A Resolution of Student's Grounded Theory A Priori Reading Dilemma

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Abstract
The originators of the grounded theory methodology argue that a researcher should begin data collection and analysis without having immersed him, or her, self in the extant domain literature. They argue that there is a danger that the researcher will be influenced by the literature and will then tend to collect that data that he, or she, expects to find. Similarly, the interpretation of that data can be influenced by prior reading. However, most supervisors insist that student researchers conduct a thorough literature review prior to commencing data collection and analysis. This situation is unlikely to change, but it has the potential to corrupt the grounded theory being developed. The use of unstructured focus groups as an initial data gathering method is proposed as a means of reducing the impact of a priori reading when using the grounded theory methodology. Using this technique allows subjects to discuss what they think is important, rather than what the researcher thinks is important. This, then, can sensitize the researcher to new data and interpretations not previously considered. An example of the use of unstructured focus groups in a student research project is then provided.

Keywords
Grounded Theory, Focus Groups, Student Research

1. Introduction
The use of the grounded theory (GT) methodology is increasing in information systems (IS) research. This can be demonstrated by the GT workshop held at the 2008 ICIS conference and the recent call for papers by the European Journal for Information Systems for a forthcoming special issue on GT. The annual European Conference on Research Methods in Business and Management consistently attracts papers from IS researchers using the GT method (see, for example, Fernandez, 2004). However, its use in student research can still be problematic particularly when considering the role of existing literature (Urquhart & Fernandez, 2006). It is assumed here that the use of grounded theory is to develop a mid-level theory of a phenomenon under investigation, not simply the use of grounded theory techniques to analyse data without the development of a theory (Howcroft & Hughes, 1999; Hughes & Jones, 2003).

There is conflicting argument about whether GT is essentially a positivist or interpretivist methodology, or should use either qualitative or quantitative data. It has been argued that, as originally described, GT is essentially positivist in nature (Denzin & Lincoln, 2000) whilst others maintain it is primarily interpretivist and using qualitative data (Howcroft & Hughes, 1999). Charmaz (2000) argues that it can be used with either a positivist or constructivist lens whilst Dey (1999) argues that the version of GT now espoused by Glaser is essentially
interpretivist in nature whilst the version promoted by Strauss and Corbin (1990) uses a positivist epistemology. There are also other researchers who are attempting to make GT more positivist in nature so that it is amenable to student research (Goldkuhl & Cronholm, 2003).

One result of conducting GT using a positivist epistemology is that it encourages prior reading of the literature and the development of categories from that literature. Collected data can then be coded to those categories. This is the essence of the version of GT espoused by Strauss and Corbin (1990) which led to the split between Glaser and Strauss, the originators of GT. Glaser (1992) argues that coding data to preconceived categories forces the data to fit preconceived ideas. This, he argues, leads to a mid-level theory that is not grounded in the researcher's data but in pre-conceptions. According to Glaser, the researcher has then found what he, or she, thinks the data should be saying, not what it is saying. Glaser argues that to prevent the development of pre-conceptions literature reading should only commence as analysis of collected data leads to the emergence of categories. It is then synthesized and integrated into the developing theory.

It is clear from the foregoing that the epistemology being used in a grounded theory study will, to a large extent, determine whether the researcher believes a priori reading of the literature is acceptable. If a researcher adopts the Glaserian approach to GT emphasis is placed on the induction of theory from collected data, not the deduction of hypotheses from the literature (Glaser, 1992). However, a dilemma occurs where a student researcher elects to use grounded theory with an interpretivist epistemology but his, or her, supervisor is not familiar with the above considerations. The supervisor, though well meaning, is unable to provide suitable guidance or recommendations regarding the role of the literature. This is known as a “minus-mentor” situation and is quite common (Glaser, 1998). It will be exacerbated where a student has a preference for interpretive research whilst the supervisor assumes a positivist epistemology. This is extremely likely to occur in IS research where the majority of existing research has used a positivist paradigm (Orlikowski & Baroudi, 1991) but where interpretive research is becoming increasingly popular. One result of this is that supervisors normally insist on an extensive literature review prior to the commencement of data collection (Goldkuhl & Cronholm, 2003) without understanding the possible impact on the outcome of a GT study.

