2020

Conducting and Analysing Semi-Structured Interviews: A Study of Open Innovation in Food Firms in Ireland.

Anushree Priyadarshini
Technological University Dublin, anushree.priyadarshini@tudublin.ie

Recommended Citation

Priyadarshini, A. (2020). Conducting and analyzing semi-structured interviews: A study of open innovation in food firms in Ireland. SAGE Research Methods. doi:10.4135/9781529705546

Conducting and Analyzing Semi-Structured Interviews: A Study of Open Innovation in Food Firms in Ireland

Anushree Priyadarshini

Technological University Dublin, Ireland

Discipline

Business and Management [D12]

Academic Level

Postgraduate

Contributor Biography

Anushree Priyadarshini is a lecturer in Business Strategy and Management in the College of Business, Technological University Dublin (TU Dublin), Ireland. Prior to joining TU Dublin, she has lectured in the Business school in Dublin City University (DCU) and University College Dublin (UCD), Ireland.

She has also been a visiting faculty in UCD Singapore and UCD Hong Kong. She has been a researcher on higher education in Ireland's Campus Enterprise Engagement Networks (CEEN) project, and prior to her PhD worked as a marketing manager in the pharmaceutical industry in India. With a background in life sciences, holding an MSc in biotechnology, she pursued an MBA in marketing from India and received her PhD in innovation management from DCU, Ireland. As a postdoctoral researcher in Applied Research for Connected Health (ARCH-UCD), she worked on industry consulting projects like designing market entry strategies for small and medium-sized enterprises (SMEs), consumer research on adoption of innovative health care technologies, designing care pathways, and assessing cost-effectiveness of health care interventions. She is supervising/has supervised PhD, master's, and undergraduate dissertation and internship students; and conducts invited lectures in research methods. She is regularly engaged in presenting her research in international conferences and publishes her work as international peer-reviewed journal articles and books chapters. Her research interests include healthcare and food management, innovation management, costing and environment sustainability.

Published Articles

Priyadarshini, A., O'Gorman, C., & Gao, Y. (2014, June 4–6). *Adopting an open innovation paradigm: Managerial perceptions and the innovation value chain*. Paper presented at R&D Management Conference, Stuttgart, Germany.

Abstract

This case study examines the use of semi-structured interviews that I used in my PhD research as a method to explore open innovation in food firms in Ireland. Literature in the field highlights that exploring innovation and the extent to which firms are open and collaborative with people outside of their organizations in conducting innovation requires detailed understanding of the concept in its natural settings. To interpret or make sense of the phenomena in

terms of the meaning managers bring to it, I conducted in-depth semi-structured interviews with managers in Ireland's largest indigenous industry, the food and beverage sector. Demonstrating some of the methodological challenges of conducting research in an organizational context, this case details how the in-depth semi-structured interviews were designed and conducted, and the process of analyzing and interpreting the data. The aim is to provide an insight into how to conduct research with managerial population to gain rich data that can help understand an organizational phenomenon.

Learning Outcomes

By the end of this case study, students should be able to

- Develop insights about designing an interview guide for data collection

- Understand the process of conducting and analyzing semi-structured interviews

- Examine how coded qualitative data can be utilized to understand an organizational phenomenon

Case Study

Project Overview and Context

This case study focuses on the qualitative research journey undertaken as part of my PhD research. In the thesis, I explored the innovation process in food firms in Ireland, with a specific focus on the extent to which these processes are open. In the decade since the term "open innovation" was coined by Henry Chesbrough in his 2003 book *Open Innovation: The New Imperative for Creating and Profiling From Technology*, it has become one of the key research

topics in innovation management (Enkel, Gassmann, & Chesbrough, 2009; Huizingh, 2011; Van de Vrande, De Jong, Vanhaverbeke, & De Rochemont, 2009). However, despite this scholarly interest, the understanding of how firms practice open innovation is underdeveloped. A more comprehensive understanding of the process of innovation, as firms open up, is required to benefit from the concept, including a better understanding of the *"why"* and the *"how"* of practicing open innovation.

Understanding the "*why*" and the "*how*" necessitates investigating a phenomenon in its natural setting to explore what little known is about it yet and to gain new perspectives on things about which much is already known. It calls for gaining more in-depth information that may be difficult to collect or convey quantitatively. In other words, it calls for conducting a qualitative analysis, the approach that I took for this research project.

