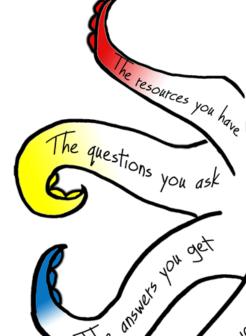
Surveys that work

An introduction to using Total Survey Error in practice

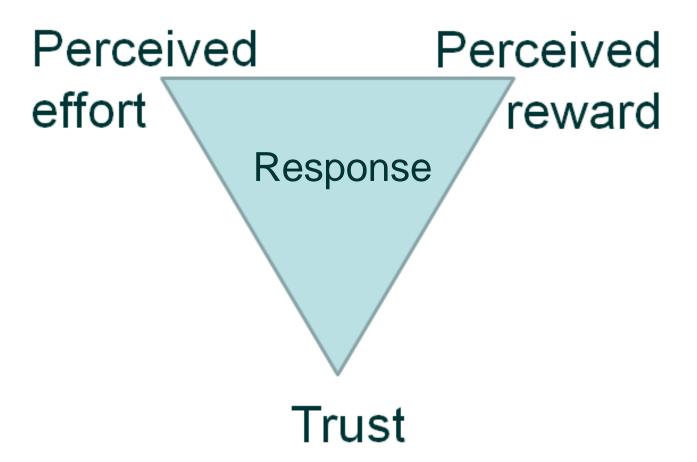
Caroline Jarrett
@cjforms
#UXInsights2020



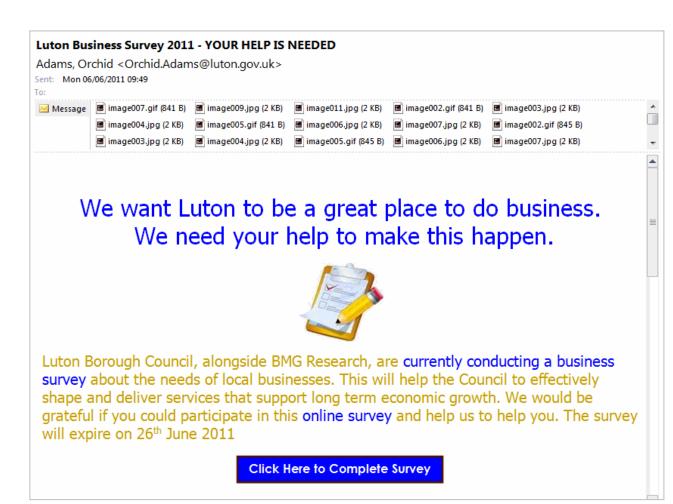
What would you do for a dollar?

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

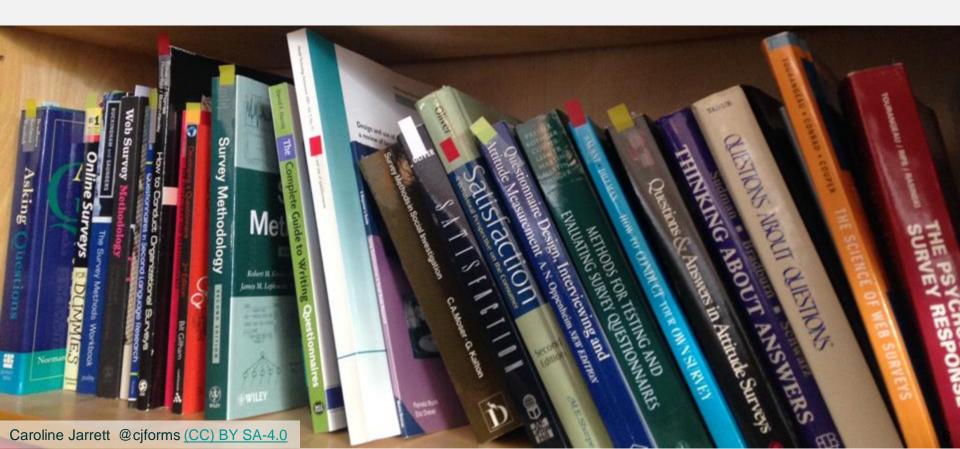




Would you answer this survey?



