



# Putting Respondents First; user centred design approaches at ONS

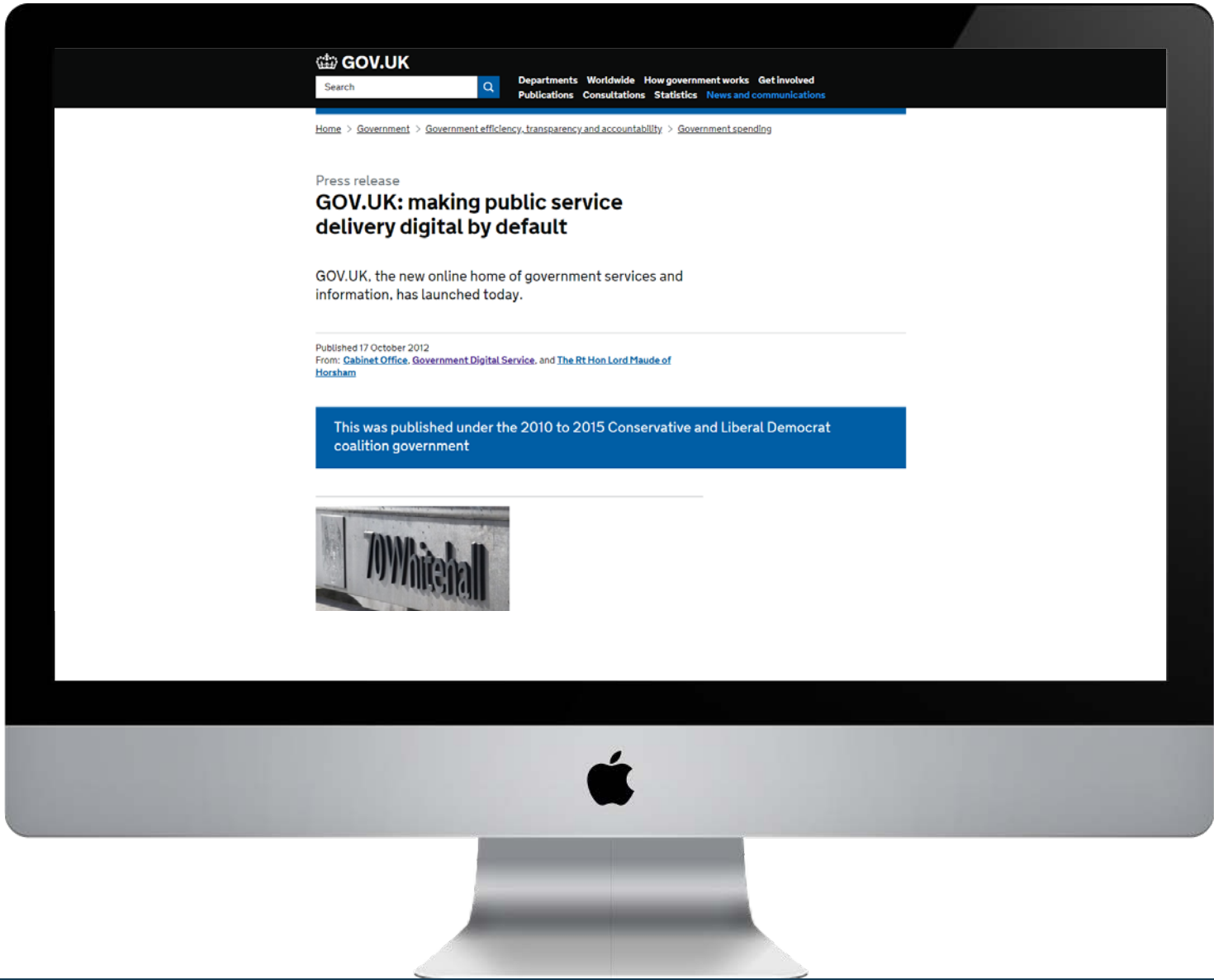
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Social Survey Transformation | Research and Design Lead



# What is User Centered Design?

User-centered design (UCD) is an iterative design process in which designers focus on the users and their needs in each phase of the design process. In UCD, design teams involve users throughout the design process via a variety of research and design techniques, to create highly usable and accessible products for them.



