

Better surveys

Caroline Jarrett
@cjforms
#surveysthatwork2022

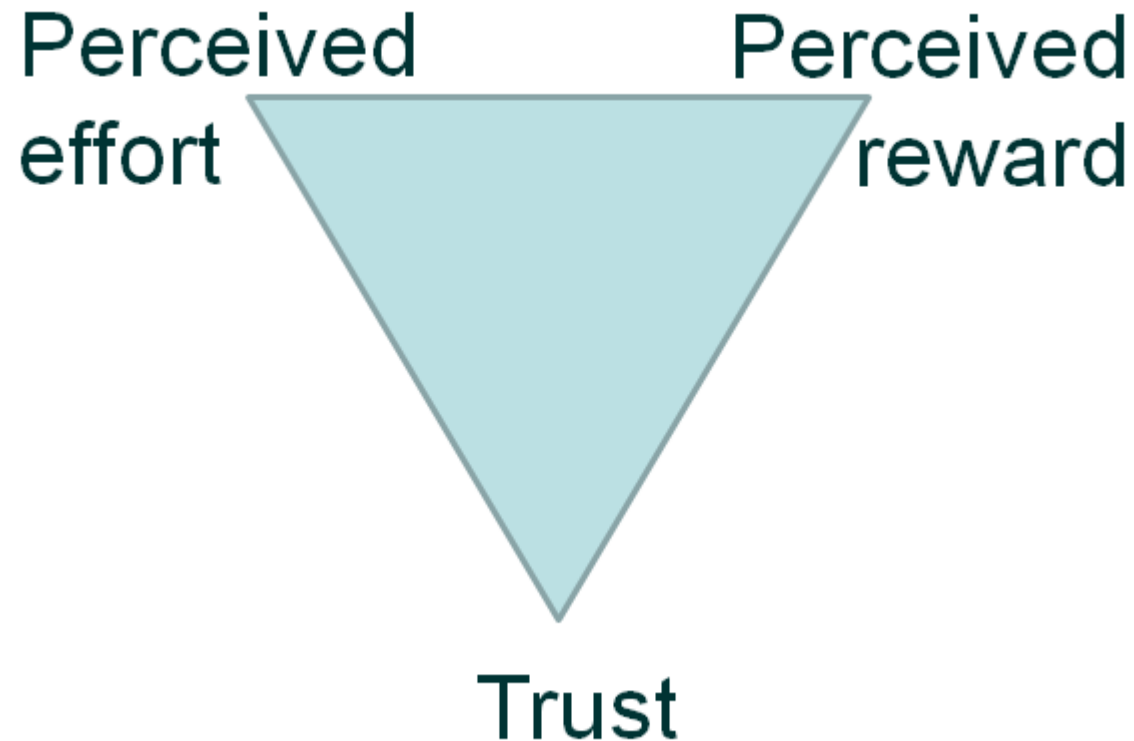
loyal

What would you do for a dollar?

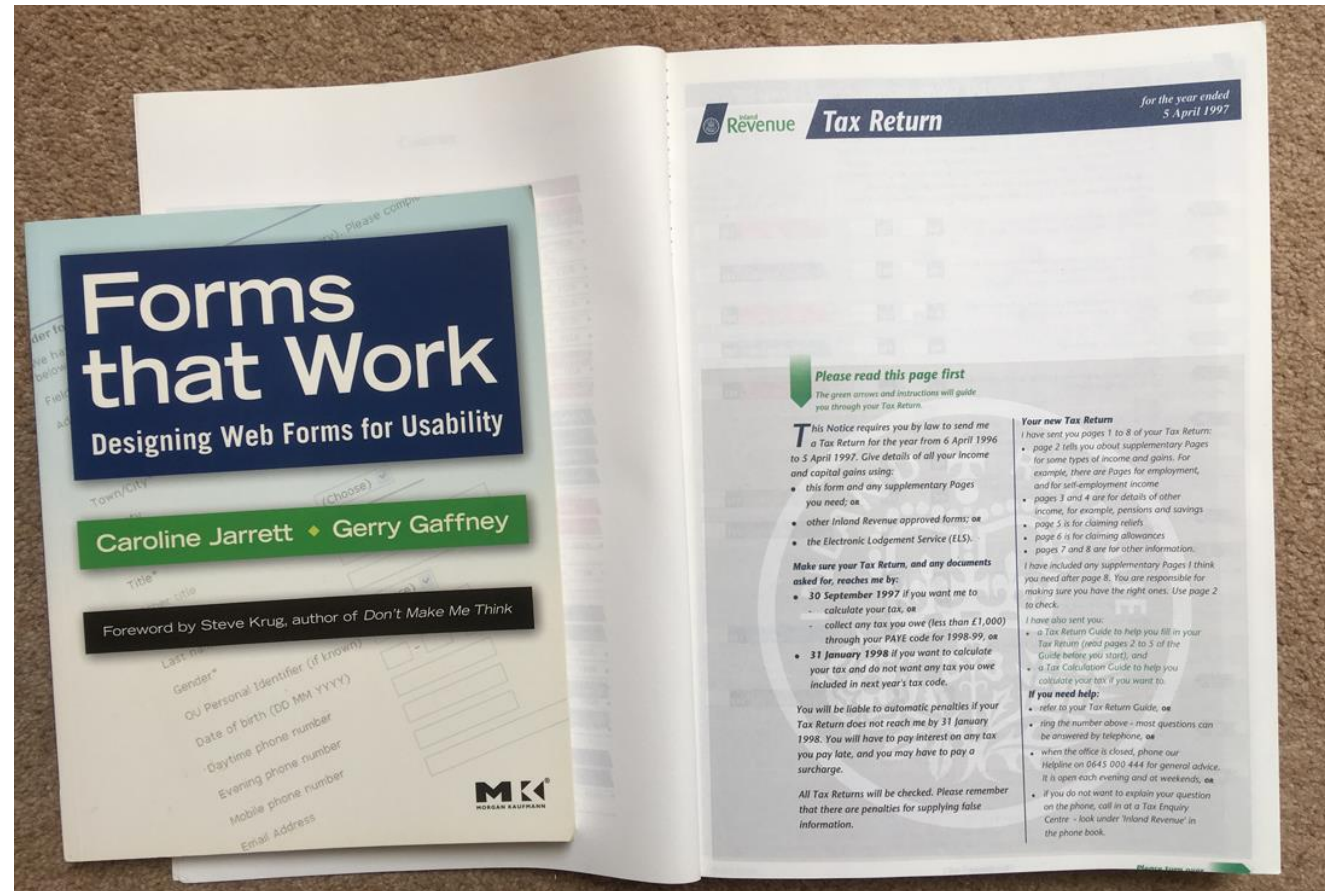
\$1 in the envelope beats \$10 guaranteed later



