Market Potential & Brand Preferences Among Competition Contractors in Enamel Industry using Coding with Concurrent Triangulation At Kolkata

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Abstract:- The Indian Paint industry is mainly divided into two segments – decorative paints segment and industrial paints segment. Berger has a share of 10% for industrial sector and 17% for decorative sector. They earn most of its revenue through enamels in decorative sector and through automobile paints in industrial sector. This industry has a vast distribution network with the lowest price range of all the well known brands in India. Promotion and sales of paints mostly increase during festive seasons. The study includes interviewing existing contractors and taking some of their Personal Details like passport size photograph and address proof which are a part of the KYC Program and also necessary information's like the volume (in terms of money) of different quality of paints they are using in a year, their total turnover, are they exclusively working for Berger or not. These data which has been collected through the interview has helped in deriving many conclusions regarding the market share of each paint category, category of the contractors with respect to the volume of purchase they make each year, whether they are dedicated to Berger Paints or not, which other paint brands they are preferring, the reason for their preference etc. Berger Paint has started a market expansion process by penetrating the market comprising of interior decorators and architects. A survey of the interior decorators and architects was made to get to know about the different types of work they are doing, the types of paints they require and the volume they consume every year. Information's regarding their total turnover in a year and also the brand they preferred were collected. The above one is totally a quantitative research based on a descriptive research design.

INTRODUCTION

Paints industry is an out-an-out Indian firm in the construction industry that manufactures and markets a wide spectrum of decorative as well as industrial paints. The corporate position of a focused national paint company by catering industrial and household customers in Indian market has been systematically repositioning itself in the recent years to become a global player by entering into a number of other country markets. The Indian Paint industry is mainly divided into two segments – decorative paints segment and industrial paints segment. Berger has a share of 10% for industrial sector and 17% for decorative sector. Berger earns most of its revenue through Enamels in decorative sector and through automobile paints in industrial sector. Berger has a vast distribution network

with Berger has the lowest price range of all the well known brands in India. Promotion and hence sales of Berger paints mostly increases during festive seasons.

On the basis of the survey conducted is being observed that major section of the revenue of Berger Paints comes from Interior and Exterior paints. Although market players are recently launched wood finishes and damp proof materials in the market but to compete with the competitors it has to carry out intense promotional program.   The biggest market players are engaging themselves in customer satisfaction programs by offering many lucrative schemes to them. These schemes will definitely serve the company to achieve its goal. Further some more schemes have been discussed which are to be enforced as demanded by the customers. The product range of company like Burger has inadequate as compared to its competitors; it's actually moderate or normal which is incompetent among the current range of the giant competitors. It is mainly due to unavailability of the same colour in the nearby paint distributor. The price range of products is on the lower side as compare to ASIAN and ICI. The promotional activities are very low, which restrict the company from mass appeal and thus decrease in sales.

The study includes interviewing existing contractors and taking some of their Personal Details like passport size photograph and address proof which are a part of the KYC Program and also necessary information's like the volume (in terms of money) of different quality of paints they are using in a year, their total turnover, are they exclusively working for Berger or not. These data which has been collected through the interview has helped in deriving many conclusions regarding the market share of each paint category, category of the contractors with respect to the volume of purchase they make each year, whether they are dedicated to Berger Paints or not, which other paint brands they are preferring, the reason for their preference etc. Berger Paint has started a market expansion process by penetrating the market comprising of interior decorators and architects. A survey of the interior decorators and architects was made to get to know about the different types of work they are doing, the types of paints they require and the volume they consume every year. Information's regarding their total turnover in a year and

also the brand they preferred were collected. The above one is totally a quantitative research based on a descriptive research design.

REVIEW OF LITERATURE

• **Mr R Muruthi Ram (Vol: 5,2)(July-Dec-2011)** have researched that "The market for both decorative and industrial paints is growing rapidly. This has resulted in paint manufacturing companies facing severe competition. The foreign companies with their modern technologies are also entering the Indian market creating problems of survival for some of the smaller companies."

• **Gupta (2005)** stated that- "observing the effects and counter effects of the top two companies; it is evaluated that Asian Paints with a market share of 44 percent dominated the decorative paints segment of the paints industry in India."

• **Kanji Gopal K., (2007), 100 Statistical Tests 3rd Ed,** stated that after application of paints, no one can judge/differentiate the Brand of paint used. That's the reason consumers don't insist too much for specific Enamel Brand. This situation provides opportunities to dealers and contractors to recommend a particular brand where they get maximum profit. Hence companies should provide more benefits and attention to dealer margins through various schemes and after sale services.