Because of my background and interest in food industry research, and moreover because the food and beverage sector is Ireland's largest indigenous industry, the research was designed to focus on the Irish food industry. For gaining insights, my study focused on how firms interpret the concept of opening up their innovation process, the way innovation is structured and managed in the firms, the interactions firms have with external parties for their innovations, and variations in these interactions as the innovation progresses. By exploring the innovation process and by examining the extent of openness of the different stages of an innovation from conceptualization to commercialization, I aimed to develop insights on how organizations can benefit from the emerging open innovation management paradigm. In doing so, my study aligned with Ireland's national ambition of developing as a smart economy on the basis of creativity, collaboration, and innovation.

Research Design

Prior to the commencement of data collection, it is essential to clarify the foundations of the research so as to ensure a well-defined focus. The discussion that follows outlines the premise that informed the research design of my PhD research. Using Fred L. Perry's (2011) three-dimensional axes of research classification, I defined the central aspects of my study and classified my research on three design continua. On the first dimension, *confirmatory–exploratory*, my study was considered exploratory as it attempted to understand how firms adopt open innovation practices and the extent to which their innovation processes are open. On the second dimension, *quantitative–qualitative*, in extracting the details that an exploratory research requires, qualitative enquiry, with its ability to understand in depth the characteristics of the situation, was conducted. Finally, on the third dimension, *basic–applied,* my study, with its focus on exploring the extent of openness in firms' innovation processes, was an applied research as it improved the understanding of an organizational phenomenon and produced findings of significance and value to organizational stakeholders.

Method in Action

When conducting a qualitative study, the researcher must develop the level of skill appropriate for a human instrument. Anselm Strauss and Juliet Corbin (1990) detail it as an awareness of the nuances of the meaning of the data, referring to the attribute of having insight, the ability to give meaning to data, the capacity to understand, and capability to separate the pertinent from that which isn't. Unlike structured interviews that contain a defined sequence of questions to be asked in a similar manner of all interviewees, the distinctive characteristic of semi-structured interviews is that they have a flexible and fluid structure. Semi-structured interviews are usually prepared around a supporting interview guide that includes areas, topics, or themes required to be covered during the interview, instead of a sequenced list of standardized questions. The aim is typically to warrant flexibility in how and in what order questions are asked, and in if and how certain topics might be followed up and advanced with other interviewees. This is so as to shape the interview based on the interviewee's understandings as well as of the researcher's interests (Mason, 2004).

As my study aimed at exploring open innovation in food firms—specifically, how they go about it and why—semi-structured interviews were considered an appropriate tool for building understanding of the complex phenomenon at hand. For example, the interview guide I developed for conducting the interviews asked the respondents,

Would you like to tell me about the most significant innovation in your firm/business unit? Be it a product/process/organizational innovation. Its complete story, of how it came about, who was involved, how it evolved and got implemented?

Such a question, thus, provides enough flexibility to the interviewee to detail the innovation. In addition, I developed a list of prompts with each question to facilitate the discussion and, if need be, to steer the discussion toward the details of the interviewee's innovation story and encourage the interviewee to elaborate.

The list of some of the prompts for the previous question included the following:

Were there other competing ideas?

Why and how was this chosen?

How it developed?

How was it implemented?

How long did it take to develop and implement?

How was it organized?

Who was involved?

In the current context, interviews not only provided me the opportunity to generate rich data but the language used by participants was vital in building my understanding of their perceptions and values. In addition, contextual and relational aspects were seen as significant in gaining insights into the respondents' perceptions. The stages involved in the research process are described in the following subsections.

Interview Guide

The research issues I distilled from the literature review guided the formation of the semi-structured interview questions. To formulate a thorough list of necessary questions for the semi-structured interview, I analyzed the research objective for its critical data points and created questions that related directly to gathering information about the identified important points. I then repeatedly evaluated and widened these questions so as to capture detailed information about the research issues as well as participants' perspectives, ideas, opinions, and experiences. For example, the questions designed to understand the innovation process in the firms were initially worded as

What role does innovation play in your organization?

What are the primary reasons because of which you do innovation?

Would you like to tell me about the most significant innovation of your organization?

How did the idea originally come into place?

Were there other competing ideas at the same time? Incremental or radical in nature? If yes, how was the choice made?

To capture detailed information, the questions were widened and revised to word as follows:

Broadly speaking, how does innovation happen/occur in your firm? Would you like to tell me about the most significant innovation of your

organization in the last 10 years?

