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Creating Qualitative Interview Protocols

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November 2011

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ABSTRACT

This manuscript describes a technique which facilitates the documentation of research participant stories interpreting their experiences in response to a research question. From a Narrative Inquiry approach interview protocols were developed based upon the exploration of a research question. The technique may be applied when gathering qualitative data in one-on-one interviews. Each interview protocol provided consistency across a number of interviews; but also allowed for flexibility of responses by the research participant within their respective interviews. This document provides a description of a technique which addresses the conundrum of consistency and flexibility. Four different research projects are described in this manuscript. The specific interview protocol is presented and it is shown how the protocol serves to address the project's research question. This document concludes with a description of how these techniques may be employed, in general, to contribute to the exploratory investigation of a research topic in business and management studies.

Keywords: qualitative research, Grounded Theory, Narrative Inquiry, Long Interview Technique, interview protocol

INTRODUCTION

Researchers who want to investigate a relatively new subject area should adopt an approach which facilitates the exploration and identification of emerging constructs. Within the context of a research question data should be gathered employing a technique which will support subsequent analysis. Emerging themes may be identified based upon the data which, in turn, could be employed to develop constructs relative to the research question. Thus, the data gathering technique must be employed consistently across a number of data gathering incidents. In contrast to this consistent technique, it also must allow for flexibility so that the research participants are relatively free to respond in their own way to the research question.

This document provides a description of a technique which addresses this conundrum of consistency and flexibility. The technique is applied when gathering qualitative data in one-on-one interviews. From a Narrative Inquiry approach interview protocols are developed based upon the exploration of a research question. Each interview protocol provided consistency across a number of interviews; but also allowed for flexibility of the research participant within their respective interviews. Four different research projects are described in this manuscript which employed this technique to facilitate the documentation of research participant stories interpreting their experiences in response to the research question.

The remainder of this manuscript is organized, according to Figure 1, in the following manner. The next section presents an overview of qualitative research. Within this qualitative perspective the concepts of Grounded Theory (Glaser and Strauss, 1967; and Strauss and Corbin, 1990) are presented. The presentation is then focused on Narrative Inquiry (Scholes, 1981) and the Long

Interview Technique (McCracken, 1988) for conducting qualitative one-on-one interviews. At the most detailed level an interview protocol is described which has been developed for each of the example research projects. The emphasis of the example projects is on the process of gathering the appropriate data and identifying the relevant issues.

(Insert Figure 1 here)

RESEARCH ROAD MAP

Qualitative Perspective

Qualitative research is an interpretive approach to investigating subjects within the context of their natural surroundings (Myers, 2009). Qualitative researchers thus spend a great deal of time in organizations focusing on the interpretations of personal experiences held by individuals. The researcher works closely with specific individuals and may come to regard them as partners in the investigation or research participants.

The researcher usually conducts the interview one-on-one with the research participant. The interview may or may not be confidential depending upon the topic. But, it is a time for the research participant to tell a personally experienced story. Within the context of the investigation topic the research participant should be allowed to freely recite the story.

In the interview the researcher will attempt to document the interpretations held by a research participant. The research participant must be allowed to respond to a research question without influence. The context of the response must be solely that of the research participant. However, the recitation must be guided somewhat by the researcher in order to be able to subsequently compare themes that emerge from across a series of interviews. A method which addresses a consistent approach while allowing flexibility is described in this manuscript.

The researcher must be open-minded and prepared to reflect upon any differences in perspectives between the researcher and the research participants. This attitude becomes especially important when conducting international or cross-cultural research. The adopted approach should facilitate grounding the discussion within the personal experiences and culture of the research participant.

There are some major issues that arise when conducting cross cultural research. One issue relates to the competing hypotheses of convergence and divergence (Ronen, 1986; Webber, 1969; and Yang, 1986). The convergence hypothesis suggests that cultures are becoming similar; while the divergence hypothesis suggests that individuals resist changes to their culture and strive to retain their distinctiveness. Evidence of convergence is supported by the international use of common technologies such as the Internet and the internationalization of education. Evidence of divergence is shown by the continued existence of groups promoting their original culture while living in another.

