Gathering Client Data: What Works?

Most libraries involved to any extent with total quality management (TQM) realize that successfully gathering information from their customers is the key to improving services. To do this libraries must employ a variety of methodologies, both quantitative and qualitative research. Quantitative primary data is usually collected in libraries by survey or by observation. Types of surveys include on-the-spot questionnaires, mail surveys, phone surveys, or in-person interviews, and the advantages and disadvantages of each are listed. Survey researchers must consider: (1) what they want to know; (2) whom they need to interview; (3) how they are going to select people to interview; (4) how many people they need to interview; (5) what questions will be asked; (6) how to administer the questionnaire; (7) how to analyze the data; and (8) how to glean meaning from the results. Qualitative research often involves focus groups, which can be used to determine how well existing services meet clients’ needs; help design quantitative studies; supplement data collected through a user survey; provide insight into non-use; plan for a new facility; and solicit input on electronic resources. To be successful, focus group discussions must have established research goals; an identifiable target audience; an objective, enthusiastic, and knowledgeable moderator; a carefully planned discussion; a record of session; and a comfortable facility.

(Contains 27 references.) (Author/BEW)
GATHERING CLIENT DATA: WHAT WORKS?

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OVERVIEW

By now, most libraries involved to any extent with Total Quality Management realize that successfully gathering information from their customers is the key to improving services. But how does one go about identifying the needs of customers with competing demands and different perceptions? Our answer is that libraries have to employ a variety of techniques. The key is to fit the tool to the problem in hand, bearing in mind that time and cost involved in gathering the data are important from a management perspective. This paper focuses on specific techniques appropriate for large research libraries. It illustrates a variety of methodologies, both formal and informal, with which we have had first hand experience. Cases have been drawn from technical, public, and administrative service areas of libraries. Because Total Quality Management emphasizes the use of quantitative data, we have focused on survey research with some of its attendant pitfalls. We have also included a discussion of the use of qualitative data, such as client interviews and focus groups, with particular attention to the problem of gathering data that is representative of the larger group.

INTRODUCTION

When we talk about gathering client data, most of us automatically think in terms of surveys or interviews to figure out what our clients want or think about our services. Our intention is to go beyond this automatic assumption and explore some of the broader themes involved in gathering data, pointing out the good and bad points of various methods as well as ways to improve the validity of research.

There has always been a split in the social sciences between quantitative and qualitative research. All too often this has been depicted as "scientific" versus "unscientific" research, "hard" versus "soft" data, and in other terms that really get in the way of taking a look at the strengths and weaknesses of different approaches. It is fair to say that quantitative and qualitative research methods are based on truly different underlying assumptions.

QUANTITATIVE VS. QUALITATIVE RESEARCH

A quantitative approach is associated with objectivity, an understanding of probability, methodological rigor (i.e., you're collecting data concerning the same variables each time you conduct a survey — not asking each person a different set of questions), and makes substantial use of statistics (i.e., allows you to generalize to varying degrees). On the other hand, qualitative research is more subjective in nature, the methodologies incorporate a high degree of flexibility, and it makes use of language and description in providing insight into attitudes and behavior.

Qualitative research can provide great depth and understanding in a particular context.

SOURCES OF DATA — PRIMARY AND SECONDARY

There are three ways of gathering data. We can gather data through surveys (which include interviews), or we can observe
behavior, or we can create an experiment. Most data gathered in libraries has been through the use of surveys, but some research has been observational (for example, some of the most useful information dealing with how people use online catalogs has been observational in nature). For a variety of reasons (among them, lack of familiarity with experimental design and our inexperience with thinking about how experiments could even be useful in libraries), experiments are rarely done in libraries.

All three of these techniques are ways to gather what is called primary data — the data that someone has collected through use of a survey, an experiment, or some sort of observation to meet a specific set of objectives. There is a second type of data out there known as secondary data. Secondary data are data collected by someone else for some (hopefully) known purpose, which may also be of use to us in understanding our clients. Our libraries are full of data that other people have collected, and our colleagues are sitting on data that often applies directly to our own concerns. Data collected in the past are often capable of being used more than once, to answer additional questions.

