

### 17.10 TERMINAL QUESTIONS

1. Explain the significance of international marketing research in today's globalised market.
2. In what manner do political system and economic factors influence international marketing? Answer with suitable examples.
3. Suggest an appropriate structure of international marketing information system for a firm which is in the export of leather products with a turnover of Rs.5 crore per annum.
4. 'International marketing research is full of complexities'. Comment.

## UNIT 18 DATA COLLECTION

### Structure

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### 18.0 OBJECTIVES

After studying this unit, you should be able to:

- explain the importance of data in marketing research
- distinguish between primary and secondary data
- identify different sources and various techniques of collection of primary and secondary data
- identify different sampling techniques in data collection
- prepare a questionnaire and conduct an interview.

### 18.1 INTRODUCTION

Any decision can be only as good as the facts on which it is based. Hence, data collection is the most important and crucial step in the marketing research process. This step is preceded by definition of research objectives, clear determination of the type of data and information required to be collected and determination of methodologies to be used in collecting the requisite data and information. Without the above pre-research activities, there is a possible danger that critical data and information may not be obtained and/or that what is obtained may turn out to be not very relevant or suitable. The validity and accuracy of the final judgement is most crucial and depends heavily on how well the data were gathered in the first place. Thus, data are considered the backbone of any research project as it helps the marketing manager to take the right decision. In the absence of reliable and updated data the entire marketing research process may be derailed.

The purpose of this unit is to acquaint you with the various sources of data, different methods for collecting primary data, the problem arises while collecting data and the precautions one should follow in using secondary data. You will also learn the types of sampling and the procedure to choose sample from the population for data collection.

## 18.2 WHY DO WE NEED DATA?

If the data lacks substance because of biases, ambiguities or other types of errors, all the sophisticated tools selected by the researcher to mold that may not be very useful towards the ultimate solution of a problem. The importance of data in the marketing research process arises because of the following reasons:

1. **Problem identification:** Even to identify what exactly is the marketing problem (before one proceeds to find ways and means of tackling the problem) certain amount of data is required. For instance, a company desirous to find out as to why it has not been possible to export an item to other country, which was importing the same items in huge quantities from other countries, the company may have to collect data on the sources of imports, basis of competition, etc. In fact, there was an instance of a famous European firm not being able to export automotive parts to a country in the Middle East market. This situation leads to the formulation of a particular problem and its ramifications. Defining one's goal leads to various courses of action to consider the rational decision maker (marketing manager) seeks to evaluate information (data) in order to maximise objectives.
2. **Market selection:** Often a company may not be sure as to which overseas markets to enter. There may be a number of countries which may be importing an item in significant quantities. This does not mean that it will be possible for a firm to sell that item in all the countries at all times to come. A short listing of markets has to be done taking into various factors like market size, present and planned production of the item, the country's import policy and procedures, geographical distance, etc. Data need to be collected in all the above before the company zeroes in on the most potential markets.
3. **Environmental changes:** One of the major requirements of data is its freshness. It is said that, information is the most perishable item and even the coldest of cold storages cannot store it fresh for long. This attribute assumes added importance in the present day world where changes are taking place at a very rapid pace. Changes may take place in any environmental factors and unless a system is in place to obtain the feedback with minimum time loss, it may be too late before proper strategy adjustment is made. Changes may relate to political relationship, technological advances, commercial policies, consumer preferences, etc. We have seen in Unit 17 as to how non-anticipation of the changes that took place in the then USSR during late 80s ruined the business of some firms in India. Thus, reliable and updated data and information on the environmental changes is a *sine-quanon* of successful marketing.
4. **Selection of marketing mix strategies:** Every market segment warrants a specific marketing mix strategy. For example, to capture a segment which comprises mostly low income consumers, price competitiveness should form the basis of the strategy; on the other hand, a segment of rich customers will generally be more quality conscious than price conscious. In order to bring about the proper blend of the marketing mix elements, it is highly important that data on income levels of various segments is collected. Thus, data influences the marketing mix strategy.
5. **Strategy assessment:** Importance of information and data does not cease even after a strategy is formulated and implemented. To be successful in business, it is very important that a marketer is constantly in touch with the market. Marketing research must get feedback from the market as to the success or otherwise of his efforts and the changes that are taking place in the market. Thus, data is required for assessing the effectiveness of the strategy followed by a firm.

The gathering of information can, however, never be a substitute for good managerial judgement. An oft-repeated story illustrates this point. Two shoe salesmen from two companies visited an Island and came away with vastly different interpretations. One felt that a market opportunity was non-existent, because people there did not wear shoes. The other salesman, however, was enthusiastic, because in his determination since no one in the Island wore shoes, a huge opportunity exist to sell shoes to the market. It must be noted that in both cases, data revealed the same fact i.e. no one was wearing shoes but the interpretation of the fact was totally different. For instance, how does one interpret that most Hindus do not eat beef and pork. Does this mean that there is plenty

of market or no market at all among the Hindu population, for the two items? Again, if data reveal that woollen carpets are not at all used in a country, can one conclude that prospects of selling woollen carpets to that country are very bright or are they poor? Thus, data collection or marketing research is only part, that too an important point, of the equation. In the final analysis fundamental decisions are the most crucial and these decisions have to be made taking into account various facts.

