

Study on Factors Influencing Customer Experience for Buying Sulphuric Acid from Vedanta Resources-Hindustan Zinc Limited in Rajasthan

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Abstract— The purpose of this paper is to find out customer experience on buying sulphuric acid from HZL branch of Vedanta Resources. Vedanta resources is major player in business of Sulphuric acid. Hindustan Zinc limited produce 98 % concentrated Sulphuric Acid at our production facilities in Chanderia, Debari and Dariba in the state of Rajasthan. Sulphuric Acid is used in production of Single Super Phosphate Fertilizers/Zinc Sulphate/Phosphoric Acid/LABSA for detergent/Chemical Gypsum for Cement Industries/Metal Industry/Specialty Chemicals/ Dyes etc. for all spectrum of Industries.

Index Terms— Quality of service, Acid marketing, Customer Survey, Customer Experience, Influencing Factors, Marketing Research

1 INTRODUCTION

Vedanta resources is one of the world's leading diversified natural resource companies with business operations in India.

Vedanta is a leading producer of Oil & Gas, Zinc, Lead, Silver, Copper, Iron Ore, Steel and Sulphuric Acid.

The aim of this paper is to find how Vedanta Limited is leading in acid market.

In order to achieve this aim I have searched various Journals and articles to understand Indian chemical industry and also how the company mainsail their elite cliental.

In this research I have made a hypothesis to find out responses from clients buying Sulphuric acid from Vedanta Resources.

After collecting these Reponses I have applied various tests to determine if hypothesis based on the research problem is true or not.

Testes were based on SPSS program and these tests would also determine the factors responsible for the success of Vedanta Resources in this field.

2 RESEARCH PROBLEM

In this research we would point out the factors that makes Vedanta the biggest supplier of Sulphuric acid in Rajasthan. How clients are managed by the Company and overall experience of customer buying the product and factors influencing them.

3 REVIEW OF LITERATURE

For this research I have reviewed following reports from various journals

(Narayansa Vithobsa Badi 2016) this research paper aims to explore the competitive situation of the aluminum industry and the competitive strategies adopted by the Indian organizations in global markets it also aims to study the perceived customer preferences and promotional methods adopted by Indian industry. It also helps to develop future plans to gain competitive edge over other countries. This study concludes aluminum to be an important metal of future and has good growth prospects. One way Anova test was used to draw the findings. It shows two predominant modes of communication is direct face to face backed up by emails and telephone. Customer needs are organized once a year by the respondents of aluminum industry. The prime producers of aluminum are supplying right quantity and quality to their customers.

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(Shrabanti Pal 2013) This research paper’s objective is to measure the performance of steel industry in India in terms of production, consumption and foreign trade. It also aims to the prospect of Indian steel industry in terms of production and consumption. In this study compound annual growth rate (CAGR) is calculated and on its basis performance of the industry is evaluated. It also shows the import and Export for the finished carbon steel product. Findings of this study shows a spectacular growth a CAGR percentage over 7.94%. It shows India as a net importer of steel since 2007. Result of the study found that India has all potential to become top producer of steel in near future. The CAGR of production, consumption and foreign trade shows an impressive picture of the development of the industry for the study period.

(Asokendu Samanta 2009) The present report discusses on the sales and distribution management of Bayer Crop Science Limited, who has been producing various products in the field of crop protection for more than a century. Data on sales and distribution of Bayer are collected through a face to face interview (shown in Appendix) with the Manager, Sales and Support of Bayer. The pros and cons of the system are discussed, critically analyzed and findings are listed in conclusions.

4 HYPOTHESIS

H0: There is no a significant association between Quality of product and Customer satisfaction towards buying Sulphuric acid from Hindustan Zinc limited.

H1: There is significant association between Quality of product and Customer satisfaction towards buying Sulphuric acid from Hindustan Zinc limited.

5 RESEARCH METHODOLOGY

For this research paper samples are collected from prospects in the acid industry and responses were collected through a Questionnaire that contains various responsive question to compare various factors from this industry.

I have used Cross tabulation Chi-Square test in SPSS to check the hypothesis and its significance.

Friedman’s test in SPSS is used to find out factors responsible for the company’s success.

