THE INFORMATION NEEDS INTERVIEW: A LONG WAY FROM LIBRARY-USE STATISTICS

Abstract. Many methods are used in the determining of information needs but most of them - and certainly the most commonly-used ones, are at best inappropriate and at worst misleading. Probably in no other area of information work does the research method influence so greatly what is discovered. It is generally recognised that information use data is no substitute for information needs data, yet researchers proceed to collect such data and continue to make bogus claims as to its provenance. The principal reason for this is that use data is easy to collect - often it's to hand (automatically produced by library/database management systems). And we must not overlook information managers' love affair with statistics either. Information needs data by its very nature can be obtained only through open-ended interviews and, less satisfactorily, through diaries and observation. The paper examines the structure of the information needs interview and makes some telling comparisons with use data - especially that gleaned from transactional log analysis.

1. Introduction

Probably no one in the profession would doubt the importance of information needs assessments, for, after all, they should lie at the very heart of information system design. Yet too few are conducted and, of those undertaken, few are done correctly. Many methods are used in the determining of information needs but most of them and certainly the most commonly used ones (library use statistics, citation analysis, transactional log analysis,) are, at best, inappropriate and, at worst, misleading. Probably in no other area of information work does the research method so greatly influence what is discovered. It is generally recognised that information-use data is no substitute for information needs data: after all, what can you learn about real information needs from the use of a poor information system or library, yet researchers proceed to use data collection methods that supply only use data and continue to make bogus claims as to its provenance. Use is a concrete enough measure, but use data can only offer a limited view of need - use is far too dependent on provision for it to be any other way. Use data can only help an information system improve on what it is already doing - and in itself that is no bad thing, but there is no guarantee that it is on the right lines in the first place. Use data will not help build a system which will do new and greater things. And, of course, in the case of library use studies, non-users, a far from inconsequential group, are not taken into the equation.

The principal reason for the preoccupation with use data is that it is easy to collect and pigeonhole: it is to hand, automatically produced by ubiquitous library/database management systems. By extension needs data is difficult to collect. The researcher must step into a world beyond their control, persuade and seek co-operation, ask (often personal) questions for which there are no stereotypical responses, and probe for data in unfamiliar territory. Undoubtedly, this can be daunting and it has put many researchers off from ever attempting to do a proper needs survey.

Nor must we overlook information managers' love affair with statistics (hard, discrete data) for the choice of the (quantitative) research method. Information needs data represents itself in quotes or paraphrased statements; there are only limited opportunities to present the data in tables and histograms and the samples and populations are inevitably smaller. There are no prescribed or familiar line of questioning - certainly not the sort that lend themselves to the 'satisfied'; very satisfied; indifferent' etc. categories beloved of managers in the field. The lack of precision is a distinct put-off.

2. The needs interview

Information needs assessments are essentially imprecise: you are asking people to consider something that is far from concrete, something they have probably not done before, something that they would like to do/use if only...This is best obtained through open-ended interviews and, less satisfactorily, through diaries and observation. There are many kinds of interview - there is the shopping mall interview (little more than a spoken questionnaire designed for speed of execution and high recall -and as such it must be regarded as a quantitative method) and the focus group interview (the current flavour of the month, see Goulding (this vol.)). However, an information needs interview (sometimes unsuitably referred to as the reference interview but the word reference limits its value too much) is an open-ended questioning-in-depth conducted on a one-to-one basis - and there lies its very strength.

Inevitably, too, the choice of methods is determined not just by the issue being studied (needs), but also by who is being investigated. Thus, there is little chance of getting busy and self-important practitioners, like journalists, politicians, lawyers etc. to subject themselves to the kind of examination that information researchers subject students to such as diaries, questionnaires and talk-aloud techniques. Yet there is every chance of getting their agreement to be interviewed.
3. Attractions of the method

No research method is free from problems, but interviewing has fewer than others. Interviews can probe for both qualitative and quantitative data. Furthermore, interviews have a habit of throwing up the unexpected, things that were not asked about (but with hindsight needed); with a good interview, the interviewee helps determine the scope and nature of the proceedings. And, of course, there is no real substitute for the method when it comes to studying non-use, for, by definition, there are no beguiling numbers. It is symptomatic that in the last fifteen years there has been no more than a handful of studies on non-use.

Needs interviews should ideally be held in the person's place of work, because it is the person's work environment that triggers off their information needs. Of course, an in-depth interview conducted in a person's place of work provides you with opportunities for observation - as you ask questions you can look around. You can double your information, treble your insight, the moment you step through someone's office or home door. Non-verbal communication can also be taken into account.

