Staff Paper

Using Case Studies as an Approach for Conducting Agribusiness Research

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Abstract

Many agricultural economists are not familiar with case study research, yet the approach is a useful means of collecting data, and building and testing theory. Case study research has a prescribed set of objectives, epistemology, methodology, and methods that have been developed and tested in a wide range of scholarly and pragmatic situations. This paper reviews these fundamentals, and then demonstrates the case study approach within the context of an agribusiness research project. This application exemplifies how case study research is capable of generating a robust, comprehensive array of "knowledge" about complex, highly inter-dependent and dynamic social phenomena.

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Using Case Studies as an Approach for Conducting Agribusiness Research

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Staff Paper 98-11[2]

"This is the era of methodological pluralism in applied social science[3]..."

Introduction

Case study research, as a means of collecting data and building theory, has a prescribed set of objectives, epistemology, methodology and methods that have been developed and tested in a wide range of scholarly and pragmatic situations. By specifying these fundamentals, researchers and practitioners have established parameters for interpreting case study results and their degree of generalization. This paper reviews these fundamentals, and then demonstrates the use of the case study approach within the context of an agribusiness research project.

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[2]This paper was presented at the annual meetings of the Western Regional Coordinating Committee on Agribusiness Research Emphasizing Competitiveness and Profitability (WCC-72) in Las Vegas, Nevada, June 11, 1998.

[3]Quoting Jennifer Greene and Valerie J. Caracelli.

An Overview of Case Study Research

Yin proposes that case studies are one of five general research strategies--the others being experiments, surveys, archival analyses, and histories. He also asserts that the appropriateness of a given strategy depends upon three parameters: (1) the research question being asked, (2) the need for control over contextual variables, and (3) the time-frame encompassing relevant events. He asserts that case studies are the most appropriate research strategy when the research question focuses on addressing "how" and/or "why" questions, when controlling the contextual variables is not an option, and when the relevant time-frame is the present.

Given these parameters, is the case study approach apropos for the objectives of agribusiness research? Certainly agribusiness researchers often are concerned with "how" and/or "why" research questions. Examples readily come to mind: How are decisions made within the firm? How do agribusiness firms manage risk and uncertainty? Why did a firm choose to diversify? Begin exporting? Vertically integrate? Similarly, agribusiness research, like nearly all social science research, has very little control over the contextual variables of the research setting. *Ceteris paribus* may be assumed for purposes of theoretic model building, but applied agribusiness researchers know that "all other things" never remain the same. An experimental design of many replications and trials where all variables are held constant but one is the very antithesis of the conditions common to agribusiness research. And although the present is not the sole time-frame relevant to agribusiness research, static snap-shots of the current status of firms and industries is at least one of the relevant time-frames. These comments suggest that, at least in terms of Yin's parameters, the case study approach is particularly well matched with the realities and objectives of agribusiness research.

Schnelle also discusses using case studies as an approach to doing research. He asserts that case study research is a useful approach for solving current, complex problems within firms. In order to

address these problems, the researcher "usually concerns himself with events in the life of a single person or of a single firm. More often, in case study, the researcher investigates the details of a single event or a closely related group of events in the life of a single person or firm" (Schnelle, p. 149). He concludes that an approach based on case study methods is, by design, problem solving research. This is very similar terminology to that used by Johnson in his text on research methodology for economists. Johnson highlights three kinds of research that are important to the economics profession: disciplinary, subject-matter, and problem-solving. Johnson (p. 20) describes problem solving research as having "immediate, practical usefulness," and as research that "prescribes a solution to a specific problem of a specific decision maker running the practical affairs of the world." As with Yin, these comments by Schnelle and Johnson suggest that the objectives of problem-solving case study research and the objectives of agribusiness research have much in common.[4]

Generalizing from Case Study Conclusions

Kennedy highlights two important observations about the nature of what we know. First, she notes that the application of knowledge is situational since sometimes "knowledge of the general case is used to explain or predict a specific case...[but other times] knowledge of the specific case may be generalized to great segments of the population" (p. 661). In other words, sometimes what we know is based on deductive reasoning, while at other times, what we know is induced from a specific case and applied to a general population.

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[4]This is not intended to imply that agribusiness research is only problem solving in nature, and without subject matter or disciplinary research questions. Nor is it intended to suggest that the case study approach is only applicable to problem solving research. The assertion that agribusiness research and the case study approach are particularly well matched within the context of problem solving research is not, repeat not, suggesting that this is the only manner in which the two can be applied collectively in a research setting.

