Specific questions are simple, significant, and focused on a single topic or a few closely related ideas.

This helps us collect information that's relevant to what we're investigating. If a question is too general, try to narrow it down by focusing on just one element.

"Are kids getting enough exercise these days?"

"What percentage of kids achieve the recommended 60 minutes of physical activity at least five days a week?"

That question is much more specific and can give you more useful information.

Measurable questions can be quantified and assessed.

"Why did our recent video go viral?"

"How many times was our video shared on social channels the first week it was posted?"

That question is measurable because it lets us count the shares and arrive at a concrete number.

Action-oriented questions encourage change.

Problem-solving is about seeing the current state and figuring out how to transform it into the ideal future state.

"How can we get customers to recycle our product packaging?"

"What design features will make our packaging easier to recycle?"

Relevant questions matter, are important and have significance to the problem you're trying to solve.

"Why does it matter that Pine Barrens tree frogs started disappearing?"

"What environmental factors changed in Durham, North Carolina, between 1983 and 2004 that could cause Pine Barrens tree frogs to disappear from the Sandhills Regions?"

This question would give us answers we can use to help solve our problem. That's also a great example for our final point, time-bound questions.

Time-bound questions specify the time to be studied.

The time period we want to study is 1983 to 2004.

This limits the range of possibilities and enables the data analyst to focus on relevant data.

Highly effective questions are SMART questions:

S-pecific M-easurable A-ction-oriented R-elevant T-ime-bound Will the answers Is the question Will the question Is the question Are the answers provide specific? Does it give you answers about the relevant to the address the that you can information that particular problem specific time being problem? Does it measure? helps you devise you are trying to studied? have context? Will some type of solve? it uncover a lot of action plan? the information you need?

Examples of SMART questions

Here's an example that breaks down the thought process of turning a problem question into one or more SMART questions using the SMART method: **What features do people look for when buying a new car?**

- **Specific**: Does the question focus on a particular car feature?
- **Measurable**: Does the question include a feature rating system?
- **Action-oriented**: Does the question influence creation of different or new feature packages?
- **Relevant**: Does the question identify which features make or break a potential car purchase?
- **Time-bound**: Does the question validate data on the most popular features from the last three years?

Questions should be **open-ended.** This is the best way to get responses that will help you accurately qualify or disqualify potential solutions to your specific problem. So, based on the thought process, possible SMART questions might be:

- On a scale of 1-10 (with 10 being the most important) how important is your car having four-wheel drive?
- What are the top five features you would like to see in a car package?
- What features, if included with four-wheel drive, would make you more inclined to buy the car?
- How much more would you pay for a car with four-wheel drive?
- Has four-wheel drive become more or less popular in the last three years?

Things to avoid when asking questions

Leading questions: questions that only have a particular response

• Example: This product is too expensive, isn't it?

This is a leading question because it suggests an answer as part of the question. A better question might be, "What is your opinion of this product?" There are tons of answers to that question, and they could include information about usability, features, accessories, color, reliability, and popularity, on top of price. Now, if your problem is actually focused on pricing, you could ask a question like "What price (or price range) would make you consider purchasing this product?" This question would provide a lot of different measurable responses.

Closed-ended questions: questions that ask for a one-word or brief response only

• Example: Were you satisfied with the customer trial?

This is a closed-ended question because it doesn't encourage people to expand on their answer. It is really easy for them to give one-word responses that aren't very informative. A better question might be, "What did you learn about customer experience from the trial." This encourages people to provide more detail besides "It went well."

Vague questions: questions that aren't specific or don't provide context

• Example: **Does the tool work for you?**

This question is too vague because there is no context. Is it about comparing the new tool to the one it replaces? You just don't know. A better inquiry might be, "When it comes to data entry, is the new tool faster, slower, or about the same as the old tool? If faster, how much time is saved? If slower, how much time is lost?" These questions give context (data entry) and help frame responses that are measurable (time).