The needs-interview is particularly successful with groups that we might call 'talking heads' - and we can include journalists, politicians and teachers in that description. Journalists, in particular, make very good interviewees, because they have no qualms in telling information professionals and researchers exactly what they think. They are generally full of confidence and self-esteem and do not feel that they have to conform to the expectations of the interviewer (a big danger in user surveys), and they are also exceedingly good at expressing themselves.

In-depth interviews are especially useful when the territory is unfamiliar - and in the case of needs both researcher and interviewee may be entering unknown territory. A big attraction of the method is that the base-data produced are the words of the interviewee. In the case of questionnaires, too often users are shoe-horned into forms of words devised by the interviewer which no user may have ever used to express themselves. Basically the researcher puts words in the mouths of users and then proceeds to describe what users said in the vocabulary they fed them with in the first place. This is clearly incestuous. And that way you get little that is truly memorable or interesting. What chance is there of getting the comment the speaker received when interviewing a senior partner of an accountancy firm about end-use: I know how to make coffee, but I don't.

It is only through interaction that needs data emerges - answers are seldom on the tip of the tongue. Through users recounting experiences -of a typical day or what they did yesterday, profitable lines of communication open-out, and new and interesting data emerge. Two examples will illustrate the point. First, one user was discussing an editorial board at which the following week's edition was being considered, and the conversation got around to an article about Mozambique. The point was raised whether the article should appear the week before the forthcoming elections or during election week. One journalist argued that the article should appear the week before, because, that way, the powers that be in Mozambique would read it and that would stop them making the same mistake as they did the time before! What the journalist was referring to was the fact that information emanating from certain sources carries authority and that The Economist's journalists take the authority invested in them extremely seriously. Now, authority is a key information needs characteristic and an important factor in information system use. Needs data rubs shoulders with work routines and problems - people do not have information needs per se.

The second example arose from a question concerning information overload which followed naturally from a journalist recounting all the information inputs that come into a newspaper.

'The presence of such vast quantities of information can lead to problems other than trying to digest/process it. Indeed, it can lead also to an unbalanced view on events. For the danger is to rely on the incoming paper flood and in so doing obtaining a far too institutional viewpoint on events. Take the example of The Guardian's Education correspondent. For a start he would get about a metre and a half of post a day. Masses will be coming from educational institutions, from pressure groups, trade unions. It is all institutional, its all about providing education - little of it is Consumer oriented. It is not about what is going on in the classrooms, it's not about what parents are wanting etc. To get that information you must leave the office. But that takes a tremendous act of will, for the pressure is to stay in the office and read the post and take the phone calls'.

Apart from the graphical description the answer also discloses an unexpected connection between information overload and the viewpoint of information sources.

4. Techniques and tips

It is said that there are no real rules to interviewing, but there are -and they really count if the interview is not to become stilted, boring, unproductive, uncomfortable etc. Because you are going into the fray with a small number of broad questions and relying on the dynamism of the interview process to reveal everything it is absolutely
essential to capture the person's interest and to make them relax. In regard to the latter we all start off with something soft and soppy, about the company, the surroundings, getting there, the weather, or perhaps some person or some interest you have in common (you have done your homework). Curiosity, empathy and compliments certainly help too. There are other things we can do to help make the interview a success.

5. Orientation

Never tell users that you are doing the interview to find out if the library or an information system is any good. You will be type cast, they will want to please, sugar the pill, and all comments will harp back to the service on offer; or worse, all kinds of hobby horses will emerge. What you do instead is ask them about their job, their work and best of all the problems they experience when doing it. Virtually everything they say will have an information needs connotation - you can then take the comment and run with it through your analytical framework (detailed questioning there may not be, but detailed analysis is essential). Of course this is heady stuff because the user has a good grip on the steering wheel - and is going to take you to places you never expected (but wanted) to go. They will mention sources of information and systems as a natural part of the discussion - any anecdote, cases etc. alerts the interviewer to an information needs requirement or to characteristics of information seeking behaviour. Any topics not covered can be swept up at the end, by which time the person is so immersed in talking about their job they are happy to continue.

Once users find out the questions are about them and not you (or your systems) they generally enjoy the experience. They find the questioning and periods of reflection that go with it, intriguing and stimulating and often come out of the interview feeling that they have been involved in an information counselling session. How did I do? is a typical response. Wanting to talk about the interview afterwards is another common reaction.