Another issue relates to the development of cross-cultural research constructs. Originating in linguistics (Pike, 1954; Berry, 1990; and Headland et al, 1990) the research may take an emic or etic approach. In an emic approach constructs are developed in one culture and then an attempt is made to investigate another culture given the original constructs. In an etic approach universal

constructs are developed based upon data gathered from many different cultures. Further, a “pseudo-etic” (Triandis, 1972) approach attempts to develop generic constructs based upon a limited number of different cultures. Whichever approach is adopted, the researcher must clearly support the decision.

Yet another consideration when conducting cross-cultural research relates to whether or not to employ a framework about cultures in general. For instance, in a series of investigations (Hofstede, 1980, 1983, and 1993; Hofstede and Bond, 1988; and Hofstede et al 1990) Hofstede has developed his cultural dimensions (see Table 1).

(Insert Table 1 here)

Beyond the controversy of the appropriateness of Hofstede’s cultural dimensions, a framework such as this may facilitate subsequent analysis of differences and similarities between the cultural aspects within a specific investigation.

Grounded Theory Approach

Glaser and Strauss (1967) originally defined Grounded Theory as, “... the discovery of theory from data systematically obtained from social research.” (Glaser and Strauss, 1967:2). Their theory describes the emergence of conceptual categories which may be characterized by their properties. The data that have been gathered employing a Grounded Theory approach are employed to discover the categories and describe their properties.

Grounded Theory may be employed as an approach to conducting research or as a data analysis technique (Urquhart, 2001). The former, research approach, suggests no *a priori* adoption of a research theory or framework. Thus, a research question is developed and appropriate data, relevant to the question are gathered and analyzed. The overall objective of this research approach is the generation of a new theory. The latter, data analysis method, involves the constant comparison of data; and is generally known as the Grounded Theory Method. As more data are gathered the constant comparison method will either generate new categories or provide further support for previously identified categories. “By comparing where the facts are similar or different, we can generate properties of categories that increase the categories’ generality and explanatory power.” (Glaser and Strauss, 1967:24)

A significant effort is required to collect and analyze qualitative data (Luna-Reyes and Andersen, 2003). Obtaining access to research participants can be very difficult. Conducting interviews, discussed in a subsequent section of this manuscript, is very time consuming. Contents of the transcripts resulting from the interviews must be reviewed thoroughly to identify emerging themes (Glaser and Strauss, 1967).

It is common practice in qualitative research to identify emerging themes (Miles and Huberman, 1994). To begin, each transcript must be carefully read noting important content such as terms or phrases. This is open coding (Strauss and Corbin, 1990). A thorough understanding of each transcript will facilitate subsequent analysis (Thompson, 1997). Common patterns of groupings are identified and categorized based upon content. Further data from the transcript are used to support the description of the categories. This is axial coding (Strauss and Corbin, 1990). The

constant comparison of data is carried out across a number of interviews. This is known as selective coding (Strauss and Corbin, 1990). This process identifies new emerging categories or further supports the existing categories. Throughout this process of reviewing interview transcripts and identifying categories the qualitative researcher must, "...be open to possibilities afforded by the text rather than projecting a predetermined system of meanings onto the textual data" (Thompson, 1997:441). Analysis of the data is complete when it is not possible to identify new categories in the data. This situation is referred to as, "theoretical saturation".

The above describes a general approach to conducting qualitative research. Within the purview of Grounded Theory and more specifically, the Grounded Theory Method, data may be gathered and analyzed. The following sections introduce and describe, in more detail, a method within Narrative Inquiry, and a technique in the Long Interview, for conducting qualitative interviews, which address the Glaser and Strauss (1967) comment about obtaining social research data systematically.

Narrative Inquiry Method

Scholes (1981) defined Narrative Inquiry as, "... the symbolic presentation of a sequence of events connected by subject matter and related by time" (Scholes, 1981:205). A further exploration of this definition identifies the concepts of contextually rich and temporally bounded. The concept of contextually rich involves the first hand experience of the research participant which are more vividly remembered (Tulving, 1972). Further, recollections of personal experiences, "...would be more memorable, be given more weight, and be more likely to guide behavior". (Swap et al, 2001:103). The other concept, temporally bounded suggests that personal recollections should be recounted based upon a beginning, a sequence of events, and an ending. A sequential account of events contributes to more vivid recollections (Bruner, 1990; and Czarniawska-Joerges, 1995).

