

The Wiki as a Virtual Space for Qualitative Data Collection

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The authors make a case for using wiki technology in qualitative research. A wiki is an online database that allows users to create, edit, and/or reflect on the content of a web page. Thus, wiki technology can support qualitative research that attempts to understand the shared thinking of participants. To illustrate the use of the wiki for this purpose, we describe how we used wiki technology in one phase of a recent Delphi study. Key Words: Qualitative Data Collection, Virtual Collaborative Space, and Wiki

Introduction

In the last several years, there has been a rapid increase in the use of web-based applications, particularly wikis, blogs and podcasts, in online health-related professional and educational services (Kamel Boulos, Maramba, & Wheeler, 2006). These applications are accessible and easy to use. They offer users the opportunity to share information and collaborate. The strengths of web-based solutions also are applicable to qualitative research.

Qualitative researchers can benefit from internet applications not just to collect their data and reach their population but to encourage rich interactions where a participant reflects on comments made by other participants. Internet applications can help researchers have access to participants who are geographically disperse, who might be difficult to recruit face to face (e.g., stay at home mothers with small children), or who are in a closed site (e.g., hospitals or prisons; Mann & Stewart, 2000). Some participants might also find it easier to discuss certain issues on line rather than in person. Through on line applications, individuals can discuss sensitive issues in groups without the fear of shaming. Also, shyness appears to be less inhibiting than in face to face interactions (Stacey, 2002). Researchers may also be able to conduct research in politically dangerous or sensitive fields (e.g., illicit drug dealers or individuals in war zones). Internet applications are also advantageous to researchers since they are economical and save time savers (Mann & Stewart). For example, the researcher has all the data already transcribed and does not have to travel to interview participants.

What is a Wiki?

In 1994, Ward Cunningham developed a collaborative tool on the Internet called wiki, a Hawaiian word meaning “quick” (Augar, Ratmar, & Zhou, 2004). A wiki is an online database that allows users to create, edit, and/or reflect on the content of a web

page. Wikis are used to create collaborative websites where users can write documents in collaboration with one another. Wikis can be open to the general public or made private. The Wikipedia is a good example of an online collaborative encyclopedia where anybody can edit and update the site content.

An administrator has extended rights to manage the information (e.g., protect pages and predetermine participants' level of access). All participants may edit, delete or modify comments that have been written and, depending on the level of access, may modify the web page.

There are at least two ways of writing wikis. The first, the document mode, is used is to collaborate with others to write a document. The document is usually written in the third person and authors add their edits or additions to the wiki document anonymously. The result is a document that reflects shared knowledge or beliefs (Leuf & Cunningham, 2001).

The second way of writing a wiki is known as the thread mode. This mode consists of authors carrying out discussions by posting their comments either anonymously or signed. Participants respond to the posted comments leaving the original messages intact (Leuf & Cunningham, 2001). Eventually a group of threaded messages is developed, enabling the team members to share knowledge in a simple and quick way. The collective knowledge base of the group can be easily navigated and managed (Sauer, Bialek, Efimova, Schwartlander, Pless, & Neuhaus, 2005).

It is this second type of wiki that we see as having particular promise in qualitative research. This is because it can be used as a virtual space where participants can discuss predetermined topics. In the next section we will share how we used the thread mode in one of the phases of a Delphi study we recently conducted.

Case Example

We conducted a Delphi study to determine model course content for family therapists who wish to learn about family business consultation. Delphi studies are multi-phased investigations typically used to determine the consensus of knowledgeable people about some predetermined topic (Fish & Busby, 2005). This particular study was conducted after IRB approval by purposefully selecting ten marriage and family therapists who were experts in family business consulting.

As in most traditional Delphi studies (Linstone & Turoff, 1975), the first phase of our study was exploratory. In this initial phase we conducted a semi-structured phone interview with marriage and family therapists engaged in family business consultation. The objective of this interview was to explore the participants' perceptions of core content areas that would make up a training program in family business consultation for marriage and family therapists.

Based on this first phase, we created an online questionnaire which was administered in Phase II of the Delphi. The questionnaire consisted of nine general questions (one regarding each course content area identified in Phase I). Each question was composed of several subquestions, each to be answered on a seven-point Likert like scale. Participants also had space to make comments regarding the content areas and sub-areas. An analysis of the questionnaire data allowed us to determine emergent themes and

the degree to which the participants agreed or disagreed on the various course components.

