

Frequently Asked Questions

1. What do you mean by a sample design?

Answer:

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. A sample design may also lay down the number of items to be included in the sample. Sample design is determined before the data are collected.

There are many sample designs which a researcher can choose. Some designs are relatively more precise and easier to adopt than others. Researcher must select or prepare a design which should be reliable and appropriate for his research study.

2. What are the principal steps of a sample survey?

Answer:

The principal steps of a sample survey are:

- 1) Objectives of the survey
- 2) Definition of the population to be sampled
- 3) The frame and the Sampling Units
- 4) Data to be Collected
- 5) Tools for collection of information
- 6) Methods of collection of information
- 7) Selection of the proper sampling design
- 8) Organization of the field work
- 9) Pre Test (Pilot survey)
- 10) Summary and Analysis of the data
 - a) Scrutiny and editing of the data
 - b) Tabulation of data
 - c) Statistical Analysis
 - d) Reporting and Conclusion
- 11) Information gained for future surveys

3. Briefly explain the objectives or the goals of a survey.

Answer:

The first step in any survey is deciding what you want to learn. The goals of the project determine whom you will survey and what you will ask them. If your goals are unclear, the results will probably be unclear. Some typical goals include learning more about:

- The potential market for a new product or service
- Ratings of current products or services
- Employee attitudes
- Customer/patient satisfaction levels
- Reader/viewer/listener opinions
- Association member opinions
- Opinions about political candidates or issues
- Corporate images

These sample goals represent general areas. The more specific you can make your goals, the easier it will be to get usable answers.

Hence, the first step is to define in clear words about the objectives of the survey. Sometimes the sponsoring agents also will not know about the objectives of the survey like what it wants and How it is going to make use the results. But they should take utmost care so that their objectives should go along with the available resource interims of money, manpower and the time limit required for the completion of the survey.

4. Distinguish between a Frame and a sampling unit?

Answer:

The population under study must able to divide into some parts what are called as sampling units for the selection of the sample. Sampling units must cover the whole population and they must be distinct and non overlapping i.e., every unit of the population must belong to one and only one sampling unit. Sampling unit may be a geographical one such as state, district, village etc or a construction of a unit such as house, flat etc. or it may be a social unit such as family, club, school etc or it may be an individual. Frame can be defined as some list or map or other acceptable material which covers the population decided upon and which serves as a guide for the population to be covered. Since Frame is the one which determines the structure of the sample survey it has become one of the major practical problems.

5. Explain the points to be considered about the type of the data to be collected.

Answer:

There are two main components in determining whom you will interview. The first is deciding what kind of people to interview. Researchers often call this group the target population. If you conduct an employee attitude survey or an association membership survey, the population is obvious. If you are trying to determine the likely success of a product, the target population may be less obvious. Correctly determining the target population is critical. If you do not interview the right kinds of people, you will not successfully meet your goals. The next thing to decide is how many people you need to interview. Statisticians know that a small, representative sample will reflect the group from which it is drawn. The larger the sample, the more precisely it reflects the target group.

However, the rate of improvement in the precision decreases as your sample size increases. For example, to increase a sample from 250 to 1,000 only doubles the precision. You must make a decision about your sample size based on factors such as: time available, budget and necessary degree of precision. One should not collect too many data which are never examined and analyzed. In practical situation one can chalk out an outline of the table which would help us in eliminating the collection of irrelevant information.

6. Distinguish between a questionnaire and a schedule

Answer:

After deciding about the type of the data to be collected the next important part of the sample survey is the construction of the questionnaire which has to be filled by the respondents or a schedule which has to be completed by the investigator. A questionnaire consists of number of questions printed or typed in a definite order on a form or set of forms.

Hence, questionnaires and schedules both are the list of questions but respondents themselves fill the questionnaire whereas schedules are filled by either an enumerator or any individual who collects the information. Schedules mostly work out among the illiterate respondents. Hence a choice of the tool depends on the quality of the population units.

