

Surveys that work

An introduction to using survey methods

Caroline Jarrett and Jane Matthews
@cjforms and @janematthews

2020 #surveysthatwork



Introductions

(We're Caroline Jarrett and Jane Matthews)

- Your name and role
- A random thing about yourself



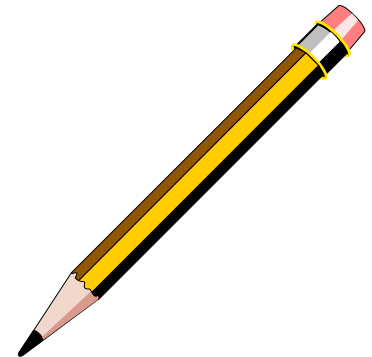
Let's find out about our experience

Fill in this questionnaire

1. How many surveys have you run?

NONE 1 to 5 6 to 10 more than 10

2. What is your top tip for a better survey, based on experience of writing or answering?



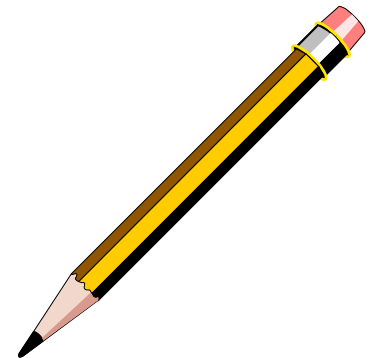
Now work in pairs

Try this as an interview

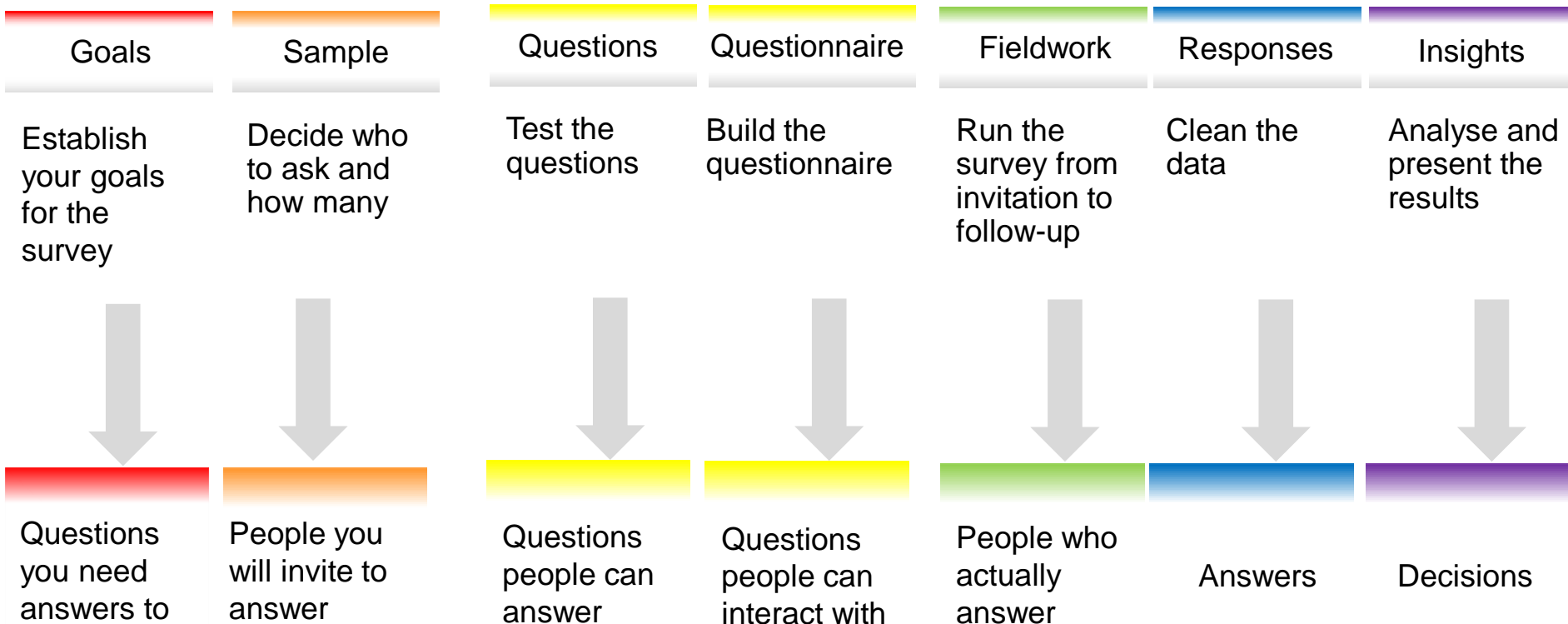
1. How many surveys have you run?

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The survey process



Agenda

Introductions

Goals

Sample

Break

Questions

Questionnaire

Lunch

Fieldwork

Break

Responses

Insights

Finish

The survey is a systematic method for gathering information from (a sample of) entities for the purpose of constructing quantitative descriptors of the attributes of the larger population of which the entities are members.

Groves, Robert M.; Fowler, Floyd J.; Couper, Mick P.; Lepkowski, James M.; Singer, Eleanor & Tourangeau, Roger (2004). *Survey methodology*. Hoboken, NJ: John Wiley & Sons.

The survey is a
process
for **getting answers to questions** from
(a sample of) entities
for the purpose of
constructing quantitative descriptors
of the attributes of the larger population
of which the entities are members.

The survey is a
process
for getting answers to questions from
(a sample of) people
for the purpose of
constructing quantitative descriptors
of the attributes of the larger population
of which the entities are members.

The survey is a
process
for getting answers to questions from
(a sample of) people
for the purpose of
getting numbers
of the attributes of the larger population
of which the entities are members.

The survey is a
process
for getting answers to questions from
(a sample of) people
for the purpose of
getting numbers
that you can use to make decisions

To make decisions

People

The survey is a
process for getting
answers to questions

getting numbers

The aim of a survey is to get a number that helps you to make a decision

What you want to ask about

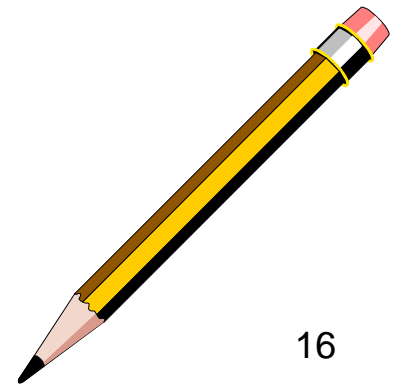
Who you want to ask

Survey

The number

Is this a survey or something else?

- Review these questions
- Decide whether they are a survey or something else



The aim of a survey is to get a number that helps you to make a decision

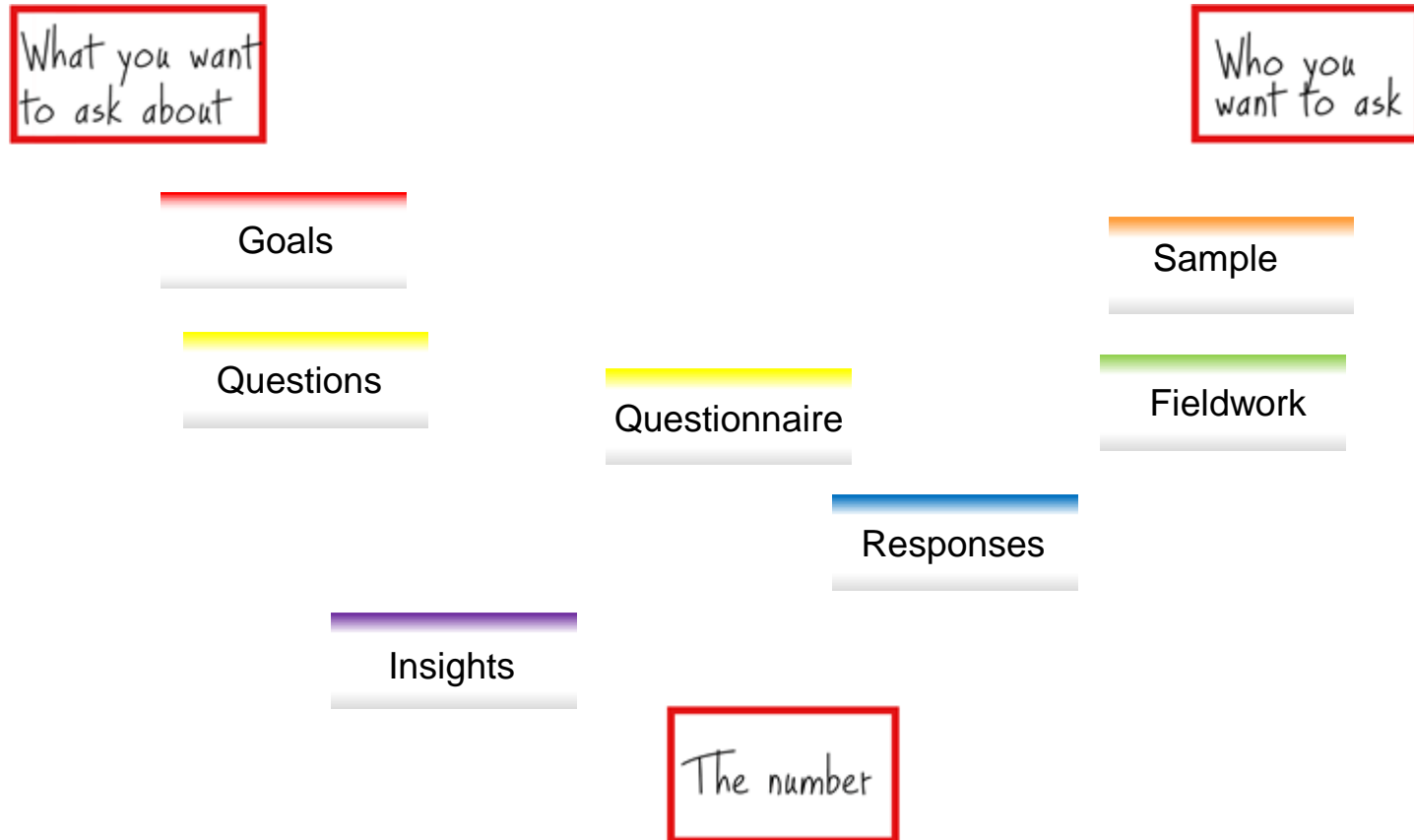
What you want to ask about

Who you want to ask

Survey

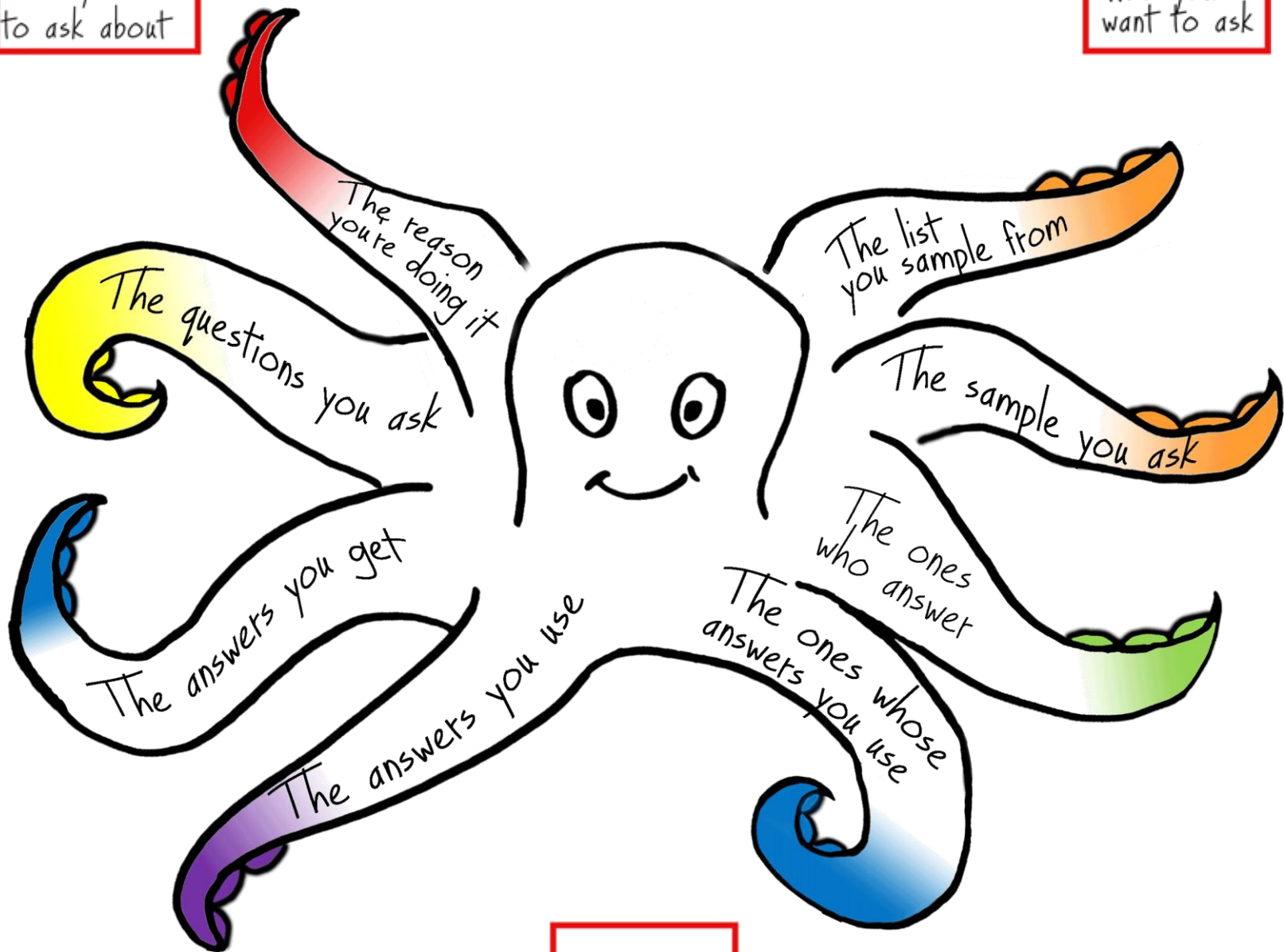
The number

The aim of a survey is to get a number that helps you to make a decision



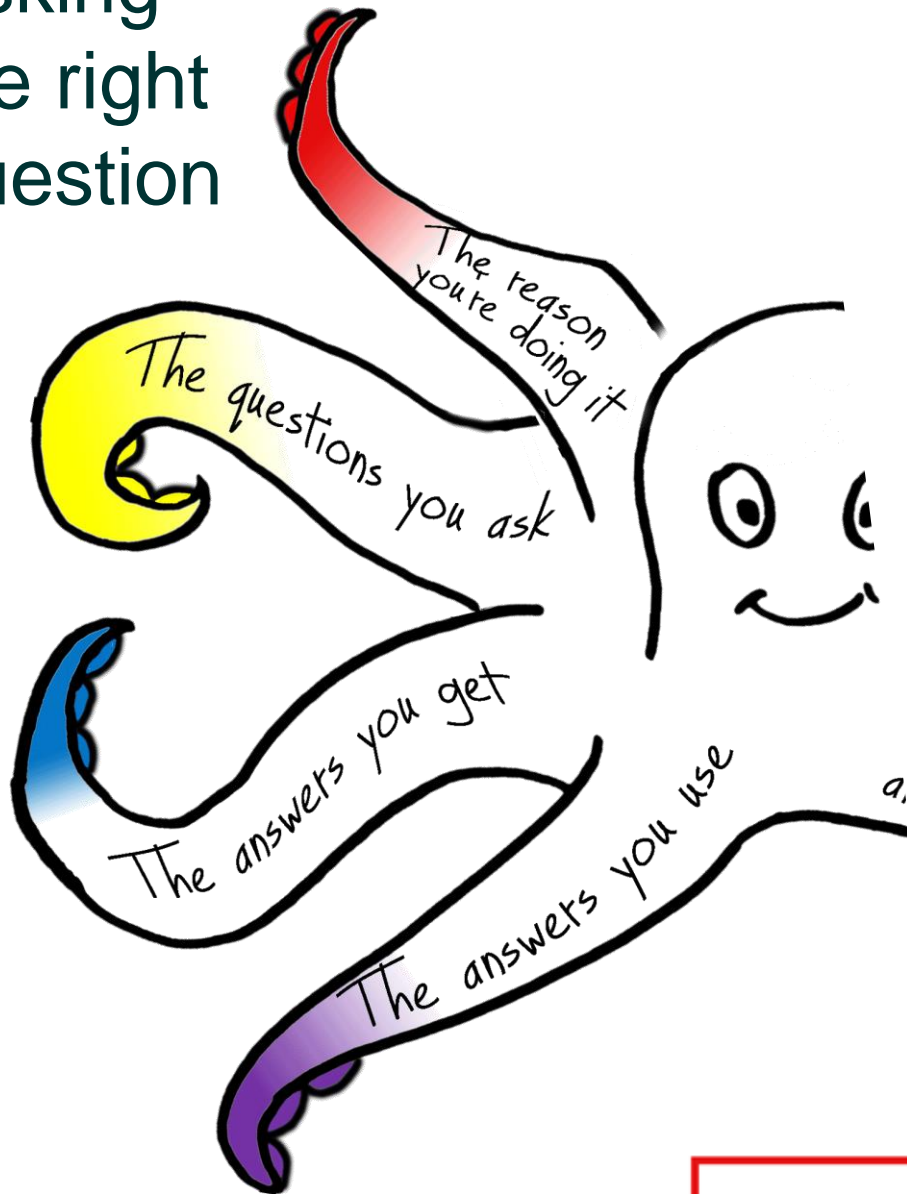
What you want to ask about

Who you want to ask



The number

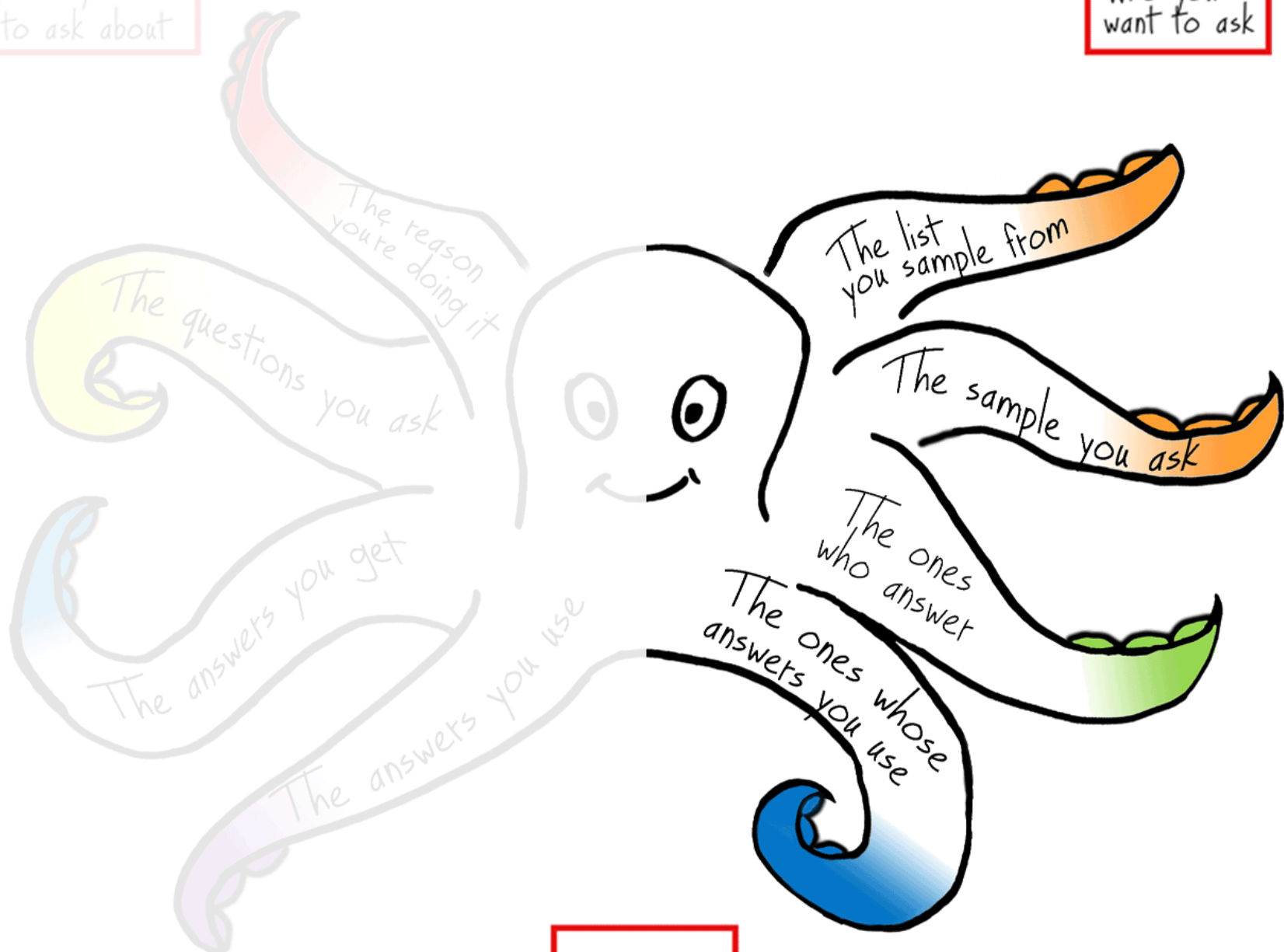
Asking the right question



The number

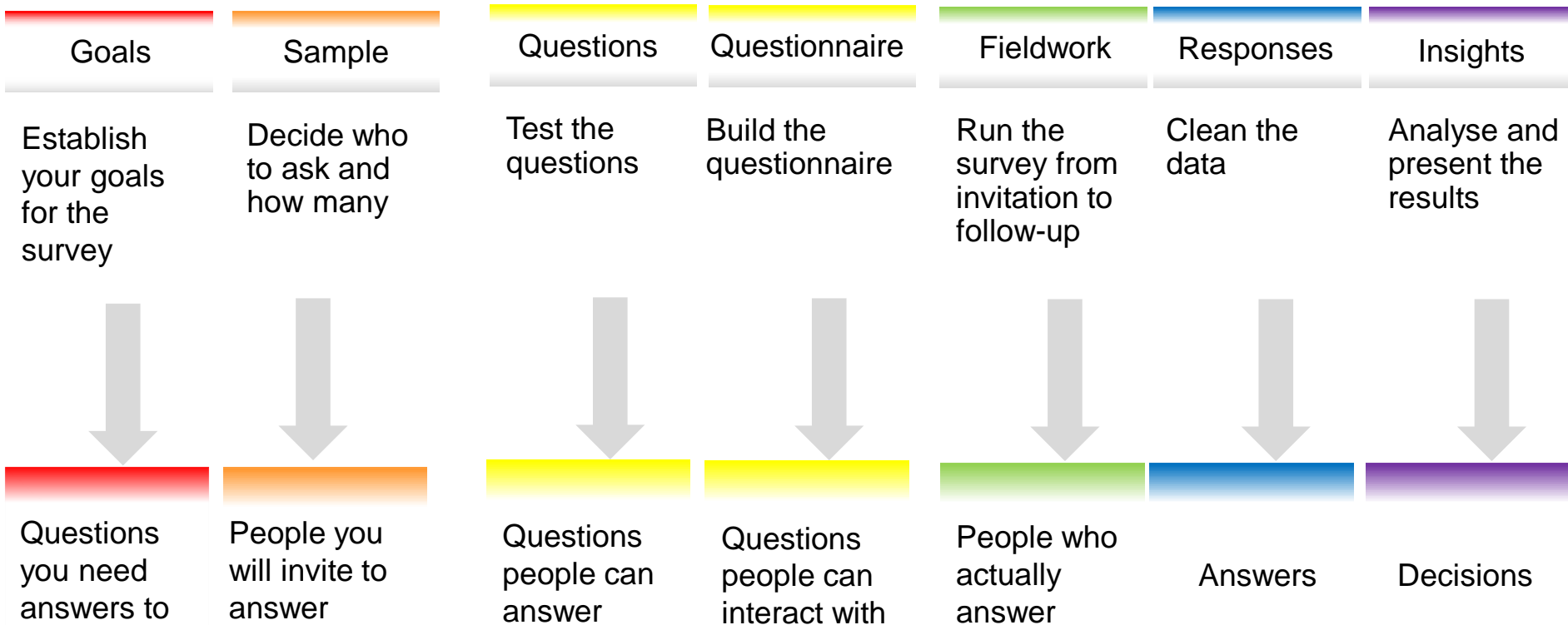
What you want to ask about

Who you want to ask



The number

The survey process



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The survey process

Goals

Establish
your goals
for the
survey



Questions
you need
answers to

Establish your goals for the survey

What do you want to know?