Before we may proceed further, it may be useful to make clear the distinction between the terms 'information' and 'data'. Data are observations and evidence regarding some aspect of the marketing system. Information refers to data which reduce the uncertainty in a decisional situation. This definition makes the use of the term 'information' depends on the decision maker and the decision making situation. An example will clarify this distinction. A cardiologist is confronted with the problem of diagnosing the cause of chest pain of his patient. To aid the decision making process, the cardiologist is provided with the following data: (i) blood pressure, (ii) pulse beat, (iii) level of blood sugar, (iv) electro-cardio graph.

Given the cardiologist's problem, which data could be labelled information? Most readers, it is hoped, will find this distinction fairly easy, but given a typical marketing decision making situation, distinguishing between data and information may become substantially more challenging.

## 18.3 DATA SOURCES

After the preliminaries discussed in the previous sections are given due consideration, marketing researcher is faced with one of the most difficult problem of obtaining the required data. Utmost care must be exercised while collecting data because data constitute the foundation on which the superstructure of statistical analysis is built. The results obtained from the analysis are properly interpreted and policy marketing decisions are taken. Hence if the data are inaccurate and inadequate the decisions taken misleading.

Data can be accessed by in many ways - through secondary sources or primary sources or both. Collection of secondary and primary data can further be sub-classified as through internal sources or through external sources. However, the techniques used for gathering of data depend on the nature and extent of information required for the specific research project. Thus, the type of data sources used vary from project to project and company to company in any given marketing situation.

It may, however, be noted that, as a rule, no research should be done without a search for secondary information first, and secondary data should be used whenever available and appropriate. Only when data is not available through secondary sources and/or to supplement data collected through secondary levels a researcher should turn to primary sources of information. To determine the suitability of the secondary data, used by the researcher in his research, a researcher should employ relevant criteria to evaluate the purpose, methodology, definitions of the concepts, and time period covered in the study from which the secondary information was collected.

### 18.3.1 Primary Data and Secondary Data

The data which is collected for the first time for your own use is known as primary data. The source happens to be primary if the data is collected for the first time by you as original data. On the other hand, if you are using data which has been collected, classified and analysed by someone else, then such data is known as secondary data. The sources of secondary data are called secondary sources. For instance, national income data collected by the Government in a country is primary data for that Government. But the same data becomes secondary for those research workers who use it later. We may, thus, state that primary data is in the shape of raw materials to which statistical methods are applied for analysis. At the same time secondary data is in the shape of finished products since it has already been treated in some form or the other by statistical methods.

To understand the difference let us assume that Mr Rao conducted a study in 1990 on "Effectiveness of Print Advertising" and using survey method collected primary data. Let us also assume that in 1996 Mr Rahim desired to conduct a study on "Effectiveness of

advertisements in various media" and used some information readily available from Mr Rao's study. Then the data collected through survey method by Mr Rao are primary data while the same data taken from Mr Rao's study by Mr Rahim becomes secondary data. Thus the difference between primary data and secondary data does not lie in the nature of data but in the form of data, the data which are primary in the hands of one become secondary in the hands of another.

In case you have decided to collect primary data for your survey, you have to identify the sources from which you can collect that data. Big enquiries like population census involve very large number of persons to be surveyed but in case of small enquiries like cost of living of industrial workers in a city, the persons to be surveyed may be few. If you have decided to use secondary data, it is necessary for you to edit and scrutinise such data. Otherwise it may not have the desired level of accuracy or it may not be suitable or adequate for your purpose. If you do not edit and scrutinise the secondary data before you use it in your survey, the results of your investigation may not be fully correct. Therefore, secondary data should always be used with great caution. Bowley writes: It is never safe to take published statistics at their face value without knowing their meaning and limitations.

### 18.3.2 Sources and Uses of Secondary Data

Secondary data can be divided into two general categories on the basis of their source relative to the company considering their use: (1) internal data, and (2) external data.

Internal data refers to data available within the company. The sources for such data include things as invoices, salesmen's reports, shipment records, operating statements, general and departmental budgets, balance sheets, registers and previous reports done by or for the company.

Collection of internal data does not involve much of formal techniques. It is largely a matter of knowing the company's operating procedures and establishing systematic methods for recording the desired information. Collection of external data is more difficult. The number and nature of sources of secondary data and the variety of such data are myriad. The problem then, is first to identify the source of data needed on the specific project. The researcher should not only be aware of the sources of some of the most important types of marketing information, but he should also educate himself on how to collect the information from the source, since very often the form in which data is presented in a source is not easily intelligible to an ordinary person. A lot of information is codified now a days and the decoding formula must be known to the researcher. If the publication is in a language with which the researcher is not familiar he faces additional problems. Besides all the above, when the researcher is not familiar with the source of a particular type of information, he should also know how to proceed to find the right source.

External data may be divided into four categories, those are: (1) census and registration data, (2) individual publication publicly circulated such as encyclopedias, books, monographs, bulletins, and periodicals; (3) data collected for sale on a commercial basis, and (4) miscellaneous data.

The sources for such data published and unpublished are the following:

- Government agencies in the exporters and importers countries or any other countries.
- International organisations such as World Bank, WTO, ITC and various UN Organisations such as FAO.
- Regional UN organisations such as ESCAP, ECE, etc.
- Other regional organisations like OECD.
- Embassies and High Commissions of concerned countries.
- Banks and financial institutions, both national and international.
- Trade and professional bodies, e.g., Chambers of Commerce, annual reports of joint stock companies, and Institute of Chartered Accountants, both national and international.

