HOW TO WRITE UP CASE-STUDY METHODOLOGY SECTIONS

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ABSTRACT

Business-to-business marketing academics study complex phenomena, aiming to describe these phenomena through theoretical frameworks, explaining the relationships among the framework's constructs, and provide guidance and insight to decision-makers. Not surprisingly, often business-to-business researchers undertake qualitative case studies. In this editorial, we discuss what we believe could be reported in the write-up of a case-study methodology section. In particular, we consider the issues of selecting cases; crafting instruments and protocols, entering the field; and analyzing the data. How to assess the validity and reliability of qualitative case studies is also discussed. We finish the editorial by examining three exemplar case studies that have been published in *Industrial Marketing Management*.

Keywords: best practice; case study; guidelines.

1. INTRODUCTION

Business-to-business marketing academics study complex phenomena, aiming to describe these phenomena through theoretical frameworks, explaining the relationships among the framework's constructs, and provide guidance and insight to decision-makers (Hunt, 1994). Like all academics, business-to-business marketing academics work within a scientific paradigm, that is, they share assumptions about the phenomena they study so as to orient their research and define their lines of enquiry (Deshpandé, 1983).

The ontology used by a large proportion of business-to-business marketing researchers publishing in *Industrial Marketing Management* is that of relativism. That is, there is no assumption of an objective reality; rather, the researcher investigates individual actors'

knowledge and perspectives in order to understand perceived reality in context (Carson et al., 2001). These business-to-business researchers also operate within the realistic paradigm: they interpret the processes of social actors within situations and seek to understand socially constructed meanings. By reconstructing these meanings with scientific language, the researchers generate theory about the phenomenon under study (Blaikie, 1993). In a relativistic setting, multiple realities and the perspective of multiple actors are taken into account by the researcher so as to understand the phenomenon in its proper context (Carson et al., 2001).

In order to fully adhere to a realistic paradigm and comprehend marketing phenomena, these business-to-business marketing researchers participate in real-world situations. The researchers recognize that actors and experiences are intertwined with marketing phenomena, and subject to causal influences (Bhaskar, 1978; Robson, 1993). Further, they recognize that marketing phenomena must be considered as part of the real world, which may only be imperfectly understood (Lincoln and Guba, 1994). Accordingly, these researchers take the perspective that marketing phenomena are not hard and fast rules, but rather reflect tendencies. Therefore, research findings should be thought of not as the reality of the world, but a window to reality, and that further insight can be gained through triangulation with results of other studies (Perry, 1998).

Given the above background, it is clear why a large proportion of business-to-business researchers have made use of qualitative case studies (Beverland and Lindgreen, 2010). The qualitative case study is a desirable research approach for realists whose goal is to describe and explain phenomena, capturing the appropriate level of complexity (Bhaskar, 1979). Case studies are useful when the actors' behaviors cannot be controlled (Yin, 1994) and when the research wants to investigate "how" and "why" questions, which might require gathering data over an extended period of time (Miles and Huberman, 1994). By using a case study method, researchers can take a holistic view and explore social processes in rich and complex detail. In this process, contextual variables that affect actors' behavior will be observed and identified.

In the following, we will discuss what we believe should be reported in the write-up of a case-study methodology section. We organize our discussion around some of the steps in Eisenhardt's (1989) framework.

2. WHAT TO INCLUDE IN THE WRITE-UP OF A CASE-STUDY METHODOLOGY SECTION

2.1. Selecting Case(s)

Researchers using the case study method must first decide on the research setting for their cases (industry, region or locality, and so on). They should be able to justify this setting as appropriate for studying the phenomenon of interest. Therefore, researchers should be able to specify how the case study will contribute to theory: through replication of earlier findings, extension of current theory, identifying theoretical categories, or showing examples of positive and negative cases so one can diagnose how they differ. Furthermore, the researchers should stress how they will be able to make theoretical contributions given their chosen research setting, and whether these contributions can be generalized through replication.