Narrative Inquiry provides an approach to conducting qualitative research. To further facilitate gathering qualitative data via interviews a guide is necessary. Not only should the guide aid in focusing the discussion of one interview; it should also provide a consistent approach across a number of interviews. The next section outlines a response to this issue.

Long Interview Technique

The Narrative Inquiry method promotes documenting research participant recollections involving the concepts of contextually rich and temporally bounded. The documentation of these personal stories is conducted via a one-on-one interview. Care must be taken across a number of interviews to ensure both an unbiased questioning but also a consistency in conducting the interviews.

Researcher bias is a difficult issue to address and attempt to resolve. This is especially so when conducting qualitative research. The qualitative researcher must continually strive to pose questions in a non-directive manner. Thus, the researcher might ask, "... tell me about ..."; or "... please describe ...". Another issue related to bias is when and how much a qualitative researcher should probe for more details. The answer to this issue usually relates to ensuring that the research participant is given every opportunity to relate their entire story in a way that is understood by the qualitative researcher.

The issue of consistency may be addressed through the development and use of an interview guide for all of the interviews. The Long Interview Technique (McCracken, 1988) provides a framework for the development of the interview guide.

The Long Interview Technique (McCracken, 1988) involves the following four steps:

- Gaining an awareness of the relevant literature
- Introspectively understanding one's own awareness of the research question
- Conducting the interview during which research participants have an opportunity to tell their story by responding to three generic question categories
 - Grand tour
 - Planned prompt
 - Floating prompt
- Conducting analyses of the interview data to identify emerging themes.

The first two steps involve preparatory work in advance of the interview. Also, before the interview is conducted an interview guide, discussed later in this section should be prepared.

The terms “Grand tour”, “Planned prompt”, and Floating prompt” form the major components of the Long Interview Technique (McCracken, 1988). Grand tour questions are asked at the beginning of the interview. They help to relax the research participant; develop a measure of trust between the research participant and researcher; and provide a context within which the research participant can present their interpretations of their past experience. Planned prompts are those questions that relate to areas the researcher knows in advance will provide valuable input to addressing the original research question. Floating prompts may be asked at any time during the interview. They relate to the decision by the researcher to probe a comment in more detail to attempt to obtain a better understanding of the interpretation being provided by the research participant.

Interview Protocol Guide

Recall that the interview is conducted so that the research participant may reflect upon past experiences within a specific domain of discourse and that the interview structure should facilitate the recollection of this past experience. Throughout the interview the research participant must be encouraged in an unbiased manner to thoroughly describe their interpretations of their personal experience regarding the subject of the investigation. Their discussion will ground the data in their personal experiences, which is the main objective of conducting the research and attempting to answer the research question.

An interview guide, referred to here as a “protocol”, gives direction for conducting the data gathering process and subsequent analysis. The protocol serves to ground the specific discussion in the research participant's personal experiences (Swap et al, 2001) and facilitate the documentation of a chronological sequence of events (Bruner, 1990 and Czarniawski-Joerges, 1995) within the interview. Further, the protocol provides some consistency in conducting a series of interviews. So, specific topics will be discussed in the interviews which relate to the research question.

DISCUSSION

Within the context of the above discussion a series of projects is presented which take a qualitative perspective, employing Grounded Theory Method and Narrative Inquiry. Specific examples of interview protocols are also included. General comments about this approach for conducting qualitative research are presented at the end of this section.

The following subsections include descriptions of four qualitative research projects. The first sub-section describes an investigation into the role of CIOs. Then a series of three projects follow which involve small business including multi-generations; failures; and response to the 2008-2009 financial crises.

The Role of Chief Information Officers

The establishment of the CIO role and appointment of the position on the senior management committee represents the formal recognition of the strategic importance of information within the organization. This appointment also shows that senior management recognizes and accepts their governance responsibility in the use of information technology. However, the turnover rate for CIOs is twice that of any other members of the senior management committee (Capella, 2006). Perhaps an understanding of the role and its performance criteria is not clearly understood by other members of the senior management committee (Marchand, 2008). The project reported here (Hunter, 2007; Hunter, 2006; and Hunter, 2005) attempted to develop a more detailed understanding of the role and issues surrounding assessments of its performance.

