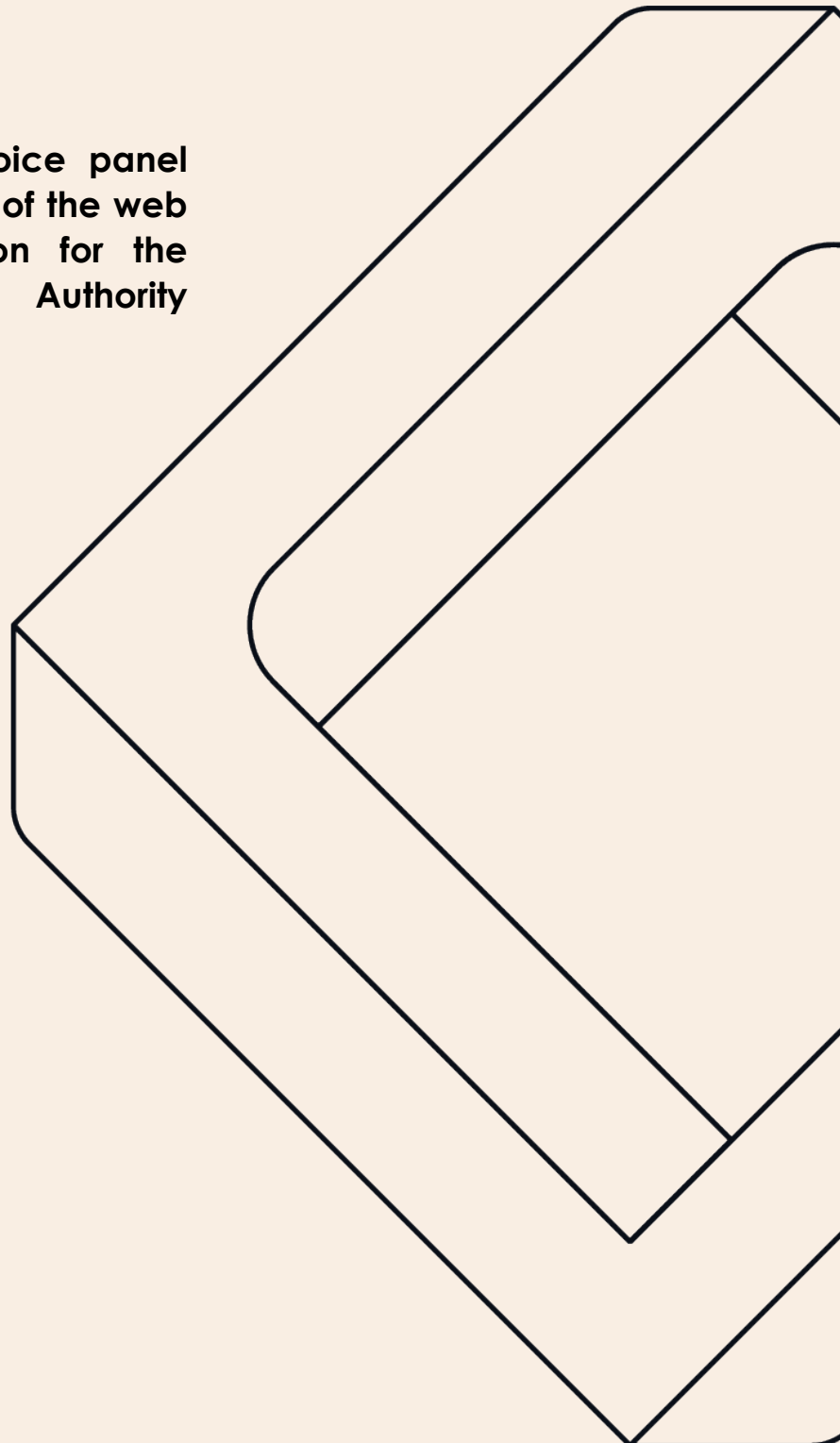


Mobile Browsers Consumer Research 2024

Technical note on Public Voice panel survey 26, conducted as part of the web browsers market investigation for the Competition and Markets Authority (CMA)

July 2024



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1. Introduction

1.1 Background and objectives

In June 2021, the CMA launched a [market study into mobile ecosystems](#), setting out its intention to gain a better understanding of a major component of the digital economy, and to gather evidence to inform an assessment of whether competition is working well for consumers and citizens in the UK.

The CMA reached the view that it had reasonable grounds to suspect that the features of these markets prevent, restrict or distort competition in the UK. Therefore, they referred the supply of mobile browsers and mobile browser engines for a single in-depth market investigation by an independent inquiry group. This market investigation launched on Tuesday 22 Nov 2022. [Mobile browsers and cloud gaming - GOV.UK \(www.gov.uk\)](#).

As part of its investigation into mobile browsing and cloud gaming, the Competition and Markets Authority (CMA) appointed Verian (formerly Kantar Public) to conduct research with UK consumers who own a smartphone.

The research sought to understand consumer behaviour in the mobile browser market, with a particular focus on the role of pre-installation and the drivers of browser choice on smartphone devices. More specifically, this research sought to investigate:

- How users access the internet on their smartphone, the activities they undertake on their smartphone and the role of their browser in choosing their smartphone.
- How users access or choose their current browser.
- Whether users consider the features of different browsers, which features are most important, and satisfaction with current smartphone browser.
- The factors influencing browser choice on the smartphone, the role of pre-installation and browser default settings on the smartphone.
- Expectations, understanding and perceptions about switching/changing mobile browser, and the motivations for switching or staying.
- Any barriers preventing users from switching/changing their mobile browsers, and confidence about changing browsers and default.
- Experience of those who have switched/changed mobile browser.

1.2 Summary of methodology

The research comprised two phases.

- A **qualitative phase** which provided an in-depth understanding of consumer understanding, awareness and behaviour in relation to use of browsers on mobiles. The qualitative research served a dual purpose: it informed the development of the survey questionnaire and provided depth to the survey findings. This phase involved 40 depth interviews conducted in January and February 2023. Interviews were conducted both face-to-face and via online video platform (Zoom). As part of the interviews, respondents were observed completing a number of tasks using their smartphone, including downloading an alternative browser and changing the default browser.
- A **quantitative survey** with a target of 3,000 people who owned a smartphone for personal use, where they had a role in choosing the phone. The survey was conducted in the period 13 March to 08 April 2024 on Verian's Public Voice panel, a robust panel recruited using random probability sampling methods.

In March 2023, the Market Investigation was suspended following a Competition Appeal Tribunal judgment and order. The Market Investigation was recommenced on 24 January 2024. Due to the pause, the research was put on hold for a year, hence the significant gap between the quantitative and qualitative stages.

The background and methodology for the qualitative study is covered in Chapter 2, while the background and methodology for the quantitative survey is covered in Chapters 3 to 5.

2. Qualitative research

2.1 Aims of the qualitative research

The qualitative strand of research was designed to inform the design of the survey questions, as well as complement the survey findings on consumer perceptions of and behaviours regarding smartphone browsers. Qualitative interviews also provided an opportunity to observe consumers' smartphone behaviour in-depth and in-situ, to help build a deeper understanding of their use of browsers and the barriers they faced when attempting to switch browser.

Specifically, the qualitative research aimed to:

- Explore the drivers of browser choice on smartphones, including:
 - How users access the internet on their smartphone, the activities they undertake on their smartphone and the role of their browser.
 - How users access or choose their current browser and the role of their browser in choosing their smartphone.
 - Whether users consider the features of different browsers, which features are most important.
 - Satisfaction with current smartphone browser
 - Awareness and understanding of different mobile browsers and their different features.
 - the role of pre-installation and browser default settings on the smartphone
- Examine experiences, motivations for and barriers to switching smartphone browser, including:
 - Expectations, understanding and perceptions about switching/changing mobile browser, and the motivations for switching or staying.
 - Any barriers preventing users from switching/changing their mobile browsers, and confidence about changing browsers and default.
 - Experience and satisfaction among those who have switched/changed mobile browser.
- Explore views of the current ways in which mobile browser choice is presented on smartphone devices, and of potentially different ways of presenting a choice of mobile browsers on smartphone devices.
- Inform the quantitative survey, in terms of the language consumers use and their understanding of the mobile browser market.

2.2 Sample

40 respondents were screened and recruited for the study, using a purposive sampling approach to ensure that specific audiences of interest were included¹. Minimum quotas were set around key audiences, including consumers with low digital confidence and consumers who had experience of switching smartphone browser or downloading an alternative browser, the latter group demonstrating higher digital confidence.

For the quotas, to classify confidence as high or low, respondents rated themselves as such to both questions Q12A and Q 12 B (see Appendix B). Low confidence was classified by those rating 4 or

¹ In contrast to quantitative sampling, qualitative sampling is not intended to be representative of a population, rather it seeks to over-sample groups of interest.

under for both questions (on a scale of 1 to 10). Otherwise, they would be counted as 'medium'. Minimum quotas were only set for respondents with low confidence.

The sample was split by the operating system used by respondents (iOS or Android), including those who had switched between operating systems recently, and sought to include a broad spread of age groups. A minimum quota was set for those who had experienced a mental health condition in the last 12 months to explore the hypothesis that this group may be more vulnerable. Further demographic quotas were set by gender, socio-economic group and ethnicity. The final achieved sample is provided in Table 1 below.

Table 1: Primary and secondary quotas for the qualitative sample.

Primary quotas			
Operating system		Age	
iOS	22	16-34	13
Android	18	35-54	11
Recent switchers between iOS and Android	10	55-69	10
Smartphone usage		Over 70	6
Infrequent	7	Browser switcher	
Medium	5	Whether they have ever downloaded a smartphone browser	19
High frequency	28	Alternative browser used	
Self-reported digital confidence		Chrome	13 (9 on iOS)
Low confidence	8	Firefox	3
Medium confidence	2	Edge	3
High confidence	30	DuckDuckGo	2

Secondary quotas			
Gender		SEG	
Male	20	AB	8
Female	20	C1	23
		C2	6
Location		DE	3
London (face to face)	20	With a mental health issue	12
NE England	4	(in last 12 months)	
SW England	3	Ethnicity	
SE England	3	White British	27
Midlands	3	Irish	4
Scotland	3	Asian	3
Wales	2	Black/African/Caribbean/British	2
Northern Ireland	2	Mixed/Multiple/Other	4

As it was important to conduct some interviews face to face (specifically, to include those with lower digital confidence who might struggle to take part in a remote video interview), the sample was split by mode – with half conducted face-to-face and half via Zoom call. This approach balanced the

need for in-person depths and allowed for a higher total number of interviews and a wider geographical spread. Location was therefore partly dictated by method, as half the interviews were conducted face to face (in London) and half by video call (which were regionally spread).

Recruitment was conducted by a specialist recruitment agency, Acumen, who used a combination of free-find methods and recruiter networks to contact and screen potential respondents. To encourage participation and to thank respondents for their time, an incentive of £50 was paid for face-to-face interviews and £40 for Zoom interviews.

2.3 Methodology

Fieldwork took place between 19 January and 16 February 2023. Interviews lasted 60 minutes and were conducted with a semi-structured discussion guide (see Appendix B). Questions were designed to allow respondents to define concepts and applications in their own language, before introducing terms such as 'mobile browser' or 'default browser'.

The discussion guide was piloted with the first eight interviews to ensure that respondents understood the questions and tasks, that the questions were eliciting the right sort of information and that the approach worked via remote interview. The CMA observed pilot interviews and provided feedback on the guide, which was adapted for the remaining interviews.

Half the interviews were conducted face to face, and half via a Zoom call with respondents joining the call from their smartphone. As part of the interviews, respondents were instructed to undertake several tasks on their smartphone, narrating their thought processes, while researchers observed. In face-to-face interviews, researchers observed respondents' actions in person, whereas in Zoom interviews, respondents shared their smartphone screen during the tasks (with support from the interviewer where needed).

The tasks included:

- Accessing a website as they normally would (to find information or news)
 - Repeating the task via alternative browsers (for those who had more than one smartphone browser), or repeating via a browser if they initially used a search app
- In-app browsing on a social media app
- Downloading an alternative browser onto their smartphone, and
- Changing the default browser.

Researchers took notes during the tasks, recording details such as how respondents accessed websites, the placement of browsers (e.g. on the taskbar, the homepage or in folders), use of search bars, fluency of smartphone use, etc., and tailored follow-up questions based on their observations.

To test awareness of alternative browsers, respondents were shown logos, without name labels, for various browsers alongside non-browser logos, including social media and search apps. Respondents were asked to select the logos that represented browsers. The browsers included in the stimulus were:

- Opera
- Brave
- Samsung Internet
- Safari
- Microsoft Edge
- Google Chrome
- DuckDuckGo

- Mozilla Firefox.

2.4 Qualitative analysis

All interviews were recorded with the consent of participants (audio recorded for face-to-face, video for online interviews). Researchers attended several analysis sessions – after the pilot and at several points during the fieldwork period, to inform survey development, refine questioning as fieldwork progressed and explore emerging hypotheses. An analysis chart was developed based on the research objectives and refined based on pilot interviews. Researchers added data from their interviews into the chart, enabling thematic and sub-group analysis across the interviews.