To ensure the capture of all specific information, I designed prompts to suggest to the interviewees if required. When all revisions were completed, the final question was worded as follows to enable the interviewee to provide as much detailed information as they wanted to:

Would you like to tell me about the most significant innovation in your firm/business unit? Be it a product/process/organizational innovation.

Its complete story, of how it came about, who was involved, how it evolved and got implemented?

The interview protocol was designed to begin the interview with detailing the background of the study and the aim with which the research was being conducted. This was so as to provide detailed information to the participants about the purpose of the study and also to create rapport, giving the parties a chance to get acquainted. The interview guide was structured in two parts. The first section of the interview (questions with prompts as detailed earlier) focused on gathering information about a significant innovation that had occurred in the organization, in terms of how it occurred, how it was developed and implemented, how it was managed, and how exchange or flow of knowledge occurred with internal as well as external parties. For example, following the interviewee's story about their most significant information, I aimed at asking them,

Would you like to tell me about any open innovation that your firm has done? Its complete story like your previous description (By open

innovation I mean creation of any knowledge, products or services by interaction with parties outside of your organization).

The second section of the interview was designed to obtain more general information about how the firm managed and measured the effectiveness of its innovation. This section included questions such as

What knowledge/information do you share with external parties? While what knowledge/information do you not share and why?

How does exchange of knowledge/interactions takes place within departments in your organization? Does that impact the exchange of knowledge with outsiders?

Once an interview guide is developed, it is vital to evaluate its effectiveness in capturing the data you aim to collect, conducting a pilot study is an effective tool in ensuring this.

Pilot Study

Pilot studies are so-called feasibility studies which are "small scale versions or trial runs, done in preparation for the major study" (Polit, Tatano, & Hungler, 2001, p. 467). These are also conducted for pre-testing or trying out of a specific research instrument. In the context of this research, the pilot study was conducted to determine the appropriateness of the semi-structured interview protocol. I pitched my research and its importance in classes of various executive courses in the Business School at my university to recruit managers attending the courses to participate in my pilot study. As two managers volunteered to participate, I conducted face-to-face interviews in two firms in Ireland. One of the two interviewed firm was an Irish subsidiary of a European firm. Each interview lasted for about 65 min.

The pilot interviews confirmed the suitability of the interview guide for the research, as detailed information about innovation in the firm and about perceptions and opinions of the participants could be gathered using the interview guide. The pilot study also highlighted that some of the questions and probes were essentially asking the same thing and that there was overlap in the way questions were asked, leading to ambiguity in the answers. I subsequently made modifications to the interview guide. For example, following the pilot study, I concluded that both of the following questions were eliciting the same answers:

Would you like to tell me if resources from outside of your organization like inputs from customers, suppliers; other organizations for technical expertise/consultancy/scale up facility etc. significantly influenced this innovation in any way? Please elaborate (who, when)

Who do you interact with when innovating?

Consequently, I removed the second question from the interview guide.

The pilot study also informed the approach to sampling for the study as it highlighted the kind of firms and the level of managers in the firms that were needed to be interviewed to obtain the data I sought.

Firm Selection

Ireland's main indigenous industry, the manufacturing of food and drink products, was chosen for this study. An initial list of the Irish food firms with a minimum annual revenue of €50m was then prepared.

Foreign-owned firms were excluded from the list. This selection criterion was informed by the pilot study, which indicated that the Irish subsidiaries of the multinational corporations had limited information and decision-making powers with regard to the firms' innovations. A second set of firms excluded were co-operative firms, as this organization form has different motives. Two subsectors were also excluded. First, firms that were only distributors or retailers of food products were not included as the nature of their innovation could be very different. Second, meat firms were excluded as the possibility of access to them was perceived to be very low. The list comprised 22 firms, all of which I contacted for this study.

Interview Procedures

I contacted 22 firms and invited them to participate in the study. An initial round of formal letters introducing the aim and scope of the study were sent out requesting the firms to participate in the research study. This was followed by repeated rounds of emails and phone follow-ups to request participation and to arrange time for the interviews. Eight out of the 22 firms agreed to participate. These grouped as four medium-sized firms (revenues €50m to €500m) and four large firms (revenues above €500m).

Interviews with multiple senior managers in these eight firms were conducted face-to-face or, in one instance, by telephone. A total of 18 interviews were conducted, with each lasting about 50 min. The interviewees were senior in that they had roles such as CEO, R&D Manager, Marketing Manager, or Innovation Manager. This selection criterion was again informed by the pilot study that indicated the level of managers to be interviewed to obtain the required information for the study, as one of the managers (middle-level manager) interviewed for the pilot study responded to most questions with "as suggested by the top management."

