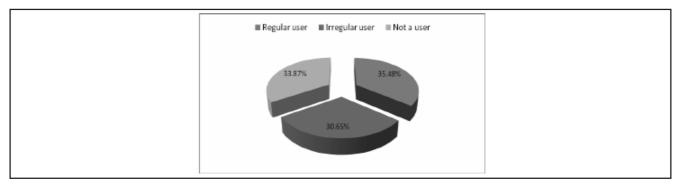


Table 6Type of vehicle on which Xtrapremium Petrol is used

SI. No	Type of Vehicle	No. of Respondents	Percentage
1.	Only for 2 wheeler	11	50.00
2.	Only for 4 wheeler	4	18.19
3.	Both for 2 & 4 wheeler	7	31.81
	Total	22	100

It is inferred from the above table that 50% of regular users of xtrapremium petrol use it only for 2 wheelers,

18.19% only for 4 wheelers and 31.81% for both 2 & 4 wheelers.

Chart 6 Type of vehicle on which Xtrapremium Petrol is used

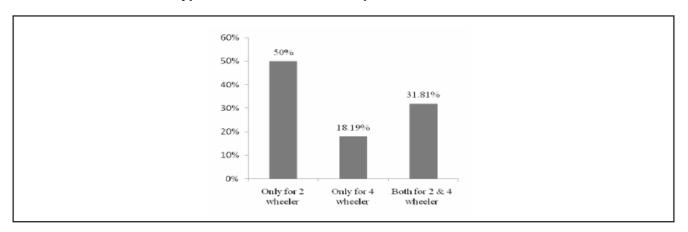


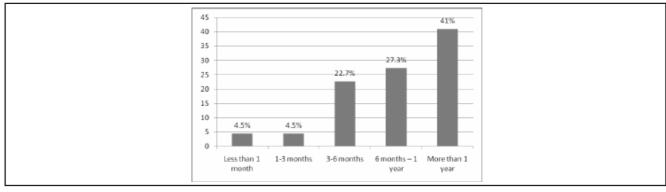
Table 7Period of usage of Xtrapremium Petrol

SI. No	Period of Usage	No. of Respondents	Percentage
1.	Less than 1 month	1	4.50
2.	1-3 months	1	4.50
3.	3-6 months	5	22.70
4.	6 months – 1 year	6	27.30
5.	More than 1 year	9	41.00
	Total	22	100

It is concluded from the above table that 4.5% each of regular users of xtrapremium petrol have used it for less than a month and for 1-3months respectively, 22.7% have

used it for 3-6 months, 27.3% for 6 months to one year and 41% have used it for more than a year.

Chart 7



Period of usage of Xtrapremium Petrol

Table 8Level of Satisfaction of regular users of Xtrapremium Petrol

Factors	Total Sum	Average Mean	Rank
Price	87	3.95	2
Offers	61	2.77	4
Availability	71	3.23	3
Mileage / Performance	94	4.27	1

It is clear from the above table that regular users of xtrapremium petrol are highly satisfied with its mileage / performance, are satisfied with its price and availability and are neither satisfied nor dissatisfied with the offers given by IOC to promote it.

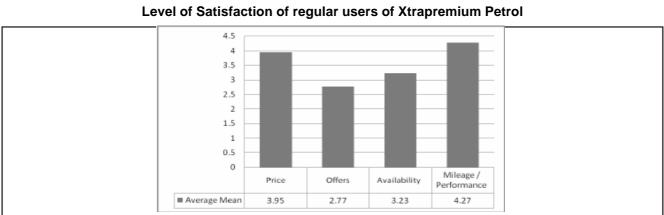


Chart 8

Table 9

Recommendation of regular users of Xtrapremium Petrol to others

SI. No	Recommendations	No. of Respondents	Percentage
1.	Definitely Yes	6	27.30
2.	Yes	12	54.50
3.	No Comments	4	18.20
4.	No	0(0.00)	0(0.00)
5.	Definitely No	0(0.00)	0(0.00)
	Total	22	100

It is concluded from the above table that 27.3% of regular users of xtrapremium petrol would definitely recommend it to others, 54.5% would recommend it to others and 18.2% have no comments to offer.