Appendix A describes the interview protocol employed in this project. To begin background data was gathered relating to personal and family history. The main part of the interview focused upon gathering the CIOs' interpretations of their role within the organization. Emerging themes were categorized as either management or technology issues. Management issues involved such aspects as governance, growth and change, supply chain, staff and skills requirements, user relations, project management, and performance evaluation. Technology issues related to system integration, security, data warehouse, and wireless or mobility.

Another emerging theme related to the alignment (Reich and Benbasat, 2000; and Seddon et al, 2002) of the interpretation of the individual role and the corporate expectations as expressed by the Chief Executive Officer (CEO). This alignment may be expressed as follows. The role of a CIO may include leadership and facilitating effective change. The role of the Chief Technology Officer (CTO) has more to do with Management and ensuring efficient current operations. While leadership involves creating vision and inspiring followers, management involves implementing programs within the established vision and evaluating performance of followers relative to established metrics. Both of these functions, CIO and CTO are important. What is more important is the alignment or agreement between the CEO and the CIO that the role will involve those aspects associated with a CIO role or a CTO role. Interpretations of both the CIO and the CEO must be clear and explicit.

From a cultural perspective it is interesting to note that the expected variability potentially attributable to culture did not emerge. This result may be explained by the preponderance of training and education related to information technology which is mainly based upon western culture. This idea was initially identified by Grover et al (1993) and later supported by Pearson

and Chatterjee (2003). Thus, the organization culture has more of an effect on how the CIO role is performed than societal culture. It is therefore incumbent upon the CIO to determine how to perform the role within the specific organization. This leads to the second, and perhaps most important, issue that of alignment.

Finally, this research project is an in-depth investigation of the role of the CIO. The results of this project will contribute to a more thorough understanding of the role of the CIO and how the role is emerging in various corporate and national contexts.

Multi-Generation Small Business

Small business is an important component of the economy of many countries. In Canada (Industry Canada, 2010) small business employs 48% of the work force and contributes 29% TO Gross Domestic Product (GDP). In the USA (Astrachan and Shanker, 2003) small business overall employs 27% of the workforce and contributes 30% to GDP. However, many of these small businesses fail. In Canada (Industry Canada, 2008) only 25% of small business survive after 9 years. In the USA (Small Business Administration, 2010) 50% survive after 4 years.

This investigation (Hunter and Kazakoff, 2008) attempted to determine the characteristics of small business which are considered “successful”. The success of a small business may be defined in a number of different ways. To begin a small business must make a profit simply to survive. Then some researchers (Smallbone and Wager, 2000; and Dobbs and Hamilton, 2007) suggest growth is synonymous with success. However, a successful small business does not necessarily have to grow (Tan et al, 2009). Some entrepreneurs reject growth (Burlingham, 2006) in order to focus on providing excellence in products and services. So, a common characteristic of successful small businesses is the establishment of a community of people who have a positive regard for the entity (De Geus, 2002; and Hunter and Kazakoff, 2008).

The interview protocol (see Appendix B) developed for this project revolved around issues concerning the research participants’ involvement in the small business. To begin a personal comment was gathered about the individual’s history. Then, the research participant was asked to provide an interpretation of the founder, background of the small business, and the business model. The main focus of the interview involved interpretations related to past, current, and future issues. The issue of succession is very important to multi-generation small business as supported generally in the literature so it was presented as a separate issue.

Twenty individuals from 11 small businesses were interviewed. Themes were identified regarding the research participants’ comments about the longevity of their small business. The major themes related to a business model; the family; and a specific attitude. The approach to conducting business as exemplified in the adopted business model was to diversify within a focused niche. The family theme related to recognizing individual’s strength and weaknesses regarding their contribution to the business. The attitude reflected a consideration for the value of the family asset and the adopting of the view that the business is “ours” and not solely “mine”.