Kennedy’s second point is that when making generalized inferences, there are two "spans" to be crossed. "One, a statistical span, connects the sample to a population just like the sample. The second span connects to a population believed or assumed to be sufficiently similar to the study sample that findings apply there as well” (p. 665). Both of these “spans” are common to agricultural economic research in general. The second span also represents the situations and type of inferences that are often associated with case studies--inductive reasoning and non-statistical inferences about general populations.

Kennedy’s two points lay the foundation for her arguments about how and when case study findings can be generalized. Although Kennedy's perspective is narrowly focused on the application of case study research to the field of evaluation (and related methodologies), her comments are still pertinent to this paper. She contends that the validity of non-statistical inferences (i.e., generalizations) can be enhanced when three criteria are met: there are (1) a wide range of attributes across the sample case, (2) many common attributes between the sample and the general population of interest, and (3) few unique attributes within the sample.

The first criterion implies that even a small number of cases can represent a wide range of attributes as long as they are selected with this intent. The second criterion requires that the researcher have some sense of the general attributes of the population of interest prior to selecting specific cases. The third criterion recognizes that the degree of unique attributes in a sample and the validity of generalizations are inversely related. Kennedy adds a caveat to the application of these criteria--attributes that are identified must be relevant. In other words, identified attributes should reflect the hypothesized relationships between dependent and independent variables and/or between treatments and intended consequences.

Yin suggests a very different way of understanding how case study results can be generalized. He abandons any attempts to justify case studies in terms of a sample being "representative" of a general

population. He contends that "case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, does not represent a “sample,” and the investigator's goal is to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization)” (p. 10). Yin's "analytic generalization" implies that the primary role of a case study is to enhance understanding through the development and refinement of theory, not by providing representative profiles of a particular population. Thus, theory, not statistical analysis, is the means to generalize case study research. Yin (p. 31) fully develops this idea in the following:

> A fatal flaw in doing case studies is to conceive of statistical generalization as the method of generalizing the results of the case. This is because cases are not “sample units” and should not be chosen for this reason. Rather, individual case studies are to be selected as a laboratory investigator selects the topic of a new experiment. Multiple cases, in this sense, should be considered like multiple experiments (or multiple surveys). Under these circumstances, the method of generalization is “analytic generalization,” in which a previously developed theory is used as a template with which to compare the empirical results of the case study. If two or more cases are shown to support the same theory, replication may be claimed. The empirical results may be considered yet more potent if two or more cases support the same theory but do not support an equally plausible, *rival* theory (emphasis in original).

Yin, like Kennedy, suggests ways of generalizing case study findings outside of the more traditional statistics-based paradigm. As Kennedy notes, a set of generalizations that reach beyond a representative sample drawn from a known population "...cannot be built on statistics, but is not necessarily less valid, even though the rules for drawing such inferences are not as clearly articulated”(p. 665). Both authors have attempted to make these rules more articulate, and in the process, have provided guidelines for how to focus and conduct case study research.

Objectives of Case Study Research

As implied in the previous two sections, three important objectives of case study research are (1) to conduct applied, problem-solving research, (2) to build new theory, and/or (3) to test existing theory. To elaborate:

> (1) When the purpose of the research is to address a specific problem that is confronting a decision maker and/or the firm, case study methods could be considered either to make a case study of the problem itself, or to make a case study of a similar firm that faced a similar problem, but has already taken action to resolve the problem.
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> (2) When the purpose of the research is to build new theory, two types of case studies could be considered. One alternative is to choose one or two "arch-typical" firms that appear to represent a particular type of firm or decision set. The other option could be case studies made of "outlier" firms that are unique in their standard operating procedures, the business choices they are making, or some other set of distinguishing characteristics of the decision maker and/or firm. Either because they are arch-typical or because of their uniqueness, insights into their success may provide opportunities to broaden the theory base on which to build an understanding of firms and their decision making processes.
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> (3) When the purpose of the research is to test and clarify existing theory, a set of case studies can be selected to purposefully challenge *a priori* assumptions and theoretical assertions. In this way the case studies are used to see if "the theory holds up" under the specific conditions and parameters of a given case.

