GLG

Strategies for Successful Surveys

A Handbook for Conducting Quantitative Research

Table of Contents

Introduction

Quantitative research is a powerful way to uncover insights that can be applied in business situations to quantify the behaviors, attitudes, and opinions of specific groups of people.. How do engineers regard a specific software product? What is the market potential for a new medical device? How do potential customers feel about the last iteration of your mobile device? Surveys can give you the quantitative insight that helps answer these questions.

But conducting a survey that produces valid, relevant, and actionable data isn't as easy as drafting a list of questions and sending it out to an email list. How do you craft a survey that gets the information you want? How do you ensure your questions do not create bias or confusion? How do you ensure that your target audience are the ones responding to your survey? It can get complicated quickly.

In this eBook, we'll discuss three aspects of quantitative research. Starting with the basics, you'll learn how to select the survey that best meets your research needs, how to design your survey, and how you can best reach the right respondents. We'll cover both questionnaire design (how to create the questionnaire to get great data) and research design (how to reduce bias and weight results).

A well-run survey can provide you with the insight you need to stop a product development roadmap before it makes a wrong turn. It can give you the insight you need to make a smarter investment by understanding how the audience may receive a product or service. It can help you advise clients of your own, by giving you insight that they may not even know they need.

Future iterations of *Strategies for Successful Surveys* will dig even deeper into the strategies that make for successful surveys.

THE BASICS

The Top 8 Tenets of Survey Design

Tactical survey design can mean the difference between a great survey experience and a truly terrible one.

So, you've decided to run a survey. You are confident it's the best way to gain insight into your research project. You sit down to write the questionnaire, but you're stuck. You know the questions you want to ask, but don't know how to ask them. You've heard that survey design is important, but don't know where to start.

Luckily, there are a few basic principles that can elevate your survey from solidly mediocre to just plain solid.

Here are eight top tactical design tenets to remember when running a survey:

1. **CLEARLY DEFINE YOUR OBJECTIVE**. Your objective is your guiding star. It informs how you structure your questions, the specific language you use, and ultimately what data you get at the end. With your objective in mind, you can focus on what exactly the survey needs to accomplish. Typically, the goal of a survey is to collect data that can be analyzed for actionable use. If your data doesn't enable confident action, then the survey has failed its objective.

2. **ALWAYS INCLUDE A SCREENING SECTION.** Whether you are surveying CEOs or consumers, a screening section will ensure that you are getting the right people to answer the right questions. What are the defining factors that make an ideal respondent? What is their role, their seniority, their experience with a given product? As a rule, screening questions with Yes/No answer choices should be avoided. Instead, offer a range of potential answers and allow the respondent to qualify by selecting the correct response. For example, instead of asking "Are you a CEO?" you could ask "What is your role?" and have CEO listed among 4-5 other roles.

3. **IMPLEMENT SURVEY LOGIC WHENEVER POSSIBLE.** Sound survey logic improves a respondent's experience dramatically. Survey logic allows respondents to only see questions and/or answer choices that are relevant to them, based on how they answered previous questions. There are few things more frustrating in a survey than being forced to answer questions that aren't relevant. If you need a respondent to remember a previous statement, remind them using survey logic. Human memory is fallible, and a well-placed reminder can reduce the most frustrating of survey outcomes: inconsistent responses.

4. **MUTUALLY EXCLUSIVE AND COMPREHENSIVE ANSWER OPTIONS.** It should never be ambiguous about how to answer a question. All answer choices should be clearly defined, comprehensive in nature, and mutually exclusive. There should always be a relevant answer choice. If there's no way to be comprehensive, then it's customary to include an "Other" option where the respondent can fill in their own response.

5. **CONSISTENT SCALES.** For surveys that contain multiple rating questions, keep the

scales consistent. Each type of scale has its own merit, whether it's a four-point scale, a seven-point scale, or a 10-point scale (or any other type of scale, for that matter). Whatever you determine to be best for the research objective, keep it consistent throughout the survey. It improves the respondent experience by making it easier to answer questions. Well-designed, easy-to-answer questions will produce good data.

6. **SIMPLE LANGUAGE.** Keep it simple! It works in many other areas of life and works in surveys, too. Remember that your population will define what "simple" language means. Speak the language of your specific audience and they will thank you by providing good data – and by not dropping out of your survey.
7. **TAKE ADVANTAGE OF VARIED QUESTION TYPES.** Single-select, multi-select, rating, ranking, grid, dropdowns – the list goes on. There are many ways to ask a question but knowing the right application of each is the differentiating factor. The right question type is easy to interpret and provides data that is easy to analyze. Remember to limit open-ended questions. Nothing fatigues a respondent faster than too many essay-style responses. You can get good data from two or three open-ended questions, but more than that and you will see a decline in quality and/or higher dropout rates.
8. **BE THOUGHTFUL ABOUT THE NUMBER OF QUESTIONS YOU ASK.** Your survey should ask the least number of questions possible that will still allow you to gain meaningful insight into your research objective. That number may be five questions, it may be 35 questions. Different populations have different tolerances for the length of a survey. Know what that tolerance is and adhere to it. And perhaps most importantly, don't ask redundant or irrelevant questions.

If you follow these survey design tenets, your surveys are more likely to deliver quality data that translates into actionable results.

THE BASICS

What Type of Survey Do You Need?

What are the best uses for surveys? When do they add value to your research and when do they waste your time and money?

A survey is a great tool for gaining insight into a topic, industry, company, population, and so forth. But commissioning a survey can also be a magnificent waste of resources. So how can you make sure that you use surveys productively?

A survey should tell you something that you don't already know or that you can't find out by other means. It should test a hypothesis, not seek to validate one. If you don't know what you want to learn from a survey, you will assuredly learn very little from the results.

Later in this guide, we'll discuss how to properly design a survey. But first, you must decide what type of survey is best given your research goals.

Here are six of the most common types of surveys and what they can help you learn:

1. **CONSUMER SENTIMENT SURVEY, NET PROMOTER SCORE (NPS) SURVEY, AND BRAND EQUITY SURVEY.** What your customers, clients, and employees think about you matters. Are they advocates of your brand or detractors? These surveys can quantify the value of your brand and how your audience perceives it.
2. **MARKET PENETRATION SURVEY.** Not sure how prevalent your product or service is in the industry? By asking broad questions about familiarity and usage, you can obtain responses that help you gauge market share.
3. **COMPETITIVE ANALYSIS SURVEY.** How does your product or service stack up against those of competitors? How is market share shifting? What criteria are customers using to make their decisions? All these questions are crucial to understanding how you should position your wares. A competitive analysis survey is designed to obtain such insights.
4. **CHANNEL CHECK SURVEY.** Instead of taking a direct approach to evaluating a company, you can use supply chains and distribution networks as proxies. When you understand how a vendor or logistics partner views a product, or how a logistics partner views a product, you gain a more comprehensive view of your target company and how it operates and performs in its industry.
5. **EVALUATION SURVEY.** How are things going? What's working? What's not working? All such questions can be answered and analyzed quickly and easily. Evaluation surveys are most often used within companies to gauge performance and engagement levels, to gain feedback about various initiatives, and to solicit recommendations. To get the most

out of these surveys, the results should be shared widely and should be accompanied by executive actions inspired by the responses. You can also use this type of survey to test perceptions about proposed product features.

