RESEARCH ARTICLE

A Review on Primary Sources of Data and Secondary Sources of Data

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ABSTRACT

The paper discussed sources of data. Data is a set of values of qualitative or quantitative variables. Data is facts or figures from which conclusions can be drawn. Before one can present and interpret information, there has to be a process of gathering and sorting data. Just as trees are the raw material from which paper is produced, so too, can data be viewed as the raw material from which information is obtained. It is evident from the review discussion that primary data is an original and unique data, which is directly collected by the researcher from a source such as observations, surveys, questionnaires, case studies and interviews according to his requirements

Keywords: Data, Primary sources of data, Secondary sources of data.

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I. INTRODUCTION

Data is a set of values of qualitative or quantitative variables. Data is facts or figures from which conclusions can be drawn. Before one can present and interpret information, there has to be a process of gathering and sorting data. Just as trees are the raw material from which paper is produced, so too, can data be viewed as the raw material from which information is obtained (Ajayi, 2017). Data as a general concept refers to the fact that some existing information or knowledge is represented or coded in some form suitable for better usage or processing. Data is collected and analyzed; data only becomes information suitable for making decision in some fashion. Gathering data can be accomplished through a primary source (researcher is the first person to obtain the data) or a secondary source (the researcher obtains the data that has already been collected by other sources, such as data disseminated in a scientific journal) (Ajayi, 2017).

Difference between primary data and secondary data

Data collection plays a very crucial role in the statistical analysis. In research, there are different methods used to gather information, all of which fall into two categories, i.e. primary and secondary data (Douglas, 2015). As the name suggests, primary data is one which is collected for the first time by the researcher while secondary data is the data already collected or produced by others. There are many differences between primary and secondary data, which are discussed in this work. But the most important difference is that primary data is factual and original where as secondary data is just the analysis and interpretation of the primary data. While primary data is collected with an aim for getting solution to the problem at hand, secondary data is collected for other purposes. The fundamental differences between primary and secondary data are; the term primary data refers to the data originated by the researcher for the first time while secondary data is the already existing data collected by the investigator agencies and organisations earlier. Primary data is a real-time data whereas secondary data is one which relates to the past (Mesly, 2015). Primary data is collected for addressing the problem at hand while secondary data is collected for purposes other than the problem at hand. Primary data collection is a very involved process. On the other hand, secondary data collection process is rapid and easy. Primary data sources include surveys, observations, experiments, questionnaire, personal interview etc. on the other contrary, secondary data collection sources are government publications, websites, books, journal articles, internal records and so on.

Comparison between Primary Data and Secondary Data

	Basis for Comparison	Primary Data	Secondary Data
1.	Meaning	Primary data refers to the first hand data gathered by the researcher himself.	Secondary data means data collected by someone else earlier.
2.	Data	Real time data	Past data
3.	Process	Very involved	Quick and easy
4.	Sources	Surveys, personal interview experiments, observations, questionnaire, etc.	Government publications, websites, books, journal articles, internal records etc.
5.	Cost effectiveness	Expensive	Economical
6.	Collection time	Long	Short
7.	Specific	Always specific to the researcher's needs	May or may not be specific to the researcher's need
8.	Available	Crude form	Refined form
9.	Accuracy and Reliability	More	Relatively

Sources of Primary Data

Primary data refer to the firsthand data gathered by the researcher himself. Some sources of primary data are surveys, observations, questionnaires, focus groups, case study and interviews as highlighted:

i. **Survey:** Survey method is one of the primary sources of data which is used to collect quantitative information about items in a population. Surveys are used in different areas for collecting the data even in public and private sectors. A survey may be conducted in the field by the researcher. The respondents are contacted by the research person personally, telephonically or through mail. This method takes a lot of time, efforts and money but the data collected are of high accuracy, current and relevant to the topic. When the questions are administered by a researcher, the survey is called a structured interview or a researcher administered survey.

ii. **Observations**: Is one of the primary sources of data. Observation is a technique for obtaining information involves measuring variables or gathering of data necessary for measuring the variable under investigation. Observation is defined as accurate watching and noting of phenomena as they occur in nature with regards to cause-and-effect relation.

iii. **Questionnaires**: Questionnaire as one of the primary sources of data is an observational technique which comprises series of items presented to a respondent in a written form, in which the individual is expected to respond in writing. Here the respondents are given list of written items which he responds to by ticking the one he considers appropriate.

iv. **Focus Groups:** It explores a topic in depth through group discussion.

v. **Case Study:** Understand an experience or conduct comprehensive examination through cross comparison of cases.

vi. **Interview**: Interviewing is a technique that is primarily used to gain an understanding of the underlying reasons and motivations for people's attitudes, preferences or behaviour. Interviews can be undertaken on a personal one-to-one basis or in a group.

Source of Secondary Data

Secondary sources mean data collected by someone else earlier. Secondary data are the data collected by a party not related to the research study but collected these data for

some other purpose and at different time in the past. If the researcher uses these data then these become secondary data for the current users. Sources of secondary data are government publications websites, books, journal articles, internal records.

Conclusion

It is evident from the above discussion that primary data is an original and unique data, which is directly collected by the researcher from a source such as observations, surveys, questionnaires, case studies and interviews according to his requirements. As opposed to secondary data which is easily accessible but are not pure as they have undergone through many statistical treatments. Some sources of secondary data are government publications, websites, books, journal articles and internal records.

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