12 Questionnaire Design

Learning Objectives

1 Understand the purpose of survey research
2 Describe the process of planning the survey research methodology
3 Learn the rules for writing effective survey questions and answers
4 Appreciate the importance of layout in designing questionnaires
5 Examine how survey forms must be adapted when placed online

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DO YOU WANT BIG BROTHER IN YOUR HOME?

A Sussex family let marketing researchers put cameras into their home as if they were part of *Big Brother*. The family – Mum, Dad and the two children – had cameras installed in their living room and kitchen for three months. It wasn't to save memories but rather they were paid £500 per month to let researchers from Brainjuicer, an online research company, watch them going about their daily business. If the family didn't perform what the researchers wanted to see, the researchers called in their request. What they learned was how the family performed daily tasks, from brushing their teeth to washing the dishes.

Why? The purpose was to see how people interact and behave without the distracting presence of researchers. The family stated that after a few days they forgot the cameras were even there!

Questions: Is the traditional survey dead? Can it be combined with other, newer, forms of marketing research?

Source: Grande, 2007c

12.1 Survey Research Methodology

Surveys are a quantitative research methodology that consists of a set of questions with predetermined answer choices from which participants must chose. In addition, some survey questions may be open-ended, where participants are able to respond in their own words. Surveys can be administered by a researcher, either in person or over the phone. Surveys can also be self-administered whereby they are sent via the postal service or put online. Whatever the form of survey administration, the survey design methodology and the questionnaire development process remain basically the same.

12.1.1 Uses of survey research

Surveys are most effective when obtaining information if marketing researchers already know something about the research problem at hand. This information will be needed as researchers must anticipate participants' responses when they write possible answers to questions. This knowledge can be the result of secondary research on the external environment or internal research on company information. However it is obtained, there needs to be some initial knowledge of the research problem so that there is enough information to write the correct survey questions and answers.

Surveys can be used to gather information on any aspect of the marketing mix including the customer, product, promotion, price and place as shown in Table 12.1. A survey can be used to learn if a company's current customers are satisfied with its products, or it may be used to determine the likelihood of a new target market segment being interested in purchasing. The effectiveness of a promotional campaign to motivate purchasing can be ascertained by asking if a consumer has purchased a product as the result of seeing or hearing an advertisement or sales incentive offer. For example, technology has increased the number of ways that marketing messages are being delivered and a researcher might be interested in how consumers are now receiving marketing messages. Of course, this researcher must first be aware of all the new methods of communicating such messages, otherwise these won't be added to the possible answers to a question (Fielding, 2006a). Survey questions can also be written to ask about the effect of price changes on purchase likelihood. In addition, where consumers could most conveniently purchase a product could be discovered through a survey question.

Table 12.1   Purpose of survey research

Marketing Mix Element	Possible Research Issues
Customer	Satisfaction of current segment toward product
	Find new customer segment to target with product
Product	Preferred benefits of current product
	Benefits desired from new product
Promotion	Awareness of promotional campaign components
	Effectiveness of promotional campaign to motivate purchase
Price	Appropriate pricing level
	Effect of price increase on purchase behavior
Place	Location where product should be sold
	Ease of purchase process

12.1.2 Questionnaire development needs

When designing a questionnaire for a survey a researcher must keep in mind the needs of a number of groups that may have an interest in what questions will be on the survey form. Each group will view the completed questionnaire from their own unique perspective. First, the management of the company that has commissioned the research will be concerned that the survey questions will provide the information needed to answer the research question. In addition, they will also want questions on demographic and geographic characteristics that will allow for comparisons and contrasts between groups of consumers.

The research participants will want the questions to be ones they can answer and that these are worded in a way that is easily understood. Participants will also want the form designed so that it is simple to record their responses. Those administering the survey (if it is not self-administered) will want the questions to be written clearly so that participants do not need to ask for clarification. The data entry clerk, who has to enter the information into a computer database, will want a survey form where the participants' answers are easy to understand, which will result in quicker data entry. In addition, the data entry clerk will require that the questionnaire should be visually designed, so that any errors are minimized while reading the entries.

