

标题:问卷设计的初步决定

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注解 - 这些项目符号上的数字对应于添加到此研究文档中的数字。

1. 没有精心设计的问卷调查，就不可能取得成功。不幸的是，调查表的设计没有理论基础来指导市场研究人员开发完美的调查表。研究人员必须指导他/她的事情是漫长的，这是根据过去和现在其他研究人员的经验而得出的。因此，问卷设计更多是一门艺术，而不是一门科学。
2. 问卷的设计将取决于研究人员是否希望收集探索性信息（即为了更好地理解主题或生成假设而定性的信息）或定量信息（以测试先前已生成的特定假设）。
3. 如果研究人员希望检验和量化假设，并且要对数据进行统计分析，则可以设计正式的标准化问卷。
4. 精心设计的问卷应符合研究目标。这看起来似乎很明显，但是由于准备工作不足，许多研究调查都忽略了重要方面，并且由于了解不足而未能充分探究特定问题。
5. 精心设计的调查表应便于受访者提供必要的信息，使访调员易于记录答案，并应进行合理安排，以便进行合理的分析和解释。
6. 查看图4.1-问卷设计之前的步骤。即使在探索阶段之后，在设计调查表之前，仍需完成两个关键步骤。首先是阐明研究打算解决的问题。第二步是确定设计问卷的假设。（Vittorio的注释：与所有其他带注释的段落一样，此图和这些陈述显示了CAUX数据如何帮助探索阶段，问题和假设。）
7. （Vittorio的说明：对CAUX数据的分析可以帮助告知步骤1至4。）
8. 可能已经有人对要收集的信息种类有所了解，但是可以从辅助数据，先前的农村快速评估和探索性研究中获得更多帮助。
9. 首先，研究人员必须定义他/她希望从要收集的样本数据中概括出的总体。
10. 暗示联系目标受访者的方法应该构成问卷设计过程的一部分，这似乎很奇怪。（Vittorio的说明：CAUX数据也可以帮助完成此任务，因为它可以显示何时是向用户显示问卷的最佳时间。）
11. 如果问题不能支持研究设计过程中建立的一个或多个假设，则不能使用问题。



Chapter 4: Questionnaire Design

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1

No survey can achieve success without a well-designed questionnaire. Unfortunately, questionnaire design has no theoretical base to guide the marketing researcher in developing a flawless questionnaire. All the researcher has to guide him/her is a lengthy list of do's and don'ts born out of the experience of other researchers past and present. Hence, questionnaire design is more of an art than a science.

Chapter Objectives

This chapter is intended to help the reader to:

- Understand the attributes of a well-designed questionnaire, and
- Adopt a framework for developing questionnaires.

Structure Of The Chapter

A brief account of the key attributes of a sound questionnaire serves as the opening section of the chapter. This is followed by a nine-point framework for developing an effective questionnaire. These are the only two components of this chapter on questionnaire design.

The qualities of a good questionnaire

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The design of a questionnaire will depend on whether the researcher wishes to collect exploratory information (i.e. qualitative information for the purposes of better understanding or the generation of hypotheses on a subject) or quantitative information (to test specific hypotheses that have previously been generated).

Exploratory questionnaires: If the data to be collected is qualitative or is not to be statistically evaluated, it may be that no formal questionnaire is needed. For example, in interviewing the female head of the household to find out how decisions are made within the family when purchasing breakfast foodstuffs, a formal questionnaire may restrict the discussion and prevent a full exploration of the woman's views and processes. Instead one might prepare a brief guide, listing perhaps ten major open-ended questions, with appropriate probes/prompts listed under each.

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Formal standardised questionnaires: If the researcher is looking to test and quantify hypotheses and the data is to be analysed statistically, a formal standardised questionnaire is designed. Such questionnaires are generally characterised by:

- prescribed wording and order of questions, to ensure that each respondent receives the same stimuli
- prescribed definitions or explanations for each question, to ensure interviewers handle questions consistently and can answer respondents' requests for clarification if they occur
- prescribed response format, to enable rapid completion of the questionnaire during the interviewing process.

Given the same task and the same hypotheses, six different people will probably come up with six different questionnaires that differ widely in their choice of questions, line of questioning, use of open-ended questions and length. There are no hard-and-fast rules about how to design a questionnaire, but there are a number of points that can be borne in mind:

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1. A well-designed questionnaire should meet the research objectives. This may seem obvious, but many research surveys omit important aspects due to inadequate preparatory work, and do not adequately probe particular issues due to poor understanding. To a certain degree some of this is inevitable. Every survey is bound to leave some questions unanswered and provide a need for further research but the objective of good questionnaire design is to 'minimise' these problems.

