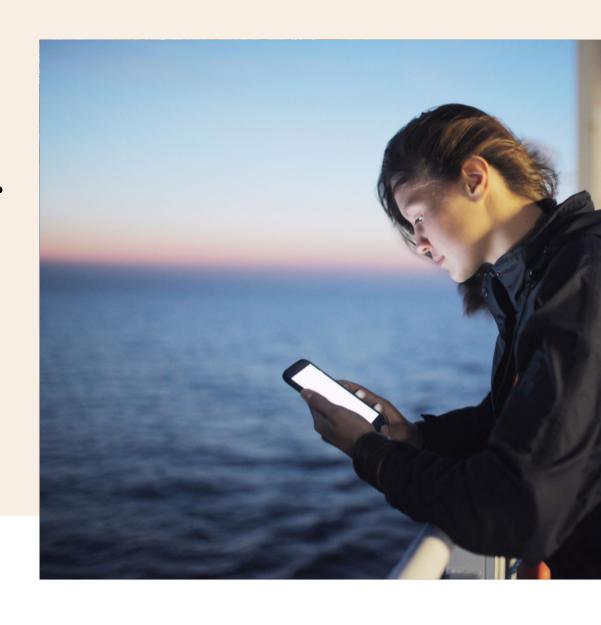
Mobile Browsers Quantitative Consumer Research

Findings presented to Mobile Browsers and Cloud Gaming Inquiry Group – Quantitative.

Becky Hamlyn & Tom Luckwell, Verian Group UK

30 May 2024



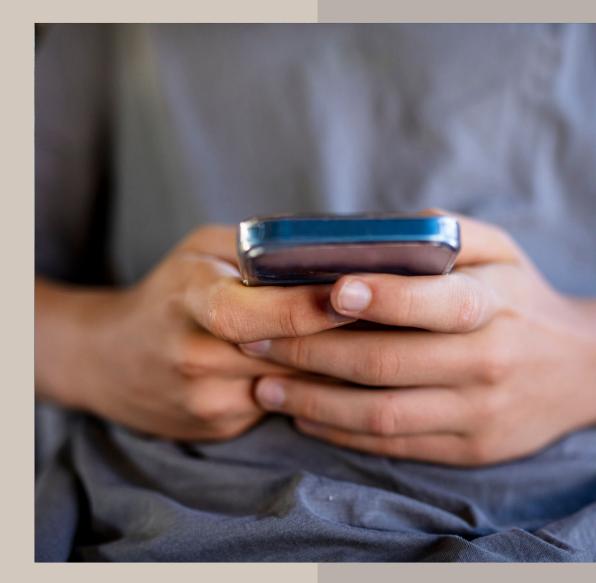


Agenda

- Background & method
- Summary of qualitative phase
- Profiling smartphone ownership
- Smartphone technical literacy
- Smartphone acquisition and purchase
- Installation and usage of browsers
- Browser placement

- 8. Default settings in browsers (including inapp browsing)
- User journey to change default browser
- 10. Prompts and notifications to switch or change default browser
- 11. Browser behaviour on desktops/laptops
- 12. Summary

1. Background & method



Research background and objectives

The CMA launched a market investigation on Tuesday 22 November 2022 into the supply of mobile browsers and mobile browser engines, and the distribution of cloud gaming services through app stores on mobile devices

The CMA commissioned Verian to undertake consumer research to measure and develop further their understanding of consumer behaviour in the mobile browser market, specifically to understand:

- The activities users undertake on their smartphone.
- How users access the internet on their smartphone.
- Awareness and knowledge of mobile browsers.
- Whether users consider the features of different mobile browsers, which features are most important; factors influencing browser choice.
- The role of pre-installation and browser default settings on browser usage.
- Expectations, understanding and perceptions about switching/changing mobile browser, and the motivations for switching or staying.
- Barriers preventing users from switching/changing their mobile browsers, and confidence about changing browsers and default.
- Browser choice and usage on laptops/desktops vs mobiles.

Overview of methodology

Two stage research design:

- Qualitative phase to explore consumer awareness and understanding of, and behaviour around browsers in depth.¹
 - Especially useful in highlighting the experiences of mobile users with a range of levels of technical literacy.
 - Helped to inform survey question wording for technical features of mobile browsers and what definitions people needed to better understand these features.
- Quantitative phase to assess the degree of consumer awareness, understanding and behaviour as it relates to browsers, with a specific focus on choice architecture elements.
 - A survey of 3,060 UK adults aged 16+ who owned a smartphone for personal use, where they had a role in choosing the phone.
 - Survey conducted in the period 13 March 8 April 2024 using screened sample from Verian's Public Voice panel: a high-quality representative panel recruited using random probability (rather than quota) sampling.

Details on the quantitative methodology

Sample

- The target population was defined as 'all permanent residents of the UK aged 16+'. The sample was drawn from among the 22,758 respondents on Verian's Public Voice panel.
- Most Public Voice 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. The panel was implicitly stratified by age group, then by region and then by subregional geography before a systematic random sample was drawn for this project.

Screeners, target, response rate and incentives

- The following groups were screened out at the start of the survey: Did not have a smartphone; Smartphone was provided by their employer; Used main smartphone for work purposes only; Given phone and did not choose it; Did not know the brand of the phone.
- The target (n=3,000) was achieved with a total of 3,060 responses passing screeners and quality assurance checks.
- The response rate for the survey of 32% was achieved against the total issued sample from the PV panel. Issued sample was issued in two batches. The composite response rate was 3%. ¹
- Respondents received at £10 e-voucher/gift voucher for participating, sent either by email or by post.

Weighting

• After design weighting, the respondent sample was calibrated to the weighted ONS Annual Population Survey of 2022 (the latest available) with respect to sex*age group, birth country (UK/other), and region. 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%).

¹ The composite response rate takes account of the response rates and attrition for the Public Voice sample, from which the Mobile Browsers sample was drawn, in addition to the response rates for the Mobile Browsers survey. Further information is provided in the Technical Report. Mobile browsers and cloud gaming - GOV.UK (www.gov.uk)

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Research limitations/considerations

Managing browser settings: measurement of confidence, capability and ease of completing tasks

The survey collected various measures which asked people to rate their confidence with smartphone technology both in general, and in relation to specific tasks (downloading a different browser and changing a default browser). These self-reported measures should be interpreted with a degree of caution:

- The qualitative research which involved observed tasks demonstrated that confidence does not always translate into ability to do the task in practice.
- Pre-testing on this survey revealed that some lower ability users rated themselves relatively highly as they focused their confidence on a narrow range of tasks which they were familiar with.
- More widely, there can be tendency in surveys for people to overstate their level of confidence.

We also asked people who had switched default browser how easy or difficult they had found it

- It is worth noting that perceptions of this will be associated with recall error if the task had been completed some time ago (it is unlikely to have been a sufficiently memorable task to recall the process in detail)
- There may also be an element of 'post-hoc rationalisation' where people say something was easy after they have successfully completed the task.
- We do not know how easy or difficult people who tried but failed to change their default found this.

2. Qualitative phase: reminder of approach and headline findings



Qualitative research: Scope

40 x 60-minute interviews were conducted across 19th Jan - 16th Feb 2023.

Mix of online (20) and face to face (20) interviews.

- Online research enabled regional spread respondents joined Zoom interviews via their smartphone and shared screen for tasks.
- Face to face interviews in a central location enabled engagement with lower confidence users.
- Key audiences of interest were operating system, age, digital confidence, and whether consumers had switched operating system (in last 3 years) or downloaded an alternative smartphone browser.
- In the achieved sample 8/40 self-identified as 'low confidence', 30/40 self-identified as 'high confidence'; and 19/40 had previously downloaded a browser.

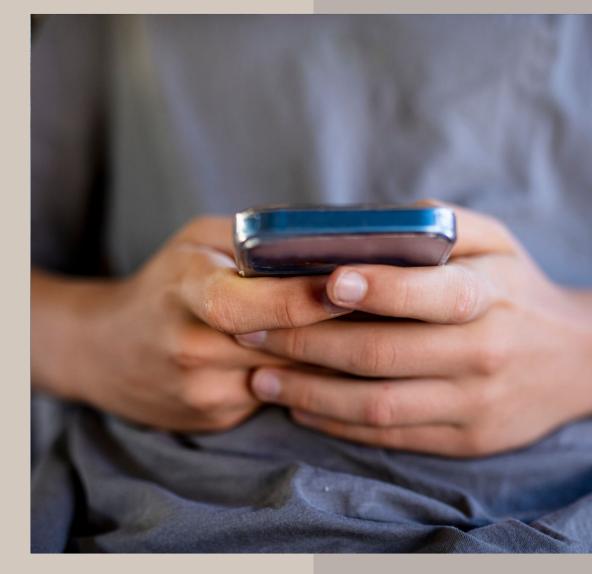
In addition to covering the key topics also covered in the survey, the qualitative research also:

- Observed respondents completing the following tasks using their smartphone:
 - Accessing the Internet and the news as they normally would, comparing search, browser apps and other browsers as relevant
 - In-app browsing task via a social media app
 - Downloading an alternative browser and changing the default browser.