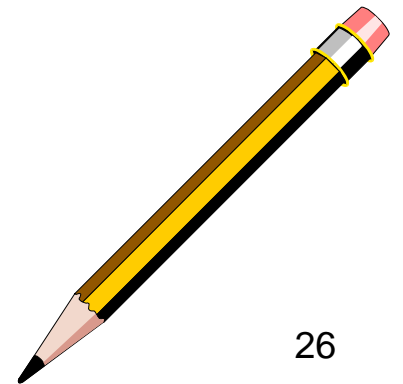
Why do you want to know?



What decisions will you make based on these answers?

An example

- What do you think the decision will be for each question?





1950s mindset: “Ask Everything”

Survey =
Big Honkin' Survey



2020 mindset: the Light Touch survey

- Choose ONE question
- Find ONE person
- Ask the question, face-to-face
- See if you can make ONE decision
- Improve, iterate, increase



This one-box survey asks one open question

Goals

The screenshot shows the Suttons Seeds website interface. At the top left is the Suttons Seeds logo with contact information: 0844 922 2899 (Customer Services) and 0844 922 0606 (Orders only). A search bar is located in the top center. On the top right, there are links for 'Sign In / Register' and 'My Account', along with a shopping cart summary: '1 item £1.45' and a 'View Basket' button. A navigation menu below the search bar includes links for Home, Vegetables, Flowers, Garden Equipment, Fruit, Perennial Plants, Special Offers, and Garden Advice and Help. The main content area displays the 'Brussels Sprout Continuity Collection' product page, featuring a large image of Brussels sprouts, the product code 216121, and a harvest period of October-February. A 'Pack of 18 Plug Plants (6 of each variety)' is shown with a quantity of 1 and a price of £6.99. An 'Add to Basket' button is visible. A survey pop-up titled 'Help us improve' is overlaid on the page, asking for user feedback. The pop-up contains a text input field and a 'SUBMIT' button. The page number '30' is visible in the bottom right corner.

SUTTONS SEEDS
Est. 1806

0844 922 2899
(Customer Services)
8.30am to 5pm, Mon to Fri

0844 922 0606
(Orders only)
24hrs a day, 7 days a week

Plant Despatch Schedule

Sign In / Register | My Account

1 item **£1.45**
View Basket

Enter Search Here **Go**

Home | Vegetables | Flowers | Garden Equipment | Fruit | Perennial Plants | Special Offers | Garden Advice and Help

Home » Gardening » Vegetables » New Vegetables for 2012 » Brussels Sprout Continuity Collection

Brussels Sprout Continuity Collection

Code: 216121

Harvest October-February

Collection contains 18 plants (6 of each variety): **Nautic** (a vigorous, high-yielding early variety with good standing)

Pack of 18 Plug Plants (6 of each variety)

Quantity: - 1 +

Add to Basket **£6.99**

Add to wish list

to grow your own. Even the smallest patio or that will give you a bumper crop of delicious fresh

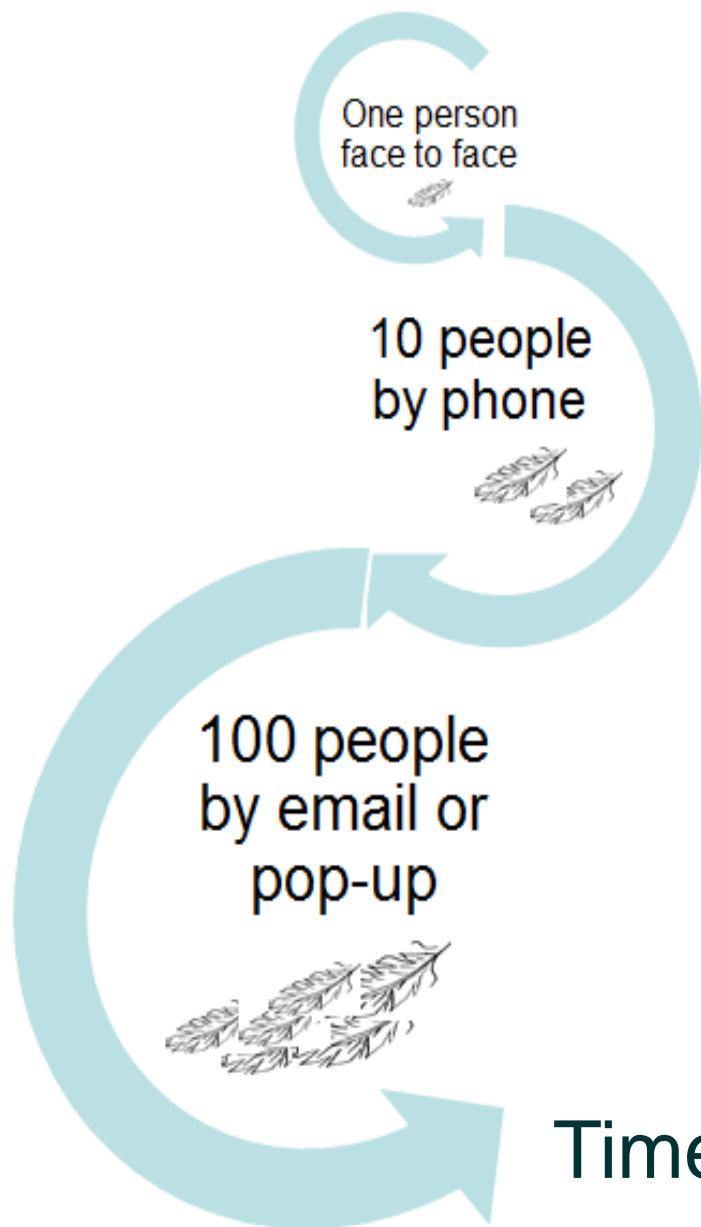
30

Help us improve

We value your opinion.
What do you like about our site and what can we improve on?

Click here to type...

SUBMIT



One way to
iterate,
improve,
increase

Time for new question

What's the Most Crucial Question?

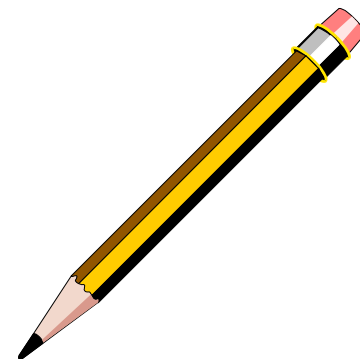
- We want to ask the fewest questions that will help us to make the decision so we need to know which are the most useful questions
- Even better: know the specific Most Crucial Question
- A Most Crucial Question has a numeric answer

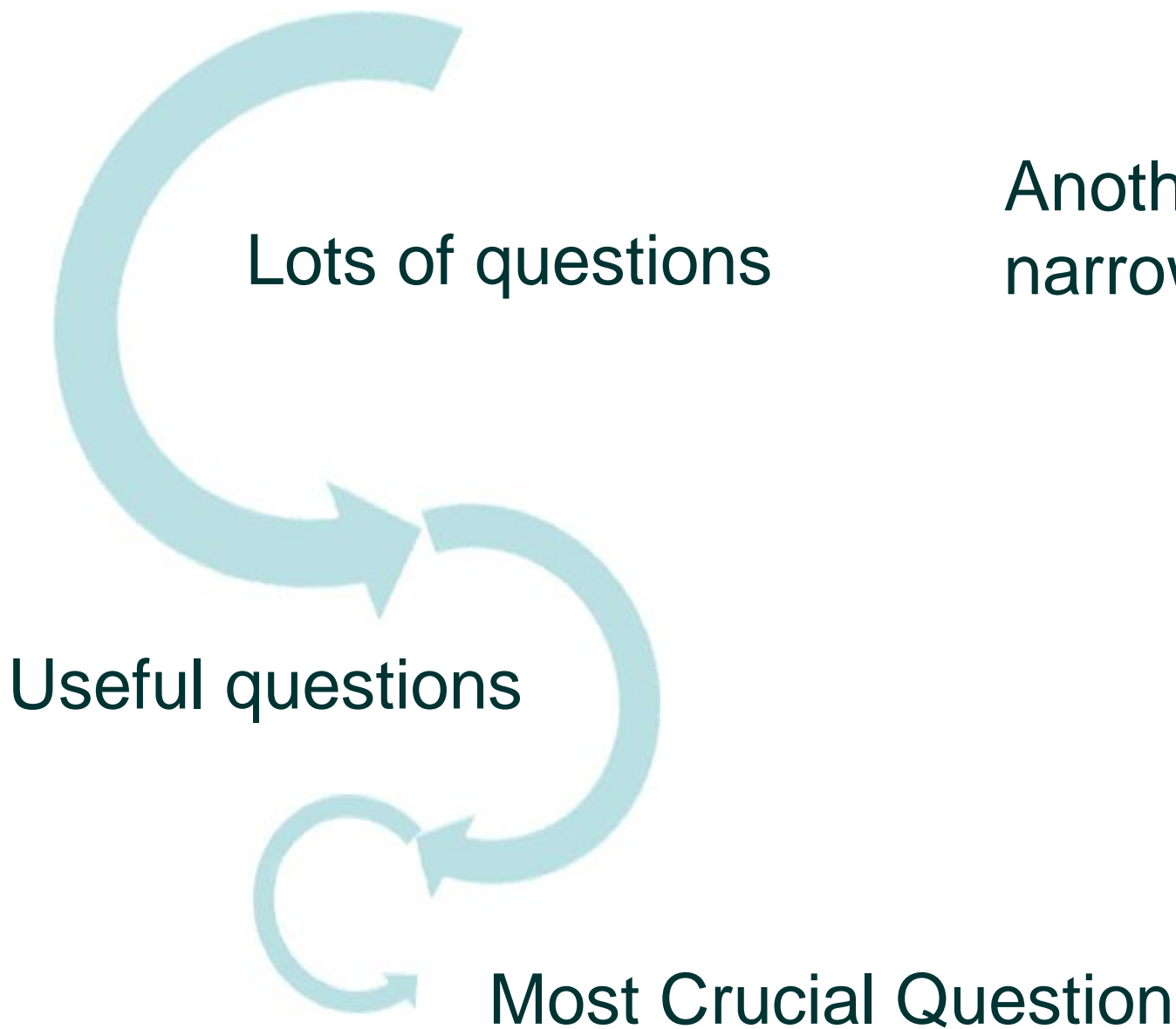


What's the Most Crucial Question?

Look through the questions in this survey

What is the Most Crucial Question?





Another way:
narrow down

Talk to users about the topics in your survey

- Who are they?
- How will you find them?
- Do they want to answer your questions?
- Do they understand your questions?



The survey process

Goals

Establish your goals for the survey



Questions you need answers to

Sample

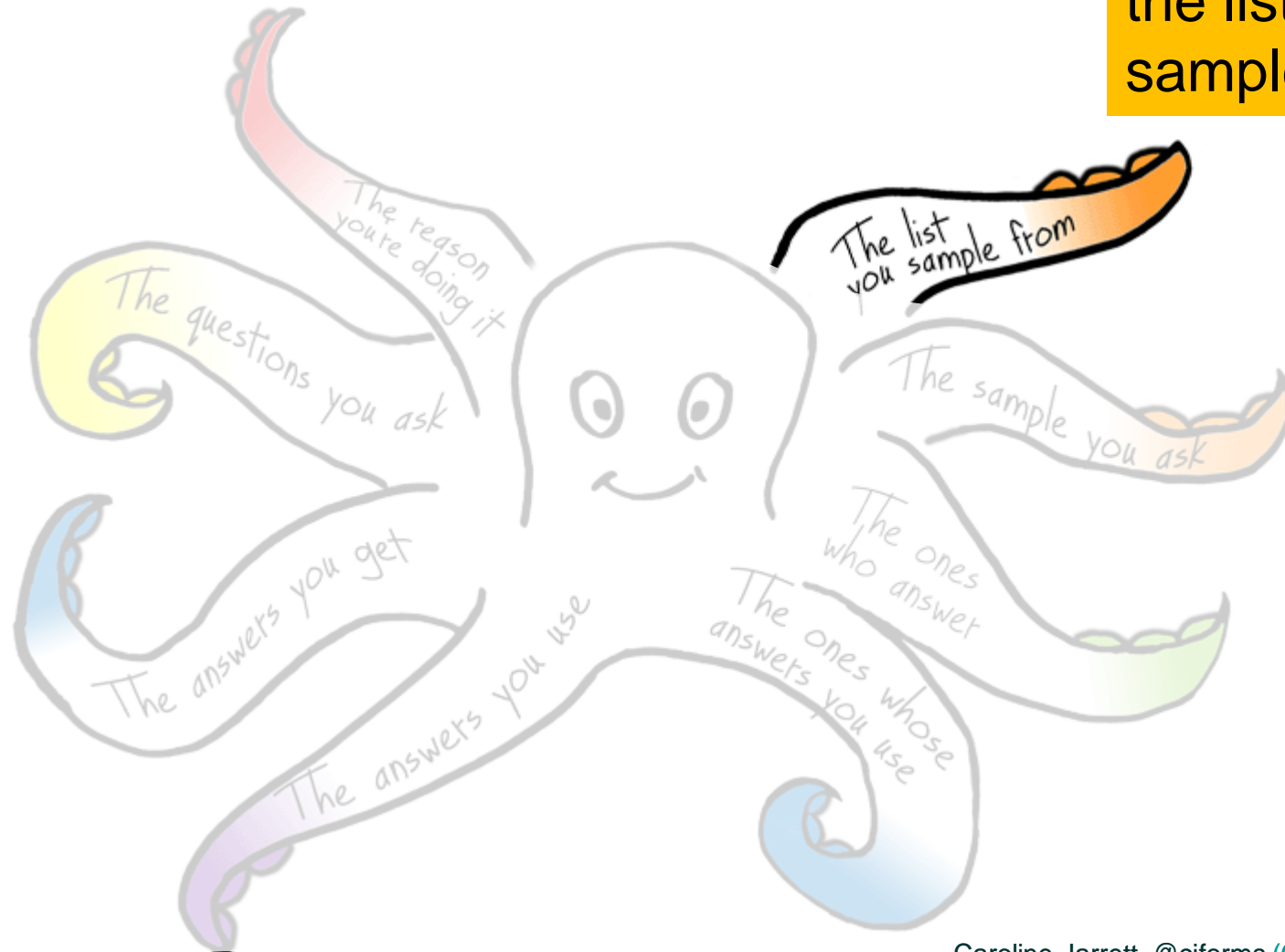
Decide who to ask and how many



People you will invite to answer

Asking the right people is better than asking lots of people

Sample:
the list you
sample from



Choose a good list



Coverage error:
Mismatch between the people you
want to ask and the list you
choose to sample from

Prank leaves Justin Bieber facing tour of North Korea

By Daniel Emery

Technology reporter, BBC News

Canadian singer Justin Bieber's has become the target of a viral campaign to send him to North Korea.

A website polled users as to which country he should tour next, with no restrictions on the nations that could be voted on.

There are now almost half a million votes to send the singer to the secretive communist nation.

The contest, which ends at 0600 on 7 July, saw North Korea move from 24th to 1st place in less than two days.

Many of the votes are thought to originate from imageboard website 4chan, which has built a reputation for triggering online viral campaigns.




It is highly unlikely Bieber would be given permission to enter North Korea

Related Stories

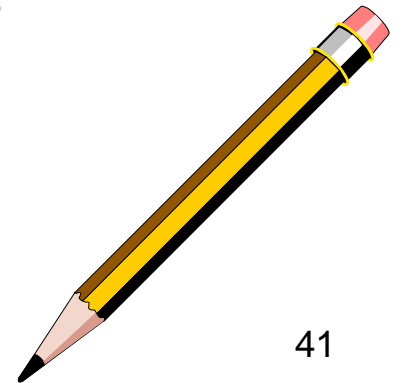
<http://www.bbc.com/news/10506482>

Difference between response, response rate and representativeness

Concept	Definition	Example
Response	Number of answers	5,000
Response rate	Response divided by the number of invitations	10%
Representativeness	Whether respondents you get are typical of the users you want	

Did we get answers from the right people?

Is this sample representative?

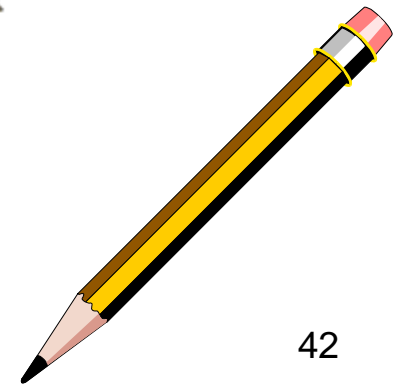


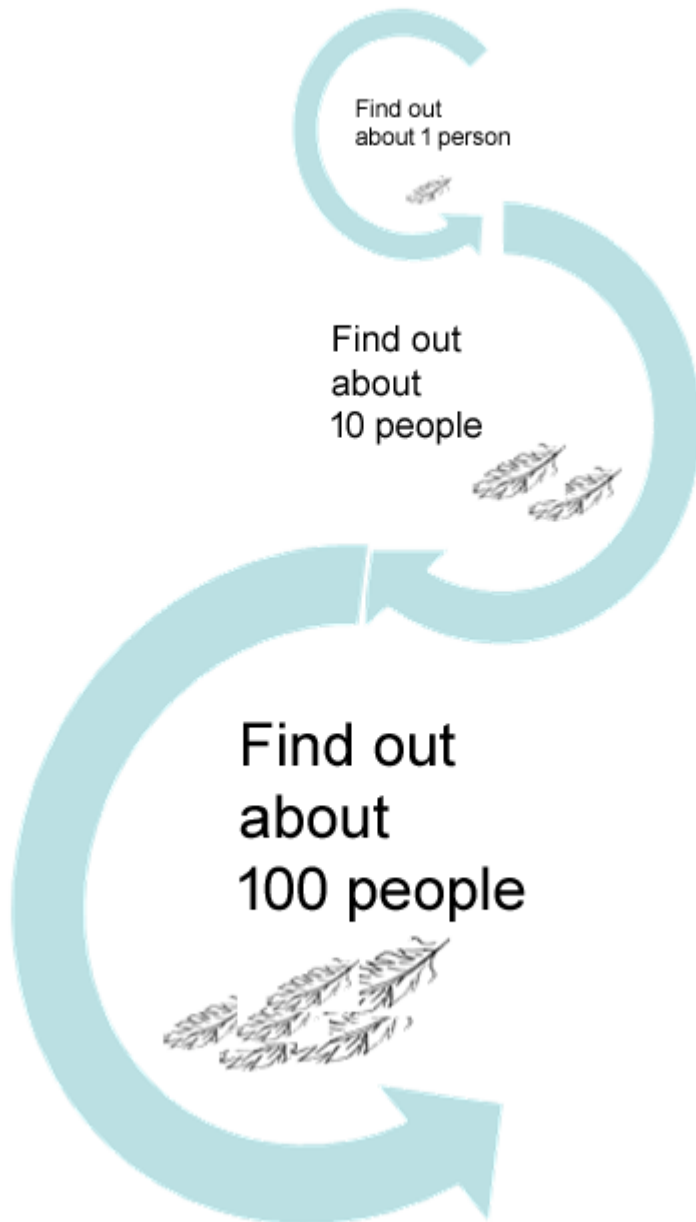
Check the representativeness of your sample

Population of assorted birds



Is this sample representative?





Iterate,
improve,
increase

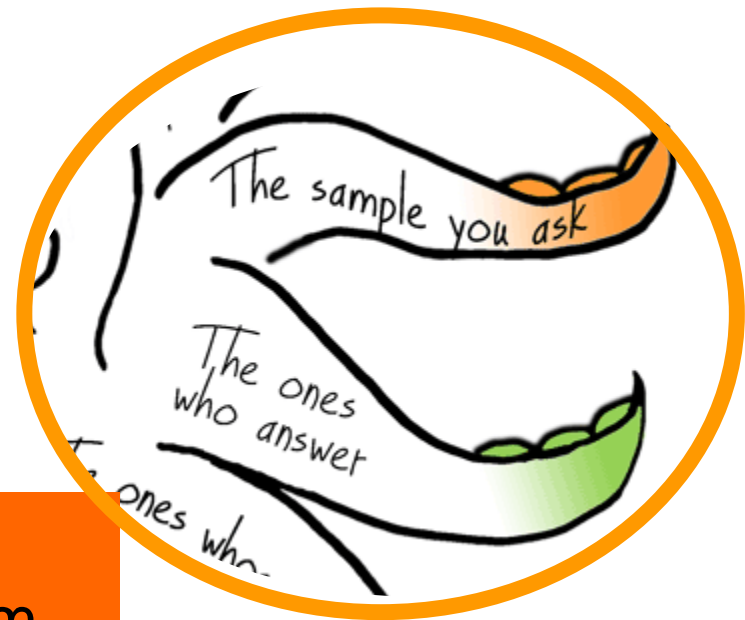
to understand
the people you
want to ask

Decide how to target the correct people

- Iterate down from a list
 - Public list
 - Private list
- Try a 'snowball'
 - Send and hope
 - Use contacts
- Catch them in the moment



Non-response error is the one that hurts

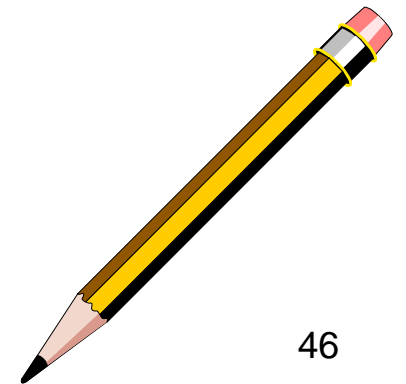


Non-response error:
The ones who answer differ from the ones who don't answer in a way that affects the survey statistic

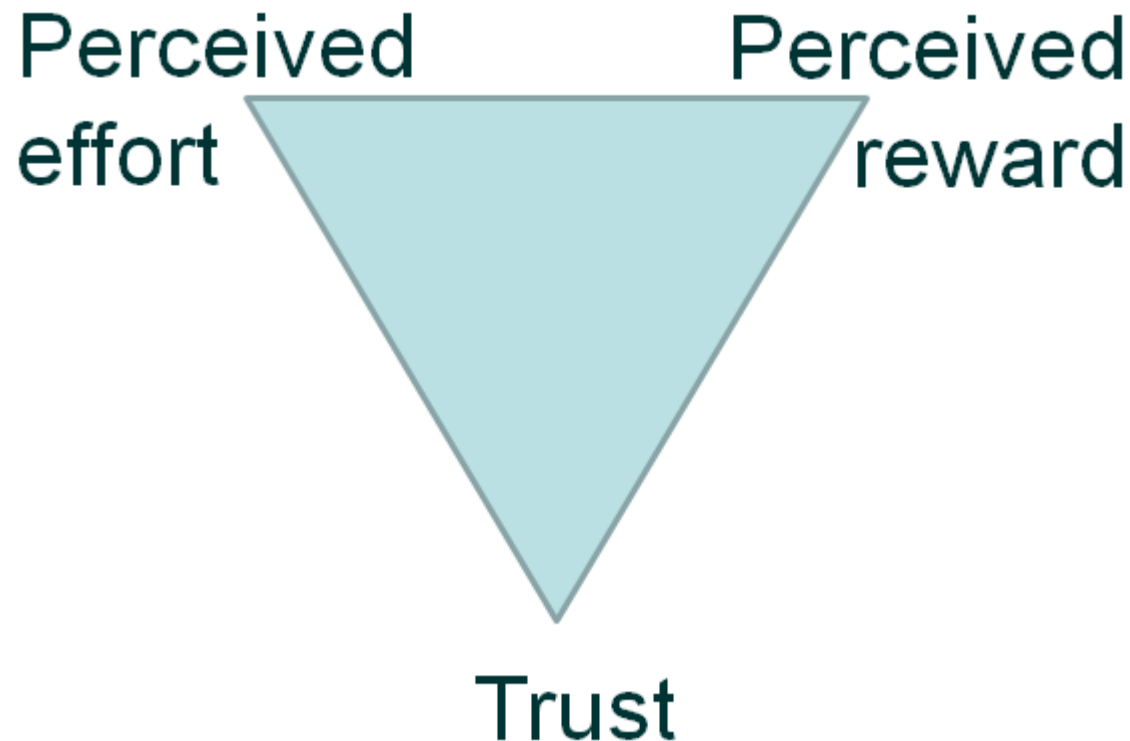
Let's try the toothpaste



Image credit: Caroline Jarrett



Response depends on effort, reward and trust



Response relies on effort, reward, and trust

Luton Business Survey 2011 - YOUR HELP IS NEEDED

Adams, Orchid <Orchid.Adams@luton.gov.uk>

Sent: Mon 06/06/2011 09:49

To:

Message

image007.gif (841 B)	image009.jpg (2 KB)	image011.jpg (2 KB)	image002.gif (841 B)	image003.jpg (2 KB)
image004.jpg (2 KB)	image005.gif (841 B)	image006.jpg (2 KB)	image007.jpg (2 KB)	image002.gif (845 B)
image003.jpg (2 KB)	image004.jpg (2 KB)	image005.gif (845 B)	image006.jpg (2 KB)	image007.jpg (2 KB)

We want Luton to be a great place to do business.
We need your help to make this happen.