- Financial and economic journals such as commerce, capital, and indian finance.
- Universities and research institutions.
- Commercial intelligence services both national and international.

### 18.3.3 Advantages and Limitations of Secondary Data

**Advantages:** There are certain distinct advantages in using secondary data in any marketing research study, the key advantage being the relatively low cost of data collection. At times they may offer the type and extent of information which may suffice for the purposes of research. Suppose a marketing manager wants to know the size of the market for a product in a country, in most cases he may obtain relevant information in this regard through scanning some secondary data.

Even if the marketing research issue cannot be completely solved with the aid of secondary data, such data may still be valuable. For instance, review of secondary data may offer useful ideas or uncover some hitherto unknown for it which can be later on explored further for the benefit of the company. For instance, an Indian businessman while collecting data on the imports of an engineering item into a West European country. Stumbled upon the fact that the country imports substantial quantities of toys and dolls every year. This information helped him build a profitable export business in toys and dolls subsequently. Likewise, secondary data sources may suggest avenues for improvement of research design and analysis. Suppose a researcher reviewed the result of a previous research study and consequently, he/she could improve on the study design by removing the pitfalls reported by previous researchers in the area of questionnaire design, sample selection, method of data analysis, etc.

Moreover, secondary data may be useful as a reference base to compare research findings. Thus, even for a relatively unique research situation, scanning the secondary data would possibly offer many useful insights.

Finally the time required to obtain the relevant secondary data is much less as compared to the time required to collect primary data.

**Limitations:** There are however certain limitations in using secondary data. Many of these limitations arise due to the fact that such data are collected for different purposes and by different people. For example, the available data may be in an aggregated form, while the researcher may need the data in a disaggregated form. Thus, any researcher faces the problem of control over the procedures adopted in the collection of secondary data. At times, the data may not explicitly define the terms of reference of the study objectives and the methodology adopted, they may be obsolete. Therefore, before using the secondary data, the researcher should examine the following questions:

- Are the data suitable for the purpose of investigation?
- Are the data reliable?
- Are the data adequate?

Finally, the researcher may not always gain access to a secondary data in view of propriety and confidentiality barriers.

#### Check Your Progress A

1. Examine the role of data and information in international marketing research. Support your answer with appropriate examples.  
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2. Distinguish between primary data and secondary data.  
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3. State whether the following statements are true or false:

- a) Most statistical analysis rests upon primary data.
- b) The rational decision maker seeks to evaluate data in order to maximise objectives
- c) Information is the most perishable item and even the coldest of cold storage cannot store it.
- d) Information and data are one and the same.
- e) Secondary data does not need much scrutiny and should be accepted as its face value.
- f) Data available within the company is known as internal data.

## 18.4 METHODS OF COLLECTING PRIMARY DATA

When secondary data are unavailable, the researcher may have to turn to primary data. One decision that must be made at this stage is whether to make or buy the information. In other words, the question to be decided is whether outside agencies such as marketing research firms should be used to collect the information needed or whether the firm should use its own personnel for this purpose.

Primary data is collected for meeting the specific objectives of the research study. When the researcher has reached a situation where he cannot get the specific information through secondary data, then he has no other option except to plan field research. Field research is actually carried out to get first hand information to answer specific questions like 'what kind?', 'what size', 'what colour', and 'what flavour' whereas the desk research answers questions such as 'how much', or 'how many', 'from where' etc. In other words, information of a personalised nature can be obtained only through primary sources while information of a macro nature can be obtained through secondary sources.

For eliciting primary data, the researcher has three options: (a) Observation, (b) questionnaire, and (c) Interviewing.

### 18.4.1 Observation

Observation is the process of recording relevant information without asking specific questions to any one and in some cases, even without the knowledge of the respondents. Examples of observation mode of data collection include:

- Observing salesman's behaviour on sales calls
- Observing the stocking pattern of retailers
- Observing the turnover of various brands
- Observe how consumers behaviour in a retail counter
- Observe what brands the consumers buy and their views on product quality, price, service, packaging, etc.
- Study behaviour of visitors in trade shows
- What television programmes the customers view, what newspapers and magazines they subscribe to, what are their views on them, etc.

Observation mode of data collection is highly effective in consumer surveys where the respondents are unwilling or unable to provide the information asked for consumer survey often wish to answer such questions as: Who actually buys the products? What brands are bought and why? To what extent, brand choice of a durable item like TV is made earlier vis-à-vis at the point of purchase? Who influence the choice of a particular brand of a

product? What factors influence purchase decisions? What sort of information they seek before purchase? One of the most significant aspects it has been found in which observation method has proved very effective, relates to product quality and features. It has been noticed that consumers comment on the drawbacks and this fact can be made use of by a firm to collect the relevant information and improve the subsequent versions of the product.

Data collected by observation is generally accurate and quicker to process, specially it is more effective if consumers' emotions and subconscious determine the buying decision. However, observation method has a number of weaknesses. The most limiting factor in the use of the observation method is the inability to examine things like attitudes, motivations and plans. Events, which occur over long duration, pose the problem of measurement. Observational data are more expensive to obtain than survey data. It is necessary to station an observer to study the pertinent phenomena. Frequently it is hazardous and time consuming affair. Of course, of late certain mechanised devices like eye camera, laser scanner, etc. are used for observation. Though installation of modern technology has increased accuracy, they are very expensive. There is the danger of the observers bias entering the findings. Basically observational method is able to eliminate errors arising from reporting of the behaviour, as done in a survey.