2. It should obtain the most complete and accurate information possible. The questionnaire designer needs to ensure that respondents fully understand the questions and are not likely to refuse to answer, lie to the interviewer or try to conceal their attitudes. A good questionnaire is organised and worded to encourage respondents to provide accurate, unbiased and complete information.

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3. A well-designed questionnaire should make it easy for respondents to give the necessary information and for the interviewer to record the answer, and it should be arranged so that sound analysis and interpretation are possible.

4. It would keep the interview brief and to the point and be so arranged that the respondent(s) remain interested throughout the interview.

Each of these points will be further discussed throughout the following sections. Figure 4.1 shows how questionnaire design fits into the overall process of research design that was described in chapter 1 of this textbook. It emphasises that writing of the questionnaire proper should not begin before an exploratory research phase has been completed.

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Figure 4.1 The steps preceding questionnaire design

Even after the exploratory phase, two key steps remain to be completed before the task of designing the questionnaire should commence. The first of these is to articulate the questions that research is intended to address. The second step is to determine the hypotheses around which the questionnaire is to be designed.

It is possible for the piloting exercise to be used to make necessary adjustments to administrative aspects of the study. This would include, for example, an assessment of the length of time an interview actually takes, in comparison to the planned length of the interview; or, in the same way, the time needed to complete questionnaires. Moreover, checks can be made on the appropriateness of the timing of the study in relation to contemporary events such as avoiding farm visits during busy harvesting periods.

Preliminary decisions in questionnaire design

There are nine steps involved in the development of a questionnaire:

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 1. Decide the information required.
 2. Define the target respondents.
 3. Choose the method(s) of reaching your target respondents.
 4. Decide on question content.
 5. Develop the question wording.
 6. Put questions into a meaningful order and format.
 7. Check the length of the questionnaire.
 8. Pre-test the questionnaire.
 9. Develop the final survey form.

Deciding on the information required

It should be noted that one does not start by writing questions. The first step is to decide 'what are the things one needs to know from the respondent in order to meet the survey's objectives?' These, as has been indicated in the opening chapter of this textbook, should appear in the research brief and the research proposal.

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One may already have an idea about the kind of information to be collected, but additional help can be obtained from secondary data, previous rapid rural appraisals and exploratory research. In respect of secondary data, the researcher should be aware of what work has been done on the same or similar problems in the past, what factors have not yet been examined, and how the present survey questionnaire can build on what has already been discovered. Further, a small number of preliminary informal interviews with target respondents will give a glimpse of reality that may help clarify ideas about what information is required.

Define the target respondents

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At the outset, the researcher must define the population about which he/she wishes to generalise from the sample data to be collected. For example, in marketing research, researchers often have to decide whether they should cover only existing users of the generic product type or whether to also include non-users. Secondly, researchers have to draw up a sampling frame. Thirdly, in designing the questionnaire we must take into account factors such as the age, education, etc. of the target respondents.

Choose the method(s) of reaching target respondents

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It may seem strange to be suggesting that the method of reaching the intended respondents should constitute part of the questionnaire design process. However, a moment's reflection is sufficient to conclude that the method of contact will influence not only the questions the researcher is able to ask but the phrasing of those questions. The main methods available in survey research are:

- personal interviews
- group or focus interviews
- mailed questionnaires
- telephone interviews.

Within this region the first two mentioned are used much more extensively than the second pair. However, each has its advantages and disadvantages. A general rule is that the more sensitive or personal the information, the more personal the form of data collection should be.

Decide on question content

Researchers must always be prepared to ask, "Is this question really needed?" The temptation to include questions without critically evaluating their contribution towards the achievement of the research objectives, as they are specified in the research proposal, is surprisingly strong. No question should be included unless the data it gives rise to is directly of use in testing one or more of the hypotheses established during the research design.

There are only two occasions when seemingly "redundant" questions might be included:

- Opening questions that are easy to answer and which are not perceived as being "threatening", and/or are perceived as being interesting, can greatly assist in gaining the respondent's involvement in the survey and help to establish a rapport.

This, however, should not be an approach that should be overly used. It is almost always the case that questions which are of use in testing hypotheses can also serve the same functions.

- "Dummy" questions can disguise the purpose of the survey and/or the sponsorship of a study. For example, if a manufacturer wanted to find out whether its distributors were giving the consumers or end-users of its products a reasonable level of service, the researcher would want to disguise the fact that the distributors' service level was being investigated. If he/she did not, then rumours would abound that there was something wrong with the distributor.