Why do people answer questions?



I'm the forms specialist



People ask me about surveys

"Please have a look at this survey"

"Tell me whether this is a good question"

"How many people do I need in my sample?"

"I prefer 5 points in a rating scale, but my boss likes 7. Who's right?"

8

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.

I change the definition a bit

systematic method becomes process gathering information becomes ask questions entities become people quantitative descriptors become numbers attributes of the make decisions larger population becomes

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 the number that helps you to make a decision

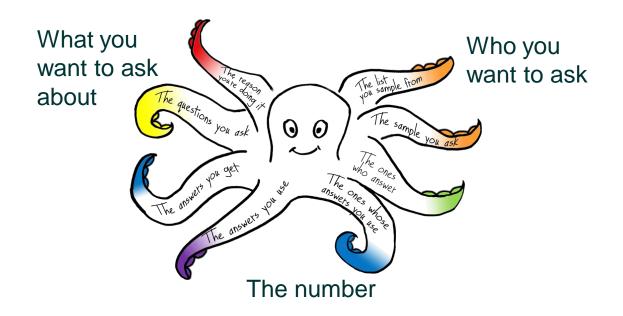
What you want to ask about

Who you want to ask

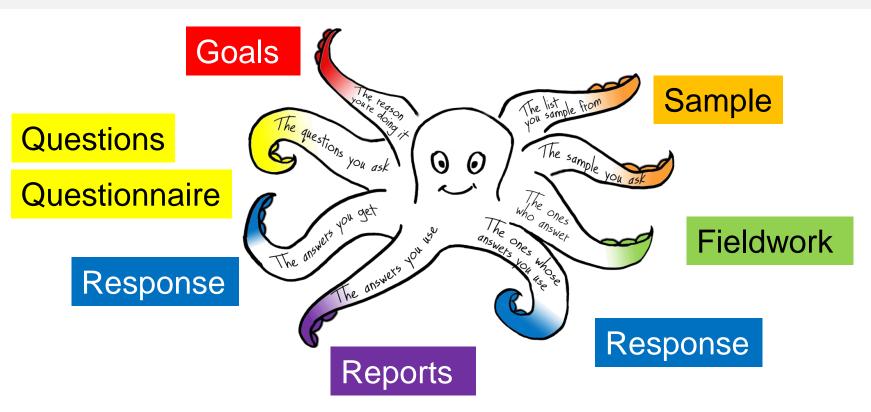
The Survey

The number

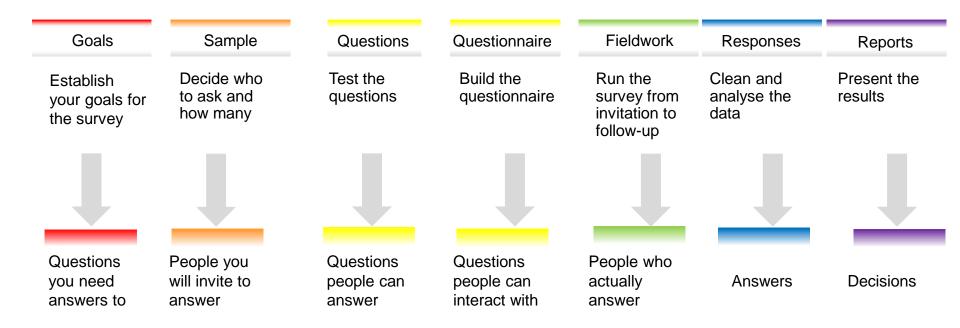
The Survey Octopus has things to think about



There are steps in the process for each area



Here are the 7 steps as a linear process



People ask me about surveys

"Please have a look at this survey"