### 18.4.2 Questionnaire

Questionnaire is the basic tool of field research. It is a kind of net which collects the required information and allows unwanted data to be screened out. If a questionnaire is well designed, it is the key to a successful market research project. If the questionnaire is faulty, the information gained may be incomplete, irrelevant or biased, and no amount of post-interview analysis of interpretation will be able to set things right. Thus, the success of the questionnaire method of collecting data depends largely on the proper drafting of the questionnaire. Questionnaire is a popular means of data collection. A questionnaire uses a structured, standardised format of data collection to record verbal responses to questions. Particularly when the population to be covered is very large and the study wishes to collect data about specific aspects of consumers' awareness, attitude, opinions, prior and present behaviour, etc. the questionnaire method is recommended. No hard and fast rules can be laid down for designing or framing a good questionnaire, however, experience suggests many thumb rules as to how to construct a questionnaire and thus, obtain the desired data in the most cost effective manner. The exact format and sequence of the questionnaire will greatly depend on the study objective and the method of administration (i.e. whether the data is collected through personal interviews, mail or panel diary). However, a number of important yardsticks may be recommended for the questionnaire design.

#### Qualities of a Good Questionnaire

- Be as short and simple as possible while still covering all relevant information, keeping in view of the nature, objectives and purpose of research.
- Questions should be specific and not vague
- Ensure maximum response
- Avoid irrelevant information and side issues
- Avoid leading questions
- Make it easy for respondents to give the information they have
- Contain a 'filter' question to determine if the respondent qualifies, and control questions to validate his replies
- Questions should be logically arranged
- Facilitate evaluation, analysis and interpretation

#### Steps in Questionnaire Design

- Designing questionnaires is a job requires high degree of skill, experience clear thinking, and a great deal of patience. A good questionnaire requires that its authors have both a thorough grasp of their research project's subject matter and the ability to



frame questions which will draw the maximum response from respondents. The basic steps for designing the questionnaire in logical sequence are as follows:

- Define clearly what information is required
- Write a series of questions, the answers to which would provide the required information
- Arrange the questions in logical sequence, making sure that they are as interesting as possible and free from ambiguity
- Pre-test the questionnaire on a pilot sample of respondents
- Examine the results of the pilot sample, both from the point of view of the ease with which the information gathered can be tabulated, and the quality of the information. They redraft the questionnaire to accommodate any necessary changes.
- The length of the questionnaire should be kept to the minimum required to supplement information from other sources
- Make a written list of points that need to be covered in terms of the overall research objective, taking into account the information already provided by desk research
- Information already obtained through other means should not be duplicated on the questionnaire, unless it needs verifying.

#### Hints for Framing Questions

Drafting questionnaire is a highly specialised job and required a great deal of skill and experience. Therefore, the following hints must be kept in mind while framing the questionnaire.

- Questions should be short. Lengthy questions tend to confuse the respondent.
- Never ask sensitive questions which may cause embarrassment to the respondents. For example, question on age or income may cause embarrassment to some respondents and they may react negatively or even violently. Questions on sexual habits may invite hostile response from some respondents. Similarly, if a respondent refuses with some information which she/he considers confidential, no question should be asked to elicit such information.
- It is not always good to ask direct questions. Sometimes more or better information can be gained by asking one or more indirect questions. For example, if the researcher wants to know the details of the cost of production of a product, the respondent may not be able to list out all elements of the cost. In such a situation the interviewer may help him recall some elements by asking a series of questions. The interviewer may also supplement the respondents' response by his own observation.
- Whenever possible, avoid mentioning specific brand names in questions. Replies to the question, 'which transistor radio costing less than Rs. 200 do you consider best?' will be very different from those given to the question, 'Do you consider the ABC radio the best set costing less than Rs. 200?'
- Only questions which respondents can be expected to answer from their own knowledge and experience should be asked.
- Avoid relying on the respondent's memory. Whenever possible, questions like 'how much', 'how many' should refer to immediately available data, or to data of which the respondent has kept some record.
- Each question on the questionnaire should cover only one point.
- Questions must be drafted in such a way that they will mean the same thing to everyone and will be open to only one interpretation. In short, eliminate ambiguity, which often arises from wording questions carelessly. In fact, the questions should be worded in such a way that a respondent should be able to answer them without the help of any one.
- Questions should invite answers that can be recorded quickly and conveniently. Preferably questions should be framed to permit only one of two possible answers.

Where it is possible to see that answers might fall into one of several groups, it is better to write a sequence of questions to cover the point.

- Cut out all unnecessary questions. The questionnaire should always be kept as short and simple as possible.
- Leading questions which influence the answer should be avoided. For example, response to a question "which are the leading brands in this product?" is likely to be different from the same to "Name some leading brands such as X Y Z" from the same respondent.
- Utmost care should be taken in arranging the questions logically, otherwise the respondent may dislike to provide correct information. For example, first questions how many children do you have? Second question are you married? These are not in logical order.
- Since all possible alternatives cannot be foreseen in an answer, for such questions which list alternatives, always provide for an extra alternative under "any other (specify)".