3. Survey sampling and fieldwork

3.1 The Public Voice panel

The consumer survey used Verian's 'Public Voice' panel. This is a high-quality survey panel, representative of the UK population aged 16+ and has been built using random sampling methods so that inferences from the data it collects will have design-based validity. This is in contrast with the typical panel in the UK which is based on a convenience sample: a pool of self-selected individuals who have responded to general advertisements to participate in surveys. Stratified 'representative' samples are drawn from such panels but inference is entirely model-dependent because of the self-selected nature of the panel itself. In practice, these models are general in form and assume that, conditional on a small number of demographic variables (typically age, gender, region and perhaps working and education status), variation in selection probabilities is uncorrelated with anything of substantive interest. This is not provable. In contrast, a random sample is much less reliant on such models. The sample design controls the initial selection of individuals, which means modelling is only required to compensate for variation in response probabilities. For Public Voice, a great deal of care has been taken to construct appropriate response models and compensate for non-response bias. This design-based validity means that a random sample is the preferred evidence base for much government and academic social research.

The two main drawbacks of random sampling are (i) its greater cost relative to stratified sampling from a convenience panel, and (ii) the time it takes to maximise the response rate and minimise the reliance on the response model. Consequently, there is value in making the most of random samples once drawn. Recruiting a panel that can be surveyed repeatedly rather than just once provides a clear benefit.

At the time of this survey (March 2024), the Public Voice panel comprised 23,055 members from across the UK. Most of these panel members were recruited via the Address-based Online Surveying ('ABOS') method in which (probabilistically) sampled individuals complete a 20-minute recruitment questionnaire either by web or on paper. Recruitment surveys were carried out in 2019, 2020 and 2021 and the respondent samples have been linked together via a weighting protocol to form a single panel.

A full technical report for Public Voice was supplied separately to the CMA.

3.2 Sample design

The target population for this survey was defined as 'all permanent residents of the UK aged 16+'. The sample for the survey was drawn from among the 22,758 respondents to the Public Voice recruitment surveys who were (i) resident in the UK based on the latest information available, (ii) either used a smartphone or accessed the internet in a different way or were aged under 75 at the time of recruitment, (iii) had joined the Public Voice panel, and (iv) had not left or been removed from the panel.

The target respondent sample size was set at 3,300 on the assumption that c.91% (c.3,000) would pass the 'screening' module at the start of the questionnaire. The panel was implicitly stratified by age group, then by region and then by subregional geography before a systematic random sample was drawn.

The sampling probabilities applied to each panel member varied in an effort to produce a maximally representative respondent sample. Broadly speaking, this sampling probability was proportionate to

the product of (i) the panel member's base weight (which makes the panel itself population-representative), and (ii) one divided by the estimated probability of the panel member responding to the Mobile Browsers survey. In technical terms, panel members were sampled with a probability proportionate to a size measure ('PPS').

The mean sampling probability among survey-eligible panel members was 0.46; among sampled members, the mean was 0.66, the standard deviation was 0.28 and the range was 0.07-0.95. In total, 10,568 panel members were sampled for this survey. One in five of these (2,122) was allocated to a reserve pool, with uniform allocation probability and this reserve pool was further subdivided into five batches of n=424/425. Systematic sampling methods were used for both steps to ensure that the main sample and each reserve batch was a statistical replicate of the whole sample.

In the event, all five reserve batches were issued before the end of fieldwork to ensure that the target respondent sample size (3,300) was achieved by the fieldwork deadline (8th April 2024).

Within the main sample, a subset of 500 was allocated to a 'soft launch', issued to the field two days before the remaining sample. This allowed the research team to check for any questionnaire scripting errors that had not previously been identified. No errors were found and the remaining 7,946 panel members in the main sample were issued to the field as scheduled.

In total, all 10,568 sampled panel members were issued to the field. The reserve sample was issued in full on 2nd April 2024 after a review of progress to date, subject to a truncated fieldwork design.

3.3 Fieldwork design

The sample was issued to the field in three stages: (i) a random subsample of 500 - taken from the main issue sample of 8,446 – was issued as a 'soft launch' 13/03/2024; (ii) the remainder of the main issue sample (n=7,946) was issued 15/03/2024; the reserve sample (n=2,122) was issued 02/04/2024.

All fieldwork was completed by 08/04/2024.

Only web surveying methods were used for this survey.

The fieldwork process was as follows:

13/03/2024	Main sample 'soft launch' invitation sent (email/SMS)
15/03/2024	Main sample 'full launch' invitation sent (email/SMS)
22/03/2024	Main sample letter reminder sent (mailed letter; landed no earlier than 25/03/2024)
19/03/2024	Main sample first e-reminder sent (email/SMS)
25/03/2024	Main sample second e-reminder sent (email/SMS)
28/03/2024	Main sample third e-reminder sent (email/SMS)
02/04/2024	Reserve sample invitation sent (email/SMS)
08/04/2024	All fieldwork ends

All emails and text messages contained individualised survey hyperlinks, matched to each sample member. Additional verification was based on panel member birthdate (including year). The contact management system Tivian was used for all email and text message communications.

A letter was sent to all main sample non-responders 22/03/2024. The letter directed respondents to the Public Voice website where they could login using the username and password provided on the letter. Once login details were inputted, the same verification based on panel member birthdate (including year) was applied.

Those who completed the survey – and for whom an email or mobile telephone number was available - were sent a thank you email and/or text message together with a £10 e-voucher. Those for whom no email or mobile telephone number was available were sent a thank you letter, including a £10 shopping voucher card.

4. Survey questionnaire design

4.1 Questionnaire development

The questionnaire was mainly developed over the period January-March 2023, with some further minor adjustments to the questionnaire once the project re-started in February 2024.

The stages of development were as follows:

- We conducted a rapid evidence review of questions used on other surveys which related to the research themes. This involved setting out the individual research questions and mapping them against any existing questions used in other surveys which could be used or adapted. We also identified gaps where new questions needed to be drafted.
- Once the mapping and evidence review stage was complete, we compiled a first draft of the questionnaire. The questionnaire was then further developed in discussion with CMA and the independent inquiry group.
- Once we had a signed off draft this was then published for consultation so that external parties could review the questionnaire. Following the close of the consultation period, the CMA reviewed consultation responses and further amends were made to address some of the issues raised. The questionnaire was then signed off for cognitive testing.
- We identified a selection of questions to be tested in the cognitive testing phase and questions were tested via 12 cognitive testing interviews (see below).
- Following a review of findings from the cognitive testing phase, the questionnaire was then finalised and signed off by the inquiry group.

Questionnaire development was conducted in parallel with the qualitative research phase. The qualitative phase was particularly useful in highlighting the experiences of mobile users who had low levels of technical literacy, and who did not understand terms such as 'browser' and 'default browser'. Another common problem was that people tended to conflate web browsers and search engines.

Throughout the questionnaire development phase, the survey team had regular meetings with the qualitative team to discuss emerging findings from the depth interviews. The qualitative research helped inform appropriate wording for technical features of mobile phones and browsers that could be understood by consumers with varying degrees of technical literacy. It also informed which definitions were needed to better understand these features, and how best to ask questions about topics which many consumers found complex or abstract.

4.2 Cognitive testing

Cognitive testing describes a process of testing survey questions to ensure they work as intended before they are included in the mainstage questionnaire. Interviews are carried out by members of the research team who ask respondents selected survey questions and then probe to check how easily the respondent can understand the question being tested and to explore how they decided on an answer. This provides valuable insight into how the questions are being interpreted and helps improve and refine question wording.

A total of 12 cognitive interviews were conducted in the period 6-8 March 2023 with smartphone users. Quotas included gender, age, type of phone (iOS vs Android), frequency of smartphone usage

and confidence in changing default settings on a smartphone. A broad spread by region, education level and social grade was also ensured.

Following discussion of findings within the Verian team, a written report was prepared, and changes were then discussed and agreed with the CMA.

The cognitive testing led to a range of questionnaire amendments. The principal findings from the cognitive testing phase were as follows:

- Screening questions were clarified to ensure that we did not lose eligible respondents as part of the screening process.
- In testing, we sometimes found that respondents broadened the scope of the question, e.g. to include other family members instead of just themselves in some questions, or broadening questions about internet browsing on smartphones to also include browsing behaviour on laptops and desktops. As a result, we added extra emphasis and reminders throughout the survey to ensure respondents were basing their responses within the correct parameters.
- Where we had long lists of mobile phone and browser brands (e.g. MOBBRAND, BROWPROMPT), respondents typically expected to see these in alphabetical order. However, in response to party comments these were randomised. Testing found that, although respondents expected a more logical order, they were still able to easily navigate a randomised list and therefore this feature was retained.
- Following confusion from some low confidence users, we decided to remove a question about which mobile operating system they had – this was instead auto-coded from brand.
- Although the question on confidence in using smartphone features and apps (TECHCONF) was useful and retained in the final draft, it was noted that it could be subjective. For example, some lower ability users rated themselves quite highly as they focussed their confidence on a relatively narrow range of tasks which they were familiar with.
- Throughout the questionnaire where these items were included, there tended to be some confusion between security and privacy features on smartphones. As a result, definitions were clarified such that security referred to features such as passwords, virus protection, and protection from hacking, while privacy was clarified as controlling how private information is used or tracked by companies when using apps or websites.
- The cognitive testing identified consumer confusion between pre-installed browsers and default browsers. Some people also confused 'default browser' with 'most used browser'. To address these issues, we changed the order of the questionnaire so that questions were asked within two separate blocks: we first asked about pre-installation, and then asked about default browsers with definitions of each at the start of each block. Wording was also adjusted in places to further clarify and distinguish between these concepts.

4.3 The Public voice questionnaire template

The final questionnaire was signed off by both parties as fulfilling the research objectives as well as meeting the standards required for the Public Voice panel.

Public Voice start and end modules were added to the questionnaire. These modules ensured panelists correctly signed into the questionnaire and sought updates to (i) where the panel member lived, (ii) working status, and (iii) email and phone details. For the most part, the respondents needed only to confirm details already supplied but any changes were collected here. A 'current status' data file is kept for all panel members, initially equal to the recruitment survey status but updated where applicable.

4.4 Survey data analysis

The survey data was analysed by Verian, with consultation from the CMA. Topline findings from the survey were presented to the CMA on the 30 May 2024.² A further analytical report will be published in August 2024.

The plan for the analyses was agreed upon by both parties. Care was taken to align analysis with the research objectives listed in section 2.1. Data tables were produced to aid analysis. Significance testing - Independent T-Test for Means (unequal variances) and Independent Z-Test for Percentages (unpooled proportions) with 95% confidence levels – were applied to the crossbreaks to guide the researchers. More information about coding, weighting and further quality assurance checks are provided in section 5.

Measuring user confidence, knowledge and engagement

The quantitative survey results use several measures when reporting to help explain variations among smartphone owners in terms of level of confidence, knowledge and engagement in issues related to mobile phone browsers. Some of these are composite measures based on two or more questions. For reference, the definitions of these measures are provided here. Full details of questions asked in the survey can be found in Appendix A.

Smartphone technical confidence

This is based on the question TECHCONF and describes self-reported level of confidence in 'using your smartphone and the different apps available on it'. The categories are:

- Very confident
- Fairly confident
- Not confident – combines 'not very confident' and 'not at all confident'

Confidence in managing web browsers on smartphone

This is a composite variable based on a combination of two self-reported confidence measures: DOWNCONF (confidence in ability to download and use a different web browser on your phone)

² The presentation slides can be found on the case page: [Mobile browsers and cloud gaming - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/case-studies/mobile-browsers-and-cloud-gaming)

and DEFAULTCONF (confidence in ability to change default browser on your smartphone). The categories are:

- High confidence – Think could definitely download new browser AND change default browser
- Medium confidence – Think could definitely do one of these activities or probably do both activities
- Low confidence – Think could probably not or definitely not be able to both download OR change default (but not both)
- No confidence – Think could probably or definitely not be able to download AND change default browser

Mobile browser engagement

This is based on the question MOBENGAGE and describes the level of engagement with issues related to mobile browsers 'Before today how much thought if any had you given to the topics you have been asked about today?'.

- Engaged – had often thought about these topics/thought about these topics from time to time
- Not engaged – had rarely or never thought about these topics before the interview

Knowledge of mobile browser settings

This is a composite measure based on answers to three true/false questions which covered objective knowledge of default browsers and in-app browsing on mobiles (TFGRID2).

- High knowledge – all three questions correct
- Medium knowledge – At least one question correct
- Low knowledge – all three questions incorrect

5. Fieldwork performance, data processing and weighting

5.1 Fieldwork performance and quality control

Fieldwork closed with a total of 3,506 completes. Of these, 3,424 passed a basic QC test. The QC test had two components: (i) the respondent had to have either been screened out or screened in and completed the last substantive question, and (ii) among those screened in, the complete questionnaire length had to be at least 40% of the 'adjusted median'. The 'adjusted median' was the median questionnaire length excluding the longest 10% (which were mostly multi-session responses). The 'adjusted median' questionnaire length came to 14 minutes. There were 82 responses that passed QC test component (i) but not (ii).

Any respondent selecting any of the following response options was screened out at the start of the survey: no smartphone; employer-provided smartphone only; main smartphone used only for work purposes; did not choose brand of smartphone; do not know brand of smartphone. 364 respondents selected at least one of these responses. In all, a total of 3,060 respondents completed the full questionnaire and passed the QC tests, satisfying the project requirement to achieve at least 3,000 completes.

The overall conversion rate (the number completing the survey and passing the QC test divided by the number issued for fieldwork) was 32%. If a design weight is computed that is equal to the inverse of the survey sampling probability, then the conversion rate was 39% (the difference is due to the fact that those expected to respond at a lower-than-average rate were sampled at a much higher-than-average rate, and vice versa). The conversion rate for the main issue sample was lower than anticipated, hence the decision to issue the reserve sample. The conversion rate for the main issue sample – with its completed fieldwork protocol – was 39% (47% weighted).