7. Write a note on a questionnaire.

Answer:

Questionnaire is quite popular in case of big enquiries. It is adopted by private and public organizations, research workers, individuals and even by the governments. A questionnaire consists of number of questions printed or typed in a definite order on a form or set of forms. Quite often questionnaire is considered as the heart of a survey operation. Hence it should be very carefully constructed. If it is not properly set up then the survey is bound to fail. This fact requires us to study the main aspects of questionnaire that is a general form, a question sequence and question formulation and wordings. This requires familiarity with the subject matter, skill and special techniques. The first rule is to design the questionnaire to fit the medium.

KISS - keep it short and simple. If you present a 20-page questionnaire most potential respondents will give up in horror before even starting. Ask yourself what you will do with the information from each question. If you cannot give yourself a satisfactory answer, leave it out.

Avoid the temptation to add a few more questions just because you are doing a questionnaire anyway. If necessary, place your questions into three groups: must know, useful to know and nice to know.

Start with an introduction or welcome in a cover page or on the questionnaire form itself. A good introduction or welcome message will encourage people to complete your questionnaire. Allow a "Don't Know" or "Not Applicable" response to all questions, except to those in which you are certain that all respondents will have a clear answer.

Sometimes "Don't Know" or "Not Applicable" will really represent some respondents' most honest answers to some of your questions. For example, many people will abandon a questionnaire that asks them to specify their income, without offering a "decline to state" choice. For the same reason, include "Other" or "None" whenever either of these is a logically possible answer. When the answer choices are a list of possible opinions, preferences, or behaviors, you should usually allow these answers. Hence, the questions should be clear, short such a way that there should not be any scope for guessing for both and also should not hurt the feelings of the respondents.

8. Briefly explain the Methods of collection of information.

Answer:

There are several methods for the collection of primary data particularly in surveys and descriptive researches. Some of them are:

- Observation method
- Interview method
- Through questionnaire
- Through schedule etc

Most popular methods of collection of information are:

- Mailed questionnaire
- Interview method

Any one of the above two methods can be adopted for collecting the information depending upon cost and time. Mailed method costs less but leads to considerable non response. This method will work out only among the educated persons. The method of collecting data by mailing the questionnaire to the respondents is most extensively employed in various economic and business surveys.

On the other hand interview method costs more and there will be an interviewer's error. For the successful implementation of the interview method interviewers should be carefully selected, trained and briefed. They should be honest, sincere, hardworking, and impartial and must possess the technical competence and the necessary practical experience. In fact interviewing is an art governed by certain scientific principles. Sometimes data can't be collected for all the sampled units. For eg: The selected respondent may not be available or they may fail or even refuse to provide information to the investigator when they are contacted. This incompleteness called non response which will tend to change in results which have to be handled with great care in order to draw valid conclusions.

9. What do you mean by a Pre-test?

Answer:

The last step in questionnaire design is to test a questionnaire with a small number of interviews before conducting your main interviews. Before a survey is committed to the field the various procedures and designs of the survey should be tested.

Ideally, one should test the survey on the same kinds of people whom we include in the main study. If that is not possible, at least have a few people, other than the question writer, try the questionnaire. This kind of test run can reveal unanticipated problems with question wording, instructions to skip questions, etc. It can help us to find out if the interviewees understand our questions and give useful answers.

Pilot surveys are the procedures that are used to test and refine the survey before it is actually fielded. Small Pre-test (Testing the questionnaire and field methods on a small scale) is very useful. It always helps to decide upon the effective method of asking questions and in improving the questionnaire. It discloses certain problems and troubles that will be very serious on the large scale.

10. What are the different stages of Analysis of data?

Answer:

The analysis may be broadly classified as:

- i. Scrutiny and editing of the data
- ii. Tabulation of data
- iii. Statistical Analysis
- iv. Reporting and Conclusion

11. Briefly explain the principal findings of a sample survey.

Answer:

Different methods of estimation are available for the same data. Appropriate formula must be used to provide the final estimates of the required information.

Most surveys have a key requirement, the need to be representative of the population of interest. In fact there are two major areas of Statistics they are 1) Descriptive Statistics and 2) Inferential Statistics.

Descriptive statistics are concerned with the development of certain indices from the raw data whereas the inferential statistics concerns with the process of generalization.