For example, if we were interested in how satisfied our customers were with our online catalog, and want to focus on in improving the catalog, we would probably design some sort of questionnaire, or we might interview a set of library users. We would collect the data, write it up, and consider the project done. But because we’re not used to thinking about using more than one technique at a time to collect data for a project, we don’t think about whether we would get a better answer to our questions if we looked around at what might have been done earlier at our own institution or at a similar institution. We might be missing some useful clues that either better explain the data we’ve collected or indicate that we’ve missed the boat.

In our hypothetical example where we’re looking at the online catalog, surveys or interviews might yield data that looked perfectly reasonable and we might draw certain conclusions about what most concerns our users from that data. But what would you find out, and how might your conclusions change if an institution with a similar catalog had conducted an observational study fairly recently? What if they had examined search logs for their online catalog and noticed a high number of searches for information done in the wrong database, or noticed a high number of poorly constructed searches, or conversely a great deal of sophisticated use of systems? Would you at least consider whether some of that data might be relevant to your research, that there might be enough similarities between the two situations to permit some use of the secondary data to explain some of your findings? Some of this is changing because the notion of benchmarking is encouraging us to look around at who else has information that may relate to our own problems. Benchmarking may have some of a ripple effect in that we’ll find that information other than direct numerical comparisons can be highly relevant.

**WHY DO SURVEY RESEARCH?**

Researchers like surveys because they are not too intrusive, they are direct, they are usually anonymous so people may tell you things they wouldn’t say to your face, the analysis is fairly straightforward, and if you’ve got a representative sample you can draw generalizations from your findings.

What’s wrong with surveys in general is that it’s so easy to do them really badly. Bad survey research has contaminated things. All too often someone does a survey
with very little thought given to sampling techniques, the questions are poorly worded or biased, results are misinterpreted — i.e., they’re done by people with little training in research in the social sciences. In addition, surveys are overused and perceived as nuisances, thanks to direct marketers with their suppertime phone surveys.

TYPES OF SURVEYS

Each type of survey also has its own set of advantages and disadvantages. What kinds of surveys are there?

1. On the Spot Paper Questionnaires We Ask People to Fill Out. This type could even include some forms that we routinely require people to fill out, such as interlibrary loan forms. With little or no modification, you might be able to gather information from a real variety of places by using these existing forms.
   **Advantages:**
   a) very convenient
   b) can get a high response rate, captive audience
   **Disadvantages:**
   a) may not be able to get a very representative sample (look at all the research done based on college students)
   b) may not be able to do this in many situations
   c) often has to be short, questions may be simplistic
   d) setting/timing may not be ideal

2. Mail Surveys.
   **Advantages:**
   a) convenient
   b) cheap
   c) potentially can get a very large group
   **Disadvantages:**
   a) poor response rate, can’t generalize (a good response rate would be 50-70% with follow-ups)

3. Phone Surveys.
   **Advantages:**
   a) fast: one week or less
   b) wide range
   c) good response rate (can achieve a 60-80% response rate with trained interviewers who are good on the phone)
   **Disadvantages:**
   a) can be very expensive

4. In Person Interviews.
   **Advantages:**
   a) 80% plus response rate
   b) can be very cheap if you use volunteers
   **Disadvantages:**
   a) can be very expensive if you use a consulting firm or professional interviewers
   b) interviewer bias
   c) interviewer effects (respondents may be embarrassed to make some comments)
   d) leading questions
   e) inconsistency (an interviewer may not always ask people the same questions)

HOW TO DO SURVEY RESEARCH WELL

There are eight basic questions to be answered when you do a survey research project.

1. What Do You Want to Know? This is actually the most important decision. Don’t expect a survey to answer all of your research questions. Keep the survey focused.

2. Who Do You Need to Interview? In most cases, it is much more important to have a representative sample than a random sample. Figure out who knows what you want to know.