I used the semi-structured interview protocol to conduct the interviews. First, the participants were asked to sign a consent form, giving permission for the interview, to tape-record the interview, and to use the data subsequently. Confidentiality was assured to encourage participants to provide truthful answers. While the number of interviews conducted were small, more than one interview was conducted in each participating organization. To reduce the risk of any person being identified during the research, the person was anonymized prior to the interview by allocating a unique identifier for each person prior to the interview and using only the identifier when further processing the data. Data were stored with confidentiality and only I had access to the data. Thus, at every stage of the process, data were treated with confidentiality and the anonymity of participants was ensured.

A brief introduction outlining the background and aim of the study was then given to the interviewees. While this provided detailed information to the participants, it helped me get the interviewee to start talking and build a rapport; then, the interview protocol was used as a guide to structure the interviews. The interviewees were first asked to identify a significant innovation that had occurred in the firm and to talk about it, everything they wanted to mention about the innovation, and in a much detail as they liked. In this way, interviewees were able to lead the conversation to issues that they viewed as important rather than being led toward talking about specific issues. When an interviewee mentioned a particular research issue, I asked one or more probe questions about how the innovation came about, what were its objectives, who were the people involved, how it evolved, and how was it implemented—This allowed me to explore in more detail the how and why of the issues of importance to the study.

To explore internal and external interactions firms engaged in when practicing innovation, the participants were asked to talk about the resources from outside the firm that were used for the significant innovation or for other innovation purposes. They were also asked about the way knowledge exchanges took place internally within the firm. Questions about the type of external collaboration partners and the extent of interactions were also included.

The participants were questioned on what sort of information they shared with their partners, whether they shared all information, and how they evaluated the effectiveness of their innovation.

Overall, the interviews went well. Almost all participants initially took a few minutes to think about how they do innovation in their organization and which innovation they regard as the most significant. However, once they started talking about the innovation, they went into great details; for example, how their organization's culture or managerial perspectives define their innovation activities. Although all participants seemed to enjoy talking about their organization's innovation activities, some of them were reluctant when answering the question "*What knowledge/information do you share with these parties? While what knowledge/information do you not share and why?*" To ease their reluctance, I gave them examples of information they might share (e.g., customer feedback on an innovative product offering) as well as information they might not share (e.g., development stages of an innovative idea). The suggested examples seemed to really help the participants in articulating their response. Barring two participants, all interviewees agreed to stretch the initial time they had allocated for the interview and seemed to enjoy the session.

Interview Transcription and Analysis

In the case of qualitative data, it is the data collection phase itself when the analysis commences (Rocks, Carson, & Gilmore, 2007). To aid my analysis, I summarized separately observations and thoughts I had during or after each of the interviews. For example, every time I interviewed a second or third participant in the same organization, either participants would mention or I could observe whether information exchange had taken place between the participants. This provided additional information to my interview question "*How does exchange of knowledge/interactions takes place within departments in your organization?*" I personally transcribed all 18 interviews to ensure that all nuances of the interviews were captured.

The overall analytical approach I adopted for analyzing the interview transcripts was template analysis, whereby the researcher produces a template that represents themes identified in the documented data (King, 2004). My analysis of the interviews was based on the Innovation Value Chain (IVC) constructs identified in the literature as a framework that facilitates the analysis of inter-relationships between external interaction and innovation by highlighting the structure and complexity of the innovation process. I created an initial template (Table 1) to summarize themes identified from a preliminary reading of the interview transcripts. The IVC framework defined the template structure, as it comprises an end-to-end view of the innovation activities involved in the process, namely, accessing and creating knowledge, building innovation, and commercializing those innovations (Birkinshaw & Hansen, 2007).

Comparable descriptions and common terminologies were identified. All data and observation summaries were categorized into themes (Glaser & Strauss, 1967; Miles & Huberman, 1994; Voss, Nikos, & Mark, 2002). I analyzed the data using a coding technique. S. Rocks and colleagues (2007) suggest that by coding, data can be connected with the theoretical constructs and it is the first step in categorizing the data. The codes "are retrieval and organising devices that allow the analyst to spot quickly, pull out, then cluster all the segments relating to a particular question, hypothesis, concept or theme" (Miles & Huberman, 1994, p. 56). However, codes must be meaningful, not only in terms of the data but also with regard to other categories (Dey, 1993).

