

An Overview of Case Study¹

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The use of case studies is of growing interest to agricultural economists. They are aware of case studies because their colleagues teaching agribusiness management have been using them for many years but they are primarily interested in them as a fresh research methodology that might let them explore problems which they have not been able to address very well with their traditional methodologies. Moving beyond awareness of the case method to using the case method requires a deeper understanding of it.

My purpose here is to help develop such an understanding of the case method. I do so by dealing with four topics that I think are fundamental to appreciating it. I start by examining the nature of case study. I provide a clearer sense of what is meant by a case study and hence what work is required to produce one. Second I consider the role of theory in case study. Some see the case study as an approach used when developing theory while others see it as an approach for examining the place of theory. Third I describe the difference between research and teaching cases. This is important because some see the two types as fundamentally different while others see them as similar. Having done this I present three important features of qualitative methodology. I do so for those who are unfamiliar with this style of research. It is considerably different from the quantitative methodology commonly used by agricultural economists and thus easily dismissed as lacking scholarly merit. On appreciating the differences, one can see that it has equivalent scholarly merit and opens up new avenues for research and teaching. This paper concludes with a set of references that you can use to explore the case method and qualitative research in greater detail.

1. What Case Study is

Different forms of qualitative traditions exist and the design of research within each has distinct features (Cresswell, 98). Case study is but one qualitative methodology, the output of which is the case study.

Definition of a Case Study

A case study is a holistic inquiry that investigates a contemporary phenomenon within its natural setting. Specifying particular terms in greater detail:

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- The **phenomenon** can be many different things: a program, an event, an activity, a problem or an individual(s).
- The **natural setting** is the context within which this phenomenon appears. Context is included because contextual conditions are considered highly pertinent to the phenomenon being studied either because many factors in the setting impinge on the phenomenon or because the separation between the phenomenon and the context is not clearly evident.
- The phenomenon and setting are a bound system; that is, there are limits on what is considered relevant or workable. The boundaries are set in terms of time, place, events, and processes.
- **Holistic inquiry** involves collection of in-depth and detailed data that are rich in content and involve multiple sources of information including direct observation, participant observations, interviews, audio-visual material, documents, reports and physical artifacts. The multiple sources of information provide the wide array of information needed to provide an in-depth picture.

Different types of cases

Case studies can deal with either single or multiple cases. There are two types of single case study: the intrinsic and the instrumental. The **intrinsic case study** is done to learn about a unique phenomenon which the study focuses on. The researcher needs to be able to define the uniqueness of this phenomenon which distinguishes it from all others; possibly based on a collection of features or the sequence of events. The **instrumental case study** is done to provide a general understanding of a phenomenon using a particular case. The case chosen can be a typical case although an unusual case may help illustrate matters overlooked in a typical case because they are subtler there. Thus a good instrumental case does not depend on the researcher being able to defend its typicality though the researcher needs to provide a rationale for using a particular case.

The **collective case study** is done to provide a general understanding using a number of instrumental case studies that either occur on the same site or come from multiple sites. Yin (1999) has described these as analytical generalizations as opposed to statistical generalizations. When multiple cases are used, a typical format is to provide detailed description of each case and then present the themes within the case (within case analysis) followed by thematic analysis across cases (cross-case analysis). In the final interpretative phase, the researcher reports the lessons learned from the analysis. When using multiple cases, the question of how many arises. Too few and generalization is impossible; too many and depth of understanding difficult to achieve. Again the researcher needs to provide a rationale for the cases used.

Whether the study performed is a single case study or a collective case study depends on the type of case that is most promising and useful for the purpose of the research.

2. The Role of Theory in Case Study

My second topic is the place of theory in case study. There is disagreement in the literature about this. Stake (1995) says that theory can be absent from studies which focus on a describing the case and its issues. Yin (1995) says that theory can be used to guide the case study in an exploratory way. And Creswell (1994) says that theory is employed toward the end of the study providing a “theory-after” perspective in which other theories are compared and contrasted with the theory developed in the case study.

My view is that existing theory is the starting point as it gives direction and structure to the initial set of questions the researcher asks. The researcher then reacts to the data received during questioning, using theory to filter and organize the data received. This will confirm existing theory but the researcher always needs to be careful to prevent existing theory from predetermining the result. This means that the researcher needs to be sensitive to paradoxes between the case situation and the theory and pursue them when they occur.

