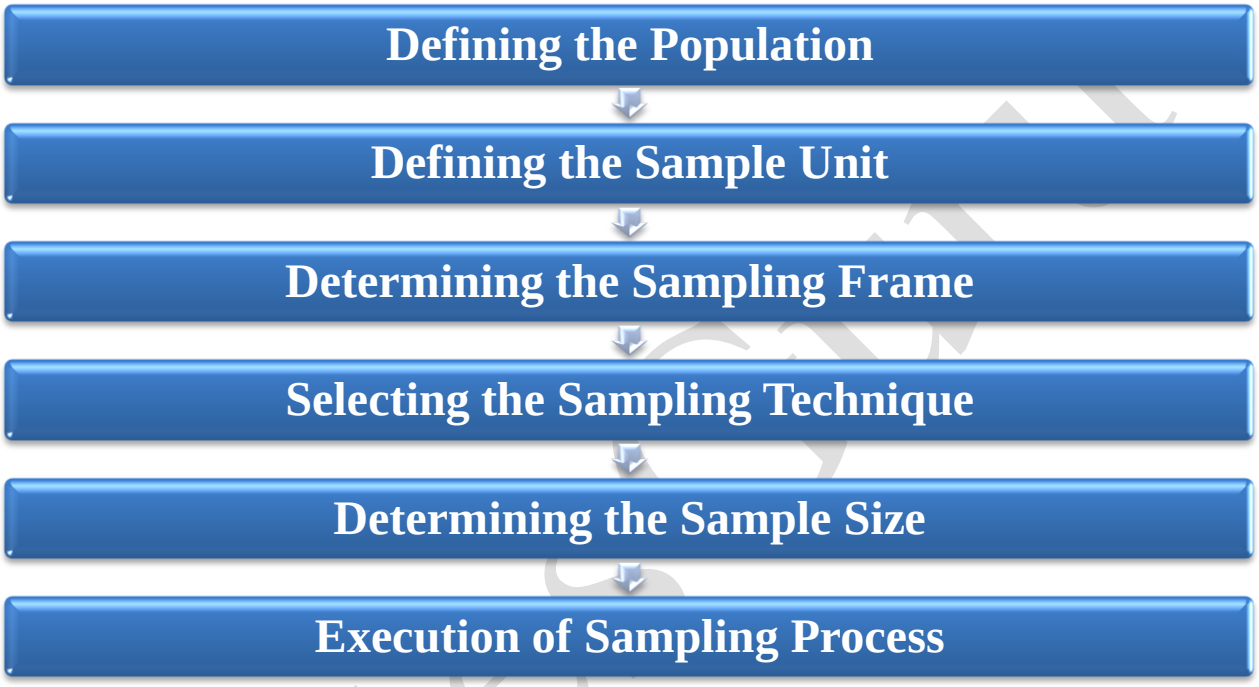
# Sampling Design

A sampling design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure; the business researchers would adopt to select units for the sample. Sampling design is determined before data are collected.




## 1. Defining the Population

The first step is the most critical step wherein a researcher has to give an operational definition for his relevant population. Population in the most common form implies the total number of individuals in the area of study from whom information is being sought, but depending on the nature of study the population can be events, workplaces etc. The members who possess the characteristics or information required by the researcher constitute target population.

## 2. Defining the Sample Unit

A consequence to the above point is defining the sample unit. The sampling unit is the person, place or object about which or from which the information is required for research e.g. in case of study conducted on newspaper readership an entire household could be a sampling unit. However, in case of study on brand preference of college students in Jeanswear every college going student is a sampling unit.

## 3. Determining the Sampling Frame

Also referred to as 'Source List' it is a comprehensive listing of all the members of a population e.g. a telephone directory is a good sampling frame, as association directory e.g. NASSCOM will have a listing of all the firms in the industry. If the sampling frame is not available, then the researcher needs to prepare the list. It may be possible that the source list does not cover all the elements of population. In that case sampling frame error enters our research which has to be accounted for in further analysis.

## 4. Selecting the Sampling Technique

The researcher must decide on the type of sample i.e. a probability or non-probability based sampling techniques. The decision as regard to the technique to be used is affected by the objectives of study, the level of accuracy desired, time and cost etc. The different sampling techniques available to a researcher are discussed in detail in the next section.

## 5. Determining the Sample Size

The million dollar question that faces the researcher is 'What sample size is needed?' A misconception is that a large sample size is a more representative sample. However there is no rigid rule that is used, although a formula does exist. A sample size is considered optimum if it fulfills the requirements of efficiency, representativeness, reliability and flexibility. Number of subjective factors like nature of population, nature of respondents, time and funds available, and sampling technique used etc. influence the decision on sample size.

## 6. Execution of Sampling Process

The last step involves working out the details of drawing a sample. Procedures for selecting each unit must be worked out. In case of non-response, the procedure to be adopted for filling the vacant unit should be stated clearly.