There are four cohorts of Public Voice panel members, with cohort defined by the recruitment survey the panel member responded to. Given the multi-cohort nature of the Public Voice panel, it is not strictly possible to compute an overall response rate for any one survey that is carried out among panel members. However, it is possible to compute cohort-level response rates as the product of (i) the design-weighted Public Voice recruitment survey response rate for that cohort, (ii) the probability of being available for the Mobile Browsers survey³, and (iii) the probability of responding to the Mobile Browsers survey, given sampled for it. On this basis, the design-weighted Mobile Browsers survey response rate for cohort 1 (2019-20, face-to-face interviewing) was 3.8% (35%*30%*36%), for cohort 2 (2019, web/paper questionnaires) it was 2.2% (8%*52%*55%), for cohort 3 (2020, web/paper questionnaires) it was 2.9% (10%*64%*46%), and for cohort 4 (2021, web/paper questionnaires) it was 2.9% (11%*76%*35%). If these are combined together and weighted on the basis of allocation ratios to this survey, the overall design-weighted response rate would be 2.9%. The main sample response rate, calculated on the same basis, would be 3.4%.

While the composite response rate is lower than we would normally seek to obtain from a probability sample survey, far more is known about the attrition between initial sample and response to the

³ Component (ii) accounts for the combination of Public Voice recruitment survey respondents rejecting the chance to join the panel and joiners who have since either left or been dropped due to persistent non-response or poor-quality data. For cohort 1, the panel recruitment rate was relatively low and there has been five years of attrition since then. The last cohort (4) joined at a higher rate and have had less time to attrite, so component 2 for that cohort is much higher than for cohort 1.

Mobile Browsers survey than is usually the case with a low response rate survey. For example, the weighted Mobile Browsers survey sample (including screen-outs) can be compared to the weighted panel recruitment survey dataset of UK adults aged 16+. Given the higher response rate of the latter - together with the comprehensive weighting protocol applied to it - we can fairly treat it as a reasonable proxy for the target population. We can quantify the effects of attrition between recruitment survey and the Mobile Browsers survey by comparing the distributions of recruitment survey variables: the more aligned these are, the more confident we can be that the weighted Mobile Browsers survey sample is representative across multiple demographic and non-demographic dimensions. There are 100 recruitment survey variables, mostly categorical, and 374 population proportions can be extracted from them. The median difference in these proportion estimates between the weighted Mobile Browsers survey sample and the weighted recruitment survey dataset is only 0.5 percentage points. 95% of differences are ≤ 2 percentage points. Therefore, we can be confident that the weighted Mobile Browsers survey sample is well-aligned with the weighted recruitment survey dataset, at least with respect to the 100 variables covered in the recruitment survey.

The other obvious comparison is with the exploratory 2022 survey into consumer purchasing behaviour in the UK smartphone market, known as 'MEMS'.⁴ This survey sample was sourced using Ofcom's database of mobile phone 'blocks' and a random digit dialling protocol was utilised. Nothing was known in advance about who - if anybody - used the sampled numbers. SMS messages were sent with a link to an (incentivised) online survey. The basic conversion rate was just under 4% and the estimated response rate (among those aged 18+) closer to - but still less than - 5%. There are some questions common to both the Mobile Browsers survey and MEMS. In general, the results are well-aligned: almost identical in terms of brand choice; very similar in terms of technical confidence (although the Mobile Browsers survey respondents expressed slightly more confidence than the MEMS respondents); and similar enough with respect to what was important when choosing their phone, despite some differences in the question structure. The distinction between Apple and Android buyers - particularly the cost-consciousness of the latter - is marked in both sources. Alignment between sources is not strong evidence that neither is biased but it does suggest the results are robust to sample source, given the differences in approach between the Mobile Browsers survey and MEMS.

5.2 Coding

The survey contained one open ended question, and 15 survey questions contained an open specify code. Open specify responses were back coded to the response codes available at the given question. The minimum for a new code to be created was set to 10 responses. No new codes were created for the 15 questions that contained an open specify code.

The open-ended question, Browspont, asked respondents to type in the names of as many web browsers they could think of. Responses were coded to match the code frame given at the proceeding question, Browprompt. New codes satisfying a minimum of 10 responses were added. This included mention of web browsers not listed at Browprompt, as well as the search engines Yahoo, Ask Jeeves and Bing. Any mentions of web browsers or search engines that did not satisfy the 10-response minimum were coded under 'Other web browser or search engine' (n=17). All verbatim

⁴ See

https://assets.publishing.service.gov.uk/media/62eb98dae90e07142f107f7f/Consumer_purchasing_behaviour_in_the_UK_smartphone_market_-_CMA_research_report_new.pdf

responses that were neither a web browser or search engine were coded under 'Verbatim response was not a web browser or search engine' (n=15).

5.3 Weighting

The respondent sample (including those who did not pass the screener module) was weighted in three stages:

- 1) For every respondent, a survey base weight was calculated that was equal to his/her panel base weight divided by the probability of being sampled for the survey (which varied substantially).
- 2) For every respondent, a propensity score weight was estimated, as a function of a set of critical (demographic) recruitment survey variables. Technically, this propensity score weight was equal to the estimated odds of being present in the weighted panel dataset rather than the survey-base-weighted respondent dataset when the latter dataset is added to the former (meaning that survey respondents are present in both datasets). To limit over-reliance on the model, the propensity score weight was limited to the inter-95%ile range. This was used as weight (2).
- 3) Using the product of weights (1) and (2) as a starting point⁵, the respondent sample was calibrated to the weighted ONS Annual Population Survey of 2022 (the latest calendar year available) with respect to sex*age group, birth country (UK/other), and region. The classic raking algorithm was used for this step.

The overall weighting efficiency was 85%, equivalent to a design effect of 1.18 and an effective sample size of 2,912 (3,424*85%). Completes that did not pass the QC tests were not given a weight.

Table 2 below shows the calibration matrix that was used for the survey, derived from the ONS Annual Population Survey of 2022.

⁵ Further trimmed to peak at its 98%ile value.

Table 2: ONS Annual Population Survey population estimates, 2022, UK adults aged 16+.

Variable	Category	% of population
	All	100.0
Sex/age group	Male 16-24	6.5
	Male 25-34	8.4
	Male 35-44	7.9
	Male 45-54	8.0
	Male 55-64	7.7
	Male 65-74	6.1
	Male 75+	4.6
	Female 16-24	6.2
	Female 25-34	8.2
	Female 35-44	8.0
	Female 45-54	8.2
	Female 55-64	8.0
	Female 65-74	6.8
	Female 75+	5.5
Region	NE England	4.0
	NW England	10.9
	Yorkshire & The Humber	8.2
	E Midlands	7.2
	W Midlands	8.8
	E England	9.4
	London	13.4
	SE England	13.7
	SW England	8.5
	Wales	4.8
	Scotland	8.4
	Northern Ireland	2.8
Birth country	UK born	82.6
	Non-UK born	17.4

Appendix A: Quantitative survey questionnaire.

Q1017 INTRO	<p>Welcome to the latest Public Voice survey.</p> <p>We would like to ask you to complete a short 10-15 minute survey about your use of mobile phones and other devices you may use.</p> <p>This research is funded by the Competition & Markets Authority, an independent non-ministerial department who promote competitive markets within the UK economy.</p> <p>If you would like, you can read our privacy policy by visiting https://www.pvoice.co.uk/ [link opens in a new browser]</p> <p>Please click the NEXT button to start the survey.</p>
	SECTION A: Screeners
SCREEN1 (Single)	<p>ASK ALL</p> <p>Do you have a smartphone for personal use?</p> <p>A smartphone is a phone on which you can send and receive emails, use apps, view websites and generally go online. Popular brands include iPhone and Samsung Galaxy.</p> <ol style="list-style-type: none"> 1. Yes, personal use only 2. Yes, personal and work use 3. No, I have a smartphone for work use only (Screen out) 4. No, I don't have any smartphone (Screen out)
MOBGET (Single)	<p>ASK ALL STILL SCREENED IN (IF SCREEN1 = 1 OR 2)</p> <p>How did you get your current personal smartphone?</p> <ol style="list-style-type: none"> 1. I purchased as new or as part of a contract upgrade 2. I purchased as used/refurbished 3. Given to me as new 4. Given to me as used/refurbished 5. Provided by my employer (Screen out) 6. Other (Please type in)
MOBCHOOSE (Single)	<p>IF MOBGET=GIVEN TO YOU OR OTHER (3/4/6)</p> <p>Did you choose the smartphone yourself?</p> <ol style="list-style-type: none"> 1. Yes - chose myself 2. It was given to me, but I had indicated which make/model I wanted 3. No, I did not choose myself (Screen out)

<p>OTHDEVICE (Multi)</p>	<p>ASK ALL STILL SCREENED IN (IF MOBGET = 1,2,3,4,6 AND MOBCHOOSE = 1 OR 2 IF APPLICABLE)</p> <p>And which of these other devices that access the internet do you personally use, not including any devices provided by an employer?</p> <p>Please select all that apply.</p> <ol style="list-style-type: none"> 1. Apple Macbook / Apple Mac 2. Chromebook (e.g. Samsung Chromebook or Google Chromebook) 3. Other laptop/desktop computer (e.g. Windows, Linux) 4. Android tablet (e.g. Samsung) 5. Amazon Fire tablet 6. Apple iPad tablet 7. Apple Watch 8. Other smartwatch (not Apple Watch) 9. Google Smart home devices (e.g. TV Chromecast, Nest, Google Home Hub, Google Voice assistant) 10. Apple Smart home devices (e.g. HomePod, Apple TV) 11. Other smart home devices (e.g. Hive, Amazon Alexa) 12. Gaming console (e.g. Play Station, Xbox) 13. Airpods/Airpods Pro 14. Other wireless air buds/headphones (not Apple) 15. Other device (please type in) 16. None of the above (EXCLUSIVE)
<p>MOBILENUM (Single)</p>	<p>ASK ALL STILL SCREENED IN (IF MOBGET = 1,2,3,4,6 AND MOBCHOOSE = 1 OR 2 IF APPLICABLE)</p> <p>How many smartphones do you currently have for personal use?</p> <ol style="list-style-type: none"> 1. One 2. More than one.
<p>INTRONUM (Text)</p>	<p>ASK ALL STILL SCREENED IN</p> <p>We will now ask questions about your smartphone for personal use.</p> <p>[IF MOBILENUM =2: For the next questions, please answer about the smartphone which you use most.]</p>
<p>MOBBRAND (Single)</p>	<p>ASK ALL STILL SCREENED IN</p> <p>Which of the following brands is your current personal smartphone?</p> <p>[RANDOMISE CODES 1-17]</p> <ol style="list-style-type: none"> 1. Alcatel 2. Apple 3. Asus 4. Blackberry 5. Google 6. Honor 7. HTC 8. Huawei 9. LG 10. Nokia 11. OnePlus 12. Oppo 13. Motorola 14. Samsung 15. Sony 16. Vivo 17. Xiaomi 18. Other (please type in) 19. Don't know (Screen out)

	END OF SCREENERS
	SECTION B: Smartphone acquisition and general use
WHICHOS (Single)	<p>COMPILE FOR ALL DUMMY VARIABLE USED IN LATER FILTERING</p> <ol style="list-style-type: none"> 1. Apple (MOB BRAND=2) 2. Android (MOB BRAND=1,3-7, 9-18) 3. Other (MOB BRAND=8)
	<p>SCRIPTING NOTE: USE THE FOLLOWING QUESTIONS FOR TEXT SUBSTITUTIONS: IF MOBGET= (1/2) buy/bought/purchase IF MOBGET= (3/4/6) got/get/choose 2+ SMARTPHONES: IF MOBILENUM=2</p>
PREMOB (Single)	<p>ASK ALL</p> <p>Now thinking about the smartphone you used before you [bought/got] your current personal smartphone, was that the same brand you have now or a different brand?</p> <ol style="list-style-type: none"> 1. Same brand 2. Different brand 3. I didn't own a smartphone before my current one 4. Don't know
PREMOBCNFRM (Single)	<p>IF DIFFERENT BRAND (PREMOB=2)</p> <p>Which of the following smartphone brands was your previous smartphone? [RANDOMISE CODES 1-17 – SAME ORDER AS MOB BRAND]</p> <ol style="list-style-type: none"> 1. Alcatel 2. Apple 3. Asus 4. Blackberry 5. Google 6. Honor 7. HTC 8. Huawei 9. LG 10. Nokia 11. OnePlus 12. Oppo 13. Motorola 14. Samsung 15. Sony 16. Vivo 17. Xiaomi 18. Other please specify 19. Don't know
MOBSETUP (Single)	<p>ASK ALL</p> <p>When you got your current personal smartphone, who set it up so that it was ready for use (for example, selecting the language, time zone and Wi-Fi network)?</p>