For example, just because, say, corporate social responsibility (CSR) has not been studied in country X is not in itself a strong reason for undertaking a study. If, however, there are reasons to believe that there are different underlying factors of influence (to those compared to countries A, B, and C where CSR already has been studied) on CSR that pertain to, say, how managers can question, identify, and prioritize relevant elements of CSR, then there is a good reason to undertake the proposed study.

Once the research setting has been chosen, the researcher has to consider which companies to include, and which respondents to choose within each company. These decisions should be justified by the researcher. Continuing with the CSR research theme, then, the researcher would need to specify the criteria used to select companies. For example, have the companies set a goal of adjusting their supplier relationships to confirm to CSR objectives? Did an industry expert help in the selection process? Companies may have been selected because they recently have made changes to their supplier relationships, in which case the study would be a *post hoc* assessment of CSR compliance. An issue with this kind of assessment is that it depends on the memories (and records) of the participants, which might not be perfect. How did the researcher address this issue? Alternatively, a company in the midst of making such changes could be studied, which allows the researcher to assess the compliance process as it unfolds, avoiding the issue of forgetting past details. In any event, the researcher must also consider which individual respondents to contact. If only CEOs are interviewed, would they have enough detailed information about specific CSR policies and activities? Should both C-level executives and middle managers responsible for CSR implementation be interviewed?

While there are no specific rules on how many companies to include or individuals to be sampled, one should be able to generalize from the data and generate meaningful theoretical

propositions (Coffey and Atkinson, 1996). The case-study researcher should be able to determine that theoretical saturation was reached, and justify that determination. In their Voice of the Customer research, Griffin and Hauser (1993) provide an example of the metrics that can be used to assess theoretical saturation. In their work, it was found that deep interviews of 20 or 30 customers yielded 90 to 95 percent of customer needs, suggesting that this was a good target number of interviews for this kind of research.

The case-study methodology section appropriately should include a table(s) summarizing the qualitative case studies using column headings including, for example, 'study and number of case(s) + time of study', 'research topic(s) examined', type of industry and geographical scope of activities', 'revenue and number of employees', 'source(s) of information', 'individual respondent's position and years in company', and 'length of interview'. Another appropriate column heading would be 'background of company' that could explain in a nutshell what the company was about, and why it was relevant for the research (e.g., how the company has worked with CSR principles).

2.2. Crafting Instruments and Protocols + Entering the Field

Case study researchers rely on in-depth, face-to-face interviews as the most effective means of gathering data. Just as the quantitative researcher develops, validates, and pre-tests the survey instrument carefully before entering the field, the qualitative researcher must develop an interview protocol to ensure that the questions will cover the relevant range of topics, and the interviews stay focused. The case-study methodology section must discuss this interview protocol. For example, which themes, identified in literature and business press or noted by industry experts, were covered during the interview? How were the interview questions standardized around the topics that covered these themes? Which specific prompts were interspersed to gain greater insight into the specific lines of inquiry? Finally, were the individual respondents provided with the opportunity of giving feedback on the findings? Did this feedback result in a reinterpretation of the findings? Incidentally, the case study method sometimes has been criticized for yielding superficial insights (Dyer and Wilkins, 1991); other data may also be used to identify deeper insights and/or ensure generalizability of findings to other contexts (Eisenhardt, 1991).

The case-study methodology section could include a table or an appendix with the interview protocol including 'themes', 'topics', 'interview questions', and 'specific prompts'. Sometimes, however, a description of what was done is more useful, especially when doing theoretical sampling where the questions may shift. If included, the table could also list, in

bullet points, the ‘key findings’ next to (in a second column) each theme, topic, interview question, or specific prompt. These key findings again could be supplemented with (in a third column) ‘illustrative interview quotes’, as well as ‘other primary or secondary evidence’ from, among others, business press articles, published reports, annual reports, and observations in the companies. If such primary and secondary evidence are presented and discussed in the article, then this third column could be omitted.

Not all the illustrative interview quotes and other primary or secondary evidence would (need to) be discussed in the manuscript. However, the abundance of rich quotes and evidence help to demonstrate that the findings discussed in the manuscript are grounded in actual facts; and that researchers have not used quotes selectively that are in support of their contentions. One way to overcome criticism that quotes are used selectively is to report on as many cases as possible. Without presentation of ‘raw data’, readers have to trust that the researchers have interpreted the data correctly (Beverland and Lindgreen, 2010). One could contemplate offering a supportive table, perhaps in an online appendix, that provides more data examples. Following that route should ensure readable articles with acceptable contribution-to-length ratios.