I see the need to draw on existing theory because I do not believe there is a situation where all of what we already know is irrelevant. This view has also been expressed by Stake (1995: 7) who stated that case studies seldom produce entirely new understandings but rather modify grand generalizations which may be further modified with additional case studies. Moreover, certain activities or problems come up in many cases because of the great realm of considerations in a complex case.

Existing theory matters even when the purpose of a case is to develop a new theory. If nothing else, one needs to be aware of the inadequacies of existing theory so that one knows where one is trying to go. Lacking such knowledge, one could be trying to reinvent the wheel. The researcher ends up discovering what is new to himself/herself rather than adding to the existing theory.

3. Research Cases Versus Teaching Cases

A distinction is often made between research and teaching cases. While they are different, the work done to create them is less different than is generally appreciated. For me the main difference between them is in what material is presented and how it is presented.

The research case is intended for professional colleagues, so is more formal, includes the researcher’s opinions and judgments, and is structured to persuade the reader to accept the researcher’s conclusions. The researcher may well have only revealed the essence of the situation after winnowing the information collected down.

The teaching case is intended for readers to have an opportunity for a vicarious experience for which they have to determine a solution and from which they can possibly draw personal naturalistic generalizations. The case writer produces this by acting as a

reporter, providing relevant description of the situation but withholding opinions and analysis. The case writer then writes an accompanying teaching note in which analysis, opinions, conclusions and generalizations are offered. A case teacher can then use the teaching note to guide students through the process of analyzing the data and drawing conclusions.

This means that the research case and the teaching case with its accompanying teaching note are equivalent products in terms of scholarship. It also implies that a research case can be turned into a teaching case by disaggregating the factual information from the research results. Essentially, the research case is based on the same work as the teaching case but in the later case the reporting is split into a teaching case and a teaching note.

I would caution the writer interested in writing teaching cases that doing so is challenging. It requires drama so the case is interesting to students and completeness so that all the content is available to support the critical thinking that produces the desired generalizations.

4. Methodology

The research methodology underlying case study is different from that which agricultural economists are used to. Much of their work has employed quantitative methodology in which they study aggregates of population rather than the uniqueness of individuals. Case study involves qualitative research which focuses on the uniqueness of individual situations. An appreciation for the differences helps us realize that both have scholarly merit and overcome tendencies to “methodological imperialism” in which we think there is only one way to create knowledge.

How Qualitative Research Differs

Stake (35) has differentiated quantitative and qualitative research on three main points. First, quantitative work seeks to explain while qualitative work seeks to understand. Second, the personal and impersonal role of the researcher differs in the two research styles. Third, the quantitative researcher seeks to discover knowledge while qualitative researchers seeks to construct knowledge.

Explanation versus understanding: The orientation of research is a different between quantitative research which starts with “why” as it searches for explanations and qualitative research which starts with “how” or “what” as it searches to promote understanding.

Quantitative research methods have grown out of scientific search for cause and effect expressed ultimately in grand theory. Researchers have controlled their search by working with a few variables, nullifying context and seeing the uniqueness of each case as “error” which is outside the system of explained science. They use many cases as they

seek to discover the most general and pervasive association, or cause and effect relationships which they hope will be relevant to other cases.

Qualitative research methods have developed to serve the view that phenomena, particularly when humans are involved, involve complex interactions and are seldom simply caused. To understand the event, all aspects of the situation need to be considered and this inclusiveness tends to mean that each situation is unique. The result is that qualitative researchers consider many variables in a case or a few cases. They probe deeply into a situation, describing the full range of influences associated with the phenomenon. They see benefit in understanding a particular phenomenon and hope that some of the understanding developed will transfer to other phenomena.

The Role of the Researcher: All research depends on interpretation as part of its method but this differs and this difference is linked to the research question. In quantitative studies the researcher seeks to develop a relationship among a small number of variables. This requires that the researcher have considerable expertise and time to develop an instrument prior to gathering data. The researcher also controls the redundancy of observation through sampling. The role of personal interpretation is limited between the time the research design is set and the time the data are collected and analyzed statistically. The results produced by the researcher tend to be viewed as objective.

