Chapter-3

Research Methodology

3.1 The Problem

Businesses are built on relationships. As relationships become complex and collaboration is required decision system must be able to recognize and process this complexity efficiently. Customer Relationship Management, Supply Chain management, and ERP are behind us as neither of these systems can handle the complex and encompassing relationship between Trade Partners/Retailers. Variables like prices, incentives, discounts, adjustment in invoices, attending to the customers through help desk etc presents a daunting task before the sellers. We have to look for an alternative. It is presumed that Trade Relationship Management can bring about a perfect solution. The present study is focused on Trade Relationship variables leading to better management and profitability along with customer satisfaction and loyalty.

3.2 Research objectives

The main objective of this research is to test inter-linkages between different components of Trade
Relationship Management and how far TRM contributes to market leadership/Benchmarking status in the industry.

The specific objectives are as follows:

1. The first objective of this research is to understand the basic concept of Channel/Trade Relationship Management.

2. The second objective of the study is to examine different components of Trade Relationship Telecom sector.

3. The third objective is to determine if Image of the organization is having significant relationship with different components of TRM.

4. The fourth objective of the research is to explore if better Trade relationship leads to customer loyalty.

5. The fifth and final objective is to ascertain if TRM directly or indirectly leads to customer satisfaction.

3.3 Hypotheses

The importance of hypotheses in a research study is that:

- They act as questions to which, answers or solutions are expected to be arrived at through the attempted research;

- They provide the direction for the design of the study as well as for the inception of findings.

Without well-defined hypotheses, the interpretations
and discussions of the findings might lose its focus and become tangential to the main viewpoint of the study.

Keeping in view the above objectives of the study, the following null hypotheses and alternative hypotheses were framed:

**H₀₁**: Customer's Image of the organization is not significantly related to their perceptions of the attributes of most preferred organization.

**H₀₂**: Customer's Image of the organization is not significantly related to their perceptions of the attributes of ROI.

**H₀₃**: Customer's Image of the organization is not significantly related to their perceptions of the organization where profitability is high.

**H₀₄**: Customer's Image of the organization is not significantly related to their perceptions of the organization where cost of dealing is the least.

**H₀₅**: Customer's Image of the organization is not significantly related to their perceptions of the overall quality of products of the organization.

**H₀₆**: Customer's Image of the organization is not significantly related to their perceptions of the value of product/service.
H_07: Customer's Image of the organization is not significantly related to their perceptions of the Quality of personnel of the organization.

H_08: Customer's Image of the organization is not significantly related to their perceptions of the recommendation of a brand.

H_09: Customer's Image of the organization is not significantly related to their perceptions of the continuity of dealings in future.

H_010: Customer's Image of the organization is not significantly related to their perceptions of the overall feeling of the product/service of the organization.

H_011: Customer's Image of the organization is not significantly related to their perceptions of the quality of interaction with organization's FOS.

H_012: Customer's Image of the organization is not significantly related to their perceptions of the Quality of Sales Personnel of the organization.

H_013: Customer's Image of the organization is not significantly related to their perceptions of the Quality of Order System of the organization.

H_014: Customer's Image of the organization is not significantly related to their perceptions of the
Quality of Trade Promotion Schemes of the organization.

H_015: Customer's Image of the organization is not significantly related to their perceptions of the possibilities of increase in share of dealings from the organization.

H_016: Customer's Image of the organization is not significantly related to their perceptions of the possibilities of a switchover from the organization.

H_017: Customer's Image of the organization is not significantly related to their perceptions of the quality of invoicing of the organization.

H_017a: Customer's Image of the organization is not significantly related to their perceptions of the quality of claim settlement of the organization.

H_018: Customer's Image of the organization is not significantly related to their perceptions of the quality of Advertising of the organization.

H_019: Customer's Image of the organization is not significantly related to their perceptions of the quality of Backend support of the organization.
\(\text{H}_0\text{20}: \) Customer's Image of the organization is not significantly related to their perceptions of the quality of Help Desk of the organization.

\(\text{H}_0\text{21}: \) Customer's Image of the organization is not significantly related to their perceptions of the problem solving by the organization.

