The Office for National Statistics (ONS) is not alone in its pursuit of the Holy Grail – that is, the introduction of online data collection, with a ‘good’ take-up rate – to its portfolio in a time when response rates keep us all awake at night. ONS currently runs a well established, interviewer-led, mixed-mode operation of telephone and face-to-face interviewing for its voluntary Social Surveys. We are very comfortable and very competent in that space. However, it is time for us to respond to societal demands and also directives from central government to be ‘Digital by Default’, and rightly so. Online surveying brings new challenges, operationally and for design, but most importantly it brings opportunities - online is not the bad guy. It’s an opportunity for ONS to change its business for the better and to put the respondent at the heart of what we do as opposed the data user, as is tradition. This shift is long overdue and is spreading through UK government service design like wildfire. After all, if there are no respondents then there are no numbers for our data users. This paper will describe how ONS is developing a respondent-centric approach to the respondent journey, from the moment the letter lands on the doorstep to the questionnaire experience and then the between wave engagement.

**So, what do I mean by ‘respondent-centred design’?** It simply means putting the respondent in the driving seat when it comes to the design of your survey experience. We must not underestimate the importance of doing this and the importance of the ‘experience’ aspect of the interaction when it comes to non-response in longitudinal surveys. Self-completion surveys no longer mean that we can rely on highly trained and dedicated interviewers (not to forget, employees) to provide a good experience for the respondent and to achieve that response. Interviewers quickly come to learn which questions are troublesome and often, rightly or wrongly, develop their own approaches to tackling the problem in order to get us the data we need. Unfortunately, as we know, this is not always good for data quality – but some data is better than no data, right?! These problem areas are fed back to research teams and question sponsors but fears over time series continuity normally trump any proposed changes to the questionnaire. This is all because the data user has traditionally been the driver and as a result the respondent has been taken for a bumpy ride – with the interviewer taken casualty along the way. The data-user-centred approach has left us with unwieldy questionnaires that are long, confusing and sometimes repetitive. However, worst of all is that they often feel irrelevant to the respondent, leaving them feeling like they’ve not really represented themselves well enough or in the way they wanted to. This poor experience is a contributing factor to declining response rates; however, it can no longer be overlooked when the tables are turned and the respondent becomes the interviewer and the interviewee.

User-centred design is not new, the term was coined the year I was born and for a long time it has driven the development of products (e.g. websites and apps) in the tech world with the aim of creating something which has high ‘usability’. It promotes the creation of ‘models’ and ‘goals’ to assist the development, including end-to-end ‘user journeys’ and ‘happy/unhappy paths’ to achieve a great experience for the user. In turn, this hopefully means the user perhaps buys something, comes back again and spreads the word about how great their experience was – each contributing to the success of your product. Almost all of those desired outcomes are relevant to the goals of an online government survey.

It also means not striving for perfection before sharing or testing something – the aim is to ‘fail fast’. It is important to learn quickly what is and isn’t working so that you can change it and get back out there with the public to test it again. This development approach means that you don’t put the roof on the house before the walls are built. It reduces the risk of sticking with something because you’ve started it now and it’s too far gone or will take too much time and effort to change it. It keeps the respondent as the informant of the design.

**How are we achieving respondent centred design?** We are transforming our data collection approach and operations through the Data Collection Transformation Programme (DCTP). The programme has five major strands, they are:

1. Introducing online mode of data collection for Social and Business Surveys
2. Data integration – changing to a default administrative data approach rather than default survey
3. Survey rationalisation and redesign (including the use of administrative data)
4. Systems integration (including registers)
5. Field force modernisation

The programme will deliver a huge amount of change for the office and to the data we produce. Ultimately, we’ve accepted that it will result in a break in the time series as we move to use administrative data more in the production of our data. It will also be very difficult to disentangle the cause of the change and attribute it to one strand. It is therefore an opportunity to take advantage of this change and make those long overdue alterations to the questionnaire content.

