Interview & Focus Groups Questions on Theme 4: Algorithmic Processing

These examples involve **algorithmic processing.** By algorithmic processing, we are referring to analytic processes where machines, not humans, make decisions, predictions or recommendations, for example about our behaviour or the kinds of content we see.

Previous participants have said they have found these complicated (and a bit overwhelming to start with) so don't worry if you feel the same. Read through them stage by stage and we will discuss all together as a group.

BBC personal data stores: The first two examples are taken from some BBC experiments with 'personal data stores.' In a personal data store, a person's data is stored in a secure place that belongs to and is controlled by them, rather than being stored and controlled by organisations, like the BBC itself, Netflix, or Facebook/Instagram, which is what usually happens. The first example is a prototype device called BBC Box. This is an experiment and is not yet in circulation.

What do you see here? What does the illustration tell you about what happens to data in BBC Box?
Fill in the gaps – add to the description collectively produced by participants, as needed, for example:
You use BBC Box by uploading data about what you watch or listen to (for example on the BBC or Spotify).
BBC Box then creates a personal profile identifying your likes and interests, based on this data and quizzes that you have completed.
This data and your profile are stored securely in the BBC Box, your personal data store.
You can then choose to share your personal profile with the BBC or other services.
If you share your profile, you will receive recommendations about content that you may like to watch or listen to, or things you might like to do.
What do you think about this data process? (*Prompts: What stands out to you here? Does anything surprise you, and if so, what? How do you feel about what you see?)*

The second example is the BBC Own It app, which *is* currently available for use (unlike BBC Box). Own It is a free app designed by the BBC to support, help and advise children when they use their phones to chat and explore the online world. Own It communicates directly with the child, without the involvement of their carer/s. Own It consists of a custom keyboard and companion application. The keyboard becomes the default keyboard for all apps used on the phone onto which the Own It app has been downloaded.

What do you see here? What does the visual tell you about what happens to children's data on Own It?

Fill in the gaps – add to the description collectively produced by participants, as needed, for example:
1. After a child has downloaded Own It, the Own It keyboard becomes the keyboard for all their mobile use.
2. Through this keyboard, the app can gather data on what children using Own It type into their phone, how they 'self report' their feelings and their responses to quizzes and questionnaires set by the app
3. Own It assesses children's phone use to provide 'in-the-moment support' (in the form of alerts or recommendations) for issues that children may experience
EG 1: a child has the Own It app installed on her phone. She is about to send her phone number to a contact on a social media platform popular with children. Own It intervenes and says 'are you sure you want to send your phone number?'
EG 2: a child is typing a message to a friend and receives an alert from Own It asking him whether he is sure he wants to send the message. This is because the Own It app has scanned the text of the message and identified words which suggest the child might be bullying his friend.
What do you think about this data process? (*Prompts: What stands out to you here? Does anything surprise you, and if so, what? How do you feel about what you see?*)

DWP Dynamic Trust Hub : Here is an illustration of part of a project at the DWP, the government department responsible for welfare, pensions, child maintenance and related policy. The project is called Dynamic Trust Hub. To enable people to interact with DWP online so they no longer need to go to a Job Centre which can be difficult to do due to working hours, illness or mobility, the DWP needs to confirm that people are who they claim to be – this is known as verifying identity. Dynamic Trust Hub is exploring and implementing different ways of verifying identity.

What do you see here? What does the illustration tell you about what happens to data about you in order to verify your identity at the DWP?
Fill in the gaps – add to the description collectively produced by participants, as needed, for example:
As part of Dynamic Trust Hub, DWP are considering doing extra checks behind the scenes when someone types in their password to access their DWP online account. The aim is to add an extra layer of information security to the identity verification process. It is important to note that this is not actually happening and that similar techniques are used by other organisations.
These extra checks include whether the time you log in is similar to your usual log in time, whether the rhythm that you type your password is the same as your usual rhythm, whether you swiped on your phone in the same pattern as you normally swipe it and whether you are using the same device that you have used for previous interactions with the system.
What do you think about this data process? (*Prompts: What stands out to you here? Does anything surprise you, and if so, what? How do you feel about what you see?*)

[where there are stages that don't get discussed here, let participants know that you'll come back to them later]

Comparison: These examples involve **algorithmic processing.** We are now going to zoom in on algorithmic processing and ask your opinion about it.