Luton Borough Council, alongside BMG Research, are currently conducting a business survey about the needs of local businesses. This will help the Council to effectively shape and deliver services that support long term economic growth. We would be grateful if you could participate in this online survey and help us to help you. The survey will expire on 26th June 2011

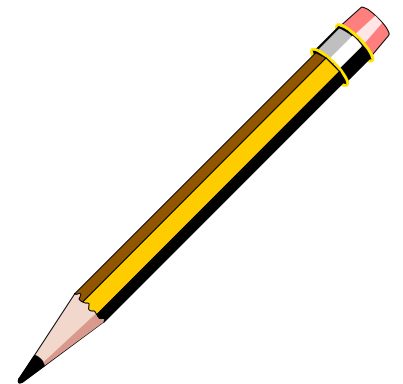
[Click Here to Complete Survey](#)

An example opening

What is the perceived effort?

What is the perceived reward?

What about trust?



There's often a 'zone of indifference'

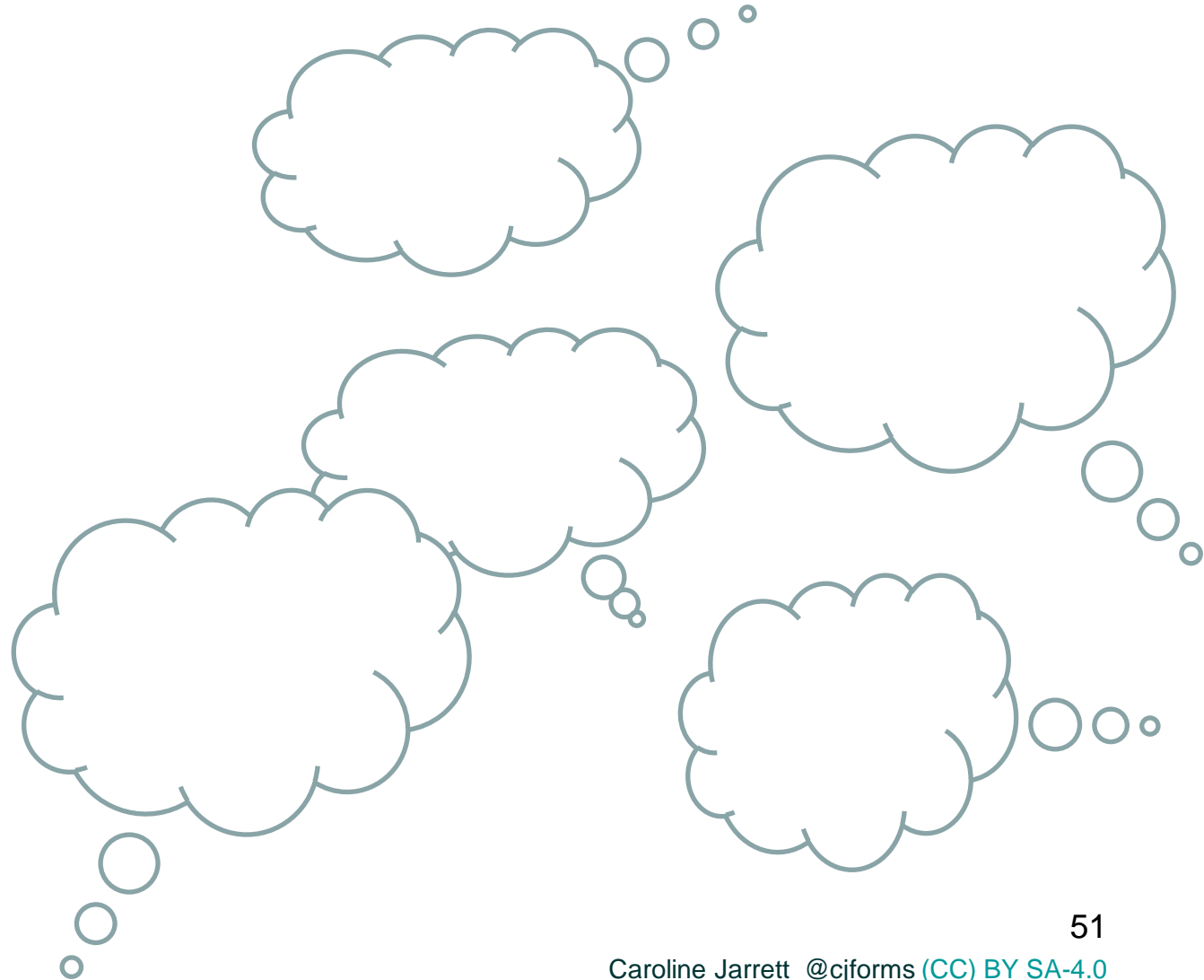


Hate it

Love it

What do people want to tell you?

Burning
Issues



What are the Burning Issues?

- Think about a service that you've used recently
- Make a note of any Burning Issue that you had



Now answer this questionnaire

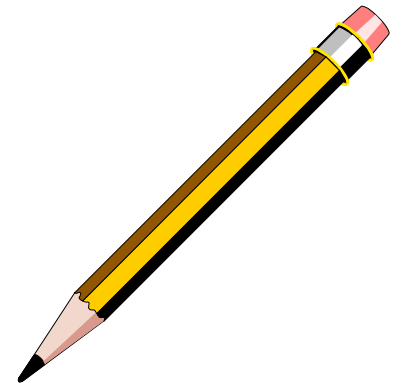
We'd love to hear what you think of our customer service. Please take a moment to answer one simple question by clicking either link below:

How would you rate the support you received?

How would you rate the support you received?

[Good, I'm satisfied](#)

[Bad, I'm unsatisfied](#)



Did you find space for your issue?

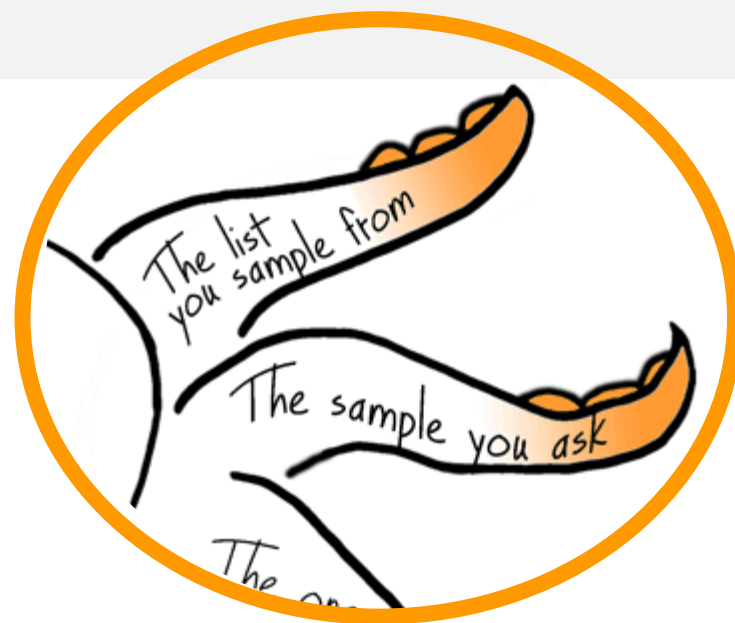


Overcome the 'Zone of Indifference' by asking about the Burning Issues

Sample



There is always sampling error



Sampling error:
Ask a sample instead of
asking everyone

If you get the other decisions right, you can calculate a confidence interval

Mean

Standard deviation

Sample size


Confidence level 95 %

Confidence interval

Lower bound

Upper bound

Confidence interval (\pm)

Advanced mode  Send this result

Confidence Interval Calculator

By Bogna Haponiuk



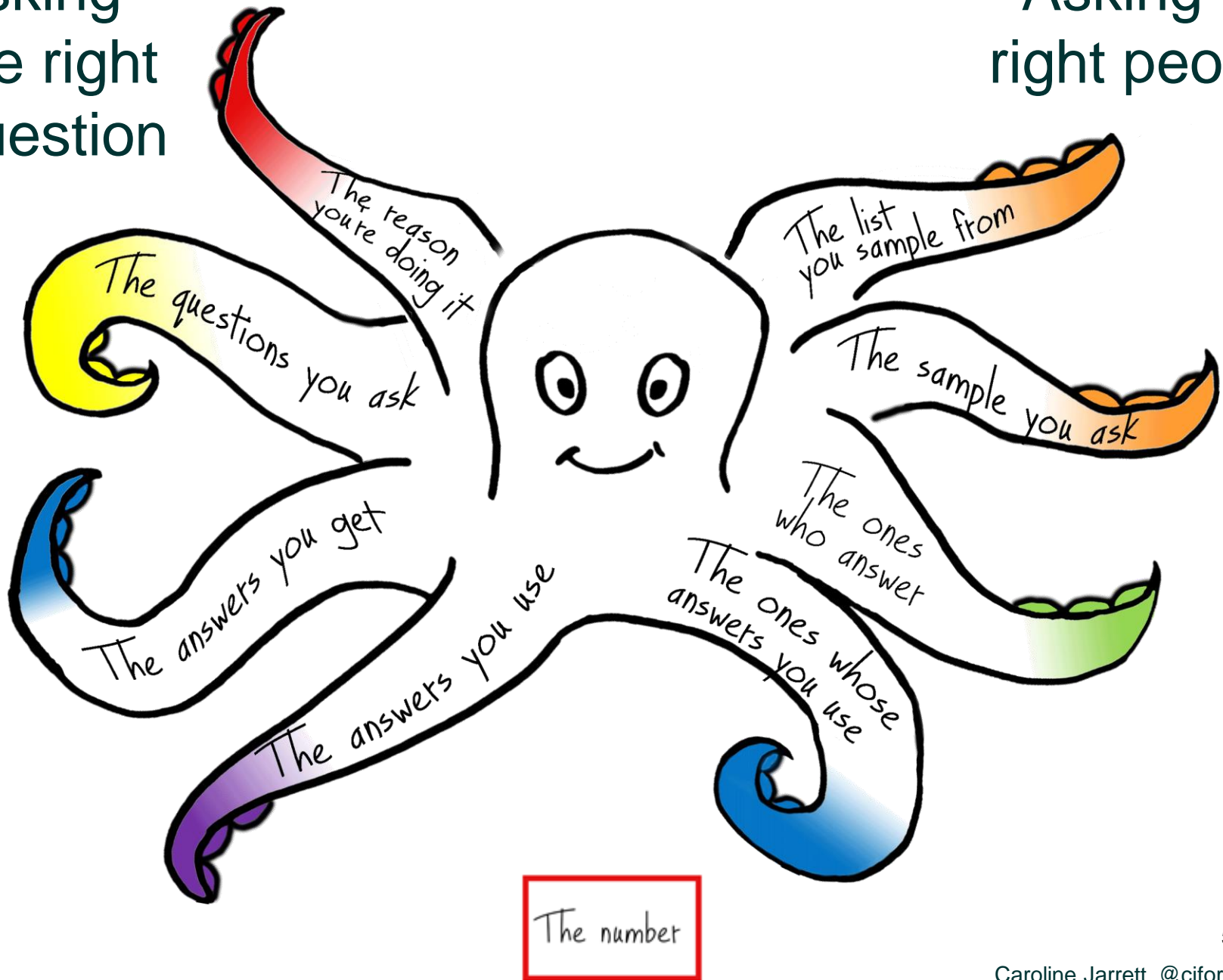
Table of contents:

- [What is the confidence interval?](#)
- [95 confidence interval formula](#)
- [How to calculate confidence interval: an example](#)

<https://www.omnicalculator.com/statistics/confidence-interval>

Asking the right question

Asking the right people



What you want
to ask about

Who you
want to ask

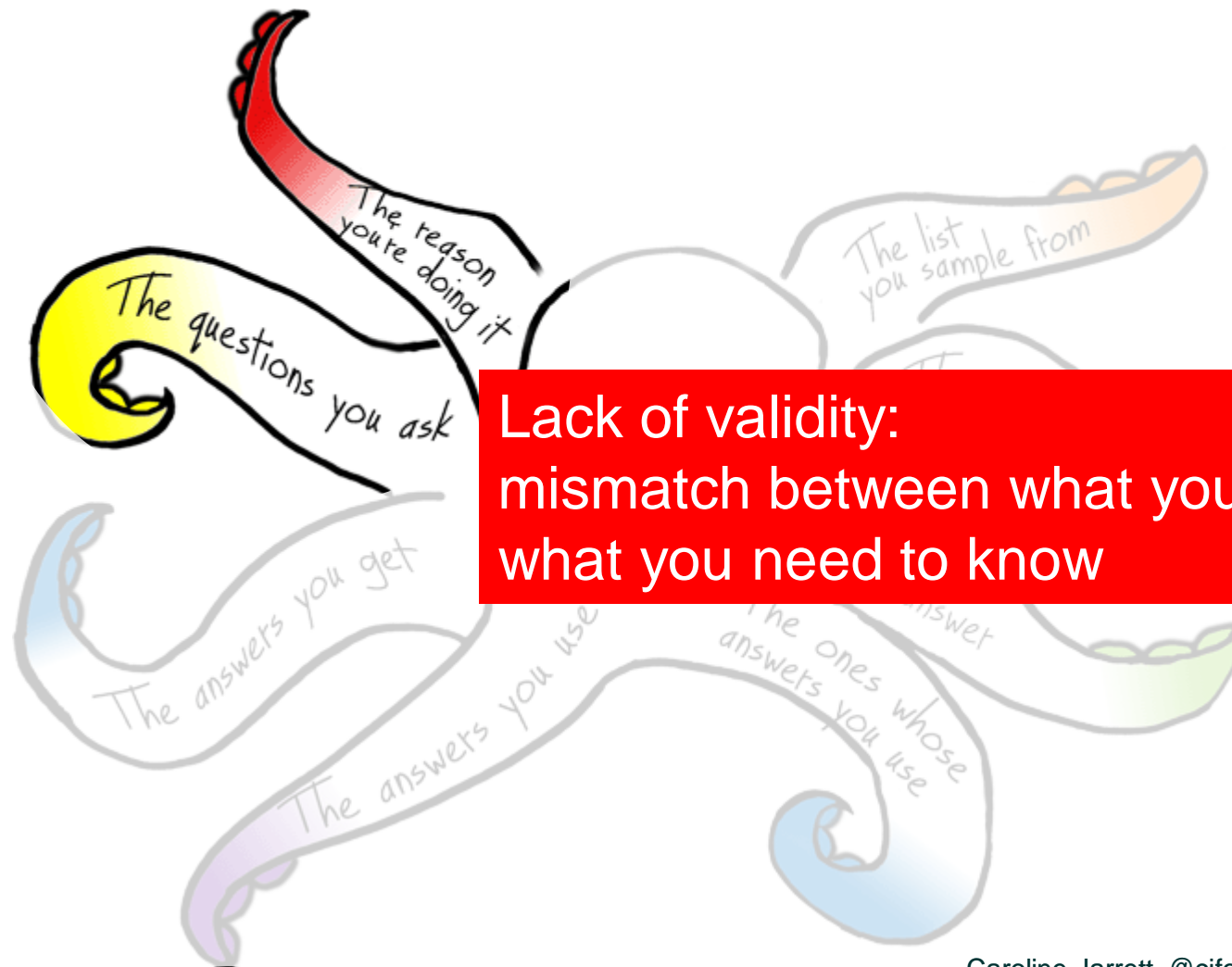
Asking one
person the
right question

is better than

Asking 10,000
people the
wrong question

The number

A survey is only valid if the questions match the reason you're doing it



The survey process

Goals

Establish your goals for the survey



Questions you need answers to

Sample

Decide who to ask and how many



People you will invite to answer

Questions

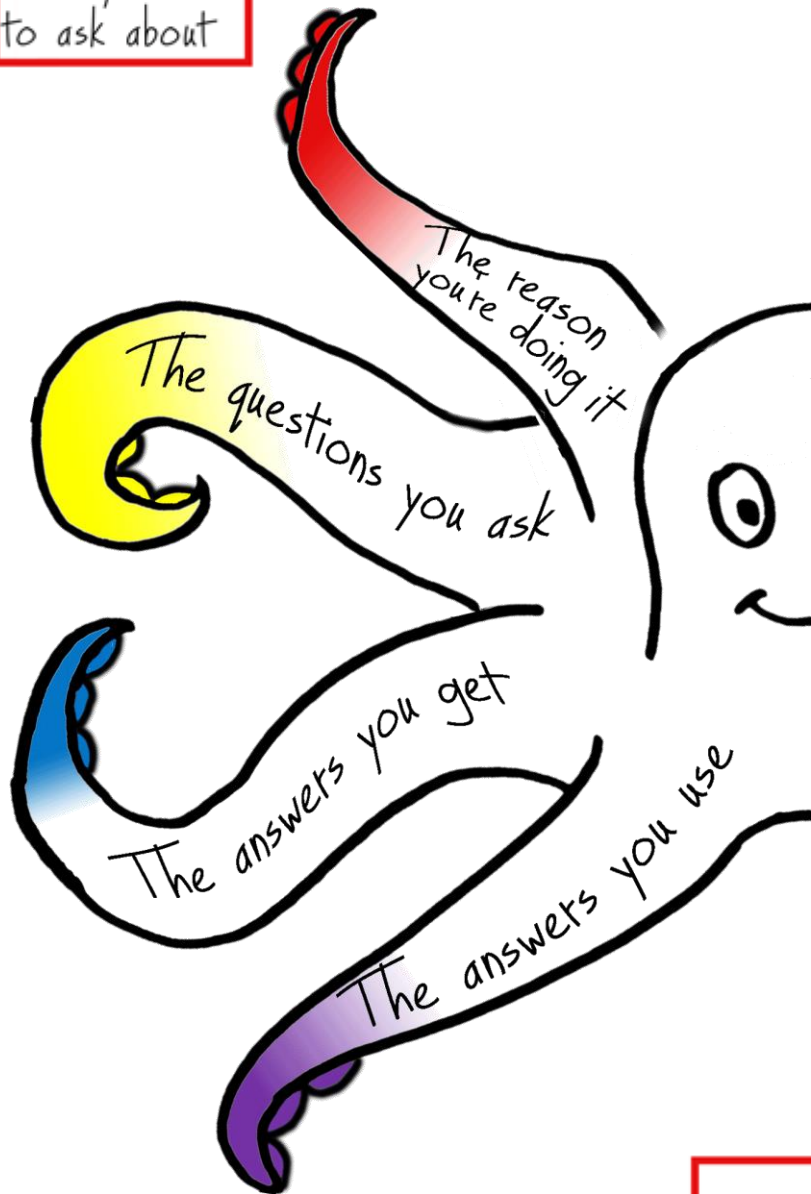
Test the questions



Questions people can answer

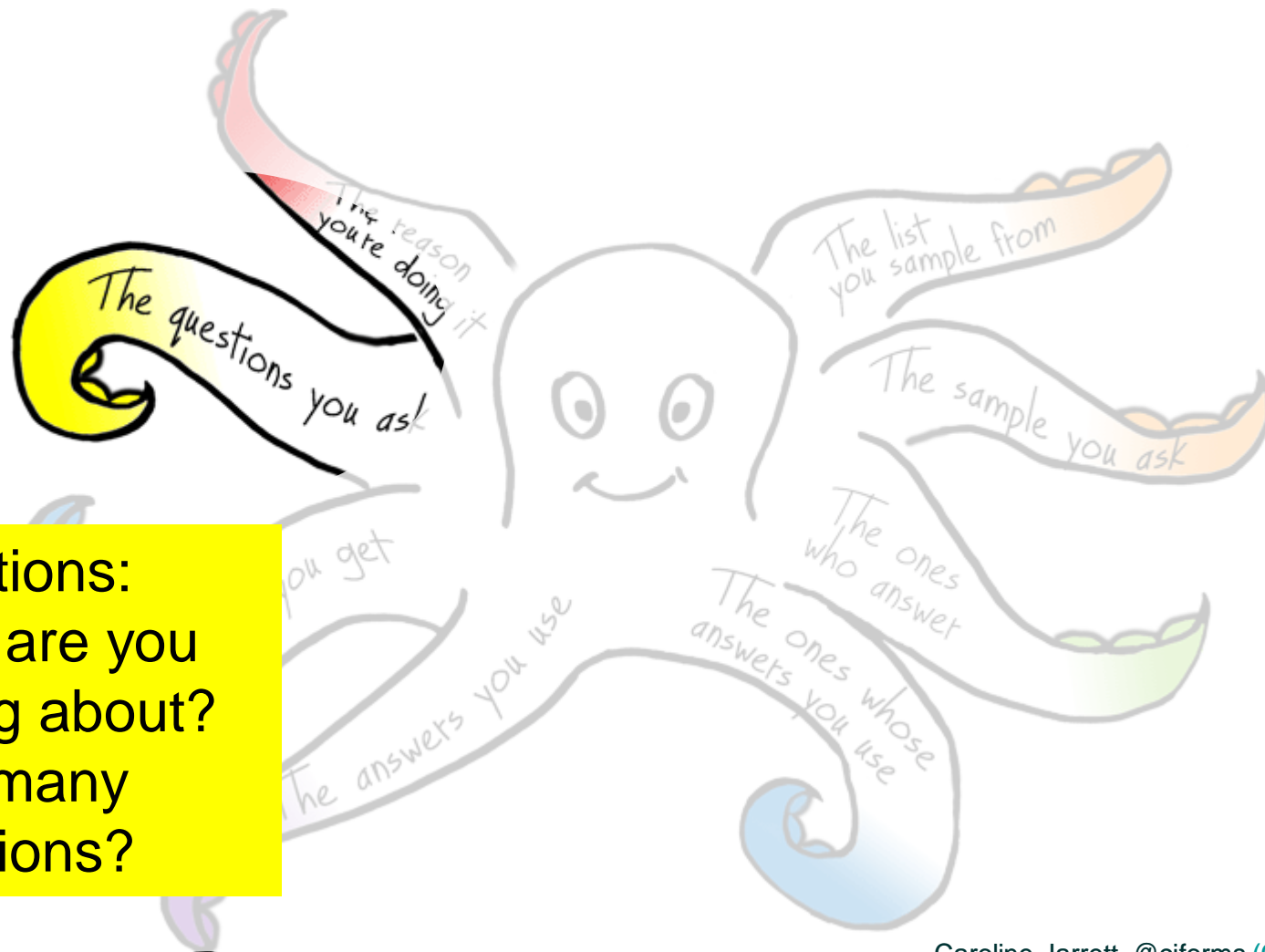
What you want to ask about

Who you want to ask



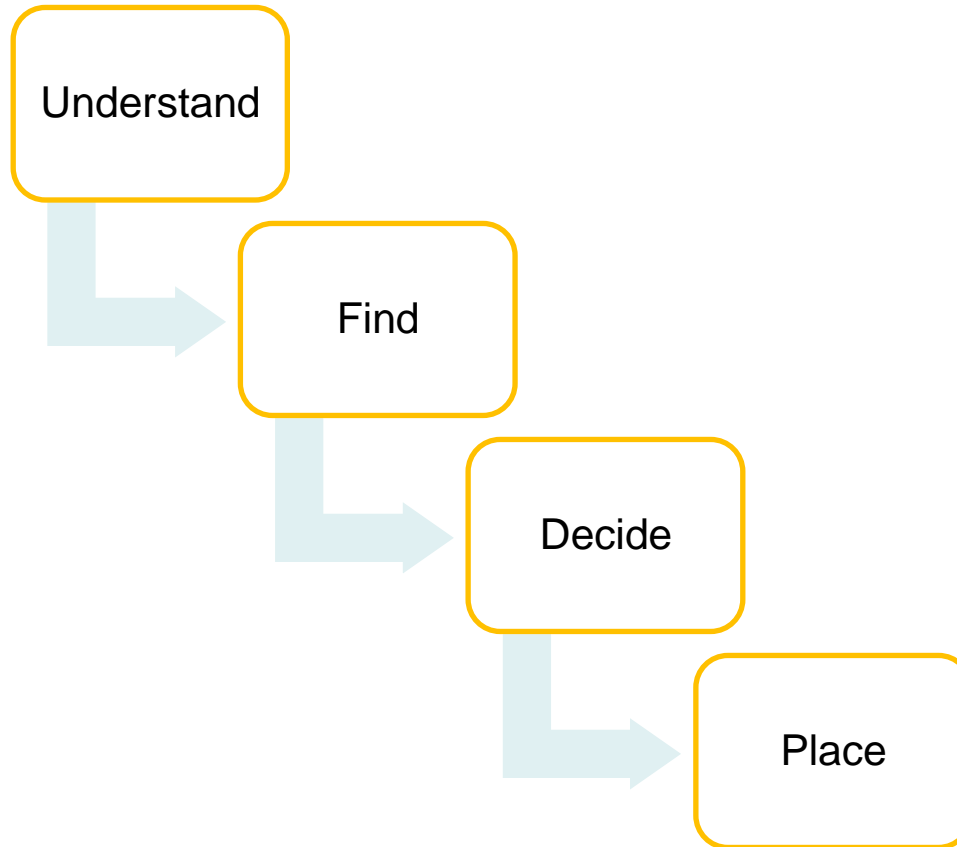
The number

Helps a lot if you ask good questions



Questions:
What are you asking about?
How many questions?