Survey issues

- Management – that it asks the right questions
- Participants – that it includes questions that can be easily answered
- Surveyor administrator – that the questions are clearly written
- Data entry clerk – that the form makes it simple to enter data

12.2 The Questionnaire Design Process

After management has determined the research question, the questionnaire design process will begin with a meeting between the researchers and management. At this meeting, researchers and management will discuss the topic areas that need to be covered in the survey to provide the data needed to answer all aspects of the research question. The researchers will then write a draft survey form. This draft will be reviewed by management for the appropriateness of the questions. Another issue that needs to be addressed is how the process needs to be adapted if the survey study is to be conducted in a different country (Vallaster and Hasenöhrl, 2006).

This process will be repeated until everyone is satisfied with both the questions and the answers. The answers will then be coded and the questionnaire will be laid out in its final form. The last step will be to test the survey with potential participants.

Questionnaire design process

1   Meet with management to determine question topic areas
2   Write draft survey
3   Review draft with management

4   Write coding into answers and lay out questionnaire
5   Test survey

12.2.1 Question topic areas

Before the design process can begin, management must have determined the research question. It may be that researchers will simply be given the research question and told to write a survey form. However, it would be preferable for management and the marketing researchers to work together during the process. Marketing researchers should meet with the management of the company commissioning the research to discuss those topic areas for which questions will need to be written to answer the research question. In addition, any questions needed to qualify participants for the study and any demographic questions need to be discussed.

For example, a survey designed to answer the question of what factors motivate young people when purchasing a car might include question topic areas on preferred price, design and power. Several sample questions such as 'How important is price when making a purchase decision?' will be written for each question topic area to help management visualize the final questionnaire. At this meeting the management of the company may suggest questions to the researchers. However, they will only be viewing the question from a consideration of their own needs. Sometimes management will propose questions that are too broad and these would only result in general data that cannot be turned into useful information. It will be the researchers' responsibility to explain that the question is too broad or too complex to be answered.

12.2.2 Writing the draft and management review

Once the topic outline and sample questions have been approved a draft survey needs to be created. Researchers will then review the form with the management of the company to determine the appropriateness of the questions and any additional questions that should be asked. This process might to be repeated any number of times. While it is management's responsibility to decide on the topic areas, each time the form is reviewed it is the marketing researchers' responsibility to explain why certain questions should be included and why some should not be asked. The exact wording of the questions also needs to be reviewed. This process must be repeated until everyone is comfortable with the survey questions. Trying to save time at this step in the process may result in wrong or badly worded questions being asked and unusable data. In addition, the answers to the questions must also be written down. It is interesting to note that the popularity of online survey software is changing the relationship between researchers and management to one of even stronger partnership (see the box below).

THE MARKET RESEARCHER AS ADVISOR

Technology has allowed many processes to become 'self-service'. People now consider it standard to pump their own gas, withdraw their money from an ATM, and even check out their own groceries at the store. New tools are also having a profound impact on the relationship between the marketer and the marketing researcher. Online survey tools are making it easier for companies to construct their own online surveys.

(Continued)

No longer does a company always need the expertise of a marketing researcher when they need research conducted. In addition, they need no longer wait during every stage of the research process for input and results from the 'professionals', as survey tools will automatically analyze statistical results.

What does this self-service ability mean for companies? First, it means less waiting time for results and, second, less chance of miscommunication. What does this mean for marketing researchers? Just as in many other fields where the routine tasks of a profession have been automated, they will now be able to focus their attention on more complex marketing research tasks and issues along with providing advice to managers.

Source: Siesfeld, 2005

Other issues that will need to be discussed at this stage in the process will include translation issues that must be addressed even for single country surveys. In addition, the organization and design of the physical layout of the form need to be discussed. Finally, any special topics need to be clarified, such as adapting the questionnaire for online use or for use by the disabled.