6. **STRATEGIC PLANNING SURVEY.** Like an evaluation survey, a strategic planning survey can gather feedback on proposed initiatives and provide a forum for recommendations. The main difference is that strategic planning surveys are almost exclusively internal. Respondents can rate and rank the relative importance of strategic initiatives. The respondent will perceive the survey differently than he perceives an evaluation survey. With strategic planning surveys, the respondent is made to feel a part of advancing the business. Employee buy-in is a critical component of any strategic planning process.

You are now ready to make some important decisions: first, whether a survey is an appropriate tool for your current research goals; second, if so, what type of survey will best accomplish your research goals.

THE BASICS

Surveying Basics: The Right Way to Reach Respondents

Getting people to take your survey is no small task. There are distractions all around us, and competing for someone's time and attention is a strategic endeavor.

To get good data – or any data, for that matter – people must first take your survey. What is the trick to getting people to take your survey? Meet them on their turf. Whether online, over the phone, or in person, your goal is to make your survey easy and accessible for your respondents.

What follows below are the four most prevalent types of surveys and the pros and cons of each.

Online/Web Surveys

We live in a tech-focused world, so it's not surprising that online surveys are the preferred – and often default – method of facilitating a survey.

Pros:

- You can reach people anywhere in the world, giving them the freedom to complete the survey at their convenience.
- You can ask complex questions in ways that are easy to comprehend and answer.
- Survey logic enhances the respondent experience; only the most relevant questions will be shown to respondents based on their answers to previous questions.
- Data collection and analysis happens in a structured and automated way, significantly improving the efficiency for you as the survey facilitator.
- As it happens, this is also the least expensive way to run a survey!

Cons:

- Online surveys can easily get buried among the other surveys, emails, and messages vying for your respondent's attention.
- When you do succeed in getting through, respondents are more likely to be distracted by other apps and messages coming through on their devices.
- Certain populations are not easily reached through online surveys. The internet is everywhere, but that doesn't mean everyone uses it in their daily lives. Some don't use it at all – like my grandmother, for instance. Then there are those who systematically don't have access to their email or internet connections – think offshore oil drillers.

Phone Surveys

In the ways that online surveys can fall short, phone surveys are surprisingly effective. Phone surveys are still facilitated by an online survey platform, but in this case, a call representative uses a script to talk a respondent through the survey and collect their responses digitally.

Pros:

- Nearly everyone is accessible in some way, if not by their computer, then likely via phone.
- Phone surveys still benefit from having structured data and automated analysis.
- These surveys can reach different populations. When run in conjunction with online surveys, phone surveys can help you smooth out sample biases inherent to each method.
- Phone surveys reach a middle ground of capturing a respondent's undivided attention. In this respect, they are more effective than online surveys, though not as good as in-person surveys.

Cons:

- They're more expensive to administer than online surveys.
- Phone surveys take longer to complete because the call representative must read the question to the respondent.
- Questions must be basic; respondents may find it difficult to keep the question – as well as all answer choices – in mind.

In-Person Surveys

Used most prevalently in academic and clinical settings, in-person surveys still benefit from technology, but they add a more human element that can elicit a deeper level of connection and, subsequently, a deeper level of insight from those taking the survey.

Pros:

- In-person surveys are the most effective method for capturing respondents' undivided attention – there's nothing else to distract them during the survey.
- They can foster a rapport between the facilitator and the respondent, which can bring out information that wouldn't otherwise come out in a more anonymous form.

Cons:

- In-person surveys are more susceptible to social bias, meaning respondents may provide answers to sensitive topics that better align with social norms rather than their most honest answer. One of the more classic examples is that people will systematically underreport the number of alcoholic drinks they have per week.
- Travel is often required for respondents, so scheduling difficulties may arise.

Paper Surveys

While not as prevalent as they once were, paper surveys are worth mentioning because they're the progenitor of current formal survey methods.

Pros:

- Paper surveys can go where computers and phones cannot, or where internet reception is poor or nonexistent.
- These surveys are great for field research.

Cons:

- Logic can be difficult for the facilitator to implement and difficult for the respondent to follow.
- Aggregating the data is a manual and labor-intensive task.
- Most people don't like writing out their answers, so questionnaires should limit the number of open text questions.

Most surveys conducted within the corporate environment will either be online or phone surveys. When choosing the best contact method for your next survey, consider the unique traits and habits of your target population, weigh the pros and cons of each survey method, then meet your respondents in their preferred environments – the uptick in your response rates might just surprise you.

QUESTIONNAIRE DESIGN

Why the Screener Section of Your Survey Is Compromising Your Results

A strongly designed screener section will usher in the right people and exclude those who are unable to effectively answer the questions.

It's always important to find the right person for the job. When we want a doctor's opinion, we do our research and find the doctor with the right specialization. When we want a contractor's opinion, we ask around for referrals to find one with the right skills.

It's no different when it comes to running a survey; it's just not as easy to identify all the right people before your survey hits the field. That's why you need to build a screening section into every survey. You may have broadly targeted what seems to be the right group of people, but a well-designed screening section can do the fine-tuning required to find the right people.

Pitfalls of Poor Screener Sections

Just as poor screener sections can let the wrong people through, they can also prevent the right people from *getting in*. This is usually done with the best of intentions by maintaining strict qualification criteria to prevent the wrong entrants from taking the survey. However, the real world is messy and *you must balance strict qualifications with an understanding of your target population.*

Poor Screeners in Practice

Let's assume you want to survey procurement decision-makers for a cybersecurity platform. Your target population is chief information security officers (CISOs), so you set up your screener section to only allow CISOs into your survey.

Not every company has a CISO. In many companies, the CIO or CTO carries this responsibility. Titles mean different things at different companies. You don't need to solve for every possible outcome, but you should aim to capture 80% to 90% of potential possibilities.

Pro Tips for Designing Strong Screener Sections

Now that you know what not to do, here are some tips to structure your screener section in the right way. The goal is to use termination logic to remove respondents from the survey who don't meet the qualification criteria. Incorrect responses will trigger a "Thank you for your participation, but you have not qualified" message. Each of the below steps will help accomplish that goal.

- **MASK THE TRUE SURVEY TOPIC AS MUCH AS POSSIBLE**. This makes it harder to game the survey by clicking what are perceived to be the "right" answers. For instance, if you want to survey consumers of Folgers coffee, first ask what types of beverages they purchase for their household (milk, juice, coffee, energy drinks, etc.), then follow up with those who purchase coffee to ask what brands of coffee they purchase (Maxwell House, Folgers, Peet's, Green Mountain, etc.). At no point will the respondent know the correct answer path that will gain them entry into the survey.
- **AVOID ASKING QUESTIONS WITH "YES"/"NO" ANSWER CHOICES.** Instead, offer a range of potential answers and allow the respondent to qualify by selecting the correct response. For example, instead of asking, "Are you a CISO?" you could ask, "What is your role?" and have CISO listed among four to five other roles. As in the example above, perhaps more than one answer can qualify.
- **INCLUDE ONE OR TWO "RED HERRING" RESPONSES.** These are fake answer options designed to catch respondents who are either not paying attention or trying to choose options they perceive as more likely to qualify.
- **START WITH THE BROADEST QUESTIONS AND FUNNEL DOWN.** Your screening section should terminate more respondents in each subsequent question. In this way, the information tells a sequential story that can more easily highlight where low response rates might be originating. Quickly diagnosing and adjusting for issues is critically important in surveys.
- **BE INTENTIONAL AND SUCCINCT.** To reduce respondent fatigue, every question in your screener section should include termination logic. Make this section as brief as possible and include a comment at the end of the screener section to affirm that they have qualified for the survey.
- **BONUS TIP: USE SCREENERS TO ASSESS MARKET SHARE.** If one of the objectives of your survey is to assess market penetration, your screener section can accomplish that. If you design your survey to be statistically representative, you can compare the number of terminated respondents to the number of qualified respondents to understand market penetration among the broader population.