There are four steps to answer a question



There are four steps to answer a question

Step	A good question ...
1. Read and understand	is legible and makes sense
2. Find an answer	asks for answers that we know
3. Decide on the answer	asks for answers we're happy to reveal
4. Place the answer	offers appropriate spaces for the answers

Four step examples:

1: read and understand

Are you...?

Please select one response only.



Next

Four step examples:

1: read and understand

Sometimes we look for people who work in particular industries. Do you work in any of the following?

Please select all that apply.

<input type="checkbox"/> Automotive	<input type="checkbox"/> Banking
<input type="checkbox"/> Education	<input type="checkbox"/> Health Care
<input type="checkbox"/> Journalism	<input type="checkbox"/> Market Research
<input type="checkbox"/> Marketing / PR / Advertising	<input type="checkbox"/> Not for Profit / Charity
<input type="checkbox"/> Retail	<input type="checkbox"/> Science
<input type="radio"/> None of the above	

Next

Four step examples:

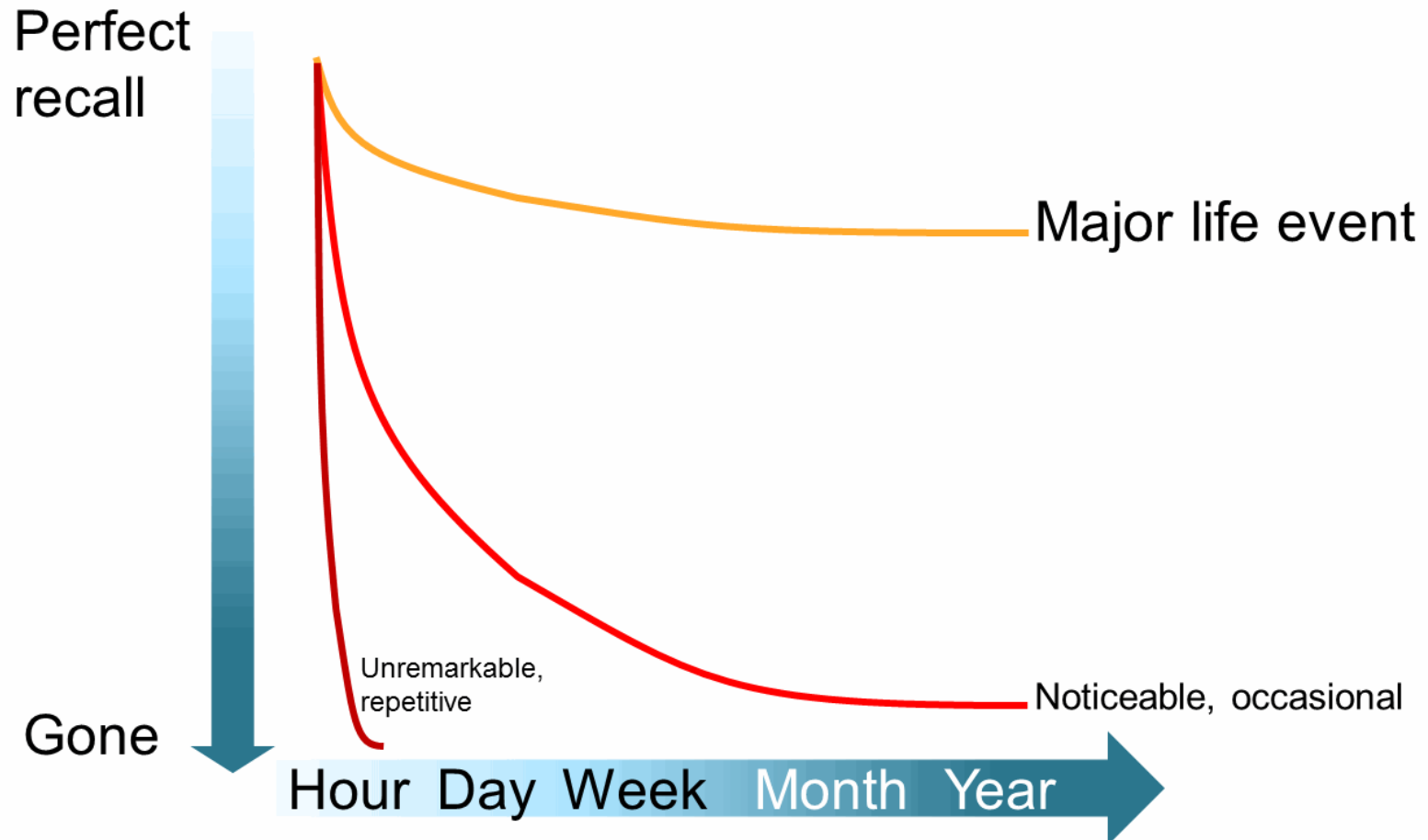
2: find the answer

Question 25

In your **last five days at work**, what percentage of your work time do you estimate that you spent using publicly-available online services (not including email, instant messaging, and search) to do your work using a work computer or other device?


In your last five days at work, what percentage of your work time do you estimate that you spend using publicly-available online services (not including email, instant messaging and search) to do your work using a work computer or other device?

The approximate curve of forgetting



Four step examples:

3: decide on the answer

*** 11. I think it is safe to challenge the way things are done in** 

- Strongly agree
- Agree
- Neither
- Disagree
- Strongly disagree

Four step examples: 4: place the answer

Where do you currently live?

Please make a selection on the map.



Please indicate to which occupational group the Chief Income Earner in your household belongs, or which group fits best.

This could be you: the Chief Income Earner is the person in your household with the largest income.

If the Chief Income Earner is retired and has an occupational pension please answer for their most recent occupation.

If the Chief Income Earner is not in paid employment but has been out of work for less than 6 months, please answer for their most recent occupation.

- Semi or unskilled manual work
(e.g. Manual workers, all apprentices to be skilled trades, Caretaker, Park keeper, non-HGV driver, shop assistant)

- Skilled manual worker
(e.g. Skilled Bricklayer, Carpenter, Plumber, Painter, Bus/ Ambulance Driver, HGV driver, AA patrolman, pub/bar worker, etc)

- Supervisory or clerical/ junior managerial/ professional/ administrative
(e.g. Office worker, Student Doctor, Foreman with 25+ employees, salesperson, etc)

- Intermediate managerial/ professional/ administrative
(e.g. Newly qualified (under 3 years) doctor, Solicitor, Board director small organisation, middle manager in large organisation, principal officer in civil service/local government)

- Higher managerial/ professional/ administrative
(e.g. Established doctor, Solicitor, Board Director in a large organisation (200+ employees, top level civil servant/public service employee))

- Student

- Casual worker - not in permanent employment

- Housewife/ Homemaker

- Retired and living on state pension

- Unemployed or not working due to long-term sickness

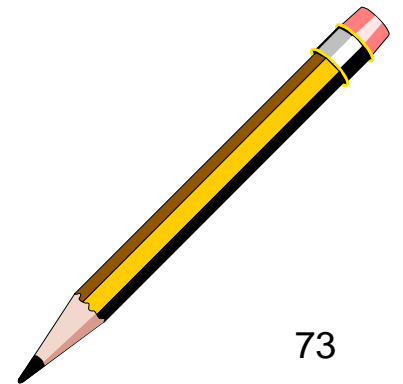
- Full-time carer of other household member

- Other

Understand
Find
Decide
Place

Make suggestions about draft questions, using the four steps

- We have some early draft questions
- Think about the four steps of answering a question:
 1. Read and understand the question
 2. Find the answer (including the Approximate Curve of Forgetting)
 3. Decide whether the answer fits
 4. Place the answer
- Any suggestions for the next draft?



The survey process

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Establish your goals for the survey



Questions you need answers to

Sample

Decide who to ask and how many



People you will invite to answer

Questions

Test the questions



Questions people can answer

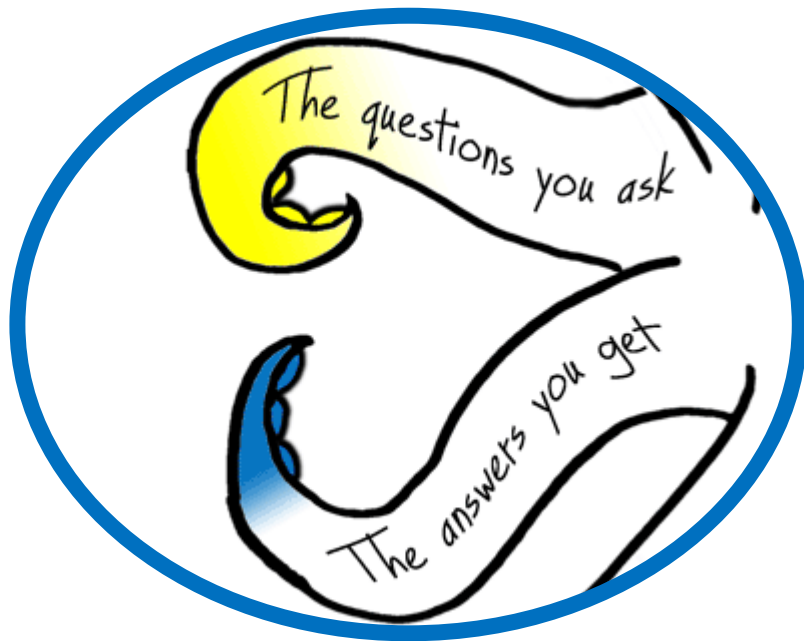
Questionnaire

Build the questionnaire



Questions people can interact with

A good question gets good answers



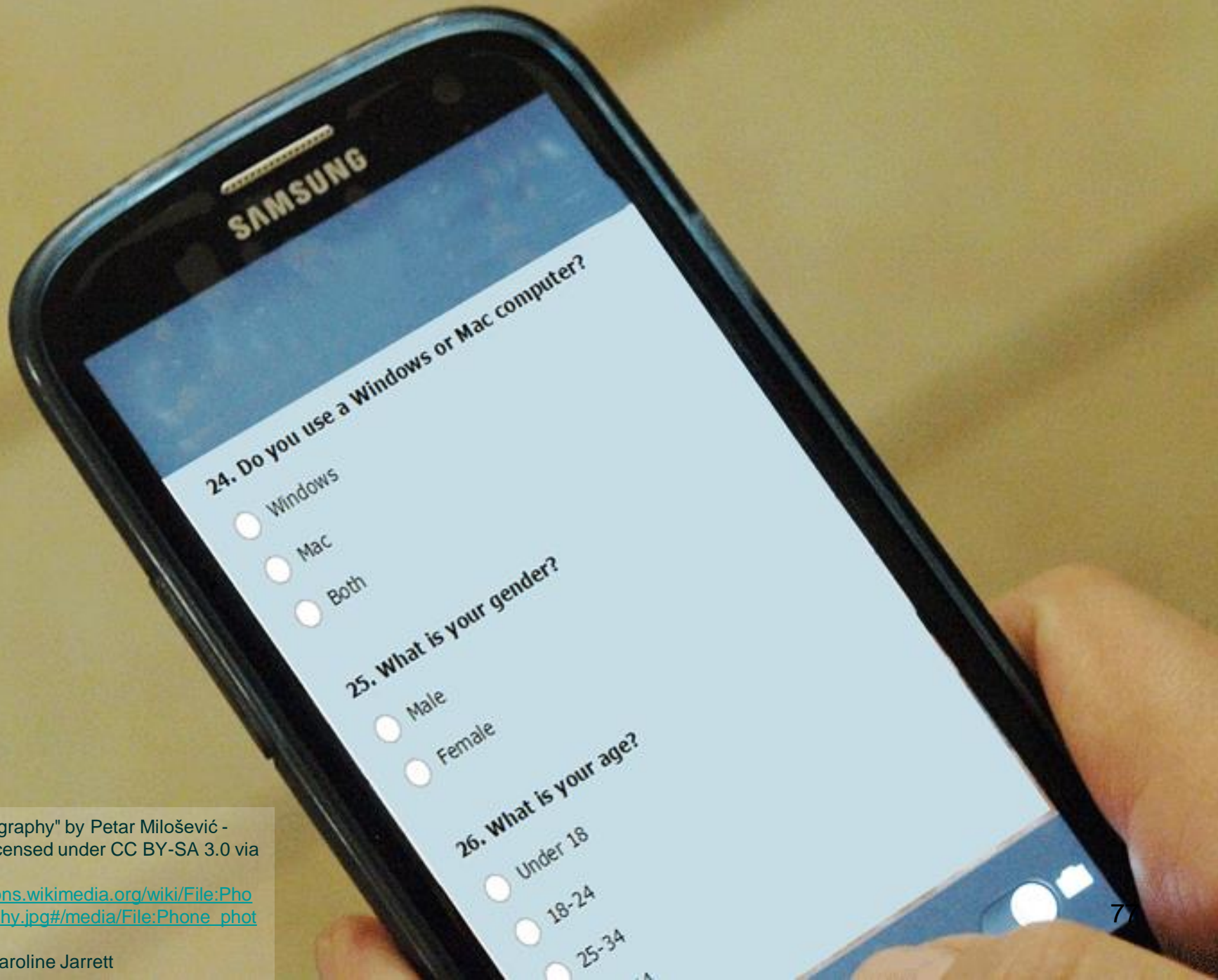
Measurement error:
Mismatches between
the questions you ask and
the answers that people give you

24. Do you use a Windows or Mac computer?

- Windows
- Mac
- Both

25. What is your gender?

- Male
- Female



24. Do you use a Windows or Mac computer?

- Windows
- Mac
- Both

25. What is your gender?

- Male
- Female

26. What is your age?

- Under 18
- 18-24
- 25-34

"Phone photography" by Petar Milošević - Own work. Licensed under CC BY-SA 3.0 via Commons -

https://commons.wikimedia.org/wiki/File:Phone_photography.jpg#/media/File:Phone_photography.jpg

Modified by Caroline Jarrett

Tip

Always allow for 'other'



“Place the answer” is also about using the right widget to collect the answer

Use	For
Radio buttons	A single known answer
Check boxes	Multiple known answers
Text boxes	Unknown answers

Likert had several types of response format in his scales

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

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

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

	Completely satisfied	Very satisfied	Quite satisfied	Neither satisfied nor dissatisfied	Quite dissatisfied	Very dissatisfied	Completely dissatisfied
Your outward journey with easyJet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your whole experience with easyJet on this latest occasion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	True	False
I usually get what I want in life.	<input checked="" type="radio"/>	<input type="radio"/>
I need to be kept informed about news events.	<input type="radio"/>	<input type="radio"/>

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Not Applicable
	5	4	3	2	1	
Overall, I was satisfied with my experience in Hayward Dining Room	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	John Lewis is WORSE	About the same	John Lewis is BETTER
Supermarket	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other local store/independent retailer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please tell us how your experience at John Lewis compares to each of the other retailers you have visited?

1. Is this OK? Tell us if you agree with us

Strongly agree

Agree

Disagree

Strongly disagree

2. Tell us more about this

Very Unimportant				Very Important
1	2	3	4	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

1: *Please rate how well the site is organized.

1=poor Excellent=10

1 2 3 4 5 6 7 8 9 10 Don't Know

Grids are often full of problems at all four steps

BBC

OPINION SURVEY

You have completed 48% of the survey so far.

100%

For the following statements about the **Commercial Availability** site, please give a mark out of 10, where 1 indicates 'Strongly Disagree' and 10 indicates 'Strongly Agree'.

	1	2	3	4	5	6	7	8	9	10	Don't know
It's the kind of website I would talk to other people about	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I learnt something new from visiting this website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This website inspired me to do something new	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found this website engaging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The website is up to date	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The website is fresh and new	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The website reflects British culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

← Previous
Next →

powered by
eDigitalResearch
For informed direction

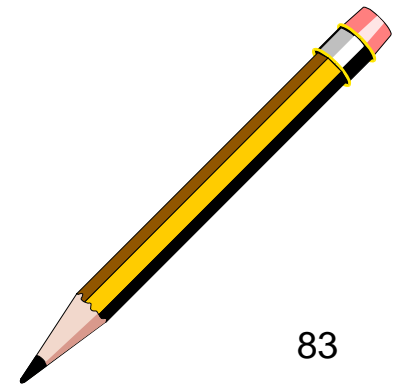
Click here to go back to bbc.co.uk

For any comments about the content of this survey, please contact bbc@digitalresearch.com
 About any other issue, please contact the BBC via <http://www.bbc.co.uk/feedback>
 If you would like further information please read the BBC's privacy policy at <http://www.bbc.co.uk/privacy>

An example

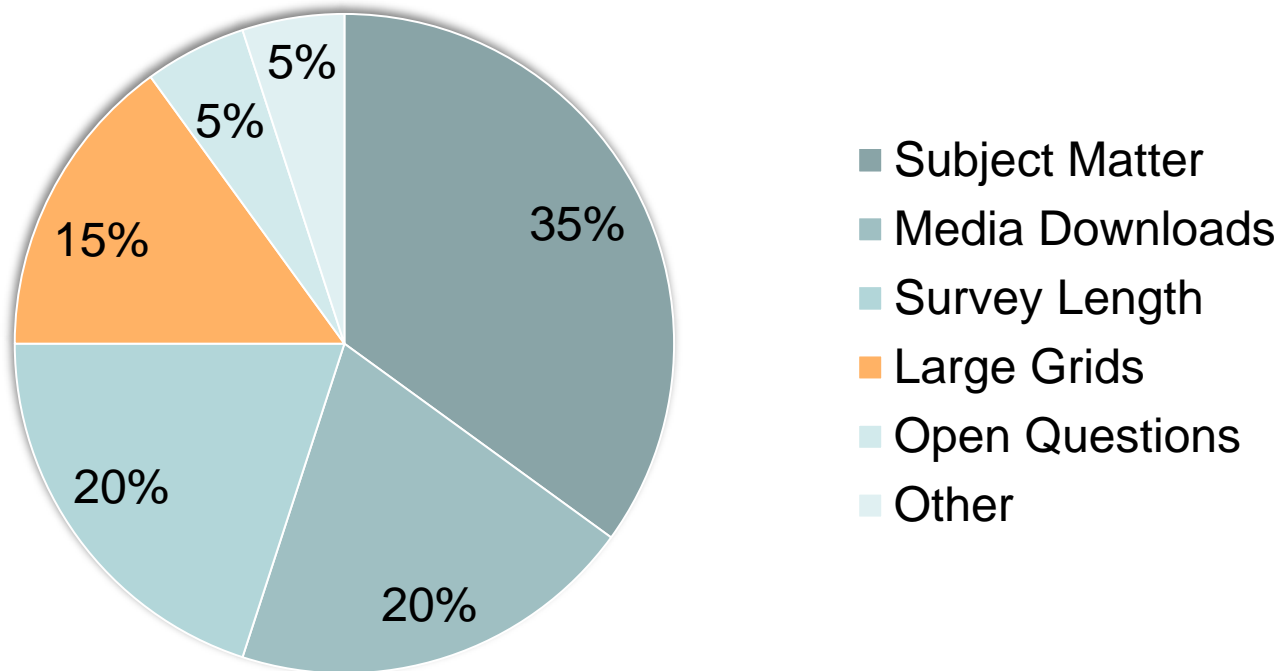
Here's an example of a questionnaire Likert scale

- Which statements would you definitely keep?
- Which statements would you amend/edit?
- Any statements you would prefer to remove?
- Any formatting thoughts before we turn it into a questionnaire?