12.2.3 Coding the question answers

Surveys are a quantitative research methodology. This means that statistics such as averages and percentages will need to be calculated during the analysis stage. To do so, answers in words will need to be converted into numbers. These numbers are referred to as 'coding' and should be designed as part of the survey form and not added later. This will save time and effort when the data are entered into a computer software program. For example, if a question calls for a research subject to decide if they agree or disagree with an answer, the form can be written so that a number is circled that corresponds to an answer. It is the number and not the word that is entered into the software program, as numbers can be manipulated statistically to find if there is a relationship between the data.

Coding example

	Agree	Neither agree nor disagree	Disagree
The product is well designed	1	2	3
The product's color is attractive	1	2	3

12.2.4 Pretesting the survey form

All survey forms should be pretested. When testing the survey form, both the content of questions and their wording should be examined. Each question should be one that the participant can and is willing to answer. In addition, the wording should be checked to see if a participant understands the question in the way that the researchers intended. Besides the questions, the answers should also be examined. The available responses for a question should contain the answers that most participants

would provide. If the written answer does not do so, 'other' will be ticked too often, or participants will choose a response even though it does not accurately reflect their opinions.

In addition to the content and wording, the form of each question should be examined. If an open-ended question leaves participants confused, it could be rewritten as a close-ended question so that potential answers can be provided. The words used in the scale that is used to answer a question, such as 'strongly agree' to 'strongly disagree', should have the same meaning for all participants. Lastly, the instructions should be tested to ensure that they are written in an easily understood format.

Participant testing

The survey questionnaire should be tested with participants who are similar to the research subject sample. If the sample consists of a variety of subgroups, at least some of the test participants should be from each group. During the first step in the testing process, a researcher should be present while a participant completes the questionnaire. This way the researcher can make a note of any direction, question or answer that causes difficulty. If there are major problems with the survey form, the researcher should address these through changes and the testing should begin again. If there only a few minor changes that result from testing the questionnaire, the testing can proceed to the next step.

Methodology testing

The questionnaire should now be tested using the planned methodology, whether administered in person, over the phone, by mail, or online. The sample for the test can be small, with as few as five to ten individuals. The reason for testing the methodology besides the questions and answers is to determine the length of time that it takes for the survey to be completed. The amount of time it will take to complete will have an effect on the completion rate (Hansen, 2007).

Data entry testing

Once the survey delivery methodology testing is completed, a final test should be conducted of the data entry system. The completed and coded questionnaires should be entered into the software that will be used for the analysis. This should uncover any coding problems. It is much better to find these coding issues at this point so they can be corrected before the final version of the questionnaire is printed.

Testing of questionnaire form

- Personally administer to discover problems
- Administer with delivery methodology
- Test data entry

12.3 Writing the Questions and Answers

Most survey questions are close-ended, with possible answers provided from which a participant must chose. These answers are determined on the basis of previous qualitative research, such as focus groups or interviews. For example, the answers that focus group participants provide most frequently to a similar question will determine the responses used on the survey form. In addition, data discovered through observation and interviews will also be used to construct the answers to close-ended questions.

Open-ended questions allow survey participants to provide their own answers that they will write on the form or type online. Since the purpose of surveys, which are a quantitative research methodology, is to support a fact or hypothesis, open-ended questions must be kept to a minimum. This is because the answers to open-ended questions may vary so much that there aren't enough similar responses to allow for statistical calculations.

12.3.1 General guidelines for question writing

There are general guidelines that researchers should remember when writing any survey question. First, the questions should not be hypothetical as some people will have difficulty imagining such situations. For example, questions that ask for imaged responses such as 'How would you feel if you found out that you had bought defective merchandise?' are difficult to answer on a survey form. Such questions are best left to focus groups or interviews where researchers have the time to draw out responses. Survey questions should only deal with what participants already know or have experienced.

Problem Question: How should manufacturers change cars so that they get better gas mileage?