Small Business Failures

As presented in the previous sub-section the failure rate for small business is very high. In Canada (Industry Canada, 2008) 75% of small businesses will fail within 9 years. In the USA

(Small Business Administration, 2010) 50% fail within 4 years. This research project attempted to identify factors which were involved in the failure of small business (Hunter, 2011).

Headd (2003) has suggested that one-third of small businesses that cease operations within 4 years have actually been considered to be successful by those involved in the business. Thus, a small business may be sold resulting in a “discontinuance of ownership” (Bruderl et al, 1992; Churchill, 1952; Ganguly, 1985; Hutchinson et al, 1938; Phillips and Kirchoff, 1989; Stewart and Gallagher, 1986; and Watson and Everett, 1999). The investigation reported here relates to “bankruptcy” (Fredland and Morris, 1976; Lowe et al, 1991; and Watson and Everett, 1999) where the remaining business assets are sold and business operations are terminated.

The project involved interviews with professionals involved in administering the bankruptcy process. The interviews documented the research participants’ interpretations of factors contributing to small business failures. The interview protocol for this investigation is included in Appendix C and contains 3 major sections. The first part of the interview protocol documents the research participant’s personal background and experience related to their practice in general and bankruptcy more specifically. The second part guides the discussion through specific small business failure episodes. This discussion involves documenting the background of the small business; when the professional was contacted for the specific episode; and the professional’s interpretation of why the small business failed. The third part simply asked for any further comments the research participant would like to add regarding the topic. Three professionals were interviewed and aspects surrounding 12 small business failures were documented.

The emerging themes that were identified based upon an analysis of the transcripts were categorized as controllable or uncontrollable. The controllable issues were internal to the small business and involved such aspects as a business plan; a business perspective; a personal approach to the small business; and a willingness to search out and accept advice. Issues related to the uncontrollable category were external in nature and involved access to financial capital; market decline; increased competitors; and a downturn in the economy. The research participants made it abundantly clear that it was the responsibility of the small business owner/manager to be able to take specific action on the controllable issues and to attempt to respond to the uncontrollable ones.

Small Business Response to the Recent Financial Crisis

This investigation involved a return to some of the research participants in the multi-generation small business project reported in an earlier sub-section. The research participants were asked to comment on their experiences in responding to the financial crisis in 2008-2009 when there was a significant down turn in the economy (Hunter and Kazakoff, forthcoming). The comments provided by the research participants could potentially serve other small businesses regarding responses to any future financial crises. Also, the emerging themes may contribute to reducing small business failures.

The interview protocol for this investigation is included in Appendix D. Personal and background information was not gathered for this project because it had been obtained in the previous multi-generation small business project. So, the interview protocol moved directly into issues related to the recent financial crisis. Then, the discussion was directed towards any

previous experience the research participant may have had with other similar situations. The future was then discussed regarding how the market may have changed and what alterations are planned for the small business. Finally, the research participant was asked for any general comments.

For this project the major categories of themes which emerged from the transcripts related to experience in a previous financial crisis; external factors such as the direct market and the response of banks to granting further credit; and internal responses involving the business model, the potential for diversification, and management of employees.

Review of the Interview Protocols

This sub-section identifies the common themes in the four interview protocols for the above research projects. These themes should serve as a general guide in the development of an interview protocol which may be employed to conduct qualitative one-on-one interviews.

It is noted that a series of steps should be carried out before the interviews are conducted. To begin, it will be necessary to obtain ethics approval from the institution where the researcher is employed and/or the project funding agency. In general, the ethics approval process involves the development of an overview description of the project, an informed consent form, and the specific interview protocol to be used for conducting the interviews.

When ethics approval has been obtained specific research participants may be contacted requesting their participation. In order to facilitate the discussion and the research participant's decision to participate, both an overview document and interview protocol should be shared with the research participant. The overview document describes the project to the research participant and provides support for why this specific individual has been contacted. If the research participant does decide to participate the interview protocol provides the context for the interview and facilitates the research participant organizing their thoughts about their experiences relating to the research question.