Qualitative research: Key findings¹

- There is low engagement with mobile browsers it is a low salience topic, not the most exciting aspect of smartphone use, and has been rarely considered, if noticed at all.
- Awareness of alternative browsers is low, and respondents did not think there were differences between them (even among those who had experience of multiple browsers). As a result, there is minimal perceived benefit to switching or using multiple smartphone browsers.
- Other barriers to switching include (a) strong preference for familiarity; (b) brand loyalty and (c) the inconvenience of migrating saved passwords from one system to another.
- Reasons for using alternative browsers included encountering compatibility or performance issues on a particular browser (usually for a specific use) or, among those selected for participation due to use of alternative browsers, having strong views about privacy and mainstream technology companies.
- When tasked with doing so in the interview, respondents were typically able to find and download alternative browsers. However, they often encountered difficulties working out how to change their default browser with success not always dependent on digital capability.
- Overall, respondents felt that there is adequate choice available to them, even if this choice has not been presented to them at any point. This is because (a) they may feel they have made a choice once (even if in the past); and/or (b) they would prefer not to have to change their browser.

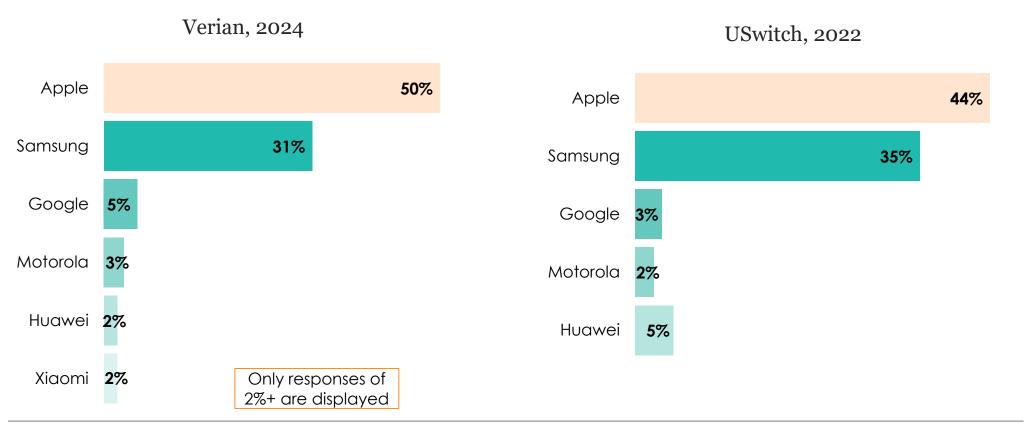
Headline findings from consumer survey



3. Profiling smartphone ownership and usage



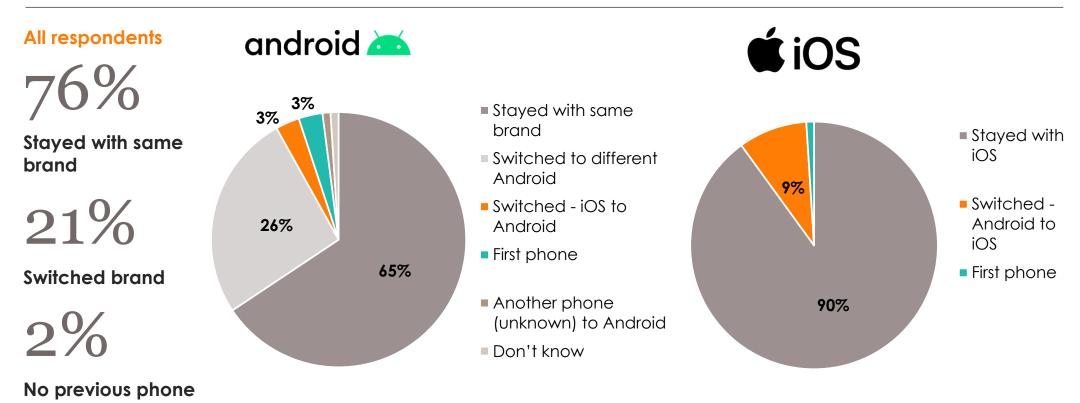
Brand profile of smartphone users in survey matches industry statistics



Left: MOBBRAND - Which of the following brands is your current personal smartphone? All (n=3,060)

Right: USwitch, September 2022. (n=2,000). Available at <a href="https://www.uswitch.com/mobiles/studies/mobile-statistics/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-statistics/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-statistics/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-statistics/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-statistics/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-statistics/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-statistics/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-phone-market-statistics/www.uswitch.com/mobiles/studies/mobile-phone-market-statistics/www.uswitch.com/mobiles/statistics/www.uswitch.com/mobiles/statistics/www.uswitch.com/mobiles/statistics/www.uswitch.com/mobiles/statistics/www.uswitch.com/mobiles/statistics/www.uswitch.com/mobiles/statistics/www.uswitch.com/mobiles/statistics/www.uswitch.com/mobiles/statistics/www.uswitch.com/mobiles/statistics/www.uswitch.com/wobiles/statistics/www.us

Overall, around three in four stick with the same brand. Nine in ten of both Android and iOS stick with the same OS. Slightly more switching from Android to iOS (9%) than from iOS to Android (3%).

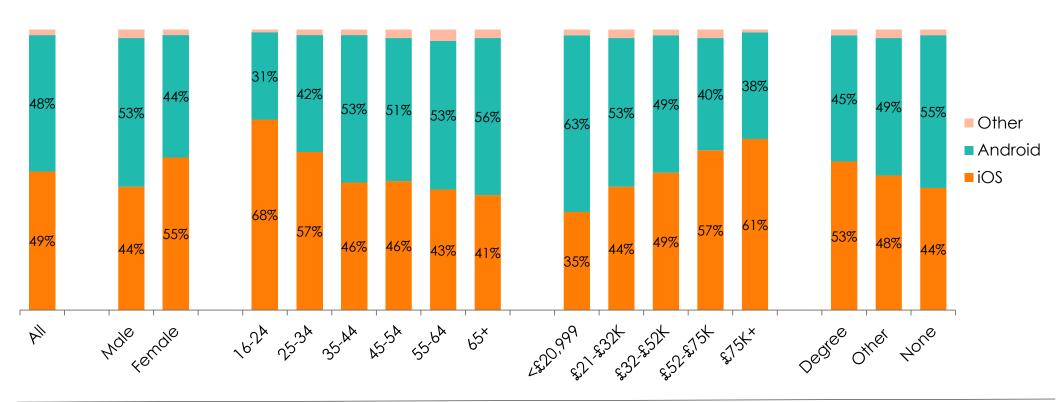


PREMOB - Now thinking about the smartphone you used before you [bought/got] your current personal smartphone, was that the same brand you have now or a different brand? (If different brand) PREMOBCNFIRM – Which of the following smartphone brands was your previous smartphone? All (n=3,060), Android (1,455), iOS (1,536)

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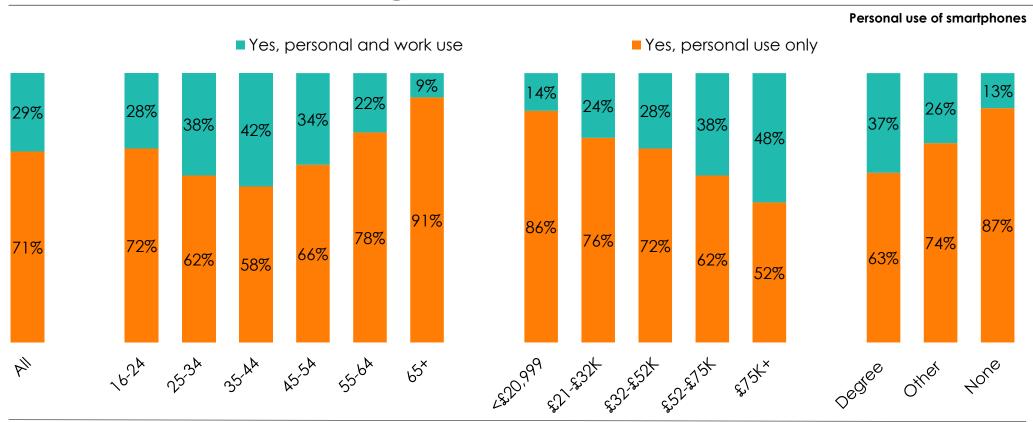
14

iOS was more popular among females, younger people, higher incomes and those with higher level of education.