Rewritten Question: How important is high gas mileage to you when you purchase a car?

Use simple terms

Researchers are often very familiar with the terminology used by the industry commissioning the research. If not initially, they will have certainly become familiar with the industry terminology while conducting secondary research. It is important for researchers to remember that participants in a survey might not have this knowledge. Researchers should always write the question using words that are commonly understood.

Problem Question: What means of transport did you use to visit this establishment?

Rewritten Question: How did you get to the store today?

Reading level

Besides the issue of terminology, respondents may not read at the same academic level as researchers. Reading level involves the number of words in a sentence, the sentence's grammatical structure, and the length of the words used. It is very important to have questions written at the correct level. If researchers are unsure they should always write at a lower level, which will make a sentence easier and quicker to read for everyone.

Problem Question: In terms of motivational desires, what would you consider of primary importance?

Rewritten Question: What was the most important reason why you bought our product?

Ask one question at a time

It is important to keep a survey form short so that participants are motivated to complete it. However, the researchers should not be tempted to shorten the number of questions by combining more than one at a time. Asking two questions simultaneously will only confuse participants. If a participant is unsure of the question being asked, the answer will be meaningless.

Problem Question: How did you travel to the store today and did you encounter any difficulty?

Rewritten Question: How did you travel to the store today? How convenient was this method of transportation?

Avoid the passive voice

Questions that ask when 'a person' or 'someone' has done something will leave respondents confused. They will find it easiest to respond to questions that ask about their own activities. For example, a question that asks 'Do you purchase products that you have seen on infomercials?' is easy to understand. In addition, a question that asks if your family members buy products that they have seen on infomercials can be answered. A question such as 'Do people buy products that they have seen on infomercials?' cannot be answered as participants will not have such knowledge.

Problem Question: How enjoyable is a visit to the theatre?

Rewritten Question: Did you enjoy your visit to the theatre this evening?

Writing questions in more than one language

It is important that any common sayings are comparable when asked in more than one language. This translation may be necessary even when a questionnaire is being used in only one country (see the box below). Even simple words such as 'miserable', 'disgusted', or 'thrilled' will be difficult to translate.

HOW MANY LANGUAGES ARE THERE IN THE UK?

The British speak English right? The officials in charge of the 2001 population census in the UK needed to know what other languages were spoken in which to print the forms. To find the answer local authorities in England and Wales were contacted. From the information provided it was discovered that the forms would need to be translated into the following languages:

Albanian	Arabic	Bengali
Chinese	Croatian	Farsi
French	German	Greek
Gujerati	Hindi	Italian
Japanese	Polish	Portuguese
Punjabi	Russian	Serbian
Somali	Spanish	Swahili
Turkish	Urdu	Vietnamese

Obviously the issue of translating a survey, even if it is given in only one country, cannot be ignored.

Source: CILT, 2007

12.3.2 Writing the answers

There are two components to a survey answer – the wording of the answer and the means of response. The same rules that apply to writing the questions apply to writing the answers, but even more so. Because each answer consists of so few words, it is vitally important that these are the right words. There are several ways that participants can be instructed to answer a question. An answer to the question of 'What motivated you to enroll in this marketing course?' could be written using fill-in-the-blank, dichotomous, forced choice, multiple choice, checklist, rating and ranking responses.

Fill-in-the-blank

Open-ended questions, where respondents are only provided with a blank line, are used when researchers do not wish to lead participants. An example of an open-ended question in a survey would be 'Why did you enroll in this marketing course?' The advantage of this type of question is that it allows any type of response, including those which researchers might not have thought of. One surprising response might be 'A person I'm attracted to signed up'. After all, potential romance might not have been among the responses considered by researchers. The disadvantage of this type of fill-in-the-blank response is that every questionnaire will have to be read and the answer will need to be coded.

Fill-in-the-Blank

Question: Why did you enroll in this course?