Government  
Digital Service



The challenge is service transformation

Not website redesign



GOV.UK

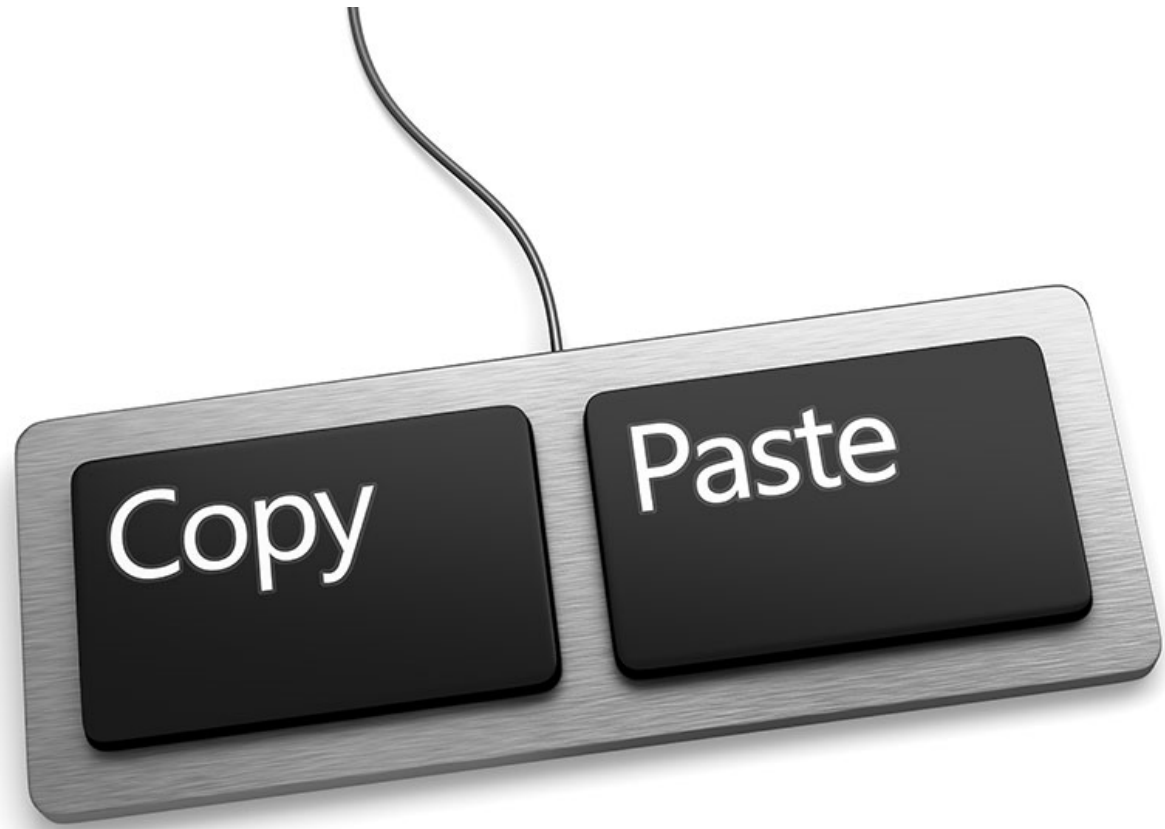


- 1**  
**START WITH NEEDS**  
USER NEEDS, NOT GOVERNMENT NEEDS
- 2**  
**DO LESS**
- 3**  
**DESIGN WITH DATA**
- 4**  
**DO THE HARD WORK TO MAKE IT SIMPLE**
- 5**  
**ITERATE. THEN ITERATE AGAIN**
- 6**  
**THIS IS FOR EVERYONE**
- 7**  
**UNDERSTAND CONTEXT**
- 8**  
**BUILD DIGITAL SERVICES NOT WEBSITES**
- 9**  
**BE CONSISTENT NOT UNIFORM**
- 10**  
**MAKE THINGS OPEN**  
IT MAKES THINGS BETTER



# MEMORY LN

c. 2010 - 2015







**How many people live in your household, including yourself, and any children and babies?**

➔ Please include all people who have this accommodation as their only residence.  
For people with more than one address please click the descriptions below and follow the include/exclude guidance.

> **Students away at university/college, student nurses, children at boarding school**

- INCLUDE: Children under 19 at boarding school/college
- INCLUDE: Students living in a hall of residence in term time:
- EXCLUDE: Students NOT living in a hall of residence
- A hall of residence is a property connected to a particular educational establishment that provides communal accommodation for students attending there.
- EXCLUDE: Student nurses living away in NHS accommodation

> **Other people living away**

- For example, working away from home, in prison, in hospital, in a nursing home:
- INCLUDE: If for less than 6 months
  - EXCLUDE: If for 6 months or more, even if this address is considered to be their main residence

> **People here temporarily while looking for permanent accommodation**

INCLUDE

> **People normally resident abroad**

EXCLUDE

> **Second home/holiday home**

- EXCLUDE: If this address is a second home/holiday home for anyone (even if this means the answer is '0')

4

< Back

Next >

Save & exit



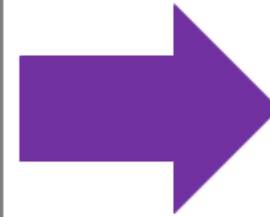
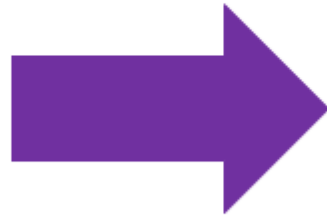


Government  
Digital Service





Rubbish In



Rubbish Out





# Respondent Centred Design Framework (RCDF)

(Wilson and Dickinson, 2021)

1. Establish the data user need
2. Mental model research
3. Understand user experience and needs
4. Use data to design
5. Create using appropriate tone, readability and language
6. Design without relying on help
7. Take an 'optimode' approach to design
8. Use adaptive design
9. Conduct 'cogability' testing
10. Design inclusively

<https://gss.civilservice.gov.uk/policy-store/a-user-centred-design-approach-to-surveys/>

# RCD Framework 1/2



**1. Establish the data user need**

**2. Mental model research**

**3. Understand user experience and needs**

User stories and journeys are key tools when designing a survey: “As a [insert]...I need [insert]...so that [insert]”.