3. How Are You Going to Select People to Interview? Aim for random selection. Avoid any sort of systematic bias. Remember that representation is the most
important factor.

4. How Many People Do You Need to Interview? There are two things to remember. First, a sample's accuracy is more important than its size. In other words, are you interviewing the right people? Second, sample size is usually independent of population size. That is, just because you have a huge population don't assume that you need a huge sample. For example, election polls are based on a small sample but are representative of the population as a whole.

5. What Are the Questions that Will Be Asked? Look at other surveys for good questions. Get advice from your colleagues. Try for multiple choice questions as much as possible but include some open-ended questions. Pretest your survey to eliminate ambiguous questions and avoid bad questions (See Figure 1).

6. How Will the Questionnaire Be Administered? Ask for volunteers. You'll be building support for your project. If others feel that they have a stake in it, it's more likely to be successful.

7. How Will the Data Be Analyzed? Get some advice from experts on your campus. Many spreadsheet packages will do a very basic analysis. Q&A or Excel could be used for frequencies. It is probably wise to build some expertise in SAS or SPSS. You can usually have a consultant or campus expert help with this part.

8. What Do the Results Mean? Know the limits of your statistical analysis. Don't overgeneralize. Remember that in the social sciences the best we can usually do is describe what's going on, causality is extremely difficult to attribute.

EXAMPLES OF LIBRARY-BASED SURVEYS

Examples of library-based surveys are appended (See Figures 2-4). Our survey examples include a traditional paper and electronic questionnaire, and a telephone survey.

WHAT IS QUALITATIVE RESEARCH?

The purpose of qualitative research is to uncover perceptions, feelings, attitudes, and ideas that relevant individuals have about an issue. It involves talking in depth with a few individuals or small groups.

Qualitative research complements quantitative research. It should be used as an adjunct to quantitative research. It is not a replacement for quantitative research.

It can be used in preparing for quantitative research. For example, qualitative research can be used to form a general hypothesis. It can also be used after quantitative research has been conducted to provide insight into survey results.

Qualitative research can be particularly valuable for needs assessment and problem analysis.

WHAT ARE SOME BASIC QUALITATIVE RESEARCH METHODS?

Qualitative research uses two basic methods of data collection: 1) Individual interviews and 2) focus groups.

With the first technique, carefully selected individuals are interviewed one at a time. Individual interviews are both structured and in-depth.

Focus groups are a prevalent form of qualitative research. Instead of interviewing people one at a time, a focus group brings together a small group of people for a focused discussion. By definition, a focus group generally consists of 8 to 12 participants from a target group who participate in a 90 to 120 minute structured discussion led by a trained moderator.

Focus groups have been used for decades in
marketing and advertising research. Focus groups were used as early as the 1930's when women were asked about soap. The basic techniques were established in The Focused Interview, a 1956 classic by sociologist Robert K. Merton and others. Focus groups were originally perceived as a generic research method that could be applied to any setting.

WHAT ARE THE STRENGTHS OF FOCUS GROUPS?

This methodology goes beyond a questionnaire. It provides more personal, in-depth information than quantitative research. The purpose is to get small groups to articulate their beliefs about an issue. You can use focus groups to determine what your clients like and dislike. Focus groups can help explain people's behaviors. Individual comments are important because participants may make telling comments. Participants tend to be less inhibited in a group discussion than in individual interviews. The security of a group setting makes them more likely to express their feelings. Using a group widens the range of responses. One individual's comments can trigger a chain of reactions from the other participants — i.e., one comment can have a snowballing effect. Focus group discussions can be more candid and spontaneous than individual interviews. Focus groups provide an opportunity to probe your clients' needs. By improving your understanding of clients' needs, you become better able to improve the quality of services to clients. You can also use employee focus groups to solicit insights of employees into problems and solutions.

Focus groups can be less time consuming than a written survey. They are also less time consuming than multiple individual interviews. If you are using individual interviews as a technique, you would probably have to conduct 15 to 30 interviews in order to have an appropriate sample size. You can plan, conduct, and analyze the results of a focus group discussion in just a few weeks.

