

Challenges and Advances in Marketing Strategy Field Research

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Introduction

Field studies are a powerful means of studying marketing strategy. A variety of field study tools have proven enormously valuable for systematically understanding not only the design of marketing strategy but also the payoff value of these efforts to the firm. By examining marketing phenomena in its natural habitat, researchers gain a bird's-eye view of the internal workings of the firm. However, field research can be messy and, if incorrectly managed, may waste the researcher's time, resources, and energy without yielding useful insights. Accomplishing effective field research is like shooting at a moving target. Key informants and authorizing agents turn over, documentation standards are updated, and organizational priorities and cultures shift. Lastly, organizations and their environments are dynamic, living entities; since a multitude of alternative explanations and potential omitted variables exist, a field study will never provide the same level of control as laboratory experiments. Hence, the researcher's task is to show that efforts have been made to account for the noisy work environments and to provide the most reasonable explanation for the observed outcomes.

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We delimit the scope of our discussion of field studies to research conducted in organizational settings with organizational participants and consider any unsimulated organizational research that occurs outside an experimental laboratory to be a field study. In this chapter, we consider direct interviews, surveys, quasi experiments, and participant observation. Our purpose is to provide an overview of a set of field study tools as well as practical advice and perspectives on using the tools. After conceptualizing this array of tools, we identify a set of general challenges that most field studies face and describe how these challenges might be managed. Throughout the chapter, we provide examples of the various ways that well-known techniques, such as surveys, have been creatively applied both on their own and in conjunction with other research techniques to illuminate the processes and management of strategic marketing variables. These examples are summarized in Table A1 in the appendix. We do not go into great technical detail on the use of the research tools or data analysis; instead, we refer the reader to more comprehensive and technical resources on these aspects.

The Landscape of Field Tools

We like to think of field study methods in terms of the researcher's control and involvement: Field methodologies afford varying levels of control over what or who is being measured and over involvement with a target firm or firms. Figure 1 plots the methods along these two dimensions and provides an overview of the conceptual landscape.

Involvement with the Organization

At one end of the involvement spectrum are field tools that demand a great deal of time and coordination with the host firm(s): participant observation and quasi experiments. Observing organizational participants in their environments requires the consent of the firm and often the individual managers. Living in an organizational environment so as to achieve a rich understanding of its processes is an important task for both the researcher and the firm being studied. Quasi experiments, which involve experimental units, treatments, and nonequivalent groups of participants, often require a great deal of coordination with the firm in regard to the administration of measures and establishment of various controls around a specific event. An exception would be quasi experiments involving public events and publicly available data.

Measurement Control

A second dimension is the researcher's control over who or what is being measured within the firm; this dimension also varies across the tools. Surveys, direct interviews, and quasi experiments afford the researchers significant control over what the instrument is measuring. These tools are often specifically designed to collect data that confirms or falsifies certain theoretical hypotheses. The researchers may also significantly influence who is measured by these tools, given the firm's permissions and interests. Tools such as participant observation represent the low end of this dimension: The researcher may have little control over what is being

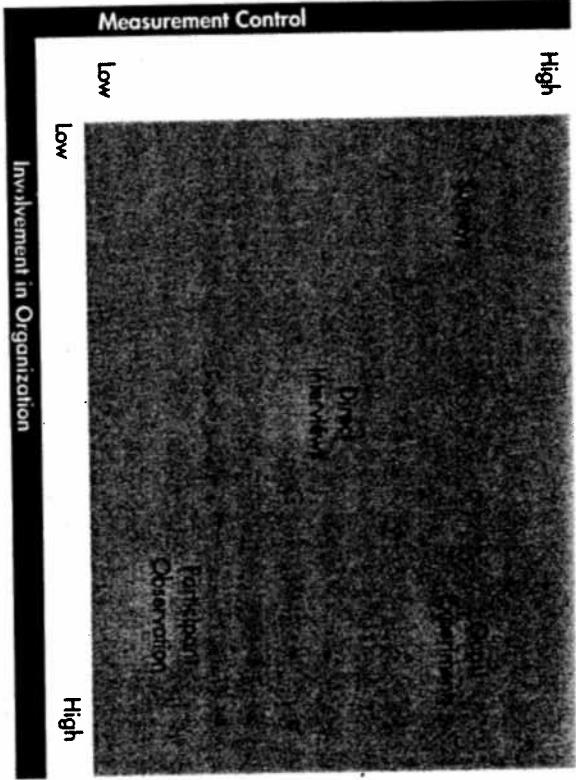


Figure 1
Conceptualization of Field Study Methods

observed and little influence on the firm's activities or the processes studied. Together, these two dimensions illustrate some of the tradeoffs for each tool and highlight the considerations field studies must take into account.