Answer: _____

Dichotomous choice

A dichotomous choice answer allows respondents to choose one of two responses that are usually opposite. Examples would be answers that allow respondents to tick 'yes' or 'no'. A dichotomous choice answer directly addresses a research issue and forces participants to make a choice. Perhaps researchers are interested in discovering whether love of learning motivates students to enroll in a marketing course. However, this response may not be one that occurs to a student. This would leave researchers with the conclusion that love of learning plays no role in motivations for enrolling in the class. A dichotomous choice question would ask 'Is love of learning one of the reasons why you enrolled in this course?' The student will tick either 'yes' or 'no'. This type of answer forces students to reveal whether love of learning had any role in motivating their decision.

Dichotomous choice

Question: Is love of learning one of the reasons why you enrolled in this course?

Answer: ___ Yes ___ No

Forced choice

A forced choice question asks respondents to choose between two responses. However, the responses do not need to be opposites. In fact they can have no direct relationship with each other. Researchers would use this type of question when they want to determine which of the two responses is more important. It might be that researchers notice that mid-afternoon classes

have the most enrollments. Is this because of a popular professor or the time of day? In this case the forced choice answers would be written as 'Like to take mid-afternoon classes' and 'Heard the professor was friendly'. Therefore a student cannot choose both. If most of the students tick the first answer, mid-afternoon might be the time to schedule professors who have lower enrollments because students do not perceive them as friendly!

Forced choice

Question: Which of these reasons more strongly motivated you to enroll in this course?

Answer: ___ Like to take mid-afternoon class ___ Heard the professor was friendly

Multiple choice

When researchers have a number of variables that might affect choice, they may wish to write a multiple choice question. The answers would then list the motivations that were uncovered during earlier exploratory research. Researchers must decide how many reasons to list. If too many are provided, participants may find it difficult to weigh them mentally and come to a conclusion about which are most important. Usually four or five possible answers are listed. Of course, the listed reasons might not include any of the reasons why an individual student might have enrolled in that class. This situation can be handled by adding 'none of the above' as a response, or by allowing a fill-in-the-blank line for respondents to write in their own responses.

Multiple choice

Question: What was the main reason you enrolled in this course?

Answer: ___ The right amount of outside classwork is given
               ___ The professor is friendly
               ___ It will help me get a job
               ___ It was scheduled at a convenient time
               ___ None of the above
               ___ Other: _____

Checklist choice

The problem with a multiple choice answer is that more than one of the answers may be true. A student might have been strongly motivated by two or even three of the reasons. A checklist solves this problem by allowing participants to choose as many variables as apply. Because participants do not have to weigh one possible answer against another, a checklist can include many more possible answers.

Checklist

Question: Which of the following were reasons why you enrolled in this course?

Answer: ___ The right amount of outside classwork is given
             ___ The professor is friendly
             ___ It will help me get a job

___ It was scheduled at a convenient time
___ I love learning about marketing
___ My friend enrolled on the course
___ I heard the professor gave good grades/marks
___ My parents told me to take this course

Ranking choice

A variation on the checklist is the ranking question. This type of question and answer assumes that the listed responses will include a number of variables that will apply. It allows participants to indicate not only which of the reasons apply, but also the relative importance of each reason. Theoretically, researchers could ask participants to rank all of the answers that apply. However, this may prove to be too difficult for participants, so usually a question will ask participants to rank their top three to five answers.

The importance of asking a ranking question instead of just providing a checklist will become apparent when data analysis is considered. In data analysis, when calculating the frequency of responses, they will not just be counted but will also be weighted by choice. For example, the number one choice for students might vary widely while the second choice is almost always 'it will help me get a job'. When the variables are weighted, the choice that was second ranked may be the most common.

Ranking choice

Question: Of the reasons listed below, chose the top three that affected your decision to enroll on this course. (Use 1 to indicate 'most important', 2 to indicate 'second most important,' 3 to indicate 'third most important'.)