When all four projects are compared common themes may be identified in the interview protocols. At the beginning of the interview the discussion is directed toward gathering background data about the research participant. This serves two purposes. First, it relaxes the research participant. The discussion is about them and their background. Naturally, they are the ones who specifically know this data. Second, this discussion provides the context of the research question and serves to demonstrate to both parties why the research participant has been asked to provide comments about their interpretation of their experiences relative to the research question.

The majority of the interview involves discussions about issues which may be either related to specific issues or non-directive in nature. Specific issues will have been identified by the researcher during the preliminary literature review related to the research question. Specific issues in the CIO project related to dealing with users and the process of deciding upon investments in various technologies and people. In the multi-generation small business project specific issues were identified about the business model and succession. The small business

failures project addressed one specific issue. When the background of the small business that failed was obtained one issue was explored. “Why did this small business fail?”

The other category of issues is non-descriptive. Note that the discussion is focused on a specific topic. The CIO discussion is about their role. The multi-generation small business research participants were asked to think of their involvement in the small business. In the “response” discussion the research participant was focused on their experiences of the recent financial crisis. Then, in a non-directive way the research participant was asked to talk about issues in a chronological sequence. This sequence is related to the concept within Narrative Inquiry known as “temporally bounded (Bruner, 1990; and Czarniawska-Joerges, 1995). The terms employed in the interview protocol include “past” or “initial” or “previous”; then “current”; and subsequently “future”. Issues were asked for and the research participant decided upon the specific issue and its description.

It is incumbent upon the researcher not to bias the responses of the research participant. Thus, a request is simply made for the research participant to recount their experience with an issue that they decide to relate. The researcher should explore a response in sufficient detail in order to obtain an understanding of the research participant’s description. So, follow on questions should be based upon an attempt to determine the meaning of words used by the research participant; or to clarify any descriptive terms, again employed by the research participant.

Finally, all four interview protocols conclude with a request for any further comments about the research question. This request allows the research participant another chance to reflect upon the issues which they have raised in the earlier part of the interview. It also provides the research participant with an opportunity to sum up their overall experience related to the research question. Further, it is a pleasant and polite way to end the conversation.

CONCLUSION

The above four project descriptions have included a discussion of how to employ a guide to conduct qualitative interviews. In general, the objective of all four project areas was to conduct in-depth interviews of an exploratory nature to gather research participants’ interpretations of a specific subject. The interview technique supported the post interview analysis of the transcripts to identify emerging themes. Further, the technique adopted facilitated subsequent analysis of these themes across a number of interviews. Thus, while it was considered important to allow the research participants as much flexibility as possible regarding their expression of their interpretations, it was also necessary to adopt an interview technique which would provide some level of consistency over several interviews. Finally, the technique provides a detailed way to apply the Narrative Inquiry method to conducting qualitative interviews which contributes to a flexible yet consistent way to gather research participants’ interpretations in one-on-one interviews and then to compare these interpretations based upon a number of interviews.