By following these design principles, you can improve the quality of your data by ensuring the right people are taking your survey. And better data means better, more confident outcomes.

QUESTIONNAIRE DESIGN

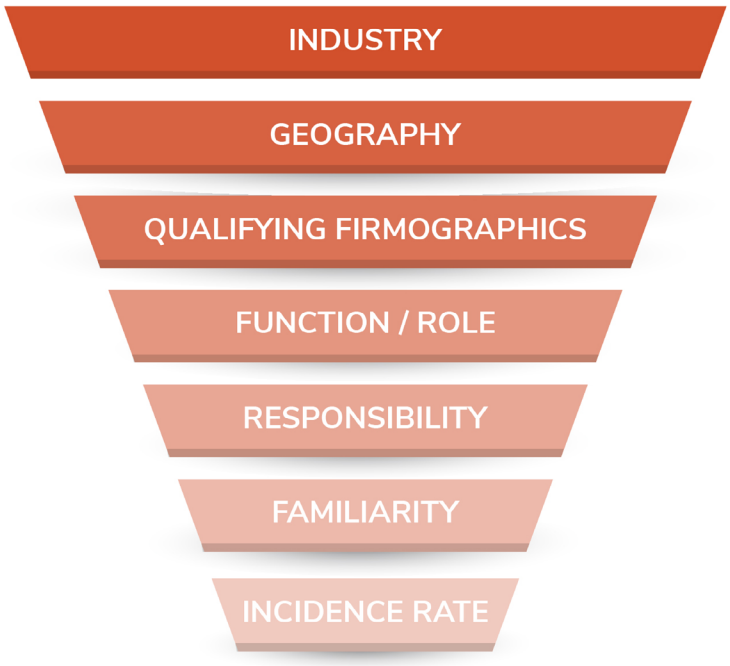
Don’t Ignore Survey Screening Criteria

The screening section is often deemed unnecessary. Don’t fall into this trap.

The screening section is the most important part of any survey, yet it is often undervalued or deemed unnecessary. Don’t fall into this trap. It is well worth the time it takes to design a tight screening section that helps identify relevant experts who are allowed to pass through and complete the survey.

How should you design a screening section to filter out unqualified respondents? It’s best practice to use a funnel approach. In the funnel approach, you start with a broad-category question and filter from there, adding progressively more granular questions until you know you have the respondent you’re seeking. It’s never a good idea to dive straight into the subject matter without first filtering out respondents who could potentially skew your data.

For example, if your target respondent is a health system marketing director, you would want to avoid starting with a “marketing decision making” question. Doing so would influence respondents’ perception of the survey, potentially impacting the quality of their responses.



Below, we've highlighted some categories to cover with the funnel approach:

- **INDUSTRY:** An industry question adds to the precision of discovering the ideal expert.
- **GEOGRAPHY:** A geography question can be at a country, regional, state, or metropolitan statistical area. This also allows you to analyze the geographic representation you've collected.
- **FIRMOGRAPHICS:** Asking full-time employee size (FTE), annual revenue, etc. will ensure that you obtain the needed distributions across the firmographics (e.g., ensuring a 50%/50% split of <1,000 and >1,000 FTEs). This will also give you a sense of what type of establishment the perspective is coming from.
- **FUNCTION/ROLE:** When a job has a variety of titles for the same position, including a question that defines title variations is a great way to ensure you're not losing good candidates.
- **RESPONSIBILITY:** A title doesn't always reveal a person's day-to-day responsibilities. A question about responsibilities helps you ensure you're getting insight from a decision maker.
- **FAMILIARITY (VENDOR/BRAND/PRODUCT/ETC.):** This question reveals if your respondents are aware of or have used the product in question. This should be at the end of your screening criteria as you're getting into the granular details.

Sometimes it's important to gauge a respondent's level of knowledge within an area or sector. These questions establish trust that the respondent has the necessary knowledge and experience to speak to the topic at hand. These can be tied into the "familiarity" category.

What Is a Great Screener Question?

Great screener questions should trigger an innate response and contribute very little to the overall length of an interview. It's easy for respondents to report on their industry or geography. You can actually improve the speed at which respondents are able to complete the survey by standardizing the format of your screening questions.

Screening questions also present an opportunity for quotas. Quotas are designed to enforce a preset distribution and monitor the counts per segment. For example, if your survey targets 50 marketing decision makers from health systems and 50 marketing decision makers from independent hospitals, quotas in the screening section will be critical to ensure you do not overindex in one area. Excluding this question from the screening section will create huge challenges when trying to monitor populations taking the survey.

Good screening questions can help you define how you'll qualify a respondent to enter the main body of the survey (while filtering out the unqualified ones). Questions collecting demographic or firmographic information that will be used for data cuts should not be included in the screening criteria. Instead, use these segmentation questions at the end of the survey to ensure the experts who do not meet the criteria are not in the survey longer than necessary.

Sometimes there are key criteria that are difficult to target. In this instance, the screening section serves as an additional measure to ensure that only the most qualified experts pass through your survey.

Solving for Bias

Poorly constructed screener questions can lead to biased results. In order to create screener questions that are clear and unbiased, you first need to understand the types of bias that might arise:

- **LEADING QUESTIONS** can be yes/no questions where the respondent can determine which is the qualifying answer. It's better to present the respondent with a list of options. Instead of, "Do you know about healthcare marketing?" ask, "Which of the areas below can you speak to knowledgeably?"
- **MULTIBARRELED QUESTIONS** ask more than one question at a time, which can lead to confusion and poor data quality. For example, asking, "Are you a current healthcare marketing director with oversight of digital platforms?" is asking position, recency, title, and platform knowledge all at once. Instead, split this into three questions, asking recency, title, and platform knowledge separately.
- **INTRODUCTION BLURBS** can introduce the sponsor of a survey, their research, and often the information they're seeking. It's okay to use an introduction blurb, but its placement in the screening section is critical. If it is presented ahead of screening criteria, the respondent knows how they're expected to answer. Use these blurbs after the respondent has been qualified by progressing through the screener questions.

A tight screening section leads to thoughtful responses in the body of the survey. When respondents are well versed in the topic, they are more likely to take their time answering each question. Avoid the unnecessary risk of two-word answers due to insufficient knowledge and use proper screening to gather comprehensive responses from well-qualified experts.

Ultimately, screening questions exist to increase the likelihood of gathering high-quality responses and data for your research. If you take the time to craft a detailed screener, you can rest easy when it comes time for analysis.

QUESTIONNAIRE DESIGN

To Rate or to Rank? That Is the (Survey Design) Question

The terms rating and ranking are often used interchangeably. However, they are distinct question types and collect different types of data.

Rating and ranking questions are two of the most common types of questions you'll encounter in a survey. They are easy to understand, quick to answer, and provide great data. However, they each have optimal use cases, and using the wrong type can leave you with data that is frustratingly unusable for your research and analysis.

Rating Questions

Rating questions use 3-point, 5-point, or even 11-point scales to gauge where you sit along a spectrum of possible outcomes. If you see question text that reads something like "on a scale of...," then you're looking at a rating question. These questions are great at measuring things like performance, quality, importance, or effectiveness.

However, therein lies the most notable limitation of rating questions. When you end up with data that has two competing products or brands that are rated the same, which one is preferred? Are they truly equal, or may slight nuances nudge the respondent to choose one over the other? With just a rating question, we cannot know the answer.