#### Types of Questions

There are four basic types of questions used in questionnaire:

- a) Simple choice offers the respondent a choice between two answers as Yes or No; Right or Wrong. Examples are : do you use imported products? Yes/No
- b) Multiple-choice is often used as a follow-up to a simple choice question. It asks the respondent to choose between a number of factors that might influence his preference. Example: Which brand of toothpaste do you use regularly? (1) Colgate, (2) Binaca (3) Pepsodent (4) Neem.
- c) Open-ended questions allows the respondent to give a free ranging answer. Example, what do you think are the good qualities in our machinery? This type of question is more widely used in industrial/trade surveys than in a consumer survey.
- d) Semantic/Likert Scale questions are used to record how strongly opinions are held. For example, are you satisfied with the present service you are getting from your bank? (A) Very good (B) Good (C) Average (D) Bad (E) Very Bad. In the case of type (b) and (d) questions presented above, provision should be made for "any other (specify)" because none of the choices may fall within his response.

All the above types of questions have their use in questionnaire design. Which is best in any specific case depends on the subject matter of the research, the kind of information required, and the nature of the interview.

A general guide, however, is:

- For personal interview all types of questions can be used effectively.
- For telephone surveys simple choice questions are preferable, they can be mixed with several open-ended questions.
- For postal surveys multiple choice, semantic/likert scale and simple choice questions are preferred. Open-ended questions can be used, but they often produce a high non-response rate.

#### 18.4.3 Interviewing

An interview is, basically, a meeting between two persons - the interviewer, who knows what information she/he needs to obtain, and the respondent, who knows the answers but who must be guided into giving useful responses. The key to successful interviewing lies in how skillfully the interviewer can provide this guidance.

Much of what can be said about personal interviewing techniques may appear obvious, just sound common sense. However, it is surprising how often the obvious can be overlooked, resulting in weak research results.

Interviewing is a very personal exercise, individuals differ, and so will their interviewing techniques. It is only through experience that the interviewer can adapt and perfect his

own techniques. Success in interviewing is measured in terms of the quantity and quality of information gathered during the interviews. This applies to all types of interviews.

### Types of Interviews

Three types of interviews and these are:

- 1) Structured interviews revolve around the strict use of questionnaire.
- 2) Unstructured interviews allow for a more free-flowing, open-ended exchange between the interviewer and the respondent.
- 3) Semi-structured interviews rely on some combination of the two alternatives. The decision about which type to use will depend on the kind of information being sought in the interview, on the experience of the interviewer, and on the nature of the respondent.

### Conducting the Interview

A marketing research interview can be divided into three phases:

- Introduction
- A question and answer period
- An informal discussion

**Introduction:** The interviewer should introduce himself/herself by giving a clear and concise statement about who she/he is, whom she/he represents, what information she/he is seeking, the use to which the information will be put and how this might benefit the respondent or the group of her/his interests such as her/his family, office, town, country, etc. After making introductory remarks, the interviewer should commence by asking some general questions, so as to judge whether the respondent would be able to easily provide information she/he is looking for or whether she/he is someone who will need to be drawn out and also to decide as to how to deal with him effectively.

**Question and Answer Period:** Once the interviewer has established some personal rapport with the respondent, she/he should move on to asking the questions which make up the main body of his interview. How the interview proceeds now depends on whether it is structured or unstructured. In a structured interview the interviewer may not make a mistake of thinking that everything will be easy as he has a well written questionnaire and has only to ask questions. Asking questions is highly skilled art, and the way the questionnaire is framed and handled will determine the success of the interview. Often the interviewer may have to explain the questions to the respondent and may have to ask supplementary questions, which are not in the questionnaire to get answer to the question given in the questionnaire.

Some general rules to follow when conducting structured interview are:

- Each question should be asked exactly as worded.
- The interviewer should not comment on the meaning of the questions, or indicate in any way what kind of answers he might expect.
- Every question on the questionnaire should be asked unless the interviewer has been instructed otherwise. The interviewer should never assume that he knows what a response will be, and she/he should never allow herself/himself to appear bored by the repetition of the same questions and responses as she/he conducts several interviews. The freshness and enthusiasm of the interviewer have important factors in getting good responses.
- Questions should be asked in the same sequence as they are written on the questionnaire.

However, in the course of the interview, if the information given by the respondent provides answers for some other questions in the questionnaire, they may be noted down then and there and the concerned questions need not be once again repeated.

In an unstructured interview, the interviewer is considered to have sufficient knowledge of his subject to be able to discuss it in a free-flowing conversation without following any shift or sequence of questions. The idea is to explore indepth information from the respondent.