Response depends on effort, reward and trust



I'm interested in questions because I've worked on forms for 30 years



I turned to the survey literature to learn more,
especially about questions



I learned a lot from the survey methodologists

- How to design better surveys
- What surveys are for and who to ask
- What total survey error is
- How to identify your survey goals and numbers
- How to test your questions and questionnaire

Today we're going in a different order

- How to test your questions and questionnaire
- How I think about surveys
 - What surveys are for and who to ask
 - How to identify your survey goals and numbers
 - What total survey error is
 - How to design better surveys
- How to rate satisfaction

How to test your questions and questionnaire

Try a person-led expert review to test your questions

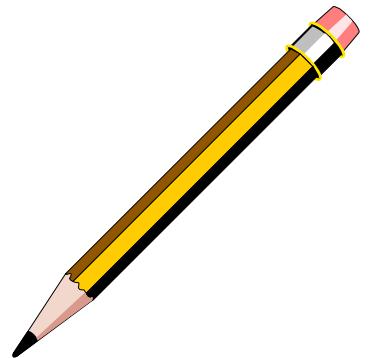
- Each attendee writes a 'once upon a time' story of a person who will answer the questions
- We work through the questionnaire / form as that person
- Then we compare our answers and think about them



Write a story



- Give the person a name
- Say why the person visited health care at a hospital
- (Optional: add an adjective about how it went)



Please answer question 1 as your 'person'

1. Visits with a health care provider can be **in person, by phone, or by video.**

Our records show that you had a recent visit with the provider named below.

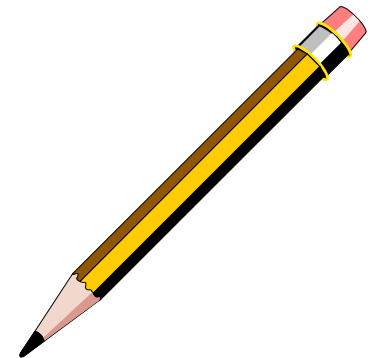
St Thomas's Hospital

Is that right?

¹ ☐ Yes

² ☐ No → **If No, go to #25 on page 3**

Please think of this provider as you answer the survey.



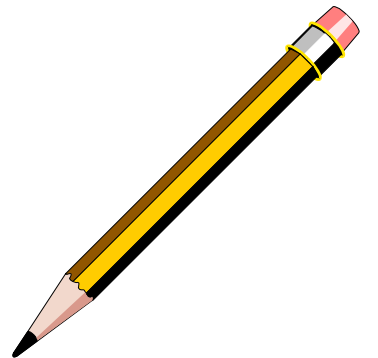
Please answer question 2 as your 'person'

If your person would have skipped to #25, please ignore

2. Is this the provider you usually talk to if you need a check-up, want advice about a health problem, or get sick or hurt?

¹ ☐ Yes

² ☐ No



Compare thoughts on the questions

Expert review

1. Visits with a health care provider can be **in person, by phone, or by video.**

Our records show that you had a recent visit with the provider named below.

St Thomas's Hospital

Is that right?

¹ ☐ Yes

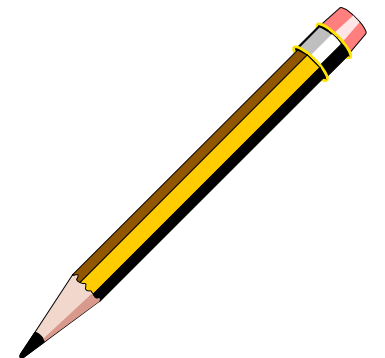
² ☐ No → **If No, go to #25 on page 3**

Please think of this provider as you answer the survey.

2. Is this the provider you usually talk to if you need a check-up, want advice about a health problem, or get sick or hurt?

¹ ☐ Yes

² ☐ No



Much better: Do usability testing on your questionnaire

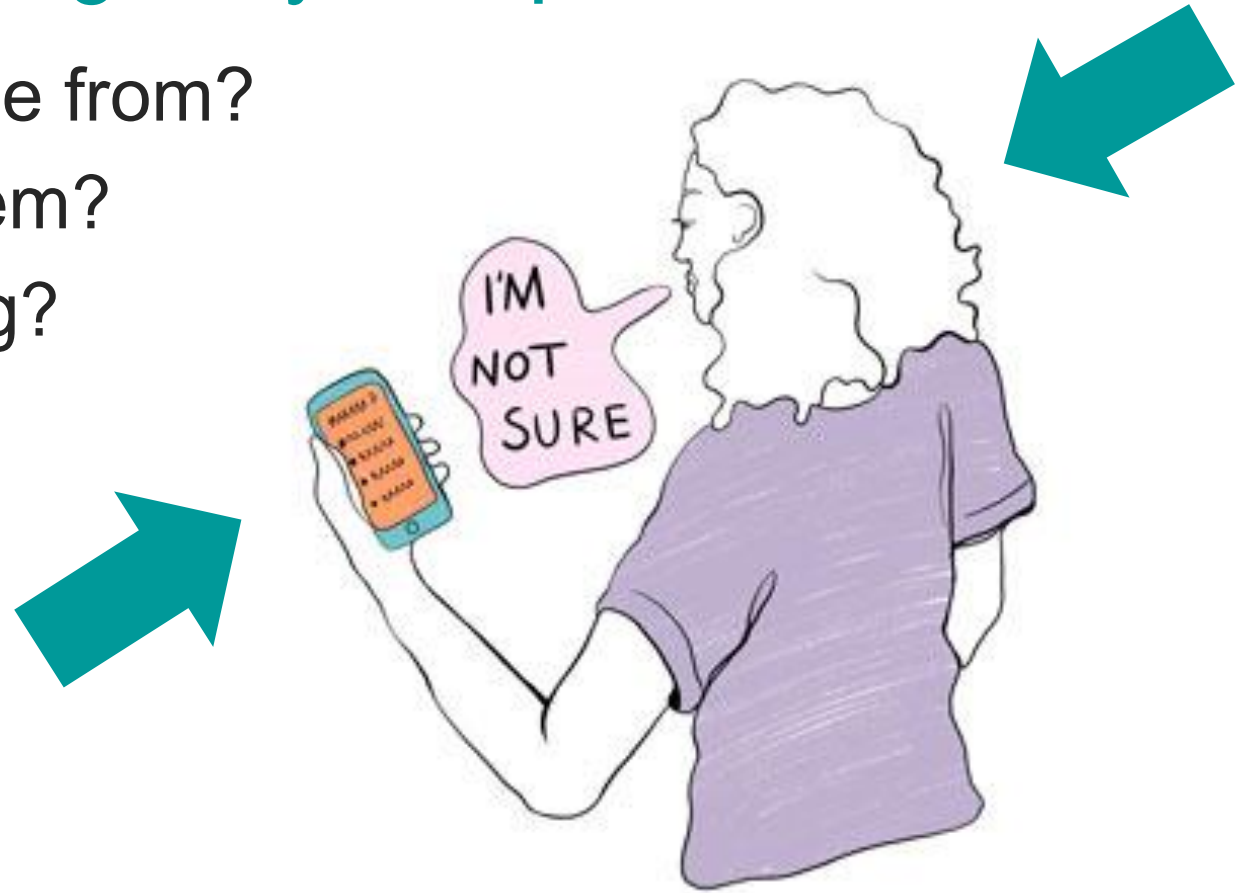
Get someone to answer your questionnaire while you watch



Even better: Do cognitive interviewing on your questions

Where did 'I'm not sure' come from?