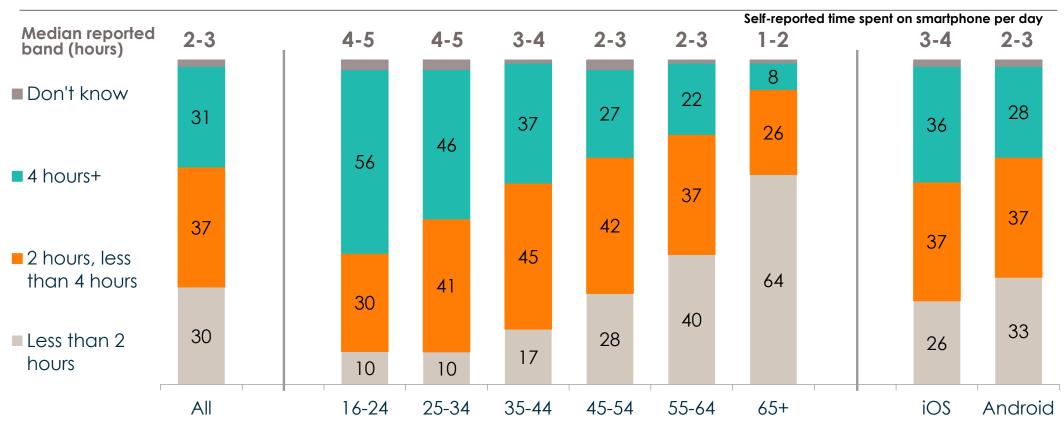
WHICHOS - All (3,060) Males (1,407) Females (1,630) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (n=482) 65+ (574) Up to £20,999 (512) £21,000 to £31,999 (442) £32,000 to £51,999 (641) £52,000 to £74,999 (460) £75,000 or more (524) Degree or above (1,236) Non-degree level (1,504) No qualifications (313)

Smartphone use for work was greater for those aged 25-54, and individuals with higher income and education levels.



SCREEN1 –Do you have a smartphone for personal use? All (n=3,060) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (n=482) 65+ (574) Up to £20,999 (512) £21,000 to £31,999 (442) £32,000 to £51,999 (641) £52,000 to £74,999 (460) £75,000 or more (524) Degree or above (1,236) Non-degree level (1,504) No qualifications (313)

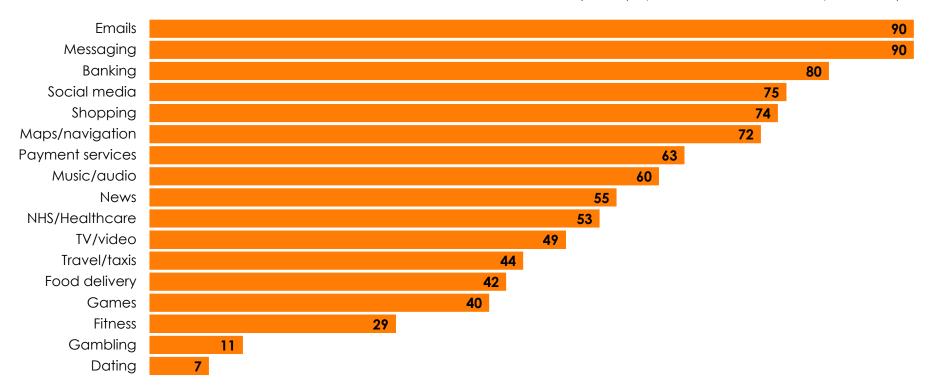
Reported daily use of smartphone declines sharply with age. Higher volume of use on Apple compared with Android.



MOBTIME - About how long do you spend on your smartphone on a typical day? All (3,060) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (482) 65+ (574) iOS (1,536) Android (1,455) .

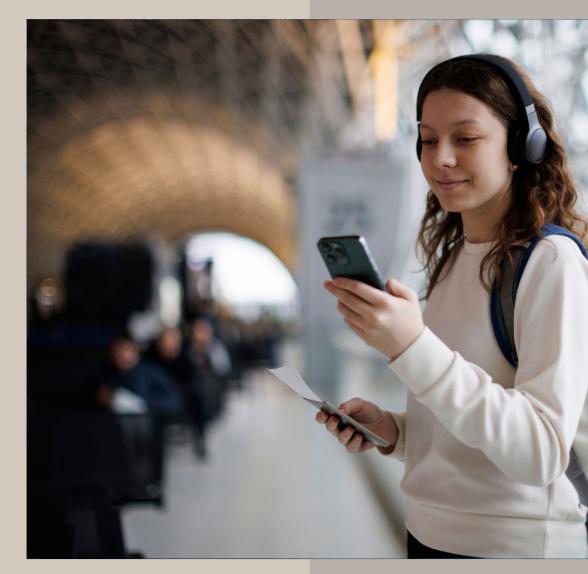
Most common smartphone activities are communication, banking, shopping, social media & navigation

% who do this on smartphone (respondent could choose multiple answers)

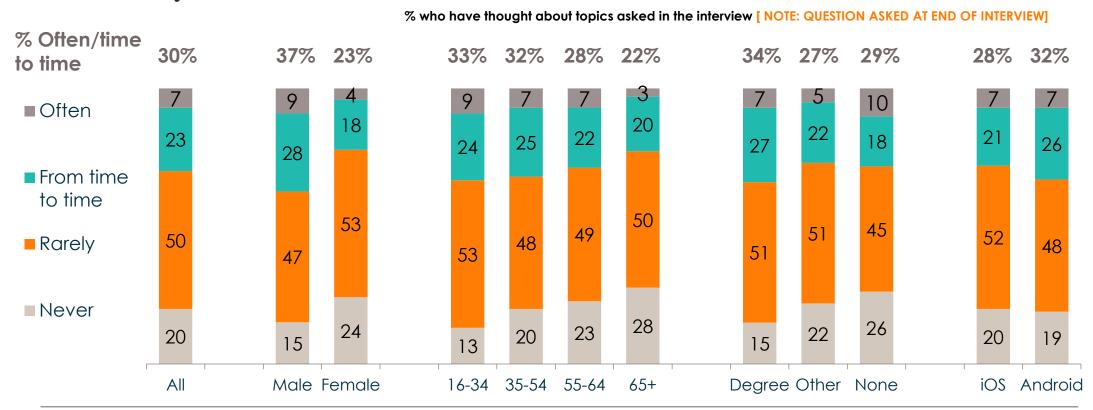


MOBACTIV - Which, if any, of the following do you do on your smartphone? All (n=3,060)

4. Smartphone technical literacy



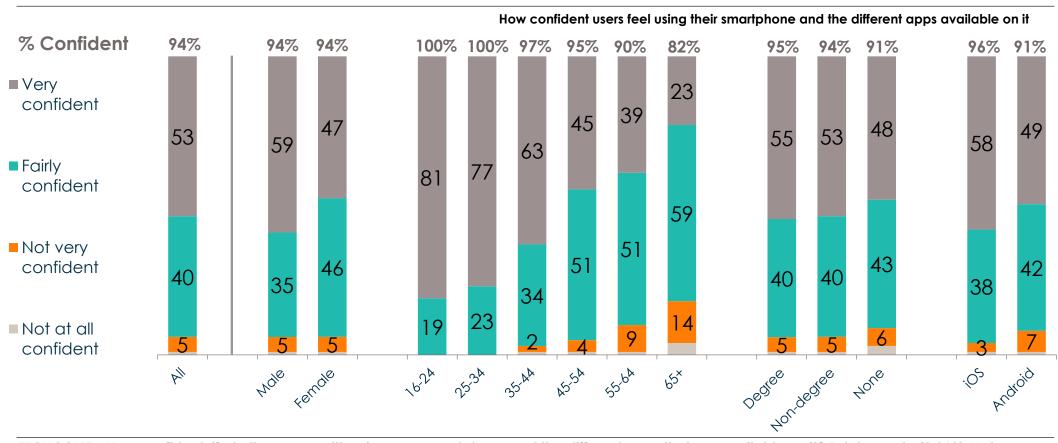
Most users (70%) had rarely or never engaged with topics asked about in the interview beforehand. Males and younger a little more engaged, with relatively little variation by education and OS.