Field Study Challenges

Four key challenges cut across field studies: selecting the field setting, persuading firms to participate and grant data access, reducing common-method bias, and reducing retrospective bias.

The Field Setting

One of the greatest challenges in field research is the lack of random selection and assignment of the organizational participants. Additionally, managers exist in unique organizational contexts. Therefore, researchers must take the specific characteristics of the field setting into account while trying to insure the generalizability of the findings. This dual requirement can be approached in a number of ways. One approach is to make sure that organizational participants are brought to a common baseline or a uniform state of reference; otherwise, it is impossible to interpret the data. For example, respondents should have a common reference point or subject matter in mind when completing a survey. Quasi experiments should be fashioned with uniform (as opposed to customized) treatments to aid causal inference. Even when treatments are considered uniform prior to their administration, seemingly minor differences in treatment may produce significantly different results. The research of Simester et al. (2000) presents a case in point. They created a quasi experiment around one firm's service intervention in Spain and the United States. The firm thought that the treatment in the two countries was equivalent *ex ante*, but an analysis of results indicated that differences in the technical expertise of field personnel in the two countries resulted in inconsistent application of the treatment.

Another approach is to consider the sampling frame carefully. Collecting data from a broad cross-section of organizations and industries or working closely with a firm to understand its specific context can aid in identifying a setting that contains necessary variation on the constructs of interest. For example, in their research on the development of commitment in interorganizational relationships, Jap and Ganesan (2000) surveyed channel customers of a major chemical supplier and collected measures of their relationship with the supplier. Through depth interviews with knowledgeable channel managers, the researchers came to understand that although all of the respondents reported on a relationship with the same

supplier, the independent and dependent variables of interest could vary widely from one customer relationship to the next.

Another approach to managing the problem of nonrandom selection and unique contexts is data analysis. Covariates can be used to account for differences in the environment when estimating models. Pretests can anticipate which covariates might be important enough to collect and what effects they might generate. This step allows the researcher to tease out the effects of theoretical interest, which might be obscured by variables that are important in the context but extraneous to the theory. The inclusion of intercept terms can help researchers account for mean differences in dependent variables, such as those that may be due to sector-specific factors. Some factors may yield more elaborate effects for unanticipated reasons; data should thus be divided into subsets to see if the model holds for each individual subset. If the data is pooled, dummy variables are necessary to allow slopes to vary in subsets of the overall data.

Collectively, these suggestions underscore the importance of careful pretesting prior to the execution of any field study. By pretesting measurement instruments, researchers can insure that their instruments are not only understood by a specific respondent but also that the data being collected across multiple firms and contexts is generalizable.

Working with Firms

Another challenge is to persuade the firm(s) or trade organization to participate in the study. It can often take months to negotiate an agreement that is amenable to academic research. Conferences such as those held by the Marketing Science Institute provide an ideal setting to cultivate opportunities for academic research. The firms that send representatives to these conferences typically value academic research and understand how it differs from consulting.

We generally prefer to work with a few firms that can provide a large number of respondents. With this approach, the researcher can typically gain access to a variety of managers across the firm for depth interviews. A cover letter from the firm encouraging respondents to participate in the research can increase the response rate (60–80% is typical) and may enable the researcher to ask more (and more sensitive) questions in the data collection. This approach may also allow the researcher to blend a variety of field tools, such as direct interviews and surveys.

When it is not possible to work with just a few firms, another approach is to choose an industry and enlist their trade associations to endorse the research and help target appropriate firms. One can then contact those firms, selling them on the benefits of the research (such as the generation of benchmark data), and take

advantage of a snowball effect—that is, one can begin to work with the firms that are easiest to access and then use one's access to those firms to attempt to gain access to the more difficult firms. The researcher might ask firms to suggest other firms that would be appropriate and would benefit from the research. Experience shows that one will generally need to visit two-thirds of the firms that are contacted by phone, and that two-thirds of the firms one visits will agree to participate. A third of the firms may drop out for various reasons even after they agree to participate, with the end result being participation by approximately 30% of those initially contacted.

We recommend that researchers develop a one-page proposal describing the problem area, research objectives, data collection process, timeline, and expected benefits and insights for the firm. Senior managers make ideal contacts since they have the most power to assure access and to influence employees to cooperate with data collection efforts. The firm must understand that the researcher is conducting academic research and not a consulting project, which means that the researcher must insure the rights to publish the results of the research, even if the results are unfavorable. A contract is always useful and may be necessary.