\(\text{H}_0\text{22}: \) Customer's Image of the organization is not significantly related to their perceptions of the recurrence of problem.

3.4 Research Design

The study used an exploratory research design. To conduct the study a written and undisguised questionnaire was developed, the questionnaire was developed to cover all possible aspects of TRM. Very simple and common language is used. The instrument was developed in consultation with senior professional, statisticians and academicians. The questionnaire has used a five points 'Likert' type scale of measurement weighted as follows:

1 = Very Poor
2 = Poor
0 = No Comments
3 = Good
4 = Excellent
For negatively worded statements, reverse scoring was used at the time of analyses, to keep the consistency.

3.5 Research Instrument Design

The research involves exploration of relationship between different variables by using appropriate statistical tools.

A structure undisguised questionnaire was developed by the researcher as well as adopted from other sources that had been used in previous studies.

The questionnaire included questions on the following variables:

Preferred Company/Service provider
Return on investment
Profitability
Cost of dealing
Image
Product Quality Image
Product Value
Quality of Company Personnel
Relationship Outcomes
Commitment
Process Areas (Three Parts)
Interaction Quality with Sales Personnel
Share of Dealings
Invoicing (Three Parts)
Quality of Backend support

Quality of Help Desk

Past Experiences (two parts)

3.6 Sampling Procedures and Questionnaire Administration

The population for this study was all retailers of mobile services in the metropolis of Delhi and NCR. A list was obtained from mobile service provider's association as on June 2006. The number stood at 16731 spread across the geographical area of Delhi NCR.

Sample size was calculated using sample calculator of Creative Research System (http://www.surveysystem.com/scale.htmzome).

Population: 16731

Confidence level: 99 per cent

Calculated Sample Size: 640

Questionnaire Administered: 640

Filled Questionnaires Returned: 312

Usable Questionnaire 271

Questionnaire was sent by courier to every 26th retailer in the list whose addresses were complete and if there was any shortcoming in the address it was sent to the 27th retailer. Upon several follow-ups by phone 312 questionnaires were received out of which 43 were either
incomplete or unfilled. Therefore 271 (1.7% of population and 42.34% of the actual sample) usable questionnaires were taken up for analysis.

3.7 Reliability and Validity of the Instrument

Measures of variables should have validity and reliability (Cronbach, 1971; Nunally, 1978) in order to draw valid inferences from the research. Reliability deals with how consistently similar measures produce similar results (Rosental & Rosnow, 1984), and it has the two dimensions of repeatability and internal consistency (Zigmund, 1995). Internal consistency refers to the ability of a scale item to correlate with other items in the scale that are intended to measure the same construct. Items measuring the same construct are expected to be positively correlated with each other. A common measure of the internal consistency of a measurement instrument is Cronbach’s alpha. If the reliability is not acceptably high, the scale can be revised by altering or deleting items that have scores lower than a pre-determined cut-off point. If a scale used to measure a construct has an alpha value greater than 0.70, the scale is considered reliable in measuring the construct (Hair, Anderson, Tatham, & Black, 1998; Nunnally, 1978; Leedy, 1997). According to Schuessler (1971), a scale is considered to have good reliability if it has an alpha
value greater than 0.60. Hair et al. (1998) suggest that reliability estimates between 0.6 and 0.7 represent the lower limit of acceptability for reliability estimates. In this research, the multi-item scales measuring Image of the organization and Trade relationship characteristics were checked for reliability by determining Cronbach's alpha and an alpha value of 0.60 or greater was considered acceptable for individual variables. The combined value of alpha is found to be 0.9801.

The validity of a measurement instrument refers to how well it captures what it is designed to measure (Rosenthal & Rosnow, 1984). Several different types of validity are of concern: content validity, the degree of correspondence between the items selected to constitute a summated scale and its conceptual definition; criterion validity, the degree of correspondence between a measure and a criterion variable, usually measured by their correlation; and construct validity, the ability of a measure to confirm a network of related hypotheses generated from a theory based on constructs.