MOBENGAGE - Thinking only about smartphones. Before today how much thought, if any, had you given to the topics you have been asked about today? All (3,060) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (482) 65+ (574) Degree (1,236) Other (1,504) None (313) iOS (1,536) Android (1,455).

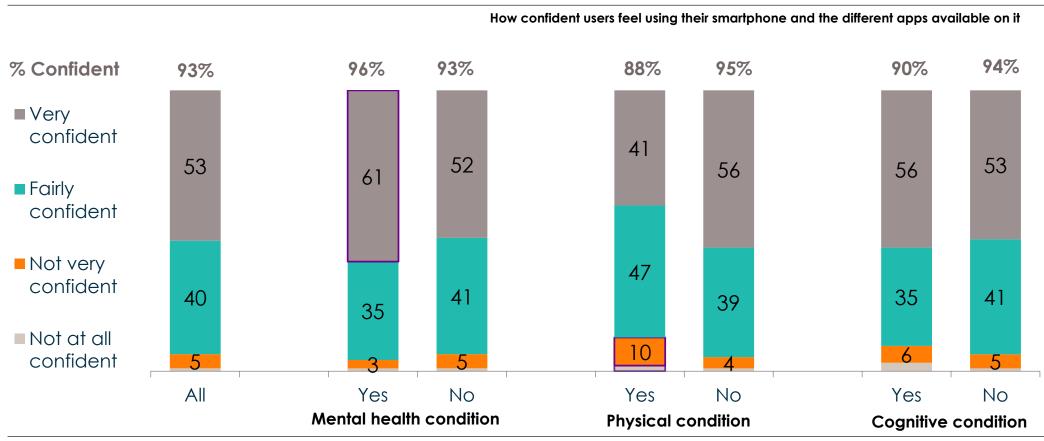
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Self-ratings of confidence using smartphone/apps universally high, but women and older users less likely to feel 'very confident'.



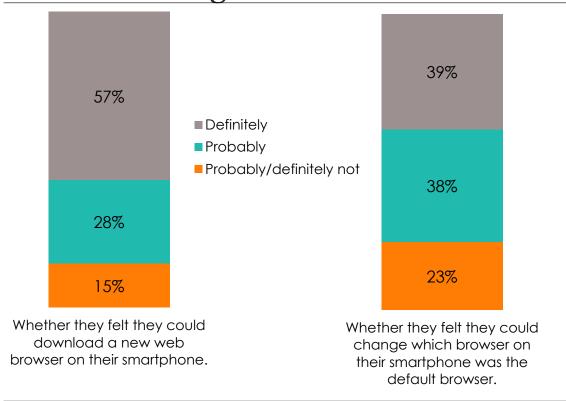
TECHCONF - How confident, if at all, are you with using your smartphone and the different apps that are available on it? Total sample (3,060) Males (1407) Females (1630) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (482) 65+ (574) iOS (1,536) Android (1,455).

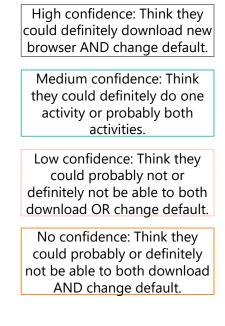
Respondents with mental health conditions reported higher levels of confidence with **using their smartphone**.

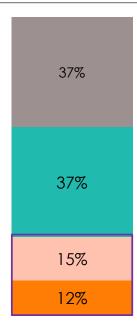


TECHCONF - How confident, if at all, are you with using your smartphone and the different apps that are available on it? Total sample (3,060) Mental health condition: Yes (238) No (2,822) Physical health condition Yes (536) No (2,524) Mental health condition Yes (357) No (2,703)

While self-reported technical confidence was high, 27% were not confident to both download a new web browser <u>and</u> change default browser settings.





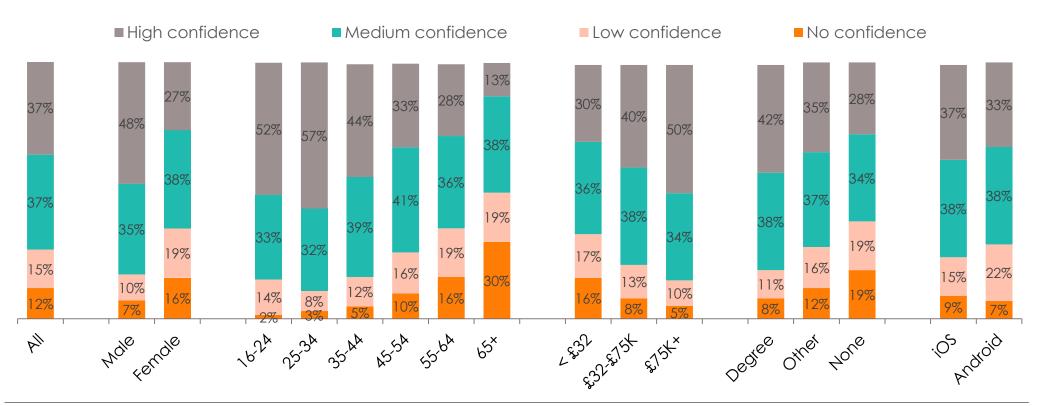


Composite variable based on answers at both questions.

DOWNCONF - 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? DEFAULTCONF - 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? All (3,060)

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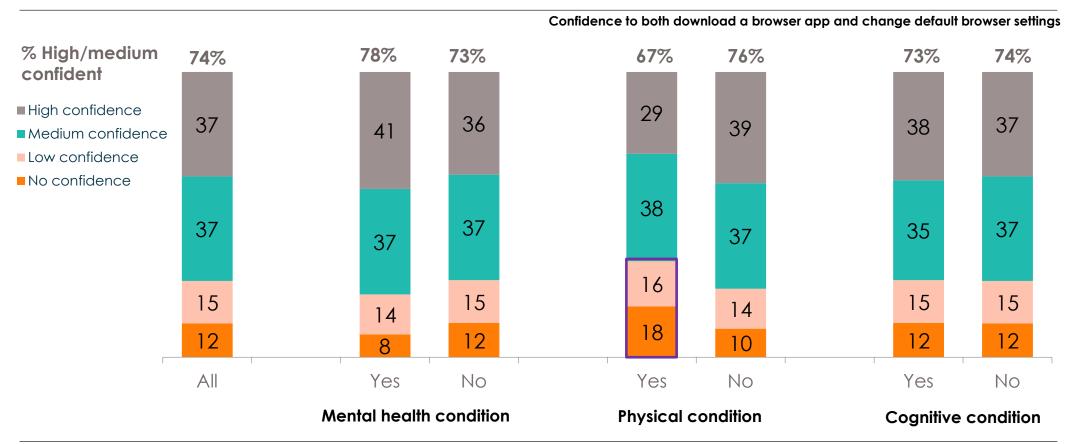
A lack of confidence with **managing browsers** was higher among women, older people, and low education and incomes.



DDCONFDR4 (Derived variable based on answers at DOWNCONF and DEFAULTCONF) All (3,060) Male (1,407) Female (1,630) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (482) 65+ (574) Low income <\frac{2}{2} (954) Medium income \(\frac{2}{2}32-\frac{2}{2}75\)k (1,101) High income \(\frac{2}{2}75\)k (524) Degree-level qual (1,236) Other qual (1,504) No qual (313) iOS (1,536) Android (1,455)

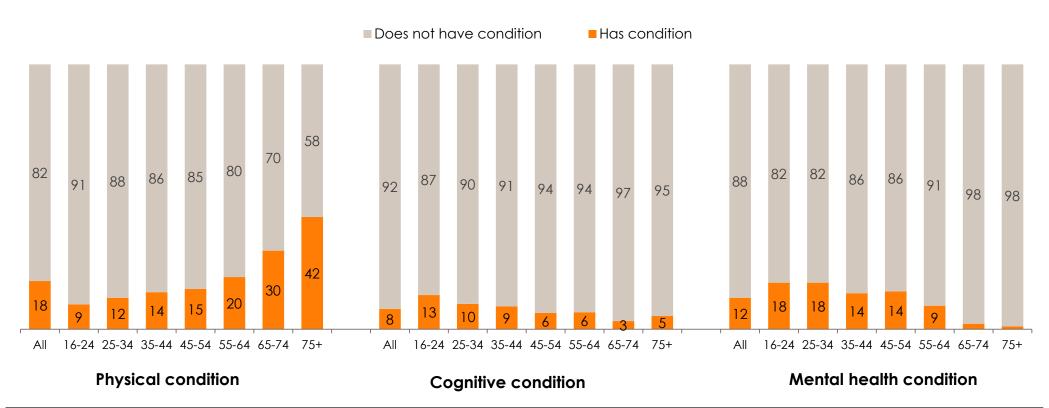
24

People with physical conditions may be more likely to lack confidence with **managing browser settings**.