Develop the question wording

Survey questions can be classified into three forms, i.e. closed, open-ended and open response-option questions. So far only the first of these, i.e. closed questions has been discussed. This type of questioning has a number of important advantages;

- It provides the respondent with an easy method of indicating his answer - he does not have to think about how to articulate his answer.
- It 'prompts' the respondent so that the respondent has to rely less on memory in answering a question.
- Responses can be easily classified, making analysis very straightforward.
- It permits the respondent to specify the answer categories most suitable for their purposes.

Disadvantages are also present when using such questions

- They do not allow the respondent the opportunity to give a different response to those suggested.
- They 'suggest' answers that respondents may not have considered before.

With open-ended questions the respondent is asked to give a reply to a question in his/her own words. No answers are suggested.

Example: "What do you like most about this implement?"

Open-ended questions have a number of advantages when utilised in a questionnaire:

- They allow the respondent to answer in his own words, with no influence by any specific alternatives suggested by the interviewer.

- They often reveal the issues which are most important to the respondent, and this may reveal findings which were not originally anticipated when the survey was initiated.
- Respondents can 'qualify' their answers or emphasise the strength of their opinions.

However, open-ended questions also have inherent problems which means they must be treated with considerable caution. For example:

- Respondents may find it difficult to 'articulate' their responses i.e. to properly and fully explain their attitudes or motivations.
- Respondents may not give a full answer simply because they may forget to mention important points. Some respondents need prompting or reminding of the types of answer they could give.
- Data collected is in the form of verbatim comments - it has to be coded and reduced to manageable categories. This can be time consuming for analysis and there are numerous opportunities for error in recording and interpreting the answers given on the part of interviewers.
- Respondents will tend to answer open questions in different 'dimensions'. For example, the question: "When did you purchase your tractor?", could elicit one of several responses, viz:

"A short while ago".
 "Last year".
 "When I sold my last tractor".
 "When I bought the farm".

Such responses need to be probed further unless the researcher is to be confronted with responses that cannot be aggregated or compared.

It has been suggested that the open response-option questions largely eliminate the disadvantages of both the afore-mentioned types of question. An open response-option is a form of question which is both open-ended and includes specific response-options as well. For example,

What features of this implement do you like?

- Performance
- Quality
- Price
- Weight
- Others mentioned:

The advantages of this type of question are twofold:

- The researcher can avoid the potential problems of poor memory or poor articulation by then subsequently being able to prompt the respondent into considering particular response options.
- Recording during interview is relatively straightforward.

The one disadvantage of this form of question is that it requires the researcher to have a good prior knowledge of the subject in order to generate realistic/likely response options before printing the questionnaire. However, if this understanding is achieved the data collection and analysis process can be significantly eased.

Clearly there are going to be situations in which a questionnaire will need to incorporate all three forms of question, because some forms are more appropriate for seeking particular forms of response. In instances where it is felt the respondent needs assistance to articulate answers or provide answers on a preferred dimension determined by the researcher, then closed questions should be used. Open-ended questions should be used where there are likely to be a very large number of possible different responses (e.g. farm size), where one is seeking a response described in the respondent's own words, and when one is unsure about the possible answer options. The mixed type of question would be advantageous in most instances where most potential response-options are known; where unprompted and prompted responses are valuable, and where the survey needs to allow for unanticipated responses.

There are a series of questions that should be posed as the researchers develop the survey questions themselves:

"Is this question sufficient to generate the required information?"

For example, asking the question "Which product do you prefer?" in a taste panel exercise will reveal nothing about the attribute(s) the product was judged upon. Nor will this question reveal the degree of preference. In such cases a series of questions would be more appropriate.

"Can the respondent answer the question correctly?"

- An inability to answer a question arises from three sources:
- Having never been exposed to the answer, e.g. "How much does your husband earn?"
- Forgetting, e.g. What price did you pay when you last bought maize meal?"
- An inability to articulate the answer: e.g. "What improvements would you want to see in food preparation equipment?"

"Are there any external events that might bias response to the question?"

For example, judging the popularity of beef products shortly after a foot and mouth epidemic is likely to have an effect on the responses.

"Do the words have the same meaning to all respondents?"

For example, "How many members are there in your family?"

There is room for ambiguity in such a question since it is open to interpretation as to whether one is speaking of the immediate or extended family.

"Are any of the words or phrases loaded or leading in any way?"

For example, "What did you dislike about the product you have just tried?"

The respondent is not given the opportunity to indicate that there was nothing he/she disliked about the product. A less biased approach would have been to ask a preliminary question along the lines of, "Did you dislike any aspect of the product you have just tried?", and allow him/her to answer yes or no.

