

## Data Collection Methods

Data collection techniques allow us to systematically collect data about our objects of study. In the collection of data, we have to be systematic. If data are collected haphazardly, it will be difficult to answer our research questions in a conclusive way.

## DATA resources

On the basis of the source of collection, data may be classified as:

(a) Primary data and (b) Secondary data

### (a) Primary data

are those data, which are collected by the investigator himself for the purpose of a specific inquiry or study. Such data are original in character and are mostly generated by surveys conducted by individuals or research institutions. The first-hand information obtained by the investigator is more reliable and accurate since the investigator can extract the correct information by removing doubts, if any, in the minds of the respondents regarding certain questions. High response rates might be obtained since the answers to various questions are obtained on the spot. It permits explanation of questions concerning difficult subject matter.

Methods of collecting primary data

**1-Direct personal investigation:** Under this method the investigator collects the data personally from the respondent. The person who collect the information is called the investigator and the person who gives the responses/answers the questions asked by the investigator is called a respondent. The data collected in this manner are therefore most reliable. However, there is a chance that the results are influenced by the personal bias and prejudice of the investigator.

**2-Indirect investigations:** Under this method the investigator obtains information indirectly from a third person who is expected to know facts about the person about whom the enquiry is done.

**3-Through correspondent:** Under this method correspondents or agents are appointed by the investigator to obtain data from various places. These correspondents are required to collect and pass the transmit information to the investigator or the central office. This method is widely used by newspaper offices.

**4-By mailed questionnaire:** Under this method a well-structured questionnaire is prepared and mailed to the respondent by post. The respondent after filling up the questionnaire send it back within the given time. However, this method can only be used when respondents are literate and can fill in the questionnaire.

**5-Through schedules:** Under this method the field workers are asked to go to the respondent with questions contained in the schedule. They collect the answers in their own hand writing and provide data to the investigator. This method is useful when the respondent is illiterate.

### **(b) Secondary data**

When an investigator uses data, which have already been collected by others, such data are called "Secondary Data". Such data are primary data for the agency that collected them, and become secondary for someone else who uses these data for his own purposes. The secondary data can be obtained from journals, reports, government publications, publications of professionals and research organizations.

Secondary data are less expensive to collect both in money and time. These data can also be better utilized and sometimes the quality of such data may be better because these might have been collected by persons who were specially trained for that purpose. On the other hand, such data must be used with great care, because such data may also be full of errors due to the fact that the purpose of the collection of the data by the primary agency may have been different from the purpose of the user of these secondary data. Secondly, there may have been bias introduced, the size of the sample may have been inadequate, or there may have been arithmetic or definition errors.

## **Sources of secondary data**

Secondary data may exist in the form of published or unpublished form. In its published form secondary data may be obtained from

- (a) Published reports of newspapers.
- (b) Publication from trade associations
- (c) Financial data reported in annual reports
- (d) Information from official publications
- (e) Others

In its unpublished form secondary data may exist as

- (a) Internal reports of the government departments
- (b) Records maintained by the institutions
- (c) Research reports prepared by students in the universities

## **Problems in gathering data**

It is important to recognize some of the main problems that may be faced when collecting data so that they can be addressed in the selection of appropriate collection methods and in the training of the staff involved

Language barriers

Lack of adequate time

Expense

Inadequately trained and experienced staff

Bias

Cultural norms (e.g. which may preclude men interviewing women)