Grids are a major cause of survey drop-out

Total incompletes across the 'main' section of the questionnaire
(after the introduction stage)

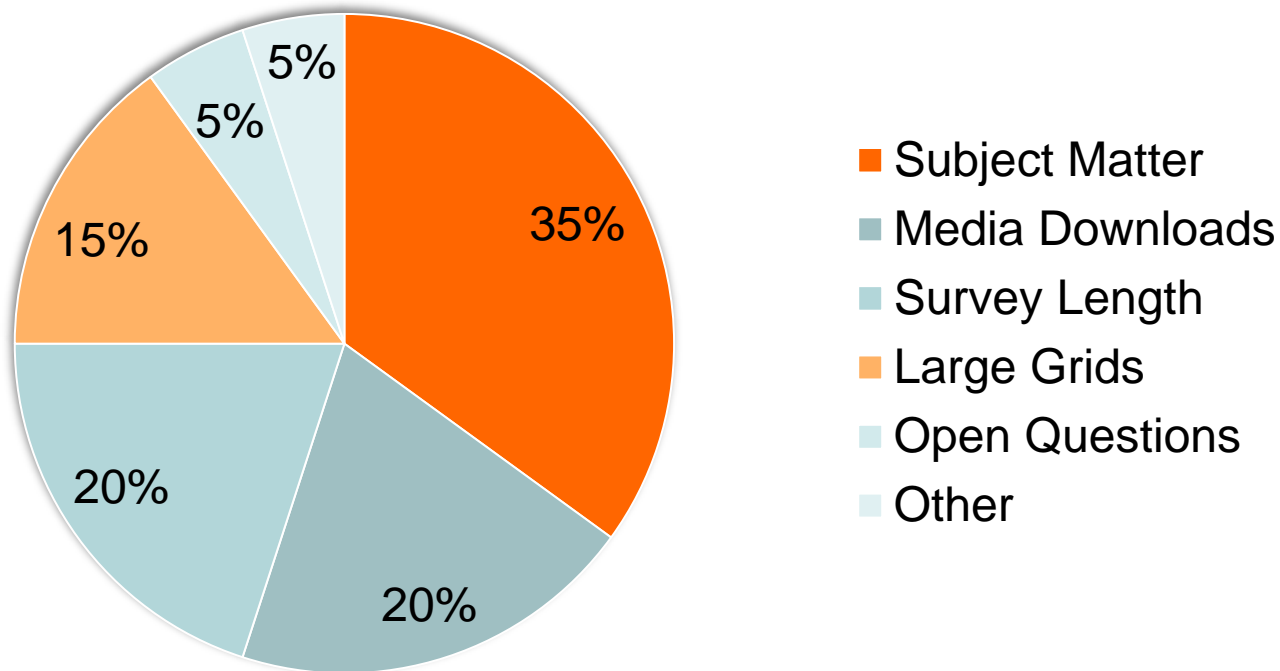


Source: Database of 3 million+ web surveys conducted by Lightspeed Research/Kantar

From Coombe, R., Jarrett, C. and Johnson, A. (2010) "Usability testing of market research surveys" ESRA Lausanne

But it's the topic that matters most

Total incompletes across the 'main' section of the questionnaire
(after the introduction stage)

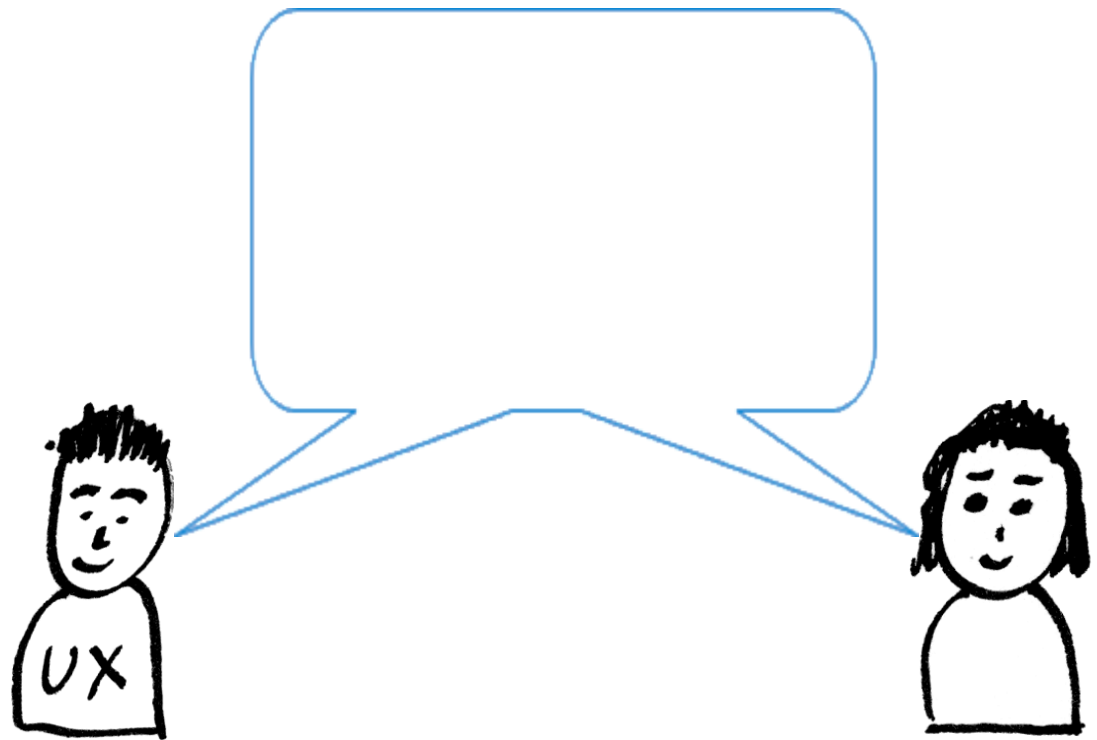


Source: Database of 3 million+ web surveys conducted by Lightspeed Research/Kantar

From Coombe, R., Jarrett, C. and Johnson, A. (2010) "Usability testing of market research surveys" ESRA Lausanne

Tip

Test your questions by interviewing in context



Your answers to this survey are important for our work



But what's in it for me? And I'm really ready for a break.



Agenda

Introductions

Goals

Sample

Break

Questions

Questionnaire

Lunch

Fieldwork

Break

Responses

Insights

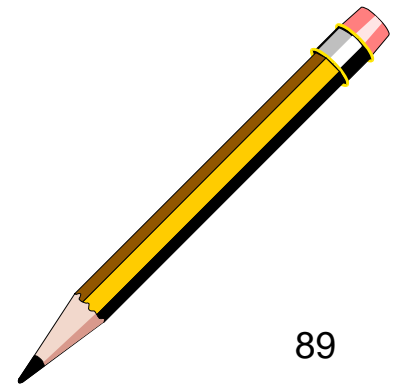
Finish

Goals and sample for the survey

We've had a request for help with a survey.

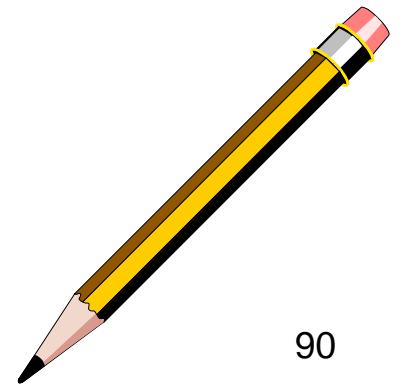
We'll be having a meeting to discuss it.

- Decide on the topics you'll want to discuss at the meeting
- Also, prepare a suggestion for the Most Crucial Question



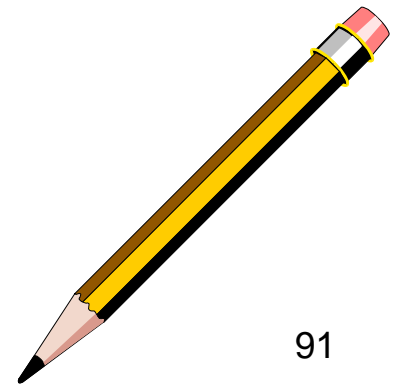
Write questions

- Decide on the MCQ that you will ask
 - Check that users can:
 - Read and understand it
 - Find the answer
 - Decide on the answer
- Decide if you need any extra questions to frame the MCQ
- Is there a Burning Issue?

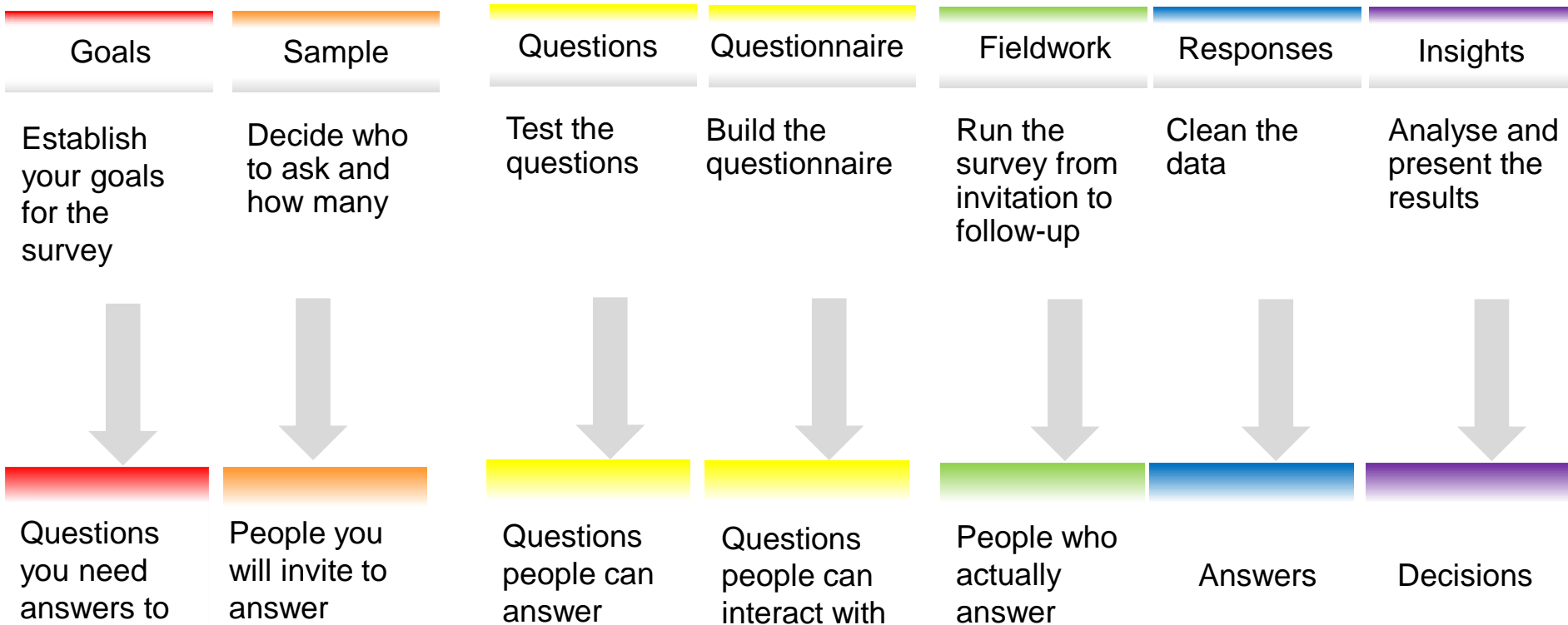


Make a questionnaire

Make a paper version of your questionnaire
(We'll be testing the questionnaires a bit later)



The survey process



The survey process

Fieldwork


Run the survey from invitation to follow-up



People who actually answer

Dear Epson Customer, review your Epson Stylus Office BX625FWD

Epson UK <epsonnewsletter@info.epson-europe.com>

 Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

Sent: Fri 14/10/2011 09:29

To: caroline.jarrett@effortmark.co.uk

If you're having trouble viewing this email please [click here](#)

Right-click here to download pictures. To help protect your privacy, Outlook prevented automatic download of this picture from the Internet.

EPSON - EXCEED YOUR VISION



Right-click here to download pictures. To help protect your privacy, Outlook prevented automatic download of this picture from the Internet.

REVIEW YOUR Epson Stylus Office BX625FWD



Right-click here to download pictures. To help protect your privacy, Outlook prevented automatic download of this picture...

Dear Epson customer,

Thank you for choosing an Epson Stylus



Right-click here to download pictures. To help protect your privacy, Outlook prevented automatic download of this picture from the Internet.

Epson Stylus Office BX625FWD

EPSON[®]
EXCEED YOUR VISION



REVIEW YOUR EPSON STYLUS OFFICE BX625FWD



Dear Epson customer,

Thank you for choosing an Epson Stylus Office BX625FWD. We'd like to hear about your experience – please tell us what you think.

Your opinion is valuable to us, and will help us develop products that best meet your needs. [Your review](#) will also help others to choose the right product.

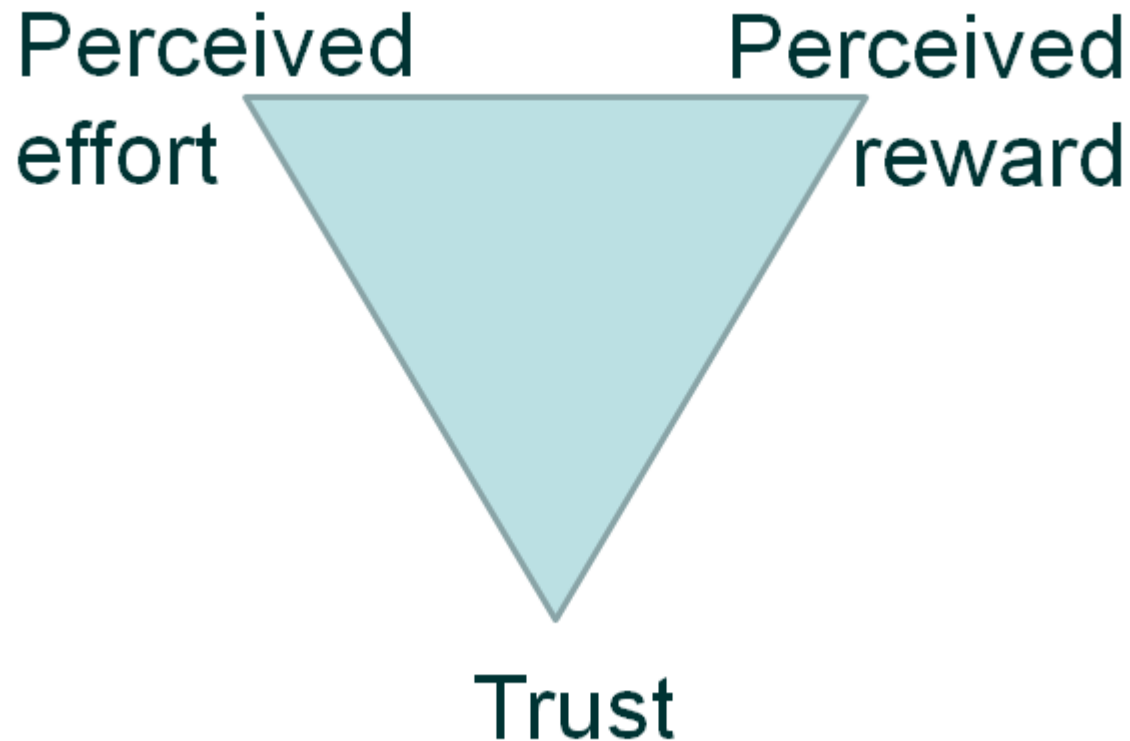
[WRITE YOUR REVIEW](#)



★★★★★ Written by Digger

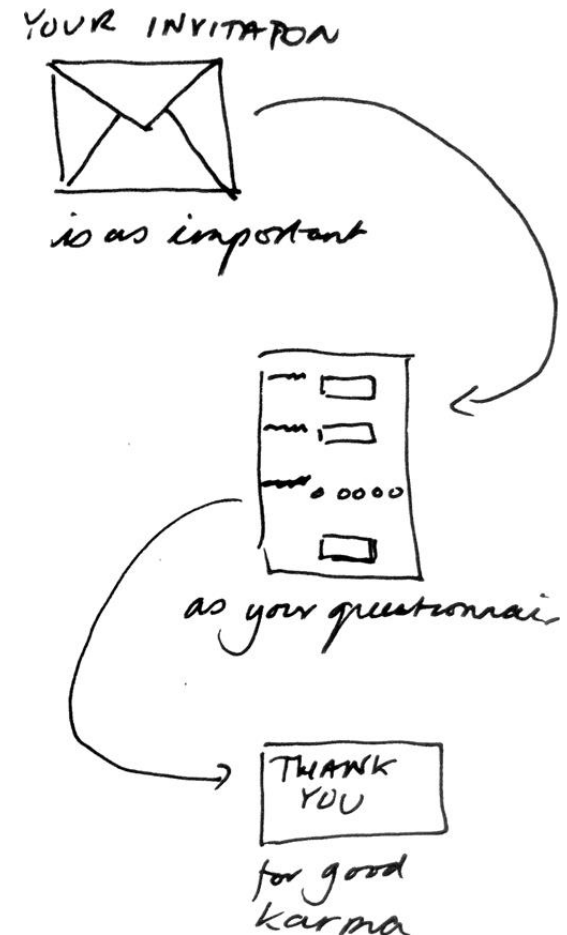
16 July 2011

Recap: Response relies on effort, reward, and trust



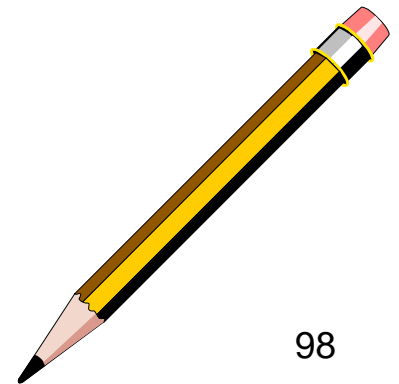
The elements of a good invitation

- Trust:
 - Say who you are
 - Say why you've contacted this person specifically
- Perceived reward:
 - Explain the purpose of the survey
 - Explain why this person's responses will help that purpose
 - If there is an incentive, offer it
- Perceived effort:
 - Outline the topic of the survey
 - Say when the survey will close
 - Do NOT say how long it will take
 - (unless you have tested the heck out of it and are extremely sure that you know the answer)



Write the invitation and thank-you

- Hints:
 - the invitation can be part of the questionnaire
 - thank-you is on a separate page

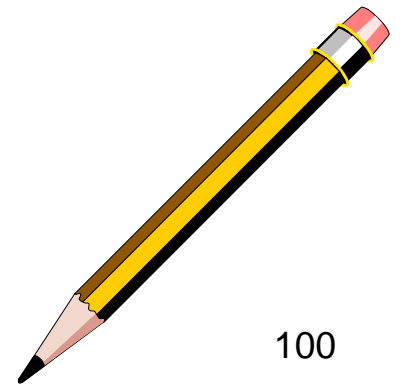


Test it: pilot study

- Run the survey from invitation to the follow-up
- Look for mechanical problems like wrong link in the invitation, no thank-you page
- Find out what your response rate is so that you can work out your sample size

“If you don’t have time to do a pilot study, you don’t have time to do the survey”

Test it and report back



Think about the test and iterate

- Are the people you tested with representative?
- Did you test the whole survey
 - From invitation to follow up?
 - Including the analysis of responses?
 - Including finding out whether you can make the decision?
- What do you need to change for the next version?

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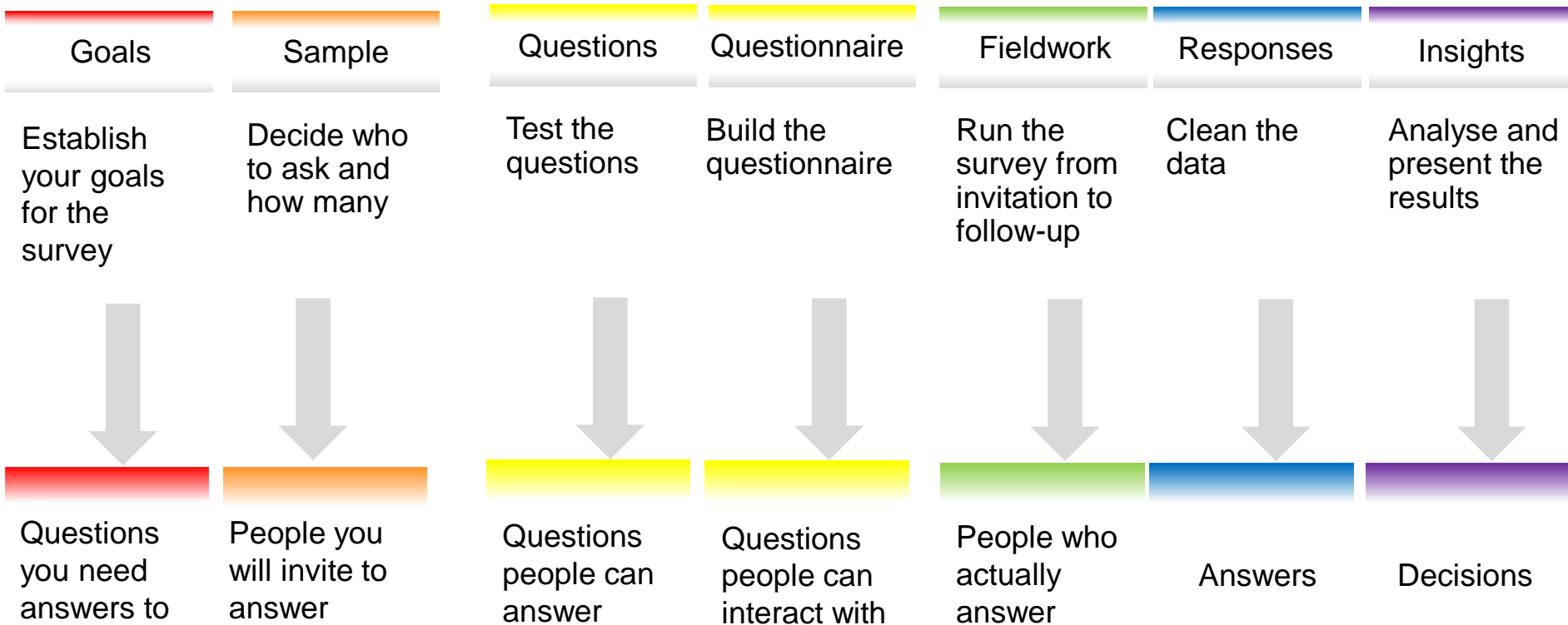
Break

Responses

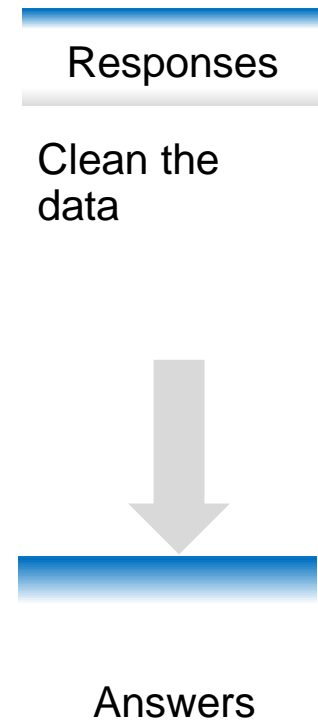
Insights

Finish

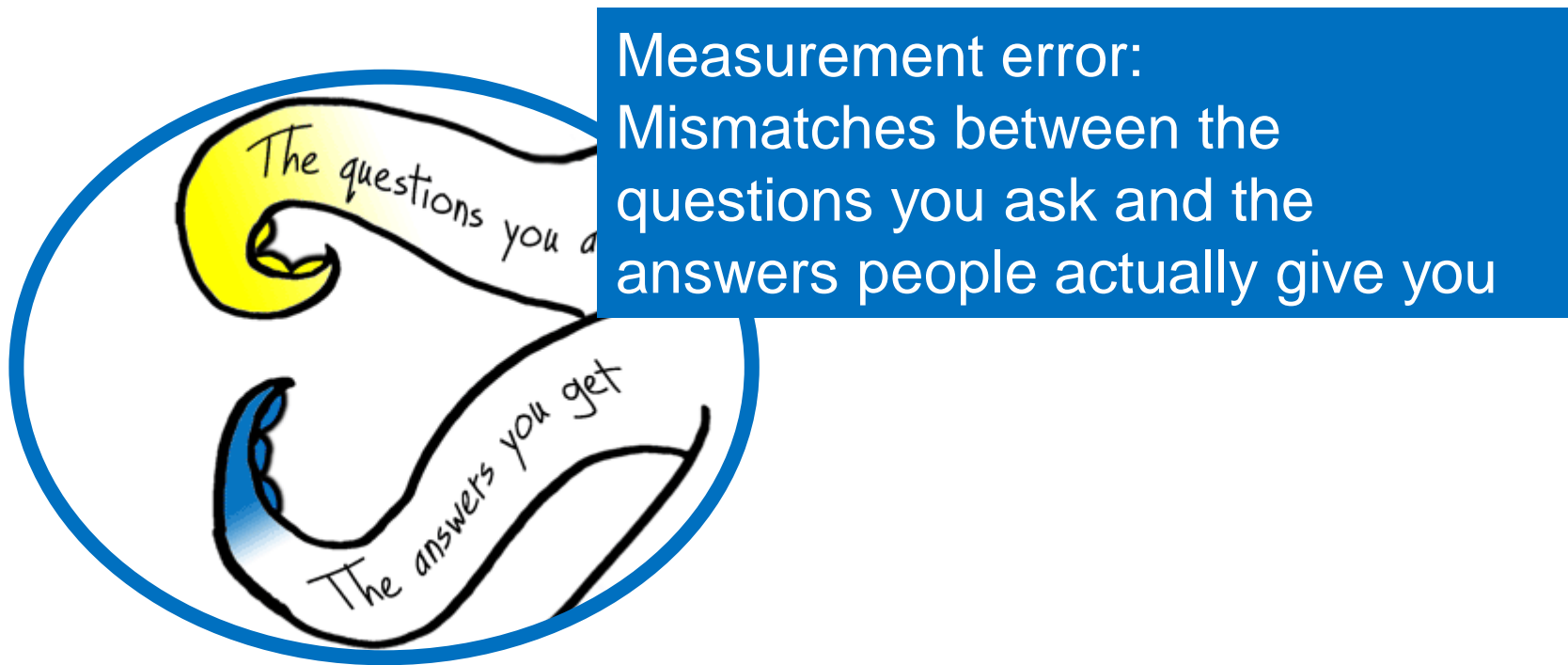
The survey process



The survey process

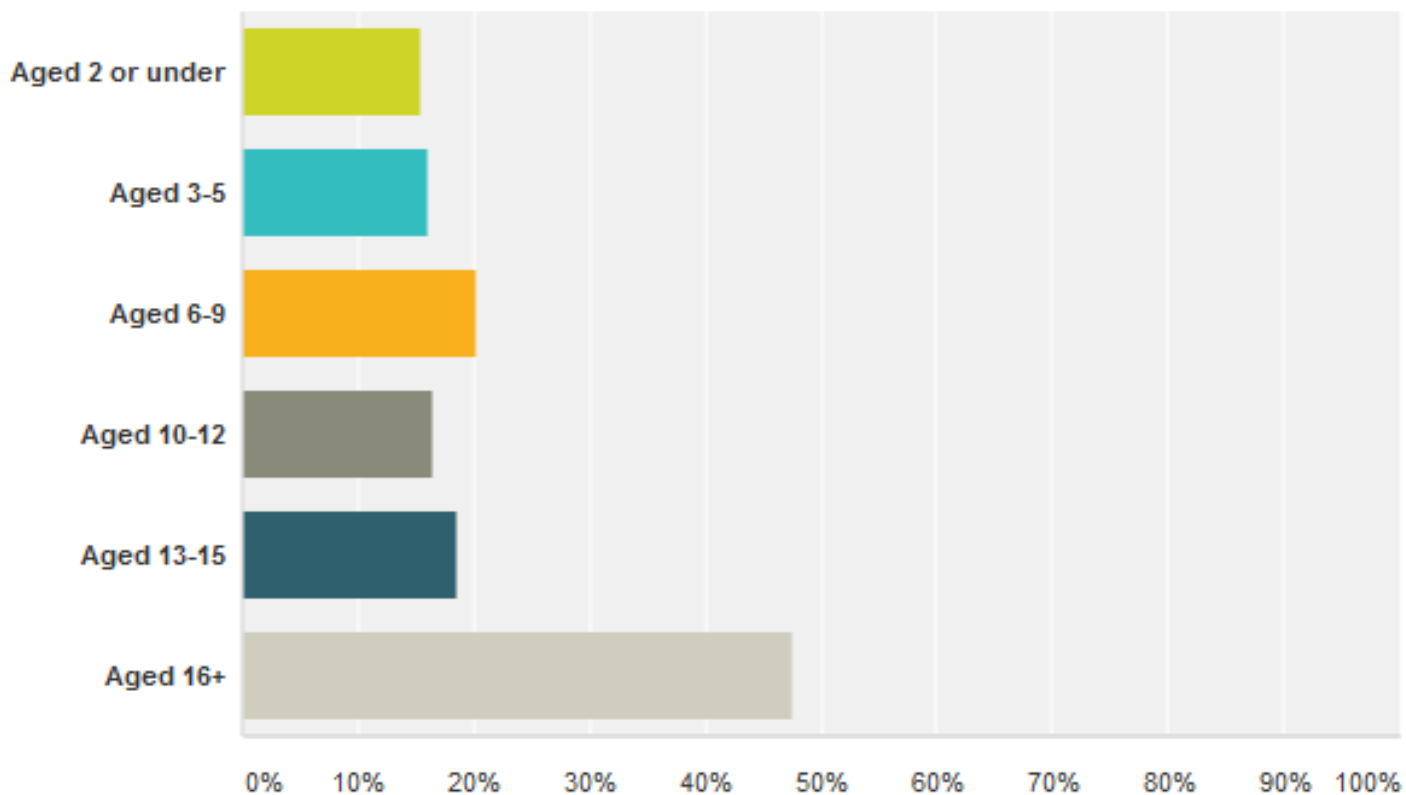


The answers that you get will tell you whether you had good questions



Measurement error:
Mismatches between the
questions you ask and the
answers people actually give you

Are you a parent or guardian of a child in any of the following age bands (please tick all that apply)?