- Was it an interaction problem?
- What is this person thinking?



How I think about surveys

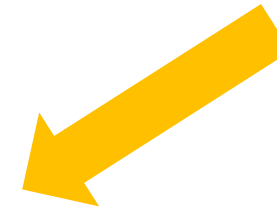
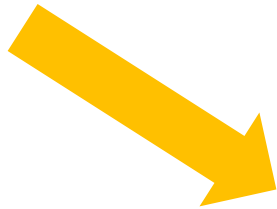
My definition focuses on process and decisions

The survey is a
process
of **asking questions**
that are answered by
(a sample of) a defined group of **people**
to get **numbers**
that you can use to **make decisions**

Start with “why” and “who”, end with the number

Why you want ask

Who you want to ask



The survey is a
process for getting
answers to questions



The number

Let's look a bit more into “why”

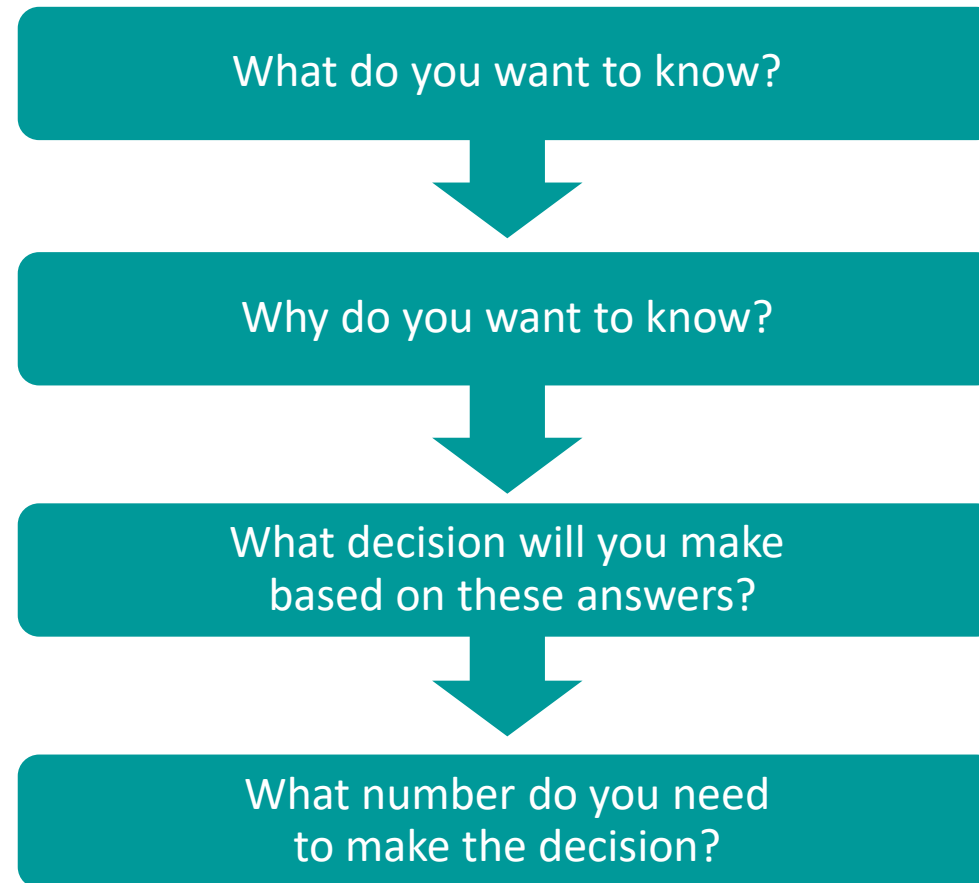
Why you want ask

Who you want to ask

The Survey

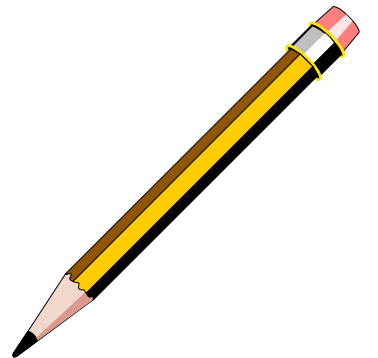
The number

I use these challenges to help with “why”



Let's try an example from hospital planning

- What do you want to know? *“ Can patients get the appointment they want?”*
- Why do you want to know? *“ To help plan capacity”*
- What decision will you make based on these answers? *????*
- What number do you need to make the decision? *????*
please type suggestions in the chat



If you don't need a number, try something else

Observe		Why? qualitative	How many? quantitative
		Usability test Field study	Analytics A/B test
Ask		Interview	Survey

Takeaway

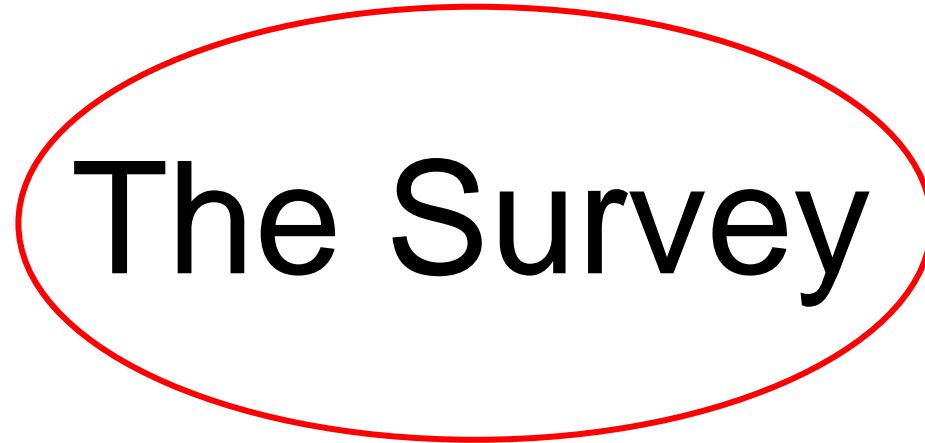
A survey is a quantitative method

If you don't need to get a number as the result then it's probably best to switch to a qualitative method such as interviews or usability testing