It should be made clear that many people do not believe that the instruction by Glaser (1992) to not conduct a literature review prior to a GT study is either absolute or even feasible (Urquhart & Fernandez, 2006). Everyone commences research with some background knowledge. The vast majority of people must have some background knowledge of the area under investigation. The only exemption would be a researcher who is completely new to the domain – an unlikely occurrence. So, prior knowledge of the phenomenon under consideration is a given. Similarly, some prior reading is a given. The amount of a priori reading by a student researcher will be largely dependent on the views of the supervisor.

The question, then, is not how to prohibit a priori reading, but how to minimise its impact on subsequent data collection and the inductive analysis of that data. The theory must be allowed to emerge from the collected data, not from the extant literature.

It will be argued that the use of unstructured focus groups early in data collection can limit the impact of a priori reading. This is because the researcher does not direct the discussion – the topics discussed are determined by participants but within the bounds set by the
researcher. This may highlight topics not generally discussed within the literature but which could actually be important. Follow-up interviews could then investigate these new topics in detail.

The next section introduces focus groups, providing some history, and theory on how they should be structured and managed. Suggestions are then made for their management within the context of grounded theory. The third section then provides an example of the use of unstructured focus groups within a grounded theory study conducted by a student researcher. It demonstrates how the use of unstructured focus groups allowed issues normally ignored in the alignment literature to emerge. They were then able to be further investigated during individual interviews.

The paper is intended to motivate researchers, particularly student researchers, to consider some of the methodological issues that accompany any research. It is not intended as an exhaustive review of the focus group literature and all the design decisions that should be considered when using focus groups.

2. Focus Groups
A focus group is a small, formal, temporary group of people brought together for the purpose of collaborative discovery within a given theme (Greenbaum, 2000; Morgan, 1997; Templeton, 1994). Groups are normally between 6 and 10 people (Cunningham, Young, & Lee, 2000; Greenbaum, 2000; Morgan, 1997; Stewart & Shamdasani, 1990) but can consist of either less than or more than these numbers. (Fern, 1982; Napolitano, McCauley, Beltran, & Philips, 2002). Focus groups rely on the dynamic interaction of participants to discover and then discuss issues of interest to both them and the researcher (Morgan, 1998; Stewart & Shamdasani, 1990).

2.1 History of Focus Groups
The first recorded use of focus groups in social research appears to be that of Bogardus in 1926. They were then used during the second world war to evaluate the effectiveness of propaganda, training manuals and work groups by Lazarsfeld and Merton (Berg, 1998; Morgan, 1997; Stewart & Shamdasani, 1990). Focus groups were then used post world war II for market research, primarily as a result of the work of Lazarsfeld (Fern, 2001; Hines, 2000; Templeton, 1994). At the same time the use of focus groups in social research virtually disappeared. Morgan (1997) hypothesizes that this may have been due to the work of Merton and others who specifically limited their use to gauging the reaction of participants to stimuli such as films, radio and manuals. It has also been argued that it may have been due to the different groups using focus groups (social scientists and marketers) not developing a shared language and not agreeing on what the outcome of focus group research should be. Marketing had the impetus and financial backing and took control of the technique (Templeton, 1994).

Most focus group research from 1970 – 1990 appears to have used the technique primarily for convenience as “... either groups allowed more individuals to be reached at once or groups were where the participants were most likely to be located” (Morgan, 1997, p. 5). This may be the reason focus groups are still seen by many researchers as an easy method whose rigour is questionable. A second reason why they may be seen as quick and easy is that their focus means that a researcher can, compared to individual interviews, quickly gather large amounts of data specific to the research question (Morgan, 1997).
In the late 1980s and early 1990s a number of books describing focus group research, especially in medical research, reintroduced the method to the social sciences (Blackburn & Stokes, 2000; Fern, 2001; Morgan, 1997). This has led to the legitimisation of the focus group method in social science research since the early 1990s (Berg, 1998).