"Are there any implied alternatives within the question?"

The presence or absence of an explicitly stated alternative can have dramatic effects on responses. For example, consider the following two forms of a question asked of a 'Pasta-in-a-Jar' concept test:

1. "Would you buy pasta-in-a-jar if it were locally available?"
2. "If pasta-in-a-jar and the cellophane pack you currently use were both

available locally, would you:

- Buy only the cellophane packed pasta?
- Buy only the pasta-in-a-jar product?
- Buy both products?"

The explicit alternatives provide a context for interpreting the true reactions to the new product idea. If the first version of the question is used, the researcher is almost certain to obtain a larger number of positive responses than if the second form is applied.

"Will the question be understood by the type of individual to be interviewed?"

It is good practice to keep questions as simple as possible. Researchers must be sensitive to the fact that some of the people he/she will be interviewing do not have a high level of education. Sometimes he/she will have no idea how well or badly educated the respondents are until he/she gets into the field. In the same way, researchers should strive to avoid long questions. The fewer words in a question the better. Respondents' memories are limited and absorbing the meaning of long sentences can be difficult: in listening to something they may not have much interest in, the respondents' minds are likely to wander, they may hear certain words but not others, or they may remember some parts of what is said but not all.

"Is there any ambiguity in my questions?"

The careless design of questions can result in the inclusion of two items in one question. For example: "Do you like the speed and reliability of your tractor?"

The respondent is given the opportunity to answer only 'yes' or 'no', whereas he might like the speed, but not the reliability, or vice versa. Thus it is difficult for the respondent to answer and equally difficult for the researcher to interpret the response.

The use of ambiguous words should also be avoided. For example: "Do you regularly service your tractor?"

The respondents' understanding and interpretation of the term 'regularly' will differ. Some may consider that regularly means once a week, others may think once a year is regular. The inclusion of such words again present interpretation difficulties for the researcher.

"Are any words or phrases vague?"

Questions such as 'What is your income?' are vague and one is likely to get many different responses with different dimensions. Respondents may interpret the question in different terms, for example:

- hourly pay?
- weekly pay?
- yearly pay?
- income before tax?
- income after tax?
- income in kind as well as cash?
- income for self or family?
- all income or just farm income?

The researcher needs to specify the 'term' within which the respondent is to answer.

"Are any questions too personal or of a potentially embarrassing nature?"

The researcher must be clearly aware of the various customs, morals and traditions in the community being studied. In many communities there can be a great reluctance to discuss certain questions with interviewers/strangers. Although the degree to which certain topics

are taboo varies from area to area, such subjects as level of education, income and religious issues may be embarrassing and respondents may refuse to answer.

"Do questions rely on feats of memory?"

The respondent should be asked only for such data as he is likely to be able to clearly remember. One has to bear in mind that not everyone has a good memory, so questions such as 'Four years ago was there a shortage of labour?' should be avoided.

Putting questions into a meaningful order and format

Opening questions: Opening questions should be easy to answer and not in any way threatening to THE respondents. The first question is crucial because it is the respondent's first exposure to the interview and sets the tone for the nature of the task to be performed. If they find the first question difficult to understand, or beyond their knowledge and experience, or embarrassing in some way, they are likely to break off immediately. If, on the other hand, they find the opening question easy and pleasant to answer, they are encouraged to continue.

Question flow: Questions should flow in some kind of psychological order, so that one leads easily and naturally to the next. Questions on one subject, or one particular aspect of a subject, should be grouped together. Respondents may feel it disconcerting to keep shifting from one topic to another, or to be asked to return to some subject they thought they gave their opinions about earlier.

Question variety: Respondents become bored quickly and restless when asked similar questions for half an hour or so. It usually improves response, therefore, to vary the respondent's task from time to time. An open-ended question here and there (even if it is not analysed) may provide much-needed relief from a long series of questions in which respondents have been forced to limit their replies to pre-coded categories. Questions involving showing cards/pictures to respondents can help vary the pace and increase interest.

Closing questions

It is natural for a respondent to become increasingly indifferent to the questionnaire as it nears the end. Because of impatience or fatigue, he may give careless answers to the later questions. Those questions, therefore, that are of special importance should, if possible, be included in the earlier part of the questionnaire. Potentially sensitive questions should be left to the end, to avoid respondents cutting off the interview before important information is collected.

In developing the questionnaire the researcher should pay particular attention to the presentation and layout of the interview form itself. The interviewer's task needs to be made as straight-forward as possible.