There's a lot to think about in the survey itself

Why you want ask

Who you want to ask

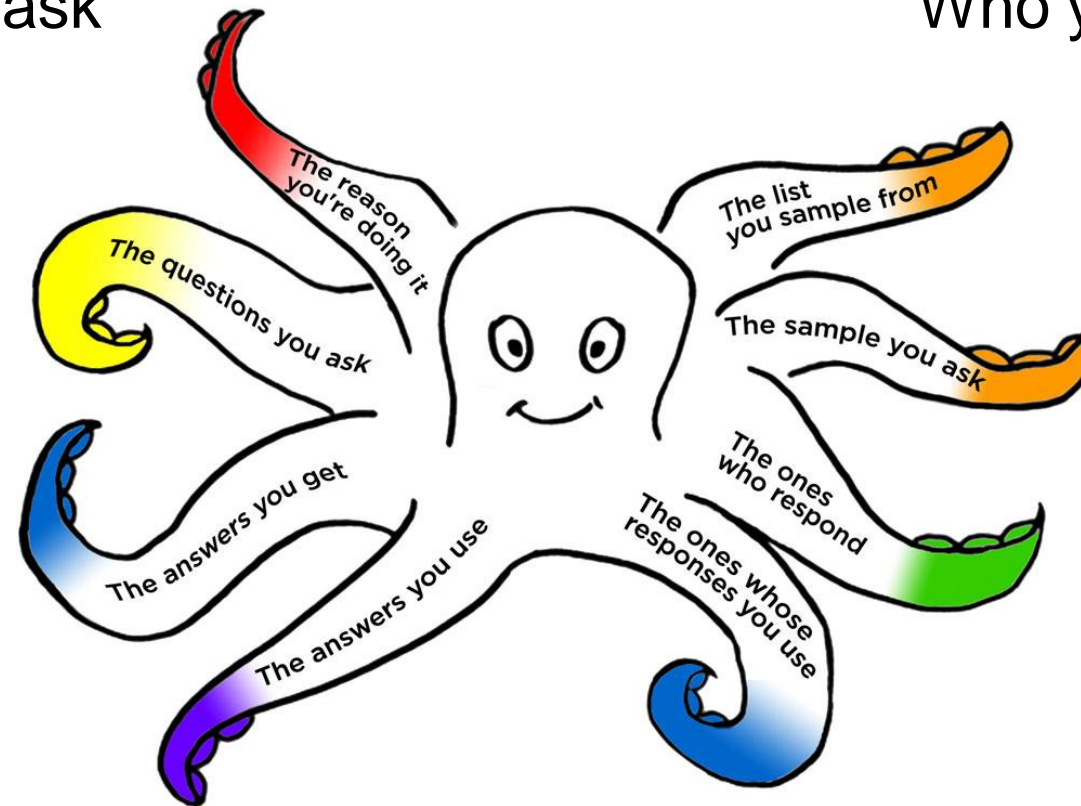


The number

I made a Survey Octopus of the topics

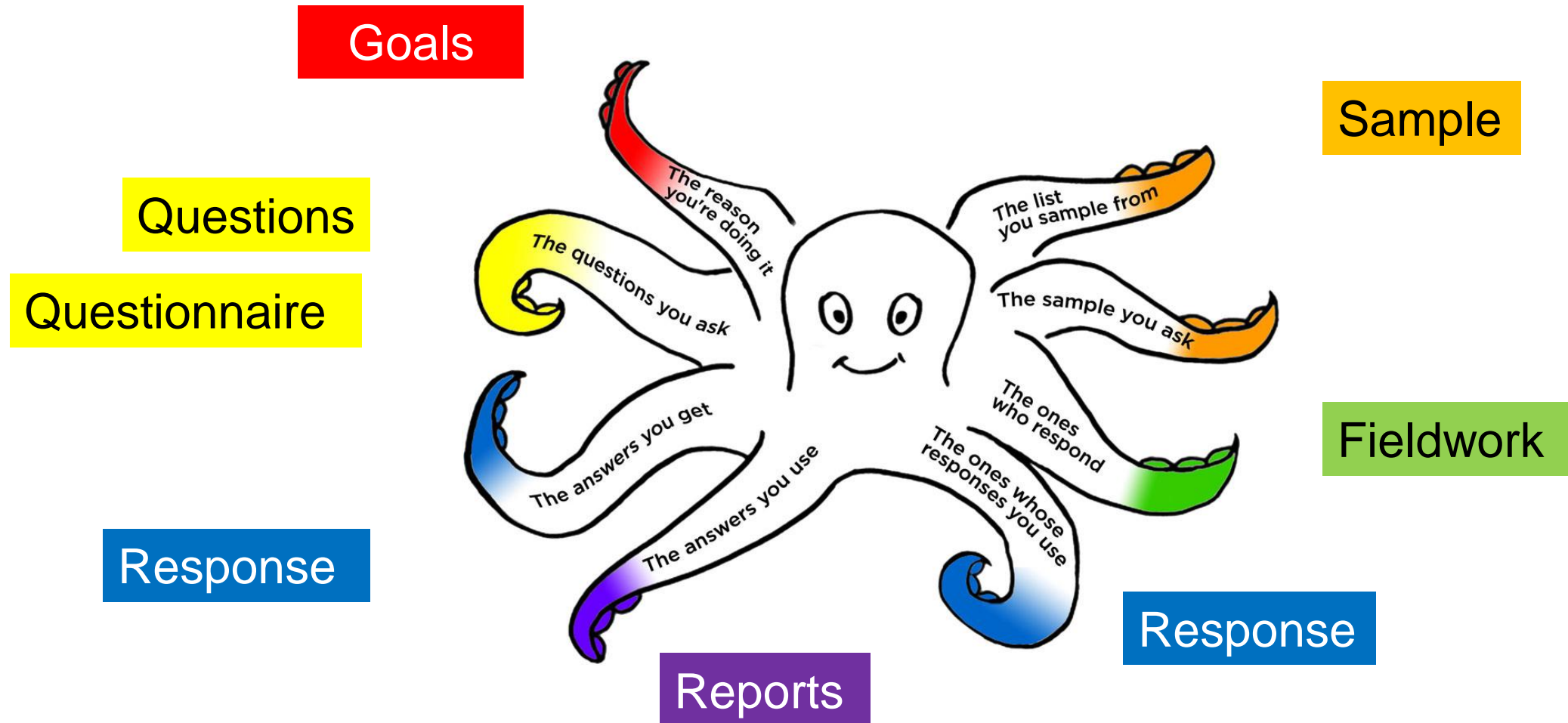
Why you want ask

Who you want to ask

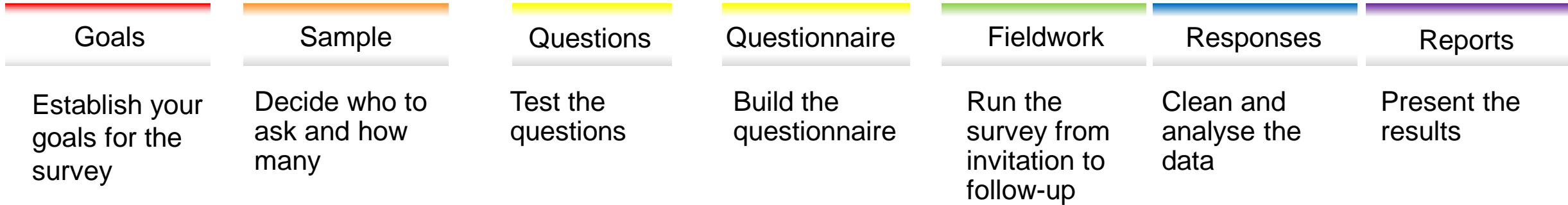


The number

My process works through from goals to reports

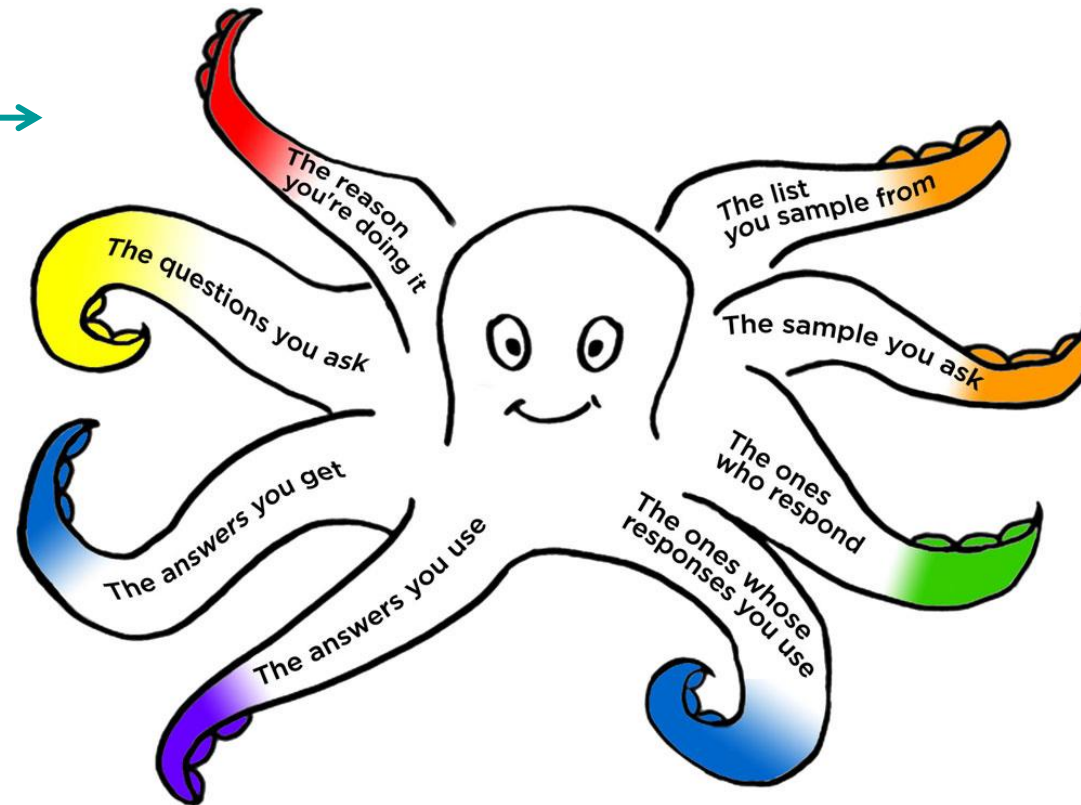


Here is my process in stages



The questions must align with the reasons

