
UNIT 7 MARKETING RESEARCH AND ITS APPLICATIONS

Objectives

The objectives of this unit are:

- to **understand** marketing research,
- to **understand** the relevance of marketing research in the context of marketing decisions,
- to **develop** an appreciation of the various possible uses and applications of marketing research,
- to know the procedure of conducting marketing research, and
- to **develop** familiarity with the necessary steps needed to complete each stage of the procedure.

Structure

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7.1 INTRODUCTION

As a manager you are making decisions all the time. It is your responsibility to reduce the risk associated with the decisions which you make. The risk arises because of lack of complete information. Therefore, you are always seeking information to improve the quality of your decision-making.

In many areas of management, such as production, finance and personnel, the information required for decision-making is primarily generated within the firm and is easy to collect and analyse. Moreover, in these areas formalised procedures have greatly improved decisions: statistical quality control in manufacturing, PERT in project scheduling, queuing theory in managing large machinery maintenance programmes, etc.

7.2 THE CONTEXT OF MARKETING DECISIONS

In the area of marketing, much of the information required for decision-making exists outside the firm e.g., information on why people buy only certain products and not other products; information about the competitor's next move; information about new government rules and regulations which can affect your working, etc. The marketing manager faces a challenging task in attempting to improve his decision-making. The variables involved in the marketing decisions being external to the firm make collection of information cumbersome and expensive. Since the variables are often qualitative and dynamic in nature their measurement is also difficult, and the results not always accurate. Moreover, many of the variables interact with each other in a very complex fashion which makes it difficult to isolate and measure specific variables. Thus the pressure on the marketing manager is very strong to correctly choose the most critical decision variables and seek relevant information about



them. The, wrong choice of (information) variables will not only result in unnecessary expenditure but can also lead the decision-making process astray. The correct identification of variables requires at least a basic understanding of why people behave in the manner in which they do. The manager also needs to monitor what is happening in the market place and in the general environment of the firm. The only way the manager can monitor all these is through regular market research.

7.3 DEFINITION OF MARKETING RESEARCH

The American Marketing Association defines marketing research as "the systematic gathering, recording and analysing of data about problems related to the marketing of goods and services". Crisp has defined marketing research as "...the systematic, objective and exhaustive search for and study of the facts relevant to any problem in the field of marketing".

It would be useful to add the word 'continuous' to these two definitions to make them even more meaningful. A study conducted today may lose much of its relevance by next year and may need updating, modification or even an entirely new effort. The rate of change in information would depend on the specific product and customer segment with which you are dealing. If your firm is marketing bathroom fittings you are dealing with functional products. The functions these fittings will serve in 1995 are the same as what they serve today. Therefore, you may not use extensive marketing research to understand the changes in customer tastes, because the variations in the designs (given the functional character of the product) which you can introduce are very limited. However, you would like to know what new colours and materials are preferred by the customers and undertake research for this purpose. If your firm is marketing ready-made clothes for teenagers you are dealing with a market where rapid change is its distinguishing characteristic. You would need continuous and extensive market research to find out what designs, fabrics, colours and prices will appeal to this market segment, this winter, the coming summer and the following winter and so on. You would also need to monitor the fashion scene in Europe and America and see what new trends can be successfully adapted for the Indian market. No matter whether you are in a product line which is greatly affected by changing customer tastes, habits, values, attitudes, or dealing in a product which is not that susceptible to environmental influences, you need marketing research to improve and be at least one step ahead of your competitors. In the latter case (ready-made clothes) marketing research is a critical input for the mere survival of the firm; in the former (bathroom fittings) case it can yield valuable ideas to make the firm a market innovator and leader. Marketing research can be used for consumer products, industrial products and services.

7.4 PURPOSE OF MARKETING RESEARCH

The basic purpose of marketing research is to facilitate the decision-making process. A manager has before him a number of alternative solutions to choose from in response to every marketing problem and situation. In the absence of market information he may make the choice on the basis of his hunch. By doing so the manager is taking a big risk because he has no concrete evidence to evaluate this alternative in comparison with others or to assess its possible outcome. But with the help of information provided by marketing research the manager can reduce the number of alternate choices to one, two or three and the possible outcome of each choice is also known. Thus the decision-making process becomes a little easier.

The second purpose of marketing research is that it helps to reduce the risk associated with the process of decision-making. The risk arises because of two types of uncertainties: uncertainty about the expected outcome of the decision, and uncertainty about the future. , Uncertainty about the expected outcome of the decisions will always remain no matter how much information you may have collected to base your decision on hard facts. Unforeseen factors have the uncanny ability of upsetting even the most stable apple cart. In the mid-1950s, Ford Motor Company in USA had a 25 per cent market share of the automobile market. The company wanted to introduce a new car model which would appeal to young executives and professionals. The decision was based on research which revealed that this



7.5 SCOPE OF MARKETING RESEARCH

Marketing research (MR) is concerned with all aspects of marketing, relating to product design and development, product-mix, pricing, packaging, branding, sales, distribution, competition, target customer segments and their buying behaviour, advertising and its impact. Specifically, the scope of MR includes customers, products, distribution, advertising, competitive information and macro-level phenomenon.

- i) Marketing is concerned with identifying and fulfilling customer needs and wants. Thus, MR should precede marketing. The unfulfilled wants should first be identified and translated into technically and economically feasible product ideas, which then should be marketed to the customers. But mere identification of customer wants is not enough. Marketing requires continuous effort to improve the existing product, increase sales and beat the competition. For this it is important to know who the customers are for your products (whether housewives, teenagers, children), what their socio-economic profile is (in terms of income, education, cultural, religious and professional background) and where they are concentrated in terms of location. Besides this information, it is also important for you to know the process by which a prospective customer arrives at a decision to buy your product. If you know the sequential steps in the purchase process and the influencing variables in each, you can design appropriate strategies to exert a positive impact on them, and thus ensure an actual purchase. The study of consumers and their purchase behaviour is so important that there is a separate, special body of knowledge known as Consumer Behaviour.
- ii) The second area which is of direct concern for MR is product and product design. MR is helpful in determining the final design of the product and its physical attributes of colour, size, shape, packaging, and brand name. It is useful in arriving at the right combination of product mix, the number of variations of the basic product, accessories and attachments. It can also help decide the quantities to be produced according to the projected demand estimates. MR can also be used to gauge customer reactions to different prices.
- iii) Marketing research helps in discovering what types of distribution channels and retail outlets are most profitable for your product. On the basis of comparative information for different channels and different types of outlets you can choose the combination most suitable for your product. Distributor, stockist, wholesaler, retailer may represent one kind of distribution channel in contrast to another in which you may use only the distributor and retailer. Consider an example:

A firm is marketing refrigerators through distributors and retailers in the Eastern zone. The understanding between the firm and distributors is that the latter will provide the after-sales-service. Analysing the sales figures, the firm finds that the sales level in East zone is much lower than in the other zones. Marketing research reveals that one of the reasons for this low sales performance is the poor after sales service provided by the distributor. In a high value, durable product such as refrigerator the quality of after sales service is an important factor influencing the customers' purchase decision regarding the specific brand to buy. The firm decides to do away with the distributor and instead opens its own branch office. The new distribution channel comprising branch office and retailers is operationally more expensive, but the company can now control the quality of after sales service as well as the other marketing inputs. The result is improved sales and the incremental cost associated with the new distribution network is justified.
- iv) Most companies provide advertising support for their products. In some cases the amount spent on advertising may be small, while in others it may run into crores of rupees. Irrespective of the actual amount spent on advertising, each firm would like to maximise the return on every rupee that it spends. Marketing research can help the firm to do this. Research can provide information on the most cost-effective media help determine the advertising budget, measure the effectiveness of specific advertisements; advertising campaigns and the entire advertising strategy. Research also provides information on the size and type of audiences for different advertising media channels. This information can be used to refine the advertising strategy to make it



more relevant and sharply focused. Advertising research is also useful in determining customer perceptions about the image of specific branches and companies.