- Questions should be clearly worded and response options clearly identified.
- Prescribed definitions and explanations should be provided. This ensures that the questions are handled consistently by all interviewers and that during the interview process the interviewer can answer/clarify respondents' queries.

Ample writing space should be allowed to record open-ended answers, and to cater for differences in handwriting between interviewers.

Physical appearance of the questionnaire

The physical appearance of a questionnaire can have a significant effect upon both the quantity and quality of marketing data obtained. The quantity of data is a function of the response rate. Ill-designed questionnaires can give an impression of complexity, medium and too big a time commitment. Data quality can also be affected by the physical

appearance of the questionnaire with unnecessarily confusing layouts making it more difficult for interviewers, or respondents in the case of self-completion questionnaires, to complete this task accurately. Attention to just a few basic details can have a disproportionately advantageous impact on the data obtained through a questionnaire.

Use of booklets	The use of booklets, in the place of loose or stapled sheets of paper, make it easier for interviewer or respondent to progress through the document. Moreover, fewer pages tend to get lost.
Simple, clear formats	The clarity of questionnaire presentation can also help to improve the ease with which interviewers or respondents are able to complete a questionnaire.
Creative use of space and typeface	In their anxiety to reduce the number of pages of a questionnaire there is a tendency to put too much information on a page. This is counter-productive since it gives the questionnaire the appearance of being complicated. Questionnaires that make use of blank space appear easier to use, enjoy higher response rates and contain fewer errors when completed.
Use of colour coding	Colour coding can help in the administration of questionnaires. It is often the case that several types of respondents are included within a single survey (e.g. wholesalers and retailers). Printing the questionnaires on two different colours of paper can make the handling easier.
Interviewer instructions	Interviewer instructions should be placed alongside the questions to which they pertain. Instructions on where the interviewers should probe for more information or how replies should be recorded are placed after the question.

In general it is best for a questionnaire to be as short as possible. A long questionnaire leads to a long interview and this is open to the dangers of boredom on the part of the respondent (and poorly considered, hurried answers), interruptions by third parties and greater costs in terms of interviewing time and resources. In a rural situation an interview should not last longer than 30-45 minutes.

Piloting the questionnaires

Even after the researcher has proceeded along the lines suggested, the draft questionnaire is a product evolved by one or two minds only. Until it has actually been used in interviews and with respondents, it is impossible to say whether it is going to achieve the desired results. For this reason it is necessary to pre-test the questionnaire before it is used in a full-scale survey, to identify any mistakes that need correcting.

The purpose of pretesting the questionnaire is to determine:

- whether the questions as they are worded will achieve the desired results
- whether the questions have been placed in the best order
- whether the questions are understood by all classes of respondent
- whether additional or specifying questions are needed or whether some questions should be eliminated
- whether the instructions to interviewers are adequate.

Usually a small number of respondents are selected for the pre-test. The respondents selected for the pilot survey should be broadly representative of the type of respondent to be interviewed in the main survey.

If the questionnaire has been subjected to a thorough pilot test, the final form of the questions and questionnaire will have evolved into its final form. All that remains to be done is the mechanical process of laying out and setting up the questionnaire in its final form. This will involve grouping and sequencing questions into an appropriate order, numbering questions, and inserting interviewer instructions.

Chapter Summary

A well designed questionnaire is essential to a successful survey. However, the researcher must develop his/her own intuition with respect to what constitutes 'good design' since there is no theory of questionnaires to guide him/her.

A good questionnaire is one which help directly achieve the research objectives, provides complete and accurate information; is easy for both interviewers and respondents to complete, is so designed as to make sound analysis and interpretation possible and is brief.

There are at least nine distinct steps: decide on the information required; define the target respondents, select the method(s) of reaching the respondents; determine question content; word the questions; sequence the questions; check questionnaire length; pre-test the questionnaire and develop the final questionnaire.

Key Terms

Group focus interviews
Mailed questionnaire
Open-ended and open response-option questions
Personal interviews
Piloting questionnaires
Target respondents
Telephone interviews

Review Questions

1. Summarise the qualities of a good questionnaire.
2. Where should interviewer instructions pertaining to responses to a particular question be placed on the questionnaire?
3. The textbook says that one does not start by writing questions. How should the researcher begin?
4. What are the two occasions when apparently "redundant" questions should be found in a questionnaire?
5. Name the three advantages of open-ended questions.
6. What are the three reasons why a respondent is unable to answer a question?
7. What is the recommended duration of interviews carried out in rural situations?
8. What are the key characteristics of opening questions in a questionnaire?

Chapter References

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2. Sudman, S. and Bradburn, N. M. (1973), *Asking Questions*, pp. 208 - 28.