	<ol style="list-style-type: none"> 1. No-one – it was already set up 2. I did it myself without assistance 3. I did it with someone else’s assistance (e.g. friends/family, staff in a retail store) 4. Someone else did it all for me (e.g. friends/family, staff in a retail store) 5. Don’t know/Can’t remember
MOBQUICK (Single)	ASK ALL As part of the set up, did you (or someone else) transfer the previous settings, apps and data over from an old phone? <ol style="list-style-type: none"> 1. Yes 2. No – I set it up without transferring any settings, apps or data 3. Don’t know/Can’t remember
MOBWHEN (Single)	ASK ALL Approximately when did you [buy/get] this smartphone? <ol style="list-style-type: none"> 1. In the last month 2. 2-3 months ago 3. 4-6 months ago 4. 7-12 months ago 5. 1-2 years ago 6. 3-4 years ago 7. 5-6 years ago 8. 7-8 years ago 9. 9-10 years ago 10. 10+ years ago 11. Don’t know
MOBTIME (Single)	ASK ALL About how long do you spend on your smartphone on a typical day? <ol style="list-style-type: none"> 1. Less than half an hour 2. Half an hour, up to an hour 3. 1 hour, up to 2 hours 4. 2 hours, up to 3 hours 5. 3 hours, up to 4 hours 6. 4 hours, up to 5 hours 7. 5 hours, up to 6 hours 8. 6 hours, up to 7 hours 9. 7 hours, up to 8 hours 10. 8 hours, up to 9 hours 11. 9 hours, up to 10 hours 12. 10 hours or more a day 13. Don’t know
TECHCONF (Single)	ASK ALL How confident, if at all, are you with using your smartphone and the different apps that are available on it? <ol style="list-style-type: none"> 1. Very confident 2. Fairly confident 3. Not very confident 4. Not at all confident 5. Don’t know

<p>MOBFACTORA (Multi – Up to 5)</p>	<p>ASK ALL Thinking back to when you first [bought/got] your current smartphone. What factors were important in your decision to [purchase/choose] it?</p> <p><i>Please read the whole list and choose up to five responses. If there are more than five important factors, choose the five most important.</i></p> <p>[RANDOMISE CODES 1-14]</p> <ol style="list-style-type: none"> 1. Overall price 2. Web browser(s) available on this device 3. Brand (e.g. Apple, Samsung, Nokia, Google, Sony) 4. Storage capacity/memory 5. Operating system (the pre-installed software that powers the device, e.g. Apple iOS, Google Android) 6. Camera 7. Product design (e.g. the look of the phone) 8. Screen size 9. Battery life 10. Security features (e.g. virus protection, protection from hacking) 11. Privacy features to control how my private information is used or tracked by companies when using apps or websites 12. Speed (how fast the phone can perform different functions) 13. Compatibility with other personal devices (e.g., laptop/tablet, smart watches, headphones, etc) 14. The games I can play on it 15. Other factor (please type in) 16. None (EXCLUSIVE) 17. Don't know (EXCLUSIVE)
<p>MOBFACTOR1 (Single)</p> <p>IF ONE CODE SELECTED AT MOBFACTORA, AUTOCODE ANSWER AT MOBFACTOR1.</p> <p>MOBFACTOR2 (Single)</p> <p>MOBFACTOR3 (Single)</p> <p>Add reactive DK if no code is selected and respondent clicks forward.</p>	<p>IF 2+ CHOSEN AT MOBFACTOR: Which <u>one</u> of these was the most important factor? FILTER ON RESPONSES AT MOBFACTORA</p> <p>IF 3+ CHOSEN AT MOBFACTOR: And which was the <u>second</u> most important factor? FILTER ON REMAINING RESPONSES AT MOBFACTORA</p> <p>IF 4+ CHOSEN AT MOBFACTOR: And which was the <u>third</u> most important factor? FILTER ON REMAINING RESPONSES AT MOBFACTORA</p>

<p>MOBACTIV (Multi)</p>	<p>ASK ALL [IF 2+ SMARTPHONES: Still thinking about the smartphone you use most for personal activities.]</p> <p>Which, if any, of the following do you do on your smartphone? Please select all that apply. [RANDOMISE CODES 1-17]</p> <ol style="list-style-type: none"> 1. Banking 2. Food delivery (e.g. Deliveroo, Uber Eats, Just Eat). 3. Games 4. Gambling 5. Dating 6. Music/Audio Streaming /Podcasts 7. Navigation/ Maps 8. News/ newspapers/Sports news 9. Payment services (e.g. Apple Pay, Google Pay, PayPal) 10. Shopping (e.g. Amazon, Ocado, eBay, retail websites) 11. Social media (e.g. Facebook, Twitter, Instagram, Snapchat, Tiktok) 12. Taxi booking or travel (e.g. Uber, Trainline, airline sites) 13. TV & video (e.g. Netflix, BBC iPlayer, Amazon Prime, YouTube) 14. Emails 15. Messaging (e.g. WhatsApp, Facebook Messenger) 16. Fitness (e.g. Strava, Map My Run) 17. NHS or other healthcare 18. None of these (EXCLUSIVE) 19. Don't know (EXCLUSIVE)
<p>MOBNATIVE (Single)</p>	<p>ASK ALL WHO CITE AT LEAST 1 ACTIVITY (ANY OF CODES 1-17 AT MOBACTIV)</p> <p>Thinking about the smartphone activities you mentioned at the previous question. In general do you prefer to download and use an app or visit a website when using your smartphone?</p> <ol style="list-style-type: none"> 1. Much prefer to use apps 2. Generally prefer to use apps 3. I don't really have a preference 4. Generally prefer to use websites 5. Much prefer to use websites 6. Don't know

	SECTION C: Knowledge/understanding of internet/web browser functionality on smartphone
INTROC1 (Text)	<p>ASK ALL</p> <p>The next questions will ask you about how you use web browsers on your personal smartphone.</p>
BROWSPONT (Open)	<p>ASK ALL</p> <p>A web browser allows you to access the web on a smartphone, either by taking you to the website address you have typed in or by providing you with a set of search results.</p> <p>Which web browsers have you heard of? Please type in as many as you can think of, separated by a comma, or if you are not sure select 'none'.</p> <p>(OPEN TEXT)</p> <p>1. None</p>
BROWPROMPT (Multi)	<p>ASK ALL</p> <p>DISPLAY LOGO FOR EACH WEB BROWSER [RANDOMISE CODES 1-15]</p> <p>REMOVE BACK BUTTON HERE.</p> <p>Now please look at the list below, and answer again using this list. Before today, which if any of these web browsers had you heard of? Please select all that apply</p> <ol style="list-style-type: none"> 1. Apple Safari 2. Brave 3. DuckDuckGo Privacy Web browser 4. Ecosia 5. Google Chrome 6. Lunascape 7. Maxthon 8. Microsoft Edge 9. Microsoft Internet Explorer 10. Mozilla Firefox. 11. Opera 12. Samsung Internet 13. Sleipnir 14. UC Web browser 15. Vivaldi 16 Other web browser (please type in) 17. None of the above [EXCLUSIVE]

<p>BROWINSTALL (Multi)</p>	<p>ASK ALL RANDOMISE CODES 1-15– SAME ORDER AS BROWPROMPT] DISPLAY LOGO FOR EACH WEB BROWSER.</p> <p>ADD BACK BUTTON IN AGAIN.</p> <p>Still thinking about your current smartphone [IF 2+ : ,the one you use most often]. Which web browsers do you currently have installed on your smartphone? If you are unsure, please check your phone now. Please select all that apply.</p> <ol style="list-style-type: none"> 1. Apple Safari 2. Brave 3. DuckDuckGo Privacy Web browser (for Textfill at BROWMOST please use 'DuckDuckGo') 4. Ecosia 5. Google Chrome 6. Lunascape 7. Maxthon 8. Microsoft Edge 9. Microsoft Internet Explorer 10. Mozilla Firefox. 11. Opera 12. Samsung Internet 13. Sleipnir 14. UC Web browser 15. Vivaldi 16. Other web browser (please type in) 17. None of the above (EXCLUSIVE) 18. Don't know [EXCLUSIVE]
<p>BROWMOST (Single)</p>	<p>FILTER=ALL WHO NAME A BROWSER ON THEIR PHONE (BROWINSTALL =1-15) [IF ONLY ONE MENTION AT BROWINSTALL, AUTOFILL THIS RESPONSE]</p> <p>IF USE 2+ WEB BROWSERS [2+ MENTIONS WITHIN CODES 1-15 AT BROWINSTALL] You said you have the following web browsers on your smartphone. Which ONE of these do you use most often?</p> <p>FILTER LIST ON MENTIONS AT BROWINSTALL (Create dummy variable)</p>

	SECTION D: Use of web browsers on smartphone
INTROD1 (Text)	<p>ASK ALL</p> <p>The next questions are about how you use web browsers on your personal smartphone.</p> <p>As a reminder, by web browser we mean apps like Google Chrome, Safari or Firefox that allow you to access the web on smartphones, either by taking you to the website address you have typed in or by providing you with a set of search results.</p>
WHYMOST1 (Single)	<p>ALL WHO NAME A BROWSER ON THEIR PHONE (BROWINSTALL =1-15) RANDOMISE CODES 1-4</p> <p>You mentioned that [BROWMOST] is your most used web browser on your personal smartphone. Why do you use this particular web browser on your smartphone? Please select the most important reason.</p> <ol style="list-style-type: none"> 1. The web browser was already on my smartphone and I chose to keep using it based on my previous browser experience 2. The web browser was already on my smartphone and I had no reason to use another web browser 3. The web browser was already on my smartphone and I didn't know there were other options 4. It is my preferred web browser (even if I sometimes use different browsers for specific web activities) 5. No particular reason/Never thought about it 6. I had never heard of a web browser before today 7. Don't know
WHYMOST2 (Multi)	<p>IF PREFERRED WEB BROWSER (WHYMOST1=1 or 4) [RANDOMISE CODES 1-15]</p> <p>Are there any particular reasons why you prefer this web browser on your smartphone? Please select all that apply.</p> <ol style="list-style-type: none"> 1. Easy to use 2. Security features (e.g. virus protection, protection from hacking) 3. Privacy features to control how my private information is used or tracked when using different apps and websites 4. Trusted brand 5. Social or ethical values of brand 6. The design, how it looks 7. Speed of loading webpages 8. Size of the app/amount of storage takes up on my smartphone 9. Compatibility with websites and software I need to use 10. Stability (how often the browser crashes or stops working) 11. Access to my saved information (bookmarks, passwords, browsing history etc.) 12. It's the same as/it's the one I use on other devices 13. Familiarity, I'm used to it 14. The web browser extensions or plug-ins available 15. Fewer adverts, pop-ups or notifications 16. Other reason (please type in) 17. No particular reason/Never thought about it (EXCLUSIVE)

<p>LOOKFOR (Single)</p>	<p>ASK ALL Below are some of the different ways that you can look for information on the web when using a smartphone.</p> <p>When you want to do this on your smartphone, which of the following do you do most often?</p> <p><i>If you are unsure what you do, try looking now for information on the web using your smartphone.</i></p> <ol style="list-style-type: none"> 1. I open a web browser app and type what I am looking for into the app's address bar 2. I open a web browser app, then look for a search website (e.g. 'www.google.com'). Then I enter my search into that. 3. I use a search engine app (e.g. Google search app or Bing search app) 4. I use the search bar on my smartphone (e.g., the search box on the home screen) 5. I use the voice assistant on my smartphone to search for information on the web 6. I use an AI app (e.g. Chat GPT) to search for information on the web <ol style="list-style-type: none"> 8. Not applicable - I never look for information on the internet using my smartphone 9. Other method (please type in) 10. Don't know
<p>BROWLOC1 (Multi)</p>	<p>ALL WHO CITE A NAMED WEB BROWSER (ANY CODES 1 TO 15 AT BROWINSTALL)</p> <p>You mentioned that you [IF 2+ WEB BROWSERS AT BROWINSTALL: mostly] use [BROWMOST].</p> <p>RANDOMISE CODES 1-5</p> <p>If you wanted to open your [BROWMOST] web browser on your smartphone, in which of these places would you find it? Please select all that apply.</p> <p><i>If you are unsure, try looking for it now on your smartphone.</i></p> <ol style="list-style-type: none"> 1. It is pinned to my screen (stays in same location even if I swipe to a new page) 2. On my home screen 3. On a page other than home screen 4. In a folder (grouped together with other apps) on my home screen 5. In a folder (grouped together with other apps) on a page other than home screen 6. Don't know where it is - I would need to search for it [EXCLUSIVE]
<p>BROWLOC2 (Single)</p>	<p>IF KNOW WHERE MOST USED WEB BROWSER IS LOCATED (BROWLOC1=1-5)</p> <p>Just to check, did you (or someone else) move your web browser to this location or was it there already when you started using your current smartphone?</p> <p>RANDOMISE CODES 1-3</p> <ol style="list-style-type: none"> 1. Yes, I (or someone else) chose this location/moved it to this location 2. No, it was already in this location and I didn't change anything 3. Someone else set up my phone and I am not sure 4. Don't know 5. Can't remember

	SECTION E: Pre-installation, downloading and switching
INTROE1 (Text)	<p>ASK ALL</p> <p>Now some questions about pre-installed browsers.</p> <p>A pre-installed web browser is one that is already on a smartphone when first purchased. Any other web browsers would then need to be downloaded.</p>
DOWNCONF (Single)	<p>ASK ALL</p> <p>Imagine that you are asked to download and use a different web browser on your smartphone. Do you think you could do this on your own, without needing to either ask someone else or search for information online?</p> <ol style="list-style-type: none"> 1. Definitely 2. Probably 3. Probably not 4. Definitely not 5. Don't know
PREINST (Single)	<p>ALL WHO CITE A NAMED WEB BROWSER (BROWINSTALL=1-15)</p> <p>You said that you [IF 2+ AT BROWINSTALL: mostly] use [BROWMOST] as your web browser on your phone.</p> <p>Did you or someone else download this web browser onto your smartphone, or was it already installed on the phone when you got it?</p> <ol style="list-style-type: none"> 1. The web browser was already pre-installed on my smartphone. 2. I/someone else downloaded it onto my smartphone. 3. I/someone else transferred it from my previous phone 5. Don't know/Can't remember
TRANSTYPE (single)	<p>IF BROWSER WAS TRANSFERRED (PREINST=3)</p> <p>Thinking about your previous smartphone device. Was [BROWMOST] pre-installed on that device or did you or someone else download the app onto that device?</p> <ol style="list-style-type: none"> 1. It was pre-installed on my previous smartphone 2. I/someone else downloaded it onto my previous smartphone 3. Don't know/can't remember
INTROC2 (Text)	<p>ASK ALL</p> <p>Next a few questions about your default web browser on your current smartphone.</p> <p>By 'default web browser', we mean the web browser that usually opens up automatically, e.g. when you click on a weblink in a text message.</p>