**4. Use data to design**

**5. Create using appropriate tone, readability and language**

Conversational, not chatty.

# RCD Framework 2/2



**6. Design without relying on help**

**7. Take an ‘optimode’ approach to design**

‘Optimode’ means to design the respondent communications and the questionnaire optimally for each mode; tailoring

**8. Use adaptive design**

The interface adapts to the screen size and displays the content accordingly.

**9. Conduct ‘cogability’ testing; interviews**

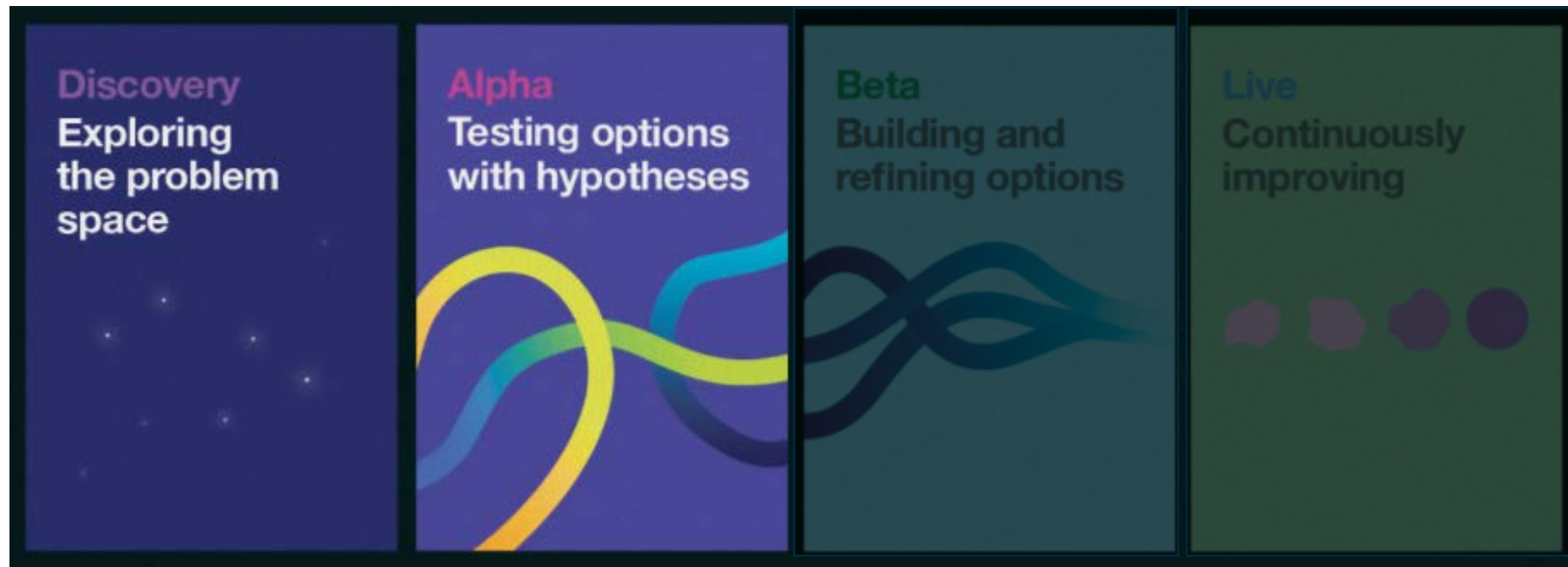
**10. Design inclusively**

# GDS design principles





# Agile delivery of the research





# Agile delivery of the research

## Discovery



Phase 1 – Qualitative work



# Step 1 – Data user needs



# Step 2 – Interviewers & Obs





# Step 3 – Design with Data



# Step 4 – Analyse and create



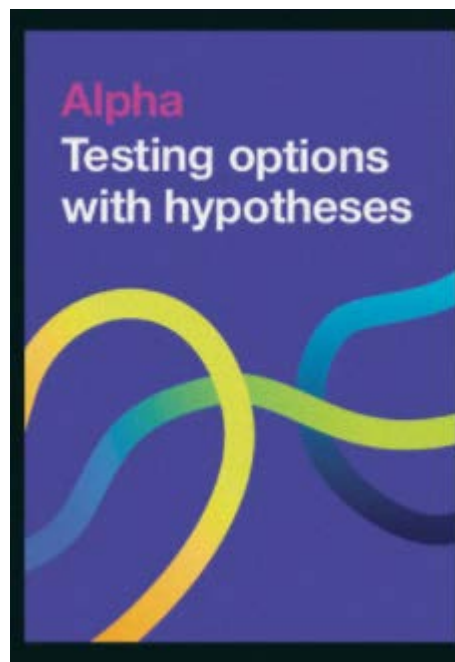
Analyse all you've collated and create:

1. User stories
2. User needs
3. Research grid
4. Plan



# Agile delivery of the research

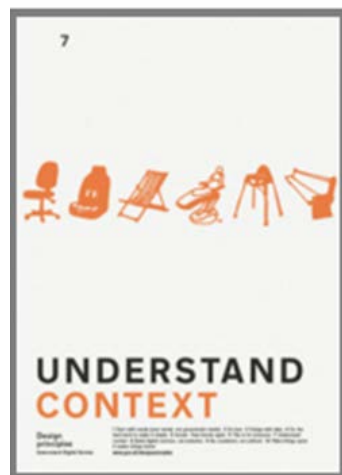
## Alpha



Phase 2 – More qualitative work



# Step 1 – Prototype (1/2)



# Step 1 – Prototype (2/2)

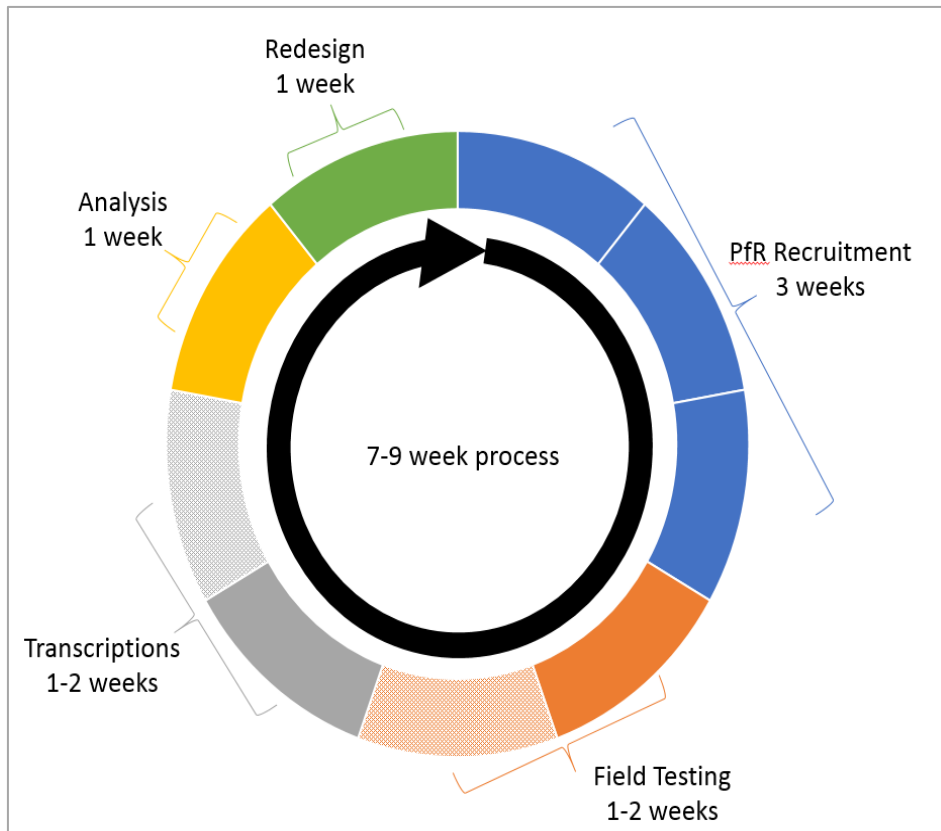
**Approach** - you MUST follow these steps:

- Employ the GDS Design Principles (e.g. do the hard work to make it simple)
- Design ‘mobile first’ – constrain your space to focus your content
- Blue sky thinking
- Design for personal and proxy completion
- Share your prototypes with interviewers before testing with the public