Data collection should not rely heavily on the actions of individual employees. When we surveyed a supplier's customer base, for example, we asked the firm to provide the names of their customers and to sign one generic letter endorsing the research. Then we administered the mailing and the follow-up. By asking the firm to do as little as possible in the data collection, the researcher reduces the firm's costs of participating and gains greater control over the process. Finally, it is always helpful to leave a back door open, obtaining permission to question the respondents or managers again on specific issues at a later date if necessary. After the research has been conducted one may discover a puzzling result or realize that one neglected to ask a critical question.

Common-Method Bias

Because of the difficulty of gaining access to data, much of the research on marketing strategy has relied on a single approach (like a survey) for data collection and hypothesis testing. This approach has been criticized because of its potential for common-method bias, meaning that data are related merely because they are generated by the same method, making them subject to distortion.

One solution is to use multiple methods for studying marketing strategy. By triangulating the results of various tools, one gains greater confidence that the phenomenon of interest does operate as hypothesized and is relatively robust. In their research on improvisation in new product development processes, Miner,

Bassoff, and Moorman (2001) used a combination of direct interviews, observation activities, and archival data to converge on how improvisation is enacted within the firm. Moorman (1996) used surveys in a quasi-experimental design to collect independent variables from consumers and then used direct interviews for the collection of the dependent variables.

Anderson, Fornell, and Lehmann (1994) utilized survey data from the Swedish Customer Satisfaction Barometer to collect their independent variables and then used secondary-source data on return on investment as their dependent variables. Lemon, White, and Winer (2002) used survey and panel data to investigate how future considerations affect the customer's decision to stay with or terminate their service subscription and then followed this with a laboratory experiment. Chandy, Prabhu, and Antia (2003) investigated the dynamics of technology expectations and radical innovations using three studies. In the first two studies, they used a MARKSTRAT simulation to test the causal links among a set of key variables. The third study involved a survey of 550 retail banks.

Retrospective Bias

Informants naturally tend to engage in "sensemaking" on their own or when asked to reconstruct the past from memory. Researchers can circumvent this bias in various ways. One approach is to question multiple observers about the same event. An alternative is to augment primary data from organizational participants with archival data, either from the firm or from public sources. Buchanan (1992) assessed the validity of her key informants' (store managers) assessments of their supplier relationships via a survey of additional informants: divisional merchandise managers and suppliers. A third approach is participant observation, although this method may require the researcher to spend significant time and effort being present within the firm, in the right place at the right time. We elaborate further on this problem in regard to specific tools in subsequent sections.

At this point, we turn to a more specific discussion of the challenges and advances associated with each of the various field tools: direct interviews, surveys, quasi experiments, and participant observation.

Direct Interviews and Focus Groups

Direct or depth interviews entail personal interactions between the researcher and specific organizational participants (see McCracken 1988 and Thompson, Locander, and Pollio 1989 for interview guidelines). These interviews can take place over the phone or face-to-face and can serve a multitude of purposes. They

can be used to pretest instruments since they allow the researcher to question informants about their experience with and perceptions of the measurement instrument. They also serve as an important record that can prove particularly valuable for interpreting anomalous results and responding to other researchers' questions and concerns.

Depth interviews are particularly useful for discovering and exploring new phenomena. Hence, it is wise to transcribe the interviews and to take copious notes, since these conversations can stimulate new ideas, make it possible to cross-reference emerging findings, and serve as a reference point for understanding the context. One of the best-known examples of depth interviewing is Kohli and Jaworski's (1990) initial research on market orientation. Their exploration of managers' cognitive maps of the construct was structured around four questions, designed to capture not only the meaning of the phenomenon but also its antecedents, consequences, and contextual role. They asked: (1) What does the term "market/marketing orientation" mean to you? What kind of things does a market/marketing-oriented company *do*? (2) What organizational factors foster or discourage this orientation? (3) What are the positive consequences of this orientation? What are the negative consequences? and (4) Can you think of business situations in which this orientation may not be very important? (Kohli and Jaworski 1990, p. 2) Throughout a depth interview, respondents are encouraged to provide illustrations, examples, and other insights. The data from depth interviews and other qualitative approaches can be used to develop a preliminary conceptual model that can then be further informed by theoretical literatures or supplemented further by marketplace stories. These descriptions from the business press can provide researchers with a sense of how managers perceive and respond to organizational phenomena and strategy (see Rosa, Spanjol, and Porac's chapter of this book).

Retrospective bias is an ongoing challenge with direct interviews. One way to overcome this challenge is to interview informants soon after the phenomenon of interest has occurred. In their research on improvisation processes in new product development activities, Miner, Bassoff, and Moorman (2001) took this approach and were able to inhibit hindsight bias, halo effects, and poor recall. A second approach is to explore a phenomenon in multiple contexts, such as different firms and industries. That is the approach that Kohli and Jaworski (1990) took. If informants are describing the same general phenomenon, the descriptions of it should remain relatively robust across a variety of scenarios and situations.