<p>TFGRID2 (Grid)</p>	<p>ASK ALL</p> <p>First a couple of statements. For each, please tell us whether you think the statement is true, false or if you are unsure either way.</p> <p>This is not a test so don't worry if you don't know. We want to find out the level of understanding across the country as a whole.</p> <p>A. The web browser that is set as the default when you first buy a smartphone cannot be changed. B. Different apps on your smartphone may use different web browsers depending on the app. C. If you click on a weblink within an app (e.g. a social media app) it will always open in your default web browser.</p> <p>1. True 2. False 3. Don't know</p>
<p>DEFAULTCONF (Single)</p>	<p>ASK ALL</p> <p>A 'default web browser' is the web browser that usually opens up automatically, for example when you click on a weblink in a message.</p> <p>[IF ONLY 1 CHOSEN AT BROWINSTAL: Imagine that you have more than one web browser on your smartphone, and that you are asked to change which one is set as the default web browser.] [IF 2+ AT BROWINSTALL: Imagine that you are asked to change which web browser on your smartphone is set as the default browser.]</p> <p>Do you think you could work out how to do this on your own, without needing to ask someone else or search for information online?</p> <p>1. Definitely 2. Probably 3. Probably not 4. Definitely not 5. Don't know</p>
<p>BROWDEFKNOW (Single)</p>	<p>ALL WHO CITE A NAMED WEB BROWSER (ANY CODES 1 TO 15 AT BROWINSTALL)</p> <p>Do you know what the default web browser is on your smartphone?</p> <p>1. Yes 2. No 3. Don't know</p>
<p>BROWDEF (Single)</p>	<p>IF KNOW SMARTPHONE DEFAULT BROWSER IF BROWINSTALL = two or more codes and if BROWDEFKNOW =1. IF only one code selected at BROWINSTALL and BROWDEFKNOW=1, autocode at BROWDEF.</p> <p>Of the web browsers that you have on your phone, which one of these would you say is your 'default web browser'.</p> <p>ONLY SHOW WEB BROWSERS MENTIONED AT BROWINSTALL + Don't know</p>

	IF ONLY ONE CODE SELECTED AT BROWNINSTALL, AUTOCODE THAT ANSWER AT BROWDEF.
BROWDEFHOW (Single)	<p>ALL WHO CITE A NAMED WEB BROWSER (ANY CODES 1 TO 15 AT BROWNINSTALL)</p> <p>Just to check, have you or someone else changed the default web browser on your current personal smartphone?</p> <ol style="list-style-type: none"> 1. Yes, I/someone else changed the default web browser on my smartphone 2. No 3. Don't know
WHYSWITCHDEF (Multi)	<p>IF CHANGED DEFAULT WEB BROWSER (BROWDEFHOW=1)</p> <p>Why did you change the default web browser on your current personal smartphone? Please select all that apply.</p> <p>(RANDOMISE CODES 1-6)</p> <ol style="list-style-type: none"> 1. I wanted to be in control of how I access the internet 2. Preference for a specific web browser 3. Want to use same web browser as used on other devices (e.g. laptop, tablet) 4. I didn't like using the default web browser on my phone 5. Because I was prompted to change this to my default after I downloaded it 6. Family/friend recommended or changed for me 7. Other (please type in) 8. Don't know (EXCLUSIVE)
WHYSWITCHDEFMAIN (Single)	<p>IF MORE THAN ONE REASON FOR CHANGING DEFAULT BROWSER (2+ RESPONSES AT WHYSWITCHDEF). IF ONE CODE SELECTED AT WHYSWITCHDEF, AUTOCODE ANSWER AT WHYSWITCHDEFMAIN.</p> <p>(CODES IN SAME ORDER AS ABOVE)</p> <p>And which of these was the main reason for changing your default browser on your current personal smartphone?</p> <ol style="list-style-type: none"> 1. I wanted to be in control of how I access the internet 2. Preference for a specific web browser 3. Want to use same web browser as that used on other devices (e.g. laptop, tablet) 4. I didn't like using the default web browser on my phone 5. Because I was prompted to change this to my default after I downloaded it 6. Family/friend recommended or changed for me 7. Other (please type in)

Add reactive DK if no code is selected and respondent clicks forward.

<p>SWITCHEASE (Single)</p>	<p>IF CHANGED DEFAULT WEB BROWSER (BROWDEFHOW=1)</p> <p>How easy or difficult was it to change the default web browser on your current personal smartphone?</p> <ol style="list-style-type: none"> 1. Very easy 2. Fairly easy 3. Fairly difficult 4. Very difficult 5. Don't know/Can't remember 6. Not applicable – someone else did it on my behalf
<p>WHYDIFF (Multi)</p>	<p>IF CHANGED DEFAULT WEB BROWSER AND DIDN'T FIND IT 'VERY EASY' (SWITCHEASE=2-4)</p> <p>Which of the following issues, if any, did you experience when changing the default web browser on your current personal smartphone? Please select all that apply.</p> <p>RANDOMISE CODES 1-4</p> <ol style="list-style-type: none"> 1. I struggled to locate the right menu in settings 2. I couldn't follow instructions about how to do this 3. Too many steps involved 4. I worried it was permanent / would not be able to change back 5. Other issue (please type in) 6. No issues experienced (EXCLUSIVE) 7. Don't know/Can't remember (EXCLUSIVE)
<p>WHYNOCHANGE (Multi)</p>	<p>IF NOT CHANGED DEFAULT WEB BROWSER (BROWDEFHOW=2/3)</p> <p>Are there any particular reasons why you have not changed the default web browser on your smartphone? Please select all that apply.</p> <p>(RANDOMISE CODES 1-7)</p> <ol style="list-style-type: none"> 1. I didn't know how to do this 2. The web browser I use isn't important to me 3. All web browsers are the same 4. I didn't know you could change the default web browser 5. The default web browser is my preferred browser 6. I don't want to lose access to information on my web browser (such as saved bookmarks, passwords, browsing history) 7. I prefer to use default settings 8. Other reason (please type in) 9. No particular reason to change/Never thought about it (EXCLUSIVE)

<p>WHYNOCHANGEMAIN (Single)</p> <p>Add reactive DK if no code is selected and respondent clicks forward.</p>	<p>IF MORE THAN ONE REASON FOR NOT CHANGING DEFAULT BROWSER (2+ REASONS AT WHYNOCHANGE). IF ONE CODE SELECTED AT WHYNOCHANGE, AUTOCODE ANSWER AT WHYNOCHANGEMAIN. (ONLY SHOW CODES SELECTED AT WHYNOCHANGE).</p> <p>And which of these was the main reason for not changing your default browser on your smartphone?</p> <p>FILTER ON LIST AT WHYNOCHANGE – USE SAME ORDER</p> <ol style="list-style-type: none"> 1. I didn't know how to do this 2. The web browser I use isn't important to me 3. All web browsers are the same 4. I didn't know you could change the default web browser 5. The default web browser is my preferred browser 6. I don't want to lose access to information on my web browser (such as saved bookmarks, passwords, browsing history) 7. I prefer to use default settings 8. Other reason (please type in)
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SECTION F: Choice architecture

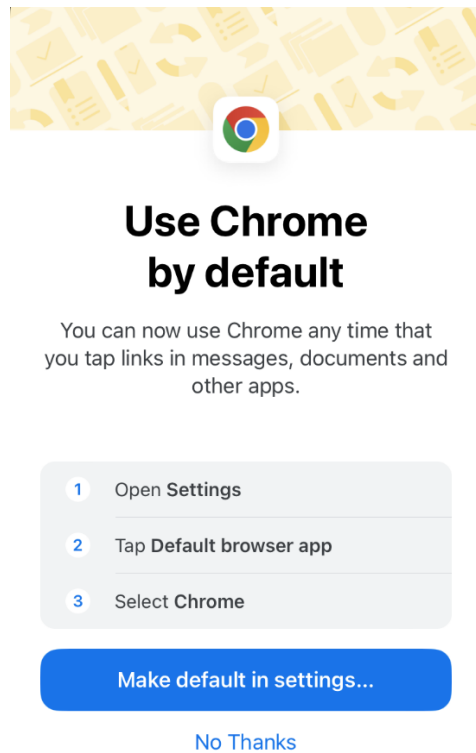
NEWPROMPT
(Single)

IF CHANGED DEFAULT BROWSER (BROWDEFHOW=1 & WHICHOS=1 or 2

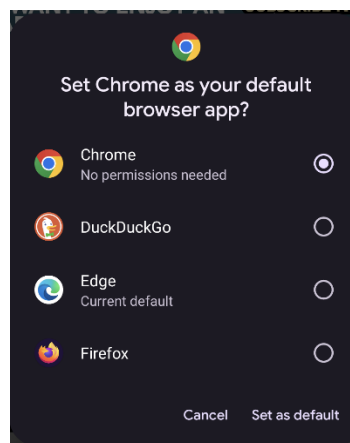
Here is an example of a pop-up message which some people get after they change their default browser.

These types of messages ask if you want to change your default browser back to the previous default browser. In this example, back to Google Chrome.

IF ON iOS PHONE (WHICHOS=1): SHOW PICTURE OF PROMPT



IF ANDROID PHONE (WHICHOS=2): SHOW PICTURE OF PROMPT



<p>PROMPTSEEN</p>	<p>IF CHANGED DEFAULT BROWSER (BROWDEFHOW=1 and WHICHOS=1 or 2)</p> <p>Have you ever seen a pop-up message similar to this on your smartphone, which asks if you want to change your default web browser back to a previous default browser.</p> <ol style="list-style-type: none"> 1. Yes, I have seen a message like this on a smartphone (current or previous smartphone) 2. Not seen on a smartphone 3. Not sure or can't remember
<p>PROMPTPURP (Single)</p>	<p>IF PROMPTSEEN = 1</p> <p>And still thinking about pop-up prompts that ask you to confirm which browser you want to use as your default browser. To what extent do you find these kinds of prompts helpful?</p> <ol style="list-style-type: none"> 1. Usually helpful 2. Occasionally helpful 3. Rarely helpful 4. Never helpful 5. Don't know

	SECTION F: Browsing behaviour on desktops/laptops
INTROF (Text)	<p>IF USE COMPUTER (OTHEDEVICE=1/2/3)</p> <p>We are nearly at the end now, so just a few additional questions about your use of the internet on these devices.</p> <p>You mentioned earlier you had the following: [IF OTHDEVICE=1: Mac/Macbook], [IF OTHDEVICE=2: Chromebook], [IF OTHDEVICE=3: Laptop or desktop].</p> <p>Please think about your own personal use of these devices (do not include work-related activities). [IF OTHDEVICE=4/5/6: And please think only about these devices, not about your tablet]</p>
COMPNUM (Single) Add reactive DK if no code is selected and respondent clicks forward.	<p>IF USE COMPUTER (OTHEDEVICE=1/2/3)</p> <p>Thinking about your devices: [IF OTHDEVICE=1: Mac/Macbook], [IF OTHDEVICE=2: Chromebook], [IF OTHDEVICE=3: Laptop or desktop].</p> <p>How many of these computer devices do you currently have for personal use?</p> <ol style="list-style-type: none"> 1. One 2. More than one
INTROF2 (Text)	<p>IF MORE THAN ONE COMPUTER DEVICE (COMPNUM=2)</p> <p>For the next questions, please think about the [IF OTHDEVICE=1: Mac/Macbook], [IF OTHDEVICE=2: Chromebook], [IF OTHDEVICE=3: Laptop or desktop], which you mainly use for personal activities.</p>
COMPBROWINSTALL (Multi)	<p>IF USE COMPUTER (OTHEDEVICE=1/2/3)</p> <p>DISPLAY LOGO FOR EACH WEB BROWSER (TBC FROM CLIENT)</p> <p>Thinking about the your [IF COMPNUM=2: most used] [IF OTHDEVICE=1: Mac/Macbook], [IF OTHDEVICE=2: Chromebook], [IF OTHDEVICE=3: Laptop or desktop].</p> <p>Which web browsers do you currently have installed on this computer? A web browser allows you to access the web on the computer. Please select all that apply.</p> <p>RANDOMISE CODES 1-15</p> <ol style="list-style-type: none"> 1. Apple Safari 2. Brave 3. DuckDuckGo Privacy Web browser (For textfill at COMPBROWMOST use 'DuckDuckGo') 4. Ecosia 5. Google Chrome 6. Lunascape 7. Maxthon 8. Microsoft Edge 9. Microsoft Internet Explorer 10. Mozilla Firefox. 11. Opera 12. Samsung Internet 13. Sleipnir 14. UC Web browser 15. Vivaldi 16. Other web browser (please type in)

	<p>17. None of the above (EXCLUSIVE) 18. Don't know [EXCLUSIVE]</p>
<p>COMPBROWMOST (Single)</p> <p>Add reactive DK if no code is selected and respondent clicks forward.</p>	<p>FILTER= WHO NAME A BROWSER ON THEIR COMPUTER (BROWINSTALL =1-15) [IF ONLY ONE MENTION AT COMPBROWINSTALL, AUTOFILL THIS RESPONSE]</p> <p>IF USE 2+ WEB BROWSERS [2+ MENTIONS AT ACROSS CODES 1-15 AT COMPBROWINSTALL]</p> <p>You said you have the following web browsers on your computer. Which ONE of these do you use most often?</p> <p>FILTER LIST ON MENTIONS AT COMPBROWINSTALL- SAME ORDER – Create dummy variable</p>
<p>COMPWHYMOST1 (Single)</p>	<p>ALL WHO NAME A BROWSER ON THEIR COMPUTER (COMPBROWINSTALL =1-15) You mentioned that [COMPBROWMOST] is your most used web browser on your computer. Why do you use this particular web browser on your computer? Please select the most important reason.</p> <p>[RANDOMISE 1-4]</p> <ol style="list-style-type: none"> 1. The web browser was already on my computer and I chose to keep using it based on my previous browser experience 2. The web browser was already on my computer and I had no reason to use another web browser 3. The web browser was already on my computer and I didn't know there were other options 4. It is my preferred web browser (even if I sometimes use different browsers for specific web activities) 5. No particular reason/Never thought about it 6. I had never heard of a web browser before today 7. Don't know
<p>COMPWHYMOST2 (Multi)</p>	<p>IF PREFERRED WEB BROWSER (COMPWHYMOST1=1 OR 4) [RANDOMISE CODES 1-15]</p> <p>Are there any particular reasons why you prefer this web browser on your computer? Please select all that apply.</p> <ol style="list-style-type: none"> 1. Easy to use 2. Security features (e.g. virus protection, protection from hacking) 3. Privacy features to control how my private information is used or tracked when using different apps and websites 4. Trusted brand 5. Social or ethical values of brand 6. The design, how it looks 7. Speed of loading webpages 8. Size of the app/amount of storage takes up on my computer 9. Compatibility with websites and software I need to use 10. Stability (how often the browser crashes or stops working) 11. Access to my saved information (bookmarks, passwords, browsing history etc.)