# Step 2 – Test

## 1. First test of designs: ITERATION 1



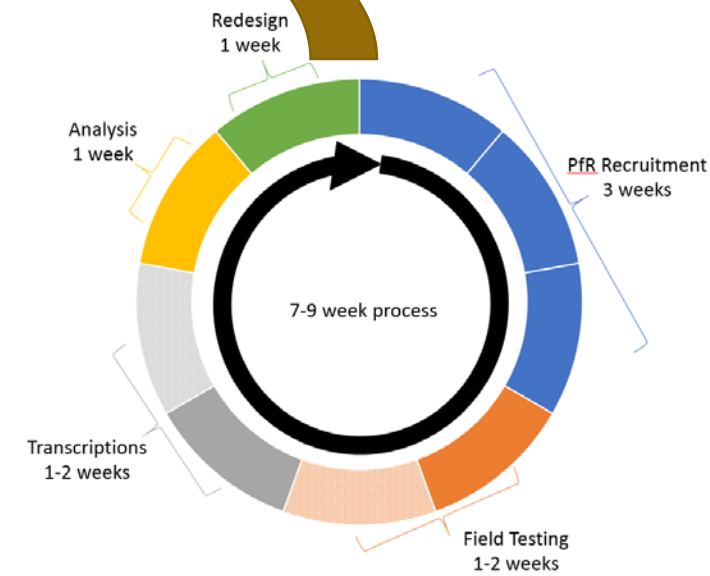
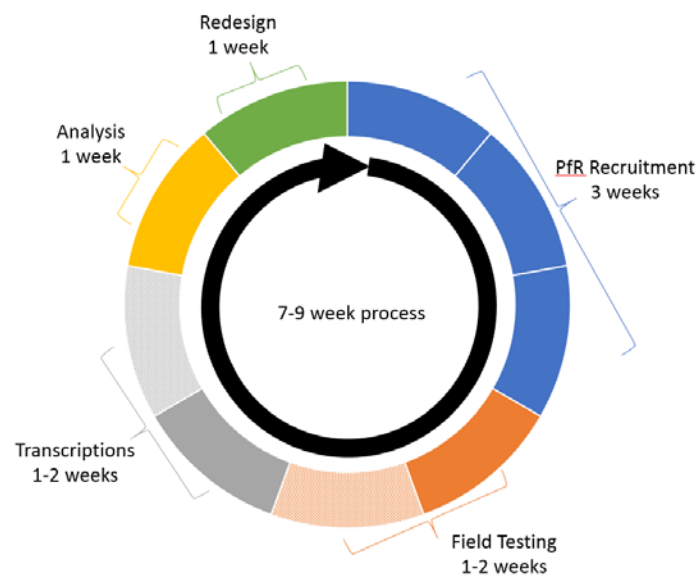
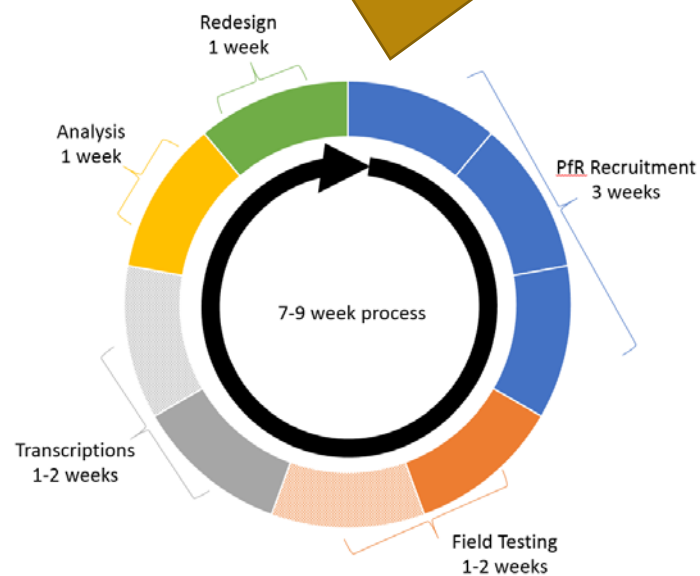
- ❖ In your own words... during completion that needs revisiting
- ❖ Easy/difficult
- ❖ [Q stem specific]
- ❖ [Response option specific]
- ❖ Anything that happened

# Step 3 – Redesign/ reiterate

1. First test of designs  
ITERATION 1

2. Redesign of iteration 1  
ITERATION 2

3. Confirm redesign works &  
any final tweaks  
ITERATION 3





# User centred design approach to accidents in the workplace questions

Case study: ACCDNT

# What we did...





# Activities

## Interviewers



## Public



## Stakeholder

Requirement template for RD\_V4.docx - Last Modified: 3 January

Design Layout References Mailings Review View Help Search

### HSE requirements for R&D

The purpose of this document is to aid the stakeholder to provide the correct level of information that R&D require for transformation. R&D have developed a template that needs to be completed for all current module questions and any proposed questions.

R&D require specific information, with no room for interpretation, to redesign to stakeholder wishes. These requirements will be in line with business as usual (BAU) needs, however R&D have allowed scope for future requirements in the "new question requests" section in each module. Any requirements in this section will need the same level as detail as the BAU questions to enable, if possible, inclusion of the proposed new question. R&D cannot confirm they will be able to deliver some or all of the suggested future requirements as part of the transformation work.

The information provided in "Data outputs" needs to state what the stakeholder wishes to measure, even if it appears clear from the current question; R&D should be able to redesign the question set from this document without having seen the current question and response options. The section of "Data outputs" needs to cover: how are the findings reported (for example research articles), how are the findings worded in articles, what are the data points, etc. As well as this, R&D requests HSE to utilize the publication shared on 10.12.18 (handout) and append how the variables are discussed in this publication to each question.

This document has been partially completed with the requirements sent from HSE (15.01.18).  
 Though some of the boxes have been populated below, additional information may be required. For examples of additional information required, please see 1.1.6 ACCDNO, 1.1.10 ACCURY & 1.2.4 Accident Severity which demonstrate missing information required for transformation with

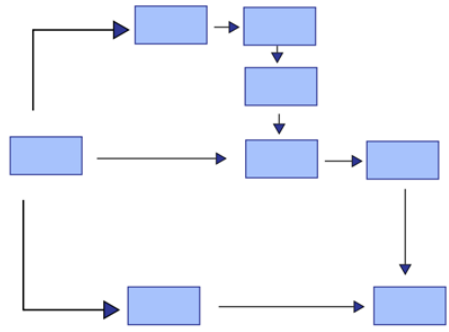
Throughout the document, please state if any boxes can stay blank with NONE.