• **Kanji Gopal K., (2007), 100 Statistical Tests 3rd Ed,** in his research also stated that two companies often offer equal profit, but it is just on dealers/ contractors. They tend to promote a particular company where senior management gives them more importance by paying more visits/personal calls etc. Hence senior management and company sales representatives should spare more time to meet dealers/contractors, involving them in major decision making process etc to gain their confidence which will ultimately result in increase in sale. This will keep them connected to one specific brand and their loyalty won't be shifted.

• **Mr R Muruthi Ram (Vol:5,2)(July-Dec-2011)** have also stated that the importance of "…identifying reasons for success of some companies and at the same time the specific causes for some companies finding it difficult to face the competitors and ensure adequate growth."

• **Gurses & Carayon, (2009 ICU Nursing Study)** stated in his research that the use of mixed methodology to collect qualitative and quantitative data has enabled us to develop more relevant measures of obstacles and facilitators related to work system.

• **José Molina Azorín 1 and Roslyn Cameron2 (Volume 8 Issue 2 2010)** stated in his research that mixed methods researchers can give equal importance to both quantitative and qualitative research, or at times give more emphasize on qualitative parts. This emphasis may result from research questions, practical problems on data collection. The need to understand one form of data before proceeding to the next or the audience preference. Mixed methods designs can therefore be divided as per

requirement into equivalent status designs (the researcher often conducts the study using both the quantitative and qualitative approaches to understand the phenomenon) and dominant-less dominant studies or nested designs (the researcher conducts the study within a single dominant paradigm with a small component of the overall study drawn from an alternative design).

• It is the opinion of **Smith and Davies** (2010:149) that the essence (gist) of the interview is sometimes sufficient. Whilst reading the data, states **Saldaña (2010:19–20)**, the researcher can do some 'prior coding' by circling, highlighting or underlining significant words or sentences. However, the author urges researchers/coder to start the coding process whilst they are collecting the data, keeping in mind that the codes may change during later cycles. **Saldaña (2010:21–22)** even suggests that researchers/coder should keep their research questions and aims of their studies in mind.

• **Smith and Davies** (2010:155) argue that coding does not constitute the totality of data analysis, but it is a method to organize the data so that underlying messages portrayed by the data may become clearer to the researcher.

• **Saldaña 2013:218** states in his research that during axial coding, categories are related to subcategories and the properties and dimensions of a category are specified. Thus, through axial coding, the researchers will be able to answer when, where, why, who, how and with what consequences questions.

• **Biochem Med (Zagreb). 2012 Oct; 22(3)** stated in his article that the kappa statistic of Cohen's is frequently used to test interrater reliability. The importance of rater reliability lies in the fact that it represents the extent to which the data collected in the study are correct representations/ analysis of the variables measured. Measurement of the extent to which data collectors (raters) assign the same score to the same variable is called interrater reliability. In 1960, Jacob Cohen critiqued use of percent agreement due to its inability to account for chance agreement. He introduced the Cohen's kappa, developed to account for the possibility that raters actually guess on at least some variables due to uncertainty. Like most correlation statistics, the kappa can range from -1 to $+1$. While the kappa is one of the most commonly used statistics to test interrater reliability, it has limitations. Cohen's inter rater reliability is not suitable for health related researches. Cohen's suggested interpretation criteria is considered too lenient for health related studies because it implies that a score as low as 0.41to be a fair agreement and acceptable.

RESEARCH GAP IDENTIFIED

This project is basically based on the analysis of the existing contractors, investigating a new avenue of contractors i.e. the interior decorators and architects and also comparing the advertisements of Berger Paints with its competitors.

1) KYC is an acronym for "Know Your Customer", a term commonly used for Customer Identification Process. The activities of customer that financial institution and other

regulated companies must perform to identify their clients and ascertain relevant information pertinent to doing financial business with them.

Accordingly, BERGER has framed its KYC procedure according to which, a photograph and documentary proof of personal identification and address proof are required to be provided. In addition to these documents various other information like the per year consumption of each paint category, construction chemicals and wood finish were taken. These data formed the main basis of the study. Various analysis like brand preferences, contribution of each product in the total sales volume etc were analysed. Investigating a new avenue in the market, this in marketing perspective is increasing customer base, which will in turn lead to sales expansion and growth. This is done in case of the interior decorators and architects. In marketing terms we can define market expansion as a growth strategy in which an organization targets existing products to new markets, market development by targeting new geographic markets, new demographic or psychographic segments, or totally new users. In this study the research problem is divided into three heads:

Firstly analyse the existing contractor's satisfaction level, contribution in the sales volume, tastes and preferences in terms of choice of a particular paint brand and scopes for increase in the volume of sales. Secondly investigate a new market with existing products in hand i.e., the interior decorators and contractors, analyse their state, the brand preference. Thirdly the type of job they do so that they can be converted into dedicated customers in near future.