Answer: ___ The right amount of outside classwork is given
___ The professor is friendly
___ It will help me get a job
___ It was scheduled at a convenient time
___ I love learning about marketing
___ My friend enrolled on the course
___ I heard the professor gave good grades/marks
___ My parents told me to take this course

Rating question

A survey multiple choice question and answer format allows researchers to learn which answer is most important. A survey checklist question allows researchers to learn which of many answers are important. A rating question will allow respondents to choose more than one answer and also to rank the importance of each. The answer can consist of three, five or seven possible rankings. One of the rankings will be that the answer had no effect on choice. This is always the middle of the rating. A researcher can then write the rating to allow a respondent to indicate whether the answer had either a positive or negative effect on choice, such as 'agree' or 'disagree'.

In addition, the ratings can allow participants to show how strongly the answer positively or negatively affected their choice. Even complex questions such as 'How happy are you?' can be answered in this way (see the box below). A researcher may obtain this information by adding more possible answers, such as 'strongly agree' and 'strongly disagree'. Along with the

response of 'no effect', the answer now has five possibilities. A researcher can continue to expand the answer to add the responses of 'very strongly agree' and 'very strongly disagree'. Of course, it is still difficult to predict how each participant will evaluate the choice of rating (Schwarz et al., 1998).

Rating

Question: Rate how each of the following reasons influenced your decision to enroll in this course?

Answer:

	Agree	No effect	Disagree
The professor is friendly	___	___	___
It will help me get a job	___	___	___
It was scheduled at a convenient time	___	___	___
I love learning about marketing	___	___	___

HOW HAPPY ARE KOREANS?

How would you go about researching how happy people are? A research group in Korea started with focus groups, where they collected 152 statements about what made life happy. After analysis the responses were placed in 18 groups based on common themes. These statements were then tested on 517 Koreans to see if they resonated. Statements with low reliability at predicting what Koreans believed made for a happy life were dropped and some additional statements were added.

The result of this testing was a Happy Life Inventory of 156 items. A 6-point scale was developed to answer the questions. This questionnaire was then shown to 1503 adults to assess their happiness. Did it work? When the results were compared with the Psychological Well-being scale a correlation was found.

Source: Kim et al., 2007

12.4 Questionnaire Layout

For self-administered surveys, the way that the questions and answers are visually presented is critical. A poorly laid out questionnaire may confuse participants and result in unanswered questions. It may also confuse the data entry clerk and lead to input errors and faulty results. When laying out a form, researchers must remember the visual impact that results from the use of margins, spacing and font size. Proper use of these elements will result in a survey form that is easy for both the participants and data entry clerks to read.

Researchers will also want to keep a survey form to as few pages as possible, as fewer pages will keep reproduction costs down. In addition, a survey with many pages will discourage potential subjects from participating. However, these concerns should not lead researchers to print the

survey in a font that is too small and therefore difficult to read. The use of white space, such as larger margins and extra lines between the questions, will result in a longer survey form but will also make the survey more attractive.

Routing is an issue that needs to be considered when a questionnaire layout is designed. For example, there might be a follow-up question designed only for those who drive an automobile to go shopping. A question that asks where participants park their car when they travel to the store will not be relevant for those participants who do not drive. Therefore these participants should be directed to skip the question and go on to the next question. The instructions for routing must be very clearly and simply stated on the survey form as most people will assume they will need to answer every question.

12.4.1 Question sequenc e

The questions should not be listed on the form in a random manner. The first questions should be for the purpose of qualifying a participant. The types of qualification questions asked would depend on the research question and the purpose of the survey. They may ask a participant about the frequency of purchase of a specific consumer product or whether they rent or own their own home. The questions may also ask about age or family status.

Even if basic demographic data are not part of the qualifications or research question they should still be included. These demographic questions should come first as they are the easiest to answer. For example, while the research question might not have asked about a gender difference in purchase habits or attitudes, when the data are analyzed it may be found that there is a gender difference in consumption. The same may hold true for age, education level and even geographic location.