1

**Contents**

1. Injury in the workplace	5
1.1. Current questions in module (BAU)	6
1.1.1. ACCDNT	6

## Frequencies



## ACCDNT

Thinking of the twelve months since [full date], have you had any accident resulting in injury at work or in the course of your work?

- 1 yes
- 2 no

**ONS** ✓

**GOV** ✓

**EUL** ✓

**Applies if respondent is in work or left job within the last year**

WRKING =YES or JBAWAY=YES or OWNBUS=YES or RELBUS=YES or

TYPSC12=1/2/3/5/8/9 or (YTETJB=yes and TYPSC12=4/6/7/10/11) or

((Year(REFDTE)-(LEFTYR)<1) or (Year(REFDTE)-(LEFTYR)=1 and Month(REFDTE)<LEFTM))

UK  
JM  
MAIN  
HSE



# What we learned...

1. Scale of injuries
2. '....accident...'



# 1. Scale of injuries (I)

Interviewers

Public

Stakeholder

“It does sound serious and if you want something that's not serious, that's not the question”



“There might be stitches or a cast involved. Like a more serious kind of thing”



# 1. Scale of injuries (I): Frequencies

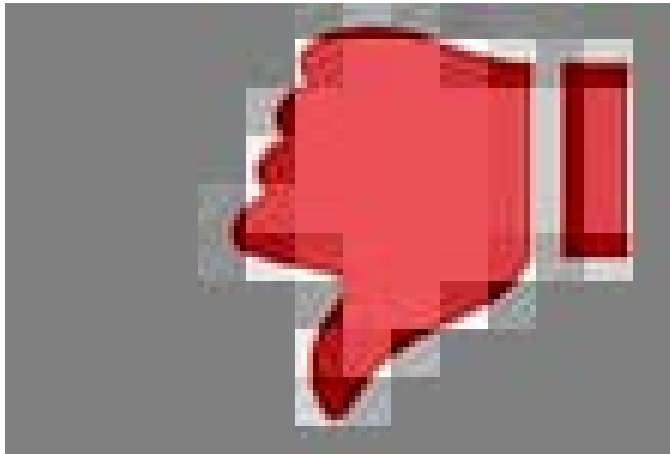
	Percent
Amputation	.7
Fracture broken bones	12.5
dislocation	4.1
sprain	24.4
superficial	20.2
lacerations	13.7
chemical or metal burn	.9
Burns scalds	3.8
Other	17.9
multiple injuries	1.3

BAU LFS 2018 re-weighted  
data



# 1. Insights

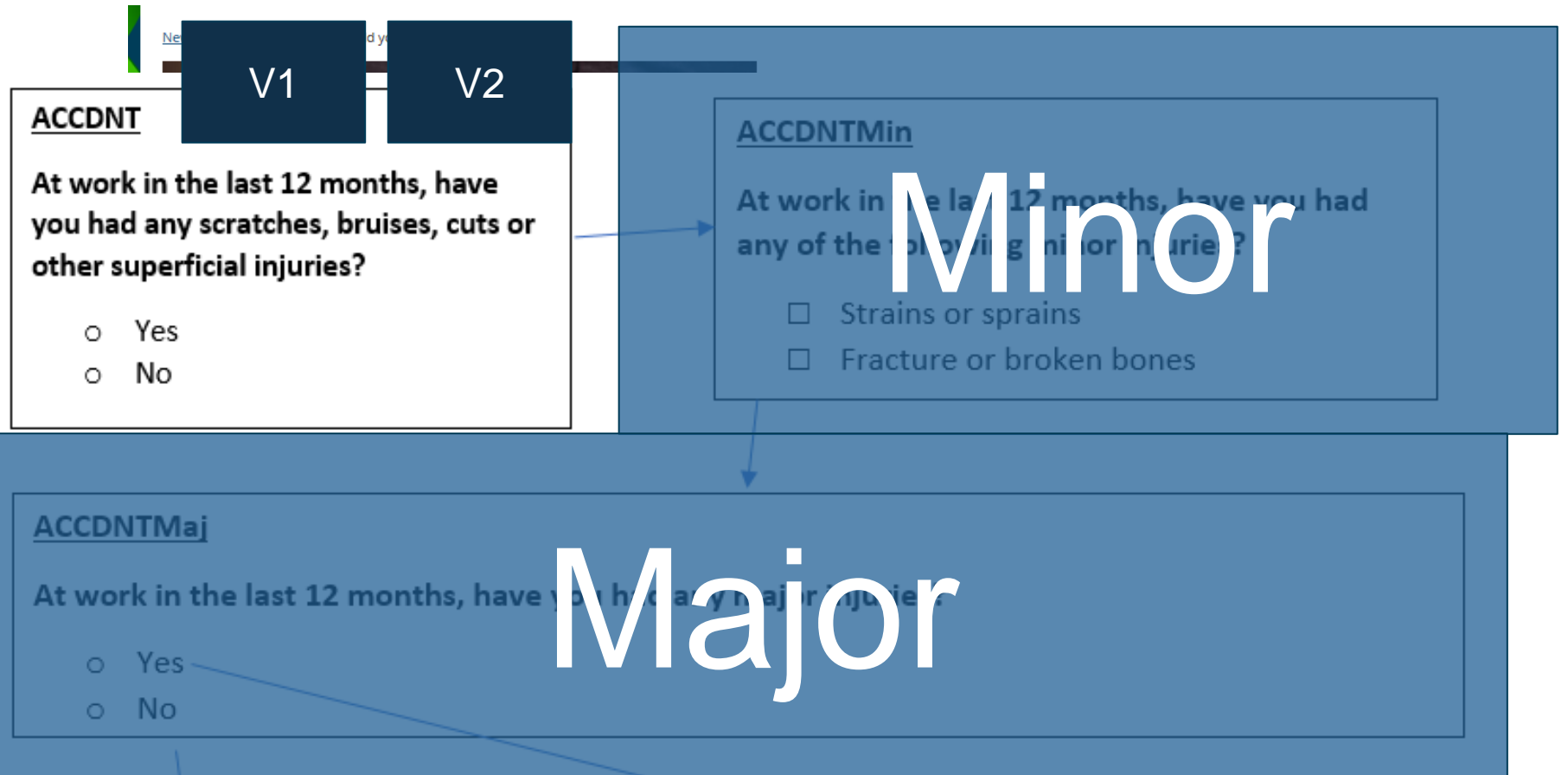
- Q not capturing data user requirements (all scale of injuries)