In this research, the content validity of the measurement instrument was assessed by asking experts to examine it and provide feedback for revision. The expert panel included professors at Aligarh Muslim University, Delhi
University and high level practitioners of telecom industry who were involved in research and managing channels and relationships. After they reviewed the questionnaire, changes were made to clarify and eliminate ambiguous statements in instructions and questions according to their recommendations. Also, in the pilot test, each question was examined for its clarity and relevance to the purpose of the research, which resulted in some modifications to the questions. After the data collection with the final questionnaire, the content validity of the Image of the organization and Trade relationship measures was assessed by factor analysis. Such analysis provides an empirical assessment of the interrelationships among items in a variable in forming the conceptual and empirical foundation of a summated scale (Hair, Anderson, Tatham, & Black, 1998). Internal construct validity was also assessed by factor analysis. Because factor analysis provides evidence of the dimensionality of a measure, factor analysis with a varimax rotation was used to determine the number of factors contained in the Image of the organization and Trade relationship attributes scales. An eigenvalue greater than 1 is considered to indicate the presence of an interpretable factor so that factors with eigenvalues
greater than 1 were taken into account for interpretation. Factor loading values indicated the strength of relationship between each item and each factor. Values greater than 0.3 are considered to be substantial or salient; however, factor loadings of 0.50 or greater are considered practically significant (Hair, Anderson, Tatham, & Black, 1998). Thus, a factor loading value of 0.50 was used for the cut-off point; any item with factor loading value less than 0.50 and any item loading on more than one factor, that is, with a loading score equal to or greater than 0.40 on each factor, was eliminated from the analysis (Chen & Hsu, 2001; Kim, 2002).

Data Analysis

The data gathered from the questionnaire were entered into a computer database and then analyzed using the Statistical Package for the Social Sciences (SPSS) and MS Excel. The data analysis consisted of factor analysis, analysis of variance (ANOVA), Pearson correlation analysis, multiple regression, t-test, and descriptive statistics including means and standard deviation. Based on the research hypotheses, corresponding null hypotheses for testing the relationships are presented above. The null hypotheses state that there is no relationship between
variables. The established significance level for rejecting all null hypotheses was 0.05.

Initially, ANOVA single factor is used to determine if there is a significant difference between the mean of the sample organizations based on different attributes.

Following this, to test the null hypotheses Multiple Regression Analysis were employed. Mean was calculated for each set of questions organization-wise to determine their status and ranking. Relationship was analyzed where in Image of the organization has been taken up as dependent variable and all other attributes has been taken as independent variable. It is assumed that if the relationship between image and other variables are significant the result of inter variable correlation shall also be significant.

Sources of Data

Primary and secondary data has been used for the study. The primary data has been collected from Delhi and NCR while Secondary data was collected from university libraries, Newspapers like The Times of India, Pioneer, Outlook etc. and Trade Journals available on line on Emerald, libraries at MDI, IIMA and IIMB.
Scope of the Study

The study would be of immense help to the trade partners. What makes a retailer remain satisfied and loyal to the company?

It would also be useful to retailers of not only cell phone in understanding, what facilities do they need from the service providers.

It will also be helpful to academia that are interested in the study of Channel partner's relationship in general and Trade Relationship Management in particular.

Operational definition

The Trade Relationship Management may be defined as a holistic process through which the supplier push their product and service into the market through their retailers proving them full support physically and financially.

Limitations

Despite the honest and enthusiastic efforts of the researcher, survey research study has limitations and shortcomings of their own. There are many limitations like limitations of methods, time, cost etc. Researcher has tried his level best effort to minimise, if not eliminate the limitations. This study has a fair amount of shortcomings. Some major limitations can be summed as follows.
The study was restricted geographically to Metropolis of Delhi and NCR only, the sample of 640 Respondents was chosen on the basis of standard sampling procedures and scientific methods. The population is representative; however, generalisation of result to whole India may not be possible.

Every possible precaution was taken to design the questionnaire, help of many academicians and practitioners were sought in constructing it, but shortcomings in the questionnaire can not be ruled out.

Every possible care was taken to ensure delivery of questionnaire to the respondents and getting them back however, only 48.7 per cent were received back.

Personal limitation of researcher viz., knowledge and time can be considered as the biggest limitation.
Reference