	<p>12. It's the same as/it's the one I use on other devices</p> <p>13. Familiarity, I'm used to it</p> <p>14. The web browser extensions or plug-ins available</p> <p>15. Fewer adverts, pop-ups or notifications</p> <p>16. Other reason (please type in)</p> <p>17. No particular reason/Never thought about it (EXCLUSIVE)</p>
<p>COMPPREINST (Single)</p>	<p>ALL WHO NAME A BROWSER ON THEIR COMPUTER (COMPBROWINSTALL =1-15)</p> <p>Thinking about the web browser you mostly use on this computer.</p> <p>Did you or someone else download this web browser onto your computer, or was it already installed on the computer when you got it?</p> <p>1. The web browser was already pre-installed on my computer</p> <p>2. I/someone else downloaded it onto my computer</p> <p>3. I/someone else transferred it from a previous computer</p> <p>4. Don't know/Can't remember</p>
<p>COMPTRANSTYPE (single)</p>	<p>IF BROWSER WAS TRANSFERRED (COMPPREINST=3)</p> <p>Thinking about your previous computer. Was [COMPBROWMOST] pre-installed on that device or did you or someone else download the app onto that device?</p> <p>1. It was pre-installed on my previous computer</p> <p>2. I/someone else downloaded it onto my previous computer</p> <p>3. Don't know/Can't remember</p>
<p>COMPBROWDEFHOW (Single)</p>	<p>ALL WHO NAME A BROWSER ON THEIR COMPUTER (COMPBROWINSTALL =1-15)</p> <p>Just to check, have you or someone else changed the default web browser on this computer?</p> <p>1. Yes, I/someone else changed the default web browser on my computer</p> <p>2. No</p> <p>3. Don't know</p>

	SECTION G: Closing questions and demographics
<p>MOBENGAGE (Single)</p> <p>Add reactive DK if no code is selected and respondent clicks forward.</p>	<p>Thank you, you are almost there!</p> <p>We have asked you several questions about how you use your smartphone to access the internet, and the way that you use web browsers on your smartphone.</p> <p>Thinking only about smartphones. Before today how much thought, if any, had you given to the topics you have been asked about today?</p> <ol style="list-style-type: none"> 1. I had often thought about these topics 2. I had thought about these topics from time to time 3. I had rarely thought about these topics 4. I had never thought about these topics before today
<p>INTRODEM (Text)</p>	<p>ASK ALL</p> <p>Finally, a few questions about you and your household circumstances.</p> <p>All the answers you give will be kept completely confidential and will be used for research purposes only, to help us categorise the answers you have already given.</p>
<p>HEALTH (Multi)</p>	<p>ASK ALL</p> <p>Do you have any health conditions or illnesses which affect you in any of the following areas? Please select all that apply</p> <ol style="list-style-type: none"> 1. Vision (e.g. blindness or partial sight) 2. Hearing (e.g. deafness or partial hearing) 3. Mobility (e.g. walking short distances or climbing stairs) 4. Dexterity (e.g. lifting and carrying objects, using a keyboard) 5. Learning or understanding or concentrating 6. Memory 7. Mental health 8. Stamina or breathing or fatigue 9. Socially or behaviourally (e.g. associated with autism spectrum disorder (ASD) which includes Asperger's, or attention deficit hyperactivity disorder (ADHD)) 10. Other (please type in) 11. None of these (EXCLUSIVE) 12 Don't know (EXCLUSIVE) 13 Prefer not to say (EXCLUSIVE)
<p>INCINTRO (Text screen, ask all)</p>	<p>15. The next question is on income. This includes earnings from employment or self-employment, income from benefits and pensions, and income from other sources such as interest from savings.</p> <p>16.</p> <p>17. It is important for us to collect this so we can understand how it influences people's experiences. All the information collected in this survey is completely confidential and will only be used for the purposes of producing statistics.</p>

INCOME
(Single
code, ask
all)

Please select the income band which best represents your total gross annual **household** income **before** any deductions such as income tax or National Insurance.

1. Up to £9,999
2. £10,000 up to £20,999
3. £21,000 up to £31,999
4. £32,000 up to £41,999
5. £42,000 up to £51,999
6. £52,000 up to £74,999
7. £75,000 up to £99,999
8. £100,000 up to £149,999
9. £150,000 or more
10. Don't know
11. Prefer not to say

Appendix B: Screeners for the qualitative depth interviews.

B001 - B001: KANTAR PUBLIC QUAL - SCREENER

Begin block

B002 - B002: RESPONDENT DETAILS

Begin block

Q001 - NAME:

Open

TITLE:

FIRST NAME:

SURNAME:

Q002 - CONTACTDETAILS:

Open

ADDRESS:

POSTCODE:

MOBILE PHONE NUMBER:

EMAIL ADDRESS:

PLEASE WRITE CLEARLY

****NOTE: RESPONDENT'S ADDRESS MUST FALL INTO THE LOCATION FOR FIELDWORK AS SPECIFIED IN THE BRIEF/SAMPLE FRAME****

Q003 - Recruitment method:

Single coded

Normal

- 1 Client sample
- 2 Recruiter's own database
- 3 Telephone
- 4 On the street
- 5 Face to face
- 6 Delivered invite
- 7 Other: (please record) _____

Q004 - RECRUITER_DECLARATION:

Open

The person named above has been recruited by me in accordance with the instructions and conditions within the Market Research Society Code of Conduct, Kantar's processes and procedures and GDPR regulations.

SIGNED

NAME

DATE

BACKCHECKED: YES / NO

Primary quotas				
Operating system	Age	Digital literacy	Smart phone usage	Location / mode
Roughly even split, to include:	Mix of ages, to include:	A mix, to include:	A mix, to include:	20 f2f in London 20 online across UK
<ul style="list-style-type: none"> Min 16 Apple Min 16 Android Min 5 to have 'switched' (between Apple/Android in last 3 years) 	<ul style="list-style-type: none"> Min 8 x 16-34 Min 8 x 35-54 Min 8 x 55-69 Min 6 x Over 70 	Min 6 lower confidence (All to be in London)	Min 6 infrequent use (All to be in London)	London f2f interviews within easy travel of Westminster. Online interviews: minimum <ul style="list-style-type: none"> 2 x North England 2 x South West England 2 x South East England 2 x Midlands 2 x Scotland 2 x Wales 2 x Northern Ireland
Secondary quotas				
Mobile browser use	SEG	Gender	Mental health problems in last 12 months	Ethnicity
<ul style="list-style-type: none"> Min 6 uses or has used an alternative to Chrome/Safari 	Mix across sample	Roughly even split across sample	Min 6	Aim for broad spread

ALL LOW CONFIDENCE / INFREQUENT USE INTERVIEWS TO BE CONDUCTED IN LONDON, FACE TO FACE

Q005 - INTRODUCTION:**Text**

"Good morning / afternoon, my name is X and I am calling from KANTAR PUBLIC, an independent research organisation.

We have been asked to carry out research on behalf of the Competitions and Market Authority (CMA), part of UK government that seeks to help the UK economy and consumers by promoting competitive markets and tackling unfair behaviour.

The CMA is looking to get public views and opinions on how people use their smartphones. You're not expected to have any specific knowledge, we're just asking you to share your own views and opinions in an interview.

We understand that you might have other priorities at the moment. There is no obligation to take part in the research but if you were interested in sharing your views, any time you do wish to give towards this research is much appreciated and your input will be truly valued.

- The research is completely voluntary
- KANTAR PUBLIC is completely independent of the CMA
- Your information will be used for research purposes only
- KANTAR PUBLIC will not pass your personal details on to anyone outside of the research team and your name will not be used in the reporting for this project

Would you be interested in taking part?"

1. Yes
2. No

ELIGIBILITY**Begin block****Q006 - EXCLUSIONS:****Multi coded**

Are you or any of your immediate family working for or involved in any of the following?

DO NOT RECRUIT IF ANY OF THESE ARE MENTIONED

Normal

- 1 Advertising
- 2 Market research
- 3 Marketing
- 4 Journalism
- 5 Public relations
- 6 Lobby or campaign group
- 7 Local, regional or national politics
- 8 TECH: Web development and design (e.g. designing websites, layout, user experience, etc)
- 9 TECH: Mobile technology (e.g. work for a smartphone company, app developer, etc.)

Q007 - ZOOM_TECH:**Single coded****Not back**

ONLY ASK IF RECRUITING FOR ZOOM INTERVIEWS (i.e. outside of London)

The research interview involves an online video call conducted via **your smartphone device** that has a camera (and built in mic) and can connect to the internet. Most smartphones will work.

It must be your own smartphone – you won't be able to use someone else's.

You will need to download the Zoom app if you do not already have it installed – this app is free.

Will you be able to join via your smartphone?

READ OUT

IF CODE 2 = DO NOT RECRUIT FOR ONLINE GROUP

Normal

- 1 Yes - have a smartphone that has a camera and mic and can connect to the internet, and can download Zoom
- 2 No - do not have access to such a device

Q08 - ZOOM_CONSENT:

Single coded

Not back

So to confirm, the research will take place as an online video call through Zoom that you will access from a link that will be emailed out to you before the research discussion date. Zoom is the name of the video chat service we will be using to carry out the research interview with you.

The discussion will last 60 minutes.

Participation will involve the following:

- Ahead of the discussion date, you will receive an email with a link to join the discussion at the agreed date/time. This email will also contain Zoom's terms and conditions of use for your information
- At the time of the interview, you will join via the link on your smartphone
- During the interview, the researcher will ask you to share your Zoom screen while completing a few short tasks. This will be explained during the interview and in your welcome email.
- The interview will be audio recorded, and anonymised transcripts may be shared with the CMA from some interviews (if you consent to this).
- Participants will receive a £40 incentive as a thank you for their time.

On this basis, are you comfortable and happy to take part in this research?

IF CODE 2 = DO NOT RECRUIT FOR ONLINE GROUP

Normal

- 1 Yes, comfortable and able to take part
- 2 No, not comfortable and unable to take part

Q09 – FACE TO FACE_CONSENT:

Single coded

Not back

ONLY FOR FACE TO FACE INTERVIEWS (IN LONDON)

So to confirm, the research will take place as A FACE TO FACE interview, conducted at our offices in Millbank, Westminster (central London)

The discussion will last 60 minutes.

Participation will involve the following:

- Attending an interview in person at a time suitable for you (including lunchtimes and evenings)
- Completing a short and simple activity on your own smartphone (which you will need to bring along to the interview), with a researcher present
- Answering some questions about your smartphone use
- The interview will be audio recorded, and anonymised transcripts may be shared with the CMA from some interviews (if you consent to this).
- Participants will receive a £50 incentive as a thank you for their time.

On this basis, are you comfortable and happy to take part in this research?