The Epistemology and Methodology of Case Study Research

The underlying philosophies (epistemology), and logic and theory (methodology) of case study research have already been alluded to in the previous three sections of this paper. The following section makes these explicit by elaborating on the philosophical foundations of case study research.

Like much of economics, the case study approach is pluralistic in its epistemology--positivistic, normative, and prescriptive types of knowledge all contribute to the overall approach.[5] Further, many other social sciences have contributed extensively to the development of case study research, in part by

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[5]Johnson presents an extensive development of these three kinds of "knowledge."

applying the epistemology of phenomenological knowledge to the approach. Given this philosophical pluralism, case study methodology is also quite eclectic. The following provides an overview of how the various philosophies of science and their respective methodologies are related to the use of case studies as an approach to applied, problem-solving research in agribusiness.

Positivism: Case study research is positivisitic in that it produces "value-free knowledge" (i.e., knowledge which is other than of goodness/badness or rightness/wrongness and which can be tested, and accepted or rejected in terms of logic and experiences specified in terms of the five senses). Examples of this type of knowledge that might result from case study research in agribusiness include descriptive profiles of "successful" firms (however "successful" be defined). These profiles may include a listing of the firm's physical, financial and human capital. Alternatively, the profiles may report sets of beliefs, perceptions and values held by the individuals within the firm (i.e., who values what).

The methodology of positivism is based on the principles of coherence, correspondence and clarity. Yin clearly relies on this methodology when he asserts that researchers can make "analytic generalizations" from case studies. When Yin states, "analytic generalization, in which a previously developed theory is used as a template with which to compare the empirical results of the case study...," he is admitting that he relies, in part, on the methods of positivism. To assert that one should use a "previously developed theory" as a template implies that this theory has already passed the positivist's tests of logical coherence and clarity.[6] Yin also suggests that the basis of analytic generalization relies on a comparison of *a priori* theory to empirical results, implying that the case study must also pass a test of correspondence.[7]

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[6]Johnson suggests that "coherence" is attained when a theory does not contain any logical contradictions, and "clarity" is attained when a theory is not vague or ambiguous.

[7]Johnson suggests that a given statement can be dis-confirmed if the observations on which it is based do not "correspond" with an established, previously recorded set of observation-

Normativism: Similarly, the case study approach can also be normative because it can produce "knowledge about values" (i.e., knowledge about the experiential goodness and badness of conditions, situations and characteristics in the observable world). Examples of this type of knowledge that might result from case study research in agribusiness include observations about the inherent goodness or badness of such current topics as human resource management, strategic planning, environmental standards, globalization, market concentration or vertical coordination--where observations are expressed in either monetary or non-monetary terms.

The methodology of normativism does not necessarily attempt to define goodness or badness, but rather it relies on an assertion that there exists a shared commonality of experiences from which an undefined but known sense of goodness and badness is understood (Johnson). From this common understanding, the values (monetary and/or non-monetary) of situations, conditions and characteristics of the observed world are researchable. This type of understanding can be seen in case study research when, for example, researchers are able to identify "outlier" firms, decision makers or resolutions of problems. These "outliers" are considered particularly good fodder for case study work, and normative methodologies facilitate their identification.

Pragmatism: Equally important is pragmatism and its contribution of "prescriptive knowledge" (e.g., knowledge of the consequences of decisions in terms of what ought to be done and/or not ought not be done). Examples of this type of knowledge that might result from case study research in agribusiness can include prescriptions about the right or wrong directions a firm should strategically plan and act. Alternatively, these prescriptive statements can be assessments of who should benefit, who should pay certain costs, and the appropriateness of power interactions among stakeholders in the enactment or repeal of market regulations, trade agreements, or government subsidies.

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based statements about reality.

The methodology of pragmatism is grounded in the concept of "workability." The value of propositions, so understood, is determined by the proposition's ability to solve practical problems, i.e., whether the consequences match the desired outcomes. Quoting Johnson, "Pragmatically, truth is dependent on consequences. It makes a difference who is benefitted or hurt, when, where, and how (p. 109)." Historically, much of case work has involved prescriptions, typically biased towards the interests of the case study firms and decision makers. However, the case study approach to research is not dependent upon this bias. In fact, researchers can readily document the reasons why a particular proposition is "right or wrong" by using the methodologies of pragmatism to outline the "winners and losers" of a given prescription. In such situations, the prescriptions themselves can become the focus of a future case study as well.