- v) Marketing research is being increasingly used at the macro-level. Government spends colossal amounts on various socio-economic development schemes and projects. If the objectives of these projects are not in tune with the prevailing consumer tastes, attitudes and values, the entire amount may prove to be a total waste. Just as a business organisation needs MR to monitor the efficacy of its strategy in achieving the objectives, so does the government, and its departments.

Recently Doordarshan conducted audience research for determining the most popular and unpopular programmes and the consumer preference for changes in programme content and timings. For conducting this research, Doordarshan inserted a detailed questionnaire in the leading national newspapers and invited viewers to fill it in and send it back to them. On the basis of this information, Doordarshan plans to revamp its programmes and timing schedules to cater to the large majority of viewers.

7.6 MARKETING RESEARCH PROCEDURE

Marketing research is undertaken in order to improve the understanding about a marketing situation or problem and consequently improve the quality of decision-making related to it. The usefulness of the marketing research output will depend upon the way the research has been designed and implemented at each stage of the process. There are five steps in every marketing research process:

- problem definition
- research design
- field work
- data analysis
- report presentation and implementation

i) **Problem Definition:** A problem is any situation which requires further investigations. However, not all marketing problems need formal investigation or research. Many problems are of a routine and trivial nature which can be solved immediately after ascertaining all the facts of the case. Your distributor wants 90 days credit against the usual 60 days because he is facing certain financial problems. You can immediately check the distributor's past record in honouring his outstandings and ascertain the genuineness of his problem and make a decision.

Some problems faced by marketing managers are such that they can be handled on the basis of past experience and intuition. Such decisions can only be made if the manager has been in the line for at least a couple of years. Decisions made on judgement may not always turn out to be correct, but the problem may not be important enough to justify substantial time,

money and effort to be spent on solving it. But when the problem is critical, spending resources to initiate formal marketing research is warranted. Also when the problem is such that the manager has no past experience to guide him (as in case of a new product launch) or the decision will have a critical impact on the future of the company (diversification into new markets, new products) it is worthwhile to undertake research and make decisions on the basis of concrete results rather than mere hunch or judgement.

It is very important that you define the problem for research properly. It is correctly said that 'a problem well defined is half-solved'. Clear, precise, to the point statement of the problem itself provides clues for the solution. On the other hand, a vague, general, or inaccurate statement of the problem only confuses the researcher and can lead to wrong problems being researched and useless results generated.

Contrast the two following statements of the same marketing problem.

a) Wrong problem definition

Product	:	Typewriter
Market	:	West Zone
Problem	:	Sales not picking up at the rate at which they should.



b) Correct problem definition

Product	: Typewriter
Market	: West Zone, with special emphasis on Bombay, Pune, Nasik, Ahmedabad, Baroda
Current Market Share	: 17 percent
Market Segment	: Non-office customers, i.e., professionals such as lawyers, doctors, accountants, consultants, journalists and writers.
Current Market Share	: 3.5 per cent in non-office segment
Problem	: In the year 1985-86, our brand of typewriters achieved only a 2 per cent growth rate as against the projected 5 per cent.
Marketing Research Problem	: To find out the reasons for the shortfall in the growth rate in the non-office market segment and suggest a specific strategy to achieve a 10 per cent market share in this segment by December 1988.

Since problem definition is the first stage, useful information generated is likely to be unstructured, qualitative, tentative and exploratory. Depending on the results generated at this stage you would decide whether to extend the scope of research or stop it here.

ii) Research Design: If you have stated your problem correctly and precisely, you should be able to spell out the precise objectives for research. Now you are in a position to prepare your research design. The research design spells out how you are going to achieve the stated research objectives. The data collection methods, the specific research, instrument and the sampling plan that you will use for collecting data and the corresponding cost are the elements that constitute the research design.

Data Collection Methods: A great deal of data is regularly collected and disseminated by international bodies, International Labour Organisation, World Bank, International Monetary Fund, Government and its many agencies including Planning Commission, Central Statistical Organisation, Reserve bank of India, Census Commission, private research organisations, and trade associations. This kind of data which has already been collected by another organisation and not by you is known as **secondary data**. This secondary data already exists in an accessible form; it only has to be located. You must first check whether any secondary data is available on the subject matter into which you are researching and make use of it, since it will save considerable time and money. But the data must be scrutinised properly since it was originally collected perhaps for another purpose. The data must also be checked for reliability, relevance and accuracy.

When secondary data is not available or it is not reliable, you would need to collect original data to suit your objectives. Original data collected specifically for a current research are known as **primary data**. Primary data can be collected from customers, retailers, distributors, manufacturers or other information sources. Primary data may be collected through any of the three methods: observation, survey and experimentation.

In the observation method, the researcher gathers information by observing. This method is generally used to observe buyer behaviour in a shop or to assess the impact of shelf placement and point of purchase promotional material. For instance you may like to observe the movement of shopping traffic through a department store, the number of shoppers who stopped before a particular display etc.

The obvious limitation of the **observation method** is that it allows observation of only overt behaviour. It provides no clues why a customer behaved in a particular manner, what product attributes appealed most to him, whether he would like to buy the product again etc. Such data can be generated by using the **survey method**. The survey method can also yield information about the socio-economic profile of your customers. The survey may either be conducted in a small group of customers through the focus group interview or may cover a large number of customers with the help of a questionnaire. In the focus group interview five to fifteen customers are invited for a discussion on a specific product or a specific aspect of the product. The customers' comments provide valuable insight into their thinking which can help the manager to fine tune his marketing strategy to suit different customer segments. Surveys conducted with the help of questionnaire often take off from the focus group interview which yields excellent clues for designing the questionnaire. The questionnaire-

based surveys yield not only qualitative but also quantitative data which have statistical validity.



The third method of collecting data is through experimentation. This is basically a simulation of the real-life situation, but in a controlled environment in which you systematically introduce certain elements to study their impact. This method is used for finding the best sales-training technique, the best price level, the most effective advertisement campaign. However, its use requires an extremely skilled researcher to ensure useful results. Also, this method is expensive.

Activity B

List the various types of secondary-data Which are generated by an industry level association or federation. Does your organisation ever make use of this data? Describe two specific decisions in which this data was used.

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Research Instrument: In the observation method, the researcher may use a camera, tape recorder or tally sheet (a sheet in which the number of times an event occurs is recorded). Whatever the instrument used, the researcher must ensure that the instrument is appropriate to the occasion and is reliable.

In the survey method the most commonly used instrument is the questionnaire. This is a written and organised format containing all the questions relevant to soliciting the required information. The construction of a questionnaire requires great skill. To check that the questionnaire serves the necessary purpose, it should be tested on a limited scale and this is technically known as a **pilot survey**. The objective of a pilot survey is to weed out unnecessary questions, questions which are difficult to answer, and improve the phrasing of certain questions which are difficult to comprehend.