Chart 9 **Recommendation of regular users of Xtrapremium Petrol to others**

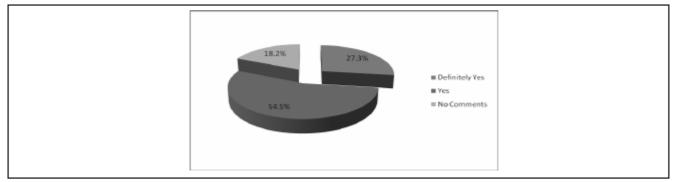


Table 10 Period of usage of Xtrapremium Petrol

SI. No	Period of Usage	No. of Respondents	Percentage
1.	Less than 1 month	3	15.79
2.	1-3 months	8	42.10
3.	3-6 months	4	21.05
4.	6 months-1 year	2	10.53
5.	More than 1 year	2	10.53
	Total	19	100

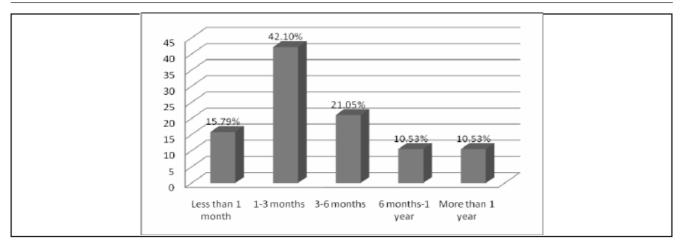


Table 11Reasons for irregular usage of Xtrapremium Petrol

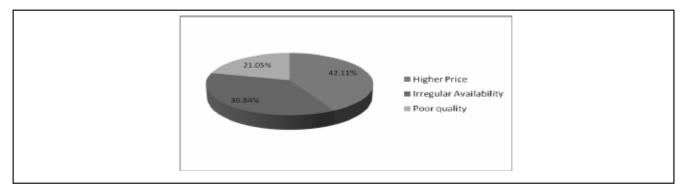
SI. No	Reasons	No. of Respondents	Percentage
1.	Higher Price	8	42.11
2.	Irregular Availability	7	36.84
3.	Poor quality	4	21.05
	Total	19	100

It is concluded from the above table that 42.11% of irregular users of xtrapremium petrol state price as the

reason for not using xtrapremium petrol regularly, 36.84% state irregular availability as the reason and 21.05% state poor quality as the reason for irregular usage.

Chart 11

Reasons for irregular usage of Xtrapremium Petrol





Nature of quality problem with Xtrapremium Petrol

SI. No	Quality problem	No. of Respondents	Percentage
1.	No improvement in mileage	3	75.00
2.	No change in Maintenance cost	1	25.00
3.	No change in engine power	0	0.00
4.	No change in emissions	0	0.00
	Total	4	100

It is clear from the above table that 75% of irregular users of xtrapremium petrol who cite quality as the reason for

irregular usage state that there is no improvement in mileage and 25% state that there is no change in maintenance cost.

Chart 12 Nature of quality problem with Xtrapremium Petrol

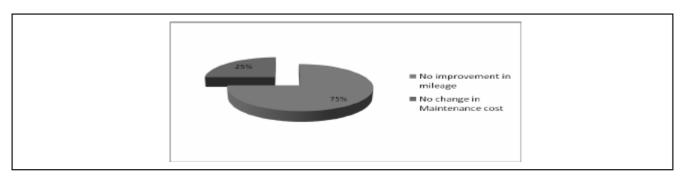


 Table 13

 Awareness level of repeated use of Xtrapremium Petrol to reap the benefits

SI. No	Awareness	No. of Respondents	Percentage
1.	Aware	9	47.37
2.	Not Aware	10	52.63
	Total	19	100

It is concluded from the above table that 47.37% of irregular users of xtrapremium petrol are aware of the

repeated use of xtrapremium petrol to reap the benefits while 52.63% are not aware.