OBJECTIVE OF THE STUDY

- To evaluate the level of competition among various Enamel Brands in the country.
- To examine the behaviour of dealer and contractor and their role in customer decision making.
- To evaluate how consumption pattern of various competitors differ in Kolkata, West Bengal.
- To assess the forces that drives the decision making of various competitors.

METHODOLOGY

- **Mixed Methodology:** Mixed methods research is basically defined as the class of research where the researcher combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study. Philosophically, it is the "third wave" or third research movement, a movement that drives away past paradigm wars by offering a logical and practical alternative. It is an expansive and creative form of research. It is complementary, inclusive and pluralistic. Mixed methods research mainly focuses on collecting, analyzing and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems that either approach alone. This better

understanding results because mixed methods offer strengths that offset the weaknesses of separately applied quantitative and qualitative research methods. It also encourages the collection of more comprehensive evidence for study problems; helps answer questions that quantitative or qualitative methods alone cannot answer. Mixed methods research is important today because of the complexity of problems that need to be addressed, the rise of interest in qualitative research and the practical need to gather multiple forms of data for diverse audiences.

- **Concurrent Triangulation Strategy**- This approach is one of the most familiar of the six major mixed methods models. In a concurrent triangulation approach, the researcher collects both quantitative and qualitative. It is then compared with the existing databases to determine if there is convergence, differences or some combination. Some researchers even refer to this comparison as 'confirmation', 'cross-validation' or 'corroboration'. This model generally uses separate quantitative and qualitative method as a means to offset the weaknesses inherent within one method with the strengths of the other. In this approach, the quantitative and qualitative data collection is concurrent, happening in one phase of the research. Ideally, the weight is equal between two methods, but often in practice, priority may be given to one or the other. The mixing during this approach, usually found in an interpretation or discussion section, is to actually merge the data (i.e. transform one type of data to the other type of data so that they can be easily compared) or to integrate or to compare the results of the two databases side by side in a discussion. This side-by-side integration is often seen in published mixed methods studies in which a discussion section first provides quantitative statistical results followed by qualitative quotes that support or disconfirm the quantitative results.

- **Coding-** Data coding in research methodology is a preliminary step to analyzing data. The data that is obtained from surveys, experiments or secondary sources are in raw form. This data needs to be refined and organized to evaluate and draw conclusions. Data coding is not an easy job and the person or persons involved in data coding must have knowledge and experience of it.   At first we need to know, *what is a code?* A code in research methodology is a short word or phrase describing the meaning and context of the whole sentence, phrase or paragraph. The code makes the process of data analysis easier. Numerical quantities can be assigned to codes and thus these quantities can be interpreted. Codes help quantify qualitative data and give meaning to raw data.

Now coming to the point *how data coding is done by us?* Data coding is done by the process of driving codes from the observed data. In qualitative research the data is either obtained from observations, interviews or from questionnaires. The purpose of data coding is to bring out the essence and meaning of the data that respondents have provided. The data coder extract preliminary codes from the observed data, the preliminary codes are further filtered and refined to obtain more accurate precise and concise codes. Later, in the evaluation of data the researcher

assigns values, percentages or other numerical quantities to these codes to draw inferences. It should be kept in mind that the purpose of data coding is not to just to eliminate excessive data but to summarize it meaningfully. The data coder should ascertain that none of the important points of the data have been lost in data coding.

APPLICATION OF INTER RATER RELIABILITY

The kappa statistic is frequently used to test inter rater reliability. The importance of rater reliability lies in the fact that it represents the extent to which the data collected in the study are correct representations of the variables measured. Measurement of the extent to which data collectors (raters) assign the same score to the same variable is called inter rater reliability. While there have been a variety of methods to measure inter rater reliability, traditionally it was measured as percent agreement, calculated as the number of agreement scores divided by the total number of scores. In 1960, Jacob Cohen critiqued use of percent agreement due to its inability to account for chance agreement. He introduced the Cohen's kappa, developed to account for the possibility that raters actually guess on at least some variables due to uncertainty. Like most correlation statistics, the kappa can range from −1 to +1.