In constructing a questionnaire the important points to be considered are the type of questions to be asked, wording of questions and sequencing of questions. Each question should be checked to evaluate its necessity in terms of fulfilling the research objectives. Furthermore, the questions should be such that the respondent can answer them easily. Questions which require the respondent to answer questions about events which occurred a long time ago or about which he does not have direct knowledge should be avoided since you are not likely to get very accurate response. The questions should have direct relevance to the problem being researched. Too many irrelevant questions will only increase the length of the questionnaire (which would only put off the respondent) and also add to the burden of analysis without yielding any useful result.

The wording of the questions is a very important input in ensuring the correct response. Clearly worded, precise questions are not only easy to understand but they also facilitate the proper response. The wording of the question should be neutral and not attempt to influence or bias the response. This is especially relevant when information is being sought on non physical issues such as motivation, attitudes, and personal values of the respondent. If you want to know the name of the shop from where the respondent bought his last tube of



toothpaste, any way that you phrase the question will elicit the same response. Consider the following three alternatives in this context:

- a) Where did you buy this toothpaste?
- b) Can you please tell me the name of the shop from where you bought this toothpaste?
- c) From which shop did you buy this toothpaste?

On the other hand, suppose you are trying to find out the customer perceptions about the performance of foreign brands of televisions versus Indian brands. The manner in which you phrase the questions is extremely critical as it can influence the response. Consider the following three alternatives:

- a) Do you think there is any difference in the performance of Indian TV sets as compared to foreign sets? (**neutral wording**)
- b) Don't you think foreign TVs perform better than Indian ones? (**interviewer bias**)
- c) Most people feel that foreign TVs perform better than Indian ones. Would you agree with this statement? (**introducing respondent bias**)

When including questions about qualitative aspects it is better to ask open ended questions rather than close ended questions, and unstructured rather than structured questions.

Open-ended question

"How would you describe the taste of this toothpaste?"

Close-ended question

"Would you describe the taste of this toothpaste as tingling?" Yes/No

Unstructured

Word association: For assessing toothpaste taste you may ask the respondent to give his immediate reaction to the following phrases in context of your specific brand:

Fresh	Tingling	Foamy
Mild	Pleasant	Sharp

In the **structured** questions you may like to give the respondents a number of answer choices to choose from. This is known as multiple-choice questions.

"Which one of the following words or phrases, in your opinion, best describes the taste of this toothpaste?"

- Fresh
- Tingling
- Spicy
- Minty
- Cool
- Antiseptic
- Medicinal

A technique which combines both the structured and unstructured type of questions is the **question scaling**. The respondent is asked to rank his perception of a particular brand, product attribute, company image or any such factor on a scale ranging from extremely good to extremely poor. A typical scale may look as depicted in Figure I.

Figure I: Example of a typical scale

+3	+2	+1	0	-1	-2	-3
Very good	Good	Slightly good	Both good & poor	Slightly poor	Poor	Very poor

The advantage with unstructured and open ended questions is that they give the respondent freedom to answer in his own words. And this often provides information and insight about the product which the researcher had not even thought about. The only problem with unstructured questions is that of interpreting the results. The same results may lead to different analysis by different researchers. Unstructured questions also make statistical summaries difficult.



Close-ended and structured questions are easy to summarise and there is no scope for misinterpretation. But the scope of the research gets limited. The respondents have to choose from already given alternative answers, even though none may exactly match the respondent's perception.

The sequencing of the questions in the questionnaire should be such that the opening questions create interest in the respondent and are easy to answer. You would not like your respondent to be put off by posing difficult questions right in the beginning. The questionnaire should gradually move from relatively simple to difficult questions. The questions should be arranged in a logical manner to facilitate the respondent's answers and not confuse him. Personal questions about income, education, profession should be asked in the end since many people may view them as a violation of their privacy.

Activity C

Construct a brief questionnaire for gathering information about the marketing strategies of the brands competing with each other. Your sampling units would be the distributors/ wholesalers/retailers dealing with that product.

Sampling Plan: After preparing your questionnaire or your equipment for observation, you have to identify the source of your information, the source is also called the 'population' or 'universe'. For conducting marketing research you would rarely gather information from the entire population, rather you would select a small group known as sample which has all the characteristics of the population, and conduct research among the sample group. The reasons for not using the population for research are:

- a) the number of units in the population may not be known,
- b) the population units may be too many in number and/or widely dispersed thus making research an extremely time consuming process,
- c) it may be too expensive to include each population item.

When the number of population items is small and known, (say, the number of cinema halls, colleges, government hospitals in a city) you may use the population as your source of information. But in most cases, a representative group which has all the characteristics of the population and is known as sample is drawn from the population and this is used for conducting research.

Having decided to use a sample, your next step is to draw up the sampling plan. There are four aspects to the sampling plan:

- who is to be surveyed (**sampling unit**)
- how many are to be surveyed (**sample size**)
- how are they to be selected (**sampling procedure**)
- how are they to be reached (**sampling media**).

The choice of **sampling unit** will depend on the product with which you are dealing and the kind of information you need. In case of a product such as lipstick if you need information on the reasons which motivate a customer to buy your brand, your sampling unit would obviously be the actual user, i.e., a woman. But would the population comprise all the women?

Obviously not, because all women do not use lipsticks. You then need to collect information about women who use lipsticks in terms of their socio-economic background, education, occupational profile (student, housewife, professional), age and marital status. The sample which you choose must be representative of the universe in terms of all these characteristics. If you want to find out the monthly sale of all brands of lipsticks in a particular market, your 'sampling unit' would be the distributors or retail outlets which deal in cosmetics. Suppose the product being researched into is toys for the under 7-years age category. Who would constitute your sampling unit: the child who actually plays with the toys or the parents who exert a strong influence in the final decision to purchase a particular toy? Here you would have to consider not only the kind of information that you need, but also who is most likely to have it and his ability to communicate, and choose your unit accordingly.



Activity D

Suppose you are assigned the job of conducting a survey to determine the levels of post-purchase or post-consumption satisfaction of the customers of your product. Who would you choose as your sampling unit? What socio-economic variables would you consider in detailing the profile of your customers?

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In deciding on the **sampling size**, you have to make a trade-off between the desired accuracy of the results and your budget. The larger the sample, the more accurate are the results likely to be, but the cost would also be correspondingly high. Another factor affecting the sample size is the kind of research which is being conducted. In exploratory research even a small sample may be sufficient. In focus-group interviews and motivation-research studies, very small sample sizes are sufficient because here the emphasis is on qualitative aspects rather than accuracy of numbers.

The choice of sampling procedure is between two kinds: **probability sampling and non-probability sampling**. In the former, each item of the universe has an equal chance of being selected as a sample unit. In non-probability sampling, the researcher selects the units to be included in the sample. Non-probability sampling is mostly used in exploratory research where a true representation of the universe is not important, But where true representation is important, probability or random sampling is used. Random sampling enables the researcher to make an accurate estimate of the population characteristic but it is more expensive than non-random sampling. The cost that you can bear and the degree of accuracy which you require have to be weighed to arrive at a decision.

The fourth element in the sampling plan is the **sampling procedure**. How should you reach your sample units: personally, by mail or by telephone. Personal interviewing is most suited when there are many questions to be asked and it is important to ensure that the questions are understood properly. Thus, wherever the questions are little complex, personal interviewing should be used. This is also the best method to ensure that correct answers are given which can be corroborated by the interviewer through observation. But this technique requires a skilled interviewer and a great deal of administration and supervision. Also, it is the most expensive of the three methods.