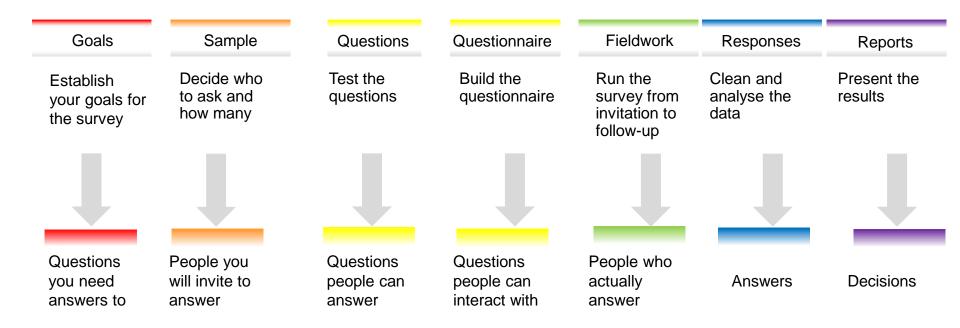
"Tell me whether this is a good question"

"How many people do I need in my sample?"

"I prefer 5 points in a rating scale, but my boss likes 7. Who is right?"

17

Here are the 7 steps as a linear process



I have to know about goals first

Goals

Establish your goals for the survey



Questions you need answers to

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

What you want to ask about

Who you want to ask

The Survey

The number

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?

People ask me about surveys

"Please have a look at this survey"

"Tell me whether this is a good question"

"How many people do I need in my sample?"

"I prefer 5 points in a rating scale, but my boss likes 7. Who is right?"

22

Is this a good question?

Would you recommend us to a friend or family member?

"Recommend to friend/family" can be OK

	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?

People ask me about surveys

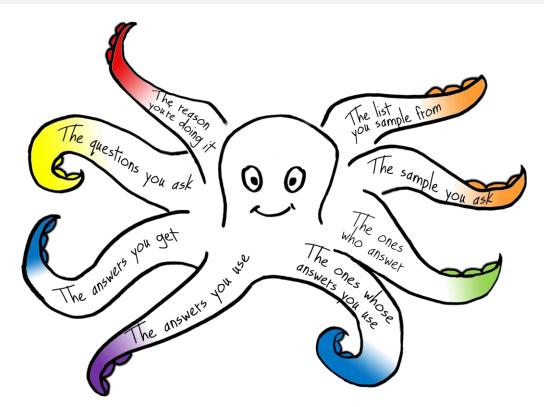
"Please have a look at this survey"

"Tell me whether this is a good question"

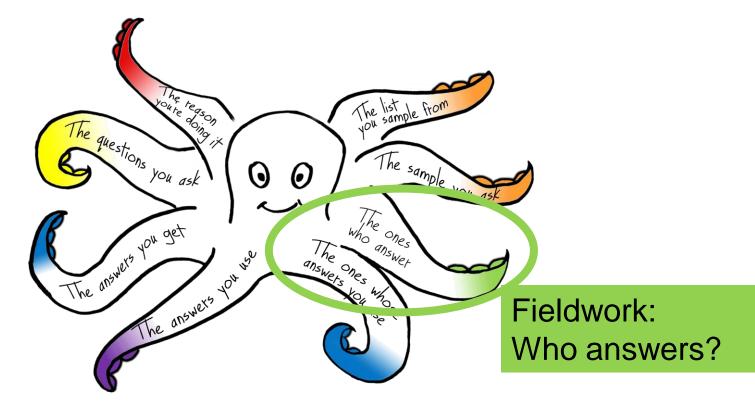
"How many people do I need in my sample?"

"I prefer 5 points in a rating scale, but my boss likes 7. Who is right?"

