case study

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Definition and Objectives

A case study is a research method that involves the documented history and comprehensive analysis of a situation concerning subjects such as industries, organizations, and markets. The distinguishing factor of the case-study methodology is that it aims to bring out unique characteristics and interesting differences in the situation under observation. The case-study approach is typically used for *idiographic* research, which means it focuses on atypical circumstances and distinctive outcomes as a subjective phenomenon. Another application of case studies is for *nomothetic* research aimed at building new theory, typically through the analysis of multiple cases and large sets of data within each case.

Types of Case Studies

The nature of the case-study sample is driven by the type of situation under investigation, which will determine the industries, companies, events, and time frames to be selected. The rationale for selecting a case study revolves around identifying events that stand out from the norm. The critical element in the design of case study research is that it does not attempt to provide a "sample of one" that represents the norm, but attempts to present insights on unusual and innovative events in a particular situation. This approach is inherent of idiographic objectives, typical of research in the humanities, and diametrically opposed to the nomothetic approach in natural sciences (where the sample has to be representative of the total population, the findings should be generalizable to other samples, and the results point toward a common rule or law of behavior).

The main types of case studies are as follows:

- *Unique case*. The basis for the selection of this case is that it is exceptional or unusual in its own right, without a critical comparison to an expected norm.
- *Revelatory case*. In this case study, the research has access to information to a new phenomenon that was previously out of reach of academic investigation. This research used to be typical of emerging markets in earlier decades, when academia started to document industry structures and philosophies, which were new to the western cultures.
- *Critical instance case*. The case is selected on the grounds that it may provide an exception to a well-established theory.
- *Cumulative longitudinal case*. This type of case is appropriate when the researcher follows a subject over a long period of time, usually over years or decades. Longitudinal observations allow researchers to identify long-term from short-term phenomena. The case may be designed to observe a situation over a future period of time through a fixed panel or a cohort of subjects. A retrospective case study is a longitudinal study that looks back in time.
- *Comparative case*. The methodology can cover more than one situation or more than one firm to allow for a comparative analysis. Multiple cases help to maximize variation in the sample and ensure better opportunities for the comparison of findings. The comparison across cases relies on variability in context and on consistency in process and outcomes using the logic of theoretical replication. A benefit of multiple-case studies is that they are generally considered to strengthen or broaden analytic generalizations.

Another type of case is the "representative" case study, where the sample is meant to be typical of the scenario under observation. This type of case study is often selected by inexperienced researchers who fall into the trap of selecting a "sample of one" to describe a common phenomenon. The representative case study falls under considerable criticism because of the lack of rigor in the research design at the sampling level and the difficulty to prove that the case study is truly representative and generalizable to the whole population.

Data Collection and Analysis

Rich case studies employ both qualitative and quantitative data.

Wiley Encyclopedia of Management, edited by Professor Sir Cary L Cooper.

Qualitative information is collected from industry publications, company documentation, open-ended interviews and surveys, structured observation, focus groups, and participant observation. In case-study methodologies that deploy qualitative data, an *inductive* approach is required to link research results and theory. The researcher moves from an open set of observations to the identification of subjective theory. The researcher begins with a wide range of qualitative information and moves toward detecting interesting patterns and irregularities, which are specific to the case, and which may contradict established theory.

Quantitative data are derived from industry statistics, company reports, economic data, and longitudinal surveys. When quantitative data are collected and analyzed, the case study would tend to have a *deductive* approach toward research findings and theory. This time theory drives the data collection and the data analysis. The information collected is determined by a predefined set of research questions. The analysis of the results revolves around proving or disproving a hypothesis or testing the assumptions inherent to the research questions.

The analysis of the case study as a whole is a complex task, particularly when qualitative results are merged with quantitative results. As the aim of the case study is to extract interesting differences from the norm, the scope is to seek out patterns and variation. Other forms of pattern matching can occur within the case, particularly when the sample includes several companies. Pattern matching can be guided by seeking expected outcomes and explanations that rival existing theory. The case study is analyzed through the identification of causal links within the case. The process is iterative. It starts with the initial theoretical statement and follows with the comparison of findings, comparison to other cases, and revision of the theoretical statements.

Critique of Case Studies

The strong point of case studies is the depth of analysis that they offer. The narratives in case studies offer detailed, rich descriptions of situations and their context. The merits of the methodology also imply a corresponding limitation. Single-case research designs are very often unrepresentative and fail to implement the rigor required to depict the uniqueness of a situation or a prevailing common behavior. Novice researchers often fall into this trap.

More experienced researchers have shown that multiple-case methodologies can be used to build theory via replications logic. Each case serves as a separate experiment that stands on its own as a discrete unit of analysis. Multiple cases can be viewed as distinct experiments, very much like a series of laboratory experiments, which meet the criteria of reliability and generalizability of emerging theory. An added benefit of case studies over laboratory experiments is that cases look at phenomena within the context that they occur, while experiments collect data in sterile research environments. Theory building in multiple, comparative case studies occurs through an iterative analysis of qualitative and quantitative data. The quantitative data may be extensive and move the methodology out of the limitations of objective research and into the area of subjective analysis. When theory building through cases is well executed, the methodology can become rigorously objective because of the rich data sets, the context-specific scenarios, and the rich narratives surrounding the phenomena under observation.

Bibliography

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