The **mail questionnaire** is extremely appropriate when your sampling units are distributed over a wide geographical area and the cost of reaching them personally is very high. However, the return rate of mail questionnaires is usually very low, ranging between three to seven per cent. On an average, you would have to mail 1000 questionnaires to get back thirty filled up questionnaires. Another drawback is that you have no way of checking the authenticity and accuracy of the response. The respondent may fill totally wrong information and you may never be able to detect it.

The **telephone interviews** combine advantages of both personal and mail interviews. It allows you to clarify questions which may not be clearly understood by the respondent and to reach a widely scattered sample at a relatively low cost. But the obvious disadvantage is that your sample is restricted to the people who have telephones. Also, you, cannot conduct very long interviews over the telephone.

Research objectives, research design and the questionnaires used in an actual survey are presented in Appendix.



Cost: No information can be collected without incurring cost. Before undertaking a research project its cost should be calculated and assessed against the benefits it would yield in improving the quality of decision-making. If the benefits outweigh the cost, it is certainly worthwhile initiating the research. There are four kinds of costs involved in marketing research.

Cost of data collection: The actual cost incurred for collecting the data, which may comprise the research organisation's fee, staff time, printing and postage of questionnaire, computer time, etc.

Cost of time delays: The more time it takes to provide the research results, the longer the dependent decision (s) is delayed. In the meanwhile, the opportunity may be lost or it may become less attractive.

Risk of adverse environment change: While the decision is pending unfavourable conditions may set in (entry of competition) and consequently the returns may be lower.

Cost of error: Sometimes, by chance or because of some bias or wrong choice of sampling units, there could be a error in the results leading to expensive consequences for the company concerned.

iii) Field work: This is the stage where the research design has to be converted from the planning stage to that of implementation. To achieve the stated research objectives data has to be collected. This data collection is known as field work. The two stages in field work are planning and supervision.

Planning: It has to be planned how many people will be assigned to the field, what will be their geographical areas of coverage; how many days will be required for the entire operation and what is the pattern to be used for choosing sample units (every fourth household in a lane, all flats with an even number in an apartment 'block' etc.). All this planning has to be done in accordance with the details spelt out in the sampling plan.

Supervision: Supervision is an extremely important input to ensure that the data collected is genuine and accurate. Most field work is carried out by a team of field surveyors, and each team is assigned to a supervisor. The team members would plan their daily area of field work in consultation with the supervisor. The supervisor may accompany different team members on different days. In the evening the team would meet the supervisor, hand over the data which they have collected and sort out any problems they may have faced.

Apart from actually accompanying team members on data collection missions, the supervisor would also make random checks to ensure that the data collected is genuine. The check can be conducted either over the telephone (wherever possible) or by again visiting the sampling unit. The supervisor may either ask the respondent whether he or she was visited by the field interviewer and cross check the accuracy of the data. Random checking is carried out to ensure that the field workers do actually collect data from the genuine source of information and not just fill in the data using their own imagination and ingenuity.

The collected data has also to be checked for its objectivity and accuracy. The data has to be carefully checked to ensure that there is no distortion because of the field worker's bias or the respondent's bias. Respondent bias arises because people generally like to project an image (about themselves and their life-style) which is more flattering than the reality. This bias would operate more in questions relating to income; possession of certain items (VCR, air-conditioner), and habits relating to life-style (travelling abroad frequently, visiting clubs, restaurants). Interviewer bias arises because of the interviewer's own pre-conceived notions and ideas. A female interviewer may prefer male respondents because she may feel that it is easy for. to gather information from men rather than women.

In conducting field work, it may happen that the relevant source of information is not at home or does not wish to be interviewed. The supervisor must give guidelines for tackling such situations. The particular sampling units may be substituted by the next one or the field worker visits the same unit again hoping to be more successful.



iv) Data analysis: After you have collected the data, you need to process, organise and arrange it in a format that makes it easy to understand and directly helps the decision-making process. Raw data has to be processed and analysed to obtain information. There are three phases for analysing the data:

- a) Classifying the raw data in a more orderly manner;
- b) Summarising the data;
- c) Applying analytical methods to manipulate the data to highlight their inter-relationship and quantitative significance.

a) Classifying the raw data: The most commonly used classification in marketing research are quantitative, qualitative, chronological and geographical.

Quantitative: In this classification, data is classified by a numerical measure such as number of respondents in each market segment, number of years employed, number of family members, number of units consumed, number of brands stocked or some such numerical characteristic.

Qualitative: In this classification, the data is classified by some non-numerical attribute such as type of occupation, type of family structure (nucleus, or joint family), type of retail outlet (speciality, general merchant, department store etc.).

Chronological classification is that in which data is classified according to the time when the event occurred.

In the **geographical** classification the data is classified by location which may either be a country, state, region, city, village, etc.

b) Summarising the data: The first step in summarising the data is the tabulation. Individual observations or data are placed in a suitable classification in which they occur and then counted. Thus we know the number of times or the frequency with which a particular data occurs. Such tabulation leads to a frequency distribution as illustrated in Table 1.

Table 1
Frequency Distribution

No. of units sold in April '87	No. of shops which achieved this sale
Up to 100	18
101 - 120	25
121 - 140	33
141 - 160	29
161 - 180	19
181 - 200	11
Above 200	4

The **frequency distribution** may involve a single variable as in Table 1 or it may involve two or more variables which is known as cross-classification or cross-tabulation.

The frequency distribution presented **per se** may not yield any specific result or inference. What we want is a single, condensed representative figure which will help us to make useful inferences about the data and also provide yardstick for comparing different sets of data. Measures of average or central tendency provide one such yardstick. The three types of averages are the mode, median and mean.

Mode: The mode is the central value or item that occurs most frequently. When the data is organised as a frequency distribution the mode is that category which has the maximum number of observations. (in the 121 - 140 category in Table 1). A shopkeeper ordering fresh stock of shoes for the season would make use of the mode to determine the size which is most frequently sold. The advantage of mode is that it is easy to compute, is not affected by extreme values in the frequency distribution and is representative if the observations are clustered at one particular value or class.

Median: The median is that item which lies exactly half-way between the lowest and highest value when the data is arranged in an ascending or descending order. It is not affected by the value of the observation but by the number of observations. Suppose you



have the data on monthly income of house holds in a particular area. The median value would give you that monthly income which divides the number of households into two equal parts. Fifty per cent of all households have a monthly income above the median value and fifty per cent of household have a monthly income below the median income.

Mean: The mean is the common arithmetic average. It is computed by dividing the sum of the values of the observations by the number of items observed. A firm wants to introduce a new packing of sliced bread aimed at the customer segment of small nucleus families of four members. It wishes to introduce the concept of a 'single-day pack', i.e., a pack which contains only that number of bread slices that is usually eaten in a single day. This strategy would help to keep the price of the pack well within the family's limited budget. The firm has many opinions on the ideal number of slices that the pack should contain - ranging from three to as high as twelve. The firm decides to hire a professional marketing agency to conduct market research and recommend the number or bread slices it should pack.

The research agency goes about the task in two steps. In the first step, it randomly chooses five families (who are consumers of bread) in each of the four colonies in the city. These families are asked to maintain for one week a record of the exact number of slices they consumed each day. From this data, the agency calculates the average (or mean) number of bread slices eaten per family per day. There would be twenty such mean values (5 families in 4 colonies each; sample size 20). In the second step, from these mean values, the model value would provide the answer to the number of bread slices to be packed in each pack.