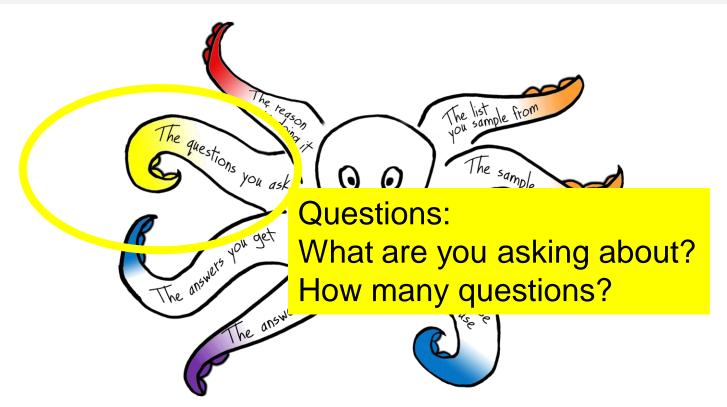
To work that out, let's visit the Octopus



Start with how many will answer



Whether they'll answer depends on effort



And on the reward you're offering



Then there's the 'Justin Bieber North Korea' problem

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.

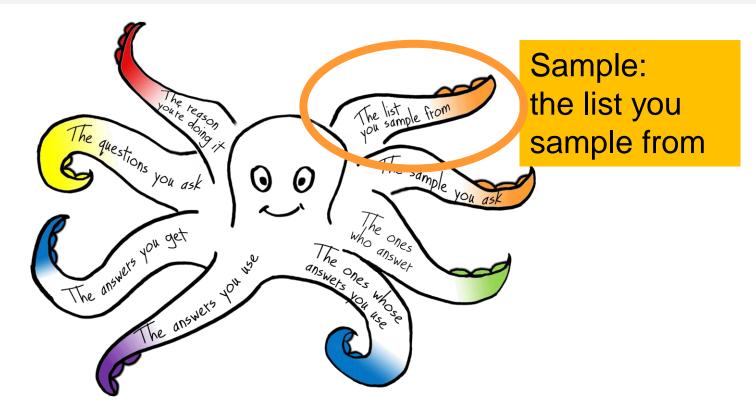
There are now almost half a million votes to send the singer to the secretive communist nation.

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

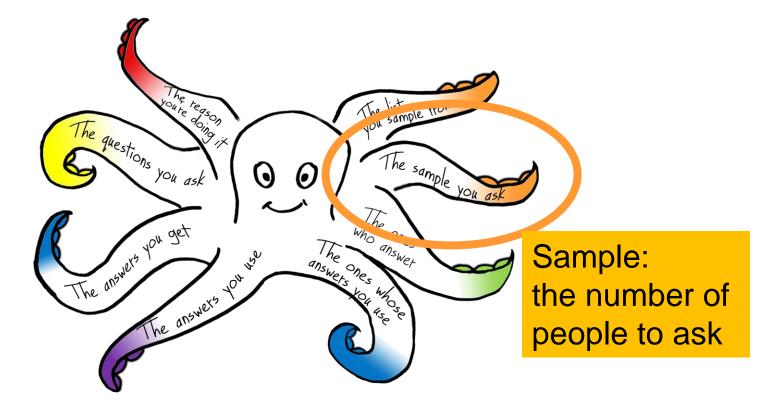


It is highly unlikely Bieber would be given permission to enter North Korea

So it matters where we get our sample



And now it's easy to work out how many to ask



The response rate varies

It depends on

- Why you're asking
- What you're asking and the type of questionnaire you make
- Who you're asking
- How you're asking

Goals

Questions

Questionnaire

Sample

Fieldwork

People ask me about surveys

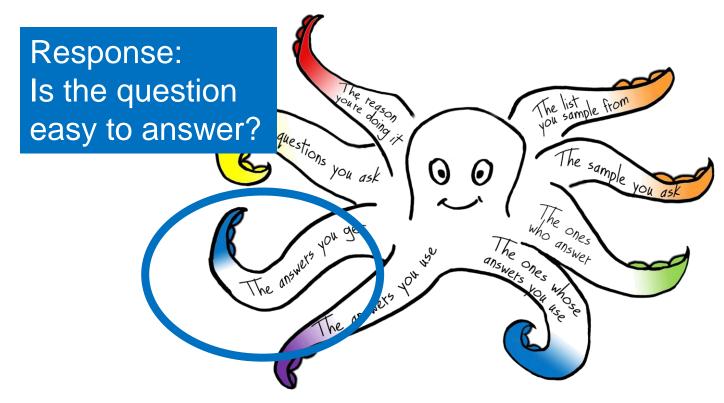
"Please have a look at this survey"

