

---

# Chapter 9. Case Studies

## Table of Contents

What is a case study? .....	1
How many cases are needed? .....	1
Research techniques used in case studies .....	1
Preparing for a case study .....	1

## What is a case study?

A case study attempts to understand an issue within the restricted context of a real-life situation. It is not created for research purposes, but is taking place independently, though it can be modified if necessary to fit the research project. A case study can be relatively easily organized at a place where the researcher has some connection — their work, community or sports organization, a local business or school, etc. A case study should be conducted in good faith — participants must agree beforehand to their involvement, which should be clearly defined and agreed upon at the outset. Some case studies are exploratory, others are structured from the outset to obtain answers to specific questions or test a particular hypothesis. The best way to get an appreciation of what a case study involves is to read some examples.

## How many cases are needed?

Where possible, it is better to conduct two or three case studies so that comparisons and generalizations become feasible. These should be selected according to the hypothesis being tested. For example if the hypothesis is that  $\langle X \rangle$  causes  $\langle Y \rangle$ , then cases having  $\langle X \rangle$  as well as cases not having  $\langle X \rangle$  must be chosen, and also cases where  $\langle Y \rangle$  does not hold, in addition to one or more randomly selected cases. A single case study is most useful if it is an extreme case, or has one or more unique characteristics that are interesting in their own right.

## Research techniques used in case studies

A case study enables far more detailed and customized data and observations to be obtained than surveys, interviews and experiments involving a sizeable number of participants. A range of techniques can be applied to the same situation — system measurements, questionnaires, interviews, audio/video recordings, and observations — and each can be geared to the specific case rather than the topic in general. Furthermore, the researcher can vary over time from being a hidden observer to being a direct participant, and thus gain first-hand experience of the phenomenon being studied in a real-life situation. The research output should be available for participants to scrutinize as it is developed, and discussion of any problems should be encouraged.

Using a case study in research requires accurate presentation of events, behaviour and perceptions; and obtaining a good understanding of the case as a whole, without omitting any aspects, in order to gain a proper and complete grasp of the reality. The findings of a case study are highly subjective, and researchers should be open about their views when they present their work.

## Preparing for a case study

Case studies tend to generate question after question, in an unpredictable way, and hence some sort of framework is needed to control this phenomenon. This can be done by considering basic questions about the case: what is it about, how does it work, why does it work like this?

A project plan should be drawn up at the start of a case study, to indicate precisely what is being studied and how it will be measured.

The project plan should document the questions being investigated or hypothesis being tested, the processes involved, the observations needed, the qualitative and quantitative data to be collected, the analysis to be performed [Yin]. Predicted outcomes should be documented for subsequent comparison against actual results and observations; preferably a number of different predictions should be recorded — those fitting the theory, model or argument being advanced by the research, and those fitting existing theories and beliefs. It makes no sense to devise a theory, model or argument after the case study is complete, since hindsight is an exact science — naturally your “predictions” will then fit observations, and nothing will be learnt. If results do not match expectations, or only in part, then consider revising the theory/model/argument and conducting a second/additional study.

For an exploratory study, the aspects of the system being investigated, and the events and behaviour of interest must be decided beforehand, but researchers must prepare to change focus as issues emerge

**References:** R.K. Yin. Case Study Research: Design and Methods (2nd ed) . Sage:1994.