

Qualitative and quantitative research

Quantitative research

Quantitative research refers to collecting numerical data or information that can be counted. Surveys and observations allow for easy collection of quantitative data. It is normal for surveys to ask closed or multiple-choice questions so that their results can be analysed easily. These questions might be related to price, income and quantities purchased. Secondary research methods, such as government population statistics or market analysis reports, are also excellent sources of quantitative data.

Making connections

In Subtopic 5.9 (/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-39043) you will learn about management information systems, including quantitative research using big data. Big data is a term that describes very large data sets. Proliferation and usage of massive amounts of data has led to an ability to analyse and make financial decisions rapidly with the use of technology.

An example of this is algorithmic stock trading, where computers can execute trades at speeds much faster than humans. Another example is when a doctor may use a patient's personal data in conjunction with other background data to arrive at an accurate diagnosis and treatment plan.

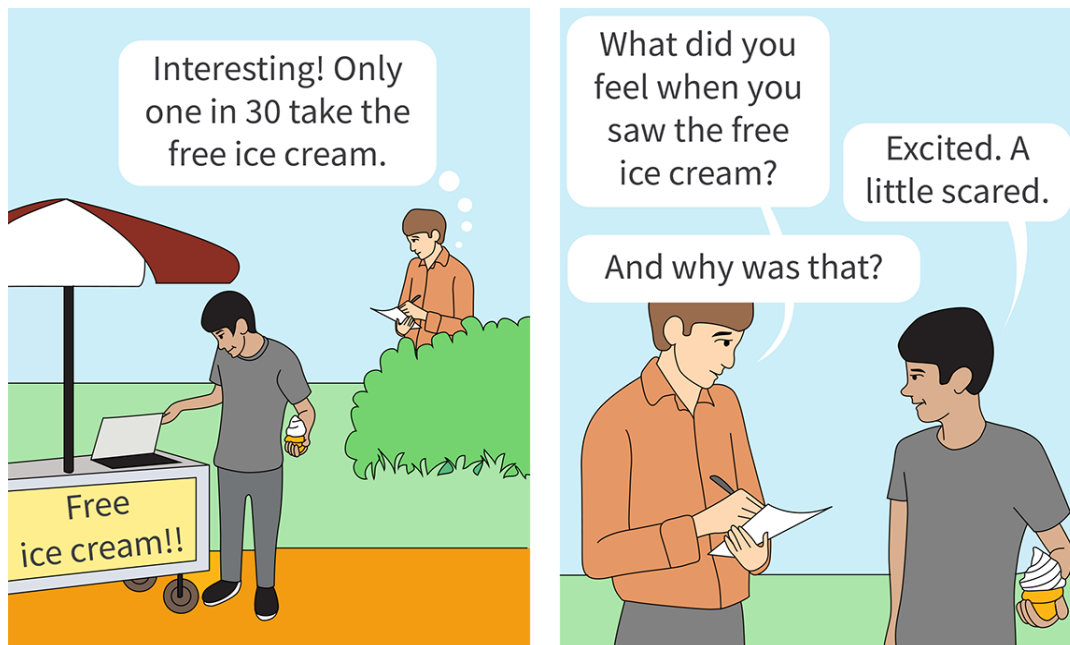


Figure 1. Using both quantitative and qualitative research.

Qualitative research

Qualitative research involves collecting non-numerical data, such as opinions. In qualitative research, the key question asked is 'Why?' For example, a participant might be asked why they would select a particular brand over its rival, or why they like or dislike a new advertising campaign.

Qualitative research may, for example, involve finding out which clothing colours sell better to different groups. More complicated information might include how people respond to shop layouts or advertisements, or how they rate the quality of the product versus the price. Conducting surveys by interviewing people or hosting focus groups, or even by simply listening in on customer service calls, will provide this information more easily.



Figure 2. Qualitative research aims to find non-numerical data, such as opinions on products.

Credit: Jill Giardino, Getty Images

Blending quantitative and qualitative research

One key difference between quantitative and qualitative research is their sample sizes. Quantitative research will seek to gather a relatively small amount of information from a large number of respondents. Qualitative research is the opposite; sample sizes are smaller, but much more information is gathered from each respondent.

Many research projects will use both qualitative and quantitative data. The mix will be decided by financial and time constraints, as well as by the objectives of the research. When choosing between qualitative and quantitative data, the key question researchers must ask themselves is, which is more important for their research: quality or quantity? Large businesses will be happy to conduct expensive qualitative research when they are about to take a big risk, such as developing a new product. It would be important to know whether the product will actually sell, so high quality and detailed information must be collected.

Theory of Knowledge

Read this article on [how Facebook collects quantitative and qualitative data](https://www.forbes.com/sites/kateoflahertyuk/2021/05/08/all-the-ways-facebook-tracks-you-and-how-to-stop-it/?sh=2b2e4cd55836) (<https://www.forbes.com/sites/kateoflahertyuk/2021/05/08/all-the-ways-facebook-tracks-you-and-how-to-stop-it/?sh=2b2e4cd55836>) on its users to build a complete consumer profile.

Answer the following question:

- Can companies know us better than we know ourselves?