In qualitative studies the researcher typically seeks to develop expected as well as unanticipated patterns among many variables. This requires that the researcher develop an initial set of questions for collecting data but, once the researcher starts collecting the data, he/she plays an interpretive role, making observations, exercising subjective judgment, analyzing and synthesizing, realizing all the while his/her own consciousness. The results produced reflect the individual researcher as he/she makes more subjective claims about the meaning of data and may produce multiple realities.

Knowledge discovered versus knowledge created: All research is a search for patterns and this search is conducted through analysis. The analysis takes different forms in the two approaches. In quantitative research the analysis looks for repetition of the phenomenon in multiple cases. A collection of instances is used with the expectation that the issue-relevant meanings will emerge from the aggregate. In this way knowledge is discovered in the data. In qualitative research the analysis has the researcher concentrate on the situation, pulling it apart and putting it back together using analysis and synthesis in direct interpretation until meaning emerges. In this way knowledge is created from the data.

The view that knowledge is constructed assumes that reality is only what we have come to believe. This is a relativist view which implies that knowledge is experimental and personally determined. It means that every informant has a personal reality but not every reality is equally important: Various constructions of reality vary in their credibility and utility. Knowledge is thus what people agree is the best explanation of reality.

The Quality of Qualitative Research

Qualitative research has all the problems its detractors claim. It produces new puzzles more frequently than it solves old ones. Its contributions to disciplined science are slow and tedious. The ethical risks in performing it are substantial. The cost of qualitative research in terms of time and money is very high. And it is subjective. Yet Creswell (1998; 16) sees qualitative research sharing good company with the most rigorous quantitative research, and arguing that it should not be viewed as an easy substitute for quantitative study.

The quality of qualitative work stems from a strong inquiry procedure with well-established protocols that both the researcher and reader follow. While these standards ensure that the work is trustworthy, Crabtree and Miller (1999; 335) argue that the ultimate test of qualitative studies is that the work carries sufficient conviction to enable someone else to have the same experience as the original observer and to appreciate the truth of the account. In other words, good methods are important but what really matters is good thinking.

The Place for Qualitative Research

The world is full of alternative research methodologies. According to Crabtree and Miller (1999: 346), the best way to judge the merits of a methodology is by how well the method relates to the problem at hand. Recognizing this allows us to let go of specious distinctions between research traditions--distinctions that simply encourage conflict and disagreement.

By being willing to accept alternative methodologies, we can expand the range of problems we can address because we have more ways of doing so. And by being able to deal with more problems we can generate new knowledge. Qualitative research is thus of benefit to use because it allows us to better understand phenomena embedded in situations through complex relationships.

Conclusions

The paper has shown that there are several approaches to case study with the common feature that each involves the holistic inquiry into a contemporary phenomenon within its natural setting. Theory plays an important role in case study, being used to guide the collection and analysis of data and it can be created using the information produced in the case study. The product of the case study can either be a research or a teaching case. From our perspective the two are of equal scholarly merit with the distinction between them being that the research case is self-contained whereas the teaching case is accompanied by a complementary teaching note.

Full appreciation of the case method comes with recognition that it fits within the traditions of qualitative research. The qualitative approach to research has features that

differentiate it from the quantitative research commonly performed by agricultural economists. In qualitative research the researcher is actively involved in understanding the situation and, in describing this understanding, creates knowledge. On recognizing these differences, one can appreciate that the qualitative research is as scholarly demanding as quantitative research. The benefit of using qualitative research is that it is better equipped than is quantitative research to tackle certain problems.

Sources for Further Exploration

Further readings on case study and qualitative methodology are:

Benjamin F. Crabtree and William L. Miller, 1999--Second Edition,
Doing Qualitative Research, Sage Publications, Thousand Oaks, California

John Creswell, 1994
Research Design: Qualitative and Quantitative Approaches, Sage Publications, Thousand Oaks, California

John Creswell, 1998
Qualitative Inquiry and Research Design: Choosing among Five Traditions, Sage Publications, Thousand Oaks, California

Alan E. Kazolin, 1982,
Single Case Research Design: Methods for Clinical and Applied Settings, Oxford University Press, New York

William Naumes and Margaret Naumes, 1999
The Art and Craft of Case Writing, Sage Publications, Thousand Oaks, California

Robert E. Stake, 1995
The Art of Case Study Research, Sage Publications, Thousand Oaks, California

Robert K. Yin, 1994--Second Edition
Case Study Research: Design and Method, Sage Publications, Thousand Oaks, California