Chart 13

Awareness level of repeated use of Xtrapremium Petrol to reap the benefits

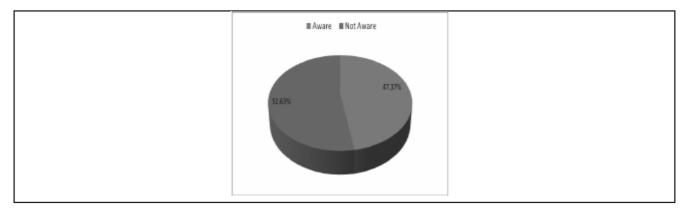


Table 14Awareness level on advantages of using Xtrapremium Petrol

SI. No	Advantages	No. of Respondents	Percentage
1.	Improved mileage	29	39.19
2.	Lower maintenance cost	6	8.11
3.	Better engine power	14	18.92
4.	Reduced emissions	10	13.51
5.	Smooth running	10	13.51
6.	Improved life for the vehicle	5	6.76
	Total	74	100

It is clear from the above table that 39.19% of the nonusers of xtrapremium petrol are aware of the improved mileage advantage of using xtrapremium petrol, 8.11% are aware of the lower maintenance cost advantage, 18.92% are aware of the better engine power advantage,

13.51% each are aware of the reduced emissions advantage and smooth running advantage respectively and 6.76% are aware of the improved vehicle life advantage by using xtrapremium petrol.

Chart 14 Awareness level on advantages of using Xtrapremium Petrol

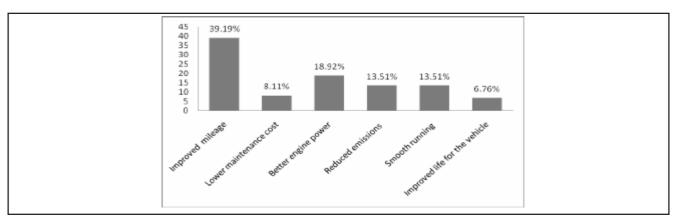


Table 15Reasons for not buying Xtrapremium Petrol

SI. No	Reasons	No. of Respondents	Percentage
1.	Not aware of advantages of xtrapremium petrol	38	51.35
2.	Price on the higher side	22	29.73
3.	Non-availability at outlet regularly	14	18.92
	Total	74	100.00

It is inferred from the above table that 51.35% of nonusers of xtrapremium petrol state that non-awareness of the advantages of using xtrapremium petrol as the reason for not using it, 29.73% state higher price as the reason and 18.92% state non-availability at outlet regularly as the reason for not using xtrapremium petrol.

Chart 15 Reasons for not buying Xtrapremium Petrol

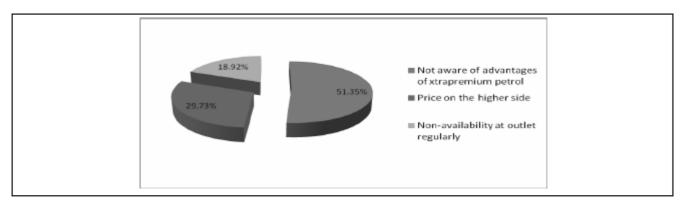


Table 16Premium price per litre expected to buy Xtrapremium Petrol regularly

SI. No	Price	No. of Respondents	Percentage
1.	Not interested to buy	13	11.30
2.	Rs. 1/-	20	17.40
3.	Rs. 1.50	24	20.90
4.	Rs. 2/-	25	21.70
5.	Rs. 2.50	25	21.70
6.	Rs. 3/-	8	7.00
	Total	115	100

It is clear from the above table that 11.3% of the respondents are not interested to buy xtrapremium petrol, 17.4% are willing to offer a premium of Rs.1/-, 20.9%

are willing to offer Rs.1.50, 21.7% each are willing to offer Rs.2/- and Rs.2.50 respectively and 7% are willing to offer Rs.3/- as a premium price per litre for xtrapremium petrol.