Here is an illustration which zooms in on algorithmic processing.
Where can you see the algorithmic processing in the illustration? What role is it playing?
Fill in the gaps – add to the description collectively produced by participants, as needed, see below some potential fillers/process descriptions.

BBC Own It: As a result of the algorithmic processing, decisions are made, for example about whether to show children media content to help them manage their well-being on their own. This happens without the involvement of a parent or carer.

BBC Box: If someone using BBC Box decides to share their profile with the BBC in order to get recommendations of things to watch, for example, then algorithmic processing of their data occurs, which results in them receiving recommendations of content that they may enjoy/like. The algorithmic processing happens OFF the BBC box itself & could be undertaken by the BBC itself, or by another company with access to the user profile, such as Skiddle. There are 2 algorithms at work here- one operated by the BBC itself that provides recommendations of programmes on BBC iPlayer and one operated by Skiddle, an events guide.

DWP: The extra checks that DWP is considering involves using algorithmic processing to contribute to verifying identity.

Do you feel the same about all of the examples? Are you equally comfortable / uncomfortable with all three examples?

Or do you feel differently about:

Where algorithmic processing happens – for example, on Own It, it's on the app; on BBC Box, it is at the organisation you are asking for a recommendation from (if you share your profile)

What algorithmic processing is used for – for example, with BBC Box and Own It, it's used to recommend content.

In the case of BBC Box, content is for adults and is based on their preferences.

In the case of Own It, content is for children and is based on assessments relating to their well-being. Here, BBC provides automated advice to children based on what they do on their phone, without the child's parents' or carers' knowledge.

With the DWP example, algorithmic processing aims to add an extra layer of information security to your online DWP account.

Who is involved (eg NHS, BBC, commercial organisations)?

Why/why not?

I'm now going to share a link with you in the chat, which I would like you to click on. It links to a whiteboard which shows some of the benefits of and concerns about these data uses:

Benefits of BBC Box = people receive personalised recommendations

Concerns about recommendation systems (ie BBC Box) = in general, recommendations systems can recommend a narrow range of things, and people using them are not exposed to a range of issues of perspectives. Some people say this is not good for democracy.

Benefits of Own It = children receive personalised wellbeing advice and support without identifying data about them leaving their device

Concerns about Own It = an automated process, not involving humans, makes assessments of and recommendations about children's mental health and wellbeing, happens without the involvement of a parent or carer,

Benefits of Dynamic Trust Hub = don't need to confirm identity in person/with paper docs & of Dynamic Trust Hub possibilities = extra layer of security to the identity verification process.

Concerns about Dynamic Trust Hub = requires people to have HMRC account, passport, bank account, financial record, so excludes people with complex lives + negative consequences for people whose identities can't be verified & about DTH = inaccuracies, eg people may not own their own devices, move around geographically or otherwise have unstable lives & this would be taken as a proxy for unverifiable identity.

General concerns about algorithmic processing = errors or bias can occur, because of how systems are designed or used, because of the data that is used to train them, or because of proxies

that are used (= things that stand in for other things). The A level results issue this summer is an example. An algorithm downgraded grades, and the downgrading affected poorer children in state schools much more than better off children in private schools. The algorithm was designed to factor in schools' past performance, and this was biased against children from state schools, which generally do less well than private schools which are selective. The algorithm was only designed to be used for classes over a certain size – this was also biased in favour of private schools, where classes are smaller – in those smaller classes, teachers' grades were upheld.

I would like you to move the post its with your name on to the position on the board that best reflects how you feel. Simply click and drag your post it- if you have a problem, I can do this for you, just let me know. Once all of the post its are in position, I will take a screenshot.
Can you tell me why you placed your post its where you did?
[discussion of benefits and concerns]
Having heard the views of others, do you want to keep your post it in the same position or move? If you would like to move it, please do this now. Once all of the post its are in position, I will take a screenshot.