Phenomenological knowledge: The case study approach also has some of its foundation in phenomenological epistemology. Case studies often are framed in an understanding of knowledge such that the phenomena of interest can not be separated from their context (i.e., knowledge is learned through reflecting upon human action and how this action emerges from the personal reflections of individual actors). Examples of this type of knowledge that might result from agribusiness case studies would be new or revised theories about the causal relationships between market forces, actors and outcomes.

Peterson, referencing Bonoma, notes that the methodology of phenomenological knowledge requires that the researcher work through a "theory/data/theory revision cycle" (p. 7).[8] This type of methodology is also very common to case study research efforts in fields other than economics. In these studies, the context in which the case study firm and/or decision maker is emersed is as much of the focus

[8]Peterson notes that to work through this cycle, researchers must (1) observe the actual situation and actions taken, (2) attach meaning through classification and comparison, (3) form tentative hypotheses about the action, its causes, and its results, (4) test the hypotheses against other situations, and (5) determine whether the hypotheses hold, need modification or be abandoned.

of the research as is the actual firm, decision maker and/or event that originally initiated the study of the case.

Summary: The preceding review documents how case study research draws from a pluralistic epistemology and an eclectic methodology. Given this board intellectual base, the case study approach applies a wide range of philosophical perspectives to research questions, and consequently, is capable of generating a robust, comprehensive array of “knowledge” about complex, highly inter-dependent and dynamic social phenomena.

Case Study Methods

Yin states that there are four basic types of case studies, represented by a 2 x 2 matrix. On one axis, is the case study design (i.e., either the study has a single-case or multiple-case design); on the other axis is the number of units of analysis within a single case study (i.e., either the case has one unit or multiple units of analysis).

A case study's primary unit of analysis may or may not entail embedded, secondary units that become a part of the overall study. For example, if the case study is a state-funded export enhancement program, a holistic approach has only one unit of analysis (i.e., the program) and focuses only on the general implementation and subsequent broad-scale effects of the program. However, the same case could include a multiple set of embedded units of analysis at the project and/or participant levels, implying several different units of analysis within the same case.

Concerning single- or multiple-case designs, Yin notes that "the single-case design is eminently justifiable under certain conditions--where the case represents a critical test of existing theory, where the case is a rare or unique event, or where the case serves a revelatory purpose (p. 44)." The alternative, the

multi-case design, is particularly useful in testing theory, where each case is like an experiment in the laboratory. With multi-case design, the researcher can choose each case so that, according to Yin,

> [I]t either (a) predicts similar results [across cases] (a *literal replication*) or (b) produces contrasting results [across cases] but for predictable reasons (a *theoretical replication*). The ability to conduct six or ten case studies, arranged effectively within a multiple-case design, is analogous to the ability to conduct six to ten experiments on related topics; a few cases (two or three) would be literal replications, whereas a few other cases (four to six) might be designed to pursue two different patterns of theoretical replications (p. 46).

Hypothetically, Yin's multi-case, single unit of analysis design could be readily applied to an agribusiness research setting. A researcher could identify two agribusiness industries, delineated by a 4- or 6-digit SIC. Within these two industries, a researcher could identify three categories of firms, creating a 2 x 3 research matrix. (These categories could readily arise out of the research question at hand.) Assuming the researcher makes two case studies of firms for each cell of the matrix, then twelve firms will be examined.

This type of research design permits a robust set of comparisons despite the small number of total firms involved in the study. As designed, comparisons can be made between industries (2 sets of 6 firms each), between categories (3 sets of 4 firms each), and between the twelve individual firms. Additional comparisons can be made within industries (6 firms per industry), within categories (4 firms per category), and within each individual industry-category cell (2 firms per cell). With the first three sets of comparisons, the researcher is, in Yin's terms, looking for "theoretical replication," i.e., evidence to confirm or refute the proposed theory that led to the original identification of the three categories as being pertinent to the research question at hand. With the latter three sets of comparisons, the researcher is looking for "literal replication," i.e., evidence to confirm or refute the *a priori* grouping of "similar" firms within each of the three categories, the implied assumption of homogeneity of firms within SIC industries, and the implied assumption of homogeneity of firms within each cell.