DDCONFDR (Derived variable based on answers at DOWNCONF and DEFAULTCONF) All (3,060) With mental health condition (257) Without mental health condition (2,703) With physical condition (536) Without physical condition (2,524) With cognitive condition (238) Without cognitive condition (2,822)

Older respondents were more likely to have a physical condition, and younger respondents more likely to have a mental health condition.

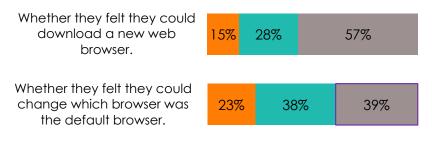


PHYSHEALTH, COGHEALTH and HEALTH (Derived variable based on answers at HEALTH) All (3060) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (482) 65+ (574)

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While perceived confidence to download a web browser and change default browser settings was high, this was not necessarily the case when observed in the qualitative research.





Probably

■ Definitely

Probably/definitely not

Important to note that confidence in changing default browser was usually based on **perception** rather than behaviour. For example, of those who expressed high confidence in changing default browser, only 33% of them had actually done it.

Observing users downloading a new web browser and attempting to change their default browser settings (qualitative research)

In line with users' perceived confidence, when observed, users found it easier to download a new web browser than to change the default browser settings.

While perceived confidence to change default settings was high in the survey, when observed, many users encountered difficulties working out how to do this on their smartphone – with some users unable to complete the task.

Success was not dependent on the user's digital capability. Some of the more digitally confident participants found the task difficult to complete.

DOWNCONF - 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? DEFAULTCONF - 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? All (3,060)

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Spontaneous (unprompted) awareness of web browsers highlights strong position of Google Chrome

NOTE: For spontaneous awareness, mentions of 'Google' have been coded as 'Google Chrome'. Microsoft Internet Explorer

Samsung Internet

Maxthon

Netscape

Apple Safari Brave Google Chrome

Mozilla Firefox Microsoft Edge

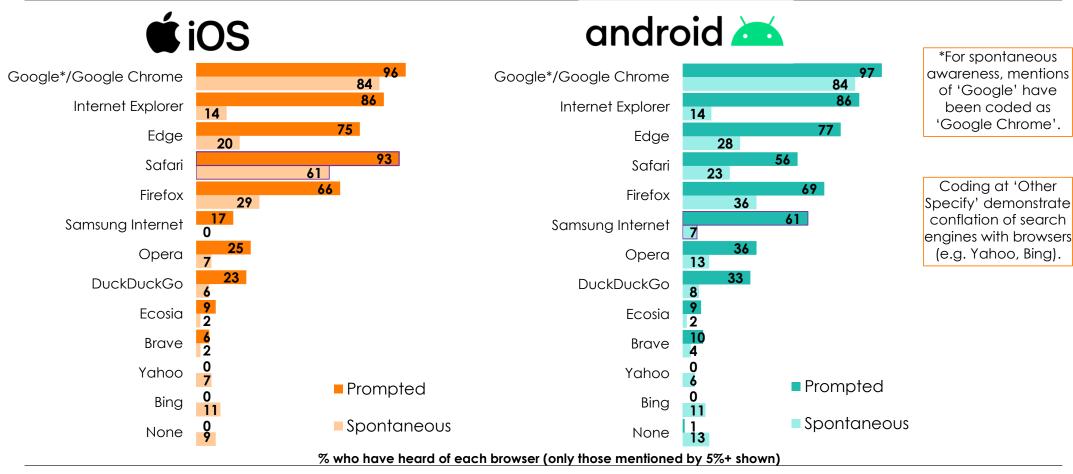
Vivaldi Ecosia **Opera**

DuckDuckGo Privacy Web browser

11% selected "none"

BROWSPONT 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 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' All (3,060).

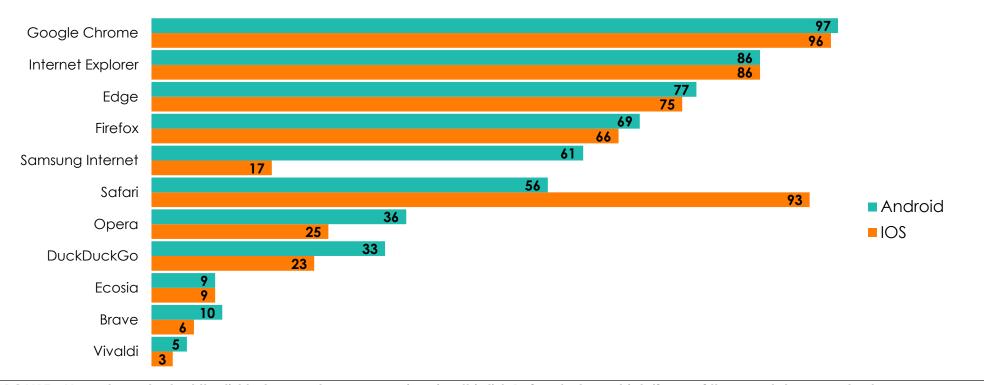
Prompted awareness adds other major players.



BROWPROMPT - 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? BROWSPONT Which web browsers have you heard of? All (3,060) Android (1,455), iOS (1,536).

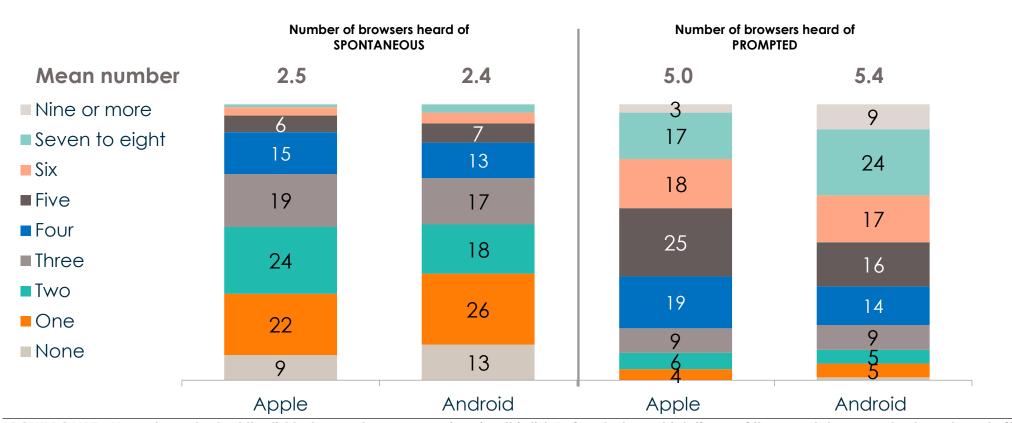
Near universal prompted awareness of Chrome and IE across OS, while only half of Android users have heard of Safari.

% who have heard of each browser (only those mentioned by 5%+ shown)



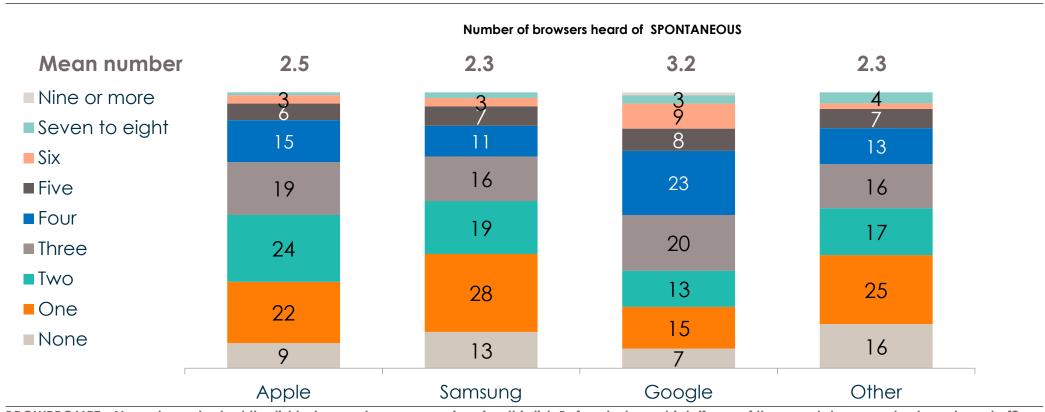
BROWPROMPT - Now please look at the list below, and answer again using this list. Before today, which if any of these web browsers had you heard of? All (3,060) iOS (1,536) Android (1,455)

Profile of spontaneous & prompted awareness similar for both OS. The mean number of known browsers doubles once shown prompted list.