Using template analysis, I categorized the transcripts into broad themes guided by my research objectives and interview questions. I read through the data to code themes, themes that were strongly expected to be relevant to the analysis. Broad themes in the template included successively narrower, more specific ones.

Guided by the IVC framework, I coded the interview transcripts and extracted significant elements. To do this, I read the transcripts over and over again and highlighted the content and gave it headings or primary codes. The primary codes included text extractions referring to the meaning of innovation at

the firm, their most significant innovation, its process, and the management of innovation. Using examples from the interview transcripts, Table 1 illustrates

the coding process.

Table 1.

Caption: Interview coding process.

Example 1	
Excerpt—Interview transcript	"We look for ideas all the time. We have not gone for brain storming sessions for the last two years; we do more cross functional meetings than brain storming sessions as they don't really generate new news. In the cider market a barrier to innovation has been the last budget. The government increased duty on wines, cider with flavour added it is defined as wine, so this has been detrimental to innovation. But we are innovation led, meaning we build on capabilities and prod categories that we have rather than look at what's new to world. Doing new to world requires lot of capabilities/resources that have to run parallel to the day to day stuff, which is difficult and most of the time very expensive. So certain innovations that are of appeal are beyond reach at times. However our innovation, the pear thing was technically led internally. We had our own cider people; we had a technical team for the recipe. For physiological testing etc. we did work with an agency on that, we also worked with an ad agency wh worked on our communication and creative. Our pack design was external and sales by our own team."
Theme	Meaning of innovation at the firm

	"In the cider market . . . beyond reach at times"	
Theme		Management of innovation "We look for ideas . . . generate new news" "However our innovation . . . sales by our own team"
Codes		Internal interactions "We have not gone . . . generate new news"
		External interactions "For physiological testing . . . design was external"
Example 2		
Excerpt—Interview transcript	"We do a piece of qualitative research every year to find out what are people drinking, seeing or trying. Then our procurement team tells us something, our packaging team tells us something and consumer research tells us something and somewhere in it all we have to try and figure out what do we want. We look at insights from business challenges and innovation falls out from them. Interactions with outsiders for ideas is quite obvious, we have good expertise in house but there is always collaboration, finding out what trends and flavours are popular. But there is always a balance between discussion of interest and protecting confidentiality. If we are planning	

	something new we go talk to them if they will be interested in it and later we make formal presentations. For general discussion it is o
	but further down the line discussion like sharing the brand name, sample etc. we would be very careful."
Themes	Management of innovation
	"We do a piece of . . . would be very careful."
Codes	External interactions
	"We do a piece of . . . would be very careful."
Subcodes	Market orientation
	"We do a piece of qualitative research . . . innovation falls out from them"
	Open innovation
	"Interactions with outsiders . . . we would be very careful"

Once the entire content of the transcripts was highlighted under different headings, I read each code/heading again. Some of the codes appeared

overlapping while a few needed to be split. Sub-categories emerged upon rereading the transcripts, so I combined related themes and split up those that

required distinction—repeating this process until everything was categorized. If I recognized new themes, I would define them to include the appropriate

material and arrange them into the initial template. I then performed a more detailed analysis of each of the broad themes so as to identify further specific

categories within each theme. For example, I initially coded "*we do more cross functional meetings than brain storming sessions as they don't really generate*

new news" under management of innovation theme, but later split it into internal and external interactions and included "*we do more . . . news*" under internal interactions (Table 1).

This hierarchical categorization that emerged from the data allowed for analysis at different levels of specificity. As scholars emphasize, to present empirical evidence, data must be compared with existing literature and analyzed like a dialogue between data and theory (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Halinen & Törnroos, 2005; Yin, 2009). I used broad primary categories to develop an overview from the interview data, and the detailed, specific ones to help identify fine distinctions both within and between cases (King, 2004). The template thus included the following:

Themes: Background of the Firm

The Meaning of Innovation in the Firm

Significant Innovations

Management of Innovation

Codes: Innovation Evolution

Innovation Objectives and Effectiveness

Innovation Team and Budget

Internal and External Interactions

Subcodes: Market Orientation

Open Innovation

The template that emerged, as outlined above, captures the broad ideas discussed during the interviews as themes; the details within each theme are categorized as codes. For example, when participants talked about management of innovation in their organizations (categorized as a theme), they spoke about setting objectives, allocation of budget, setting up of teams, and so on, for managing their innovation activities (categorized as codes). The variety within each code is coded as subcodes—for example, within teams for managing innovation, participants mentioned cross-departmental innovation teams and teams with external innovation consultants, and so on, or within interactions (categorized as codes) they mentioned interactions for market orientation and interactions for opening up innovation (categorized as subcodes). Analyzing the data by way of themes allowed listing the findings in terms of the phenomena's real-life context and the particular research questions: exploring the innovation process of the firms and the extent to which firms are open when innovating.