Chart 16 Premium price per litre expected to buy Xtrapremium Petrol regularly

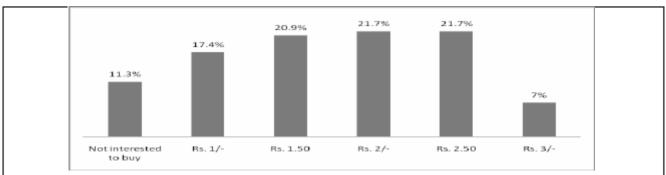


Table 17

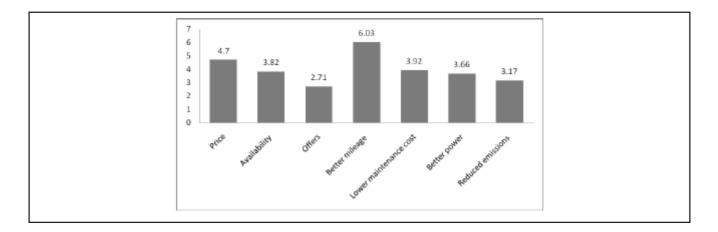
Ranking of the various factors that influence using Xtrapremium Petrol regularly

SI. No	Factors	Total Sum	Average Mean	Rank
1.	Price	541	4.70	2
2.	Availability	439	3.82	4
3.	Offers	312	2.71	7
4.	Better mileage	694	6.03	1
5.	Lower maintenance cost	451	3.92	3
6.	Better power	421	3.66	5
7.	Reduced emissions	364	3.17	6

It can be inferred from the above table that the respondents rank better mileage as the main factor that influences using xtrapremium petrol regularly, followed by price, lower maintenance cost, availability, better power, reduced emissions and offers.

Chart 17

Average Mean of the various factors that influence using Xtrapremium Petrol regularly



Type of vehicle and period of usage for regular and irregular users of Atrapremium Petrol								
	Type of Vehicle							
Type of User	2 Wheeler	4 Wheeler	2 & 4 Wheeler	Total				
Regular Users	11 (50%)	4 7 22 (18.19%) (31.80%) (100%)						
Irregular Users	10 (52.63%)	6 (31.58%)	3 (15.79%)	19 (100%)				
— (1)			Period of us	sage				
Type of User	< 1 month	1-3 months	3-6 months	6-12 months	>1 year	Total		
Regular Users	1 (4.50%)	1 (4.50%)	5 (22.70%)	6 (27.30%)	9 (41.00)%	22 (100%)		
Irregular Users	3 (15.79%)	8 (42.10%)	4 (21.05%)	2 (10.53%)	2 (10.53%)	19 (100%)		

 Table 18

 Type of vehicle and period of usage for regular and irregular users of Xtrapremium Petrol

It is clear from the above table that 50% of the two wheeler users are regular users of xtrapremium petrol and only 18.19% of the four wheeler users are the regular users of xtrapremium petrol.

Chart 18 Type of vehicle and period of usage for regular and irregular users of Xtrapremium Petrol

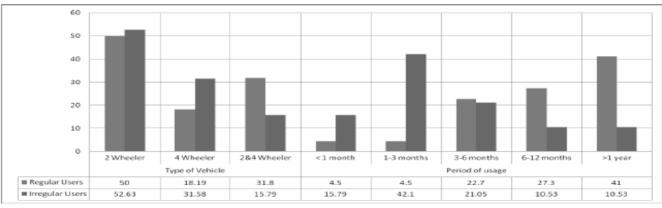


Table 19

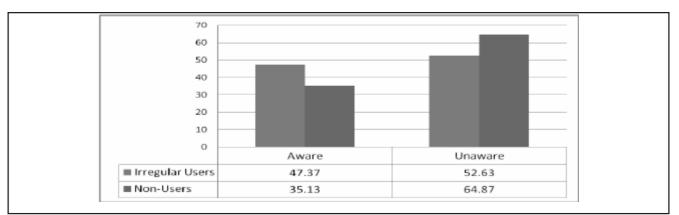
Awareness level on repeated use to reap the benefits among irregular and non-users of Xtrapremium Petrol

Users	Aware	Unaware	Total
Irregular Users	9(47.37%)	10(52.63%)	19(100%)
Non-Users	26(35.13%)	48(64.87%)	74(100%)

It can be inferred from the above table that a majority of both irregular and non-users are unaware of the benefits

of repeated use of xtrapremium petrol to reap the benefits.