Finally, the case-study methodology section could at a minimum mention the number of pages (e.g., single spaced, New Times Roman 12) of the combined text with the information from the in-depth, face-to-face interviews and the other primary or secondary evidence. When researchers include, for example, images and recorded information, they need to consider other options (e.g., total file size) that capture the total sample of data.

2.3. Analyzing the Data

Case-data analysis techniques must be presented carefully to fully understand and explain the marketing phenomenon being studied and to show evidence of generalizability of results to either a population or to theory. This can be done in two steps, the first of which is the within-case analysis. Here, the researcher documents how the data from individual respondents within each company were handled, with respect to how specific research topics were addressed. This is generally accomplished by coding, in which the raw data are converted or coded to understandable components, which can be then more easily compared across respondents (Eisenhardt, 1989). A figure can be presented, which shows how the coding was done, and how themes and patterns within the data were identified using a coding scheme. The coding scheme itself should be included. A table can be included that shows how the data were interpreted and grounded-theory coding was developed (Spiggle, 1994). This coding and identification process

could be supported with, for example, Atlas.ti software for qualitative research: However, this additional support may not be necessary in simpler cases involving single case studies.

If there are multiple companies, the coding scheme may be developed using data from interviews of one company's informants, and then can be used for the other companies; this process should be described. Additionally, if multiple researchers were involved in coding, the process by which they compared their coding results and resolved disagreements should be clarified as well. This could be expressed through, for example, inter-rater reliability.

Other decisions also should be disclosed in the methodology section regarding how the data were selected, analyzed, interpreted, and presented. Since the case-study methodology is discursive, full disclosure of all the evidence and findings may be prohibitive in length. The researcher will need to decide what should be included, and the presentation should convey the richness of the data to the reader. As noted above, the use of figures and tables may simplify presentation. Here and elsewhere, researchers should support their methodological choices with well-known references.

The second step is across-case analysis, which identifies differences and similarities on key dimensions across sets of cases. This step is important when the study includes multiple cases, and the step is used to determine if there are common patterns across the cases (Eisenhardt, 1989). For example, researchers will need to explicate how they moved back and forth between the established literature and the case data to develop theoretical categories and developed contextualized insights on the phenomenon under study. Figures or tables again can be used to facilitate communication of this process.

2.4. Validity and Reliability Concerns

The qualitative case-study researcher also must address validity and reliability concerns. According to the relativist view, research is the result of interaction between researcher and phenomenon (Alvesson and Skjöldberg, 2000; Seale, 1999), making it difficult to assess research quality since researchers each possess their own perspective or lens of how they see the world. Nevertheless, it has been argued that judgments about research quality can be made, even under the relativist view.

We argue that the validity and reliability of qualitative case-study research can be assessed using four design tests: construct validity, internal validity, external validity, and reliability. Beverland and Lindgreen (2010) note that the "lack of description of procedures makes replication difficult, thus undermining claims of reliability or dependability" (p. 58). For each of the four design tests, one can provide a brief theoretical explanation, a list of tactics that can

be used to establish validity/reliability of case studies, and methods by which each of the tactics could be operationalized in a case-study context. Table 1 presents a general, non-exhaustive format that describes how each of the design tests could be operationalized; this can be used as a starting point by case-study researchers for establishing research quality (Flint, Woodruff, and Gardial, 2002; Lindgreen, 2008). To reduce the page space of the case-study methodology section, researchers could consider discussing validity and reliability in an appendix.