The third and last phase consisted of the use of a wiki space to give participants the opportunity to interact with one another regarding issues that were controversial or that needed more in-depth reflection to better understand. In essence, we asked the group to discuss specific findings of particular interest to us. We believed that such discussions would provide richer information and a deeper understanding of controversies than interviewing participants one by one. Since all our participants were located throughout the United States and their lives as consultants has them traveling several times per week, it made sense to make use of on-line applications to generate a discussion group.

Also, in Delphi studies there is typically a phase that allows participants to reflect on and possibly modify their own opinion based on the responses of other participants. The wiki structure was ideal for this purpose.

We gave participants a link to a wiki and asked them to comment on each question posted and/or to comment on comments posted by other panelists. Panelists were free to respond to as many questions or comments as they wished and as many times as they wished. Participants were not shy in engaging one another in wiki discussions, which allowed us to collect rich data with many examples. We did not intervene during the process.

An issue that arose early in the wiki was related with confidentiality. Participants were asked to sign in with a pseudonym as their user name. Only one did. All the other participants signed in with their names. Participants were contacted regarding this issue and they all stated that they wanted to use their real name. Since the universe is so small, they all knew each other and many had worked together. Being that the subject matter (family business consulting) was not an overtly sensitive topic (as infidelity or drug use would be) we honored their wish to use their real names. A Delphi is usually anonymous to cut down on the risk of some individuals unduly influencing others. Perhaps because they were all highly experienced, none expressed such a concern. A positive aspect to the use of their real names was that they added credibility the results had on the consensus and research.

To illustrate the use of the wiki, one issue we wanted participants to discuss was dual relationships (e.g., simultaneously being a therapist, organizational consultant, and having a cocktail with the boss to discuss his/her business). We wanted to know how multiple relationships and boundaries in family business consultation might differ from those in traditional marriage and family therapy (in their ethical code, marriage and family therapists are warned to maintain appropriate boundaries in their work to assure that they do not find themselves in a position that exploits or harms clients [American Association for Marriage and Family Therapy, 2001]). The dual relationship question we wanted participants to discuss on the wiki was put this way:

Dual relationships were identified by all panelists as an important ethical issue. Could you please give an example involving dual relationships from your own experience that could be used as a case study in an ethics course?

We found that family business consultants often had more flexible boundaries than were typical of marriage and family therapists in general. Responses were received to this question included:

I have met with families in their homes and/or business site(s). I met with a family once a month in their home ...for four hours every Friday morning for 18 months. We had a lunch as part of the process. During breaks, they discussed many issues and I also disclosed more issues about myself...

I happen to have begun my career as a clergyman, and still am (I have been a) consultant to businesses...that feel like family. (In one case), I (performed the marriage ceremony of) the owner and his girlfriend of many years. That came after working with his two sons, separately, around (their) role and function in the family. I've been in the owner's home, vacation home, and I took him to his retirement party. I ... was the one he called when there was a fatality.... I worked with this company for 12 years and took staff on strategic planning retreats, went along on golf outings, a dozen Christmas parties, difficult meetings with bankers and accountants, and interventions with other business owners... a friendship developed here; steel on steel.

The examples provided by the participants allowed us to better understand how relationships differ in consulting and in therapy. This discussion illustrates how the wiki platform allowed participants to build on and expand previously posted comments. The wiki allowed participants to share their experiences and opinions and to reflect on what other participants said. The result was rich examples like these that we used to better understand the final profile findings. The last step of data analysis consisted of further developing the themes that could be included in the model course curriculum.

Regarding the dual relationship illustration above, for example, the data analyses from Phase I and II suggested that panelists tend to agree that there is a difference between the role of a therapist and the role of a family business consultant. But we needed to understand this difference better. There were disagreements, for example, regarding the depth of the work a family business consultant should do with families. This disagreement led us to include this topic in the wiki, so that we could get clearer illustrations from our participants. The discussions created on the wiki allowed us to better understand the controversies that exist in the definition of such distinction. The discussion also allowed new related topics to emerge which permitted us to have a better idea of the complexity of the matter. Participants discussed, for example, whether the family business consultant should provide therapy to family members as part of their consultation or if they should outsource therapy. Below is an example of such discussion.

I hate to say 'it depends', but ... ok. I work with business consultants who delve more deeply into the business issues. This allows me to do therapy types of things, but again it is different than straight forward therapy... when I work with the family and other consultants work with the family

business, we can provide a very in-depth and integrated approach... I think this has greater impact.

It depends. Joe is correct. I've worked with a partner who focused more on the biz while I focused on the family issues/therapy side. That 18 month engagement was a dance between us, back and forth, depending on who we worked with in the family, and in the business. When working solo much of what I do is "therapeutic" - more like coaching, and framed that way... it depends.