Clean your data

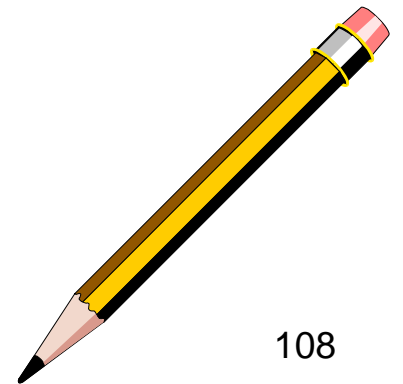
- Look for gaps and missing entries
- Remove any (unintended) duplicate responses
- Read the answers to make sure that they make sense compared to the questions



Have a go at data cleaning

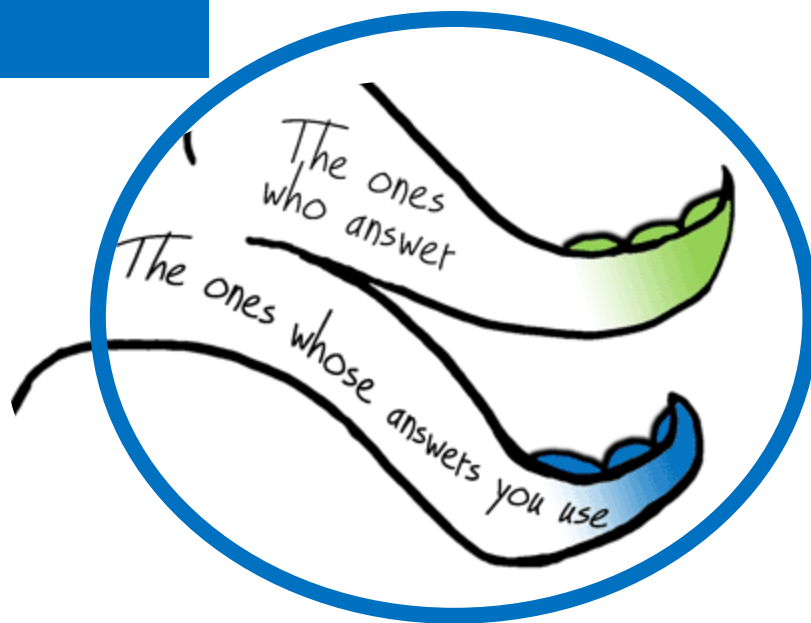
Here are some answers from a survey

- What adjustments could we make to this question to make the next survey better?



Decide whose answers to include

Adjustment error:
Problems when deciding whether
to include or exclude someone's
answers




Look after your data

- Data analysis can take a long time; you won't want to repeat it
 - Make copies of your data, especially before any drastic change
 - 'Undo' doesn't always work on large files
- Make notes of what you did
 - It helps if you have to defend your conclusions
 - It's hard to remember the details a year later



Decide what to do when people have skipped questions or dropped out

1. Remove the whole of that person's response
2. Use the partial responses, and accept that your number of responses is lower for some questions
3. Calculate an "imputed value"
 - Include a flag showing that the value is calculated
 - Estimate the most likely value using the other data



If you're not a statistician,
you might need to find one
to help with this

If you're losing people, have you still got representativeness?

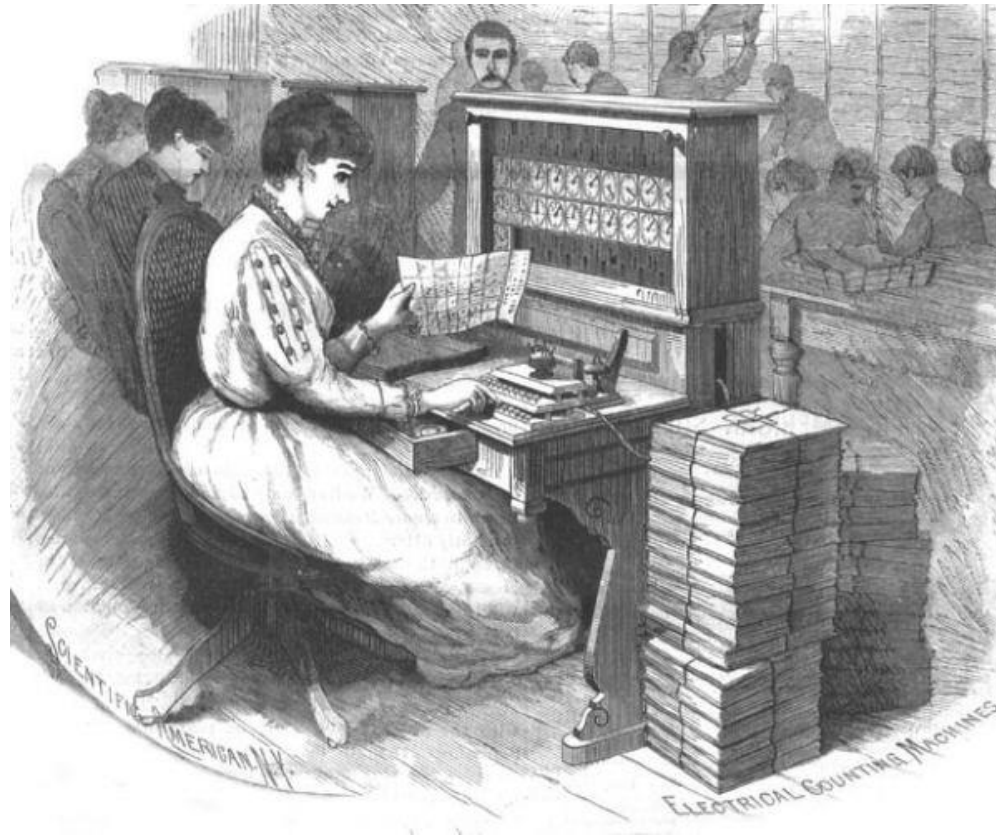


You can interpret data well – or poorly

Processing error:
Bad choices about how to interpret
the answers



Typing in the answers = coding



If you ask for answers, you have to read and think about them

Responses

SUTTONS SEEDS
Est. 1806

0844 922 2899
(Customer Services)
8.30am to 5pm, Mon to Fri

0844 922 0606
(Orders only)
24hrs a day, 7 days a week

Plant Despatch Schedule

Sign In / Register | My Account

1 item **£1.45**

View Basket

Enter Search Here **Go**

Home | Vegetables | Flowers | Garden Equipment | Fruit | Perennial Plants | Special Offers | Garden Advice and Help

Home » Gardening » Vegetables » New Vegetables for 2012 » Brussels Sprout Continuity Collection

Brussels Sprout Continuity Collection

Code: 216121

Harvest October-February

Collection contains 18 plants (6 of each variety): **Nautic** (a vigorous, high-yielding early variety with good standing)

Pack of 18 Plug Plants (6 of each variety)

Quantity: 1

Add to Basket **£6.99**

Add to wish list

to grow your own. Even the smallest patio or that will give you a bumper crop of delicious fresh

Help us improve

We value your opinion.
What do you like about our site and what can we improve on?

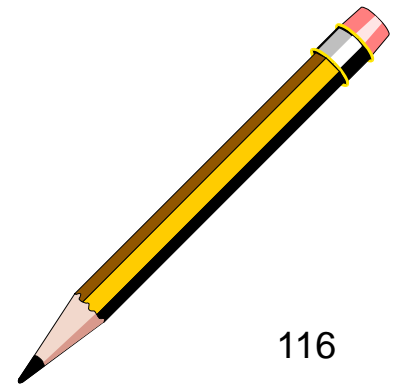
Click here to type...

SUBMIT

Have a go at coding

Here are some answers from a survey

- Are there any themes?
- How would you code them?



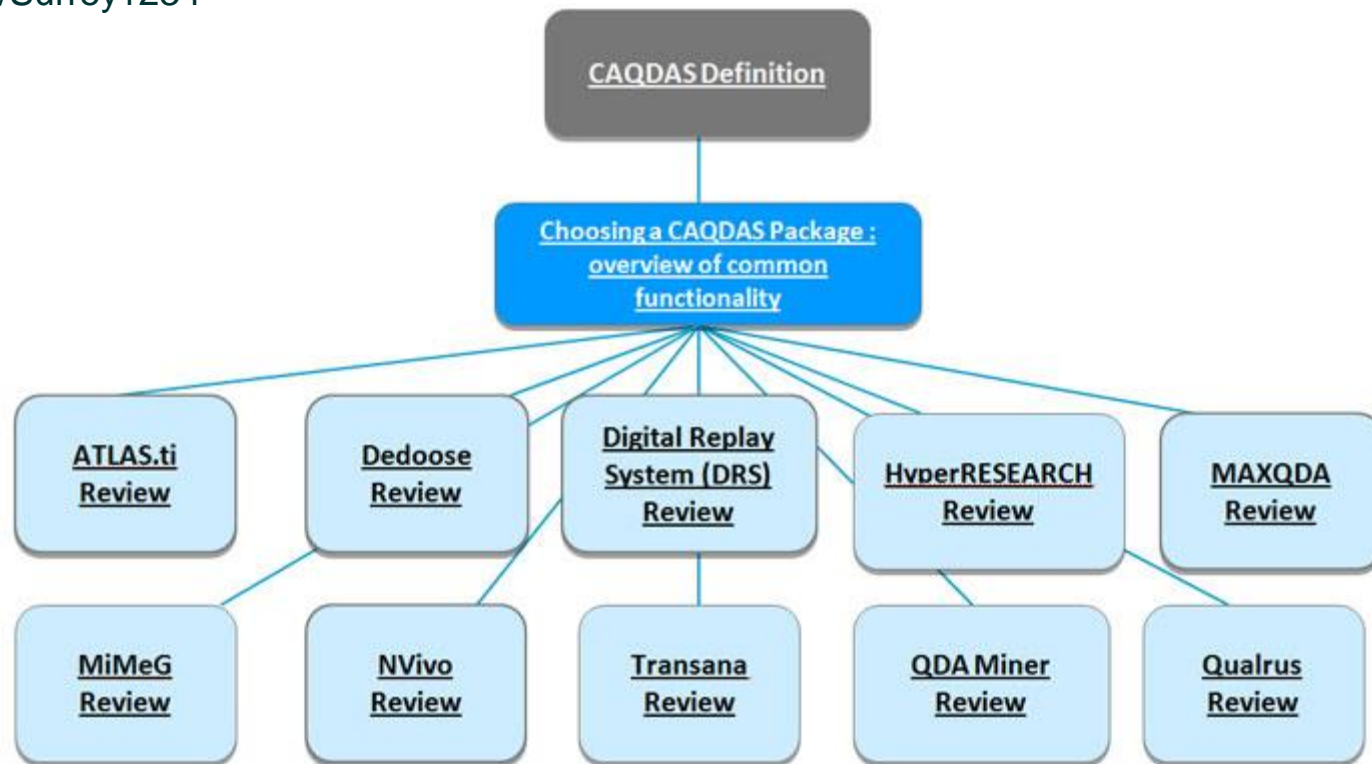
CAQDAS tools are available (but are a big challenge)

Before buying one, read this site:

<http://www.surrey.ac.uk/sociology/research/>

[researchcentres/caqdas/support/choosing/index.htm](http://www.surrey.ac.uk/sociology/research/researchcentres/caqdas/support/choosing/index.htm)

<http://bit.ly/Surrey1234>

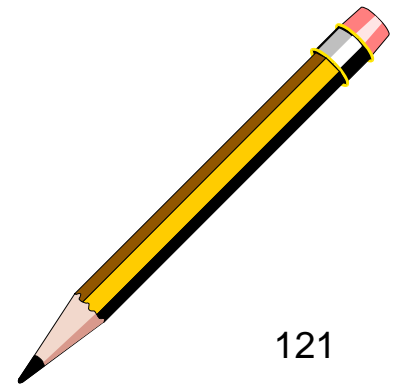


Wordle.net example: in favour of Facebook

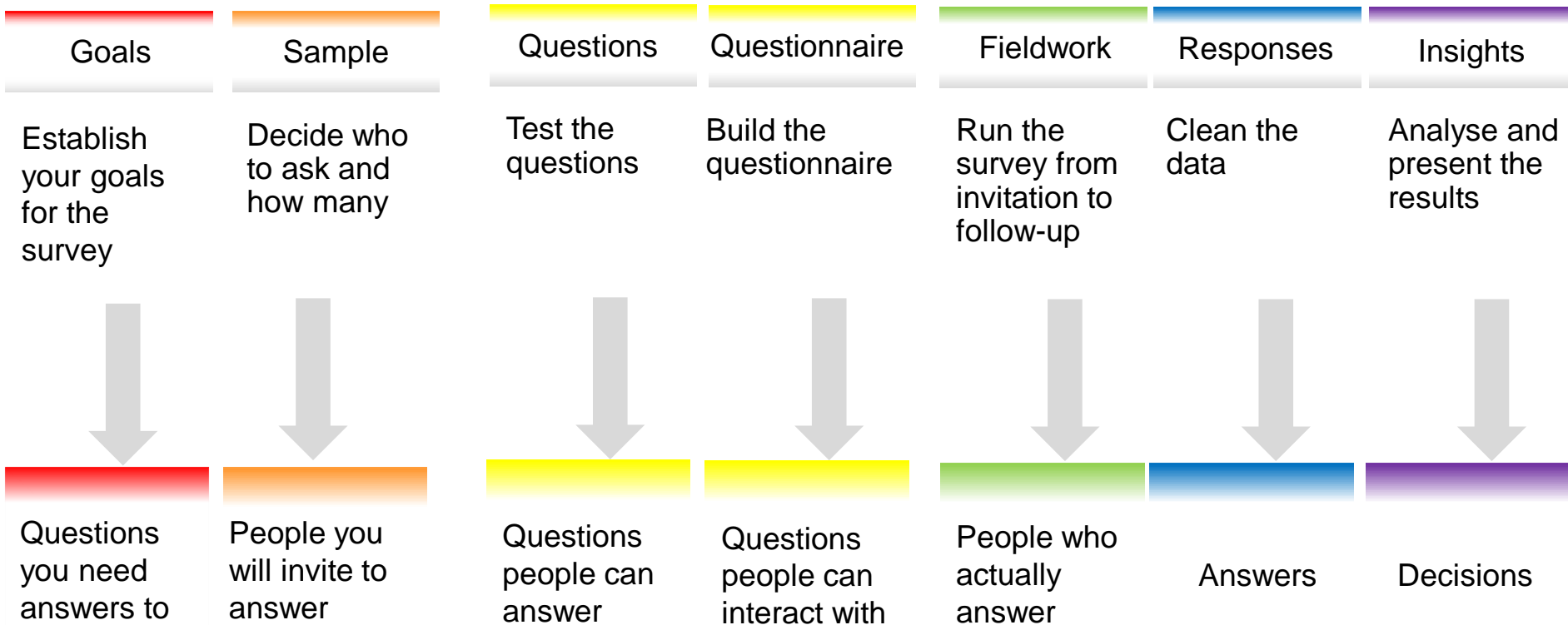


Here's an example of results

- Does the pie chart / bar chart presentation work for you?
- Does the tag cloud help or not?



The survey process



The survey process

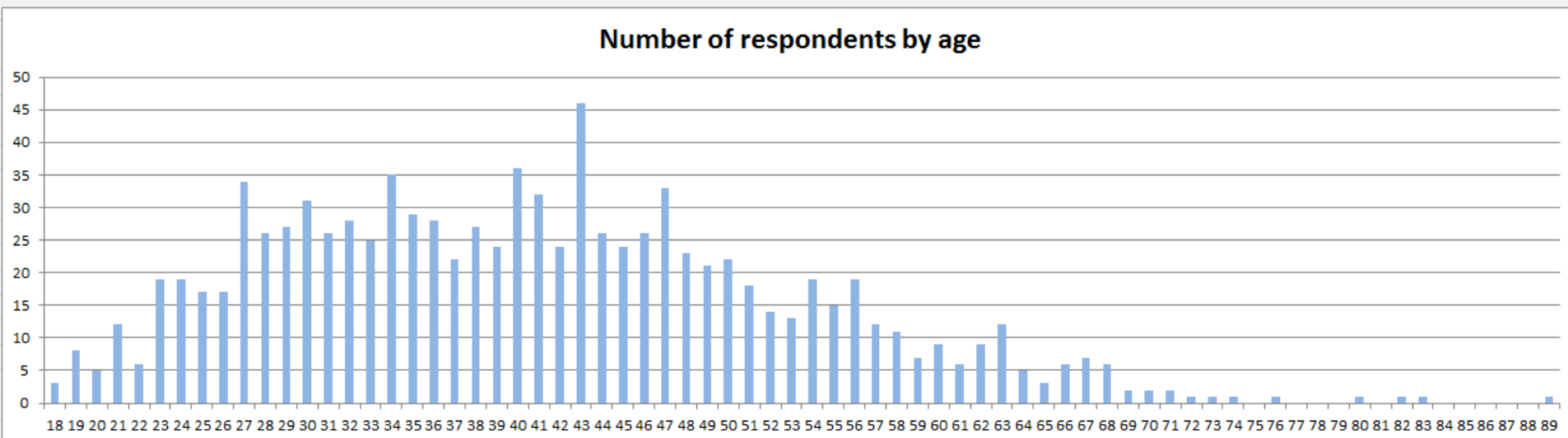
Insights

Analyse and
present the
results

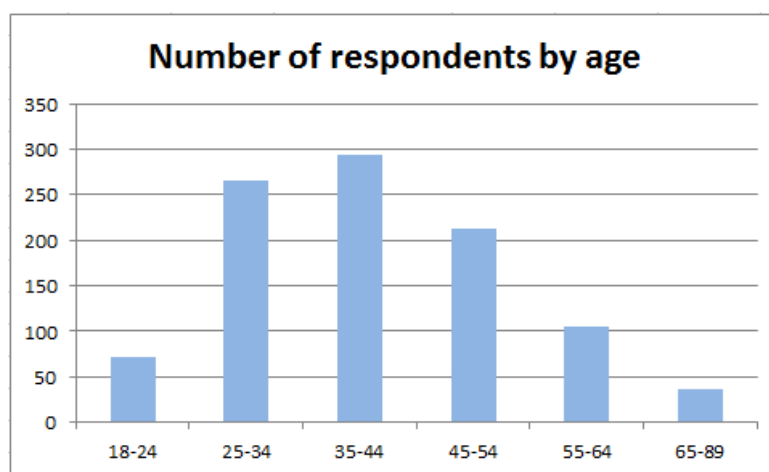
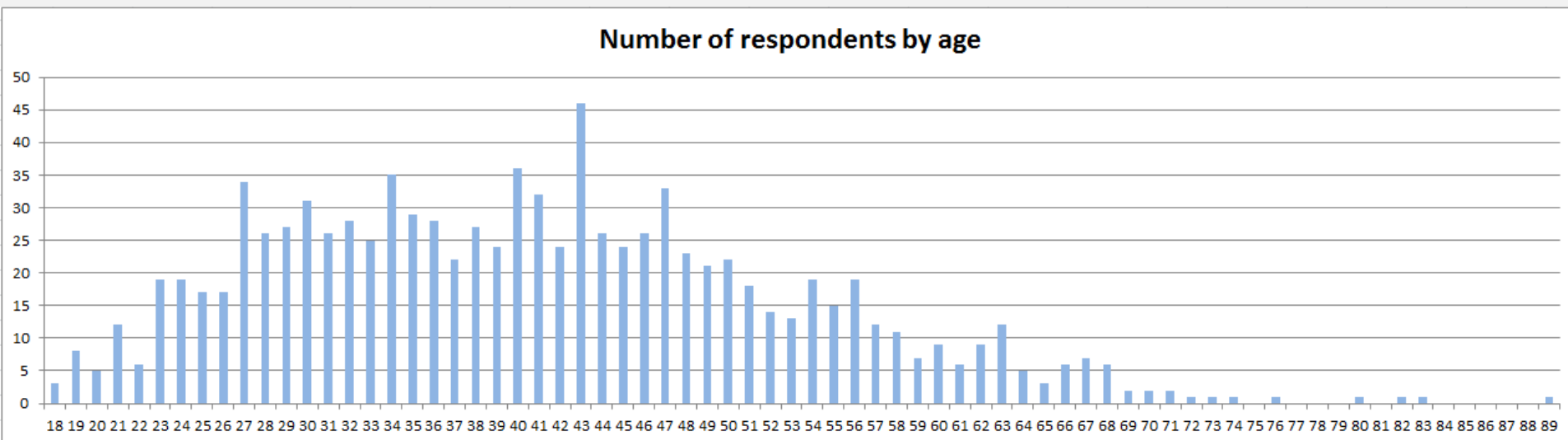