BROWPROMPT - 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? BROWSPONT Which web browsers have you heard of? All (3,060) ioS (1,536) Android (1,455) Verian

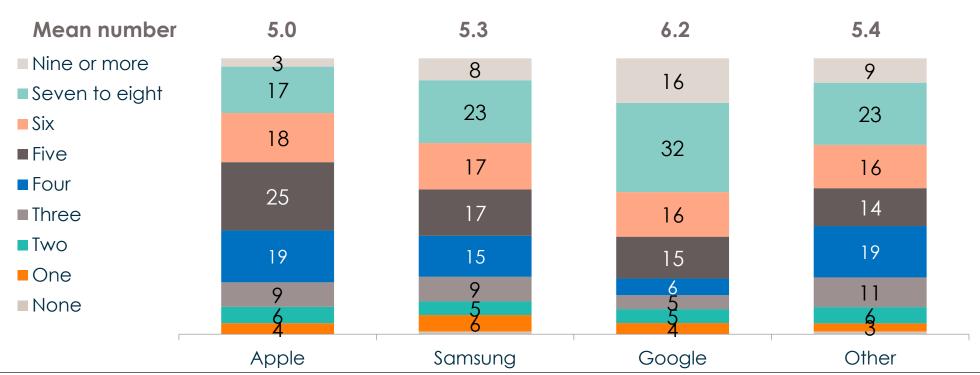
Spontaneous awareness of browsers: Samsung and other phone brand users name slightly fewer browsers compared to Apple, while Google users can name most brands



BROWPROMPT - 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? BROWSPONT Which web browsers have you heard of? Apple (1545) Samsung (939) Google (167) Other (409). Verian

When prompted, Samsung, Google and other phone brand users name more browsers than Apple, while Google users can name most brands

Number of browsers heard of PROMPTED

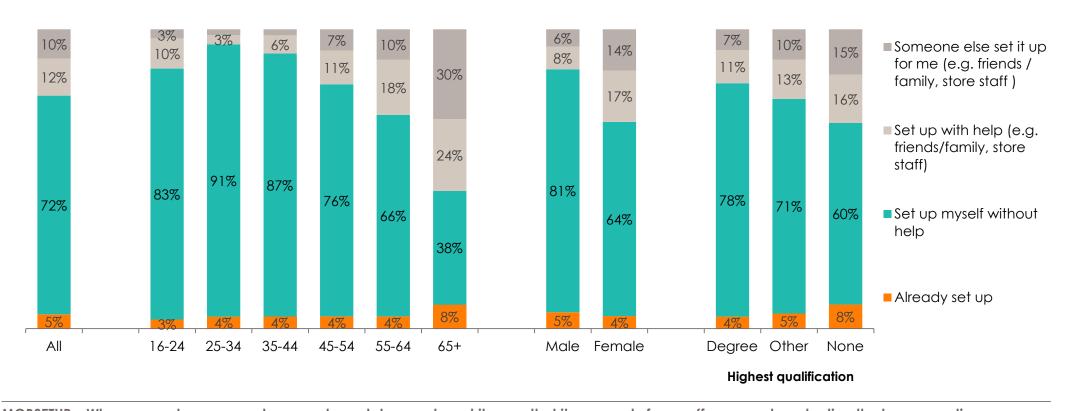


BROWPROMPT - Now please look at the list below and answer again using this list. Before today, which if any of these web browsers had you heard of? BROWSPONT Which web browsers have you heard of? Apple (1545) Samsung (939) Google (167) Other (409).

5. Smartphone acquisition & purchase



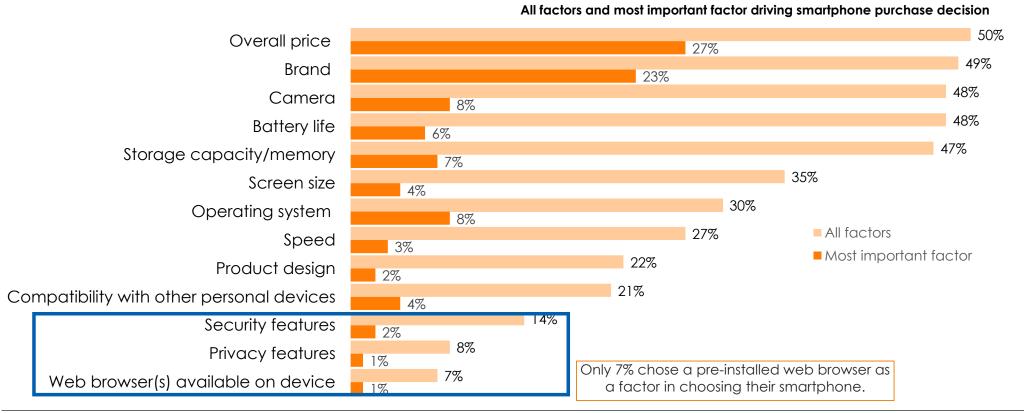
Most individuals set their smartphone up themselves, in particular, men, younger people and those with a degree.



MOBSETUP – 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)? All who own a smartphone for personal use (n=3060) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (482) 65+ (574) Male (1,407) Female (1,630) Degree or above (1,236) Non-degree level (1,504) No qualifications (313)

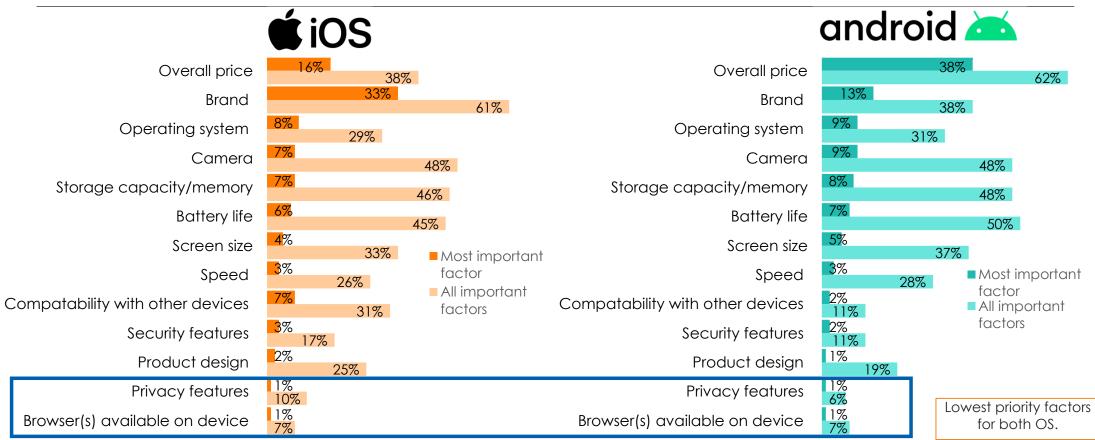
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Most important factors in deciding which smartphone to purchase were overall price and brand. Web browsers, security and privacy were among the least important purchase factors.



MOBFACTORA – Thinking back to when you first [bought/got] your current smartphone. What factors were important in your decision to [purchase/choose] it? All (3,060) MOBFACTOR1 – Which one of these was the most important factor? All who selected at least one factor at MOBFACTORA (3,043)

Android purchasers mainly driven by price, Apple purchasers by brand. Ecosystem compatibility was more of a driver for Apple than Android.