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FIGURE 1
RESEARCH ROAD MAP

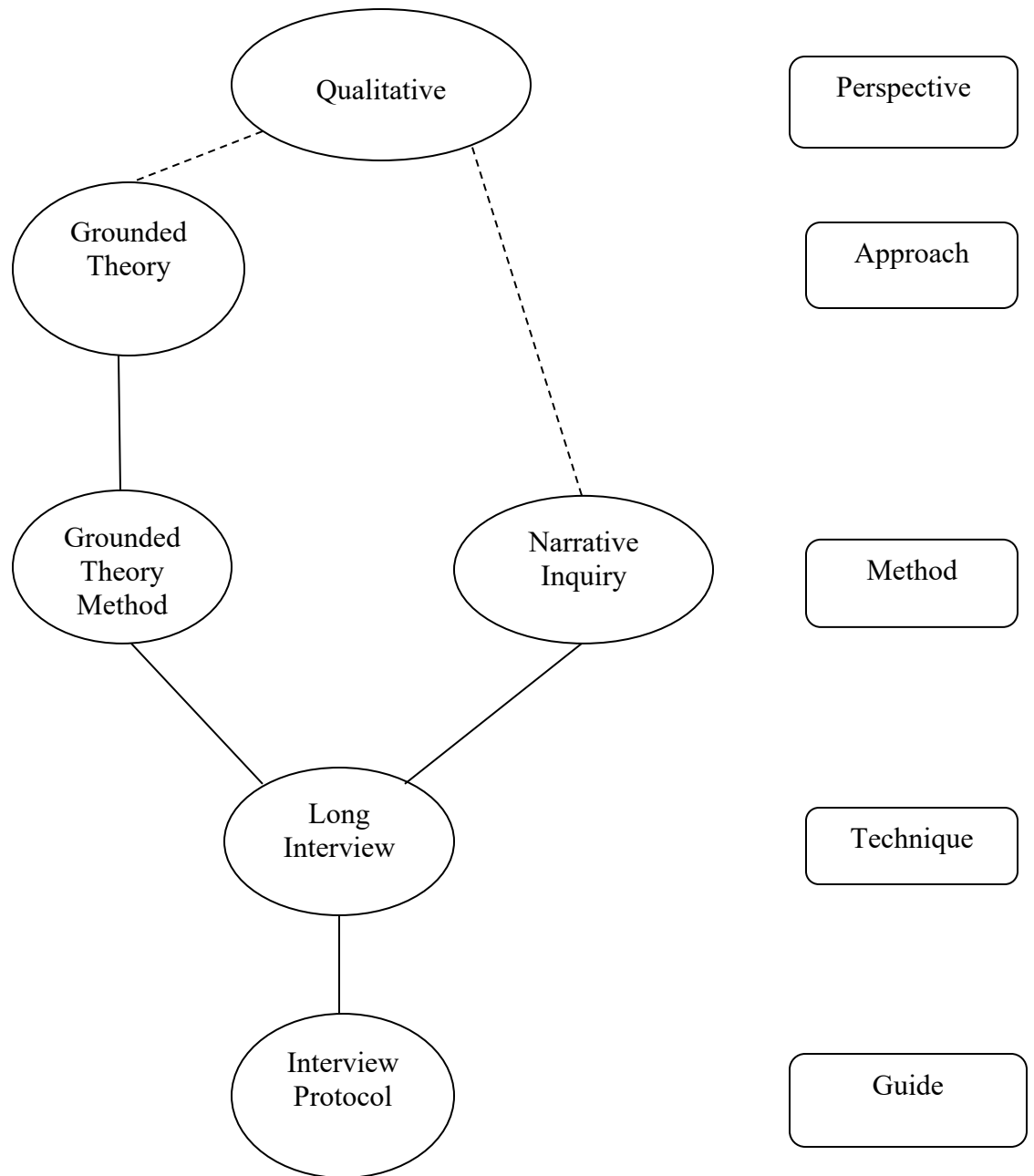


TABLE 1
Cultural Dimensions

Cultural Dimension	Description
Individualism – Collectivism	Individualistic cultures emphasize independence, while Collectivist cultures emphasize mutual dependence and obligations.
Power Distance	High Power distance cultures tend to accept an unequal distribution of power, while Low Power Distance cultures strive for an equal distribution.
Uncertainty Avoidance	Strong Uncertainty Avoidance cultures have formal codes of behavior, while Weak Uncertainty Avoidance cultures are less controlled.
Masculinity – Femininity	Masculine cultures emphasize achievement, while Feminine cultures emphasize caring.

APPENDIX A
The Role of Chief Information Officers
Interview Protocol

PART A

1. Personal History
 - a. Where were you born?
 - b. Where did you grow up?
 - c. Are you married?
 - d. Any children?
 - e. Please relate a personal interest story.
2. Family History
 - a. Parents
 - b. Siblings
 - c. Where you lived
3. Education
 - a. Where and when did you go to elementary school, high school and university?
4. Previous Work Experience
 - a. What companies have you worked for?
 - b. What positions have you held at these companies?
 - c. What were the highlights as far as tasks performed and major accomplishments?