As the case study design is being planned, the researcher must also consider other implementation specifics. In particular, which are the "right" firms to study, and which are the "right" questions to ask? To address these two concerns, a researcher can draw from existing theories about causal relationships, anecdotal evidence observed in the field, and *a priori* hypotheses about the relationships under study. As Yin noted, cases are not representative samples, but rather experimental tests. Firms and questions should be chosen purposefully so that they represent and test the frontiers of current understandings of the research topic.

Yet another consideration concerns the intended output of the case study. The Harvard Business School has built much of its reputation on the writing of business case studies. These studies are almost always designed as single cases with one or perhaps a limited number of units of analysis within the case. One of the main outputs of this type of approach is the classic "Harvard" teaching case. However, case study research has a much broader potential set of outputs than this well known format. As already mentioned, multi-case designs are particularly well suited for building and testing theory, and/or solving a particular researchable problem. Case studies can also be used to do preliminary appraisals of social phenomena. These types of "stage setting" exercises can provide valuable background information which can help guide and substantiate further data collecting exercises (e.g., mail questionnaires, market studies). In all of these examples, the intended output influences the design, level of detail that is pursued in field work inquiries, and the overall nature of the case study itself.

An Empirical Example from Agribusiness Research

Background: An empirical study was designed to investigate the underlying forces driving the internationalization process in smaller agribusiness and food industry firms.[9] At the onset of this research, the *a priori* set of relevant theory, prior studies and available data was very limited in scope. Confounding this constraint was a limited amount of somewhat conflicting anecdotal evidence about who, how, why and how many smaller firms were, in fact, internationalizing their business activities. To gain a greater understanding of these issues, a decision was made to conduct a series of case studies targeting the principle decision makers of several agribusiness and food industry firms.

Using Yin's text as a guide, the case study proceded through five initial steps:

(1) Specifying the research question in terms of "how" and "why."
(2) Composing a set of *a priori* propositions about what was driving the internationalization process.
(3) Selecting the targetted unit of analysis, and appropriate case study design.
(4) Establishing an *a priori* set of "links" between the propositions generated in step #2 and the anticipated data to be collected, resulting in a set of four categories of firms: strictly domestic markets in focus, new entrants in foreign markets, experienced practitioners in foreign markets, and former participants in foreign markets.
(5) Establishing criteria for interpreting case study findings in advance of any data collection.

Given its ambiguity both in how it is listed here and in Yin's original text, the fifth step merits further elaboration. Yin provides little help for specifying the criteria needed to interpret case study findings. He simply observes that it is useful to know in advance of data collection what is to be done with the data, that interpretations are often a matter of degree, and that the current state of the art of case study research does not provide adequate guidelines for establishing criteria.

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[9]Sterns, and Sterns, Peterson and Schweikhardt (1996, 1997) provide more detailed and comprehensive coverage of this research.

The dilemma of specifying criteria for interpreting findings from this paper's example of case study research can be specified as follows: if differences in perceptions about the driving forces underlying the internationalization process can be documented across the four categories (in the form of interview responses), at what point do these differences become "significant" (in a strictly figurative, qualitative sense)?

Significance, even in a statistical sense, is still a relative term that must be interpreted by the reader. For example, as both Manderscheid and McCloskey have noted, there is no hard and fast rule that sets a definitive confidence interval (whether it be 99%, 95%, 90% or 80%). Thus, the first objective of the case study is to simply report any differences in decision makers' perceptions across the four categories (just as the first step of statistical reporting is to list the confidence interval). At this point, published case study literature often leaves the interpretation of the relative significance of these differences to the reader.

There are, however, additional steps that can be taken to guide the reader in interpreting any reported differences across cases. For example, when differences exist in some systematic and consistent manner across categories, these should be noted. Similarly, attempts should be made to report the degrees of differences, possibly using techniques that mimic survey techniques that are designed to capture relative degrees of differences in respondent opinions and attitudes.[10] With these suggestions in mind, the following approach was proposed for reporting and interpreting the case study findings: (1) document differences across cases, (2) document any systematic or consistent patterns in these differences, and (3) document, if possible, the degree of these differences.

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[10]Examples from survey work include Likert scales ranging from strongly agree to strongly disagree, verbal frequency scales ranging from always to never, and ordinal scales ranking the importance of a set of variables.