A third option would be to ask informants to respond to hypothetical scenarios, as in a conjoint task. Wathne, Biong, and Heide (2001) took this approach to investigate how buyer preferences for incumbent or alternative sup-

pliers differ systematically as a function of various marketing variables. They described a scenario in which a buyer has an existing relationship with a supplier and must choose a new supplier with different relationship and marketing program attributes. The use of a conjoint task enabled the researchers to create a common reference point, eliminate the possibility that informants might not remember the relevant factors and considerations clearly, and mitigate the possibility of social-desirability bias, which might occur if the informants attempted to rationalize their choices to the interviewer.

A final approach is to employ a variety of information-gathering techniques in addition to the direct interviews to converge upon the phenomenon of interest. This approach was taken by Urban and Von Hippel (1988) in their investigation of lead users' insights and preferences for high-technology products. They used direct interviews with engineers to identify an important trend and measures of potential benefit in the PC-CAD domain and followed the interviews with a field survey of a national organization of professional engineers and a large cooperating supplier to assess the characteristics of a lead-user group. A focus group was then held to develop one or more concepts for improving PC-CAD systems, which was followed by a second survey in which respondents were asked to rate the proposed systems.

We thus see that direct interviews have a variety of uses and are critical for discovering and developing complex phenomena, but they are prone to retrospective bias. Another disadvantage of direct interviews is that they require a great deal of time and effort. An alternative and less time-consuming approach is the use of focus groups. These constitute a variation of a direct interview: There are multiple informants instead of one. Calder (1977) provides a more extensive discussion of the use of these groups in marketing research. Focus groups are useful when the researcher is trying to identify the general characteristics of a phenomenon across a range of informant types and contexts. By creating focus groups that vary by important characteristics, the researcher can gain a broader understanding of how a phenomenon manifests from the perspective of organizational participants. An excellent illustration of this approach is the discovery and development of the concept of service quality (Parasuraman, Zeithaml, and Berry 1985). This research used twelve focus groups, one-third of which were convened in major cities across the country. Each group discussed one of four different service types (ranging from high- to low-contact services). In order to encourage informant participation, each group was composed of homogenous users (on the basis of age and gender). Bendapudi and Leone (2002) took a similar approach in their research on how customers view the turnover of a key contact employee in vendor firms. They used

x focus group interviews with 10-15 informants in each group, making each group as homogenous (in terms of rank and functional area) as possible to encourage participation.

Surveys

Surveys are perhaps the most widely used tool for field research and the study of marketing strategy (see Dillman 2000 for an extensive primer on the design and execution of surveys). This tool is useful for mapping the principle features of a terrain—and toward a specific research objective. Surveys are enormously valuable for limited purposes such as static descriptions (does X happen?), context (under what circumstances does X happen?), and discovery (spotting and naming X), but generally provide no insight into causality or the dynamics of a phenomenon unless additional measures, such as a time series, are used, or causality-related formation is directly obtained. Surveys are practical, tractable tools (though they're not necessarily easy to perform!) and are therefore often overused or misused.

Prospective Bias in Survey Research

The goal of a survey is to obtain grounded, specific judgments of what respondents expect. It provides a summary of what unfolds before respondents every day, but does not provide a comprehensive picture. Like direct interviews, surveys are subject to retrospective bias; respondents tend to report on what they *think* happened instead of what *did* happen. One way to overcome this bias is to use a variety of measure types, such as observation and assessment questions, in order to assess the facets of a construct. Consider the example of a survey question investigating how much a sales representative learns that is specific to his or her employer. An observation question might be, "When you hire experienced salespeople from within our industry, how many months do they require to reach the proficiency of someone who has mastered the sales territory? Approximately ____ months." An assessment statement might be, "To be effective, salespeople must learn a great deal about the ins and outs of our company, our ways of doing things, and our customers." Respondents would then agree or disagree with the statement. By employing a variety of approaches in measuring a construct, the researcher improves his or her understanding of the nature, depth, and breadth of a construct.