Table 1. Case Study Tactics to Secure the Design Tests of Validity and Reliability

Design Test	Theoretical Explanation	Case Study Tactics	Operationalized in this Study by...
Construct validity	To ensure correct operational measures have been established for the concepts being studied.	• Triangulation • Chain of evidence	• Multiple methods (interviews with different internal and external respondents; content analysis of data collected; case feedback from respondents; time in the field); multiple data sources (primary and secondary); multiple case studies and research settings; collaboration with knowledgeable colleagues; rich case descriptions • Providing a chain of evidence throughout the study
Internal validity	To establish a causal relationship. Internal validity is a concern for explanatory or causal case studies but not for exploratory or descriptive case studies that do not attempt to make causal statements.	• Pattern matching and rival explanation as pattern • Explanation building • Time-series analysis • Type of data • Triangulation	• Carrying out a cross-case analysis • Drawing on multiple perspectives and searching out negative cases • Building timelines for each case to form the basis of an initial coding scheme for the cross-case analysis. • Collecting rich data; grounding phenomena in data • Allowing respondents to review the draft of a case and give feedback; discussing the findings with colleagues
External validity	To demonstrate that the domain to which a case study's findings belong can be generalized.	• Specification of population of interest • Replication logic in multiple case studies • Research methods • Type of data collected	• Selecting data on the basis of population statistics • Providing a detailed description of the historical context of the study and locating each case within that context; using different research settings • Using a standardized interview protocol, clear procedures for data analysis, and a database • Collecting rich data
Reliability	To demonstrate that a case study's findings can be replicated if the case study procedures are followed.	• Interview protocol • Clearly conceptualized concepts • Multiple indicators • Execution of pilot tests • Case study database • Triangulation	• Developing a standardized interview guide • Using concepts from extant literature • Addressing multiple concepts • Developing an interview guide from pilot cases, as well as previous studies • Building a case study database (perhaps using QSR NUD*IST or a similar program) • Using secondary data

Source: Lindgreen, A. (2008). *Managing Market Relationships: Methodological and Empirical Insights*. Aldershot: Gower Publishing, p. 49.

3. CONCLUSIONS

We have tried to point out good guidelines for case-based research, as well as some examples of what generally would not be thought of as an interesting case study (a simple replication in a new country, where there is no theoretical reason why that country would be different for some cultural or business environment reason). Accordingly, we will end this editorial by discussing some case studies, which have been published in *Industrial Marketing Management*, that have the hallmarks of good case studies.

Choosing an exemplar multiple-case study within *Industrial Marketing Management* is difficult, given the high standard of research published in the journal. However, Flint and Woodruff's (2001) multi-site analysis of customer-desired value change is one standout example of a textbook case study. The authors provide a level of detail on their methods that for the time was unusual, and that meets the standards of this editorial. Readers understand each step of sample selection, data collection and subsequent analysis, and validity and reliability checks. The authors report their findings drawing on a range of compelling passages across the nine cases selected, and they summarize their data throughout as they build a theory of customer-desired value change. As the authors propose, value change is complex, and they fully capture this richness while never losing site of the need to order their material into a useful mid-range theory that can further research.

Multiple-case studies often rely on single informants. However, theoretical insights can be gained when drawing upon multiple informants within cases. Ylimäki's (2014) examination of co-created product development between suppliers and users is one such example. The value of multiple inputs has long been demonstrated within new product development; however, this almost always gives rise to tension and the potential for conflict and poor outcomes. Understanding how actors from different disciplines come together to make team-based innovation work is critical. Ylimäki outlines his approach carefully, captures the ebb and flow of interaction between suppliers and customers, and brings to life the reality of joint product development, while also making use of figures, quotes, tables, and secondary data to ground his analysis.

Case studies are particularly suited to addressing issues of process and change. However, longitudinal work is difficult to undertake, given issues of access, time commitment, and the sheer amount of data one generates. It is heartening to see more longitudinal work being published in *Industrial Marketing Management*. One exemplar is Roerich and Caldwell's (2012) examination of public-private procurement in the UK health sector. As well as providing all the details on method suggested in this editorial, the authors adopt a novel approach to presenting their data. They start with

comparing the traditional model of public sector procurement with a possible novel model of thinking about public-private procurement. This device enables the authors to explore their rich data. They draw on as much interview, observation, and secondary material as they can within an article length, cleverly integrating data tables and figures into a classical qualitative narrative before discussing their adjusted model of public private procurement. Seeing authors develop theory within an article always helps convince readers of the quality of the authors' approach.

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