IF CODE 2 = DO NOT RECRUIT

Normal

- | | |
|---|---|
| 1 | Yes, comfortable and able to take part |
| 2 | No, not comfortable and unable to take part |

B004 - B004: PROJECT SPECIFIC

Begin block

Q10 – SMARTPHONE OWNED:

Single coded

A. Do you have a smartphone?

READ OUT

DO NOT RECRUIT CODE 2

Normal

- | | |
|---|-----|
| 1 | Yes |
| 2 | No |

B. What brand of smartphone do you have?

READ OUT

RECRUIT TO QUOTA
APPLE = CODE 1
ANDROID = CODES 2-8

Normal

- 1 Apple / iPhone
- 2 Samsung
- 3 Huawei
- 4 Motorola
- 5 Google Pixel
- 6 Xiaomi
- 7 Sony
- 8 Other
- 5 Don't know

Q011 – SMARTPHONE USAGE:

Single coded

A. Which of the following activities do you do **frequently** on your smartphone?

HIGH USE = at least 10
INFREQUENT USE = 4 or fewer
Plus codes for 11B

Normal

- 1 Email
- 2 Social networking
- 3 Watching TV and video
- 4 Online shopping
- 5 News or weather
- 6 Banking
- 7 Maps / navigation
- 8 Food delivery
- 9 Games
- 10 Music /audio streaming
- 11 Payment services
- 12 Taxis
- 13 Fitness/healthcare apps
- 14 None of these

B. How often do you check your phone?

CODE 1 or 2 = HIGH USE
CODE 3 or 4 = INFREQUENT USE

Normal

- 1 Every 15 mins or more
- 2 Every 30 mins
- 3 Every hour
- 4 Less than once an hour
- 5 Don't know

Q12 - CONFIDENCE:

Single coded

A. On a scale of 1-10, where 10 is very confident and 1 is not at all confident, how confident would you feel downloading and using a new app on your smartphone, that you'd never used before?

RECRUIT TO QUOTA
LOW CONFIDENCE 1-4
MEDIUM CONFIDENCE – 5-7
HIGH CONFIDENCE 8-10

B. And on the same scale of 1-10, where 10 is very confident and 1 is not at all confident, how confident would you be changing the settings for an app on your smartphone, e.g. adjusting the privacy settings?

RECORD
LOW CONFIDENCE : 1-4
HIGH CONFIDENCE : 8-10

C. In addition to your smartphone, which of the following devices do you personally use?

RECORD
LOW CONFIDENCE SHOULD BE 3 DEVICES MAX
HIGH CONFIDENCE SHOULD HAVE AT LEAST 1

Normal

- 1 A smartwatch
- 2 A tablet computer
- 3 Smart home gadgets e.g. video doorbells, smart lightbulbs
- 4 Smart home hub e.g. Alexa, Google Nest
- 5 Wireless headphones or smart speakers e.g. AirPods or Earbuds
- 6 Games console, e.g. Xbox, playstation
- 7 None of these

A sm
A tab
Smar
Wirel
Game
None

Q13 – SWITCHER O/S:

Single coded

Have you ever changed from an Apple iPhone to an Android phone (i.e. not an iPhone), or vice versa?

RECRUIT TO QUOTA

Normal

- 1 Yes, within last 3 years
- 2 Yes, over 3 years ago
- 3 No
- 4 Don't know

Q14 – SWITCHER Browser:

Single coded

Have you ever downloaded a new internet browser onto your smartphone? For example, downloading Google Chrome, Firefox, Opera or Edge to use on your phone?

IF NEEDED: this would be in addition to or instead of the browser that was already installed on the phone, if there was one.

RECRUIT TO QUOTA**Normal**

- 1 Yes, RECORD _____
- 2 Yes, but can't remember which one
- 3 No
- 4 Don't know

Q15 - AGE:

Single coded

Can I ask what age you were on your last birthday?

**RECRUIT TO QUOTA
DO NOT RECRUIT CODE 1****Normal**

- 1 Under 16
- 2 16-34
- 3 35-54
- 4 55-69
- 5 Over 70

Q16 - SEG:

Single coded

A. What is the occupation of the chief earner in the household?

RECRUIT TO QUOTA**Normal**

- 1 AB – Higher & intermediate managerial, administrative, professional occupations
- 2 C1 - Supervisory, clerical & junior managerial, administrative, professional occupations
- 3 C2 - Skilled manual occupations
- 4 DE - Semi-skilled & unskilled manual occupations, Unemployed and lowest grade occupations
- 5 Prefer not to say

B. Are you currently employed?

RECORD

Normal

- 1 Yes – full time, part time, self employed
- 2 Yes – on temporary leave (e.g. maternity/paternity)
- 3 Student
- 4 Not currently employed
- 5 Prefer not to say

Q17 - GENDER:

Single coded

RECORD GENDER.

IF NECESSARY: Which of the following applies to you...? READ OUT.

RECRUIT TO QUOTA

Normal

- 1 Male
- 2 Female
- 3 Other - Specify.....
- 4 Prefer not to answer

Q18 - MENTAL HEALTH:

Single coded

We would like to include people in the research with a range of health conditions, including those in good health. In the last 12 months have you had any mental health conditions?
This would include, for example, anxiety, depression, panic attacks or OCD.

RECRUIT TO QUOTA

Normal

- 1 Yes
- 2 No
- 3 Prefer not to answer

Q19 - ETHNICITY:

Single coded

Which of these is most appropriate in describing your ethnicity?

READ OUT

RECORD AND RECRUIT TO QUOTA**Normal**White

1. English/Welsh/Scottish/Northern Irish/British
2. Irish
3. Gypsy or Irish Traveller
4. Any other White background, please describe

Mixed/Multiple ethnic groups

5. White and Black Caribbean
6. White and Black African
7. White and Asian
8. Any other Mixed/Multiple ethnic background, please describe

Asian/Asian British

9. Indian
10. Pakistani
11. Bangladeshi
12. Chinese
13. Any other Asian background, please describe

Black/ African/Caribbean/Black British

14. African
15. Caribbean
16. Any other Black/African/Caribbean background, please describe

Other ethnic group

17. Arab
18. Any other ethnic group, please describe

Q020 - LOCATION:

Single coded

Not back

ONLINE ONLY: Where in the UK do you live?

- 1 SE Eng
- 2 SW Eng
- 3 Midlands
- 4 N Eng
- 5 Wales
- 6 Scotland
- 7 Northern Ireland

FACE TO FACE ONLY: Interviews will be conducted in our offices in Millbank, Westminster. Can you confirm that you can travel to our office for a one hour interview?

In which London borough or town do you live?

RECORD REGION/LOCATION
IF FACE TO FACE CANNOT TRAVEL TO WESTMINSTER, DO NOT RECRUIT

B004 - B004: PROJECT SPECIFIC

End block

Q021 - INVITATION:

Text

Not back

We would like to invite you to take part in [AS RELEVANT:]

- a face-to-face interview with an independent Kantar researcher, at our offices in Millbank, in Westminster.
- an online interview conducted on Zoom with an independent Kantar researcher, at a time convenient to you.

The discussion will last for 60 minutes and you will receive a [£40 online/£50 f2f] incentive as a thank you for your time and contribution.

- **FACE TO FACE: You must bring your smartphone with you to complete a simple activity during the interview.**
- **ONLINE: You must take part in the interview via your smartphone (i.e. through the Zoom app), and be happy to share your screen during the call to complete a simple activity during the interview.**
- **BOTH: One of the tasks involves downloading an app onto your smartphone. It is a mainsteam app. The researcher can help you delete it from your phone at the end of the interview.**

The discussion will take place [**AGREE /CONFIRM DATE AND TIME**]

With your permission, we will be audio recording the discussions. The discussions will be confidential and anonymous – your details will not be shared with anyone except the Kantar research team. We will share a small number of anonymized audio recordings or transcripts with the CMA, though only with consent (you can decide this during the interview).

You do not need to have any prior knowledge to take part in this research. We will not be testing people’s knowledge, but simply asking for people’s views and opinions on their experiences.

Q022 - CONFIRMATION:

Single coded

Not back

Are you happy to participate in this research?

IF CODE 2 = RECORD REASON FOR REFUSAL. THANK AND CLOSE.

Normal

- 1 Yes
- 2 No - RECORD REASON.....

Q023 - PRIVACYPOLICY:

Single coded

Not back

READ OUT: As part of our commitment to protecting your rights, please note that Kantar Public's privacy policy can be accessed on our website, uk.kantar.com/surveys. We can also provide you with a written copy of the policy.

RECRUITER, CONFIRM THAT PARTICIPANT HAS BEEN MADE AWARE OF HOW TO ACCESS PRIVACY POLICY. DO NOT RECRUIT OTHERWISE.

Normal

- 1 YES - PARTICIPANT HAS BEEN MADE AWARE OF PRIVACY POLICY

Q024 - GDPR

Single coded

- C. As part of our research process, and only with your express consent on the day, a member of the CMA team may wish to observe our interview with you, but we would take efforts to protect your confidentiality in this instance. Are you happy to proceed on this basis?

1. Yes2. NoRECORD and continue

- D. Personal data is data that allows a living individual to be identified, either directly or indirectly. As part of this research, Kantar Public would like to make a recording of our interview with you for analysis purposes. This recording is your personal data and will only be shared with the CMA team in an anonymised form if you consent, and for research purposes only. We will securely delete the recording from our systems no later than the end of September 2023. Are you happy to proceed on this basis?

1. Yes2. No (Thank and close)

- E. Please note that by giving your consent to participate in an interview, you consent to Kantar Public using and storing (processing) the personal data we have collected from you during your recruitment to the research and any further personal data you share with us during your interview. Kantar Public will use and store (process) your personal data for the purposes of this research project only.

Your personal data will not be shared with our client, the Competition and Markets Authority, in a way that would allow you to be individually identified. Please note that you are also consenting to the CMA processing aggregated data from which you cannot be individually identified, in the form of our report for the CMA on the findings from the research.

We will not share your personal data with any third party, except in the very unlikely event that we are required to do so by law. We will securely delete all your personal data from our systems no later than the end of September 2023. Are you happy to proceed on this basis?

1. Yes2. No (Thank and close)**Q024 - INCENTIVE:**

Single coded

As a thank you for your time and contribution, you will receive a [£40 (online)/£50 (f2f)] incentive. This will be provided as a BACS payment.

Q025 - RECONTACT:

Single coded

Not back

Would you be happy to be recontacted in relation to this project or for further research? You would not be obligated to take part in any future research if you were contacted.

RECORD

Normal

- 1 Yes - happy to be recontacted in relation to this project only
- 2 Yes - happy to be recontacted in relation to any further research
- 3 No - would not want to be recontacted for any further research

Appendix C: Topic guide for the qualitative depth interviews.

Mobile Browsers Market Investigation

For the qualitative phase of consumer research
Topic Guide

Background

The CMA wishes to collect robust and current evidence on UK consumer behaviour in mobile browsing to inform its market investigation.

Research Aims

The broad research objective of this study is to better understand and measure consumer behaviour in the mobile browser market, particularly understanding the impact of pre-installation and what drives consumer choice of browser on smartphones. This will include, but not be limited to, understanding (in order of priority):

- *How users interact and browse on the internet, the type of apps they use for it and the reasons for choosing them*
- *What is the placement of the different apps they use for browsing*
- *Their understanding of what a default browser is*
- *Usage of default browser app vs pre-installed (ie preloaded on the device upon purchase) apps*
- *Barriers to switching default browser setting*
- *The extent to which search apps are used for browsing*
- *Understanding of what an in-app browser (eg browser embedded within a social networking app) is and how is it different from normal browser apps*
- *User understanding and perceived helpfulness of browser prompts*

Note to Moderators

The guide includes some tasks to be carried out by respondent and observed by moderator.

Stimulus list

Respondent must bring their smartphone to the interview.

Stimulus A: logos.

Stimulus B: screenshots of browser prompts

Wi-fi log in details for guest.

Thank you leaflets.

Please note, this guide is not a script and is intended to be used flexibly, with participant responses guiding the flow of the conversation, topics covered in the order that they naturally arise and probes used only when needed.

1. Introduction

(2 mins)

Introduce research, reassure about confidentiality and set tone of discussion

• Warm up and introduction

- Introduce moderator working on behalf of Kantar Public
- Research on behalf of CMA
- (if relevant) Introduce observer – someone from CMA working on the project who is here to observe and listen – they will not make notes about anything that could identify you
- Aim of the discussion is to understand how consumers use their smartphones
- This information will be used as part of a market investigation into smartphone software, ultimately to help ensure the market works fairly for consumers
- Interview length – 60 mins
- (Online interviews – test share screen)
- One of the activities will involve me observing you complete some actions on your phone, including potentially accessing a social media app and briefly scrolling through it – gain consent for this (if uncomfortable with social media, this is not compulsory)
- One of the activities will involve me asking you to download a commonly used app onto your phone. You do not need to keep this app on your phone and at the end of the interview I can help you to delete it. Is that ok?
- There are no right or wrong answers – and you don't need to know anything about the topics we are discussing. If you are not sure, or you don't have an opinion about something, that is also really useful for us to know.
- Research is confidential and voluntary.
- Ask for consent to record the interview for analysis purposes.
- ASK: "Some of the recordings will be anonymised (identifiable data will be removed) and shared with the CMA, to be used for research purposes only. The CMA will securely delete the recording from our systems no later than the end of September 2025. Are you happy for your audio file to be shared with CMA? Again this is voluntary - you can continue with the interview if you do not give consent. You can also change your mind at the end of/after the interview."
 - Kantar's privacy policy can be accessed on our website: <https://www.kantar.com/uki/surveys>
- Any questions?

• Recording (audio recorder / Zoom record)

Ask participant for permission to record, then start recording and confirm consent

2. Background

(5 minutes)

For a warm up and to gather some context about how the individual uses their smartphone

• Quick introduction to respondent

- Where do you live/do you live with anyone?
- If you work, what do you do?

- **Smartphone introduction**

- Tell me a bit about your smartphone
 - What make is it (Apple, Samsung, Huawei)?
 - How long have you had it?
 - Did you buy it new? (or, e.g. get from a family member/buy second-hand)
 - Did you set it up yourself, or was it set up by someone else?
 - Have you always had this type of phone (have you ever swapped between iPhone/non-iPhone)?
- How would you characterise your phone use:
 - For example, are you someone who uses their phone a lot or a little?
 - How confident do you feel using your phone?
 - Are there any areas that you feel less comfortable with, or less confident? (probe for examples and reasons for discomfort)
- What things do you use your phone for, most often?