(Lack of)
validity

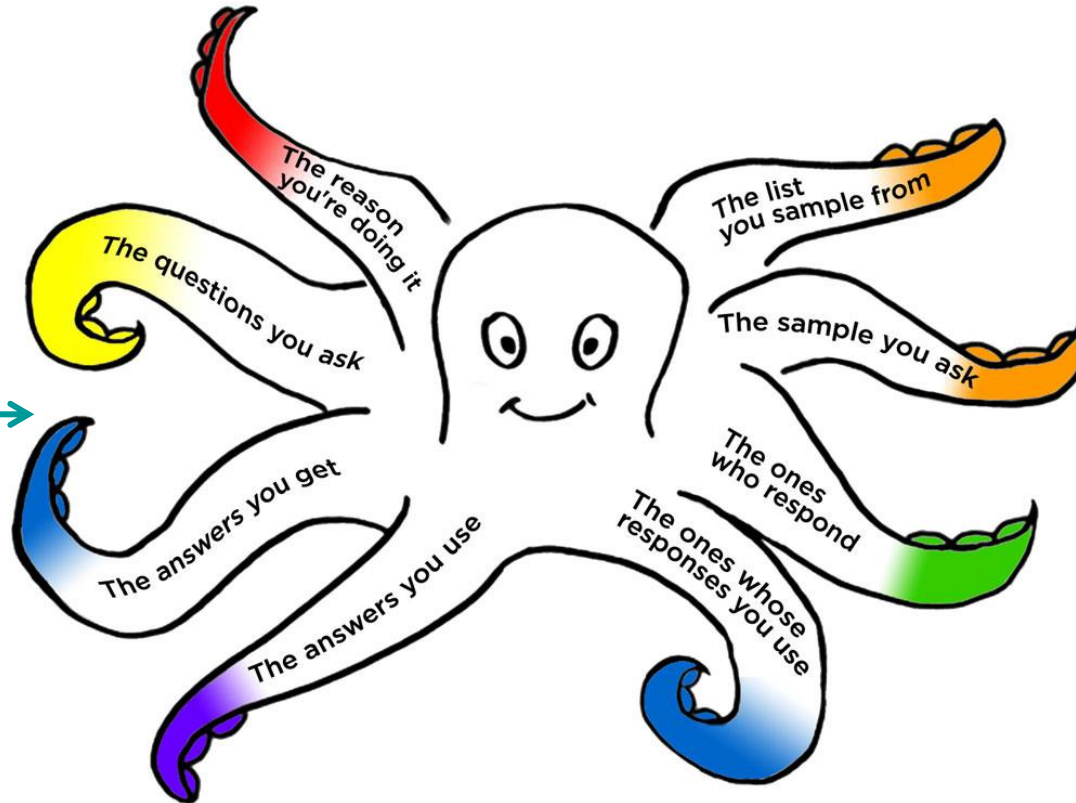


Measurement error happens with questions that are not answered accurately

Why you want ask

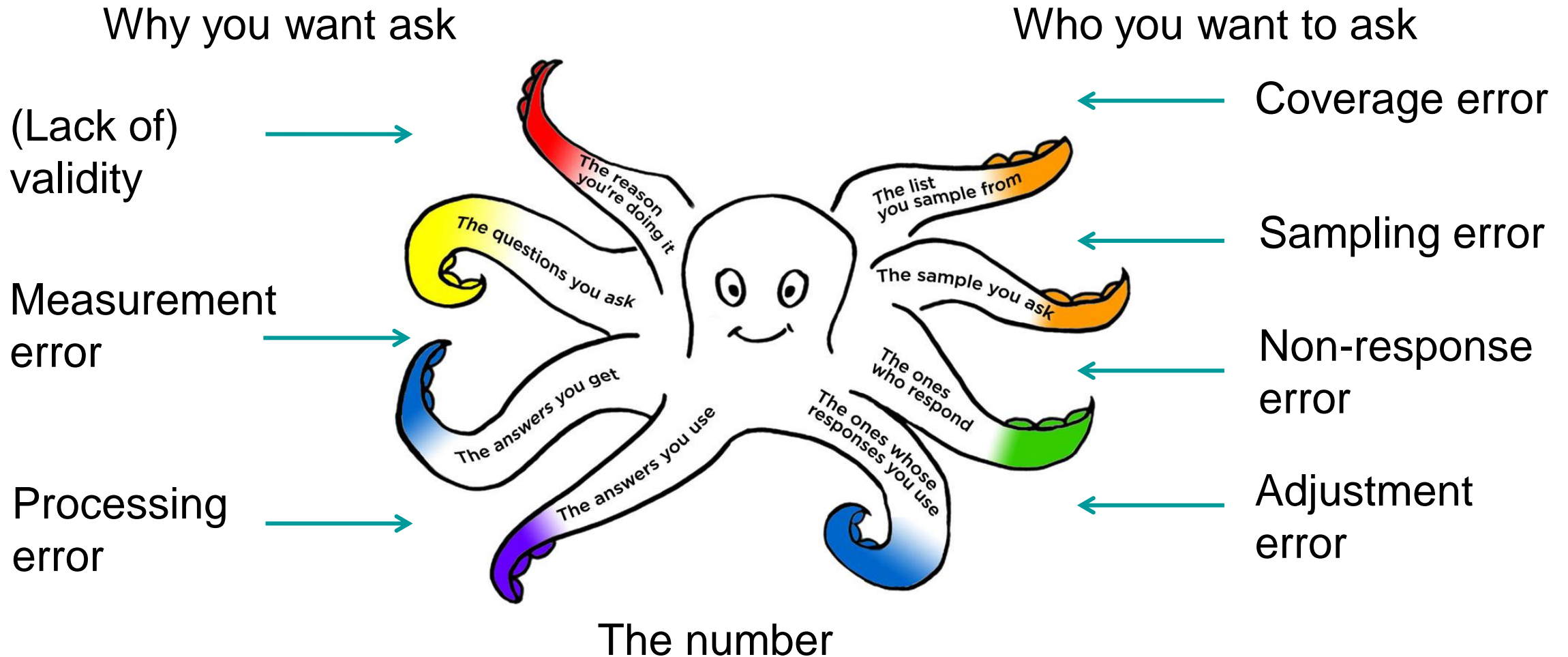
Who you want to ask

Measurement
error

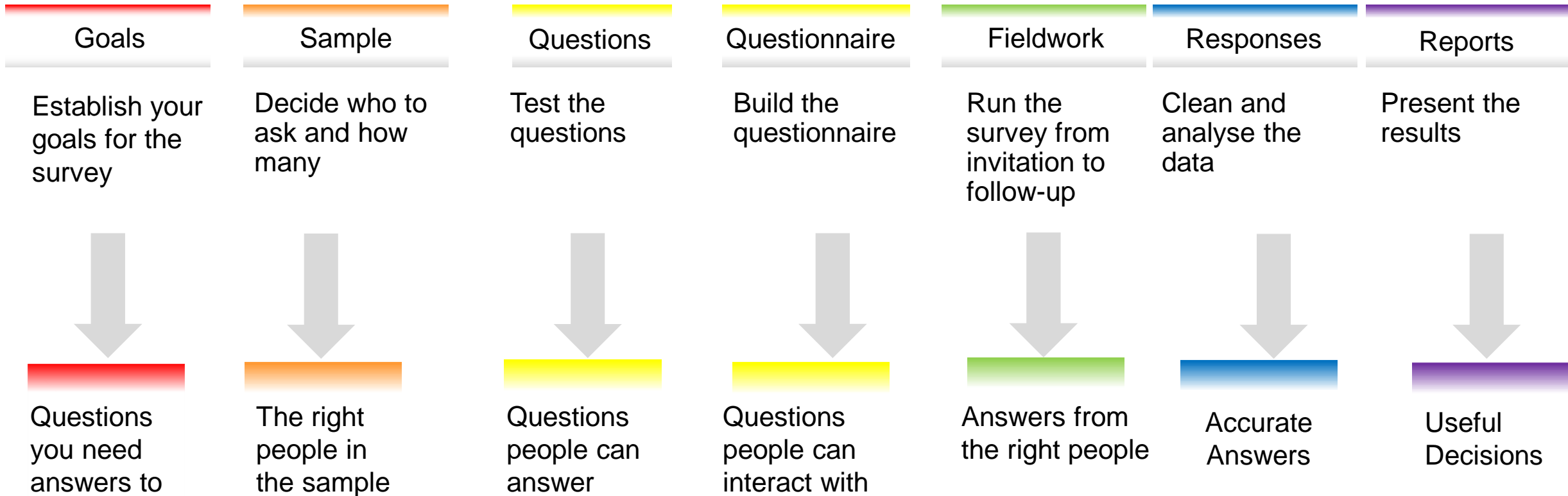


The number

There are errors all around the Survey Octopus



You get a better survey by doing many things well



Takeaway

Your aim with a survey is to make choices that keep Total Survey Error as low as practical, overall

How to rate satisfaction

I see a lot of questions
like this one

Section 2: The application process

Q4 How satisfied are you with the application process, on a scale from 0 to 10 where '0' means 'not at all satisfied' and 10 means 'completely satisfied'?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10

A Likert scale has several Likert items

Likert scale

Statement

System Usability Scale

© Digital Equipment Corporation, 1986.