Step I

Family 1

Days	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.
No. of bread slices eaten	4	4	2	5	6	5	3

$$\text{Mean} = \frac{4+4+2+5+6+5+3}{7 \text{ (no. of days)}} = \frac{29}{7} = 4.1 \text{ or } 4.$$

(For Family 1)

Step II

Mean values for 20 sample units:

4 10 7 6 8 8 9 6 7 7 4 6 8 3 8 2 7 8 5 8

Rearranging these mean values in a frequency distribution we have:

Mean Value (No. of bread slices eaten daily)	Frequency (No. of families)
2	1
3	1
4	2
5	1
6	3
7	4
8	6
9	1
10	1

The mode in this frequency distribution is 8. Eight slices is the most commonly occurring consumption pattern. The agency's recommendation is to pack eight bread slices in the single-day pack.

The mean, mode and median are measures of central tendency or average. They measure the most typical value around which most values in the distribution tend to converge. However,



there are always extreme values in each distribution. These extreme values indicate the **spread** or the **dispersion** of the distribution. To make a valid marketing decision you need not only the measures of central tendency but also relevant measures of dispersion. Measures of dispersion would tell you the number of values which are substantially different from the mean, median or mode. If the number of observations at the extreme values is large enough to form a substantial number, it indicates an opportunity for market segmentation. In the earlier example or bread if in a larger sample, you find that the number of households who consume three slices per day is also substantially large, the firm may find it worthwhile to introduce a 3-slice pack for light bread consumers. Such variations from the central tendency can be found by using measures of dispersion. The two commonly used measures of dispersion are range and standard deviation.

Range: The range is the difference between the largest and smallest observed value. Using the data in step I in the bread illustration, the largest observed value is 6 and the smallest observed value is 2, therefore the range is 4. The smaller the figure of range, the more compact and homogenous is the distribution.

Variance and standard deviation: These two measures of dispersion are based on the deviations from the mean. The variance is the average of the squared deviations of the observations values from the mean of the distribution. Standard deviation is the square root of the variance. The standard deviation is used to compare two samples which have the same mean. The distribution with the smaller standard deviation is more homogenous.

Selecting analytical methods: Besides having a summary of the data, the marketing manager also would like information on inter-relationships between variables and the qualitative aspects of the variables.

Correlation: Correlation coefficient measures the degree to which the change in one variable (the dependent variable) is associated with change in the other variable (independent one). As a marketing manager, you would like to know if there is any relation between the amount of money you spend on advertising and the sales you achieve. Sales are the dependent variable and advertising budget is the independent variable. Correlation coefficient, in this case, would tell you the extent of relationship between these two variables, whether the relationship is directly proportional (increase or decrease in advertising is associated with increase or decrease in advertising) or it as an inverse relationship (increase in advertising is associated with decrease in sales and vice versa) or there is no relationship between the two variables. However, it is important to note that correlation coefficient does not indicate a causal relationship. Sales is not a direct result of advertising alone, there are many other factors which affect sale. Correlation only indicates that there is some kind of association - whether it is casual or casual can be determined only after further investigation. You may find a correlation between the height of your salesmen and the sales, but obviously it is of no significance. In 1970, NCAER (National Council of Applied and Economic Research) predicted the annual stock of scooters using a regression model in which real personal disposable income and relative weighted price index of scooters were used as independent variables.

Regression Analysis: For determining casual relationship between two variables you may use regression analysis. Using this technique you can predict the dependent variables on the basis of the independent variables.

So far we have considered relationship only between two variables for which correlation and regression analysis are suitable techniques. But in reality you would rarely find a one-to-one casual relationship, rather you would find that the dependent variables are affected by a number of independent variables. Sales is affected by the advertising budget, the media plan, the content of the advertisements, number of salesmen, price of the product, efficiency of the distribution network and a host of other variables. For determining casual relationship involving two or more variables, multi-variate statistical techniques are applicable. The most important of these are the multiple regression analysis, discriminant analysis and factor analysis.

Multiple regression analysis is a variation of the regression analysis technique discussed above. The difference is that instead of considering one you may have two or more than two independent variables.



Discriminant analysis: In our discussion of dependent and independent variables, we have so far taken sale as the dependent variable. Sale is expressed in a numerical form. But not all dependent marketing variables can be expressed in numbers. Suppose you want to find out the reasons for customers brand preference for Thums Up vs. coca cola In this case, the dependent variable, the brand, is not numerical in nature. A company is planning to introduce a new brand of detergent bar in the market and wants to find out the consumer traits associated with detergent bar as compared to detergent powder. This information would help the company focus its advertising strategy to exploit such associated traits. Several studies, aiming to discriminate between users and non-users of a particular brand of a product have been carried out. In one such study for a popular brand of Shirt, it was found that significant differences in the personality traits could determine between users and non-users.

Factor analysis: The multiple regression technique is based on the idea that you use truly independent variables. These variables are neither influenced by the dependent variable nor are they influenced by other independent variables. But in real life situations, there are many independent variables which are influenced by other independent variables, i.e. these independent variables have a high inter-correlation. You may find such an inter-correlation between the dealer discount structure and the 'push' which the dealer provides to your product. Factor analysis is a statistical procedure which tries to determine a few basic factors that may underline and explain the inter-correlation among a large number of variables.

Statistical inference: These procedures involve the use of sample data to make inferences about the population. The three approaches used here are: estimates of population values, hypotheses about population values and tests of association between values in the population. Statistical inference as an analytical tool for marketing decisions is gaining wide acceptance.

v) Report presentation and implementation: The final step is the preparation, presentation and implementation of a report giving the major findings and recommendations. A typical format of the report may comprise of the following sections:

- a) **Objectives and methodology** in which the research objectives are stated and details of the sampling plan are described.
- b) **Summary of conclusions and recommendations** in which the main findings of the research are highlighted. On the basis of the findings, some recommendations may be made.
- c) **Sample and its characteristics** which contains descriptions of the sampling units in terms of their geographical location, socio-economic profile and other relevant details.
- d) **Detailed findings and observations** in which the data which has collected is presented in a form which is easily comprehensible to the user. The data may be presented in tabular form or graphically in a bar chart, pictogram or pie diagram; or in a combination of all these.
- e) **Questionnaire** and supporting research instruments are presented in the last section.

The research agency may or may not be involved in the implementation of the recommendation made in the report.

7.7 APPLICATIONS OF MARKETING RESEARCH

The broad areas of application for marketing research are sales and market analysis, product research, advertising, business economics and corporate research, and corporate responsibility.

i) Sales and Market Analysis

- a) **Determination of market potential:** The market potential is the total amount of a product or product group which could be sold to a market in a specified time period and under given conditions. Market potential is applicable in case of a new product, a modified version of an existing product, or an existing producer to be introduced in a new geographical market.