# 1. Scale of injuries (I)

N=170  
Randomly split  
into 3 groups

1. ACCDNT
2. V1 redesign
3. V2 redesign



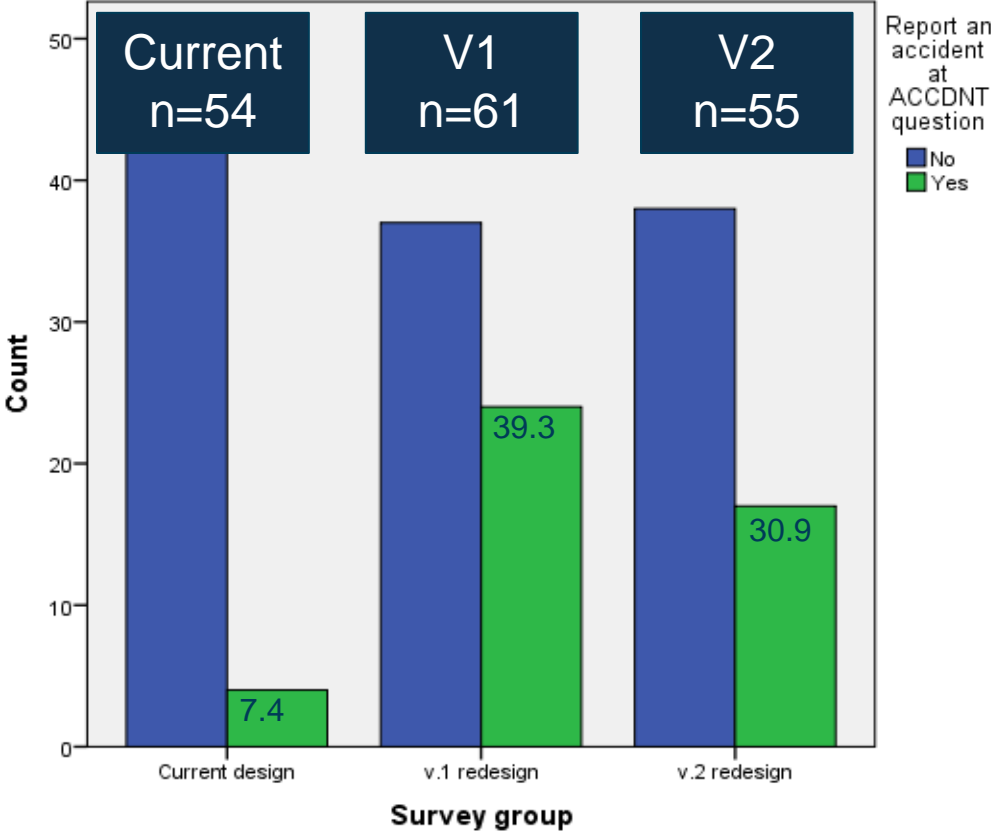
**V1 Redesign**

At work in the past 12 months have you been hurt, even including scratches, bruises or cuts?