I believe that it is important to differentiate "consultation" from therapy for several reasons... I believe there are different ways in which we use our "selves" as consultants and as therapists...

I think Leslie has a good point, since boundaries are a major issue in this work, it is difficult to call what we do therapy because therapy requires a stricter reliance on therapeutic boundaries...

The dual relationship wiki discussion of this particular question (one of nine wiki topics) helped us better understand differences between therapy and family business consulting. For example, the discussion led to new issues such as the self of the therapist and the use of boundaries.

Advantages

Wikis are inexpensive. Several companies provide use of free wikis (e.g., www.CentralDesktop.com, www.wikidot.com, www.wikispaces.com, www.ProjectForum.com). These free versions are relatively simple but can meet most researcher needs, depending on their goals.

Wikis also are easy to use and wiki pages can be personalized to the user's need. The personalization, however, needs to be made by an expert knowledgeable of the specific wiki programming language. Through an online platform, researchers can reach participants from different locations and provide a space for them to interact and exchange ideas which, in turn, provides the researcher with rich data that are already transcribed.

In our Delphi study, the wiki phase was particularly useful to gather qualitative data by allowing participants to discuss certain issues and exchange ideas. The wiki, unlike other electronic means such as e-mails or forums, allowed us to design a more complex instrument for collecting our data. Our wiki had several pages and links which let us gather information about different topics in a way that was friendly to the participants.

The discussions helped us understand emergent issues that had not been discussed in the existing literature or in the previous phases of our study. For example, in the discussion of therapy vs. consulting, an important theme emerged regarding the definition of the client. This appears to be a central issue since it affects the scope and depth of the

work of the consultant. For example, some participants defined the client as the business. Others defined the client as the families that own the business. These differences invited different ways to understand and approach the work family business consultants do with their clients.

Possible Limitations

Wikis are set up to be used with a specific browser. Thus, incompatibility of browsers can result in blocking participants from posting their comments. Although this can be solved with the help of a knowledgeable technician, participants might not be willing to spend time getting this issue solved. Thus, browser compatibility issues should be resolved prior to your study.

Since anyone can edit another person's answers, reliability also can become an issue. This is probably not likely; however, some monitoring is called for. The technology would facilitate this technology. Every time a new comment is made or if an edit to a previous comment is made, all the participants and the administrator could receive a message. This feature can be set to happen however frequently one desires. The researcher, as the administrator, should set up to receive this message immediately. In this way, the researcher can verify and control that the comments posted are not changed. If they were, the researcher could be notified and change it back to its original format. Of course, clear and up-front ground rules could minimize this risk as well.

Recommendations

Wikis allow participants to take the time they need and to participate as much as they want. In our case, a week seemed long enough to allow participants to elaborate on the questions posted on the wiki. In fact, toward the end of the week, we found that few new ideas were being shared.

To maximize their participation, the researcher must provide topics for discussion that engage the participants. Also, topics and/or questions posted should be written in such a way as to be direct, concise, and easy to understand. The number of open ended questions needs to be considered, as well. We kept our questions under ten, which we believe supported maximum participation. Since the longer an instrument is, the more likely a participant is to decide not to complete it (Dillman, 2000).

The researcher's level of participation should also be considered. For example, the researcher can post comments (e.g., provide probes, request further elaboration). His/her comments may help keep a discussion going, and may encourage rich responses from his or her participants. It may be useful to include member checks, as well, to make sure that the researcher is reporting and interpreting the data in the manner in which the participants intended. Researchers, for example, could participate more actively in the data collection process. He/she could state his/her understanding of the comment(s) posted and ask participant(s) to verify the accuracy of that interpretation. Method triangulation can also be considered as a way to increase trustworthiness. In our research, we used other means of data collection as different ways of gathering data about the same topic. Researchers could include different data collection procedures as ways of looking at the data from different perspectives.

Conclusion

Technology can distance us or bring us closer. Through planful use of wiki technology, qualitative researchers can learn more from their participants as the participants learn from each other. Wikis, for example, can help qualitative researchers collect data in a unique way. Participants who are separated by distance can come together in a site and exchange experiences and ideas allowing researcher to have a clearer and deeper understanding of the phenomena under question. Wikis can be molded to the needs and interests of the researcher. The researcher can add as many or as few gadgets to the wiki as he/she desires. Wikis can include several pages, links, pictures, or videos, etc., the resources are endless. As we have illustrated, wikis provide qualitative researchers with tools to collect data in distinctive and creative ways.

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