Notable types of rating questions:

- Numeric ratings use numbered scales, the most popular of which are 1-5 or 0-10. Net Promoter Score (NPS) ratings are a great example of numeric ratings.
- Frequency ratings ask how common an occurrence or behavior is and can be structured as a scale from "Never" to "Always."
- Comparison ratings use qualitative answer choices like "Better" and "Worse" to evaluate two variables.
- Likert ratings ask respondents to identify how much they agree or disagree with a given statement.

There are many ways to rate – just choose the version that best gets at the question you need answered.

Ranking Questions

Everyone loves a good ranking! What are your top three movies of 2019? What are the 10 worst bands of all time? We naturally gravitate toward framing things as "best" and "worst," and ranking questions are designed to do exactly that. These questions are most effective when you need to know the relative positioning among many variables. Since ranking comes so naturally to us, this type of question is easy to interpret and answer for respondents.

However, as with all question types, there are limitations. What is the difference between first place and second place? How about third place and fourth place? Perhaps a respondent is equally passionate about their first- and second-place rankings and they have to flip the proverbial coin to decide. Then they get further down the list, and third place is still strong, but fourth place is barely worth a second look.

Ranking questions alone cannot capture the close tie between first and second place, and they also cannot capture the chasm between third and fourth place.

A Better Way to Rank - Pick a Clear Winner (or Loser):

To get around this gap in data, have the respondent rank either their top three or bottom three choices. You still don't capture the gap between ranks, but you also don't get bogged down in ranking choices that are, in many cases, irrelevant.

If You Need to Know Both – Ask Both!

Both rating and ranking questions are easy for the respondent to answer, so asking both within the survey is not unduly burdensome to the respondent. If you need to know relative positioning but also understand the gaps between the ranks, simply ask both!

Bonus Pro Tip: Optimize for Mobile

While both rating and ranking questions are easy to answer, consider this: Most people take surveys on their phones. This is especially true for consumer surveys, but even for expert populations, between 30% and 40% of the participants take surveys on their phones as they travel from meeting to meeting or from location to location.

Obviously, phones are limited in their ability to display a large amount of data in a way that doesn't require an inconvenient amount of scrolling back and forth. Now consider a numeric rating scale (0-10) that asks to rate the performance of 10 different vendors. While the matrix table only requires 10 answers, there are 100 options to display.

There are no hard-and-fast rules to follow here, but always think through the various ways a question displays on different screen sizes.

The Takeaway

To rate or to rank? Ratings offer detail about a variable independent of other factors. Rankings answer the question of what's the best and what's the worst. And if you need both, ask both!

QUESTIONNAIRE DESIGN

Types of Survey Questions and When to Use Them

When designing your questions, remember this golden rule — it is better to have multiple simple questions than to have one complex question.

The first step in building a survey is determining the topic, goals, target, and/or hypothesis to test within your survey, and the next step is determining the best way to get those insights. After establishing the flow of the survey — grouping like topics, naturally connecting ideas and segments, etc. — you are ready to start writing the questions.

There are three basic categories of questions – single-select, multi-select, and open-ended questions. Out of these three categories, you can build more complex questions: e.g., ranking or matrix. When designing your questions, remember this golden rule — it is better to have multiple simple questions than to have one complex question. Let us dig deeper into the question types, common combinations, and rules of thumb for writing questions.

Question Types:

Single-select questions are used when you need a single response.

- **BASIC** — a simple "select one of the below" option
- **NPS/RATING** — more of a metric question inquiring of opinion (typically 1–5, 1–7, 1–10)
- **MATRIX/GRID** — combining either of the above options across a few subjects (e.g., "select your rating of the below fast-food chains on a scale of 1–5" with the options as rows and ratings as columns)

Multi-select questions are best used when you need multiple responses for a topic.

- **BASIC** — a simple "select all that apply" question
- **RANKING** — a multi-select question that requires comparison across a state dimension for a subset of the options presented (e.g., "rank your top three choices for a CRM solution during your last evaluation cycle out of the list below")
- **MATRIX/GRID** — using a multi-select question across a few subjects (e.g., "For the below providers, please select the products that are included in your subscription")

Open-ended questions are best used when either 1) you do not know what the answer options should be or 2) a robust opinion or view is required.

Combining various questions and question types to get to the details you seek is just as much an art as it is a science.

- **FULL ESSAY** — requiring multi-sentence response
- **BRIEF STATEMENT** — aiming for a few words or a phrase
- **FOLLOW-UP** — pertaining to a closed-ended question that was just asked (e.g., first question being "Please rate your experience with XYZ on a scale of 1–10 with 10 being the highest" followed up by "What interaction impacted your experience to select this rating?")
- **OTHER (PLEASE SPECIFY)** – providing a small text box within a single or multi-select question to gain insights into options/choices not listed

Common Question Combinations:

Combining various questions and question types to get to the details you seek is just as much an art as it is a science. Let us consider a few examples.

When considering how to ask for the information you are seeking, it's easy to fall into the trap of asking the question exactly how you're thinking about it. For example: if you want to understand how much people spend on toilet paper per roll, this is likely too specific of a question. Instead, you might want to:

1. Start by asking "Which of the following products have you purchased in the last six months?" (Multi-Select)

2. Get confirmation of the metric needed with "Of these products you've purchased, of which do you recall the details of their price?" (Multi-Select)

3. Assume the respondent has selected "Toilet Paper" in the above questions and then ask, "What count do you typically purchase when buying toilet paper?" (Single Select)

4. Wrap up with pricing: "On average, how much do you spend on toilet paper per purchase?" (Single Select)

Another good combination is employing different multi-select questions — one in the form of ranking. Say you need to understand which payroll software is favored by small businesses. You would conduct the survey among small businesses, of course, but when you get to the ranking of potential options, there are a few choices.

1. **Provide respondents with a full list of payroll software solutions and have them rank each with respect to the full list.** This could be a cumbersome solution, requiring precious time for the respondent, and it is unlikely to provide the best data. If the respondent is aware of only a fourth of the solutions, the person would be guessing at the remainder of the rankings, skewing your data.

2. **Provide respondents with a full list of payroll software solutions and have them rank their top three based on perception or experience.** While this is more efficient than ranking in respect to the full list, you could be missing out on additional insights if the respondent is aware of more than three of the solutions.

3. **Split this into two questions.** First, provide the full list asking respondents to select all payroll software solutions they are aware of. Second, have them rank based on perception or experience only those software solutions they flagged in question one. This will cut down on time to complete the question and will provide a well-rounded data set due to the familiarity with the software brands.Wrap up with pricing: “On average, how much do you spend on toilet paper per purchase?” (Single Select)

There are many combinations that prove to be useful depending on your needs. The opportunities are endless. Just make sure each question flows into the next and is easily understandable. This leads to our general rules of thumb.

General Guidelines for Questions:

There are several things to consider when writing questions, some more important than others. Below are a few paramount aspects of question writing that should be considered when designing a survey.

1. Make sure the respondents will be able to answer the question. For example, you want to make sure that A) the respondent will be able to share the information — i.e., the responses do not include proprietary information and B) they will actually know the answer. The information should be relevant to the individual's expected knowledge or experience.

2. Ask questions in a straightforward format. The questions should be the most basic questions possible. You know exactly what you are asking for, but the respondent might not. This is especially important when dealing with complex topics.