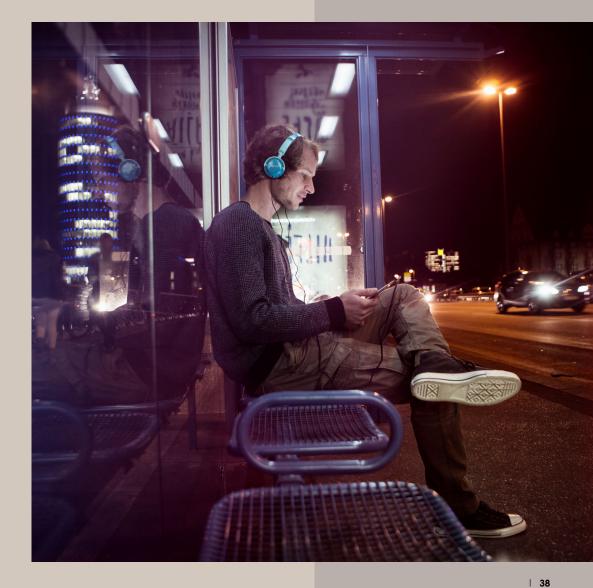


MOBFACTORA – Thinking back to when you first [bought/got] your current smartphone. What factors were important in your decision to [purchase/choose] it? All (3,060) MOBFACTOR1 – Which one of these was the most important factor? All who selected at least one factor at MOBFACTORA (3,043) Android (1,445) iOS (1,530)

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37

6. Installations and usage of browsers



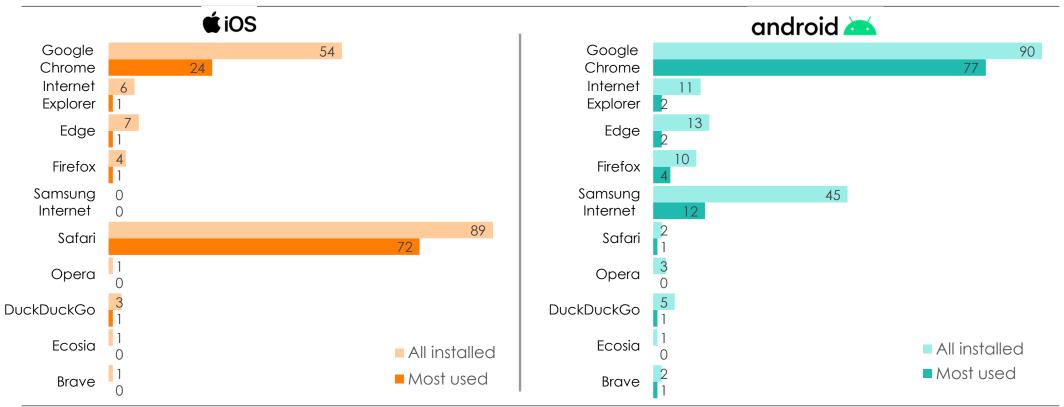
Apps are preferred over websites, and especially popular among younger people, with higher incomes, the more digitally confident and iOS users.



MOBNATIVE – Thinking about the smartphone activities you mentioned at the previous questions. In general do you prefer to download and use an app or visit a website when using your smartphone? All who do at least one activity on their smartphone (n=3,045) 16-24 (364) 25-34 (500) 35-44 (587) 45-54 (549) 55-64 (480) 65+ (565) <£32k (947) £32-£75k(1100) £75k+ (523) iOS (1,529) Android (1,447) Very confident (1,613) Fairly condiment (1,251) Not confident (181)

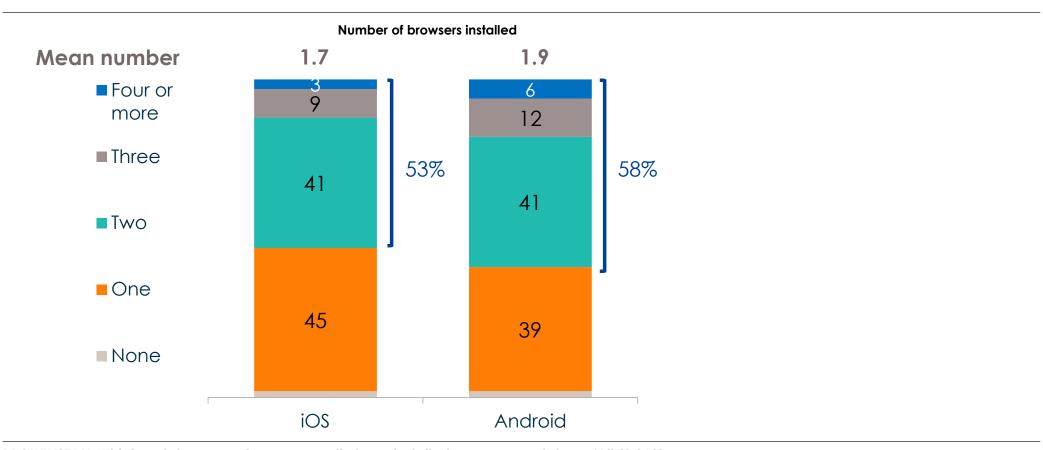
Verian

iOS users mainly only use Safari and Chrome, with Safari most used. Android users use a broader spread of browsers, with Chrome most used.



BROWINSTALL Which web browsers do you currently have installed on your smartphone All (3,060) iOS (1,536) Android (1,455). BROWMOST - You said you have the following web browsers on your smartphone. Which ONE of these do you use most often? All who name a browser on their phone (2,992) iOS (1,536) Android (1,455) Verian

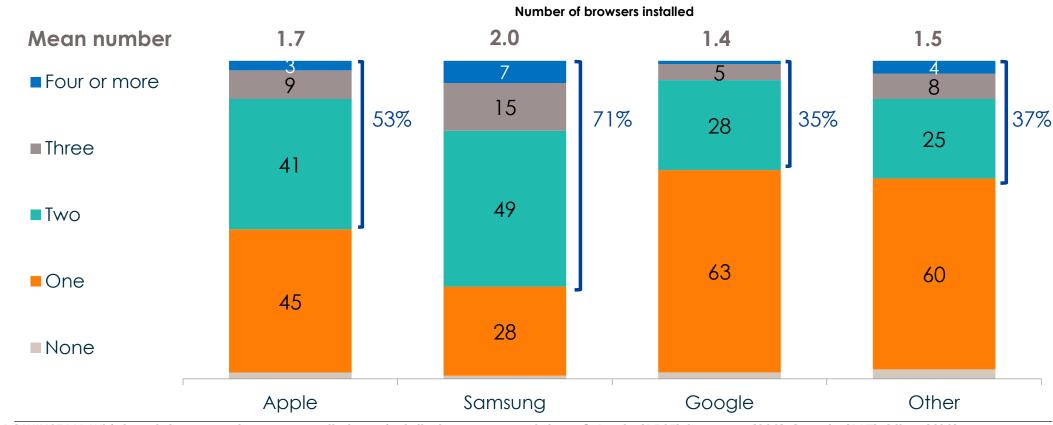
A little over half of both OS have more than two browsers installed on their smartphone. Little variation by OS.



BROWINSTALL Which web browsers do you currently have installed on your smartphone/All (3,060)

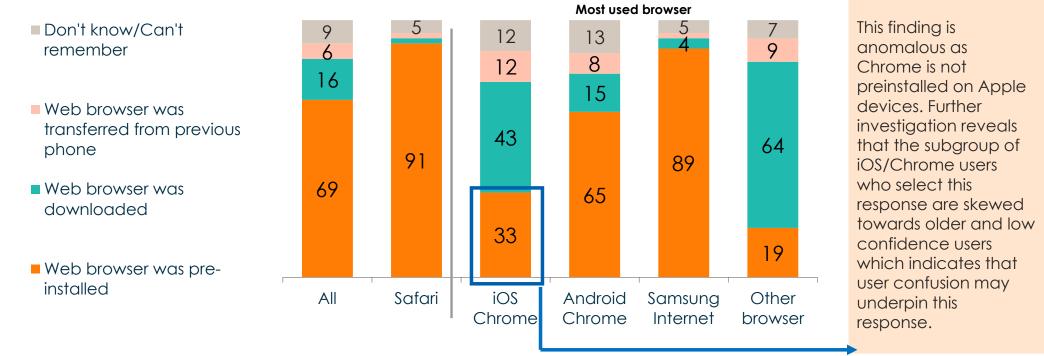
Verian

However, when split by phone brand there is wide variation in number of browsers installed across Android brands. Samsung users most likely to have 2+ browsers installed.