I then applied this initial template to the whole data set and altered it in the light of consideration of each transcript. The template served as the basis for interpretation of the data set and for the writing-up of the findings.

Conclusion: Lessons Learned

In undertaking qualitative research, the definitive aim is to offer a viewpoint of a situation and provide a detailed research report that reveals the ability of the researcher to demonstrate or describe the corresponding phenomenon. The relevance of my PhD research lies in the fact that it added to the knowledge about open innovation adoption by firms by providing a detailed account of what "innovation" and being "open" in their innovation means to firms in Ireland and how they are adopting the concept.

There are several key takeaways from my research journey. When conducting semi-structured interviews, questions must be designed as broad as possible to enable the participant to lead the conversation to issues that they consider as important rather than being led toward talking about specific issues. However, having prompts to steer the discussion if required helps to collect rich data in the limited interview duration. Equally important is building a rapport with the interviewee, giving them confidence about the confidentiality of the study and providing them examples if they are not clear or reluctant in answering some questions. Pilot studies are vital and should always be conducted as they enable you to understand and evaluate your research instrument before the real data collection. Similarly, when analyzing semi-structured interview data, transcribing all interviews yourself can be very beneficial in enabling you to identify from across the interviews the themes that can emerge from the data.

Using the lens of my PhD research of exploring open innovation in food firms in Ireland, this case study offers insights into conducting qualitative research to gain rich data that can help understand an organizational phenomenon. Providing guidance to researchers, this case study can aid them in developing and executing a qualitative research approach with managerial population and present a relevant research piece.

Exercises and Discussion Questions

1. In case of semi-structured interviews, the way the questions are phrased can vitally affect data collection. Discuss the statement.

2. Discuss the importance of having prompts when conducting semi-structured interviews.

3. Discuss the potential benefits and potential drawbacks of conducting a pilot study before commencing data collection.

4. What approach can you employ to extract rich information from interview transcripts?

References

Birkinshaw, J., & Hansen, M. T. (2007). The innovation value chain. *Harvard Business Review, 85*, 121–130.

Dey, I. (1993). Creating categories. In G. R. Gibbs (Ed.), *Qualitative data analysis* (pp. 94–112). London, England: Routledge.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review, 14*, 532–550.

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *The Academy of Management Journal, 50*, 25–32.

Enkel, E., Gassmann, O., & Chesbrough, H. (2009). Open R&D and open innovation: Exploring the phenomenon. *R&D Management, 39*, 311–316.

Glaser, B. S., & Strauss, A. (1967). *The discovery of grounded theory*. London, England: Weidenfeld & Nicolson.

Halinen, A., & Törnroos, J. Å. (2005). Using case methods in the study of contemporary business networks. *Journal of Business Research, 58*, 1285–1297.

Huizingh, E. K. (2011). Open innovation: State of the art and future perspectives. *Technovation, 31*, 2–9.

King, N. (2004). Using templates in the thematic analysis of text. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (Vol. 2, pp. 256–270). London, England: SAGE.

Mason, J. (2004). Personal narratives, relational selves: Residential histories in the living and telling. *The Sociological Review, 52*, 162–179.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. London, England: SAGE.

Perry, F. L. (2011). *Research in applied linguistics: Becoming a discerning consumer*. New York, NY: Taylor & Francis.

Polit, D. F., Tatano, B. C., & Hungler, B. P. (2001). *Essentials of nursing research—Methods, appraisal and utilization* (5th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Rocks, S., Carson, D., & Gilmore, A. (2007). Understanding small business enterprise networking: A qualitative case approach. In D. Hine & D. Carson (Eds.), *Innovative methodologies in enterprise research* (pp. 214–231). Cheltenham, UK: Edward Elgar.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research*. London, England: SAGE.

Van de Vrande, V., De Jong, J. P., Vanhaverbeke, W., & De Rochemont, M. (2009). Open innovation in SMEs: Trends, motives and management challenges. *Technovation, 29*, 423–437.

Voss, C., Nikos, T., & Mark, F. (2002). Case research in operations management. *International Journal of Operations & Production Management, 22*, 195–219.

Yin, R. K. (2009). *Case study research: Design and methods (Applied social research methods)*. London, England: SAGE.