Chart 19 Awareness level on repeated use to reap the benefits among irregular/non-users of Xtrapremium Petrol



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Table 20 Results of one way ANOVA test

Null Hypothesis: There exists no association between the type of vehicle, period of usage, future loyalty and

the level of satisfaction of regular users of xtrapremium petrol.

	Type of Vehicle		Period of Usage		Future Loyalty		yalty		
Factors	F value	Sig	Remark	F value	Sig	Remark	F value	Sig	Remark
Price	2.429	0.116	NS	0.185	0.905	NS	0.351	0.70	NS
Offers	1.192	0.326	NS	2.826	0.070	NS	4.567	0.052	NS
Availability	0.424	0.661	NS	5.453	0.08	NS	0.155	0.85	NS
Mileage / Performance	3.405	0.056	NS	1.410	0.274	NS	7.874	0.053	NS

Level of Significance: 5 per cent

Results of one way anova test implies that the calculated F values are greater than its probability values at 5 percent level of significance. Thus, the hypothesis framed stands rejected and it is concluded that there exists significant association between the type of vehicle, period of usage, future loyalty and the level of satisfaction of regular users of xtrapremium petrol.

Suggestions

The following are the suggestions suggested by the researchers based on the findings of the study:

- 1. IOC has to improve the awareness level of xtrapremium petrol among the public on the following aspects by promoting the product mainly through petrol outlets and television advertisements:
 - a. All the advantages of using xtrapremium petrol.
 - b. Repeated use for 4 or 5 times to reap the benefits.
 - c. Using the product on four wheelers without any apprehension that it would damage the engine or other parts.
 - d. Reduced environmental pollution thus leading to a better healthier life for the mankind.
- 2. Regular users of xtrapremium petrol are satisfied with the mileage / performance and price and are willing to recommend it to others. IOC has to capitalise on this by identifying regular users through retail outlets and preparing a list of satisfied customers and popularising the same so that others also would be convinced and start using the product.
- IOC has to instruct all their retail outlets to ensure sufficient stock of xtrapremium petrol so that availability is not a problem to any customer willing to purchase the product.

- 4. Periodic offers / incentives have to be offered to customers to encourage them to buy and use xtrapremium petrol. These offers / incentive schemes have to be given wide publicity to reach customers even in remote locations.
- 5. IOC has to ensure that xtrapremium petrol is priced at the preferred premium band of Rs.1/= to Rs.2.50 per litre for customers to regularly purchase the product.
- Respondents have ranked better mileage when compared to price as the major factor that influences the purchase of xtrapremium petrol. Hence, if customers get a better mileage along with other advantages by using xtrapremium petrol, they are willing to buy the product regularly.
- IOC has to consider taking the following steps to prevent contamination / adulteration of xtrapremium petrol so that the customer is ensured of fully getting the benefits for the extra price paid:
 - a. Differentiating the product from ordinary petrol by having a different colour for xtrapremium petrol so that the customer can easily identify it (similar to differentiating domestic LPG from commercial LPG through odour for domestic LPG).
 - b. Having exclusive outlets that trade only in xtrapremium petrol and not in ordinary petrol.

Conclusion

Xtrapremium petrol is no doubt a premium product from the IOC stable and regular users of the product endorse this view. However, there are certain myths in the mind set of consumers which have to be overcome for a better market share for the product. It is obvious from the above discussions that adopting the above strategies will definitely help IOC to clear the mindset of consumers for a better product penetration and to thwart competition in the long run.