In contrast to written surveys, focus groups are relatively inexpensive. The cost depends largely on the number of sessions you conduct, the choice of moderator, and the availability of facilities. You should use more than one focus group in case the responses of one group are atypical. A rule of thumb is to hold two to four groups per target audience. Ideally, you should continue to hold sessions until the discussion fails to reveal any new issues. Libraries are fortunate because they can use faculty members or graduate students who have had experience with focus groups as moderators. In addition, facilities are generally free since the sessions can be conducted in the library or elsewhere on campus.

Good public relations can be an added benefit of focus groups. Participants often enjoy the experience. It makes them feel that their opinions are important.

LIMITATIONS OF FOCUS GROUPS

You have to remember that focus group samples are both small and unrepresentative. You have to be careful not to project the results to a larger population since focus groups don't provide a large enough sample to allow for extrapolation. Since the results are not projectable, qualitative research is not a substitute for projectable quantitative research. Focus groups complement traditional surveys.

You have to be cautious since intent and actions are two separate things. Participants might respond that they would use the library more if hours were expanded. This doesn't mean that they would actually do so if hours were increased.
Group dynamics can impact the outcome. This is especially true if one or two participants monopolize the conversation.

This is why having a good moderator is the key. Success depends heavily on the moderator. A moderator has to be able to use a range of verbal and nonverbal techniques in order to ensure that every participant has an opportunity to speak and that no one monopolizes the discussion. A moderator needs to be able to direct but not control the discussion. Moderating is a skill.

Focus groups have been widely used in colleges and universities. For example, admissions offices have used focus groups to determine how and why prospective students choose a college. Focus groups have only been used by libraries in the past decade.

LIBRARIES CAN USE FOCUS GROUPS TO:

1. **Determine how well existing services meet clients needs.** The Iowa City Public Library used focus groups to find out how the library could improve services to the business community. Individual interviews can also be used to find out what your customers think about service.

   Penn State recently conducted 16 individual interviews with frequent and infrequent ILL users. First, an interviewer conducted in-depth, unstructured telephone interviews with nine frequent ILL users (both faculty and graduate students) to determine what they thought about the service and their suggestions for improvement. Overall, the respondents were very positive about ILL and they did offer a number of suggestions for how service could be improved, such as the ability to send requests electronically. Next, the same interviewer conducted in-depth telephone interviews with seven infrequent ILL users. The interviewer asked four open ended questions: 1) What do you expect from ILL? 2) How do you prefer to communicate with ILL? 3) What might encourage you to make more use of ILL?, and 4) What amount of time do you think is reasonable to wait for materials? The interviewer found that this group tended to have an apathetic or negative view of ILL since they infrequently used the service and didn't know much about the service. In contrast, the first group tended to have more realistic expectations.

2. **Help design quantitative studies.** Qualitative research helps you identify the questions to be asked. In addition to helping with the focus of a survey, qualitative research can help with the wording of the survey. You can use the language that participants use in order to increase the likelihood that survey respondents will understand the questions being asked. The individual interviews that Penn State conducted with ILL users were followed up by a print handout survey.

3. **Supplement data collected through a user survey.** Purdue University used focus groups to gather student users opinions about the quality of service (i.e., the collection, staff, facility). These focus groups supplemented data gathered through a survey on student and faculty attitudes toward the library.

4. **Provide insight into non-use.** While quantitative research provides data about who uses library services, qualitative research, particularly focus groups, provide insight into why people use or do not use library services. The Denver Public Library used focus groups to find out the needs of minority populations. This insight into non-use is critical if libraries want to improve services, increase use, and increase users...
satisfaction.

5. Plan for a new facility. Penn State is in the process of planning for a major expansion that will result in several new libraries within a library, such as a business library, social science library, education library, etc. Last year we conducted focus groups with faculty and students in order to gather input about the design of each of these specialized libraries. Although our intentions were good, we found that things could go wrong. One problem is that groups can be hard to assemble (especially faculty). No one showed up for one of the discussions and one of the other sessions had poor attendance. These sessions were scheduled in winter and bad weather forced us to reschedule one of the other meeting times.