Though there are no strict rules to follow in an unstructured interview, some general guidelines are as under:

- Questions should be as clear and brief as possible.
- Stick to the subject and guide the respondent in doing so. If the respondent wanders away from the subject, the interviewer might say something like, "That is a very interesting point - can we come back to it in a moment?"
- Never begin with difficult or critical questions. It is best to develop some rapport first.
- Never ask sensitive questions early in the interview. Such questions might concern the number of the respondent's employees, how own output and its growth rate, the prices he pays, cost of production, etc. These questions are best asked towards the end of the interview.
- Always try to obtain precise answers when the respondent has spoken in generalities. This can often be achieved by restating what she/he has said in other terms to see if he agrees. For example, the respondent might say, "It takes about half my time to check these dockets". The interviewer could then reply, "In terms of time, that means that you spend four hours a day. Is that correct?"
- If the respondent offers information that contradicts something learned in a previous interview, cross check with her/him to make sure she/he has understood the question correctly but do not annoy her/him by bluntly telling him that he is wrong or deliberately not telling the truth.
- Avoid tiring or boring the respondent; keep the interview moving at a good pace and occasionally change its tempo.
- Try not to take too much of the respondent's time in interviewing her/him.
- Two hours is about the maximum duration for the type of interview.

**Informal Discussion:** This the last leg of conducting the interview. In this phase, when the interviewer has covered all the formal questions he needed to ask, he should finish his interview with a short, informal discussion. This is the time when the interviewer may try to elicit information on the points where the respondent was a bit reluctant to answer either due to personal reasons or ignorance.

At the end, the interviewer may ask the respondent if there is anything else that he would like to say and if there is anything that he would like the interviewer do for him. Perhaps the respondent would appreciate being supplied with some information herself/himself or may ask for a copy of the researcher's report provided it does not violate the confidentiality. These types of gestures creates goodwill and go a long way to break the feeling among respondents that they are always there only to answer some questions put by the interviewer and their knowledge is never appreciated or fully made use of.

### Hints for Interviewing

Some of the hints for interviewing are:

- Fax the appointment in advance
- Arrival at the appointed time
- Introduce yourself and explain the purpose of your visit
- Be clear, precise and brief
- Don't begin with difficult and sensitive questions
- Focus discussion on the subject of interview
- Ask clarifications if you do not understand an answer
- Take legible notes during discussion and read them thoroughly the same day. But do not interrupt the respondent saying that you have still not finished noting down his previous responses.
- Keep your word about anything you promised during the discussion.

- Don't be officious; the interview should be informal and relaxed as if two friends are casually talking to each other.

#### Follow-up

After the entire exercise of interviewing the respondents is over, the researcher must on returning to her/his office, send letters of thanks to all the respondents for granting interviews and providing necessary help and cooperation during the conduct of the interviews.

#### Check Your Progress B

1. What are the various techniques of collection of primary data?  
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.....
2. Distinguish between observation and survey method of data collection.  
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.....
3. Indicate whether the following statements are True or False:
  - a) Questionnaire method cannot be used when the informants are illiterates.
  - b) Questionnaire need not be pre-tested before it goes for final print.
  - c) Recording information without asking questions is called as observation method
  - d) Structured interview allows open-ended exchange between the interviewer and the respondent.
  - e) The number of questions in a Questionnaire should be as small as possible keeping in view the purpose of the survey.
  - f) Information of personalised, whether macro or micro nature, can be obtained through secondary data.

## 18.5 SAMPLING

When the secondary data are not available or useful for the marketing research, a decision may be taken to gather primary data by using any of the methods discussed in the previous section (18.4).

The desired information may be obtained either by the census method or the sampling method. Before we discuss the sampling in detail, let us know briefly the distinction between census and sampling. You must be knowing that all the items in any field of enquiry constitute a universe or population. In statistics 'population' does not mean only human population. It means sum total of all the items, which relate to a certain study. In census enquiry the whole group is to be surveyed while in a sample enquiry only a part of the group is studied. A complete enumeration of all the items in the population is known as census enquiry. Census enquiry involves a great deal of time, money and energy. Therefore, organising census enquiry on large scale becomes difficult because of the resources involved. At times, this type of enquiry is practically beyond the reach of individuals. Perhaps, government alone can get the complete enumeration carried out. Even the government adopts this type of enquiry in very rare cases. For instance, Government of India conducts population census once in a decade. Further, many a time it may not be possible to examine every item in the population. Sometimes it is possible to obtain reasonably accurate results by studying only a part of the total population. In this case, there is no utility of census surveys.

As you know, in case of sample enquiry only a part of the population is studied. When field studies are undertaken, as discussed earlier, considerations of time, cost, convenience, etc., lead to selection of sample survey. The basic assumption in the sample survey is that the sample items selected truly represent the total population. The sample items, therefore, would enable the investigator to estimate the characteristics of the population without any bias and would produce valid and reliable results. The advantages of sample enquiry are:

- A sample study is relatively less expensive as compared to a census study and produces results at a relatively faster speed.
- It enables more accurate measurements, as it is generally conducted by trained and experienced investigators.
- When the population is very large, sample survey is the most suitable method of data collection
- Sample survey method is very suitable, when test involves the destruction of the item under study. For instance, in physical sciences, you take fresh samples of chemicals every time.
- It also enables us to estimate errors due to sampling.

In spite of these advantages of sample enquiry, we should remember that if the universe happens to be small, resorting to a sample survey is not useful. In fact, the decision about the type of enquiry (i.e., sample enquiry or census enquiry) depends upon a variety of factors like objective, scope, nature of enquiry, availability of resources, etc.

Therefore, when doing field research, in most cases, it is usually impossible to interview every user or buyer, or potential user or buyer, of a company's product. So, some methods of selecting respondents must be devised. This is done by sampling.