PART B

5. Current Position
 - a. Company background
 - i. What is the industry?
 - ii. When was the company formed?
 - iii. What is the company's industry relationship (market share)?
 - iv. What is the company Mission?
 - v. Are there any unique aspects to the company that you find interesting?
 - vi. What is the URL for your website?
 - b. Why did you accept your current position?
 - c. What issues initially required your attention?
 - i. Describe the issue.
 - ii. Discuss what you did.
 - iii. Discuss the final result.
 - d. What issues are you currently addressing?
 - i. Describe the issue
 - ii. Discuss the status and anticipated outcome.
 - e. What issues do you foresee addressing or requiring your attention in the future?
 - i. Describe.
 - ii. How do you plan to address the issue?
 - iii. What is the anticipated outcome?

PART C

6. Pick a week and tell me what you did
 - a. Describe the task
 - b. Indicate the number of hours you spend doing the task
 - c. Was there something that you did not do that week that you normally would?
7. Dealing with Users.
 - a. How do you determine what your users want/require?
 - b. How do you know that you have responded to what your users want/require?
 - c. How do you know that you have delivered what your users want/require?
8. How do you decide on investments in:
 - a. Hardware?
 - b. Software?
 - c. People?
 - d. Tools?
 - e. Techniques and methods?
9. General comments about CIOs and their emerging and evolving roles.

Appendix B

Multi-Generation Small Business Interview Protocol

1. Personal Comment
 - a. Personal History
 - i. Where were you born?
 - ii. Where did you grow up?
 - iii. Please relate a personal interest story.
 - b. Family History
 - i. Parents
 - ii. Siblings
 - iii. Where you lived
 - c. Education
 - i. Where and when did you go to elementary school, high school and university?
 - d. Previous Work Experience
 - i. What companies have you worked for?
 - ii. What positions have you held at these companies?
 - iii. What were the highlights as far as tasks performed and major accomplishments?
2. Family History
 - a. Founder
 - i. Where born?
 - ii. Where grew up?
 - iii. Education
 - iv. When moved to Lethbridge?
 - v. When married?
 - vi. Children
 - vii. Repeat if more than one generation
3. Company background
 - a. What is the industry?
 - b. When was the company formed?
 - c. What is the company's relationship (market share) to the rest of the industry?
 - d. What is the company Mission?
 - e. Are there any unique aspects to the company that you find interesting?
4. Business Model
 - a. Describe your firm's approach to conducting business
5. Major issues in the past
 - a. Describe the issue.
 - b. Discuss what you did.
 - c. Discuss the final result.
 - d. Repeat the above for another issue.
6. What issues are you currently addressing?
 - a. Describe the issue
 - b. Discuss the status and anticipated outcome.
 - c. Repeat the above for another issue.
7. What issues do you foresee addressing or requiring your attention in the future?
 - a. Describe.
 - b. How do you plan to address the issue?
 - c. What is the anticipated outcome?
 - d. Repeat the above for another issue.
8. Succession
 - a. Has this issue been considered
 - b. How has it been considered?
 - c. What has been the result of this consideration?
9. General comments
 - f. Do you have any other comments about your business?

Appendix C

Small Business Failures

Interview Protocol

1. Participant Background
 - a. Personal
 - i. Education
 - b. Practice
 - i. When did you start?
 - ii. What is your specialization?
 - iii. Why did you become involved in bankruptcy?
2. Cases
 - a. Describe
 - i. Company
 1. Background
 - a. When formed
 - b. Industry significant trends
 2. Size (number of employees)
 - ii. Contact
 1. When
 2. Why
 - iii. Opinion
 1. Why did this small business fail?
 - b. Repeat
3. General Comments
 - a. Do you have any further comments to add?

Appendix D

Small Business Response to the Recent Financial Crisis Interview Protocol

In this interview we would like you to comment upon how you responded to the recent economic crisis. The recent crisis spanned the period of mid-2008 to late-2009 characterized by a sharp economic downturn, world-wide financial markets collapse, and significant job losses.

- Participant's Name: _____

- Business Name: _____

- The Recent Crisis
 - How did the recent crisis affect your business?

 - What did you do in response?

 - What has been the consequence of your response?

 - What did you learn?

- A Previous Economic Crisis
 - Have you (or your business) experienced a previous economic crisis?

 - What was the response?

 - What was learned?

- The Future
 - What do you foresee in the future?
 - How has your market changed?

 - How will you change your business?

- General Comments
 - Do you have any further comments?