A second approach for reducing retrospective bias is to use projective techniques. This method is particularly valuable when the researcher is investigating a phenomenon that involves social desirability. Consider the following question from Robertson and Anderson (1993), based on focus group interviews of sales-

people. This question taps whether the respondent considers lying to the boss a socially acceptable behavior. The question is deliberately innocuous, to avoid eliciting the socially desirable answer. The domain of this construct is captured by the italicized words:

Your boss is a *real stickler* for *reporting procedures* and for making *lots of sales calls*. You haven't been able to *convince* your boss that you are *much more effective* making fewer, targeted calls. Should you *keep your boss happy* by *exaggerating the number* of calls you're making? Definitely should not—Definitely should (1-7) (p. 630)

By adding projection to the question, the researcher can reduce retrospective bias and still attempt to get respondents to provide honest answers about socially undesirable behaviors:

A close friend of yours, John, used to work with you but was transferred to another region, still working for your company. John *calls to ask your advice* about the following: John's boss is a real stickler for reporting procedures and for making lots of sales calls. John hasn't been able to convince his boss that John is much more effective making fewer, targeted calls. *Should* John keep his boss happy by exaggerating the number of calls he's making? Definitely should not—Definitely should (1-7) (p. 630)

The question attempts to maximize the respondent's involvement, using the language of the informants so that the respondent will project his or her intended behavior more accurately. (As much as possible, survey measures should be written in the language of the informant. Depth interviews are particularly effective for uncovering this language.)

Common-Method Bias in Survey Research

The threat of common-method bias can be minimized in several ways. One approach is to spread the various items tapping a construct throughout the survey, so that the respondent is less likely to detect which items affect which factors. Another approach is to minimize the use of subjective questions. A third tactic is to combine the survey findings with archival data, as illustrated by Lemon, White, and Winer (2002). They used archival data containing monthly information on customers' decisions to keep or drop an interactive TV service. A survey of 490 households measured overall satisfaction, usage, and expectations of future use

The researchers then modeled customers' decisions either to keep or drop the service (from archival panel data) as a function of the survey responses. By adopting this approach, Lemon and her colleagues not only reduced common-method bias by mixing consumers and archives as sources), but they were also able to demonstrate the temporal nature of the customer's keep/drop decision.

A fourth method for reducing common-method bias would be to examine the phenomenon at multiple time periods. For example, one can question respondents about their role in an incident, wait a year, and then ask them about the outcomes of the incident. Respondents are unlikely to remember their earlier responses, making it impossible to retrofit their current and prior answers. This approach is taken by Jap (1999), who surveyed matched dyads of industrial buyers and suppliers about their transaction environment, characteristics of their firms, interpersonal states, mutual activities, and performance outcomes. One year later, the same characteristics were measured. At this point, it was unlikely that the respondents could have remembered their prior responses and altered their Time 1 responses to fit their previous answers.

Dynamics and Causality

Cross-sectional surveys are often criticized for failing to provide insight into the dynamic nature of a phenomenon. However, there are several ways to ameliorate this problem. One is to measure the dynamic aspect of the phenomenon explicitly and to investigate it directly. For example, Jap and Ganesan (2000) and Jap (2001) developed a measure of the phases of a relationship lifecycle and asked the customer base of a major supplier to classify their supply relationships into one of several possible categories: exploration, buildup, maturity, decline, or deterioration. A multigroup analysis was then used to examine the moderating effects of this lifecycle on interorganizational issues such as control strategy and salesforce actions. This method overcomes the difficulty of collecting longitudinal data; while the measurement is not dynamic, the measure can inform our understanding of a dynamic phenomenon.

A second approach is to use a longitudinal survey. Since these surveys provide a temporal ordering among the independent and dependent variables, they present a stronger form of causal investigation. Abundant opportunity arises for activity. There are a number of variations on the prototypical approach of collecting the independent and dependent variables at two points in time (e.g., Jap 1999). For example, Moorman and Rust (1999) collected both independent and dependent variables at Time 1 and then collected dependent variables only at Time Moorman and Miner (1998) collected only independent variables at Time 1 and

dependent variables only at Time 2. Rust, Moorman, and Dickson (2002) provides an alternative twist using a multiple-method approach: They collected the independent and dependent variables at Time 1 via a survey, then relied on secondary data at Time 2 to provide additional dependent variables. This approach not only provides greater insight into causality and enhances validity; it also mitigates common-method bias.

Innovative Use of Survey Techniques

Surveys are increasingly being used for techniques typically applied in laboratory settings, such as conjoint tasks. For example, Murry and Heide (1998) used a series of conjoint scenarios administered through a mail survey to retail managers in two industries to investigate retailer participation and compliance with manufacturer-sponsored promotion programs. Stremersch et al. (2003) used a conjoint approach to investigate the purchase of high-tech modular products, a tactic that offers a number of advantages. First, since a respondent can evaluate multiple scenarios the conjoint task allows for efficiencies in data collection (always a consideration when persuading busy managers to participate in research). Second, by using hypothetical scenarios, respondents have a greater sense of confidentiality since they do not report on actual occurrences in their firm, and the researcher can probe aspects of behavior that are prone to social-desirability effects. And finally, this method allows the researcher to manipulate the focal variables of interest independently and to examine the relative importance of these variables.