We are moving to a default administrative data approach whereby we look to the admin data first to see if it meets the output need before asking a question on a survey. If it’s not possible to directly match ‘like for like’ then we’re taking the approach of ‘is it good enough?’. This means that we can instead include questions on the surveys which add context to the admin data to get a richer data source. This change is enabling us to rationalise the survey content; we’re reducing the size of our surveys which we hope will help to reduce attrition between waves.

When it comes to designing the questionnaire we are using respondent mental models to inform the flow and wording. We’re exploring with interviewers to learn about the problems associated with the current flow and wording and utilising their experience and knowledge to fix those. This work has revealed the way that respondents think and talk about the concepts we need to measure on surveys. I’ll explain this in more detail in a later section – but for now, the takeaway from this is we are designing a flow that makes sense to the respondent. We are not letting the data user need fully dictate the experience. Instead, we are creating a more relevant experience for the respondent and using words that they would use to describe their circumstances. As a result, the survey tone has moved away from being formal - some respondents have described it currently as using the “Queen’s English”- to become much more conversational. The questions now sound more like how you’d chat to a friend about your job or hobbies, in turn creating a questionnaire that the respondent can connect with. These questions still meet the fundamental output need just in a different way.

When it comes to the respondent materials, we are using behavioural insights to inform the design. Also, we are using language that the public would use; however, this is a delicate balance as the public do expect government to ‘sound’ a particular way. In addition, we are providing less information overall – we used to pack our letters with every possible worry or piece of information you could think of. Recent testing has revealed that less is more – it seems people’s attention spans are decreasing and they only want to be hit with the important information. They can find the rest elsewhere if they need it. The respondent is taking the lead on the design and content.

**Why are we changing in this way?** ONS tried the translation approach to ‘going online’ before embarking on the DCTP change journey. By that I mean, taking what we currently have and putting that online in its original form. DCTP’s predecessor was the Electronic Data Collection Programme (EDC) which ran between 2010 and 2015. EDC focused on developing an online version of the Labour Force Survey (LFS) which is the UK’s principal measure for employment statistics. The EDC LFS questionnaire content remained the same, in terms of the number of questions, their wording and flow. The UK LFS is a beast of a questionnaire - it has over 600 variables and 300 derived variables and whilst not everyone would be asked all of the questions, it still amounts to a very long, dry questionnaire. It was clear from qualitative research with the public that without interviewer intervention the questions were very difficult to understand, resulting in poor data quality and a negative respondent experience. Unsurprisingly, we also found that respondents don’t use online help (others researching online surveys have found the same). Therefore, this translation approach meant that we were trying to plug the leak by adding more guidance instead of fixing the hole in the pipe and addressing the cause of leak. We concluded that the questions simply were not suitable for self-completion by a member of the public and needed a radical redesign.

The Data Collection for Social Surveys ESSNET was running around the same time as this work. It concluded that we should expect a break in the time series when introducing online data collection and that we should take advantage of this by optimising for the mode.

The evidence from these two sources shaped the strategic direction of DCTP and resulted in the respondent centric approach we are pursuing today. We think this approach is one of the key players in helping to combat non-response in voluntary surveys across all modes. The other is optimising for the mode and developing online first, mobile first questions which I come on to next.

**Optimising for the mode and online first, mobile first questionnaire design – yes, it sounds like a mouthful but what does this mean in practice?** Having a mode specific approach to collecting answers to questions is not new – for example, the use of show cards in face-to-face surveys and not in telephone is common. We are extending this approach to include online mode specific design; however, this is where we can potentially begin to see big differences in the wording and number of questions. In order to get good quality data and achieve a positive experience we need to let go of the ‘uniformity is key’ rule. Some of our surveys are trying to collect data on very complicated concepts and when an interviewer is present they can exercise their judgement, talk around it and also utilise any information given before that question was asked to help find the correct response. When the interviewer is taken away it may no longer be viable to ask one question to get an answer to your data need. We have a principle that we work to called ‘consistent but not uniform’. We are reserving the right, if we identify a need, to have alternative wording and number of questions for the online self-completion version of the questionnaire. For example, we have found that sometimes it is necessary to break a question down into two or more questions to get to the answer we need in an online collection mode. There is often too much tied into one question for a respondent to answer without additional information or support. Rest assured, data users are able to map back the data to one data point so it is comparable to other modes. This is where designing for the output need comes into play (I talk about this more in the following LFS section). Caution should be exercised here as we don’t want to increase the length of the questionnaire unnecessarily, especially as we are working so hard to reduce it. However, we would much rather let the respondent work quickly through three easy questions and not notice, than struggle for five minutes trying to work out how to respond to one question. A nice example of this is the age old debate of traditional grids versus no grids (I am #teamnogrids, by the way – NB: ESRA 2017 reference).