	Strongly disagree					Strongly agree
1. I think that I would like to use this system frequently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	2	3	4	5	
2. I found the system unnecessarily complex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	2	3	4	5	
3. I thought the system was easy to use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	2	3	4	5	
4. I think that I would need the support of a technical person to be able to use this system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	2	3	4	5	
5. I found the various functions in this system were well integrated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	2	3	4	5	
6. I thought there was too much inconsistency in this system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	2	3	4	5	
7. I would imagine that most people would learn to use this system very quickly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	2	3	4	5	
8. I found the system very cumbersome to use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	2	3	4	5	
9. I felt very confident using the system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	2	3	4	5	
10. I needed to learn a lot of things before I could get going with this system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1	2	3	4	5	

Likert item

Response points

Likert had three formats in his scales

1. Do you favor the early entrance of the United States into the League of Nations?

YES	?	NO
(4)	(3)	(2)

13. How much military training should we have?

- | | |
|--|-----|
| (a) We need universal compulsory military training. | (1) |
| (b) We need Citizens Military Training Camps and Reserve Officers Training Corps, but not universal military training. | (2) |
| (c) We need some facilities for training reserve officers but not as much as at present. | (3) |
| (d) We need only such military training as is required to maintain our regular army. | (4) |
| (e) All military training should be abolished. | (5) |

17. The United States, whether a member or not, should co-operate fully in the humanitarian and economic programs of the League of Nations.

Strongly Approve	Approve	Undecided	Disapprove	Strongly Disapprove
(5)	(4)	(3)	(2)	(1)

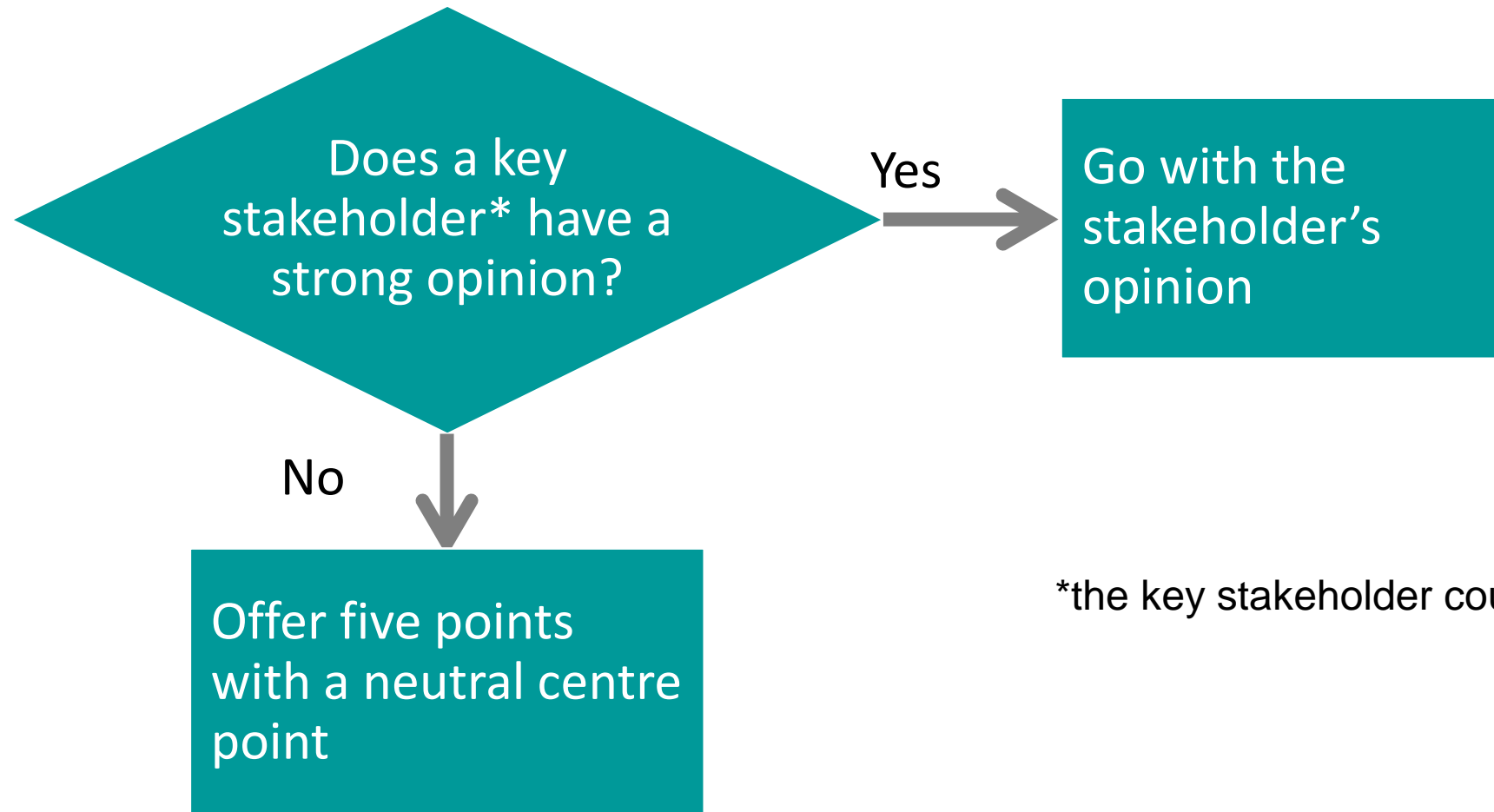
You can find an academic paper to support almost any number of response points

- Krosnick and Presser refer to about 87 papers on response points

The image displays several examples of questionnaire scales and formats:

- Top Left:** A 7-point Likert scale for satisfaction with easyJet, ranging from "Completely satisfied" to "Completely dissatisfied".
- Top Right:** A 7-point semantic differential scale for satisfaction with Hayward Dining Room, ranging from "Strongly Agree" to "Not Applicable".
- Middle Left:** A True/False scale for two statements: "I usually get what I want in life." and "I need to be kept informed about news events."
- Middle Right:** A comparison scale asking how experience at John Lewis compares to other retailers (Supermarket, Other local store/independent retailer), ranging from "John Lewis is WORSE" to "John Lewis is BETTER".
- Bottom Left:** A multi-item scale with radio button options: "Strongly agree", "Agree", "Disagree", and "Strongly disagree".
- Bottom Center:** A 4-point semantic differential scale ranging from "Very Unimportant" to "Very Important".
- Bottom Right:** A 10-point scale for rating how well the site is organized, ranging from "1=Poor" to "Excellent=10", with a "Don't Know" option.