6 DATA ANALYSIS, INTERPRETATION AND HYPOTHESES TESTING

6.1 CROSSTABS AND CHI SQUARE TEST

- This test is used to find out relationship between two variables in two distinct data tables.
- In this research two variables are people buying sulphuric acid from HZL and choose High Quality of acid as factor and they buy quality acid in general for their business.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
What are the factors responsible for you to buy your acid from Hindustan Zinc? [Quality of Product]* Please Give Response related to buying Sulphuric acid. [High Quality of acid.]	53	100.0%	0	.0%	53	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.387 ^a	2	.040
Likelihood Ratio	1.399	2	.497
Linear-by-Linear Association	.917	1	.338
N of Valid Cases	53		

P value (0.040) < Level of Significance (0.5), H1 is true

6.2 FRIEDMAN’S TEST-1

This test is used to rank the factors that are responsible for the respondents to buy sulphuric acid from HZL.

Friedman Test

Ranks	Mean Rank
What are the factors responsible for you to buy your acid from Hindustan Zinc? [Quality of Product]	3.05
What are the factors responsible for you to buy your acid from Hindustan Zinc? [Customer Service]	2.94
What are the factors responsible for you to buy your acid from Hindustan Zinc? [Price]	3.05
What are the factors responsible for you to buy your acid from Hindustan Zinc? [Availability]	3.05
What are the factors responsible for you to buy your acid from Hindustan Zinc? [Post-Purchase Relations]	2.92

Test Statistics^a

N	53
Chi-square	8.348
df	4
Asymp. Sig.	.080

a. Friedman Test

6.3 FRIEDMAN'S TEST -2

In this test we compare the factors that are essential in the customer service as per the responses given by the respondents in the industry.

Friedman Test

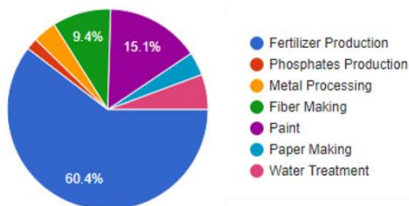
Ranks	Mean Rank
Please Give Response related to buying Sulphuric acid. [We like to buy in large Quantity.]	4.32
Please Give Response related to buying Sulphuric acid. [High Quality of acid.]	5.16
Please Give Response related to buying Sulphuric acid. [Reasonable pricing.]	5.33
Please Give Response related to buying Sulphuric acid. [Quality of Service.]	5.16
Please Give Response related to buying Sulphuric acid. [Concession for loyal Customers.]	5.44
Please Give Response related to buying Sulphuric acid. [Customer assistance.]	5.18
Please Give Response related to buying Sulphuric acid. [Delivering in given time frame.]	5.40
Please Give Response related to buying Sulphuric acid. [Feedback for further assistance.]	4.71
Please Give Response related to buying Sulphuric acid. [Customer Retention.]	4.30

Test Statistics ^a	
N	53
Chi-square	57.330
df	8
Asymp. Sig.	.000

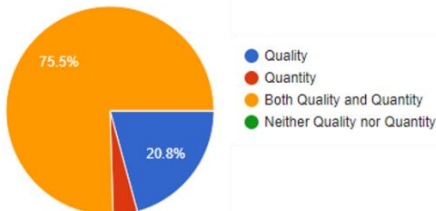
a. Friedman Test

7 FINDINGS

- In the study 60.4% respondents belonged to fertilizer production sector which makes it the prime sector for usage of sulphuric acid.



- The study shows 75.5% respondents preferred both quality and quantity of product.



- By analyzing the data it noted that respondents preferring high quantity of acid were keen on high quality of product.
- Respondents buying high quality of product were also showing quality of service as a factor for purchasing the product from the company.

8 LIMITATIONS OF THIS STUDY

- Main limitation to this study is the sample size as there is limitation for getting responses from consumers of sulphuric acid.
- Another limitation is the kind of method for data sampling as only limited respondents were available for this research so the conclusion made on this sample data would not be accurate.
- Due to pandemic COVID situation it was not possible to conduct this research of different regions.

8 CONCLUSIONS

- The present research concludes that Customer buying high quantity of acid preferred high quality as well.
- Customers were satisfied from the services provided by the company.
- Factors like Quality of service, Product and price were among the factors responsible for the success of Vedanta Resources in the acid market.

8 REFERENCES

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- [3] (Asokendu Samanta 2009) Sales and Distribution Management of Bayer Crop Science Limited
Project of sales distribution and management
XLRI Jamshedpur

https://www.researchgate.net/publication/318318943_Sales_and_Distribution_Management_of_Bayer_Crop_Science_Limited

- [4] Link for the Questionnaire used for the above research is given below. This Questionnaire was made with the help of Google forms.

<https://docs.google.com/forms/d/e/1FAIpQLSfYRFGoFurWxgcAGjtEYWD9IFnKWrEPNKE5lcB2XhOcyRVuLA/viewform>

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