Selecting Cases: The protocol for selecting firms for the case study was based on a purposeful targeting of specific industries and types of firms. The objective of the protocol was to (a) target industries in the agri-food sector that demonstrated, in a relatively even distribution, the full range of categories of firms as listed above (i.e., industries with domestically oriented firms, new entrants to foreign markets, experienced practitioners in foreign markets, and former participants in foreign markets), and (b) screen firms within these industries based on specific size and category criteria[11]. In this way, the protocol controlled for two of the commonly cited explanatory variables in the internationalization literature: firm size and "industry effect". With these two variables held constant, firms from the same industry and of similar size could be compared and their varied responses to essentially the same market stimuli could be studied.

Based on a review of existing secondary data, two industries (SIC 2033 and SIC 3556, canned fruits/vegetables and manufacturers of food processing equipment, respectively) provided a relatively even distribution of the four categories of firms. Drawing from existing data bases, 66 firms within these two industries were initially identified, and 16 were selected in a final screening exercise. These firms were characterized as having gross annual sales and total number of employees near the mean values of all the firms within the respective SIC classifications. An additional characteristic of this set of "finalists" was that two firms per SIC were identified per category of firms, yielding a 4 x 4 matrix of 16 firms (i.e., 2 firms per SIC for two different SICs for a total of 4 firms per category for 4 categories).

Case Study Fieldwork: These sixteen firms were contacted by mail and telephone to solicit their participation in the study. Ten of the sixteen permitted on-site interviews, eight of which led to in-depth

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[11]Mandates from the funding agency provided additional constraints on the selection of industries and firms. This research is part of a project which assessed the status and potential of Michigan's agricultural sector. To this end, only industries within the agri-food sector and only firms based in Michigan were considered for selection.

interviews with principle decision makers. As with all forms of data collection, the reality of fieldwork almost always falls short of the ideal. Some firms refused to participate. With others, it was discovered “on-site” that the firms fell outside the specified parameters of the study. And one, despite genuine interest in participating in the study, was never interviewed because no interview time could be arranged due to scheduling conflicts.

The actual interviews were modeled after a format proposed by Michael Q. Patton for what he calls "depth interviewing using an interview guide." As Patton notes, "depth interviewing probes beneath the surface, soliciting detail and providing a holistic understanding of the interviewee's point of view (p. 108)." For the eight case study interviews, the sought after "holistic understanding" was the interviewee's personal attitudes and opinions about the deciding factors concerning international marketing and sales, specifically in terms of their firm's products.

In order to provide some structure to the interview process, separate, but similar, interview guides were developed for the four categories of firms (i.e., domestic, new, experienced, former). Differences in the guides were primarily grammatical tenses (*would be, is, was*) and extensions of subjects in which some, but not all of the firms, had experiences (e.g., asking former exporters about why they exited international markets).

After leaving the interview sites, summaries of the interview and observations made during the site visit were written as soon as possible, often at the first available road-side rest stop. These hand-written summaries and the tape recordings of the interviews (when available) were then used as the basis for the formal synthesis of the case study findings.

Case Study Analysis: The analysis focused on a series of comparisons very similar to the ones suggested in the hypothetical example cited earlier in this paper. These included comparisons within

SICs, within categories, across SICs, across categories, and across individual cases. Due to the loss of eight of the original targetted 16 firms, “within cell” comparisons were not possible.

The analysis concluded with assessments of how well the cases supported or refuted both (1) the underlying theory that guided the case study design, and (2) a set of hypothesized causal relationships about the internationalization process. The case studies also provided insights that proved useful for the next two stages of the overall research project--making a proposed conceptual model of the internationalization process operational, and drafting a comprehensive questionnaire that was subsequently mailed to over 240 firms.

Summary

Using case studies as an approach to conducting research offers considerable potential for agribusiness academic scholars. When the objectives of their research agenda are to (1) conduct applied, problem-solving research, (2) build new theory, and/or (3) test existing theory, the case study approach is particularly apropos. Clear guidelines for conducting this type of research are well grounded in a pluralistic epistemology. Further, these guidelines, i.e., case study methods, provide specific implementation steps towards initiating a case study, selecting a case (or cases), conducting fieldwork, and analyzing/synthesizing research findings. In this way, case study research is capable of generating a robust, comprehensive array of “knowledge” about complex, highly inter-dependent and dynamic social phenomena.

Postscript

Although the implementation steps for conducting case study research are reviewed in this document, other authors have provided much more detailed outlines of this process. A "quick guide" to some of these references is appended to this paper.

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Appendix -- A Quick Guide to References on Case Study Research Methods

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