3. Ask only for what you truly need. Keeping the survey concise and direct will help ensure quality and coherent data.

QUESTIONNAIRE DESIGN

Open-Ended Survey Questions: User Discretion Advised

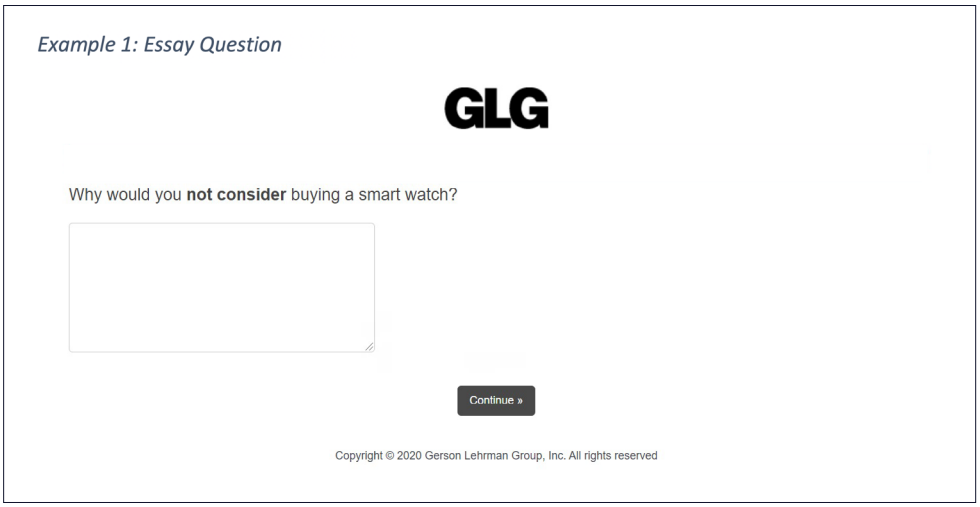
A good open-ended question gives respondents the autonomy to answer thoughtfully yet is structured to keep them on topic.

Open-ended questions are tricky to get right. Framed in the wrong way, they produce data that is difficult to analyze. Rely too heavily on them and dropout rates will increase while data quality decreases. Underuse can leave valuable data uncollected. Here's what you need to know to strike the right balance.

A good open-ended question allows enough autonomy for respondents to lean into their experience to answer thoughtfully and meaningfully yet is structured well enough to keep them on topic. How do you strike this balance? The first step is to know the right way to frame your open-ended question.

Here are three common open-ended structures:

1 FULL ESSAY QUESTION



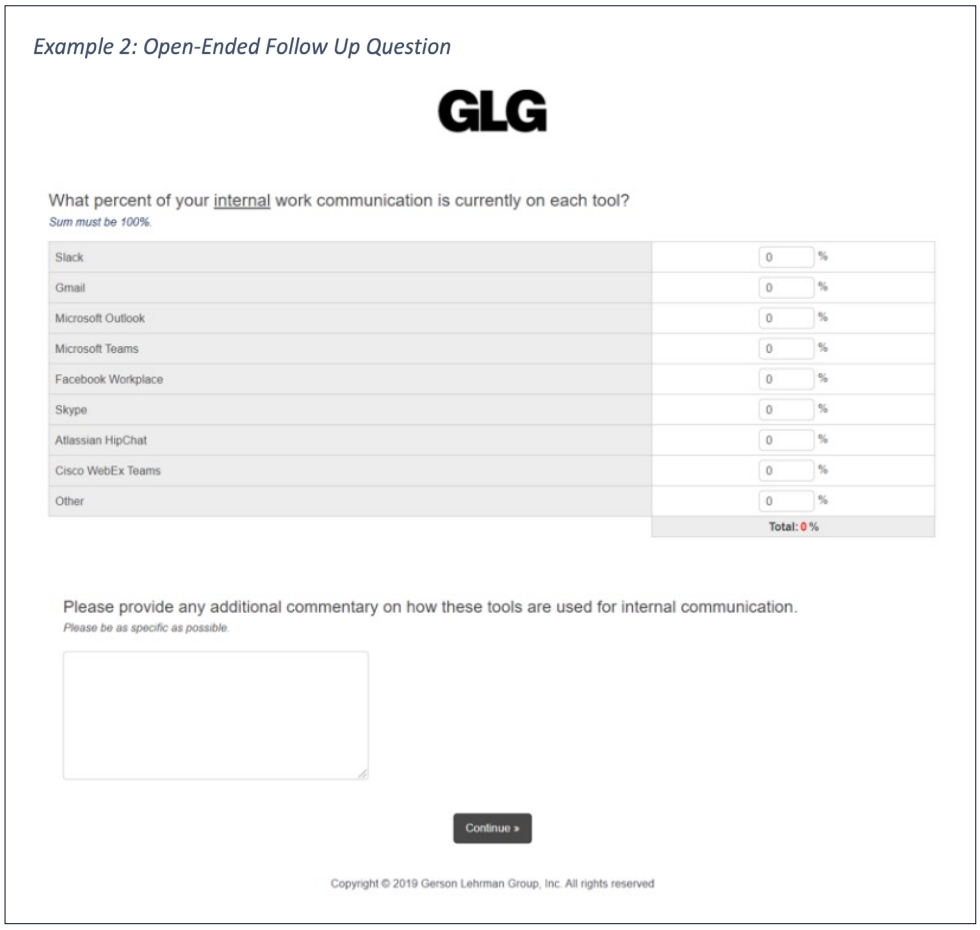
This is likely the first type of open-ended question that comes to mind: a question without defined-answer choices that leaves respondents the space to answer however they see fit.

Pros: You can get unfiltered feedback that wouldn't otherwise show up in a survey. This type of information can be invaluable if you need to understand what people are thinking. Moreover, this can elicit feedback you hadn't considered.

Cons: Picture this: you are taking a survey and after a couple of questions, you fall into a groove. You've gotten a sense of how the survey is structured and you're in the zone. Then you come across an essay question and stop dead in your tracks. Your flow is disrupted because now you must switch to a different part of your brain. A survey with three or four essay questions will not likely deter you from finishing, but any more and you might seriously consider walking away.

2 THE FOLLOW-UP

Example 2: Open-Ended Follow Up Question



Used in conjunction with another question, the open-ended follow-up is a great way to tease out nuanced information. By tying it to another question, you've primed respondents to think a certain way about the question. The way they answer the first question will shape the way they answer the open-ended question.

Pros: The follow-up is a great way to dig deeper on a respondent's answer. It also provides less opportunity for responses to wander off topic since participants are responding to an answer they've already given and that they can still see on the screen.

Cons: Some respondents will feel as though they've already answered the question and that they don't have anything to add. Even if you make the question mandatory, you will likely end up with empty responses like "Nothing to add" or "None."

3 OTHER (PLEASE SPECIFY)

Example 3: Other (please specify) answer option

Often, you don't need an open-ended question — you need an open-ended answer choice. This is the most common type of open-ended response, and it's also the easiest for respondents to fill out.

Pros: It ensures a question's answer options are comprehensive and exhaustive. The goal is to capture approximately 80% to 90% of the answer choices that people will select, then include "Other (please specify)" to collect the remaining responses. This strikes the right balance between optimizing the respondent experience and limiting the amount of data that will need to be manually analyzed.

Cons: It can be difficult to codify these responses, especially if the responses are varied.

