Best practices in survey design

Part II—Getting your survey in order

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This white paper is the second in a series on survey design best practices. It presents SMG's research findings and thought leadership on the design, wording, and ordering of survey questions and response options. *Getting your survey in order* examines how to best design surveys to reduce abandonment rates and minimize biases.

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At SMG we adhere to six best practices in survey design that help **reduce abandonment rates** while also working to **minimize biases on the results**:

1. Using smart branching
2. Avoiding double-barreled questions
3. Considering the effects of question order
4. Randomizing blocks and response options
5. Limiting to one open-ended question
6. Shortening surveys on mobile devices

1. Using smart branching

Not everyone has the same experience with a product or service. Smart branching allows you to ask the right questions of the right people and is beneficial when you know ahead of time that certain questions will only be applicable to a subset of respondents (Fink, 2013).

For example, we would not want to ask questions about interior cleanliness to respondents who only used the drive-thru; nor would we want to ask about variety of bakery items to respondents who did not visit that department in a grocery store. Irrelevant questions like these cause undue fatigue in respondents and increase the likelihood of response errors. Additionally, respondents must have knowledge, experience, and insights specific to our research questions to offer useful information (Andres, 2012; Fink, 2013).

SMG uses surveys with smart branching logic built into the survey software, so we can avoid asking irrelevant questions of respondents. When smart branching is used effectively, we are able to elicit more accurate responses and reduce abandonment rates by being more considerate of respondents' time.

FIGURE 1

Smart branching logic ensures you ask the right people the right questions by re-routing respondents when appropriate
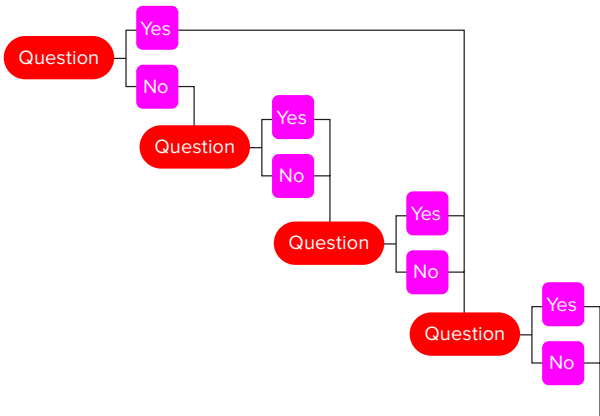
2. Avoiding double-barreled questions

"Double-barreled" questions—those that incorporate two separate topics or ideas into one question—present several problems. When people try to answer, they can become confused and unable to answer honestly, particularly if they have different opinions about the two items (Andres, 2012). Consider the following example:

> *Please rate your satisfaction with the taste and temperature of the food.*

This question assumes respondents logically group "taste" and "temperature" together, but what would the response be if someone was highly satisfied with the temperature but thought the taste was too spicy? This question is double-barreled, making it confusing and ultimately unlikely to produce actionable results when the respondent has mixed sentiment. Separating it into two different questions, one pertaining to temperature and one to taste, makes it much easier for the respondent to understand what is being asked and answer accurately. Likewise, the results are easier to analyze and make actionable.

FIGURE 2

Separate topics into different questions to produce actionable insights

3. Considering the effects of question order

Research shows question order can influence how people respond. In particular, earlier questions can provide context for later questions (Andres, 2012; Dillman, et al., 2014; Krosnick & Presser, 2010). This context can create systemic biases, called "order effects," in the way people respond to subsequent questions. Because of this, particular attention should be paid to how questions are ordered to minimize the impact of these biases.

Overall Satisfaction belongs near the start

SMG's best practice is to place questions about Overall Satisfaction at the beginning of the survey to measure top-of-mind feelings about the experience separated from the context of product and service attributes. »

Intent to Return and Intent to Recommend have their place

We recommend asking Intent to Return and Intent to Recommend after the questions about experience-related satisfaction and problem occurrence, as this allows the respondent to provide a more considered opinion (Auh, et al., 2003). As these are intended behaviors, respondents are more likely to generate rationales before they decide to return and recommend.

Simpler questions and demographic questions bring up the rear

The least important and easiest-to-answer questions should be placed at the end of the survey. This is because respondents tend to tire while taking the survey and, as a result, may not answer the final questions carefully or accurately (Fink, 2013). Research on survey design has found higher levels of missing data, greater agreement, less detailed answers, or less differentiation among items when they appear later in a survey compared to the same items placed earlier.