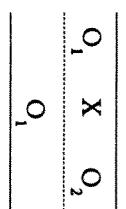
Surveys are also valuable for exploring dyadic phenomena such as the joint efforts of a buyer-supplier dyad. For example, Jap (1999) measured the buyer's perceptions of its relationship with a specific supplier in terms of the structural (for example, goal congruence), interpersonal (such as trust), and environmental (dynamism, for example) characteristics of their relationship as well as their joint outcomes (attainment of strategic advantages, joint profits, and so on) and collected the same information from the supplier. She then estimated a model of the dyadic collaborative action *together*. An alternative is to use the surveys to measure each side's perspective on a joint relationship. Anderson and Weitz (1992) and Ross, Anderson, and Weitz (1997) used surveys to measure a matched buyer and supplier individual commitments to the other party and perceptions of the other party's commitment. They then examined intriguing asymmetries in each party's perceptions of their partner across the dyad. In a similar vein, Rokkan, Heide, and Watne (2003) used surveys to collect buyer and supplier reports of the supplier's opportunism examining how perceptions of this behavior vary as a function of the buyer's time horizon, specific investments in the relationship, and reliance on relational norms.

Finally, it is worth considering whether to administer the survey online or via paper and pencil. Both approaches have their tradeoffs. Online surveys provide real-time data, reduce the coding errors that arise from the transcription of paper data to an electronic format, and can be customized to respondents. For example, it is possible to provide nested sets of questions to respondents on the basis of their prior responses within a survey. The development of a robust site can be expensive, however, and requires a high level of technical skill. A Web survey is also less portable than a paper-and-pencil survey (respondents must be at a computer), and there is also the problem of driving traffic to the site. Paper-and-pencil surveys are often cheaper to produce and relatively easy to administer, but the transit time between the researcher and the respondents can be significant and fraught with error (there can be postal errors and incorrect addresses, for example). Moreover, the surveys are easily lost both in the mail and by respondents.

Quasi Experiments

Quasi experiments are similar to laboratory experiments in that they involve treatments, outcome measures, and experimental units. Their primary difference is that quasi experiments do not contain random assignment, which is a critical factor for inferring treatment-caused change in laboratory experiments. If one is running a quasi experiment on salesforce incentives, it may not be possible to assign managers randomly throughout the firm to participate in the quasi experiment, nor would it make sense to do so. As a result, quasi experiments involve nonequivalent groups, meaning that the participants may differ systematically on a variety of dimensions. The researcher's task is thus to separate the treatment-induced effects from the initial noncomparability of the respondents. To this end, Simester et al. (2000) used a variety of variables to control for otherwise unobservable environmental factors that might confound the effects of their treatment; they also statistically controlled for individual scale and question effects in their analysis.

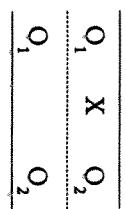
Whenever possible, using a control group can enhance the validity of the results, since it provides a baseline understanding of the dependent variables in the absence of a treatment effect. A control group is even more important in the field than in the laboratory because of the noisiness of field environments and the researcher's inability to control everything that goes on during the experimental period. A common quasi experimental design is the untreated control group, which makes use of a pretest and a post-test, as shown below.



In general, it is wise to be opportunistic when using quasi experiments. One must look for a naturally occurring event in a firm that could serve as a basis for study. Jap (2003) and Simester et al. (2000) were, for example, involved with corporations who were planning their own internal experiments concerning customer service interventions and online reverse auctions. Maxham and Netemeyer's (2002) quasi experiment also took place around naturally occurring events; they were able to examine customer service failure and recovery efforts over a 20-month period as these events occurred in a major bank. Maxham and Netemeyer surveyed customers before and after a service recovery effort, and approximately six months later, they surveyed the same customers before and after a second service recovery effort. This study is also noteworthy for collecting longitudinal survey data over three time periods, instead of just two time periods.

In this approach, the X indicates the treatment. The Os indicate a measurement point for Group A, which is the treatment group (above the dotted line) and for B, the untreated control group, though it may not always be possible to use a control group. In research on the Nutrition Labeling and Education Act, Moorman (1996) and Balasubramanian and Cole (2002) were not able to use a control group because the act was implemented nationwide. As a result, the researchers took other steps to enhance the internal validity of their findings such as insuring that the same stores were visited in the same month during the pre and post conditions distributing data collections evenly across stores, time of day, and day of the week and controlling for store promotional activity via Nielsen data.