I have a flowchart to help you to decide



*the key stakeholder could be you

Let's have another look at a Likert question

1. Do you favor the early entrance of the United States into the League
of Nations?

YES	?	NO
(4)	(3)	(2)

Do you favour the early entrance of the
United States into the League of Nations?

Type YES, ?, or NO in the chat



Takeaway

In a Likert item, the statement matters a lot more than the number of points

Is 'satisfaction' the only relevant emotion?

Section 2: The application process

Q4 How satisfied are you with the application process, on a scale from 0 to 10 where '0' means 'not at all satisfied' and 10 means 'completely satisfied'?

Let's try a thought-experiment



Satisfaction is a complex matter

Compared experience to what?	Resulting thoughts
(nothing)	Indifference
Expectations	Better / worse / different
Needs	Met / not met / mixture
Excellence (the ideal product)	Good / poor quality (or 'good enough')
Fairness	Treated equitably / inequitably
Events that might have been	Vindication / regret

Consider other emotions and reactions

The Microsoft Product Reaction Cards have 118 adjectives

Accessible	Creative	Fast	Meaningful	Slow
Advanced	Customizable	Flexible	Motivating	Sophisticated
Annoying	Cutting edge	Fragile	Not Secure	Stable
Appealing	Dated	Fresh	Not Valuable	Sterile

I also see a lot of “recommend” questions

Would you recommend us to
a friend or family member?

“Recommend to friend/family” can be OK

A shop selling clothes

What do you want to know?	Whether they will recommend
Why do you want to know?	To compare numbers over time
What number do you need to make a decision?	Some good reasons (investigate and fix problems) Some bad ones (punish staff)

I did not want to “recommend” my hospital ward

	A shop selling clothes	A hospital ward
What do you want to know?	Whether they will recommend	????
Why do you want to know?	To compare numbers over time	Because someone said they had to ask
What number do you need to make a decision?	Some good reasons (investigate and fix problems) Some bad ones (punish staff)	???? What decision?

The new question rolled out in 2020

3 AT A GLANCE

3.1 What has changed

The new question

There is a new standard question for all settings:

“Overall, how was your experience of our service?”

The new question has a new response scale:

- ☐ Very good
- ☐ Good
- ☐ Neither good nor poor
- ☐ Poor
- ☐ Very poor
- ☐ Don't know

And new preceding text to make it clear which setting the feedback refers to, following the words: **“Thinking about”**, providers can choose the most appropriate of these options or use their own similar wording – this will help ensure the feedback collected is related to the right service:

- your GP practice...**
- your stay in the hospital...**
- your dental practice...**
- your recent visit to A&E...**
- this maternity service...**
- our antenatal service...**
- our labour ward...**
- our birthing unit...**
- our homebirth service...**
- our postnatal ward...**
- our postnatal community service...**

your recent appointment...

your recent visit...

our recent visit...

the service we provide...

Change to the placement of the question

If the mandatory question is being used as part of a larger local survey, it no longer needs to be the first question asked. It can be situated in the questionnaire wherever it makes most sense to the respondents.

Change to recommended free-text question

Providers are still required to include at least one free text question alongside the standard fixed question and can choose locally what question or questions to ask. We have carried out some testing as part of the project and, where providers do not have a local preference, we recommend the following two questions which, taken together, have been found to encourage good quality feedback:

Please can you tell us why you gave your answer?

Please tell us about anything that we could have done better

Changes to timing requirements

In all settings, patients should be able to use the FFT to give feedback when they want to.

In **general and acute inpatients** and **A&E** settings the previous requirement to collect feedback at discharge or within 48 hours has been removed. Patients should be able to give real-time feedback at any time, and they should be able to use the FFT to do this. This introduces the opportunity to give feedback during time spent in the setting; and allows longer to recover and reflect on the experience before giving feedback. Providers can still choose to do a proactive feedback collection if they want to; options to consider include asking in real time whilst the patient is still receiving care, asking at discharge or asking a few days or weeks after discharge. All of these options are valid, and all have considerations, which are discussed more fully in **section 7.5** When to collect feedback.

It's now three questions

1. Thinking about your recent visit to hospital. Overall, how was your experience of our service?

☐ Very good
☐ Good
☐ Neither good nor poor
☐ Poor
☐ Very poor
☐ Don't know

2. Please can you tell us why you gave your answer?

3. Please tell us about anything that we could have done better

Takeaway

It's hard to crush a complex experience into one question

Try the anti-problem to generate statements

Our initial Most Crucial Question was:

“Can patients get the appointment they want?”

Think of ways to make that as **hard** as possible



A true Likert Scale takes a lot of effort – part 1

Prepare and reduce statements

1. Collect candidate statements, looking for between 50 and 100
2. Choose a single topic for your Likert scale
3. Split up any double-barrelled statements
4. Check that the statements are opinions
5. Test that the statements use familiar words in familiar ways
6. Check that you have no more than 10 statements left
7. Check that your statements are positive

A true Likert Scale takes a lot of effort – part 2

Create and test the scale

8. Choose the number of response points
9. Decide on your method of scoring for your Likert items
10. Decide on how to calculate the overall Likert scale
11. Think about whether a rating response is appropriate
12. Test your Likert scale
13. Run the statistics on your Likert scale

Takeaway

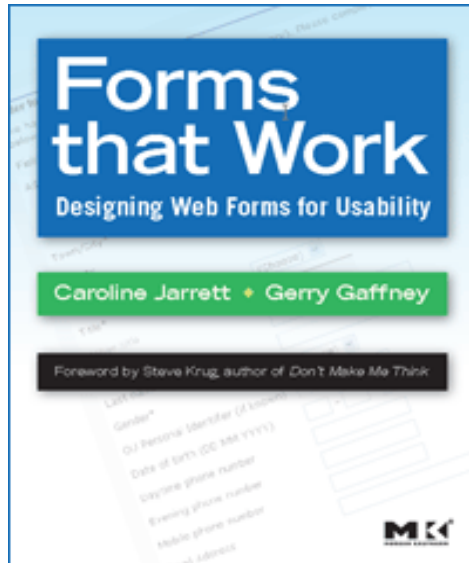
You can do one big survey with many questions, but it's probably better to do lots of little surveys

Caroline Jarrett

@cjforms

<https://www.effortmark.co.uk>

carolinej@effortmark.co.uk



SURVEYS THAT WORK

A Practical Guide for Designing Better Surveys

by **CAROLINE JARRETT**

Foreword by Steve Krug

 Rosenfeld