- b) **Determination of market share:** In case of an existing product, a company may be interested to know the percentage share of the market which their brand commands.
- c) **Sales forecasting:** Sales forecasting is an attempt to predict the sales level at a given point in the future on the basis of the existing information. Sales forecasting is applicable to both existing products as well as new products. The sales may be calculated either in units or in value. Basically, there are two types of forecasts --- short-term and long-term. The short-term forecast takes into account seasonal variations, seasonal trends and cycles. The long-term forecast has its basis more in the growth pattern of the industry to which the product belongs and the business cycle operating in the industry.
- d) **Design of market segmentation studies:** A market is a group of potential customers which has something in common. The common factor may be a geographical area, sex (after shave lotion is used only by men), age (toys for children under 5, between 5-7, etc.), physical characteristic (weak eyesight, over weight), income, life-style.
- Children comprise the market for toys. But in this broad category, the market can be viewed to be made up of many smaller markets or segments: one market for pre-school children, another for school-going children, one market comprised of educational toys, one for mechanical toys, one for electrical toys, one for indoor games, etc. The choice before the marketing manager is whether to cater to the broad market of toys or to only one or two of the specific market segments. MR can help answer questions such as "To what extent should the market segmentation strategy be pursued?" and "What should be the basis for segmentation?"
- e) **Test market:** This is a controlled experiment to predict sales or profit consequences of the various marketing strategies. It refers to trying out something in a particular market before extending it on a larger scale. You may have noticed advertisements for soaps, or snack foods which sometimes carry the message 'available only in Hyderabad' or 'available only in Calcutta'. The firm selling these product is probably test marketing the product. The results of the market test provide the research data for taking a decision whether to extend the marketing to other areas or drop the idea totally. Test marketing also yields information which helps to modify the product and marketing strategy to give it a better chance for success.
- Test marketing is used not only for new product but also for researching into the impact on sales of retail level promotional displays and promotional schemes such as coupons and discounts.
- f) **Distribution channel studies:** Market research can be used to determine the most effective and profitable distribution channels for different types of products.
- g) **Determination of market characteristics:** Research surveys can be conducted to collect information about the market characteristics which would help a new entrant plan his entry or help an existing company focus its strategy more sharply for increasing market share. Information can be collected on the number of brands competing in the market, state-of-technology prevailing in the market, geographical concentration and dispersal of customers, nature of outlets selling the products, number of such retail outlets, etc.
- h) **Determination of competitive information:** Research can provide information on the marketing strategies used by various competing brands and the 'unique selling proposition' of each.

ii) Product Research

This can be used for:

- Evaluation of new product ideas
- Testing for new product acceptance
- Evaluating the need for change in product formulation
- Testing package design in term of aesthetic appeal, protection for the product, and ability to withstand transportation and stocking ordeals.
- Testing for product positioning. Should a new brand of tea be positioned on the basis of its fragrance and taste, or colour and strength, or price:



iii) Business Economics and Corporate Research

- a) Studies of business **trends** to determine industries with growth potential and those facing a stagnant future.
- b) **Pricing studies** to estimate the demand level at different prices. Such studies reveal the extent to which customers are sensitive to price changes, and provide valuable clues to the market or in assessing the impact of price increase or decrease on the sales.
- c) **Diversification studies**: These provide information on the profitable new opportunities of business growth which a firm can consider for diversification. The diversification may be into totally new and unknown areas or into allied areas.
- d) **Product-mix studies**: If a firm is considering diversifying into allied product areas, it may like to find out the product-mix combinations which would optimise its existing resources and provide synergy for growth. A company in the business of cooking oil would like to do research into one or more of the following products for arriving at a 'synergistic' product-mix: butter, vanaspati, ghee, spices, dehydrated foods, frozen foods, instant food mixes, custard powder, branded wheat flour and rice.
- e) **Plant and warehouse location studies**: Research is also needed to determine the best possible location for setting up a new plant. Before arriving at a decision, a firm would need to research into factors such as availability of raw material and labour, proximity to market place, telecommunication and transport infrastructure, financial, taxation and other incentives applicable to each location. In case of warehouse location, you would research into movement patterns of goods to different cities, high sale potential areas versus low sale potential areas, number of checks for quality needed en route the destination to final customer, benefit of conducting these checks against the cost of acquiring and maintaining a warehouse and convenient rail/road connections.

iv) Advertising Research

- a) **Audience measurement** for advertisements appearing in different media such as newspapers, magazines, journals, radio, TV, outdoor hoardings, kiosks, bus side panels; etc. The objective of this type of research is to estimate the audience size of each media channel (e.g. press) and within that the specific media vehicle (India Today, Readers Digest, The Indian Express, etc.). Given the audience size, you would be interested in knowing its age, sex, socio-economic and cultural profile to focus your advertising strategy.
- b) **Determining the most cost-effective media plan**: Each media channel has its unique advantages and disadvantages, and each media vehicle has its own cost structure. Research can be used to find out the best media vehicle by matching your product characteristics with the audience profiles of different media vehicles and the respective cost of advertising in these.
- c) **Copy testing**: One approach for researching into the effectiveness of the copy is to test the following elements:
 - basic themes, ideas, appeals
 - headlines baseline, pictures, jingle, story sequence
 - pre-testing whole advertisements in rough or finished form
 - pre-testing the effect of repetition to simulate a campaign (all the above can be tested under simulated conditions)
 - after the advertisements have been released, post-testing them individually in their normal media
 - The other approach for conducting research is to assess the copy or the entire advertisement/campaign for the following:
 - assessing for its attention value, interest value and arousal,
 - test for communication clarity;
 - test for their effect on consumer attitudes,
 - test for their effect on purchase behaviour.
- d) **Determining advertising effectiveness**: After the advertisements have been released, it is important to monitor their impact in terms of achieving the intended objective (s). To what extent has the advertising achieved its objective of creating brand awareness, creating corporate image, educating the customers about the product usage, and so on. The effectiveness is always determined in relation to the cost incurred.



v) Consumer Behaviour Research

- a) To determine who the customers of the product (men, women, children, working women, housewives, retired people) are and profile them in terms to their socio-economic background, age, religion and occupation.
- b) To find out where the customers are located.
- c) To determine their motivations to purchase your brand of product.
- d) To determine their buying behaviour pattern in terms of identifying sources of information and influence, and sequence of purchase decision.
- e) To find out the post-purchase satisfaction level of customers.

7.8 MARKETING RESEARCH IN INDIA

The most common application areas for marketing research in India are described in Table 2, Table 2

Common Applications of Marketing Research in India,

Marketing Research used frequently/always

Areas	Percentage of Respondents
New product decisions	58
Estimating market share	49
Gathering competitive information	47
Demand estimation	46
Product modification decisions	44
Measuring consumer satisfaction	43
Product positioning decisions	42
Diversification decision	40
Market segmentation decisions	38
Advertising theme/message decisions	31
Pricing decisions	30
Customer service decisions	27
Product elimination decisions	21
Evaluating advertising effectiveness	20
Channel modification decisions	9

Source: Business India, November 17-30, 1986.

A survey was conducted by Consulting and Research Enterprise, Hyderabad in 1986 to gather information about managers' perceptions on the utility and usage of marketing research as an aid to decision-making. About 500 questionnaires were mailed out to firms selling industrial goods, consumer products and services, out of which 130 responded.

The responses reveal the fact that more than 91 per cent managers feel there is a great need for marketing research in India and it is useful to them in improving their decision-making. However, a large majority of them also feel that marketing research in India is not very sophisticated and that it often takes too long to conduct and this reduces its usefulness.

Despite an overall favourable attitude towards marketing research, most companies do not spend much money on it, Expressing the cost incurred on marketing research as a percentage of sales, 28 per cent of the companies spent only 0.01 per cent or even less during the year 1985-86, 63 per cent companies spent between 0.02 to 0.4 per cent and 9 per cent of companies spent more than 0.4 per cent on MR. Only two companies producing consumer goods spent more than one per cent on research. In absolute amounts, larger companies tend to spend more on MR, but not when considered as percentage of sales. Forty per cent of the companies spent less than Rs. 1 lakh on MR and only 14 per cent spent more than 10 lakhs with the highest figure touching the Rs. 1 crore mark. Companies in the consumer goods sector usually spend more on MR than industrial companies.