2.2 Focus Groups in Social Research
There are commonly two types of research task using focus groups: theoretical research involving testing or developing theory; and applied research conducted for decision making purposes, often marketing decisions (Fern, 2001). Discounting the latter, there are then three main uses of focus groups in social research:

- **self contained study** where they are the principal method of data collection;
- **supplementary source of data** in studies that rely on another primary source of data collection, and;
- **multi-method studies** where there is no primary method of data collection – focus groups are as important as all the other methods (Morgan, 1997).

When used in multi-method studies, focus groups are used in conjunction with interviews and other data collection methods usually in ethnography. Each method contributes to the overall understanding of the phenomenon under consideration. The relative importance of focus groups depends on data needs, access to resources and participants, and research design (Cunningham et al., 2000; Fontana & Frey, 2000; Morgan, 1997).

Focus groups must be consistent with the objectives and purpose of the research (Stewart & Shamdasani, 1990). An example given by these authors is that of an exploratory study, where one or two initial focus groups could be used to get a feel for the issues involved. These, then, can be used to form the basis of individual interview questions.

Although individual interviews generally provide much more depth of material at the cost of time (Palmerino, 1999) it is argued that focus groups can provide more detail in situations that are poorly understood, have not been previously thought about by participants, or are value and attitude laden (Morgan, 1997).

The foregoing indicates that the design of focus groups should be carefully considered.

2.3 Design of Focus Groups
Most focus group texts recommend between six and twelve participants per group but there has been little research on the effect of group size on research outcomes. It has been shown that when participants are interested in the topic, and are therefore motivated, groups with as few as three participants can be very effective (Morgan, 1998; Napolitano et al., 2002). This is often the case when professionals or managers are involved in a session related to their work. This would normally be the case in IS research.

Additionally, it has been noted that whilst it may not be difficult to get managers to commit to a focus group session, if it is of interest to them, it may be difficult to get them to turn up at the nominated time due to their other commitments (Blackburn & Stokes, 2000). This is one reason why many texts recommend over-subscribing a focus group session when recruiting subjects.

The focus group literature recommends that groups should be homogenous as far as backgrounds and attitudes are concerned (Morgan, 1998). This limits the possibility of
destructive disagreements occurring during the session. When applied to IS research this may mean conducting separate focus group sessions for, say, IT managers and business managers or separate sessions for developers and users. Do you actually need input from various groups of subjects? Depending on the research problem it may be sufficient to identify a particular group and then organise a number of focus group sessions with subjects drawn from this group. The disadvantage of this is that you may not identify all the issues pertinent to your research problem. Each homogenous group could perceive a problem purely from its own perspective (Vennix, 1996).

When using focus groups during marketing research it is often attempted to recruit subjects so that they represent, as far as possible, the target market. That is, the sample is representative of the population. However, this may not be desirable, or even possible, in social research. Depending on the objectives of the research it may be far more effective to purposely select subjects to gain as wide an understanding of the phenomenon under study as possible.

The number of focus groups held is dependent on both the research design and the attainment of saturation of concepts and issues (Morgan, 1998; Stewart & Shamdasani, 1990). If, as suggested here, focus groups are being used within a grounded theory study it is most likely that they are just one of a number of data collection methods. Therefore the research design could call for their use primarily to identify those issues that subjects believe are important to the phenomenon under study. Once no new issues are being raised by focus groups their use can be terminated. The issues raised during the focus groups can then be investigated in more detail via other data collection methods such as structured, or semi-structured, interviews.

Focus group sessions can be conducted in many ways from highly structured to unstructured. There are advantages and disadvantages in these extremes.

The choice of a more structured approach is usually associated with a strong, pre-existing agenda for the research, where considerable knowledge of the topic is already held by the researcher. This is unlikely for a student researcher. Nevertheless, standardised questions will allow the exploration of specific topics, whilst high moderator involvement maintains that focus (Fontana & Frey, 2000; Morgan, 1997, 1998; Stewart & Shamdasani, 1990).