6. To solicit input on electronic resources. Cornell University used focus groups to find out what features and enhancements users would like to see incorporated into the Mann Library Gateway.

A SUCCESSFUL FOCUS GROUP DISCUSSION REQUIRES:

1. Established research goals. Define what the purposes of the study are. Determine what information is needed. The purpose of a focus group is not to arrive at a group consensus, change attitudes, or resolve conflicts, but to collect qualitative data to answer research questions.

2. An identifiable target audience. Determine whom to study. Who should the participants be? Do you want to study clients or potential clients? If you are studying users of a particular service, such as ILL, are you interested in those who make limited, moderate, or heavy use of ILL? Participants should be carefully selected and should represent the individuals you want to study.

3. An objective, enthusiastic, and knowledgeable moderator. An outside moderator is more objective. This is why it's best if the moderator is not a library staff member. It is important that the moderator be perceived as friendly. The moderator also needs to be knowledgeable about the subject. A moderator needs to be a good listener and needs to be able to draw out reticent participants. Good moderators ask probing questions such as "Give me an example of ..." or "Would you explain further?" It is also important that the moderator try to minimize bias. An example of moderator bias would be the reinforcement of favorable comments by head nodding or praise such as "excellent," "wonderful," etc.

4. A carefully planned discussion. The moderator, in conjunction with a library staff member, should prepare a written guide which outlines topics to be covered. This guide should have planned questions and a sequence of questions. A moderator should avoid questions that can be answered by a simple yes or no. A moderator should limit the number of topics to be addressed so each one can receive sufficient attention. A focused discussion generally revolves around fewer than ten questions. There are often only five to six questions with follow-up questions. If the topic is complex, there should be even fewer questions. Good focus group research is narrow in scope. Rather than gathering superficial information about many ideas, it is better to gather in-depth information about a few issues. Before each session, the moderator should welcome the group, explain how participants have been selected, identify the group, and establish basic ground rules, such as the
need for participants to speak one at a time and that there are no right or wrong answers.

5. A record of session. The session can be recorded in several ways. First, you can have a representative from the library sit in, observe the session, and take notes. This observer does not participate. You should limit the number of observers so their presence is not intrusive. Another option is to have the observer behind a two-way mirror. Sessions are generally taped with an audio recorder. If the session is being taped, however, it is important that the moderator tell participants that they are being recorded. You can also consider using a moderator and an assistant moderator. The moderator leads the discussion and takes minimal notes. The assistant moderator takes extensive notes, operates any equipment, and handles logistics such as refreshments. After the session, the moderator transcribes the tapes. The moderator should prepare a written analysis soon after all the sessions have been conducted using the transcript. The moderator’s notes and observer’s notes can supplement the transcript if the tape is unclear. This written report should outline the broad themes which have emerged in several different sessions. There are commercially available computer packages (Qualpro, Hyperqual) to analyze transcripts. These packages typically identify the frequency of words and phrases. The problem is that packages like these may take comments out of their context.

6. A comfortable facility. The room you use should have comfortable chairs. It should be convenient, easy to find, and free from distractions. You should also serve refreshments.

ASSESSING QUALITATIVE RESEARCH

The following criteria can be applied to both individual interviews and focus groups.

- Are the objectives clear?
- Are the number of individual interviews and/or focus group discussions adequate for the issues being explored?
- Have the participants been carefully selected?
- Is the interviewer or moderator well trained?
- Is there a written guide listing topics to be covered and a sequence of questions?
- Does the analysis identify broad themes that have emerged in sessions?

CONCLUSION

Focus groups can be used in conjunction with individual interviews and surveys. The best approach to data collection is one that uses several methodologies. Both methods of gathering data (quantitative and qualitative) are useful and the relationship between them should be complimentary rather than adversarial. None of the techniques which we have presented are particularly complex. The key to success is developing good judgement about what techniques to use under which circumstances.

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