Marketing research is used equally by companies in both the private and the public sectors. The only difference is that private sector companies tend to use MR more for decisions on diversification, new products, market segmentation, product positioning and measuring customer satisfaction than do public sector organisations.



Table 3
Marketing Research Channels used by Indian Organisations

Type of Channel	Per cent
Company sales staff	69
Market research agencies	52
In-house market researchers	44
Advertising agencies	35
Consultants	34
Syndicated research services	22

(Companies use more than one kind of channel and so the percentages add up to more than 100)

Source: Business India, November 17-30, 1986.

7.9 PROBLEMS OF CONDUCTING MARKETING RESEARCH IN INDIA

The biggest problem confronting anyone who sets out to conduct research in India is the meager secondary data. The census which contains a wealth for data takes many years to be compiled and released for public usage. Data contained in journals and handbooks is usually two to three years old. Thus whatever data is available is usually obsolete and this greatly reduces its utility.

In collecting primary data the problems are those of widely scattered sampling units, location or some sampling units in remote and inaccessible areas, and poor communication facilities which compounds the problem of inaccessibility. If the sampling units are the industrial units in the unorganised sector, there is no guide for locating these units. The other kind of problem encountered in collecting primary data is the uncooperative attitude of respondents arising out of sheer lack of knowledge about the nature of MR and its utility. Respondents often view interviewers with suspicion and may refuse to give any information.

Most of the market research organisations are located in the cities and have an urban-bias to the extent that they have neither a penetration/base in the rural areas and nor can they communicate properly with the rural people. Most market research is conducted in the cities for products used by city, dweller's.

The state-of-art in marketing research has not reached the sophisticated levels as in America or Europe. The marketing research techniques used in India are still relatively unsophisticated and 'simplistic.

7.10 SUMMARY

Marketing Research as a tool for decision-making is gaining wide acceptance. Marketing decisions involve variables which are often external to the firm, dynamic in nature, uncontrollable by the firm and interact with each other in a Complex manner. Because of their dynamic and uncontrollable nature the uncertainty associated with them is very high, which in turn leads to the situation that in most marketing decisions the associated risk factor is also very high. The marketing manager is always on the lookout for ways and means to reduce this risk. One way that the risk can be reduced is through the use of MR which by providing information reduces uncertainty and converts the unknown risk factor into a know calculated risk.

MR can be used for gathering information about market structure, Competitors' activities, consumer behaviour, testing the efficacy of various elements of the marketing strategy and making forecasts. MR can be used for pre-testing a strategy before actually implementing it, monitor it during implementation, and after implementation monitor the results to access its impact. Apart from its usefulness in the area of marketing, MR is also used for monitoring



socio-economic projects. Every MR project involves five steps. These are; problem definition, research design, field work, data analysis and report presentation and analysis.

The manager must make the decision regarding the utility of MR on the basis of the cost involved in conducting the research and the benefits expected to accrue from it.

7.11 KEY WORDS

Primary data: Data which is collected originally for the current investigation.

Secondary data: Data which has already been collected by an agency or individual and is available in a published or unpublished form.

Sample: A small group drawn from the population or universe and which has all the characteristics of the population and is a true representative of it.

Survey: A method of collecting primary data. In the survey method data is gathered from the sample with the help of a questionnaire, The data may be gathered personally, over the telephone or by mail.

Questionnaire: An organised and written format which contains all the relevant questions for gathering data from the sample.

Respondents: An individual in his personal capacity or representing an institution who fulfils all the requirements of a sampling unit and is used for collecting data: He is known as respondent because he responds to the questionnaire.

7.12 FURTHER READINGS

Kotler, Philip, 2002, 11th Edition, *Marketing Management*, Prentice-Hall of India Ltd., New Delhi

V. S. Ramaswamy, S. Nama Kumar, *Marketing Management, Planning, Implementat/on & Control, 3rd Edition, 2002* Macmillan India Ltd. New Delhi

7.13 APPENDIX - A MARKET SURVEY ON MINERAL WATER

On 2nd November, 1984, Marketing and Management Services, a Delhi based consulting organisation, conducted a market survey on mineral water. Presented here are some sections from that research report.

Activity E

Study the stated objectives of the report and the two questionnaires, and assess whether the questionnaires serve the stated objectives or not.

If not, note down the changes you would make in the questionnaire.

Study the wording of each question for clarity of meaning and ease in comprehension. If you think that some questions do not fulfil these two requirements, reword or rephrase them to make them more meaningful.

Study the sequencing of the questions. Can you arrive at a more logical sequencing?

Objectives

The objectives of the study are:

- a) to make a detailed study of the mineral water market in terms of **its** existing market size, future market potential, major geographical markets and important customer segments;
- b) to record, who are the major competitors for this product, their respective product attributes, brand positioning and marketing strategies;



- c) to study each of the major customer segments viz., institutions (such as hotels, restaurants, etc.), and retail outlets and foreign tourists to determine:
- i) the consumption of mineral water in these segments,
 - ii) the consumption pattern of mineral water in various restaurants, bars, room-service, etc., by foreign tourists while sitting down to a meal, travelling, etc.,
 - iii) the brand awareness and brand preference of the different segments,
 - iv) the purchase pattern for mineral water in terms of identification of manufacturers from whom the product
 - v) is purchased, price paid, credit facilities enjoyed by the institutions and retailers and the delivery schedules,
 - vi) the various segment preferences for the packaging medium, bottle size and price of mineral water,
 - vii) the extent of breakage of bottles of mineral water and the re-usability of the empty bottles, vii) identify motives for consumption of mineral water;
- d) to identify and determine the market potential for mineral water amongst upper-income group resident Indians in Delhi.

(RESEARCH DESIGN)

Data collection method: Data was collected by using the survey method.

Research instrument: To achieve the objectives of the survey detailed questionnaires were designed to gather information about each of the market segments.

Sampling plan: For the purpose of the survey, information was gathered from a sample drawn from four distinct segments, viz., institutions such as hotels and restaurants; retail outlets, foreign tourists in India and upper-income class Indian families identified as potential consumers of mineral water. The sampling unit in each of the four segments was:

- hotels belonging to the 5, 4 and 3-star categories; restaurants and permanent tourist camps,
- retail outlets selling mineral water,
- foreign tourists, and
- housewives/husbands belonging to upper income families.

Sampling size: 20 hotels and restaurants, 20 retail outlets, 50 foreign tourists, 50 householders.

Selections of sampling units: All sampling units were chosen randomly. In case of non-cooperation by a respondent, it was substituted by the next conveniently located unit.

Sampling media: All the information from the sampling units was gathered personally using the questionnaire.

Questionnaire for Retail Outlets

1 For how many years have you been stocking mineral water?
 less than 1 year
 1-3 years
 3-7 years
 more than 7 years

2 Which brand of mineral water do you stock?
 Mohan Meakin
 Bisleri
 Any other (please specify)

3 If you stock only one brand, why do you stock only this brand?
 Customers usually ask for this brand.
 It comes in plastic bottles.
 It is natural spring water.
 It is cheaper.
 We get a larger dealer discount.
 We have a contract with the manufacturer.
 Supply is regular.
 Better relations with the company salesman.
 We have had negative experiences with the other manufacturer/s.

.....
 please specify who

.....
 (Any other, please specify)

4A Do you use any display material for the mineral water:
 Posters Hangers
 Stickers
 Neon lighting

.....
 please specify who

4B Who pays for the display material:



6A Are you satisfied with the present display set?
 Not satisfied Satisfied

6B What improvements do you suggest?