Less structured focus groups are more suitable for exploratory research. This is the likely situation when a student researcher is just entering the research field. The researcher is not familiar with the topic and so any research is effectively exploratory. Another aspect of low structure focus groups is that they tend to “... effectively eliminate the researcher's perspective from the resultant data” (Berg, 1998, p. 104). Low moderator involvement, and a few open ended questions, will allow the discussion to cover areas of interest and importance to the subjects. In our scenario the student researcher's perspective is analogous to that of the literature. That is, a low structured focus group has the ability to minimise the effect of a priori reading on the issues being raised. This allows the researcher to identify issues within the research problem area for further investigation (Blackburn & Stokes, 2000; Morgan, 1998). It also allows the identification of issues that either may not have been identified in the literature or given only minor coverage. As will be demonstrated, this can occur even in areas that have been extensively researched in the past.

An unstructured focus group is one where the moderator (researcher) has little control and may not even be at the same table. Essentially, the focus group subjects are instructed on how
to self manage the session and then given a very few questions or topics to discuss. The researcher then takes no part in the discussion (unless there is a major problem such as a violent disagreement between subjects).

Suggested instructions to be given to subjects of an unstructured focus group session are provided by Morgan (1998). These consist of recommendations such as:

- Legitimising the participants' responsibility to manage the discussion. Advise them that anyone within the group has the right to re-direct the discussion if it moves off track.
- Advising them how to handle common problems. If they run out of things to say, advise them to reconsider the questions they have been asked. Normally someone will restart the discussion.
- Emphasize that you want as many perspectives as possible. Everyone's experience is important. Often a topic raised reluctantly will result in confirmation by other members and start a new discussion thread.
- Get them to use questions to direct the flow of interaction. If a subject is not participating other members should be encouraged to ask that person's opinion with a reminder that all member's experiences are important.
- Emphasize the importance of their stories. Many people are reluctant to express opinions, especially in front of peers. However, most people are more than happy to tell stories of their experiences. If other members have had either a similar or conflicting experience, then those stories should be told as well.

There are other considerations to focus groups that must be addressed such as location of the sessions, the facilities available, whether group members will receive payment for their time and how the sessions will be recorded and then analysed. These are outside the scope of this paper but are discussed in Greenbaum (2000), Morgan (1997, 1998), Stewart & Shamdasani (1990) and Templeton (1994). However, it should be noted that most of these authors, with the exception of Morgan, are writing to a market research audience. Many of the recommendations they make, such as the use of dedicated facilities, a trained moderator and sophisticated multi-media recording devices, may not be appropriate for social science and IS research.

The above indicates that the use of low or un-structured focus groups has the potential to reduce or minimise the impact of perspectives held by the researcher during data collection. In the instance of a student researcher these perspective have most likely been determined by his, or her, reading of the existing literature as required by most supervisors. Careful analysis of focus group recordings can then identify issues important to the subjects of the sessions. If these people have been selected carefully the issues they have identified should be common to most people working in that area. This, then, heeds the call by Glaser (1992) to identify what is actually there, rather than what you think should be there.

The next section introduces an example of unstructured focus groups being used in student research.

3. An Example of the Use of Unstructured Focus Groups in a Grounded Theory Study

As is common with interpretive research this section will be presented in the first person. The example below reflects my own doctoral studies and is based on an interpretive grounded
theory examination of IS/business alignment (B. R. Campbell, 2007; B. R. Campbell, Kay, & Avison, 2005). In this work I attempted to remain as true as possible to the Glaserian approach to developing a grounded theory.

Although my supervisors were familiar with interpretive research none of them had experience with the grounded theory method. They were largely unaware, as I was at the time, of the recommendation by Glaser (1992) that researchers enter the field without having conducted a literature review. I therefore conducted a thorough review of the alignment literature prior to commencing data collection and analysis. At the same time I was reading texts on the grounded theory method. It was at this stage that I realised that I may have had a problem that I needed to resolve. A decision was made to conduct an initial focus group primarily as a form of exploratory research. It was largely unstructured. This was intuitive on my part and not based on any theory.