INTER RATER RELIABILITY CALCULATION

Cohen's kappa measures the agreement between two raters who each classify N items into C mutually exclusive categories.

The definition of ķ is:

$$\kappa \equiv \frac{p_o - p_e}{1 - p_e} = 1 - \frac{1 - p_o}{1 - p_e},$$

Where p_o is the relative observed agreement among raters (identical to accuracy), and p_e is the hypothetical probability of chance agreement, using the observed data to calculate the probabilities of each observer randomly seeing each category. If the raters are in complete agreement then $k = 1$. If there is no agreement among the raters other than what would be expected by chance (as given by p_e), k=0. It is possible for the statistic to be negative,[4] which implies that there is no effective agreement between the two raters or the agreement is worse than random.

For categories k, number of items N and $nk\ i$ the number of times rater i predicted category k:

$$p_e = \frac{1}{N^2} \sum_k n_{k1} n_{k2}$$

Now coming to the point why we do crosstab calculation from Coding, is because as we know to describe a single categorical variable, we use **frequency tables**. To describe

the relationship between two categorical variables, we use a special type of table called a *cross-tabulation*.

TWO WAY / CONTINGENCY TABLE

A two way contingency table of observation by the author and the coder, where the author and coder independently derives the attributes on the basis of in depth interviews and comes out with a matrix that derives their agreement with in their observations.

DATA ANALYSIS & FINDINGS

Interpretation is the process of making sense of numerical data that has been collected, analyzed, and presented. Here the parameters screened by collecting various keywords are further tabulated into individual codes which are further being analysed into pie charts. As this research involves in-depth interview of the competition contractors, so each question gives us certain parameters which are prevalent over the other codes which are being analysed previously. Here are the following parameters on the basis of their importance, based on the survey made on 50 competition contractor.

*AUTHOR * CODER*

Cross Tabulation

Symmetric Measures

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
AUTHOR * CODER	96	100.0%	0	0.0%	96	100.0%

	Value	Asymptotic Standardized Error	Approximate T[b]	Approximate Significance
Measure of Agreement Kappa	.430	.093	4.215	.000
N of Valid Cases	96			

a. Not assuming the null hypothesis. b. Using the asymptotic standard error assuming the null hypothesis.

RESULTS

On the basis of attributes wise analysis of competition contractors whether the company increases brand awareness of the respondents. It is observed that the respondents moderately agree on added benefits and advantages which give impact on their brand preference. It is also observed that respondents face various challenges with their competitors who may decrease the effectiveness towards brand preference. It is alsoobserved that 29 attributes have same level of agreement out of 80 attributes for turnovers, schemes, demands, efficiency. The documentation and analysis process aimed to present data in an intelligible and interpretable form in order to identify trends and relations in accordance with the research aims. In turn, the identified trends and relations in accordance with the research aims would enable the researcher to understand the market potential which determines the paint preference of the competition contractors. The research results were firstly presented as an analysis of the qualitative data obtained from the individual semi-structured interviews .The analysis of the qualitative data was followed by an analysis of the quantitative data that was recorded by the questionnaire. Furthermore, it is important to remain mindful of the fact that the data from the qualitative and quantitative sections are connected, in that the results of qualitative data contributed to the development of the quantitative questionnaire for competition contractors and related role players, concerning the relevant needs and competencies in accordance with the diverse needs.

CONCLUSION

To become the preferred brand in India the products of enamel industry, there are some fields that are yet to be more emphasized which can improve the sales volume in the near future.They should maintain the quality of the paint to satisfy the existing and new customers. Versatility of the designs should be increased and lucrative schemes should be offered to attract new customers. Sales promotion committee should be formed to formulate and implement new market strategies to compete with competitors and to extent the market share. Company must increase their dealership network so that desirable contractor and consumers who wants to buy or use Berger paints can be reached easily. Both Dealers and Contractors who have been interviewed have a common complain that there is not much interactions from the company. So Sales Officers and Demand Generators should be in a regular touch with their customers. Regular interactions are necessary as a part of after sales service which can bring more sales later. Painters need should be identified and schemes framing should be like that the painters get motivated to satisfy their needs. Efforts should be made so that the applicators are made aware of the various new schemes and new product launches and these must be completely entertained by the company by the help of personal meeting as most of the contractors are less educated to understand the procedure. Painters meet should take place on regular interval to help the painters as it helps to promote brand as well as it maintain company goodwill. Industry may   introduce card system for uploading points as it is easy and most preferred medium among the contractors.Effective and fast reward collection mechanism should be there to keep the contractors engage in the loyalty programs.

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