### 18.5.1 What is Sampling?

In sampling a small group is chosen deliberately or at random from a large group. In market research, as elsewhere, a sample is some chosen part of a universe (by universe we mean all possible items of a relevant group) whose properties or behaviour the researcher needs to know about. There are two basic assumptions of sampling. Both based on statistical laws and are:

- That the properties of the part which is selected from the universe will represent the properties of the universe.
- That the larger the sample taken, the more accurately it will represent the universe. Though the larger sample tends to give more accurate results, it involves higher costs - the larger the sample, the higher the cost. Thus the company planning to do market research must select a sample which is large enough to produce accurate data while small enough to be within the available research budget.

No sample, however, will have exactly the same characteristics as the universe. At best, a sample is a good approximation, valid within certain limits.

### 18.5.2 Types of Sampling

As mentioned earlier, there are two types of surveys: (1) census survey where the whole group is to be surveyed, and (2) sample survey where a selected representative items of the group are studied. In the sample survey, the representative items so selected are referred as sample. The technique of selecting items for the sample is usually referred as sampling method. There are several sampling methods. They are generally categorised as (1) probability sampling methods, and (2) non-probability sampling methods.

#### Probability Sampling Methods

In the case of probability sampling method, each and every item in the population has a probability or chance of being included in the sample. Thus, in this method every member of the population has an equal chance of selection into the sample. Under this probability sampling, there are various methods such as:



- Simple random sampling
- Systematic sampling
- Stratified sampling
- Cluster sampling
- Multi-stage sampling

Let us discuss about each of these briefly.

- a) **Simple Random Sampling:** This method is also known as chance or lottery sampling method. In this case each and every item in the population has an equal chance of inclusion in the sample and each one of the possible samples has the same probability of being selected. This is the most common method used when the population is a homogeneous group. To identify the sample unit, normally, random numbers are used.
- b) **Systematic Sampling:** Under this method, population is arranged in alphabetical, serial order etc. Then the sample units appearing at fixed intervals are selected. Thus, you may select every 14th name on a list, every 10th house on the side of a street, and so on. Element of randomness is introduced into this method of sampling by using random numbers to pick up the first unit with which to start. Thus, in this method, the selection process starts by picking some random point in the list of population, and the units are to be selected until the desired number is secured.
- c) **Stratified Sampling:** This method is generally used when population is not a homogeneous group. Under this method, population is divided into a number of homogeneous sub-populations or strata. While doing this, care should be taken to avoid overlapping. After stratification, the sample items are randomly selected from each stratum either on proportionate or equal basis. To understand this method clearly let us take an example. Suppose we want to survey the economic conditions of the employees of a university and its various affiliated and constituent colleges. There are different categories of employees: (i) principals, professors, (ii) readers, (iii) lecturers, (iv) administrative staff, and (v) class IV staff. Each of these groups is more or less a homogeneous group. These five groups will, therefore, be called 'strata'. From each of these five groups, you can randomly select a suitable size of sample. This method of selection is called stratified sampling.
- d) **Cluster Sampling:** This method involves grouping the population into heterogeneous groups called 'clusters' and then selecting a few of such groups (or the clusters) by simple random sampling method. All the items in the selected clusters are studied for accomplishing the survey work. Let us consider the same example discussed under stratified sampling method. Each of the affiliated and constituent colleges and the different departments of the university have all the five categories of employees: (i) principals, professors, (ii) readers, (iii) lecturers, (iv) administrative staff, and (v) class IV staff. So from the point of economic conditions, employees of an institution form a heterogeneous group. Each institution will therefore be called a 'cluster'. You select a few institutions by a simple random sampling method and then survey all the employees of the selected institutions. This method is called cluster sampling.
- e) **Multi-stage Sampling:** This method is suitable for big surveys extending to a considerably large geographical area or the population is heterogeneous. For instance, in a survey you want to select some families from all over the country. Under this multi-stage sampling method, the first stage may be randomly select a few states. At the next stage, from each sample state you can randomly select a few districts. Then at the third stage you can select few towns from each of the selected districts. Finally, certain families may be randomly selected within the selected towns. Thus, in this method stratification is done at four stages to constitute a final sample. It may be noted that in this multi-stage sampling, each and every item of the population has a chance of being selected but this chance need not be same for all items.

#### Non-probability Sampling Methods

This method involves purposive or deliberate selection of particular item(s) of the universe for constituting a sample. This means that if the investigator thinks that certain

units are 'not representative', such units may not get equal chance of being included in the sample. Hence, the method is called non-probability sampling. The following methods come under this category:

- a) **Convenience Sampling:** When you select the sample items from the population based on the ease of access, the method is called convenience sampling. For example, we want to collect data from the consumers of petrol. We may select a few petrol pump stations within our reach and then may interview the persons who buy petrol at these stations. This would be an example of convenience sample of petrol buyers.
- b) **Judgement Sampling:** When investigator's judgement is used for selecting sample items for constituting a representative sample, we call it judgement sampling. Judgement sampling is generally used in case of qualitative research surveys where the purpose is to develop hypotheses rather than to generalise larger populations.
- c) **Quota Sampling:** This is another variety of non-probability sampling. Under it the population is first divided into homogeneous groups and the interviewers are simply allotted quota to be filled from each group. The actual selection of sample items is left to the interviewers' judgement. The size of the quota for each group is usually proportionate to the size of that group in the population.