The next questions should be general in nature, with more in-depth questions to follow. For example, a question that asks what brand of toothpaste a participant uses is easy to answer. A more specific question, as to why the participant chooses to purchase a specific brand of toothpaste, will take more thought. If difficult questions are listed on a survey form too early on, they may discourage participants from continuing and completing the form. For this reason also, any sensitive questions should be saved for last.

Question sequence

- Qualifying questions
- Demographic questions
- Easy to answer questions
- In-depth questions
- Sensitive questions

12.5 Electronic S urvey Forms

The development of an online survey should be no different from that of a traditional survey. There are software packages now available that make the creation of a survey much easier. However, this does not make the decision of what topics to address and how to write the questions and potential answers any easier. The invention of word processing programs made writing much easier – but it did not automatically make everyone good writers (see the box below)!

There are a number of reasons for the increasing popularity of putting survey forms online. One is the difficulty in motivating individuals to participate in traditional survey research. An online form can be completed at a time that is convenient for a participant, unlike a phone or personal survey. Also, the completed form is automatically returned – unlike a mail survey.

In addition, there are design advantages to using an electronic form. With an electronic form there is less concern to keep a questionnaire to as few pages as possible. Participants only see one or two questions at a time and, therefore, will not be intimidated by the overall length. In addition, the form can be laid out so that it is easy to read, with a larger font size and more white space.

Coding of responses is not needed because the results from an electronic form are calculated automatically without data entry. In addition, the routing of questions can be handled automatically. The next question that needs to be answered will appear on the screen based on the answer to the previous question. On an electronic survey form, when a participant responds to a question on how they travel to the store with the answer 'by car' the next question will

automatically ask about the difficulty of parking. If the response to the question is not 'by car', the next survey question will not ask about parking.

Another advantage to laying out an electronic survey form is the ability to use drop down boxes for answers to questions. In written surveys, researchers face the temptation of limiting the number of responses provided to any one question so that the survey form does not become too lengthy. Using drop down boxes – where participants use their cursors to pull up a menu of answers and then makes their choice – solves this problem.

12.5.1 Using technology to design new types of responses

Besides convenience, using an online format allows creativity in designing a questionnaire. This is particularly true in writing the answer format. For example, when product or brand preferences need to be indicated, they can be shown with pictures or logos along with their names. Participants may more easily recognize a package or logo than the name of a brand. Beside each picture would be a 'radio' button that a participant would click to indicate his or her choice.

Survey questions often ask participants to rank their choices of products or desired benefits. In a paper survey, such choices are ranked in the same order. There may be a bias here towards the early responses as research subjects may find a likely answer and stop before they read the complete list. With an online survey the order can be randomly generated so as to eliminate this bias. Below are some additional rules for online survey form development.

RULES FOR DESIGNING THE ONLINE SURVEY FORM

RAND is a nonprofit organization that sponsors research and analysis. RAND decided to take a look at best practice in the new area of online surveying. They developed the following criteria for a successful online form.

1 List only a few questions per screen
2 Eliminate unnecessary questions
3 Use graphics sparingly
4 Be aware of how respondents may interpret questions in light of accompanying graphics
5 Use matrix questions sparingly
6 Reduce response errors by restricting response choices
7 Force answers only on rare occasions
8 Make error/warning messages as specific as possible
9 Always password protect Web surveys
10 Ensure that respondents' privacy and their perception of privacy are protected
11 Provide some indication of survey progress
12 Allow respondents to interrupt and then re-enter the survey
13 Carefully handle respondents who fail a screening test
14 Give respondents something in return
15 Take advantage of the media's presentation capabilities

Source: Schonlau et al., 2002

Summary

1 Surveys can be used to research any aspect of the marketing mix. The development of a survey should be a joint undertaking between management and marketing researchers. Both participants and data entry clerks should also be considered when designing a questionnaire.