Decisions

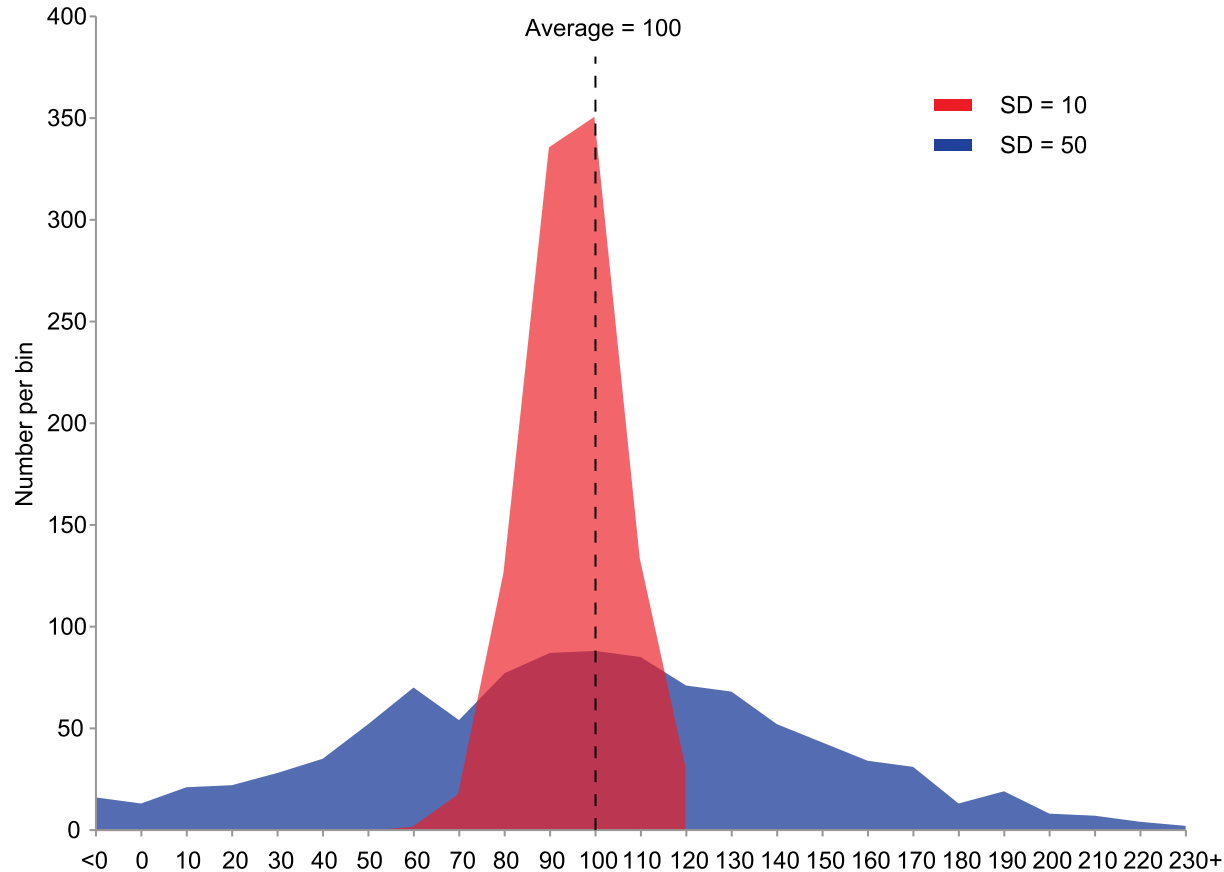
Explore your data and ask questions



Explore your data and ask questions



Standard deviations (SD) show spread



Correlations show relationships



+1.0 closely aligned

+0.8 somewhat aligned

+0.4 a bit aligned

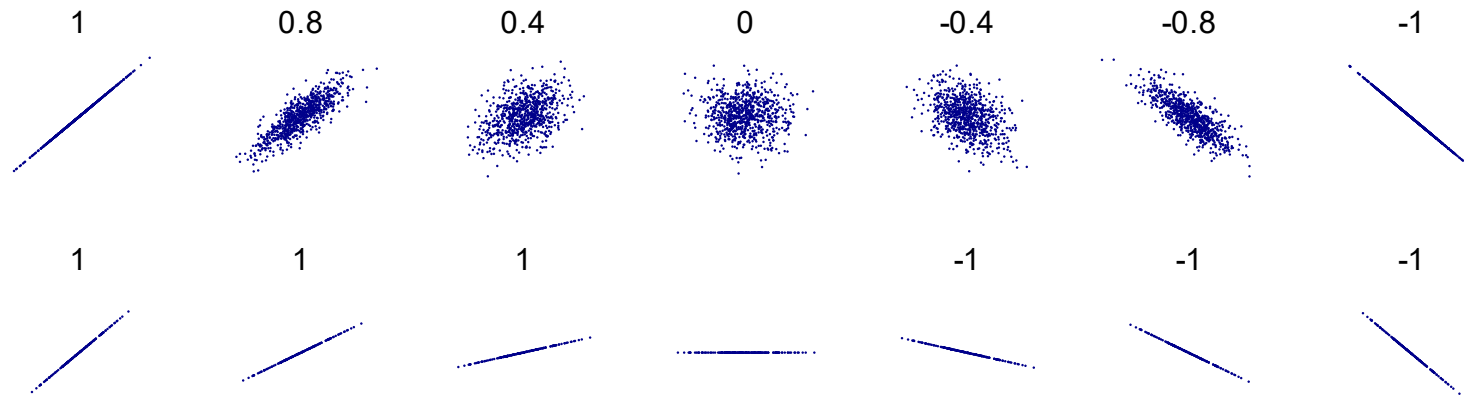
+0.0 no relationship

-0.4 one goes up, the other one goes down a bit

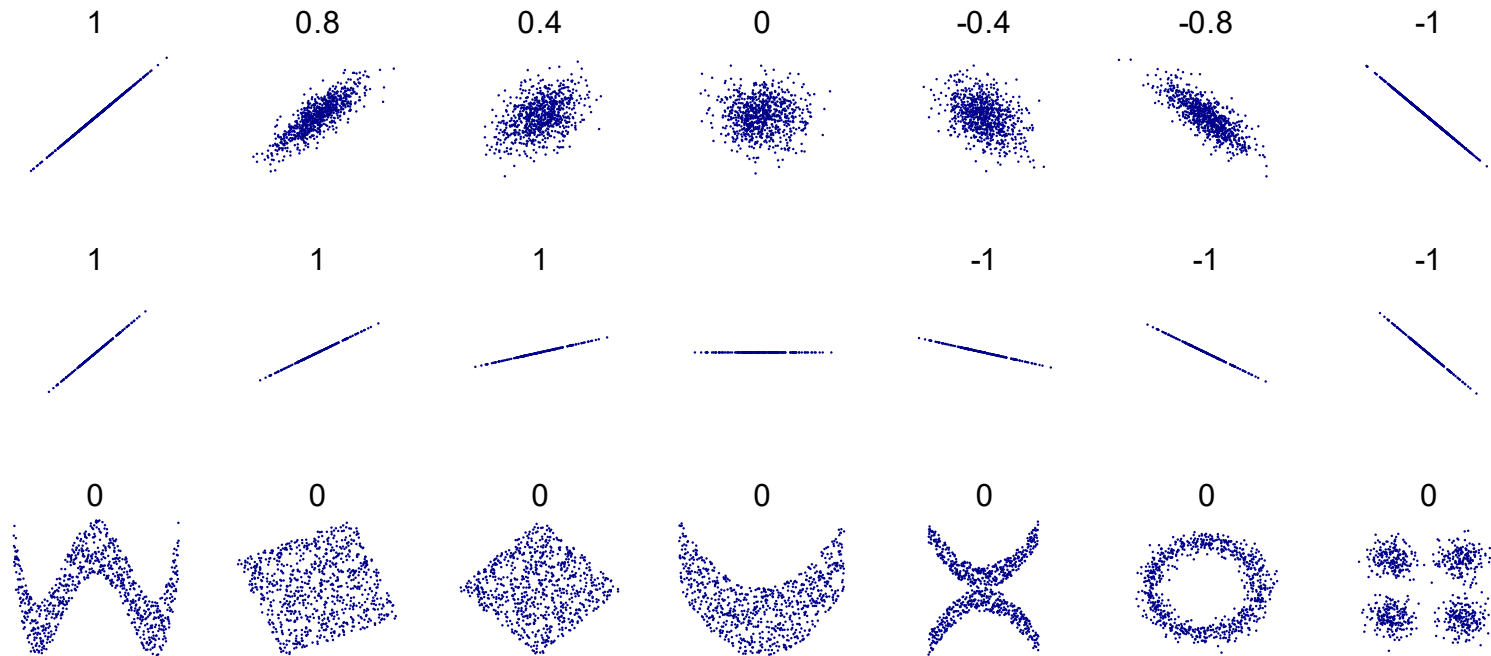
-0.8 one goes up, the other one mostly goes down

-1.0 one goes up, the other goes down the same amount

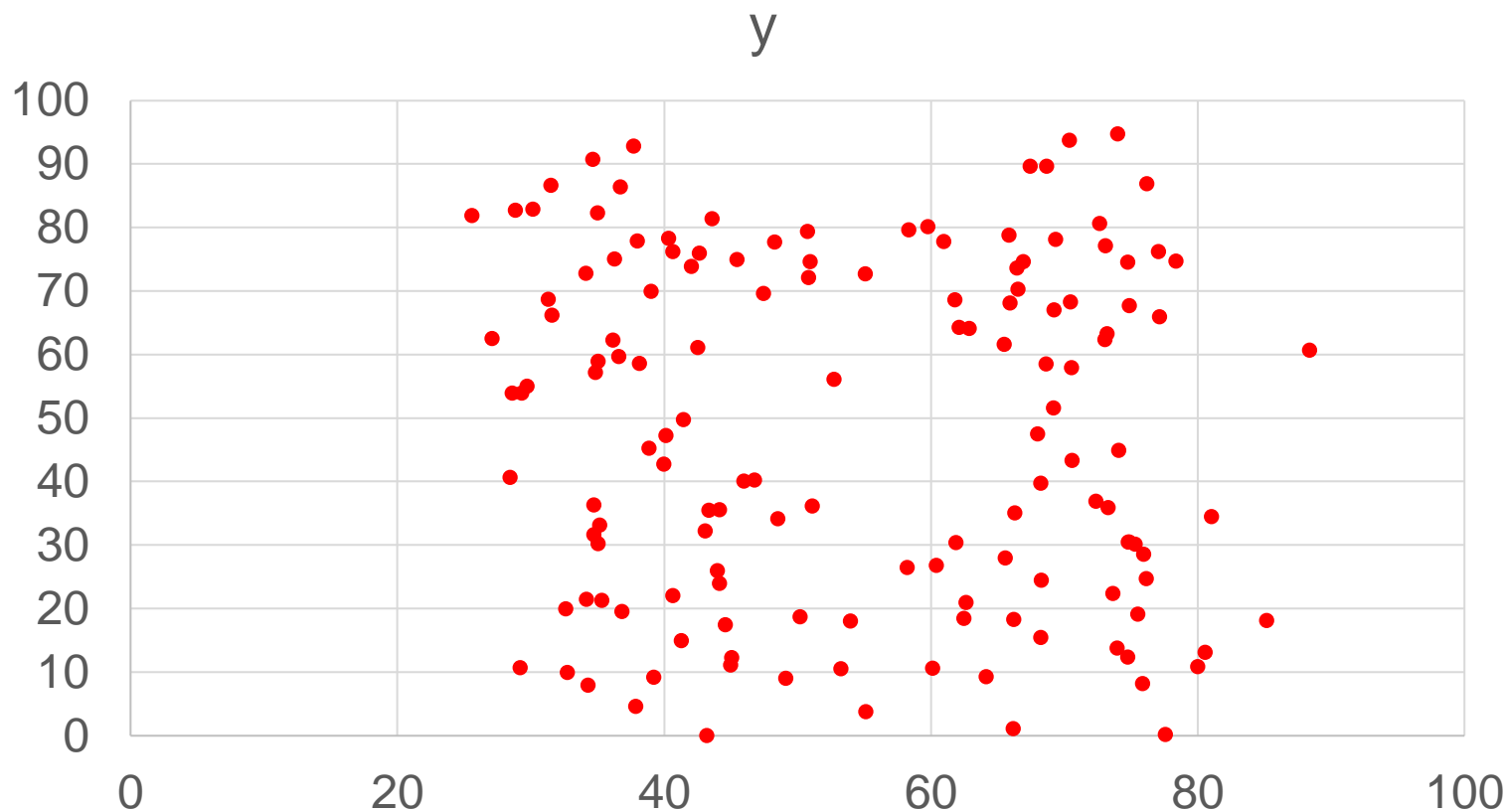
Correlations do not show slope



Some relationships are not correlated



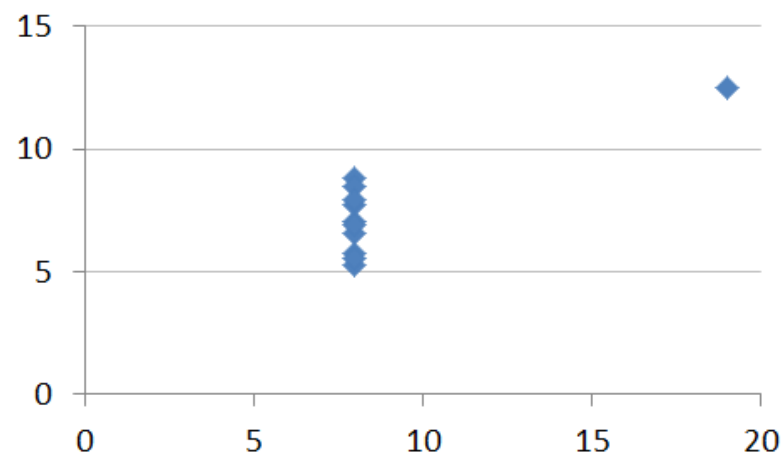
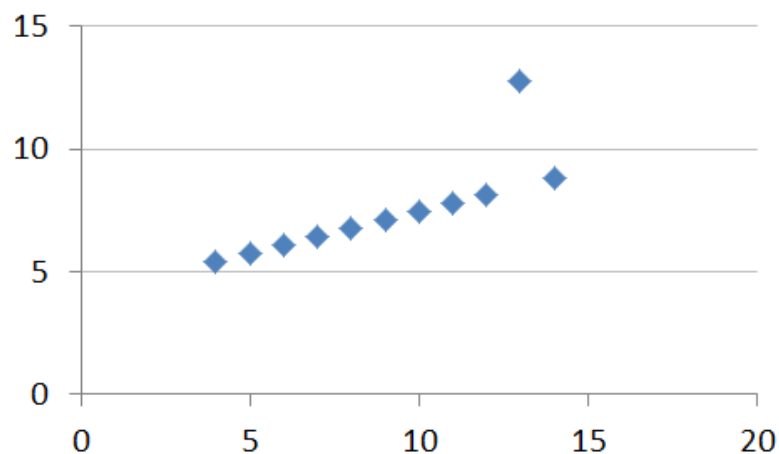
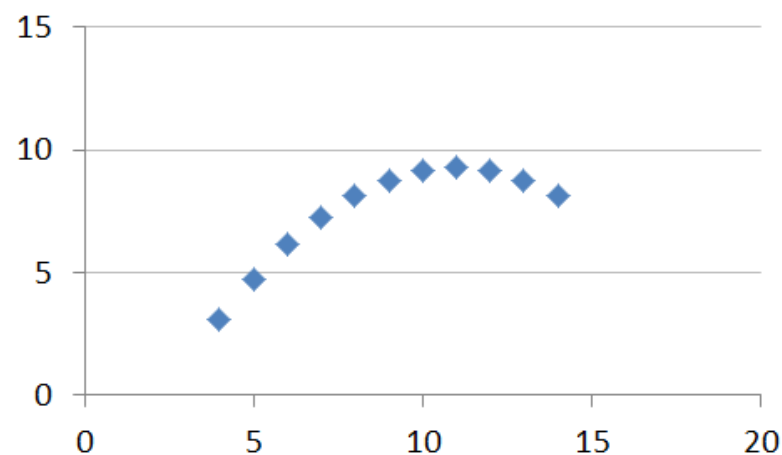
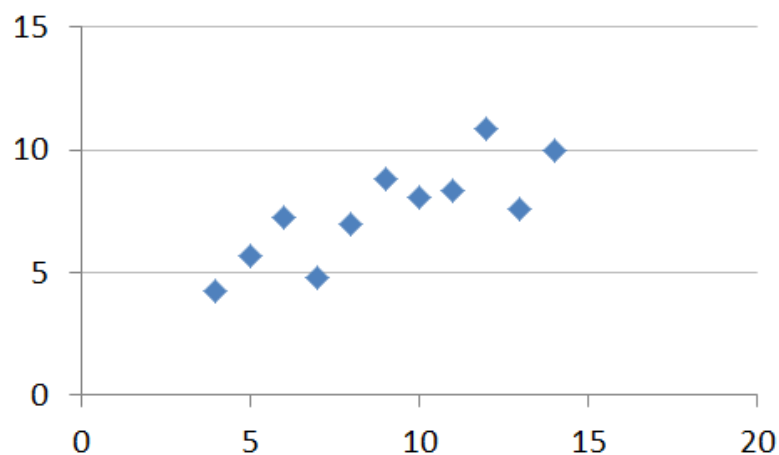
Justin Matejka's dataset



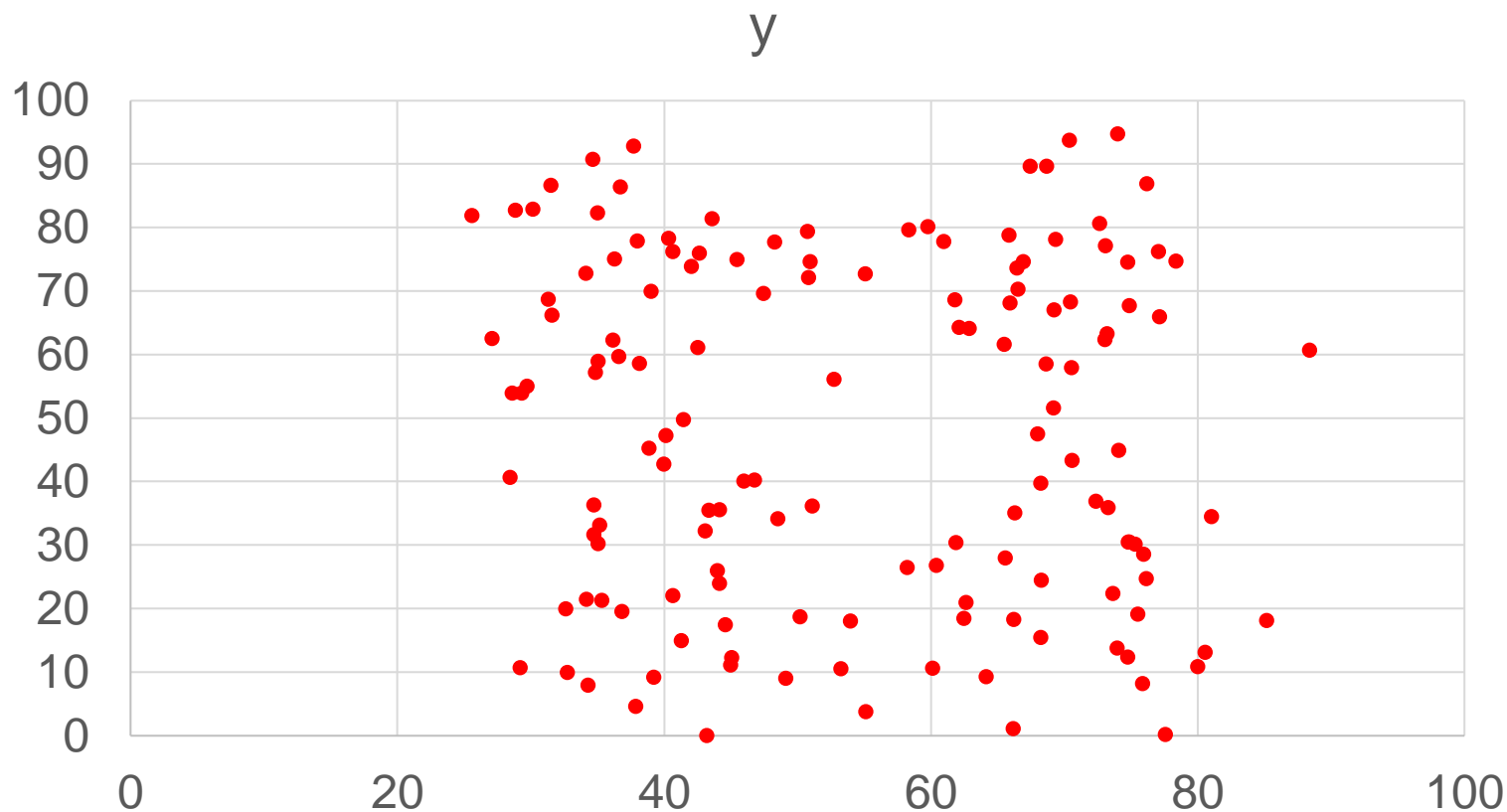
Actual values for Justin's dataset

- X Mean: 54.26
- Y Mean: 47.83
- X SD: 16.76
- Y SD: 26.93
- Corr.: -0.06

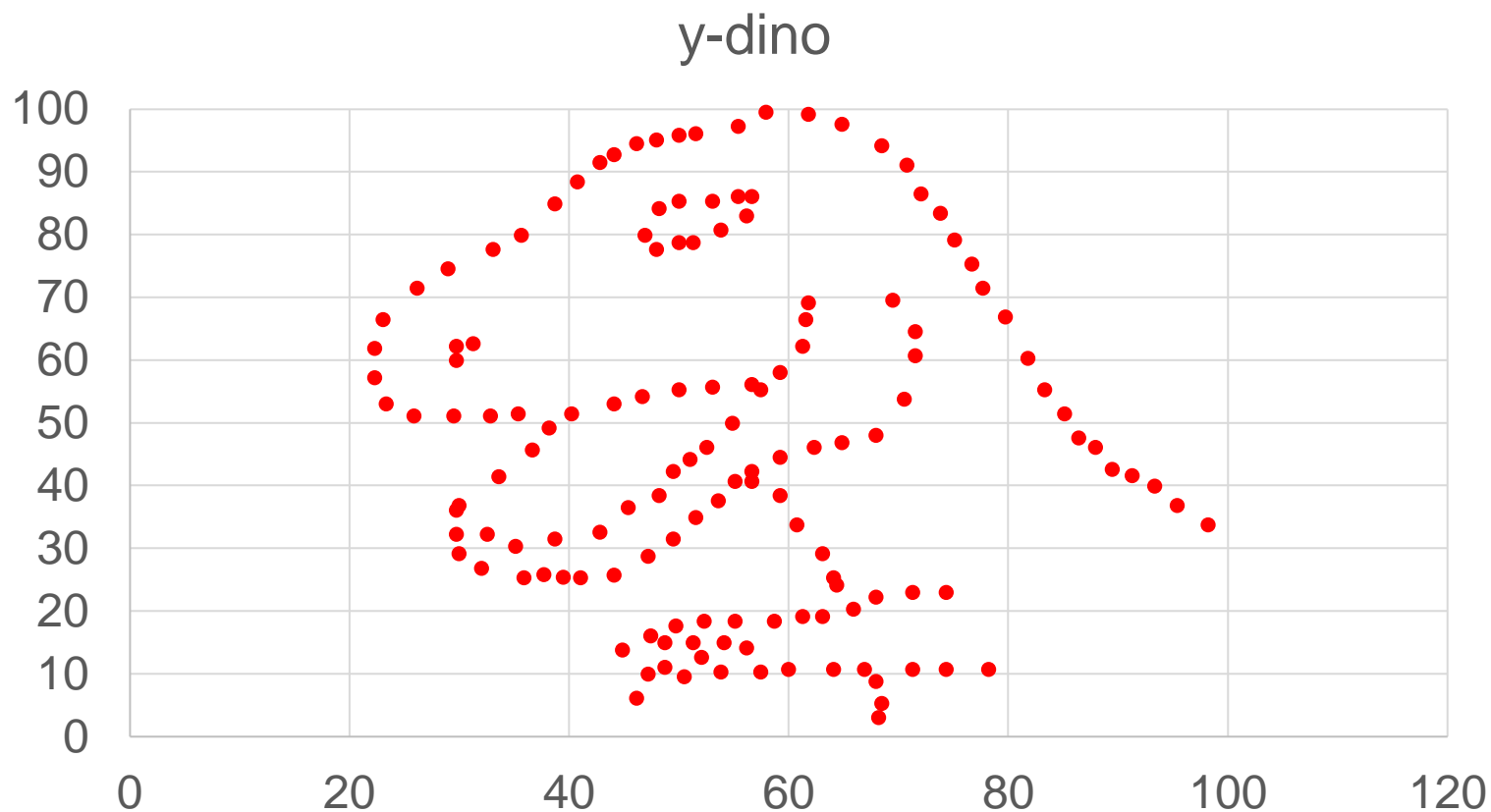
Use graphs and charts to understand relationships in the data



