CHAPTER -3

3. Research Methodology:

3.1 INTRODUCTION TO RESEARCH:

The advanced Learner’s dictionary of current English lays down the meaning of research as “a careful investigation or inquiry especially through search for new facts in any branch of knowledge”

Redman and Mory define research as a “systematized effort to gain new knowledge”

It is thus, an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, comparison and experiment. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research.

3.2 RESEARCH METHODOLOGY:

Research Methodology is a way to systematically solve the research problem. It may be understood as a science of studying how the research is done scientifically. In it we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them.

Methodology used in this study:

The study was descriptive in nature. Methodology involved instrument development and validation, data collection and appropriate analysis.

The research is designed in such a way to gather data to analyse selected parameters of brand equity influencing customers attitude towards colour television brands and also the status with regard to the brand equity of specific brands. This will enable the companies to make some rational decisions in introducing marketing strategies with respect to the customer responses and research findings.
The Universe/population in this study is the Colour television owners in Coimbatore city. Coimbatore city covers the Municipal corporation limits of 105.50sq.kms. The sample size chosen for this research is 400 customers of Colour Television (CTV) products in Coimbatore city. The city is divided into four zones (North, East, West & South) with each zone having 18 wards*. Multi stage sampling** is adopted. In the first stage, Purposive sampling is adopted by which three areas/wards were chosen from each zone. This choice was based on the density of the mixture of both low income and middle income families. In the second stage through random sampling, the streets were chosen. For this, the lists of street names were collected from the ward offices. In the third stage, the households in the street were selected by convenient sampling that is either left or right side of the street or in the middle was selected. Because the total CTV owners were not known Quota sampling was followed by taking 100 respondents from each zone. If a street could not be covered with 100 respondents then the next street was chosen at random and the respondent households were identified until all the 100 respondents were covered in each zone. Colour Televisions as per popularity and market shares ascertained from the Company executives fall in the order of sales quantity in Coimbatore city as LG, Samsung, Onida, Sansui & Videocon. Therefore in the study, focus is given to these top five brands for the study of brand equity.

** Sampling method: 1st stage- wards (Purposive); 2nd stage- streets (Random); 3rd stage- houses (Convenient); 100 households as a (quota) for each zone.

<table>
<thead>
<tr>
<th>NORTH ZONE</th>
<th>100</th>
<th>EAST ZONE</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kavundampalayam</td>
<td>33</td>
<td>1. Ramanathapuram</td>
<td>35</td>
</tr>
<tr>
<td>2. Rathnapuri</td>
<td>33</td>
<td>2. Ondipudur</td>
<td>34</td>
</tr>
<tr>
<td>3. Tatabad</td>
<td>34</td>
<td>3. Singanallur</td>
<td>31</td>
</tr>
<tr>
<td>WEST ZONE</td>
<td>100</td>
<td>SOUTH ZONE</td>
<td>100</td>
</tr>
<tr>
<td>1. Sai baba Colony</td>
<td>35</td>
<td>1. Ram Nagar</td>
<td>36</td>
</tr>
<tr>
<td>2. R.S.Puram</td>
<td>30</td>
<td>2. Sukrawarpet</td>
<td>30</td>
</tr>
<tr>
<td>3. Vadavalli</td>
<td>35</td>
<td>3. Raja Street</td>
<td>34</td>
</tr>
</tbody>
</table>

*source; www.coimbatore-corporation.com

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3.3 METHOD OF DATA COLLECTION:

**Data collection from the sample selected:**
The data from the respondents were collected through interview schedules which have been filled up by meeting the respondents. The researcher had made a pilot study to find out how effective the schedule should be. The Company executives of CTV companies suggested some ideas at this stage. A pre-test of the schedule was done on 30 customers and adjustments made in the schedule.

**Data Collection from Secondary sources:**
In order to substantiate the Research, secondary data was collected from the Books, Journals, Newspapers & Magazines, other research reports and Net resources. Discussions were had with the company executives at Coimbatore and also the Dealer network to ascertain the performance of brand before administering the interview schedule to the respondents.

**Period of the study:**
The research was conducted during the period 2005 to 2010.

3.4 Analysis of Data – Tools used:
The data was analysed using the following statistical tools,

1. **Simple percentage method:**
   Simple percentage method is used to study some of the personal and purchase assessment factors in the study.

2. **Correlation:**
   Correlation analysis studies the joint variation of two or more variables for determining the amount of correlation between two or more variables. It is a study of the functional relationships existing between two or more variables. In this study correlation is worked out for of brand of CTV owned and brand equity factors.
3. Chi-Square Test:
Chi-square test is an important test amongst the several tests of significance. It is a statistical measure used in the context of sampling analysis for comparing a variance to a theoretical variance. As a non-parametric test it can be used to determine if categorical data shows dependency or two classifications are independent. In this study Chi-Square test is used to test significant relationships between Personal factors and Ownership of brands of CTV.

4. Kendall’s Coefficient of concordance:
Kendall’s coefficient of concordance represented by the symbol ‘W’, is an important non-parametric measure of relationship. It is used to determine the degree of association among several (k) sets of ranking of N objects or individuals. The basis of this test is to imagine how the given data would look if there was no agreement among the several sets of rankings, and then to imagine how it would look if there was a perfect agreement among the several sets. In this study Kendall’s coefficient of concordance is used to identify the priorities in the minds of the respondents’ with regard to the specified brands.

5. t test:
t-test is based on t-distribution and is considered an appropriate test for judging the significance of a sample mean or for judging the significance of the difference between the mean of the two samples in the case of small samples when the population variance is not know. The relevant test statistic, t, is calculated from the sample data and then compared with its probable value based on t distribution at a specified level of significance for concerning degrees of freedom for accepting or rejecting the null hypothesis. In this study t-test is used to find significant differences in specified personal factors and factors of brand equity.
6. ANOVA:
The ANOVA technique is important in the context of all those situations where we want to compare more than two populations. It is essentially a procedure for testing the difference among the different groups of data for homogeneity. It can investigate any number of factors which are hypothesized or said to influence the dependent variable. In this study, ANOVA is used to study significant differences in selected personal factors and brand equity factor scores.

7. Regression analysis:
Regression analysis is adopted when the researcher has one dependent variable which is presumed to be a function of two or more independent variables. The objective of this analysis is to make predictions about the dependent variable based on its covariance with all the concerned independent variables. In this study regression analysis is used to study the effective of CTV brand advertisements on the overall brand equity scores.

Hypothesis was framed and tested using the appropriate statistical tools from above and significance levels were observed at 5% and 1% level.
3.5 LIMITATIONS OF THE STUDY:

This study is based on the opinion of the sample respondents of Coimbatore city. The researcher has taken all possible steps to see that all the respondents reveal the true facts and figures and what actually they feel about the select colour television products. Similarly the information elicited from the company executives and dealers are from personal discussions with the company managers and showroom owners.

The limitations of the study are:

1. The study is restricted to the top 5 brands of Colour Televisions in Coimbatore city. This was ascertained from the Company executives and cross checking with 5 leading retailers in the city. The actual sales quantities were not revealed.
2. The study covers colour television products (screen size 14”, 20”, 21”, 29” and LCD segments) only to assess the brand equity.
3. One of the factors of Brand Equity as per author Aaker namely Brand Assets/patents was not taken for the study as this information is presumed as not published or revealed by the company in any of their communication to the customer.
4. Only individual customers have been chosen as the sample for this study, and not the Institutional customers.
5. The study has covered only Coimbatore city. It does not cover any other part of the district.