Sometimes researchers must modify the standard untreated control group design for the research context. For example, in her research on online reverse auctions, Jap (2003) attempted to use the untreated-control-group design with a pretest and post-test measurement when surveying suppliers, but found that the supplier resisted completing the post-treatment survey because it occurred within only a few weeks of the pre-treatment survey, and their attitudes toward the buyer had no changed significantly in that time period. Thus, the design was modified as follows



Alternatively, circumstances in the marketplace environment may offer a natural opportunity for quasi experimentation. The coming into effect of the Nutrition Labeling and Education Act represented a prime opportunity to examine whether consumers' patterns of nutritional information processing were actually altered by the event. Ratchford, Lee, and Talukdar (2003) likewise saw the emergence of the Internet as a prime opportunity to examine consumer search behavior. They use a between-subjects field study to collect survey data on customer search behavior in 1989 and 1999, with the emergence of the Internet occurring between the data collections.

Additional data within the organization or research environment can enhance the internal validity of the results. In her research on online reverse auctions, Jap (2003) argued that the auction format (either an open or sealed-bid process) would differentially affect suppliers' suspicions that an organizational buyer was acting opportunistically. Along with the pre and post measures, Jap provided supporting data in the form of additional survey measures and direct interviews that indicated that the auction process was in fact driving the observed results and not alternative factors. An even stronger approach is to incorporate the firm's archival data into the research objectives. In their investigation of the adoption of salesforce automation technologies, Speier and Venkatesh (2002) collected perceptual data from sales reps before and after the implementation of salesforce automation tools in two firms and then estimated a structural model that included both survey data and the firm's internal data regarding sales performance, usage of the new tools, absenteeism, and turnover as the dependent variables.

Researchers should try to exercise control over treatment effects whenever possible. In her research on how physical surroundings and employee responses affect service encounters, Birner (1990) was able to create a $3 \times 2 \times 2$ factorial experiment and randomly assign airport travelers to the various conditions. Anderson and Simester (2001, 2003, 2004) have conducted multiple field experiments with catalog retailer in which they have been able to manipulate aspects of the catalog and randomly assign respondents to the treatment conditions. All of these field experiments benefit from the ability to manipulate the treatment successfully, to assign customers randomly to treatment and control conditions, and to control for alternative explanations in the field context.

Participant Observation

Participant observation requires the researcher to "live" in the organization—that is, to participate in the firm's activities, processes, and initiatives, which can take a significant amount of the researcher's time. The management literature widely uses

participant observation to study product development activities, organizational process, group dynamics, organizational identity, and change and the social and institutional environment (van Maanen 1998 provides an extensive review of the qualitative work in this area, and Barley 1990 provides excellent guidance for conducting participant observation studies). However, in marketing strategy we observe far fewer studies that employ this approach, which may be due to the difficulty of gaining such extensive access to firms as well as to the significant time commitment required of researchers once the access is gained.

Workman (1993) devoted nine months to full-time observation of the activities of marketing, engineering, and field groups of a major computer systems manufacturer. In their research on improvisational processes, Moorman and Miner (1998) and Miner, Bassoff, and Moorman (2001) also spent nine months observing and recording approximately 100 product development meetings—from concept development to prototype development, design, and launch. All these researchers were able to uncover unique and interesting aspects of their phenomena of interest. For example, Workman discovered strategic coalitions and a variety of informal networks that served as vehicles for marketing's influence on the new product development process. Moorman and her colleagues discovered behavioral variations in the execution of improvisational processes and observed how such variations led to new physical product attributes without prior design and to the use of concepts and ideas in novel environments and circumstances. It would have been impossible to make these discoveries using more quantitative field tools.

Since a growing number of firms use private intranets to manage communications in their interorganizational and intraorganizational activities, computer-mediated activities will become a prime context for studying marketing strategy in action. In this regard, Kozinets (2002) described a novel approach to such online communities: netnography. Netnography finds its roots in ethnography but differs substantially: While ethnography examines the interactions and observed behavior of individuals in person, netnography focuses on the textual discourse between participants engaged in computer-mediated communication. This approach provides a number of comparative advantages over traditional ethnography, including speed, ease of use, and lower cost. In another example, Dahan and Hauser (2002) provided an overview of six Web-based methods for the rapid and inexpensive collection of customer inputs for all stages of the product development process. Not only do these tools show promise for all stages of the new product development process, they can also be applied to the study of marketing strategy performance.

Conclusions

In this chapter, we have identified some key issues associated with field studies and have provided some suggestions for handling them. We have also discussed the specific challenges associated with various field study tools. In general, it is wise to be opportunistic about field research, using a variety of field tools, blending multiple sources of data, and learning as much as possible about the research context and how the phenomenon of interest occurs in the marketplace. Since field research can be incredibly time consuming, it is important to try and generate multiple projects from one data collection.