7. Are you satisfied with the existing level of advertising done by the manufacturers?
 Yes No

8. When customers ask for mineral water, do they ask for a specific brand?
 Yes No
 Which brand

9A Do you give credit to your customers?
 Yes No
 If yes, how much?

9B Do you give credit to your customers for other purchases?
 Yes No
 If yes, how much?

10 Do you provide home delivery to your customers?
 Yes No

11A What percentage of your customers
 Carry the bottle away?
 Drink the mineral water in the shop?

11B What percentage of your customers are
 Foreigners?
 Indians?

12 In case of the foreigners, can you tell us the ranking of the following categories of customers?
 Resident foreigners.
 Student (resident)
 Tourists

13 How many bottles do your customers purchase from you at a time?
 One 5-7
 Two 8-10
 Three Over 10
 Four

14 Do you charge for the bottle in case the customers wish to carry it away?
 Yes No
 How much?

15 What is the percentage of breakages (of bottles) during delivery?

16 What is the frequency of ordering and the number of bottles ordered per lot?
 Daily Weekly Fortnightly Monthly
 1 case 6-10 cases
 2 cases over 10 cases
 3-5 cases

17. Could you tell us
 the price you pay per case?
 the price you sell per bottle?
 in case of bulk sales per case?

18 What credit + discounts do you get from the manufacturer?
 give to the customer?
 for bulk purchases/timely payments?

19 What is the nature of your delivery?
 It is delivered to us
 We pick it up from the manufacturer
 Both (varying situation-wise)

20 Is the demand for mineral water seasonal?
 Yes No
 When + Why.

21 Name of outlet:

22 Address:

23 Profile of outlet:
 a) Soft drink vendor
 b) Pan shop
 c) General provision shop
 d) Chemist
 e) Departmental store
 f) Super Bazar
 g) Any other

Questionnaire for potential Indian customers

1 Do you use water from the tap for drinking purposes?
 Yes No
 If yes, what do you think of the hygiene of tap water.
 If no, then why not.

2 Could you tell us what treatment do you subject tap water to (at home) before you consider it fit for drinking?
 only filter filter + boil



- | | | | |
|--------------------------|-------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | only boil | <input type="checkbox"/> | filter + boil + chemical |
| <input type="checkbox"/> | only chemical treatment | <input type="checkbox"/> | chemical |
| | | <input type="checkbox"/> | chemical + boil |

any other (please specify)

3A Home treated water, in your household, is used by:

- all members of the household
- only the aged members
- only the children
- only the unwell
- any other (please specify).....

3B Home treated water, in your household, is used when:

- travelling
- unwell
- throwing a party
- on a festive occasion
- all the time
- in the rainy season
- any other (please specify)

3C You treat your water at home because:

.....

4 Outside your home, your drinking water habits can best be described as:

- usually drink only at the homes of friends
- carry drinking water along
- drink water only at decent restaurants
- drink water from vendors, dhaba etc.
- drink only beverages
- any other (please specify)

Mark (x) the two most relevant blanks.

5. What do members of your household do when on an outstation trip?

- carry drinking water from home
- drink from local sources (untreated)
- treat local water before drinking it
- drink only beverages
- any other (please specify)

6 What do you feel about the treatment you give to the tap water?

- renders the tap water less than 100% bacteria-free, but fit enough for drinking
- cleans the water only partially
- leaves room for risk of infection
- consumes excessive fuel/gas/electricity
- too cumbersome an effort
- a time consuming effort
- worth the trouble
- (√) the most relevant blank.

7 If an easily available, safe and hygienic substitute for treated tap water be made available would you use it?

- Yes
- No

8 How much would you be willing to pay for a 1 litre bottle (2 milk bottles = 5 soft drink bottles = 1 litre)

.....

9 You would like to use this substitute in your household:

- for children
- for the unwell members
- for the aged
- for special occasions (festivals, parties, picnics)
- for foreign guests
- when travelling
- for daily use for all household members
- any other (please specify)

10 Where would you prefer to purchase such a substitute from?

- local grocery shop
- local restaurant/soft drink shop
- departmental store
- chemist
- super bazar
- any other (please specify)

11 What bottle size of this substitute would be most convenient for you?

- | | |
|---------------------------------------|-----------------------------------|
| <input type="checkbox"/> 1/2 litre | <input type="checkbox"/> 1 litre |
| <input type="checkbox"/> 1 1/2 litres | <input type="checkbox"/> 2 litres |

Any other (please specify)

12 Have you heard of mineral water?

- Yes
- No

If yes, could you indicate the source of your information?



- shopping displays
- on a trip abroad
- from foreign guests
- from a hotel menu card
- from reading matter
- any other (please specify)

13 Have you ever consumed mineral water before? Yes No
 If Yes, could you indicate how often? once occasionally
 twice regularly
 a few times

14 If you have consumed it more than a few times could you mention the occasions of consuming n water?

15 Why did you consume it on these occasions?

16 You think mineral water is:
 a medicinal drink
 natural spring water
 purified water
 a tonic
 a nutritive water
 water with minerals mixed in
 an ingredient for cooking purposes
 Mark (x) the two most relevant blanks.

17 Could you please mark (x) the product to which the following phrases are more relevant
 Mineral Water Home Water
 More hygienic
 Better value for money
 Safer for children and old people
 Easier to mix with drink
 Safer for sick people
 Lower risk of contacting
 Water-borne diseases
 More healthful
 More germ-free

18 Could you tell us the reason for your not having consumed mineral water on a regular basis to date
 Mark (x) the two most relevant blanks.
 it is too expensive
 it is too much of a bother
 you have never felt the need to do so
 you don't need mineral water

19 Your occupation
 Your spouse's occupation

20A Educational qualification:
 Yourself
 Your spouse

20B How often did you and your spouse travel abroad
 You Your spouse Never
 once

20C Are you/your spouse a member of any club in India?
 Could you name it/them

20D Your monthly income is
 Rs. 5000 Rs. 8000
 Rs. 8000 Rs. 12000
 Rs. 12000 Rs. 16000
 Over Rs. 16000 Rs. 16000.....

20E Name.....
 Address + Tel.....
 Status in family

Age 20-30
 30-40
 40-50
 50-60
 Over 60



FOR REGULAR CONSUMERS ONLY

- 21 Your monthly consumption of mineral water bottles is:
- | | | | |
|------|--------------------------|---------|--------------------------|
| 1 | <input type="checkbox"/> | 11-15 | <input type="checkbox"/> |
| 2 | <input type="checkbox"/> | 16-20 | <input type="checkbox"/> |
| 3 | <input type="checkbox"/> | 20-30 | <input type="checkbox"/> |
| 4 | <input type="checkbox"/> | Over 30 | <input type="checkbox"/> |
| 5-10 | <input type="checkbox"/> | | |

22 You purchase mineral water from:
.....

- 23 Your brand preference is for:
- | | | |
|--------------------------|----------------------------------|----------|
| <input type="checkbox"/> | Golden Eagle | Why..... |
| <input type="checkbox"/> | Aqua Mineral | Why..... |
| | Any other (please specify) | |
| <input type="checkbox"/> | Indifferent brands | |

- 24 Your preference is for:
- | | | |
|--------------------------|-----------------|----------|
| <input type="checkbox"/> | glass bottles | Why..... |
| <input type="checkbox"/> | plastic bottles | Why..... |
- Thank for your time and effort.