Another principle we follow is ‘harness the power of defaults’. When a respondent reads an online question, often they won’t read the full question stem. Instead they’ll glance over the response options to work out what the question is asking and then revisit the question for confirmation that they understand the task. As this is the case, we’ve challenged ourselves to question whether we should front-load the question (i.e. the stem). Instead, should we harness this default behaviour which comes with an online interface and focus on developing the response options? We don’t apply this to all questions as it doesn’t work for all - but we have found success with some. It speeds up the experience for the respondent.

We’re finding that designing for online-first is creating a better experience for all modes. Our approach is to develop online first and then optimise from that question set for the other modes. After all, if you can create a questionnaire that can be understood by ‘average Joe’ public then surely it is suitable for use for interviewer modes too? We have taken this online optimised version and shared with it the interviewers and it’s been welcomed with open arms – they’ve requested to use it now and feel it would make their lives easier. This results in a better experience for everyone. We are in the process of adapting it, where necessary, for the interviewer led modes. Again, with support from the interviewers we believe this will create a better respondent experience and reduce attrition.

When we design the questions for online first we do so for a mobile or smartphone in the first instance and not for PC or laptop users. This follows another principle that we have which is ‘we do the hard work so the respondent doesn’t have to’. By this we mean that we have to invest the time and effort upfront at the design stage into really thinking whether that question is suitable for completion on a smartphone. We have to think more like a commercial organisation - if we don’t commit to deisgn in this way then why should we expect a respondent to commit to completing the survey? We are competing against social media, shopping apps, broadcasting apps for the public’s time – they are all designed to be user centred. If we don’t do the same then why should they spend their time completing a survey over killing 15 minutes on social media? Especially, when there’s no tangible reward in most cases. The smartphone-first approach really focuses the mind of the questionnaire designer to only display what is necessary as the screen space is limited. Now I don’t mean that the tail is wagging the dog here when it comes to design. Instead, it facilitates the creation of short, snappier, direct questions with little room for typical government waffle.

The success of this online-first and smartphone-first approach has also encouraged us to be bold and design questions that do not have any respondent guidance. Don’t panic - this actually works! By radically overhauling the question set we can design very simple, clear questions and flow. We’ve tested this transformed set with the public and where we’ve found that it breaks then we’ve explored to understand why – is it the question, the placement? Where we’ve found it’s the question, we redesign it. Where we’ve found it’s the flow, we adapt it. Only then if that fails subsequent re-testing do we consider adding in guidance; we’ve found that this is rarely necessary.

The end result is something that is no longer burdensome for the respondent to complete. This in turn creates a more engaging and easy-to-use survey which hopefully means that the respondent will be happy to return to at future waves.

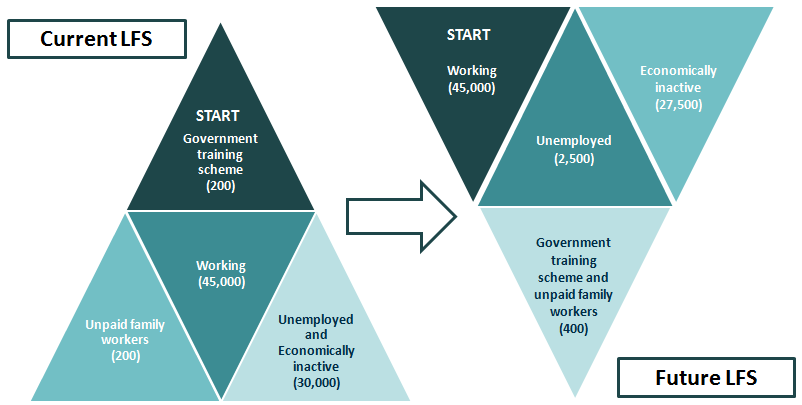
**How are we researching the above approaches?** The respondent-centric design and the mobile-first may seem like a fluffy approach or overkill (especially coming from me, a self-proclaimed ‘respondent hugger’) but it is much needed. We’ve adopted this approach and created respondent user journeys and the respondent happy path. We have already seen the benefits of this approach from a recent pilot. This has helped us to detail the tasks, barriers and the workflow of the survey, in turn, allowing us to identify research questions for each step. We then design for each of these so that, for example, each potential barrier is not ignored but is instead overcome through user centred design.