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Annexure –A

Socio -Economic Profile of the Respondents

Variables		IOC Customers'	Other company Customers'	Total
	Male	43(37.40)	34(29.60)	77(67.00)
Gender	Female	19(16.50)	19(16.50)	38(33.00)
Gender	Total	62(53.90)	53(46.10)	115(100)
	Up to 20 years	0(0.00)	2(1.70)	2(1.70)
	20-30 years	18(15.70)	14(12.20)	32(27.90)
Ago	30-40 years	20(17.40)	17(14.80)	37(32.20)
Age	40-50 years	15(13)	17(14.80)	32(27.8)
	More than 50 years	9(7.80)	3(2.60)	12(10.40)
	Total	62(53.90)	53(46.10)	115(100)
	Illiterate	0(0.00)	0(0.00)	0(0.00)
	Up to SSLC	1(0.90)	1(0.90)	2(1.80)
	HSC	2(1.70)	1(0.90)	3(2.60)
Education	UG Degree	7(6.10)	12(10.40)	19(16.50)
Euucation	PG Degree	23(20.00)	12(10.40)	35(30.40)
	M.Phil	21(18.30)	16(13.90)	37(32.20)
	Ph.D.	8(7.00)	11(9.60)	19(16.50)
	Total	62(53.90)	53(46.10)	115(100)
	Less than Rs. 5000	0(0.00)	0(0.00)	0(0.00)
	Rs. 5000-Rs.10000	6(5.20)	7(6.10)	13(11.30)
	Rs. 10000-Rs.20000	25(21.70)	13(11.30)	38(33.00)
Monthly	Rs. 20000-Rs.30000	11(9.60)	16(13.90)	27(23.50)
Income	Rs. 30000-Rs.40000	5(4.30)	3(2.60)	8(7.00)
	Rs. 40000-Rs.50000	4(3.50)	3(2.60)	7(6.10)
	More than Rs. 50000	11(9.60)	11(9.60)	22(19.10)
	Total	62(53.90)	53(46.10)	115(100)
	Business	7(6.10)	8(7.00)	15(13.00)
	Government Employee	4(3.50)	3(2.60)	7(6.10)
	Public Sector Employee	0(0.00)	3(2.60)	3(2.60)
Occupation	Private Sector Employee	36(31.30)	28(24.30)	64(55.70)
	Professional	13(11.30)	11(9.60)	24(20.90)
	Others	2(1.70)	0(0.00)	2(1.70)
	Total	62(53.90)	53(46.10)	115(100)

Annexure –B

Variables		IOC Customers'	Other company Customers'	Total
	2 wheeler	21(18.30)	24(20.90)	45(39.10)
Type of	4 wheeler	17(14.80)	7(6.10)	24(20.90)
Vehicle	Both 2 and 4 wheeler	24(20.90)	22(19.10)	46(40.00)
	Total	62(53.90)	53(46.10)	115(100)
	< 1 year	2(2.20)	3(3.20)	5(5.40)
Age of Two	1-3 years	11(11.80)	12(12.90)	23(24.70)
wheeler	3-5 years	17(18.30)	9(9.70)	26(28.00)
	>5 years	17(18.30)	22(23.70)	39(41.90)
	Total	47(50.50)	46(49.50)	93(100)
	< 1 year	2(2.90)	1(1.50)	3(4.40)
Age of Four	1-3 years	15(22.10)	11(16.20)	26(38.20)
wheeler	3-5 years	7(10.30)	5(7.40)	12(17.60)
	>5 years	15(22.10)	12(17.60)	27(39.70)
	Total	39(57.40)	29(42.60)	68(100)
	Less than 5 litres	1(0.90)	1(0.90)	2(1.70)
	5-10 litres	10(8.70)	11(9.60)	21(18.30)
Petrol	10-20 litres	20(17.40)	11(9.60)	31(27.00)
Consumption	20-30 litres	7(6.10)	8(7.00)	15(13.00)
in litres	30-40 litres	13(11.30)	6(5.20)	19(16.50)
	40-50 litres	7(6.10)	5(4.30)	12(10.40)
	More than 50 litres	4(3.50)	11(9.60)	15(13.00)
	Total	62(53.90)	53(46.10)	115(100)

Nature of Vehicle Ownership and Petrol Consumption Profile of the Respondents