3. Observation of user journey (25 mins)

To see the apps respondents use to perform the browsing tasks, the placement of these devices on the home screen, understand reasons for use and placement, assess their understanding and experiences of in-app browsing. Specifically, researchers to note: language used around web browsing, search engine, and in-app browsing

3.1 Observed tasks

FACE TO FACE INTERVIEWS:

Moderator to introduce task – and ask to sit next to the respondent so you can observe their screen.

“Now I'd like to ask you to complete a few short tasks on your phone, while I observe the screen alongside you. While you're doing the task, I'd like to ask you to narrate what you are doing, what you're looking for, and so on – in other words, try to think aloud as you complete the task. Aside from that, please try to do the task as you would normally, as far as possible.”

Check if they would like to connect to wi-fi and provide password

ONLINE INTERVIEWS:

“Now I'd like to ask you to complete a few short tasks on your phone, while sharing your screen (which I'll explain in a moment). For example, I'll ask you to look something up online. While you're doing the task, I'd like to ask you to narrate what you are doing, what you're looking for, what you want to click on – in other words, try to think aloud as you complete the task. For example, you might say, 'I'm looking for a specific app, so I'm scrolling on my home page to find the app.’” Aside from narrating what you're doing, please try to do the task as you would normally, as far as possible.”

Moderator to explain how to Share Screen: click the green SHARE/SHARE CONTENT on Zoom call taskbar (should come up if they click anywhere on the video screen), then select Share Screen.

WARM UP (1 minute max):

- Navigate to the home-screen – briefly, can you talk me through the most important apps you have on your home screen, including which ones you use most often. Talk me through whether you arranged them like this, or they were always like this.

Complete 3 tasks from list below – complete all three before asking questions. Ask respondent to return to the home screen between each new task:

1. Use your phone to find out [the capital of Bulgaria / speed of light]
2. Use your phone to access the news in the way you normally would – whichever news outlet you usually go to. Ask them to look at the stories, select a news story they find interesting and start to read it. (if needed: top news stories of the day)
 - If they use a news app: repeat the same task but not using the app, e.g. what they would do if they had to do it online, without the app. If they ask which browser to use: ask them to use the browser/app they use most often to access/browse the internet on their smartphone
 - If they use a browser app: ask them to repeat the task using any other browser they have on their phone
 - If they use a search app: ask them to repeat the task using any browser they have on their phone
 - If they used an alternative to Chrome/Safari (depending on device), ask them to repeat the task using Chrome/Safari (if they have it on their phone)
3. [NB first check they are happy to share their screen / whether they want to check first before sharing screen] Go onto a social media app (e.g. Twitter, Facebook) you often use, and scroll through until you see an external link or advert, and follow the link to the content – read the content [could repeat for another social media app]
 - If a product – find out if you can get it cheaper elsewhere
 - If other content – find out more about this idea / issue

Moderator observe and note down:

- Which browser / app is used for each task (e.g. a browser? A search engine app? A news app?)
- Where the browser is located on the phone (homepage / elsewhere) – including other browsers if seen
- How they search (app or browser used)
- How they respond to any browser prompts
- Whether/how they use in-app browsing (e.g. whether they switch to main browser)
- Whether they click any links within apps
- Whether they use a search widget on their phone
- Whether they use voice search

3.2 Follow up questions (use flexibly)

- **Browser usage: follow ups**
 - How did you find that? (if needed: probe for any areas where participant was hesitating or seemed unsure, or where researcher was unsure of thought process)
 - I noticed you started the task/ some tasks by ... [clicking on browser / clicking on search app / other]

- Is this how you would usually access the Internet on your phone?
 - *As relevant:* What other ways might you access the internet / websites on your phone? When / for what reasons?
- Why do you access websites in this way?

SPONTANEOUS, then probe:

 - How much have you thought about it before?
 - Have you always done it in the same way?
- *If used search app* – to what extent did their experience differ when they repeated it using a browser app?
 - If so, how?
 - Do they have a preference for using search app / browsing app? Why/why not?
- I noticed that when you clicked on a link within [social media app], you... [continued on in app browser / switched to other browser]
 - Is this usually what you do? Why?
 - When might you do something different (i.e. why would you switch to the browser)
 - Is the browser you are using within the app the same as your regular browser, or different? Have you ever thought about this before?
 - How do you find the in-app browser (i.e. within the platform) – how does it compare to the main browser you use on your phone?
 - Which company or app do you think has access to the data about what you do in the in-app browser? (*if needed: i.e. is it the social media company, or another company*)
- For those with multiple browsers:
 - Was there a difference in the activity between the different browsers you used?
 - any difficulties encountered on specific browsers?
 - any positives for specific browsers?
- Probe on any other relevant behaviours observed – such as use of search engine apps, a mixed use of these for specific tasks (explore drivers of behaviours for specific activities)

- **Browser awareness / knowledge**

- What words would you use to describe how you accessed the Internet during the tasks [refer to specific task if they did different things each time]?

Listen for mentions of 'browser' / 'app' / other descriptions – paying attention to the particular wording they use. Probe on different methods.

 - *As relevant:* Do you think of it as using an internet browser? Why/why not? How would you define 'internet browser'?
 - *As needed, for respondents who are unsure about what a browser is:* "A web browser allows you to access the internet on smartphones and computers."
- Which browser do you use on your phone – if you know/most often (*as appropriate*)?

If they don't know – confirm the browser you have seen during the activity is the (main) one they use when accessing the internet on their phone

 - Have you actively noticed this in the past?

- Can you recall if you ever downloaded this particular browser?
If needed: this means you would have actively chosen to add this app to your phone when setting up the phone, or through the app store/Google Play
- Do you recall there being a choice of browser to download, or was it already on the phone from when you first got it/set it up? *Probe on what they can remember about this*
 - *If chosen: Why did you choose this particular browser? How did you find out about it?*
- I noticed your [browser app – refer to by name] is located [on the homepage/among other apps] – *probe for anything not covered in warm up task*
 - Has it always been here, since you've had the phone?
 - If not, why did you move it here?
 - If so, have you ever changed where apps are placed on your phone? Which ones and why?
 - How helpful or otherwise is it to have app icons placed on the home screen, compared to elsewhere?
 - Do you know how friends or family use browsers on their phone? Have you ever noticed any differences?
- Do you have more than one browser on your phone?
 - If not, why not?
 - SPONTANEOUS, then probe:
 - have they ever thought about it before;
 - was it already installed when you first got the phone
 - Do you think there is a difference between different browsers? (in terms of user experience, features available, etc.)
 - If so, which one?
 - Why did you add another browser?
 - How do you use the two (interchangeably, some for certain activities, etc)
 - When did you download the second browser (within last year?)
 - Can you recall anything about downloading the second browser?
 - SPONTANEOUS, then probe: e.g. How easy or difficult was it? How long did it take? How satisfied were you with the process?
- **Views of their browser**
 - What do you think about the browser you have been using? (*ask for most frequently used browser if multiple are used*)
 - Which features do you use? How satisfied or otherwise are you with them?
SPONTANEOUS, then probe:
 - Favourites/Bookmarks
 - History
 - Password storage
 - Do you have any other views about this specific browser's:
 - Speed
 - Security
 - Privacy (e.g. how much do you trust your browser)

- How it works on different websites
- If multiple browsers are used: repeat above for alternative browser

- **Default browser**

- **Do you know what a 'default browser' is?**
 - **How would you define it (if don't know: if you had to guess)?**
 - **If not: do you think you have a default browser on your phone?**
 - If not, explain: By default browser, I mean the browser on your phone which automatically opens to get to a webpage. For example if you clicked on a link to a website in an email, the page would open automatically in the default browser, without you having to select which browser to use
 - Is it something you've come across before?
 - How might you describe this in your own words?
 - Do you know which browser is the default on your phone?
 - (If not already covered): Where is the default browser placed on the phone? Did you put it there or was it already there when you got the phone?
 - (If not already seen/only for those with more than one browser) Can you just double check what your default browser is? (open a link in an email, check which browser opens)
 - Do you have any thoughts/feelings about your phone automatically using a default browser, e.g. if you click a link in an email?
 - (If multiple browsers) Did you change the main browser you use on your phone to be your default browser?
 - If not, why not?
 - If so: What can you remember about this –
 - why did you change the default?
 - how easy or difficult was it?
 - Have you changed the default more than once? Why?
- Is the browser used the same/different from the browser you use on your computer?
 - Reasons for this
 - Whether it is something they'd noticed/thought about before
- Would you know what I mean by 'a search app' or 'search engine app'?
 - If not: By search app, I mean an app that is primarily a search engine, allowing you to search for information on the internet by entering keywords, returning a list of results that match what you are searching for. Examples include Bing, Yahoo search, and the Google app.
- Do you have any search apps on your phone?
 - If so:
 - Where are they placed? (if not already observed)
 - What do you use them for?
 - How often do you use them?
 - How, if at all, do you see your search apps as different to your mobile browser? (i.e. are they the same or separate?)
 - If you search in the web address of your mobile browser, which search engine is used?

4. Changing browsers and settings (12 mins)

To observe the respondent while they change the default setting on their phone and to assess any barriers encountered. It is up to the respondent how they want to change the default setting – either by going to the device settings or opening up the browser app and clicking on any prompts shown.

4.1 Observed task

- **Switching the default browser**

As relevant / if not already discussed:

- Do you think it is possible to change the browser on your phone?
 - Reasons for views

“Let's imagine you wanted to change your browser on your smartphone. Select an alternative web browser that you know of.” If respondent does not know any alternatives, note this, and suggest Firefox, Edge, or Opera as one to download.

*“Can you show me how you would download a new browser and **then set it as the default browser** on your phone? As before, talk me through what you're doing and thinking as you go along.”.*”

If respondent is unsure about how to change the default setting, researcher can prompt, e.g.

- Where do you think the relevant setting might be?
 - How would you look for the relevant setting?

If respondent is uncomfortable, explain we just want to see how they would do it – they can choose any browser they want, and that we can help them delete it afterwards. If respondent is very concerned about downloading, ask them to get to the point of almost downloading instead, so we can observe the process of looking.

Moderator observe and make notes on their levels of confidence, the route taken to change the default, the number of steps involved/ease of journey, points of friction and misunderstanding, responses to settings screens/prompts if they open the new browser and time taken to complete the task etc.

4.2 Follow up questions

- **User journey**

- How easy or difficult did you find that?
- Was it as you expected?
- Were there any areas of confusion?

- **Default browser**

- (if relevant) Did you notice the prompt that came up in the new browser, asking if you wanted to make it your default browser?
 - What did you think of this?

- **Motivations for switching browser**

- Why might someone want to switch browser?
- Are there any benefits to using a particular browser / different browser than the default?

- Are there any disadvantages?
 - How relevant are these to you?

5. Other browsers

(5 mins)

To measure awareness, experience and views of alternative browsers

- **Brand awareness (show stimulus A)**
 - Do you recognise any of the following logos?
 - For those you recognise [only ask for browser/search apps], do you know what they are called?
 - And what their function is?
- **For browsers they can correctly identify (as browsers): ask for each individual browser**
 - What do you think of them?
 - Have you used any of them before and on what devices?
 - What was your experience like of using them?
 - How far do you trust them?
 - Any specific ones you trust or don't trust?
 - Which features have you used? How do you find them?
 - Favourites/Bookmarks
 - History
 - Password storage
 - Do you have any views about the speed, security or privacy of any of these browsers?
 - Do you have any views on how different worksites might work with the browsers?
For those who have used multiple:
 - How do they compare to one another? Do you have a preferred browser? Why/why not?

6. Ways of presenting browser choices (5 mins)

To understand whether respondents have any feelings about default browsers / limited choices being presented, and the extent to which they understand what would happen if they followed the switch prompts

- **Views on ways of presenting browser choice**
 - Show all **STIMULUS B1 (Browser prompts) – for Android/Apple as relevant**
 - Have you encountered any of these messages before? Or anything similar?
 - If so, when?
 - How helpful or otherwise did you find it? Why?
 - If not: why do you think these messages are shown? What do you think would happen if you clicked yes? How would you respond if you saw them while using your phone?
 - Show all **STIMULUS B2 – for Android / Apple as relevant**
 - Have you encountered any of these messages before? Or anything similar?
 - If so, when?
 - How helpful or otherwise did you find it? Why?

- If not: what do you understand by these messages – what is the prompt asking you to do? How would you respond if you saw them while using your phone?
- Looking at these different examples (in STIMULUS B) of ways of asking to switch the default browser, which of any do you find more helpful / less helpful?
 - Why?
- Thinking about the task you just did - to what extent do you feel that you currently have a choice of mobile browsers?
- Thinking about the browser options or choices you have been presented with on your current smartphone while setting it up, do you have any thoughts or feelings about this?
 - Would you change anything? Why/Why not?

7. Attitudes to technology, privacy and security (5 mins)

To explore whether privacy and security play a role in browser choice or attitudes

• **Data collection and security**

- Thinking more broadly now about data collection, how much do you think about the privacy and security of your personal data and information when browsing the internet on your smartphone?
 - If so – how do you feel about it?
- Does this vary by the type of activity/browsing/searching you are doing on your phone?
 - If so, how? (if mentioned, probe on: *opinions about accepting/rejecting cookies*)

8. Close

• **Any final thoughts**

• **Thanks and close**

- Check if they would like help deleting the app
- Thank you leaflet

Check consent for audio shared with CMA



Powering decisions
that shape the world.