Common Pitfalls

- **OVERRELIANCE** — Open-ended questions are taxing for respondents to answer. Asking too many will lead to higher rates of dropout or less thoughtful responses. If responses can be predicted or captured in near entirety, then do so by using "Other (please specify)." Save the respondent the trouble.
- **TOO MUCH DATA** — Remember, you'll eventually need to synthesize this information. You don't want to inadvertently inspire someone to write War and Peace. Ask only what you can reasonably analyze. Your level of tolerance for this will vary based on the sample size, the length of the responses, and how much time you have to conduct the analysis. A survey with a sample size of 30 that asks only "Other (please specify)" open-ended questions will mean something very different from a survey with a sample size of 100 that asks several full-essay questions. You can manage expectations by being specific in what you ask of respondents (e.g., "In one or two words, please describe," "In a few sentences, provide details on," or "Please be exhaustive in your response").
- **POOR INTERPRETATION** — Written language lacks tone, inflection, demeanor, and background context. Be careful in how you interpret the results. You may be biased in your interpretation, especially for ambiguous responses. Be sure you are interpreting and categorizing phrases in the same way across your data set. When in doubt, devise rules for how you will interpret certain phrases.

- **ASKING DOUBLE-BARRELED QUESTIONS** — These are questions that ask about more than one issue or topic but allow for only one answer. When it comes to open-ended questions, the problem is that not everyone writes clearly. You could end up with responses that are difficult to interpret if the respondent answered only one of the issues, or worse yet, if it's not obvious which issue the individual addressed. If you need to ask about more than one issue, ask separate and distinct questions that allow for one response each.
- **BEING VAGUE** — Vague questions get vague answers. Think hard about how you want respondents to answer and what data you are trying to collect. Then ask a question that is specific enough to accomplish that. The hope is that each respondent will respond in a similar way, which means that you can interpret the results in the same way.
- **NOT ASKING ANY** — Up to this point, it's been all about limiting these questions and ways to structure. However, there are good reasons to include at least one or two open-ended questions in every survey. They provide a gauge for quality since it's harder to fake your way through them. They also give power to the respondent. People like knowing that their opinion is valued. This gives the respondent an opportunity to provide extra context or nuance, which keeps them engaged with the survey.
- **ONE LAST CONSIDERATION: MANDATORY OR OPTIONAL?** — Is it reasonable that every respondent will have an answer to the question? If not, don't make them answer — and definitely don't make them write "N/A" or "No comment." Just make the question optional and allow them to pass through. Conversely, if everyone should have an answer, make them mandatory and consider putting your least essential open-ended questions near the end of the survey. This ensures that respondents are in a good mindset to provide more thoughtful responses to your most essential questions.

The Takeaway

People like to feel that their opinions matter. When used sparingly and structured soundly, open-ended questions give voice to the respondent in a way that empowers them to give their unique perspective. The outcome is more nuanced data for analysis and a more engaged respondent.

RESEARCH DESIGN

Stop Letting Garbage Data Get in the Way of Good Survey Results

As the saying goes, “garbage in, garbage out.” The term comes from computer science but is true of many things, including surveys. Here are the best practices you can employ today to prevent garbage data from diluting your results. Instead, you will be able to be confident in your data and the decisions you need to make based on it.

Modern tools and methods make it easy to collect the data you need from the people who have it. Unfortunately, not all data is created equal. How can you trust that the data you’ve collected is good data?

While you can’t block 100% of all bad data from getting into your data set, you can employ a few best practices to block the majority of it. I know what you’re thinking: “I can’t tolerate *any* percent of bad data in my data set.” Good news there too, because there are proven ways to identify poor-quality data points within your data set and remove them.

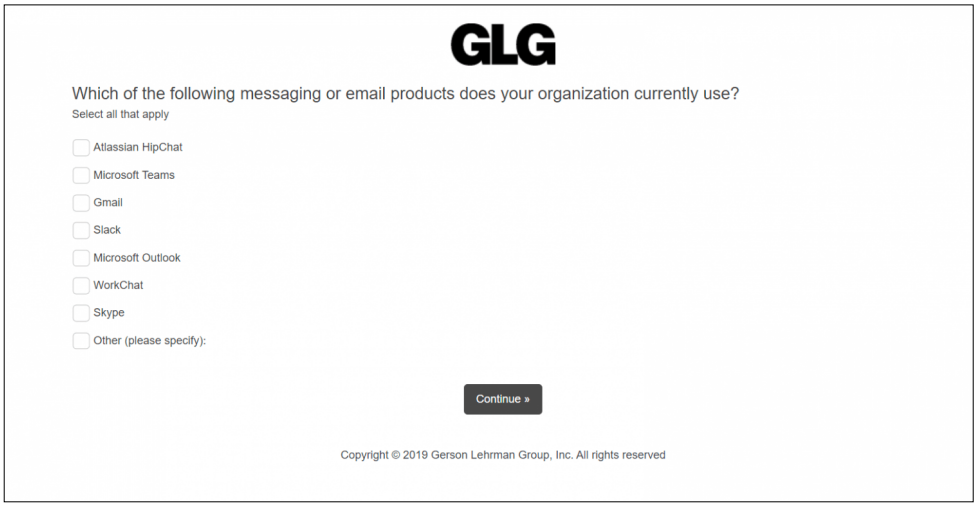
Therein lies the structure of how to think about improving data quality. There’s the **proactive** approach of preventing poor-quality data from getting into the data set, and the **reactive** approach of dealing with poor-quality data once it’s already in your data set.

The following best practices are framed with that delineation in mind.

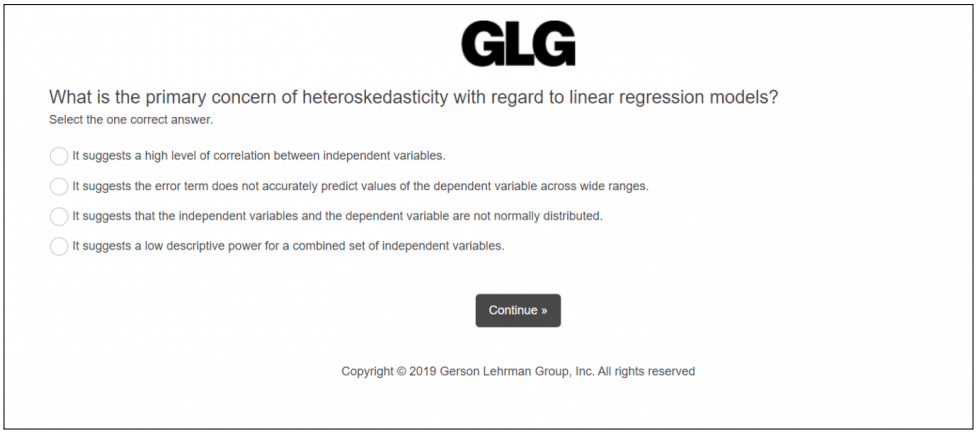
How do you prevent bad data in the first place?

Smart research design can systematically prevent poor-quality data from entering your data set. Once you integrate these best practices into your questionnaire, you can sit back and let the survey do all the heavy lifting.

- **RED HERRINGS** — A red herring is a fake answer choice amid an otherwise legitimate question. It is intended to catch those who are trying to "guess the right answer" to gain access to the survey. In the example below, "WorkChat" is a made-up product and if respondents selected it, they would be terminated from the survey.