As discussed above, you find that there are several sampling methods. You can adopt any of these methods whichever is suitable for your enquiry. However, if you resort to random sampling, errors due to personal judgement entering into selection of items can generally be eliminated. In this case sampling error can also be estimated. There are methods for estimating sampling errors which are outside the scope of this course. Purposive sampling is desirable when the universe is small and a known characteristic of it is to be studied intensively. Sample designs other than random sampling may be used only for reasons like convenience and low costs. Therefore, sampling methods to be used must be decided by taking into consideration the nature and scope of enquiry and other related factors like the time, money, staff, convenience, etc.

#### Check Your Progress C

1. List the different methods of sampling.  
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2. Distinguish between census and sample method of data collection.  
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3. Indicate whether the following statements are True or False:
  - a) A population is the part of limits under study.
  - b) A sample is less expensive than a census.
  - c) Judgement sampling is a type of non-probability sampling method.
  - d) Cluster sampling involves grouping the population into homogeneous group.
  - e) When the items selected as samples through systematic sampling is said to be random.
  - f) Sampling is inevitable under certain situations.



## 18.6 LET US SUM UP

Data is the lifeline of a research project since any decision can only be as effective as the facts on which it is based. Without the aid of authentic and accurate data, it would be very difficult to arrive at any conclusion for making an effective decision. Besides, timely availability of data is an important factor in the market research process, as collection of obsolete data will serve no purpose. Thus, reliability, relevance and timely availability are the three main requirements of data. Before any data is collected, the researcher must be clear about the specific purpose of research and its information requirement. Tonnes of data and information is available but it is important that the researcher must gather the right type of information from the right sources at the right time. The above will help the marketer manage the future of its business. Information is the key to manage a business. That is why, it is said, to manage a business well is to manage its future, and to manage its future is to manage information.

The researcher can gather secondary data, primary data, or both. Secondary data are data that were collected for another purpose and already exist somewhere while primary data are data gathered for a specific purpose or for a specific research project.

Since the collection of data involves lot of time, money and still the researcher as a rule must first try to obtain data from secondary sources. When required data is not available from secondary sources or that is available is not sufficient or upto date, the researcher should plan field research to collect primary data to meet the specific requirement of research objective of a project.

Different methods are available for collection of primary data, and the use of any method depends on the type of information and specific purpose of the project which vary from company to company and project to project.

Preparation of questionnaire and conducting interviews are highly skilled jobs. The researcher must be clear about the framework of questionnaire and the type of questions to be asked. Questions should invariably be simple, precise and brief, which the respondent can easily understand and answer. There should be no ambiguity while framing the questions.

Interviewing is a very personal exercise, individuals differ, and so will their interviewing techniques. It is only through experience that the interviewer can adapt and perfect his own techniques.

Success in interviewing is measured in terms of the quantity and quality of information gathered during the interviews.

## 18.7 KEY WORDS

**Cluster Sampling:** Selecting geographic areas at random and then selecting every member of the universe within the selected geographical area.

**Data:** Facts or numbers, collected for examination and consideration and used to help decision making.

**External Data:** Data available from sources outside the organisation.

**Information:** Data that reduce uncertainty in a decisional situation.

**Internal Data:** Data available within the organisation.

**Multiple Choice Questions:** A question which offers a choice between a number of answers.

**Observation:** The process of collecting primary data without putting specific questions to respondents.

**Open-ended Questions:** A question which allows the respondents to give a free ranging answer.

**Primary Data:** Information that is collected first hand and generated by original research

to meet the specific requirement of research.

**Quota Sampling:** Selecting sample in such a way that it reflexes the characteristics of the universe in the same proportion as in the universe.

**Random Sampling:** The sampling technique which offers equal chance of being selected to each and every member of the universe.

**Sample:** A chosen part of the universe which represents the characteristics of the universe.

**Secondary Data:** Data already collected earlier for a purpose other than the one currently pursued.

**Semantic/Likert's Scale Question:** A question which enables the respondents to record his opinion strongly.

**Semi-structured Interview:** A combination of structured and unstructured interviews.

**Simple Choice Questions:** A question which offers a choice between only two answers.

**Stratified Sampling:** Dividing the universe with various strata and sampling each stratum.

**Structured Interview:** Interview revolving around strict use of a structured questionnaire.

**Survey:** The process of collecting information from respondents by personal interview or mail.

**Systematic Sampling:** Selecting the respondents from the universe on the basis of every nth number.

**Unstructured Interview:** Interview that allows for free flowing, open ended exchange between the interviewer and the respondent.

## 18.8 ANSWERS TO CHECK YOUR PROGRESS

- A. 3. a) False b) True c) True d) False e) False f) True  
B. 3. a) True b) False c) True d) False e) True f) False  
C. 3. a) False b) True c) True d) False e) True f) True

## 18.9 TERMINAL QUESTIONS

1. You have been asked to conduct market research by an Indian firm for assessing the export potential of the following branded items in an African country.

- A herb based shampoo
- An audio tape of Indian classical music
- Handloom saree, and
- Mixed fruit jam

In the case of each of the above products, answer the following questions giving reasons thereof.

- What will be the source, primary or secondary, of information and data and for which type.
- What primary data collection method will you employ for which part of information and why?
- For which type of data collection will you employ the questionnaire method and why? What type of questions (simple choice, etc.) will be asked and why?
- How would you select the sample and why?