"Tell me whether this is a good question"

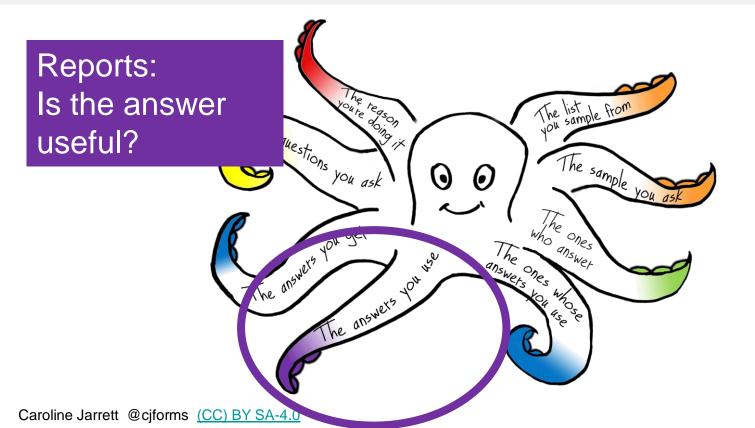
"How many people do I need in my sample?"

"I prefer 5 points in a rating scale, but my boss likes 7. Who is right?"

A good question gets good answers



Good answers help you to make decisions



Likert had several different types of question in his response formats

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 Disapprove (5) (4) (3) (2) (1)

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)

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

Krosnick and Presser refer to over 80 papers



Krosnick, J. A. and S. Presser (2009). Question and Questionnaire Design.
Handbook of Survey Research (2nd Edition) J. D. Wright and P. V. Marsden, Elsevier.
https://web.stanford.edu/dept/communication/faculty/krosnick/docs/2009/2009_handbook_krosnick.pdf

Let's try this question. Pick your answer.

```
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 Disapprove (5) (4) (3) (2) (1)
```