In addition to being low priority, demographic questions lend themselves to appearing at the end of the survey because this makes it possible to first establish a rapport with the respondent. By doing this, the respondent will be more likely to answer demographic questions and less likely to abandon the survey (Backor, Golde, & Nie, 2007).

Question order should go with the flow and remain consistent

Finally, items should flow coherently throughout a survey, which usually requires items on related topics to be grouped together. Coherent grouping can facilitate respondents' ability to answer accurately by specifying the meaning of a question clearly and making retrieval from memory easier (Dillman, et al., 2014; Krosnick & Presser, 2010).

In addition, the placement of questions (e.g., Overall Satisfaction) should remain consistent. Industry research, as well as SMG's internal research on survey design, shows changing the location of questions can ultimately affect scores. The result is that scores may not be comparable—limiting the effectiveness of the survey to measure change (Andres, 2012).

4. Randomizing blocks and response options

While the overall order of questions helps minimize response order bias, the order in which a group of similar questions within a block are presented to respondents can still influence how they respond. Because of this, SMG has developed the best practice of randomizing questions within a block of similar questions, meaning each one has the same chance of being asked first, last, or somewhere in the middle for any given respondent. Block randomization allows for an even distribution of order effect bias across responses, resulting in data that is more reflective of what is being measured rather than an artifact of the survey design (Dillman, et al., 2014).

A similar bias is seen in the response options for certain questions. For example, we may ask the reason for visiting a retail establishment and provide a number of response options. Not surprisingly, the order in which response options are presented to a respondent may influence which particular option the respondent chooses. Cognitively, early response options may be processed more sincerely, and are thus more likely to be selected. Another potential cause of response option bias is lack of motivation. Respondents may choose the first response to questions because they want to finish the survey quickly (Dillman et al., 2014). To guard against this order effect bias in categorical and demographic questions, SMG's best practice is to randomize response options so they are not always displayed in the same order in our surveys. »

FIGURE 3

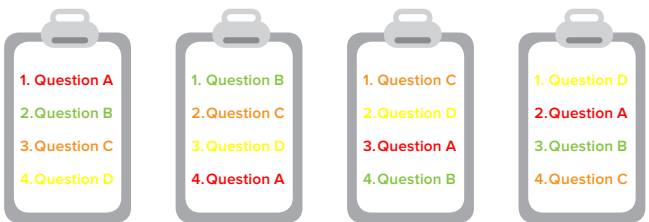Randomizing questions within blocks helps minimize order bias

FIGURE 4

Randomizing answer options helps reduce response option bias

Q: What is your favorite color?

5. Limiting to one open-ended question

Open-ended questions allow the respondent to leave a text comment (Andres, 2012). In our surveys, these questions are typically based on the respondent's response to the Overall Satisfaction question and are designed to gather additional information that may not have been captured from earlier closed-ended questions.

The question wording we use encourages respondents to cover multiple topics in their response, and we're able to use text analytics to identify aspects of the customer experience that drive satisfaction and loyalty. Therefore one open-ended question per respondent is sufficient to obtain actionable information. Furthermore, asking each respondent more than one open-ended question does not significantly improve the quality of information gathered— as respondents typically repeat themselves.

To read more on best practices for open-ended questions, including where to place them in the survey, see our white paper *Want better insights from text analytics? Start by eliciting better comments.*

6. Shortening surveys on mobile devices

Mobile technologies are essential market research tools. Yet long or complex surveys are not suitable for mobile devices because the smaller screen makes it more difficult to complete the survey, and Internet speeds tend to be slower on mobile devices—resulting in longer survey completion times. Both of these factors increase the likelihood that a respondent will abandon the survey before completing it. Therefore, one of SMG's primary considerations is how to best gather substantial and meaningful insights while using shorter, simpler surveys suited for mobile devices. Our best practice is to only ask our core questions (Overall Satisfaction, key drivers, loyalty, open-end) of mobile respondents (Andres, 2012, Fink, 2013).

Conclusion

To get the most actionable information from your surveys, you have to pay as much attention to your questions as you do to the results. The questions you ask, the way they're worded, and the order in which they appear all have the potential to create bias or frustrate respondents to the point of abandoning the survey. By following the best practices laid out in this white paper, your surveys will be consumer-friendly while also collecting the actionable data you need. ●

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Best practices in survey design—Part I

Data collection: The smartphone way

Increasing response rates by managing survey length

Want better insights from text analytics? Start by eliciting better comments

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