2 The survey development process starts with the research question and proceeds through meetings between the marketing researchers and management where question topic areas will be discussed. Drafts of the survey form are created and reviewed until everyone is satisfied that the questionnaire will provide the needed information. The questionnaire is then tested on potential participants and should be first tested verbally to check for understanding and possible confusion. After this it will be tested with a few survey participants using the planned delivery method.

3 Survey questions can be either closed or open-ended. The general rules for writing effective questions include using simple terms, writing at the correct reading level, asking only one question at a time and writing in the active voice. It should be remembered that questions may need to be translated into other languages. There are a number of different ways to structure the answers. These include fill-in-the-blank for open-ended questions. Close-ended questions can be answered using dichotomous, forced choice, multiple choice, checklist, rating or ranking responses.

4 The questionnaire's layout should ensure the form is easy to use and to read. It should look attractive so that people will be motivated to read the questions. The routing of the participant through the questionnaire should be clearly explained. The questionnaire should start with qualifying questions and then move on to demographic questions, easy to answer questions, in-depth, and finally sensitive questions.

5 If a form is to be administered online, the same development process must take place. One advantage of an online survey form is that the form can be designed so that only one question can be seen at a time and routing can be automatic. Another advantage is that answers can be constructed using graphics and drop down boxes. In addition, radio buttons can be used for answers and photos or products and logos can be shown instead of words.

Key Terms

coding answers   using numbers on the questionnaire form to represent answers so that the data entry clerk can enter numbers rather than words

dichotomous answers   when a participant is allowed to choose one or more answers

forced choice   an answer type that forces participants to choose between two opposite answers

ranking choice   an answer type that allows participants to provide more than one answer, ranking each in importance

rating choice   an answer type that asks participants to rate the importance of all responses

routing   the order in which participants should answer questions

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Discussion Questions

1   What are three research questions regarding student activities that would be appropriate for survey research?
2   Why would it be useful to meet with university officials before such a survey is undertaken? What should be discussed at these meetings?
3   Which of the general rules for writing survey questions would be most important to remember when writing a survey form for students?
4   Why is it sometimes better to use a rating question rather than a ranking question?
5   Which type of question answers would work best for your student survey? Why?
6   How would you respond to the argument that survey questions should be written so that management get the results they want?
7   Why is testing of a survey form important?
8   Why does an online survey form need to go through the same development process?
9   How should a survey form be changed if it is administered online?

Recommended Reading

Campbell, Bruce (2000) *Listening to your Donors: The Nonprofit's Practical Guide to Designing and Conducting Surveys that Improve Communication with Donors, Refine Marketing Methods, Make Fundraising Appeals More Effective, Increase Your Income.* San Francisco, CA: Jossey-Bass. The ability to write survey questions is also needed by those working in nonprofit organizations. This book presents information on how to write questions and design surveys for nonprofits.

Corder, Lloyd (2006) *The Snap Shot Survey: Quick, Affordable Marketing Research for Every Organization.* Chicago, IL: Kaplan. A book aimed at the practitioner with many examples of different types of surveys written for a variety of purposes.

Czaja, Ronald (2004) *Designing Surveys.* Thousand Oaks, CA: Pine Forge. While comprehensive in nature, this book has specialized chapters on writing questions, organizing questions on a survey form and testing questions.

Fink, Arlene (2006) *How to Conduct Surveys*. London: SAGE. This book gives special attention to writing questions, creating measurement scales and the appearance of survey forms.

Fowler, Floyd (2002) *Survey Research Methods*. London: SAGE. While written about the social sciences, this book has useful chapters on designing questions to measure accurately and the evaluation of written questions.

Gratton, Chris and Jones, Ian (2004) *Research Methods for Sport Studies*. London: Routledge. A book that covers questionnaire development and question writing from the perspective of someone in the sports industry.

Presser, Stanley (2004) *Methods for Testing and Evaluating Survey Questionnaires*. New York: Wiley. This book is an overview of issues related to questionnaire design and testing. It is based on the papers presented at a joint conference of many organizations interested in the issue.

Questionnaire Design