The field context is inherently noisy and difficult to control, making it relatively easy to develop alternative explanations for the results. If these explanations are correlated with the variables in the study, one cannot deploy the usual defense, that the impact of omitted variables is contained in the error term. Others often question whether informants gave honest answers and whether they are truly knowledgeable, particularly when the phenomenon under investigation is large and complex. It can be difficult to establish that no systematic reason exists for nonresponses, a reason that might contaminate the data set. And the inability to prove causality (outside of longitudinal or quasi-experimental work) continues as a constant issue.

But field studies remain a fascinating means by which to study marketing strategy, providing a bird's-eye view into marketing phenomena as it occurs in its natural habitat, the firm. Carefully constructed, these studies for the most part make it through the review process and are published in leading journals. For most marketing problems, the range of plausible outcomes is enormous. Theory and logic alone cannot delimit the plausible from the probable. Ultimately, a well-performed field study provides compelling evidence of what actually happens, offering a definitive verdict. And field research is the best way to show that a phenomenon is robust, that it operates predictably in multiple settings. Finally, field research is the most effective and most efficient way to map out the domain of a problem, showing its interconnections, antecedents, and consequences, short and long term. For these reasons and more, field studies can be incredibly worthwhile endeavors.

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Appendix Table A1
Field Study Applications in Marketing Strategy

Author	Research Tool	Application Notes
Sinnesler et al. (2000)	Quasi experiment	Variations in the field setting can yield inconsistent treatments; controls for unobservable factors, treatment confounds, individual scale, and question effects; involves naturally occurring event
Jap and Ganeshan (2000)	Survey	Generalizability in a single-industry setting; cross sectional insight into dynamic phenomenon
Miner, Bassoff, and Moorman (2001)	Direct interviews, participant observation, and archival data	Multimethod approach to minimize common-method bias; direct interview approach inhibits retrospective bias; time consuming
Moorman (1996)	Quasi experiment, direct interviews	Multimethod approach to minimize common-method bias; lack of a control group and alternative approaches to enhance internal validity; involves naturally occurring event
Anderson, Fornell, and Lehmann (1994)	Survey, secondary data	Multimethod approach to minimize common-method bias
Lemon, White, and Winer (2002)	Survey, archival data, laboratory experiment	Improves internal and external validity; mitigating common-method bias
Buchanan (1992)	Survey	Assesses validity of key informants via additional informants
Chandy, Prabhu, and Antia (2003)	Simulation and survey	Improves internal and external validity
Kohli and Jaworski (1990)	Direct interviews	Discovery and exploration of new phenomena; exploration in multiple contexts enhances generalizability of findings
Wathne, Biong, and Heide (2001)	Conjoint analysis in direct interviews	Reduces retrospective and social desirability bias
Urban and Von Hippel (1988)	Survey, focus group	Reduces retrospective bias, common-method bias

Author	Research Tool	Application Notes
Parasuraman, Zeithaml, and Berry (1985)	Focus groups	Homogenous groups facilitate participation
Bendapudi and Leone (2002)	Focus groups	Can be more efficient than direct interviews, useful for identification of general characteristics of a phenomenon
Robertson and Anderson (1993)	Survey	Projective vignettes reduce retrospective and social-desirability bias
Jap (1999)	Survey	Longitudinal approach to improve causal investigation; independent and dependent variables collected at Time 1 and 2; exploration of dyadic phenomena
Jap (2001)	Survey	Cross-sectional insight into dynamic phenomenon
Moorman and Rust (1999)	Survey	Longitudinal approach to improve causal investigation; independent and dependent variables collected at Time 1 and dependent variables at Time 2
Moorman and Miner (1998)	Survey	Longitudinal approach to improve causal investigation; independent variables collected at Time 1 and dependent variables at Time 2; time consuming
Rust, Moorman, and Dickson (2002)	Survey	Longitudinal approach to improve causal investigation; independent and dependent variables collected at Time 1 and secondary data at Time 2
Murry and Heide (1998)	Survey with conjoint task	Lab techniques in field settings
Sternersch et al. (2003)	Survey with conjoint task	Exploration of individual perspectives of a dyad
Anderson and Weitz (1992)	Survey	Exploration of individual perspectives of a dyad
Ross, Anderson and Weitz (1997)	Survey	Exploration of individual perspectives of a dyad
Rokkan, Heide, and Wahne (2003)	Survey	Exploration of individual perspectives of a dyad

Author

Research Tool

Application Notes

Author

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