People focus on the actual question

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

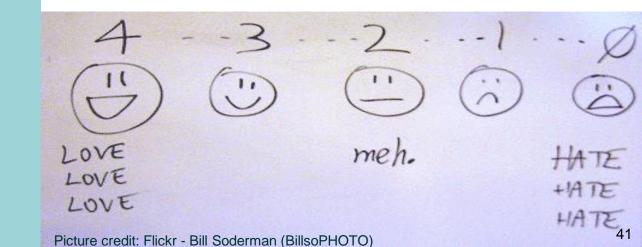
1=Poor

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

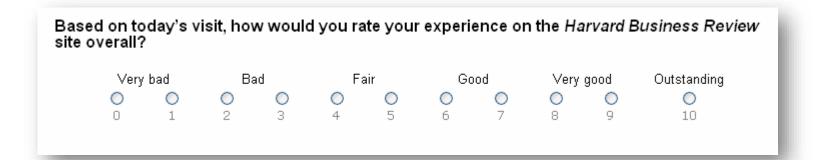
○ ○ ○ ○ ○ ○ ○ ○ ○
```

Tip

Don't stress too much about the number of points in your rating scale



Well, OK, stress a little bit.

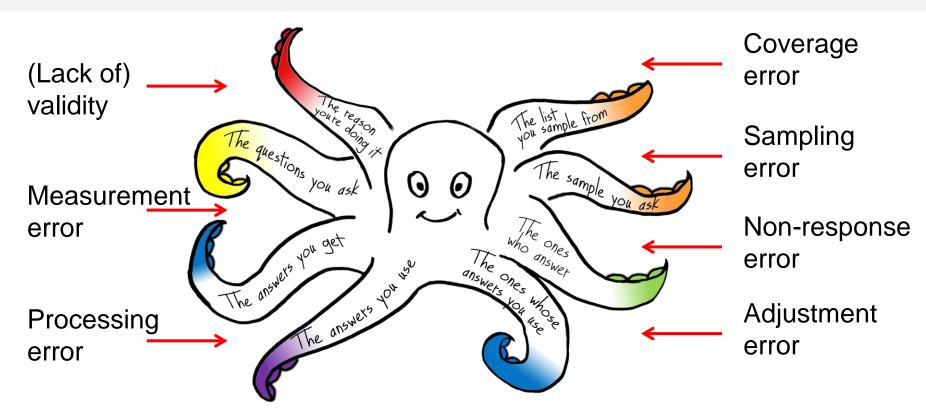


This scale is downright peculiar.

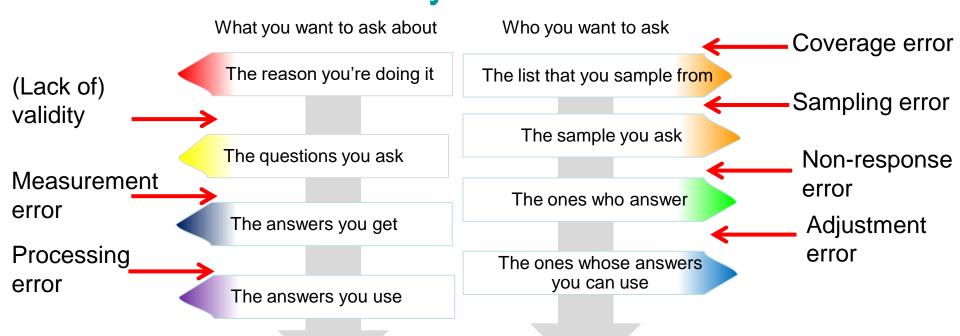
Avoid.

Let's look at all the errors

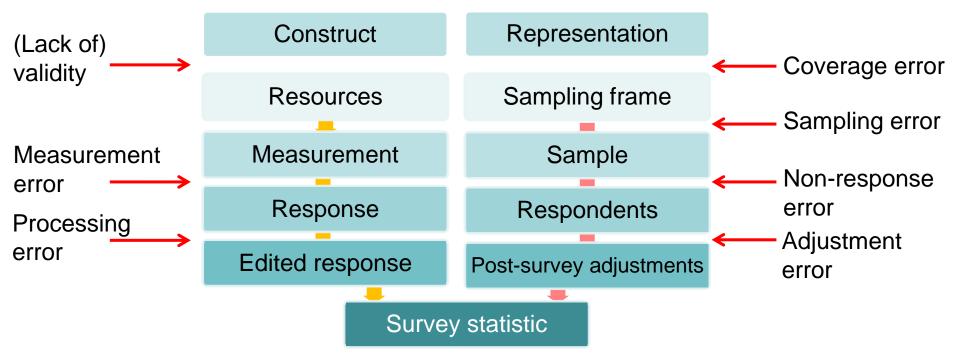
There are errors all around the Survey Octopus



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



This version uses terms from survey methodology



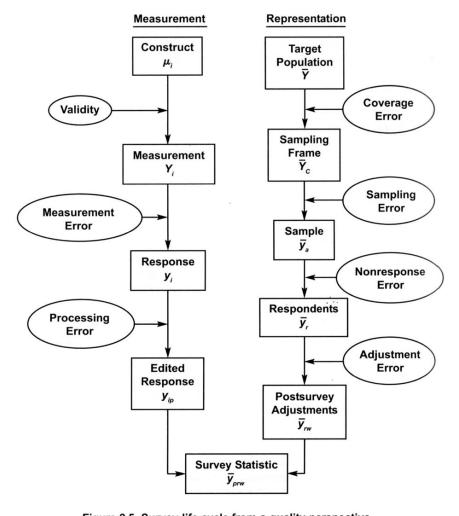


Figure 2.5 Survey life cycle from a quality perspective.

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.

Caroline Jarrett

Twitter @cjforms

http://www.slideshare.net/cjforms

carolinej@effortmark.co.uk