Inferential statistics are also known as sampling statistics and are mainly concerned with two major types of problems i) Estimation of population parameters and ii) The testing of Statistical hypothesis. The important statistical measures that are used to summarize the survey data are:

- 1) Measures of central tendency or averages
- 2) Measures of dispersion
- 3) Measures of asymmetry(skewness)
- 4) Measures of relationship and others

In statistical terms the representativeness can be defined in the following ways:

- Sample means are statistically no different from the population means
- Sample variances are statistically no different from the population variances etc

Results are organized into categories in tables, charts, graphs, maps, and/or other written forms making appropriate calculations (e.g. total growth, distances, total number observed).· Analyze Data to Look for Patterns and Trends—Populations are estimated; means, modes, medians, t-values and r-values are calculated; graphs, tables, or maps are analyzed for patterns; data are compared to standards.

12. What do you mean by a selection of the proper sampling design?

Answer:

The size of the sample, the procedure for selection of the sample and estimation of population parameters along with the margin of error are some of the important statistical problems that should receive most of our attention. A number of designs for the selection of the sample are available and one has to select judiciously which will guarantee reliable estimates.

13. Distinguish between. Mailed questionnaire and Interview method.

Answer:

Interview method:

Investigator goes from house to house and interviews the individual's personally. He fills up the schedule in accordance with the answers provided by the respondents.

Mailed Questionnaire Method:

In which a questionnaire is posted to the individuals who are required to fill up and return after completing in a specified time.

14. What are the various types of interviewing techniques? Explain

Answer:

Personal Interviews

An interview is called personal when the Interviewer asks the questions face-to-face with the Interviewee. Personal interviews can take place in the home, at a shopping mall, on the street, outside a movie theatre or polling place, and so on.

Telephone Surveys

Surveying by telephone is the most popular interviewing method in the USA. This is made possible by nearly universal coverage (96% of homes have a telephone).

Mail Surveys

One way of improving response rates to mail surveys is to mail a postcard telling your sample to watch for a questionnaire in the next week or two. Another is to follow up a questionnaire mailing after a couple of weeks with a card asking people to return the questionnaire. The downside is that this doubles or triples your mailing cost. If you have purchased a mailing list from a supplier, you may also have to pay a second (and third) use fee - you often cannot buy the list once and re-use it.

Another way to increase responses to mail surveys is to use an incentive. One possibility is to send a dollar bill (or more) along with the survey (or offer to donate the dollar to a charity specified by the respondent). If you do so, be sure to say that the dollar is a way of saying "thanks," rather than payment for their time. Many people will consider their time worth more than a dollar. Another possibility is to include the people who return completed surveys in a drawing for a prize. A third is to offer a copy of the (non-confidential) result highlights to those who complete the questionnaire. Any of these techniques will increase the response rates.

Computer Direct Interviews

These are interviews in which the Interviewees enter their own answers directly into a computer. They can be used at malls, trade shows, offices, and so on.

Email Surveys

Email surveys are both very economical and very fast. More people have email than have full Internet access. This makes email a better choice than a Web page survey for some populations. On the other hand, email surveys are limited to simple questionnaires, whereas Web page surveys can include complex logic.

Internet/Intranet (Web Page) Surveys

Web surveys are rapidly gaining popularity. They have major speed, cost, and flexibility advantages, but also significant sampling limitations. These limitations make software selection especially important and restrict the groups you can study using this technique.

At this stage we recommend using the Internet for surveys mainly when your target population consists entirely or almost entirely of Internet users. Business-to-business research and employee attitude surveys can often meet this requirement.

15. Briefly describe the essentials of a good frame.

Answer:

Frame is the one which determines the structure of the sample survey it has become one of the major practical problems.

A frame which has been already prepared for some other purpose has to be scrutinized

and should be checked to see that it is free from all sort of defect like unknown amount of duplication and should be brought up-to-date before using them. A good experience helps in constructing a good frame.

A Frame should be comprehensive, correct, reliable and appropriate. It is extremely important for the frame to be as representative of the population as possible. Hence, utmost care should be taken while constructing a frame regarding the size and shape of the population under consideration.