6. Probing

Probing is an essential part of an open-ended interview. Its function is to: (1) encourage further communication; (2) show interest; (3) and make a direct bid for more information. What is required is motivation and direction without unwanted influence - never give signs that some responses are more acceptable than others (otherwise you are back to the pitfalls of questionnaires). Probing questions follow up an interviewee's responses; they are particularly important in getting to the depth and detail of information required, but must be asked sensitively to avoid discomforting the interviewee. Postural signs of interest and acceptance - nodding of head, have their role. Brief assertions of understanding and interest: assenting comments like 'I see, um-hm' play a part, they show that the answer is on the right lines, but has not been answered fully. We can go further and be rather more directional, though still retaining a neutrality:

"in what way were your needs not met" [clarification probe]

"can you tell me more about your difficulties meeting your needs?" [elaboration probe]

"so, you were feeling very dissatisfied with what you got" [reflective probe]

"but you were dissatisfied?" [repetition probe]

Silence can also be an effective probe, encouraging the interviewee to contribute more. Mirroring the thoughts of the interviewee can be useful too - through this process they can see what they said more clearly and can make modifications if their words were interpreted wrongly or if they were hurried into saying the wrong thing.

7. Recording

There is the problem of data collection: notebook or tape recorder (or both). The use of a tape recorder brings with it the problem of making the interviewee feeling uncomfortable, perhaps stifling some of the more sensitive responses; and it can prove a distraction. In fact some groups might not respond at all if they know a tape recorder is involved. In addition the transcription times are horrendous. However, if you want to capture the real diamonds - the quotes, then interviews have to be taped. The big advantage of a notebook, as opposed to tape, is that it is not so unobtrusive and you are editing as you go along. And users are generally impressed by the fact that you are taking notes - something they said is so important as to warrant taking it down.

8. Case study: user satisfaction; logs, questionnaires and interviews

To illustrate the differences in approach let us take the way that three popular research methods (computer logs, questionnaires and needs interviews) tackle the problem of user satisfaction. Computer logs are largely used to
obtain the fine detail as to what happens when users go on-line - and you get an awful amount of detail but not all of it means anything. Logs give rise to countless opportunities for type-casting users, but none of them are without reproach. The words of a TV detective are recalled: there are twenty-one ways of disarming an armed robber but none of them work. Thus they are sometimes used to measure the success with which people meet their information needs: the more records found the more successful the person has been, with a zero posting denoting failure and frye-hundred records a high degree of success. Something positive can be read into the fact that records were actually displayed as a result of a search. However, this does not work as a strong measure of satisfaction, for allowances have to be made for the fact that negative searches can be positive, and that a display of records does not necessarily mean that useful records were found. Furthermore, everybody - bar the academic researcher, would be happier with one document than a hundred.

Measuring satisfaction is very popular with questionnaire researchers. They too run into all kinds of problem as well, although their problems are more linguistic in nature. What does it mean when a user says that they are satisfied - presumably that they find what they are looking for (or that they were not looking for anything in the first place)? Use itself can, of course, point to satisfaction. A system that failed do deliver would soon result in dissatisfaction. The trouble is that satisfaction is a relative and very slippery term. Low expectations and skills mean that satisfaction may be achieved fairly easily. For end-users the ability to find relevant information with simple search techniques, with little expenditure of time, perhaps in the comfort of their own offices is always likely to inflate satisfaction scores. Novelty must play a part too. On the other hand - and this largely concerns professional or experienced searchers - the more you know and the more conscious you are about your own frailties the less you are satisfied. So what of satisfaction scores? And who is in the best position to judge?

A needs interviewer would never ask a user how many documents they retrieved/wanted or ask them to assign a satisfaction score. Instead, the interviewer could make the observation, if appropriate, on the basis of numerous user-directed comments. The user might volunteer the information, but that is quite another thing - and you then could always follow this up. Once we move from just asking people about their use of systems then the satisfaction question is just not that relevant. And, in any case, it is uncertain what value it is to know that 65% of users are `quite satisfied'. Far better to have comments such as this one from a user (journalist) asked about what he thought of the library:

'journalists should never be over-dependent on the library, for this would be dangerous. Journalists should assemble data from a wide variety of sources and systems and sew the whole lot together into something resembling a patchwork quilt. The very essence of reporting is to tell people what they do not know already - and almost by definition cuttings and libraries tell you what is already known - possibly widely known'.

Now the journalist did not even mention the word satisfaction, but we have a very clear idea of what he thinks.

9. Conclusion

The information needs interview has much to commend itself but I am not at all convinced this paper will deflect researchers and practitioners away from simplistic quantitative methods. A profession with an identity-crisis and a chip on its shoulders will shy away from anything that smacks of soft science, smells of subjectivity and involves users or, worse, non-users. The in-depth, needs interview is too loose, too unstructured, too uncontrolled for comfort. Even when the speaker, in a recent Aslib Know How Guide (1), detailed the broad lines of questioning and provided lots of examples of the kind of data that emerges as a result of questioning he was taken to task for not supplying a detailed questionnaire. Perhaps the best way to sell the depth needs interview is to sell it as one of a package of research methods - a method of finding out what all those numbers mean!

References


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