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**Methods used for quantitative data collection**

A data that can be counted or expressed in numerical constitute the quantitative data. It is commonly used to study the events or levels of concurrence. And is collected through a structured questionnaire asking questions starting with “how much” or “how many.” As the quantitative data is numerical, it represents both definitive and objective data. Furthermore, quantitative information is much sorted for statistical and mathematical analysis, making it possible to illustrate it in the form of charts and graphs.

**Probability sampling**

A definitive method of sampling carried out by utilizing some form of *random selection* and enabling researchers to make a probability statement based on data collected at random from the targeted demographic. One of the best things about probability sampling is it allows researchers to collect the data from representatives of the population they are interested in studying.

There are three significant types of probability sampling

* **Simple random sampling:** More often, the targeted demographic is chosen for inclusion in the sample.
* **Systematic random sampling:** Any of the targeted demographic would be included in the sample, but only the first unit for inclusion in the sample is selected randomly, rest are selected in the ordered fashion as if one out of every ten people on the list.
* **Stratified random sampling:** It allows selecting each unit from a particular group of the targeted audience while creating a sample. It is useful when the researchers are selective about including a specific set of people in the sample, i.e., only males or females, managers or executives, people working within a particular industry.

**Interviews**

Interviewing people is a standard method used for data collection.However, the interviews conducted to collect quantitative data are more structured, wherein the researchers ask only a standard set of questionnaires and nothing more than that. They are three major types of interview: telephone, face-to-face and computer assisted personal interviewing.

* **Surveys/questionnaires**

Surveys or questionnaires created using online survey software are playing a pivotal role in online data collection be is quantitative or qualitative research. The surveys are designed in a manner to legitimize the behavior and trust of the respondents. More often, checklists and rating scale type of questions make the bulk of quantitative surveys as it helps in simplifying and quantifying the attitude or behavior of the respondents.

There are two significant types of survey questionnaires used to collect online data for quantitative market research.

* **Web-based questionnaire**: This is one of the ruling and most trusted methods for internet-based research or online research.
* **Mail Questionnaire:** In a mail questionnaire, the survey is mailed out to a host of the sample population, enabling the researcher to connect with a wide range of audiences.

**Observation**

As the name suggests, it is a pretty simple and straightforward method of collecting quantitative data. In this method, researchers collect quantitative data through systematic observations by using techniques like counting the number of people present at the specific event at a particular time and a particular venue or number of people attending the event in a designated place. More often, for quantitative data collection, the researchers have a naturalistic observation approach that needs keen observation skills and senses for getting the numerical data about the “what” and not about “why” and ”how.”

**Document Review**

Document review is a process used to collect data after reviewing the existing documents. It is an efficient and effective way of gathering data as documents are manageable and are the practical resource to get qualified data from the past. Document review has emerged as one of the beneficial methods to gather quantitative research data.

Three primary document types are being analyzed for collecting supporting quantitative research data

* **Public Records**
* **Personal Documents**
* **Physical Evidence**

**Methods used for qualitative data collection**

Qualitative data collection methods are exploratory, and they are usually more focused on gaining insights and understanding the underlying reasons by digging deeper. Although quantitative data cannot be quantified, measuring it or analyzing it might become an issue. Due to the lack of measurability, qualitative data collection methods are primarily unstructured or structured in rare cases – that too to some extent.

Let’s explore the most common methods used for qualitative data collection

**Individual interview:**

It is one of the most trusted, widely used, and most familiar qualitative data collection methods primarily because of its approach. An individual or a face-to-face interview is a direct conversation between two people that has a specific structure and purpose.

At times, depending on the approach of the interviewer, the conversation can be unstructured or informal but focused on understanding the individual’s beliefs, values, understandings, feelings, experiences, and perspectives of an issue. More often, the interviewer chooses to ask open-ended questions in individual interviews. It’s because, if the interviewee selects answers from a set of given options, it becomes a structured, fixed response, or a biased interview.

The individual interview is an ideal qualitative data collection method. Particularly, when the researchers want highly personalized information from the participants. The individual interview is a notable method if the interviewer decides to probe further and ask follow-up questions to gain more insights.

**Qualitative surveys:**

To develop an informed hypothesis, many researchers use qualitative surveys for qualitative data collection or to collect a piece of detailed information about a product or an issue. If you want to create surveys for collecting textual or qualitative data, then ask more open-ended questions. To answer such questions, the respondent has to write his/her opinion or point of view concerning a specific topic or issue. Unlike other qualitative data collection methods, online surveys have a wider reach wherein a large number of people can provide you quality data that is highly credible and valuable.

**Paper surveys**

The paper questionnaires are frequently used for qualitative data collection from the participants. The questionnaire consists of short text questions, which are often open-ended. The motive of these questions is to collect as much detailed information as possible in respondents own words. More often, the survey questionnaires are designed to collect standardized data hence used at the time of collecting responses from a larger population or large sample size.

**Online surveys**

An online survey or a web survey is prepared using a prominent online survey software and either uploaded in a website or emailed to the selected sample size with a motive to collect reliable online data. Instead of writing down responses, the respondents use computers and keyboards to type their answers. With an online survey questionnaire, it becomes easier and smoother to collect qualitative data.

**Focus group discussions:**

Focus group discussions can also be considered as a type of interview but it is conducted in a group discussion setting. Usually, the focus group consists of 8 – 10 people (the size may vary depending on the researcher’s requirement). The researchers ensure appropriate space is given to the participants to discuss a topic or issue in a context. The participants are allowed to either agree or disagree with each other’s comments.

With a focused group discussion, researchers get to know how a particular group of participants perceives the topic. Researchers analyze what participants think of an issue, the range of opinions expressed, and ideas discussed. The data is collected by noting down the variations or inconsistencies (if any exists) in the participants, especially in terms of belief, experiences, and practice.

**Observations:**

Observation is one of the traditional qualitative data collection method used by researchers to gather descriptive text data by watching or observing the people and their behavior at events or in their natural settings. In this method, the researcher is completely immersed in watching or observing people by taking a participatory stance to take down notes. Aside from taking notes, these days, different methods such as videos, photographs, audio recordings, tangible items like artifacts, mementos are also be used.

There are two main types of observation:

Covert: In this method, the observer is concealed without letting anyone know that they are being observed.

Overt: In this method, everyone is aware that they are being observed.