Justin Matejka's dataset



Alberto Cairo's dataset



Use descriptive statistics to explore numerical data

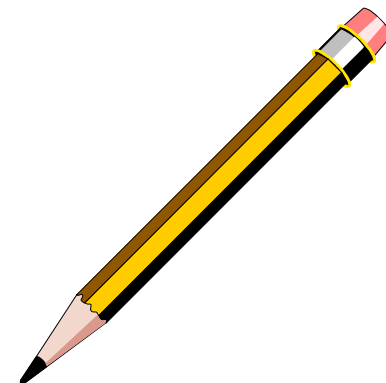
- Most seen for statistics
 - Mean (arithmetic average)
 - Standard deviation (spread of answers)
 - Correlation (whether answers vary together)
- Useful for thinking about the data
 - Range (lowest to highest)
 - Mode (most common answer)

Dealing with rating questions

A 'Like / Dislike' question got these responses

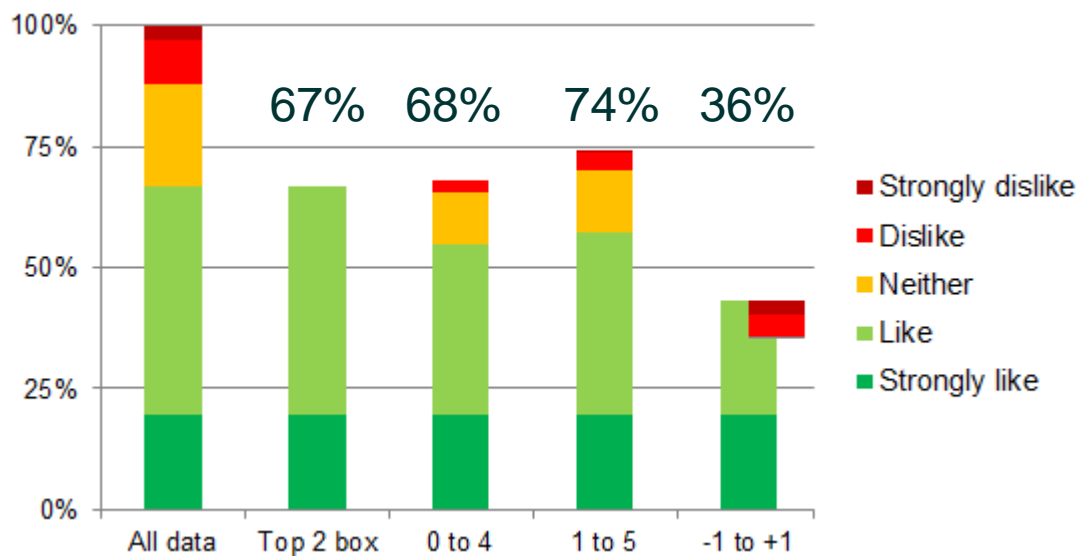
Strongly dislike	2
Dislike	6
Neither dislike nor like	14
Like	31
Strongly like	13
Total responses	66

Please work out:
the percentage of respondents who 'like'



There are many ways to combine ratings into means and percentages

- 47% 31 ticked 'like' so $31/66 = 47\%$
- 67% 'Top box' / 'top 2 box' uses the positive responses
- 68% '0 to 4' weights responses: 0%, 25%, 50%, 75%, 100%
- 74% '1 to 5' weights responses: 1, 2, 3, 4, 5 (then divide by 5)
- 36% '-1 to 1' weights responses: -100%, -50%, 0, 50%, 100%



This example has a graph

- This example uses the calculation:

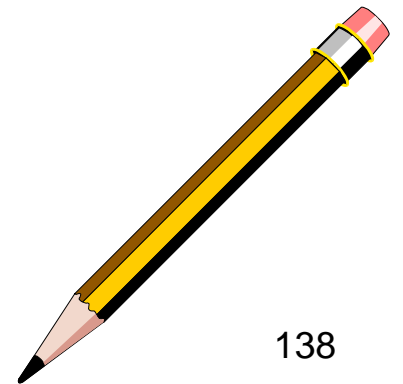
Poor = 1

Reasonable = 2

Good = 3

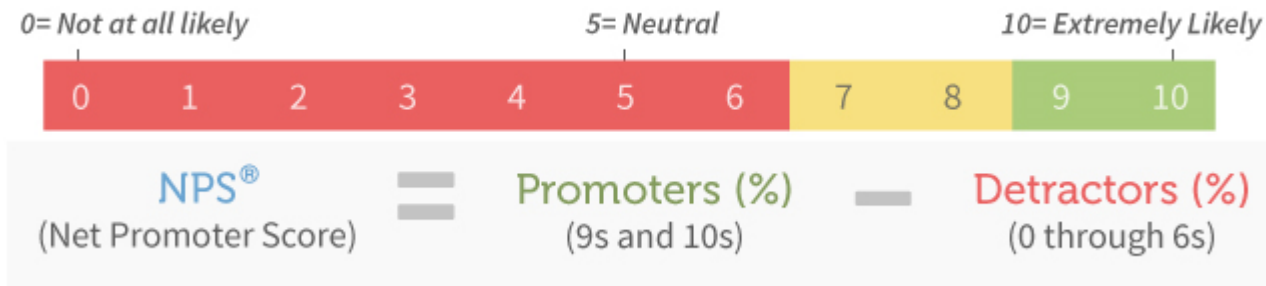
Excellent = 4

- Is the graph an appropriate illustration of the data?

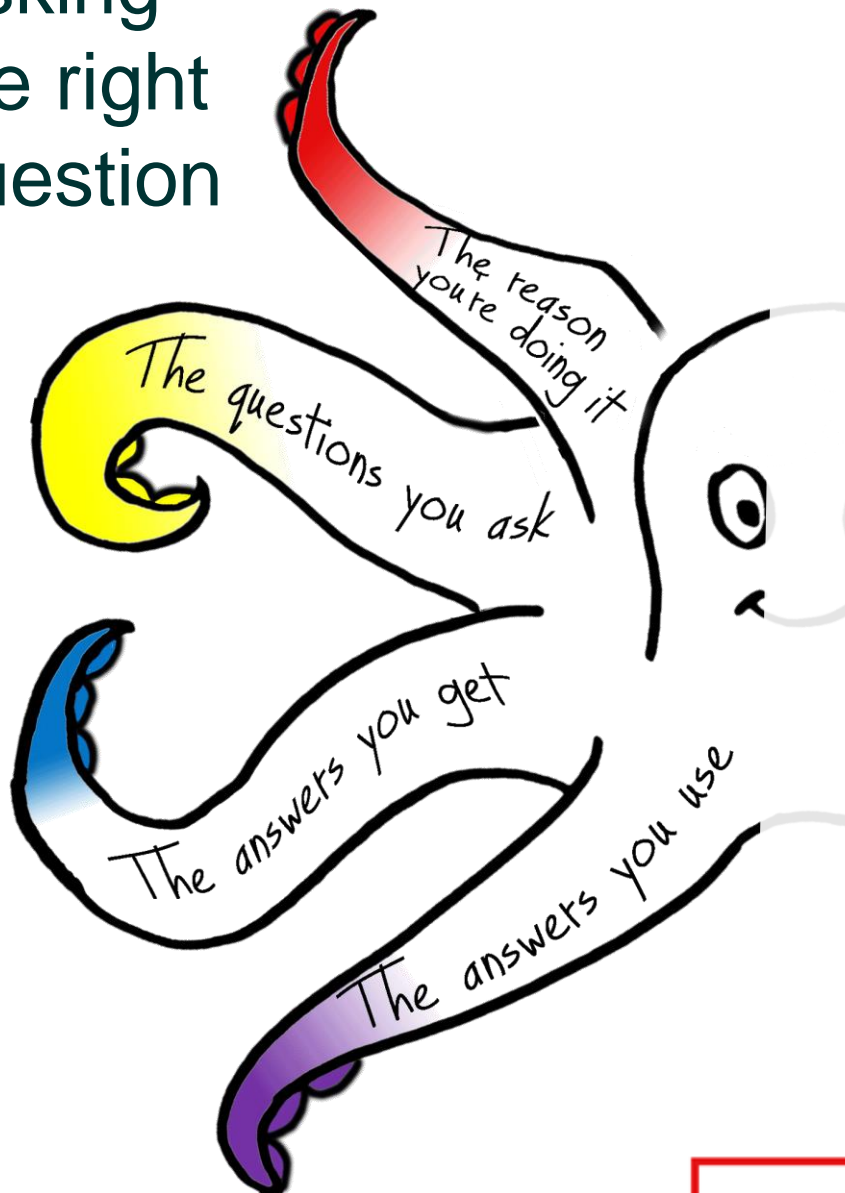


Net Promoter Score™

has a special analysis method



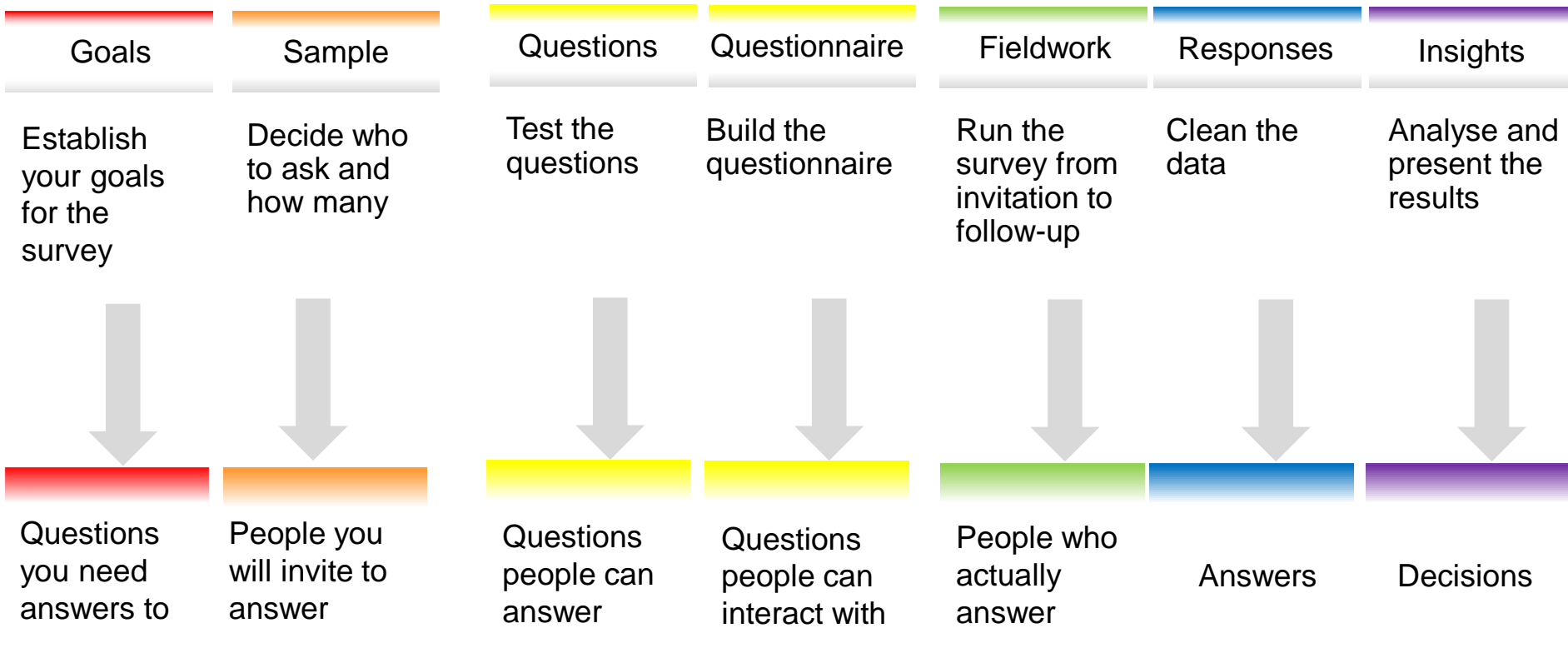
Asking
the right
question



Choose whichever
method you like,
but you must
make the choice
when you decide on
the goals of the survey

The number

The survey process



All the topics are connected

Goals

Questions

Questionnaire

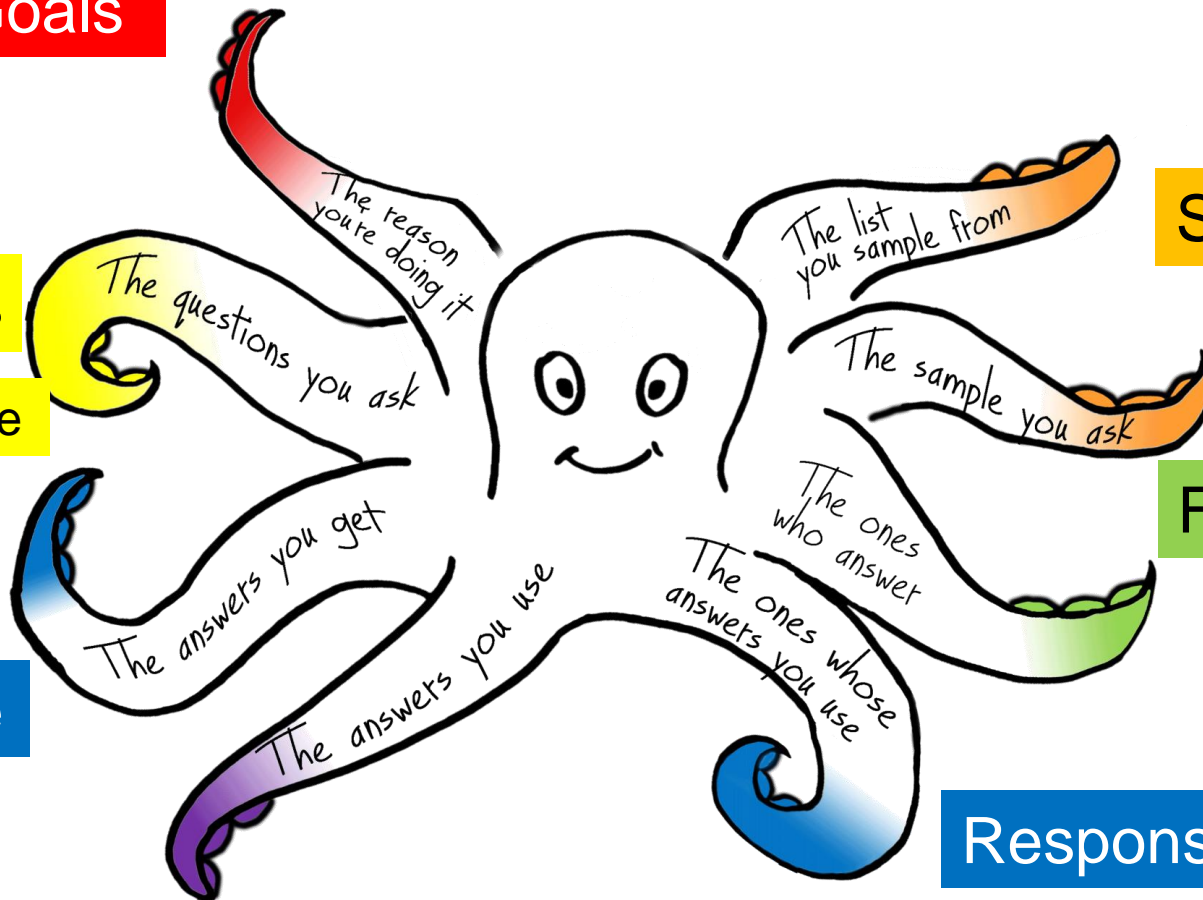
Response

Insight

Sample

Fieldwork

Response



The aim is to get the best number you can, within the resources you have

What you want to ask about

The reason you're doing it

The questions you ask

The answers you get

The answers you use

Who you want to ask

The list that you sample from

The sample you ask

The ones who answer

The ones whose answers you can use

The aim is to get the best number you can, within the resources you have

What you want to ask about

The reason you're doing it

The questions you ask

The answers you get

The answers you use

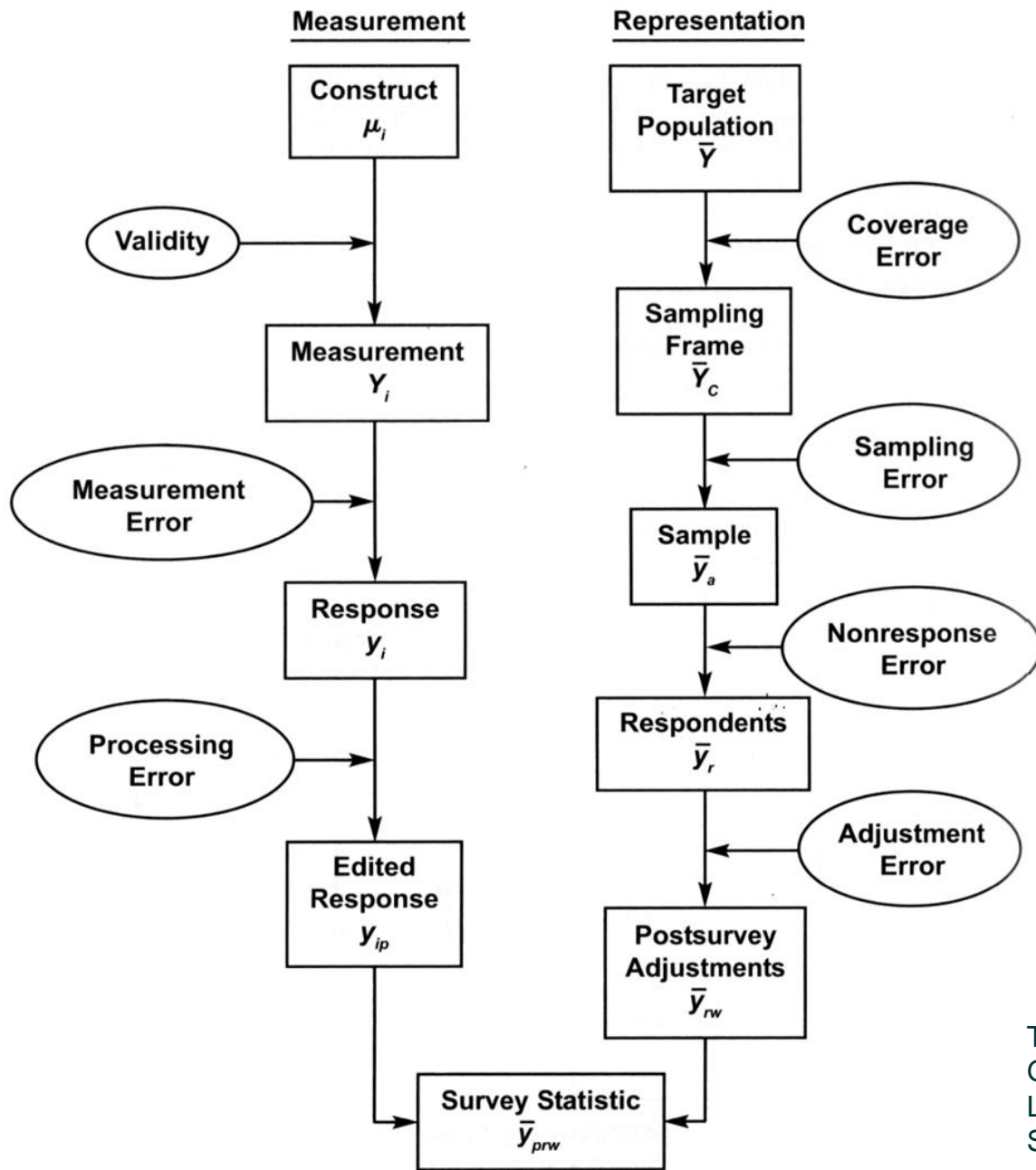
Who you want to ask

The list that you sample from

The sample you ask

The ones who answer

The ones whose answers
you can use



Total Survey Error diagram as presented in Groves, R. M., F. J. Fowler, M. P. Couper, J. M. Lepkowski, E. Singer and R. Tourangeau (2009). Survey methodology. Hoboken, N.J., Wiley.

Figure 2.5 Survey life cycle from a quality perspective.

What you want
to ask about

Who you
want to ask

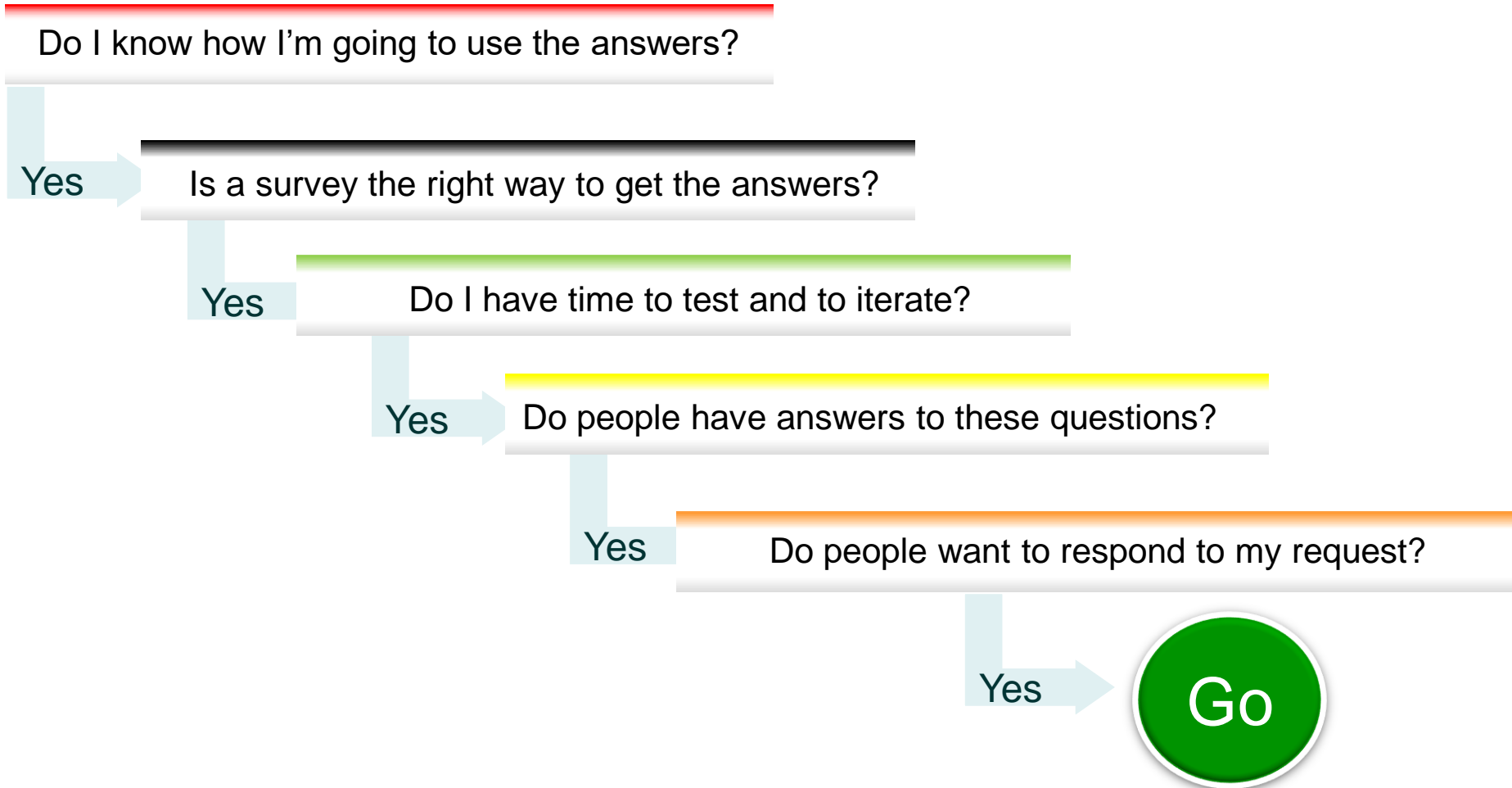
Asking one
person the
right question

is better than

Asking 10,000
people the
wrong question

The number

Should I do this survey?



Caroline Jarrett

Twitter @cjforms

<http://www.slideshare.net/cjforms>

carolinej@effortmark.co.uk