Reading continued, now concentrating on focus group theory. It was at this point I realised a totally unstructured focus group may minimise the effect of my prior reading on both my data collection and interpretation. Therefore the remaining two focus groups were purposely entirely unstructured.

The first and third focus groups were each made up of six IT managers who were purposively selected from various organisations and hierarchical levels within those organisations. The second focus group consisted of three business managers. This maintained homogenous groups as recommended by Morgan (1998). The small number of business managers was primarily due to the difficulty of ensuring that recruited subjects, busy managers, actually attend the session (Blackburn & Stokes, 2000). However, as predicted by these authors obtaining involvement was not difficult as they were interested in the topic, knowledgeable and motivated. Each of the sessions, regardless of the number of subjects, lasted between 1.5 and 2 hours.

The first focus group session was largely unstructured, with minor input from the moderators to clear up some points being made by subjects. The remaining two focus group sessions were completely unstructured with participants being advised how to self-manage the session. The moderator, myself, took no part in these latter two sessions.

Each session was asked two questions: What do you understand by the term IS/business alignment, and; What, in your experience are the three most important enablers and inhibitors to alignment?

The recording of each session was transcribed and analysed before the next session was conducted.

From the first response in the first focus group session emphasis was placed by subjects on politics. Numerous sections of my transcripts were coded to this category. For example, one subject described a situation in his organisation which traditionally had developed accounting practice management tools. The organisation dominated the Australian market with an 85% market share in this area. But, the organisation had recently acquired a legal software company as it was seen as a growth area. The subject indicated that internal politics meant that most marketing effort was still directed towards the accounting tools with the legal market almost totally ignored.
Another subject in this first focus group session gave another example:

We've got branches, and we've got products we are trying to put out. New South Wales branch get in trouble for trying to work with Victoria or South Australia or Queensland branches to provide a focussed kit... If they're crossing those borders they have to really justify it. So there's bunker mentality. New South Wales branch against Victoria branch. I've come across this a lot in the last few months... as far as IT and business alignment goes, one of the main inhibitors may well be divisions within the business as well, not just IT.

Other sections of the transcript were coded at self-interest. A CIO involved in the first session said that:

There are examples of other organisations where I couldn't identify a rational strategy. And there were things happening where maybe you could call them strategies, but they were more around the interests of the senior managers of the company rather than one that you could map back to what the shareholders may have liked to happen.

There were many instances of sections being coded to politics and self-interest. Subjects related many instances where self-interest, which could be related to individuals, small business units or large organisational divisions, appeared to be present. Initially I regarded these instances negatively as it appeared that actions were aimed at maximising remuneration but were almost destructive to the organisation. During analysis of the second and third focus group transcripts I started to realise that this may not have been an appropriate view.

Eventually I understood that in all instances individuals and business units were reacting to the measurement and motivation schemes being applied. Using this view their actions were totally logical. At this stage I went back to the first transcript and re-analysed it. The first example given above then makes some sense. The organisational strategy was to develop the legal market as that had potential for growth unlike the accounting market. However, the marketers and salespeople were remunerated primarily via sales commissions. They knew the accounting market. They knew how to market to it. They had contacts. None of these things were true for the legal market. If they wanted to maintain their level of income it was in their interest to concentrate on the accounting market. That is, the motivation and measurement scheme applied to them was inappropriate to encourage them to develop a new market. The strategy developed at senior management level was being subverted at the operational level due to lack the of consideration to the motivation and measurement scheme.

Motivation and measurement can also explain the other examples given above, together with nearly all the other examples of both politics and self-interest that I had coded.

The importance of motivation and measurement is rarely mentioned in the alignment literature. I then found that it has another affect that is rarely mentioned in the alignment literature.

All of the examples given above indicate that the strategies developed by senior management and promulgated in plans are not necessarily being implemented as planned. This is a well known phenomenon in the business literature and is referred to as goal displacement (Baker, 1992; Kerr, 1995; Robbins, 1990, pp. 314 - 316). That is, the strategies being implemented are not necessarily those contained in plans. However, the alignment literature almost completely ignores this fact. It concentrates almost exclusively on business and IT strategic
plans both in its definition (Reich & Benbasat, 1996) and measurement (King, 1988) of alignment. This is partly a result of the focus of much alignment research at the CEO/CIO level, thereby ignoring strategy implementation (Chan & Huff, 1992; Ciborra, 1997). However, it could be argued that it reflects a mindset of IS researchers – that plans will be implemented as intended.