We are researching this approach with the public using a mixture of new and old qualitative methods. For example, focus groups, in-depth interview, cognitive testing, usability testing and pop-up testing. We pick the right tool for the job at the time and aim to test at least once a month.

**What does all of the above mean for the LFS?** Well, it means big changes. Effectively, in employing all of the above approaches we’ve turned the LFS on its head. We’ve identified the key variables that our analysts cannot live without and used these to create our rationalised future LFS questionnaire. This question set is much reduced; the count currently stands at 50 questions – yes, 50! It has scope to grow to 80 but this is under discussion. We then asked our analysts what they *need* to output on, more generally, and not what they currently output. This gave us the freedom to change the questions and to design for the output need whilst not being constrained by the current wording and flow. We know there is a better, more respondent friendly way to get the data they need.

The next step was to design with data. By this I mean we looked at the volumes of the people being routed through sections of the questionnaire at any one time. See the diagram overleaf, fig. 1. The ‘Current LFS’ depicts the LFS structure and uses shading moving from dark to light to show the flow. As you can see from the numbers appended to each section, this questionnaire keeps a lot of people in the survey until the very end. This is a frustrating experience for most of these respondents as they are forced to be taken on the scenic route when they could have told you up front their situation and taken the motorway to the end. Looking at this along with the mental models and interviewer advice I mentioned earlier, we redesigned the flow. The ‘Future LFS’ shows the end result and how we’ve turned it on its head. The numbers are inverted; we have classified the majority of respondents earlier than in the exiting questionnaire. This is creating a more relevant experience for the respondent and reducing frustrations. We take the approach of disqualifying respondents from an outcome. For example, they may have told us that they have a job (but in reality they may be waiting to start their new job). Our follow-up questions reveal why they weren’t working in the reference week – that’s because they’ve yet to start their job. So we then reclassify them as unemployed, according to the definition, but they never need to know this. As far as they are concerned they have told us they are employed, they feel happy to have been recorded as this and are content with their experience.

Figure 1. LFS before and after.



**How far up the mountain are we? How’s the trek been so far? What’s the view looking like? These are my concluding remarks...**I don’t want to mislead you – it has not been plain sailing to get this point, by any means(!). I am happy to talk about the challenges associated with each step along the way with you at any time, during or after the conference. However, now this work is endorsed and underway I feel that we’re making great progress. We are confident in the approach we’re taking and our key analysts are supportive. Our design is evidenced-based and if something isn’t working we drop it and find an alternative solution. It’s been a difficult journey but enduring the translation approach evidenced the need for the transformation approach – so it worked out for the best in the end. External stakeholders are accepting and understanding of the need for change but have grave concerns about the time series so there is work to do there. This work cannot be underestimated and will require a lot of support from senior staff at ONS.

The view is looking good; in July 2017 we achieved the highest take-up rate of any voluntary, non-incentivised, fresh sample, online social survey in the UK to date (20%). We hope to increase that measure with our next test as we are trialling incentives. Check out Andrew Phelps’ talk for more detail.

Our respondent-centric approach appears to be working and the feedback from respondents is overwhelmingly positive. I appreciate that this approach is radical and controversial but I hope it inspires and encourages you to consider how you could take some aspects, if not it all, and apply it to your work. At ONS we’re tackling non-response in an approach that we feel is one barrier at a time. I look forward to our discussion…