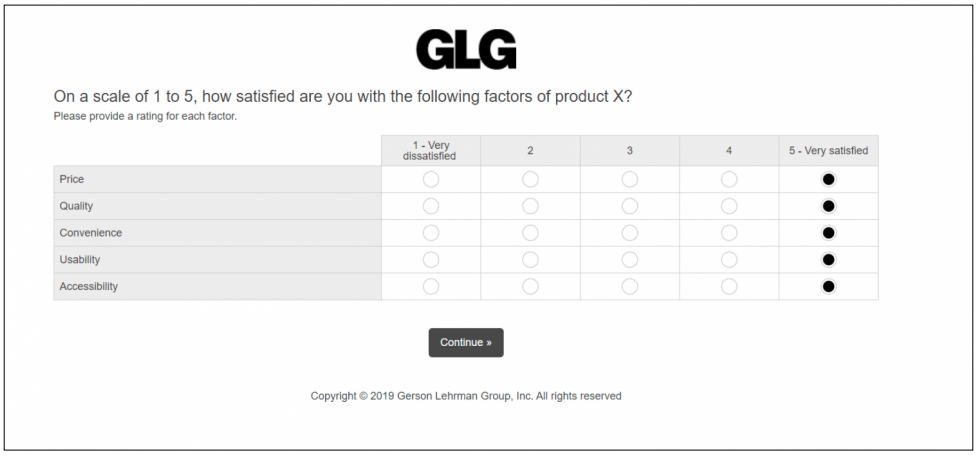
- **KNOWLEDGE CHECKS** — These questions are designed to test respondents' knowledge of a topic that they'll be asked about within the survey. The question should have an objectively correct answer, but not be something that can be quickly googled. As an example, don't ask just to verify an acronym since anyone can look it up and answer correctly in a matter of seconds.



- **ATTENTION CHECKS** — This one is self-explanatory; it is designed to make sure the respondent is paying attention, and in the case of large-scale consumer surveys, catch bots. The question will have one obvious correct answer.

How do you identify bad data once it's already there? While preventative measures can do the heavy lifting, you will still likely need to do some fine-tuning. These best practices will highlight potential issues and turn what could otherwise be a several-hour manual process into an efficient, brief exercise in data cleaning.

- **STRAIGHT-LINING** — This calls out respondents who select all the same answers down a column or across a row. It's important to note that this requires a judgment call. It may be entirely reasonable for someone to select down a row and be providing perfectly reasonable responses. However, in the example below, it would be highly unlikely that a respondent would feel that the highest level of satisfaction applies to all factors.



- **SPEEDERS**
  This category determines if a respondent completed the survey "too quickly." This is also a judgment call. Although, if you have a respondent who completed the survey in half the amount of time as everyone else, that's a strong reason to suspect that the person may not have been paying full attention.

Common Pitfalls

Make sure to factor in any logic in your survey that would show a different number of questions to respondents based on their answers. You can have drastic differences in completion times for perfectly valid reasons.

- **CUSTOM FLAGS** — If you have questions that might allow respondents to provide contradictory answers, you can set up custom flags that will trip if a logical fallacy occurs. The flag shows only on the back end, but it allows you to quickly identify those flags in the data, review the responses, and determine if you need to remove them from the data set. It's a quick way to quality-check the data and make informed decisions about how you deal with potentially poor data.
- **OPEN-ENDED QUESTIONS** — In addition to providing qualitative data, open-ended questions allow you to assess the quality of respondents. Are they answering the question being asked? Are they providing coherent and cogent responses? If not, you can remove them from the data set. If it's less clear — perhaps the individual just misunderstood the question — then you can review the rest of that respondent's data and make a more informed decision about how to handle it.

The Takeaway

There are a lot of ways to improve the quality of your data set. Some tactics can be used to prevent bad data from getting into your data set. Some tactics can be used to run a quality check on the data you've already collected.

You can use all these tactics or select a few applicable to your specific project. Either way, stop letting garbage data get in the way of good research and your ability to make confident decisions.

RESEARCH DESIGN

Are You Running the Right Survey for the Wrong Reason?

The goal of a survey is to objectively test a hypothesis. Don't allow bias to creep into your surveys, either in your design or in your respondent pool.

You've decided to run a survey and you've brushed up on the best practices for survey design. Now you must answer the single most important question of this entire process: Are you running a survey to test your hypothesis or to prove it?

The difference may seem subtle, but its implications are enormous. To test a hypothesis is to design an unbiased survey that may either validate or invalidate the underlying assumptions.

To prove a hypothesis is to collect data to support a predetermined narrative. This perhaps conjures an image of a villain twirling his pencil-thin mustache as he plots a devilish scheme. In practice, it's not nearly as nefarious. When you have a hypothesis, you typically believe in it strongly backed by some level of research you have already conducted.

In other words – whether you know it or not – you are biased.

When you are biased, you can inadvertently build that bias into your research surveys. To avoid this you need impartial input. Someone not invested in the project should review the questionnaire for leading questions and language that can influence the respondent and alter their responses. If you are outsourcing your survey, it is incumbent upon the research organization to help you avoid these pitfalls. They have no investment in your research other than to ensure you get good results.

Okay, so you run an unbiased survey with an intent to test rather than prove. What happens if the results come back disproving your hypothesis?

Results that run counter to your expectations are more impactful. Yes, it's great to get results that validate your assumptions. However, invalidated assumptions mean that something was wrong in your initial research. This outcome is substantially more important; you can avoid making a poor decision that wastes money, time, and resources.

It's not just the survey design. You must also consider the respondent pool. In the same way, you want to avoid bias in your design, you also must avoid bias in who you invite.

Beyond the Customer

Let's say that you are interested in knowing what people think of a new service being provided by a gym. Naturally, you survey the gym's membership. You learn that people are generally pretty excited about the service and usage will increase substantially. Great results, right? Well, maybe...

Devout loyalists will tell you what you want to hear. They are members for a reason – they have already shown to have an affinity for your type of services.

Who's Missing?

Surveying casual gym-goers provides you with a sense of interest from less serious users. Members from competing gyms can tell you how competitive the new service will be to capture new members. Lapsed members can give you an estimate of how many member "win backs" you can achieve. Non-gym users can help you understand how much of a lure the new service will be.

The universe of respondents is much broader than just members, and to ignore their perspectives is to ignore critical data points that could shape the success of the new service.

The Takeaway

Surveys are a tool to aid in the decision-making processes. If you design a survey that proves a hypothesis rather than objectively tests it, your decisions will be biased and your previously confident decisions will lead to frustratingly failed outcomes.

RESEARCH DESIGN

When Statistical Significance Just Isn't... Significant

Hard-to-reach populations or tight budgets can limit your ability to reach a statistically significant population.

When does a collection of anecdotes become a reliable data set? The extent to which statistically significant results are required is often overstated – quantity is not indicative of quality. So how do you know if the data you have is enough data?

Here are some factors to consider:

What Decision Are You Making?

Are you surveying employees about preferences for the upcoming holiday party, or are you surveying physicians about new treatment methods? Depending on the intended use of the data findings, the level of risk and/or uncertainty that you're willing to tolerate may change. How important is it that you have *exactly* the right representation? If the decision is life or death, clearly the answer to that question is yes (although most things are not life and death and can bear some level of uncertainty).

Who Are You Surveying?

C-suite executives from Fortune 500 companies give you a different caliber of data than consumers of, say, Greek yogurt. Input from one CEO is just an anecdote, the same as one consumer of Chobani, but the CEO's data carries more weight. This is true for a couple of key reasons:

- **LIMITED UNIVERSE.** How many Fortune 500 CEOs are there? Well, by definition, there are 500. How many Chobani consumers are there? The exact figure may be unknown, but it probably measures in millions. One in 500 will naturally carry more weight than one in millions.
- **EXPERTISE.** The expertise required to be CEO is slightly more advanced than the expertise required to buy yogurt. Greater confidence can be placed in smaller data sets when that data is derived from experience, training, and persistent learning in a given topic.

Capturing insights from 20 CEOs that precisely meet your criteria is better than diluting your sample with 100 unqualified matches simply for the sake of reaching a statistically significant number of respondents.