This, then, highlights the value of unstructured focus groups. Given the literature I had read to that point I would normally have conducted structured or semi-structured interviews, concentrating on strategic plans as had most other researchers. It is quite possible that I would not have discovered the effect of motivation and measurement schemes on employee actions. Allowing subjects to discuss, without interference, those issues of importance to them allowed these issues to surface. All I had to do was be sensitive to what my data was saying.

This is an example of unstructured focus groups allowing a new understanding of a well researched area.

Whilst re-analysing the focus group sessions I also paid more attention to those sections coded to communication. I then noticed that in most instances where I had coded a section to communication I had also coded an adjacent section to understanding. By communicating with their business peers IT managers were attempting to understand the goals and strategies being implemented by their business peers. They were attempting to reduce the ambiguity surrounding espoused versus enacted business strategies. This became the core problem of my grounded theory.

The insights from these three focus groups then determined the structure of the individual interviews. The focus groups showed that motivation and measurement has an impact on strategy implementation and creates the strategy ambiguity that was the core problem of the focus group participants. The interview instruments explicitly included questions on the effect of motivation and measurements schemes on employee and business unit behaviour, as well as others related to espoused versus emergent strategies. The overall focus of the interviews was to investigate how IT managers deal with the difference between planned and implemented business strategies.

In short, where IT managers can develop a relationship with their business peers they are able to align their actions to the goals of the business manager, regardless of whether those goals and strategies represent the official plans or not. At a senior level these actions are often associated with business goals. However, at lower levels of an organisation the strategies being implemented (and supported by IT managers) are often associated with individual and business unit performance measures which are normally based on short term financial criteria, not the strategic intention of senior management (A. Campbell & Alexander, 1997).

For various reasons personnel in some IT units are unable to form relationships with their business peers. In this situation IT managers are unable to determine the strategies in use and usually retreat to providing a reliable, low cost IT service with little to no interaction between business and IT groups.

In either situation the dynamics of the system create a self fulfilling prophecy ensuring that the status quo is reinforced over time (B. R. Campbell, 2007).
4. Conclusion

Grounded theory research projects are becoming more popular in the IS domain. However, most student researchers and many supervisors are still unfamiliar with its tenets, especially that of entering the field without having conducted a thorough literature review. It is argued by Glaser (1992) that doing so may bias the results of the study as the researcher may report what he or she expects to find rather than what the data is actually saying. However students’ supervisors normally require a thorough literature review be undertaken for a number of reasons: to become familiar with current thought on the topic, and to determine a gap in current knowledge that can be investigated and thus develop a research question.

These conflicting needs immediately provide a dilemma for student researchers. On one hand they are being advised by the originators of the grounded theory method not to conduct a literature review prior to data collection and analysis. On the other hand they are required to conduct a thorough literature review by their supervisors prior to data collection.

The contribution of this paper is to demonstrate that there is a way of overcoming these conflicting requirements and the student’s dilemma. Whilst not conducting a literature review is unrealistic, it is possible to reduce its influence on data analysis via the use of unstructured focus groups as an initial data collection technique. This allows subjects to discuss topics of importance to them, not what the literature deems is important. As this paper has demonstrated, analysis of unstructured focus group transcripts can identify important issues that have been either ignored, or given superficial coverage, in the literature. Thus two objectives are achieved. The student has conducted a prior literature review as required by his or her supervisor, and has also allowed the data to speak for itself as required by the grounded theory method.

Some theory of focus groups has been provided, especially as it relates to the argument being made. However, there are many more considerations of focus groups that must be resolved prior to a session being conducted. The references provided in this paper discuss most of those considerations. It is recommended that any researcher intending to use focus groups become familiar with this literature before conducting a session.

References


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