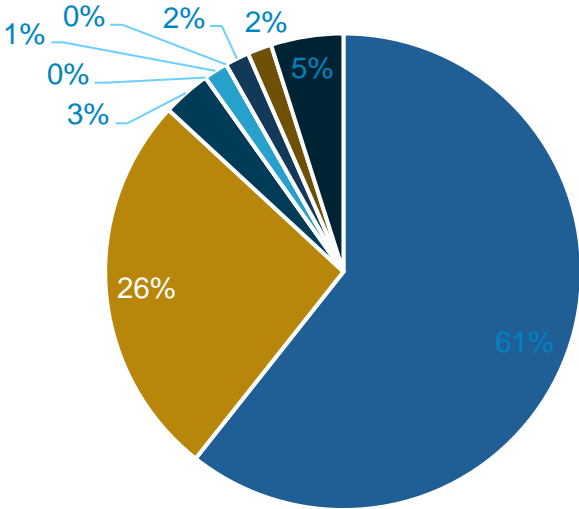
- Yes
- No

# 1. Scale of injuries (I)

Bar Chart



Total injuries reported



- Excluded concept of 'accident'
- In-house

- Superficial
- Dislocation
- Burns
- Strain/sprain
- Open Wound
- Loss of consciousness
- Fracture
- Loss of sight
- Amputation





# 1. Insights

- Re-designed Q including guidance = more successful at capturing superficial injuries
- Q taken forward – explored as new opener to the module

## V1 Redesign

**At work in the past 12 months have you been hurt, even including scratches, bruises or cuts?**

- Yes
- No



# What we learned...

1. Scale of injuries
2. '....accident...'



# Activities

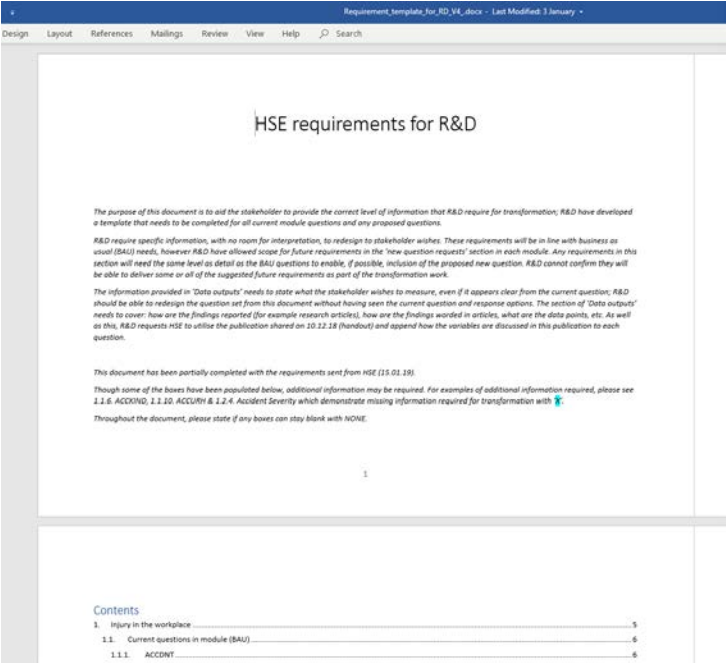
## Interviewers



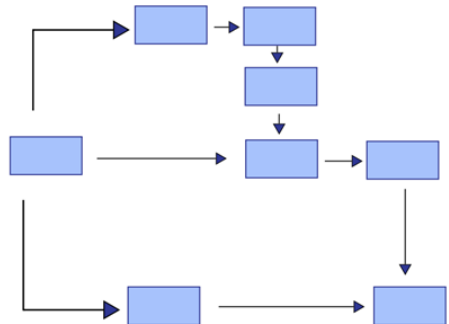
## Public



## Stakeholder



## Frequencies



## 2. '...accident...'



Interviewers



“if I saw it I'd think it was an accident and injury at work resulting in some sort of claim or action.”

Public

“I don't know if this is the adverts that have kind of put this logic into my head. That an injury at work is something you can claim for, and anything else is not.”



## 2. Insights

- The word ‘accident’ is problematic
- Related to ‘scale of injuries’ finding
- Concerns around confidentiality





## 2. ‘...accident...’: removal

Any injuries, even including scratches, bruises or minor cuts?



Have you been hurt or injured during your time at work in the past 12 months in any of the following ways?

*Please select all that apply*

one-off event at work

## 2. ‘...accident...’: removal

### □ one-off event at work

“I didn't really understand what it meant by that... I think like sort of like a **an award day** or something like that for customers...



“If I got injured at just like **an event at work...**”



## 2. '....accident...'

one-off event at work



one-off injury at work



## 2. '....accident...'

□ one-off event at work



□ one-off injury at work

### Free Chocolate!

Can you spare 2 minutes  
to help us with our  
survey design?



“One-off injuries - like a fall or  
whatever”

“its something that is unusual I  
guess, tripping over a corner of  
a carpet that's poking out or not  
concentrating when pouring  
coffee”

“ 'one-off' explained to me it was  
that one [to select]”



## 2. Insights

- ‘Accident’ removed due to mental models
- New terminology that respondents understand to collect data user requirements





thank you!

# RESPONDENT CENTRED SURVEYS

STOP, LISTEN AND  
THEN DESIGN

LAURA WILSON  
EMMA DICKINSON

online  
resources 



Book publication Nov 2021  
(SAGE Publishing)