

Course: 07

The choice of methodological tools and data collection techniques

Basing yourself on good data is essential for making strategic decisions. To obtain accurate and useful data, you need the right tools, as well as reliable and appropriate data collection methods. Field data collection consists of collecting information to assess the state of a situation through field visits. This is generally done using a pre-written survey questionnaire administered by prospect collection agents. Furthermore, this data collection process is very useful for identifying problems on the ground and implementing the right strategies and policies to resolve them. Different types of data Before talking about data collection methods, we will look at the two types of data.

These are:

*** Qualitative data**

***Quantitative data**

To launch any data collection operation, you must first determine the type of data to be collected which is qualitative, quantitative or mixed. Collection of quantitative or qualitative data ;Quantitative data collection aims to collect quantifiable numerical data (quantities and types, etc.).

Qualitative inquiry, on the other hand, is most often done to obtain opinions on a certain topic or to provide additional clarification through open-ended questions.

Data collection methods Qualitative research methods

***IN-DEPTH INTERVIEWS** With these in-depth interviews, you collect as much information using open-ended questions asked directly to people. These face-to-face interviews are sometimes long and expensive, but you will have a very high response rate.

***ADVANCED OBSERVATIONS**

Sometimes, experts are called upon to make in-depth observations and provide comments based on their expertise.

Example: the condition of equipment, an expert will be able to give more details on the causes of the malfunction. Quantitative research methods

***SURVEYS WITH CLOSED QUESTIONS**

Well-structured and standardized questionnaires allow you to minimize the risk of inaccurate or unnecessary data by making it easier for respondents to respond. **TESTS OR EXPERIMENTS**

Measuring the number of people who passed a test or answered a question (or set of questions) adequately is another way of collecting quantitative data. You may collect information such as participants' age, employment status, education level, etc. when you conduct tests or experiments.

SURVEYS

Surveys are another effective method for collecting data. They can be conducted online, over the phone or in person. Telephone surveys are cost-effective and less time-consuming than face-to-face interviews. However, the response rate to telephone surveys is lower. Online surveys are less expensive and can be sent to large numbers of people.

OBSERVING, COUNTING AND RECORDING WELL-DEFINED EVENTS

Observing, counting and recording is another simple method used to determine the number of certain events or items. For example, counting the number of

vehicles on a road. Data collection tools Data is collected in different ways.

PAPER FORMS

The paper form is a physical questionnaire traditionally used for data collection. This method is still used, but it is gradually disappearing in favor of collections using digital tools. The response rate of the paper questionnaire and the accuracy of the data collected are relatively low compared to applications which generally have mandatory response fields with passing conditions and integrated controls.

ONLINE QUESTIONNAIRES

Online surveys are cheaper and faster data collection tools. They allow you to have real-time results for easy and quick analysis. On the other hand, even this method offers you the possibility of interacting directly with your target and has limits. Among other things, we can list that only people with access to computers and the Internet will be able to respond to the survey. Obviously, you can find tools like Survey Monkey, Google Form, etc.

DATA COLLECTION ON MOBILE APPLICATIONS

This method has become increasingly popular in recent years. Mobile apps are more popular because they offer innovative ways to collect and manage data. You will spend less time collecting data using mobile data collection apps. Additionally, errors will be significantly reduced and you will be able to collect rich data types such as photos, videos, GPS coordinates, etc. Compared to online surveys, mobile surveys are also easier to manage and more versatile, as they allow respondents to use their smartphone to send photos, audio recordings or take notes.