If Your Results Aren't Statistically Significant, Are They Still Significant?

What is the data telling you? Specifically, what is the variance among responses in your sample size? The smaller the variance among respondents, the greater the level of confidence you can have in the results. Conversely, if variance is high, consider a larger sample sizer to increase your statistical representation.

The Caveat

When your results are not statistically significant, you must be sure you understand what biases you may have in your population.

Biases are tricky and even exist within statistically significant results. The problem is that biases can carry disproportionate weight in smaller sample sizes. Knowing your biases can allow you to analyze your results more accurately by considering factors that may swing your results away from the statistically representative population.

To illustrate that point, consider again the Fortune 500 CEO example. Do your respondents overrepresent a specific industry – say, healthcare – that may cause them to respond in slightly different ways? By knowing this, you can adjust the weighting of your healthcare respondents in the data to reflect their true prevalence in the overall sample.

Confidence Level and Margin of Error

The intention of this article is not to be a stats refresher. Mostly because you can find that in countless other places on the internet, but also because, for some reason, most people don't like reading about stats! However, it does help to be versed in the lingo.

Here's what you need to know: Confidence level and margin of error are all about determining how much uncertainty you're willing to bear.

- **CONFIDENCE LEVEL.** Measured at the 95% level or 99% level, the confidence level tells you how often the same research project will return outcomes that truly represent the population. Are you fine with 5 tests out of 100 producing non-statistically representative results, or would you prefer if only 1 test out of 100 did so?
- **MARGIN OF ERROR (MOE).** This measures the plus/minus (+/-) of the stats that seek to describe your population. For example, you find that 72% of CEOs are concerned that COVID-19 is going to adversely impact revenues in 2020. A 4% MoE says that the true percentage is actually somewhere between 68% and 76%.

If you want to be accurate, then aim for a 2-3% MoE. On the opposite end of the spectrum, an 8% MoE tends to be the maximum that most researchers are willing to allow. A 5% MoE is a nice middle ground.

The Takeaway

Results don't always need to be statistically significant in order to still be significant. If you run a survey with a smaller sample size and you're not comfortable with the results, seek out additional qualified respondents to reach a statistically significant sample size. If that's not possible, understand the shortcomings of your data and adjust accordingly to best simulate statistical representation. The more confident you are in your results, the more confident you can be in your course of action.

RESEARCH DESIGN

Let Your Survey Design Help You

There are many tools you can program into your survey to address minor difficulties or confusion during analysis.

Your survey has concluded, and you've begun to dig into the data. This can be an exciting and daunting task. You might be met with frustrations around pivot tables, defining more custom fields in Excel or SPSS. Do you have too many of one type of respondent? Is a numeric response off by a factor of 100 to the industry standard? All these things can be solved on the front end if you know where to look.

There are many tools you can program into your survey to address minor difficulties or confusion during analysis. Below are key items to consider in the design phase that can save you time and a potential headache once a survey is over and analysis begins.

Hidden Variables

These are classifications or variables that exist within the data set only. Respondents never see them when going through the survey. They provide greater flexibility when analyzing your data set. A few use cases are outlined below:

- **MAPPINGS:** You have a country question within your global survey and want to compare regional differences. By using mappings, you can set up a variable for region in the back end to assist — e.g., comparing the U.S., Canada, and Mexico with North America.
- **GROUPINGS:** You'd like to compare economic outlook by region and industry; instead of having to filter by region and industry in the data set, you can combine them to be a single variable in the final data to speed up the analysis process. Groupings can be used to categorize types of respondents as profiles for analyzing segments of interest.
- **CALCULATIONS:** You have respondents providing market pricing across a variety of brands and need to use your survey to populate the average price in the respondent data. Programming averages, medians, or other complex functions for metrics respondents provide within the survey are a great way to cut down time spent on data analysis.

Strategic Answer Choices

Asking the right questions and respective answer choices is critical to getting your survey off on the right foot. Done the right way, strategically designed answers will aid your analysis on the back end. These include:

- **BASIC ANSWER OPTIONS:** What may seem trivial can have a huge impact on the quality of your analysis. If your client is asking for a particular metric, ensure that the question choices will get you to that answer. For example, small, medium-, and enterprise-sized businesses can think of things differently; have specific measurements for them to compare their organizations instead of self-identifying.
- **IDENTIFYING KEY MARKET SEGMENTS:** Are you considering key market segments based on your client's footprint? Ensure the segments you are going to need are reflected within the industry question separately. For example, manufacturing is very broad. Should you consider listing aerospace, automotive, and industrials as options instead?

Quotas

As you're designing your survey, keep the final report in mind. It's important to consider your analysis strategy and which data cuts are required to craft a story. Ensure base sizes for those data cuts are large enough to provide reasonable insight and validity to your data.

Include quotas in a survey to ensure you meet your base size requirements. By setting up a quota, you can monitor progress and make quick adjustments to quota targets as needed. Some common use cases for quotas include:

- **SETTING A MINIMUM QUOTA PER INDUSTRY**
- **REVENUE BREAKS**
- **FULL-TIME EMPLOYEE COUNT**
- **USAGE OF CERTAIN SOFTWARE/VENDORS**

Flags are helpful tools that can be included in programming code to act as “checks” in the data.

Flags

Flags are helpful tools that can be included in programming code to act as “checks” in the data. The flags work in the background of your survey and can provide support to validation and quality checks. By including flags in your survey, you can save time and ensure the data will not be conflicted.

VALIDATION FLAGS

If you have experience running surveys, at some point you will have encountered conflicting or incomplete data. The survey design may follow all the usual research best practices. You had a robust screening section, the questions were clearly written, and you had a limited number of grids. Yet as you begin analyzing the data, realization sets in that something is wrong.

For example, your survey asked questions around pricing optimization for a new product. When reviewing your open-ended questions, you notice that data values entered for “too expensive” are less than the data values entered for “just right” price. In this instance, a validation flag could have been included on the “too expensive” question to confirm the value entered was greater than the “just right” value previously answered. The survey would have flagged an error message to the respondent in real time while they were completing the survey that the answers conflicted, forcing the respondent to adjust their answer before proceeding to the next question.

Validation flags can save time and help limit data concerns on the back end, and they are not to be ignored.

QUALITY-CHECK FLAG

Done the right way, quality checks can help keep your survey data clean and useable. To streamline and expedite data review, build the flags into your survey directly. With quick turn timelines, you want to pull every lever possible to streamline the data review process. Including quality check flags is a great way to ensure your data is clean and useable.

Common quality-check flags include:

- **SPEED FLAG:** tripped when a respondent completes the survey in one-third or less the median length
- **STRAIGHT-LINING FLAG:** tripped when a respondent provides too many "straight-line" answers in a grid (e.g., they select "Strongly agree" for all rows in your matrixes)
- **OPEN ENDS:** tripped when a nonsensical answer is entered; some programming platforms can identify "gibberish" open ends and trip a flag
- **RECONFIRMING SIMILAR DATA:** tripped when a respondent provides different answers to very similar or identical questions over the course of the survey

It's important to note that a respondent tripping one quality-check flag does not necessarily mean automatic removal. It's recommended to have multiple flags throughout a survey; if a respondent triggers multiple flags, review their data and remove them if needed.

In closing, including the above items in your survey design can expedite analysis, maintain clean data, and support streamlined analysis. Doing the hard work up front will really pay off on the back end. Put yourself in the driver's seat by following these simple steps and avoid any awkward client conversations.

LOOKING TO LAUNCH A SURVEY?

GET IN TOUCH