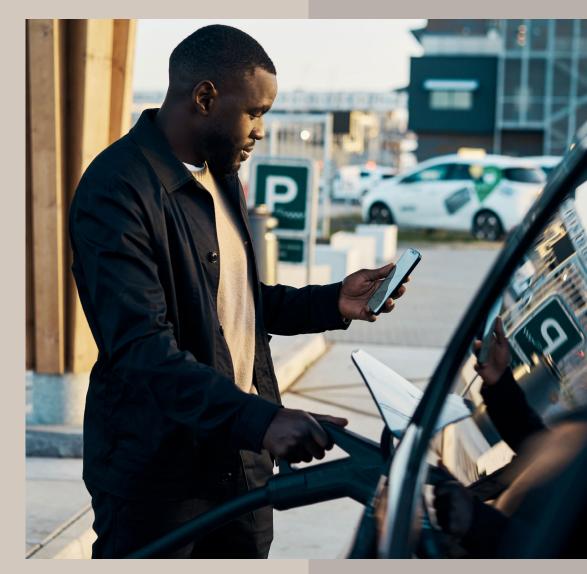
BROWINSTALL Which web browsers do you currently have installed on your smartphone? Apple (1545) Samsung (939) Google (167) Other (409)

Main browser: seven in ten use pre-installed while 16% download a different browser. Safari and Samsung Internet almost universally rely on pre-installation while Chrome-iOS and less mainstream browsers were more likely to have been downloaded



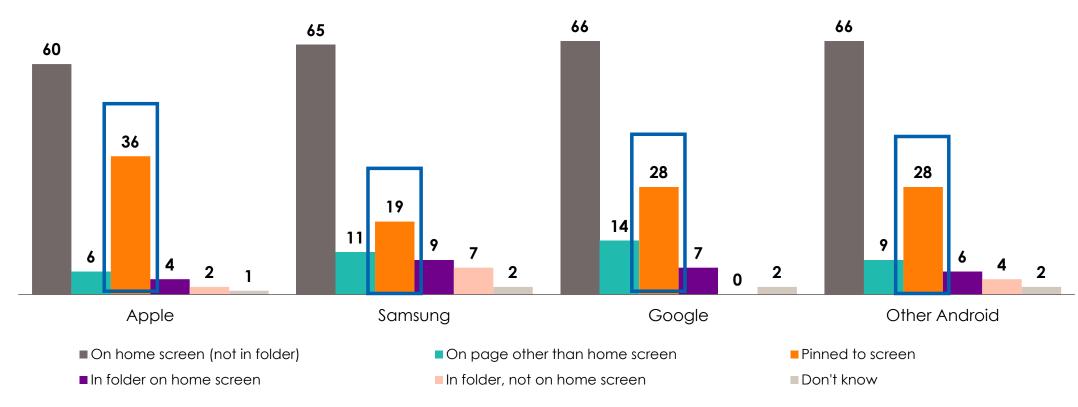
PREINST - You said that you [mostly] use [BROWMOST] as your web browser on your phone. Did you or someone else download this web browser onto your smartphone, or was it already installed on the phone when you got it? All who named a browser on their smartphone (2,992) Safari (1,084) iOS Chrome (364) Android Chrome (1,098) Samsung Internet (175) Other (213)

7. Browser placement



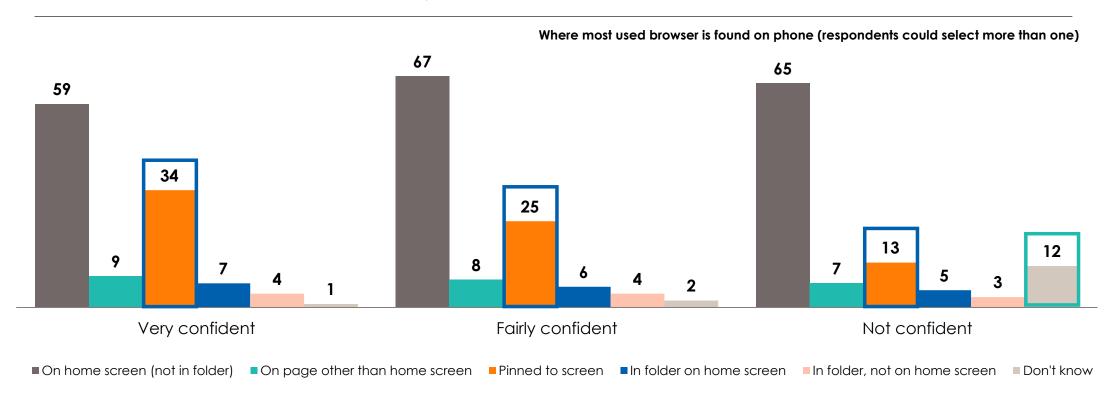
Most users access their main browser via default home screen. Apple users more likely to pin main browser to screen ('hotseat' location)





BROWLOC1 - You mentioned that you [mostly] use [BROWMOST]. If you wanted to open your [BROWMOST] web browser on your smartphone, in which of these places would you find it? All who cite a most used browser (2,992) Apple (1,509) Samsung (924,) Google (165) Other android brand (395)

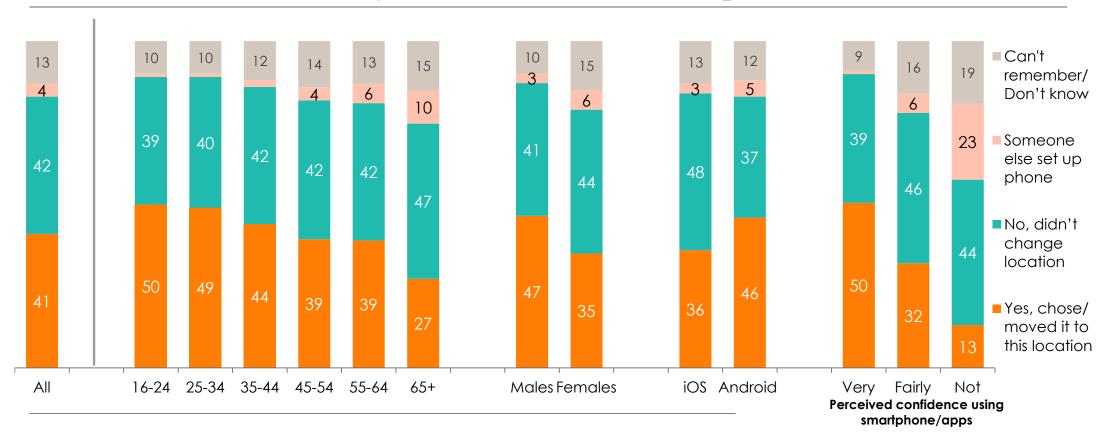
Technically confident users more likely to access most-used browser via screen pin 'hotseat', 12% of non-confident users do not know how to locate their browser.



BROWLOC1 - You mentioned that you [mostly] use [BROWMOST]. If you wanted to open your [BROWMOST] web browser on your smartphone, in which of these places would you find it? All who cite a most used browser (2,992) Very confident (1,591) Fairly confident (1,228) Not confident (173) Verian

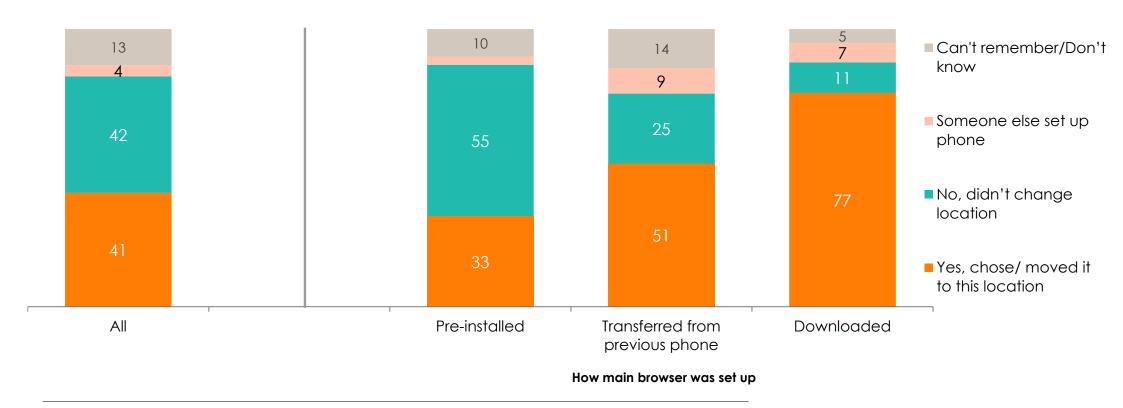
46

Of those who recalled this, there was an equal split between those who positioned their browser and those who left this as per default. Older, females, least technically confident and iOS least likely to set browser location on phone.



BROWLOC2 - 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? All All who knew location on smartphone of their most-used browser.(n=2,938) 16-24 (359) 35-34 (487) 35-44 (573) 45-54 (527) 55-64 (466) 65+ (526) McMeisr (1,361) Females (1,555) iOS (1,478) Android (1,396) Very confident (1,577) Fairly (1,205) Not (156)

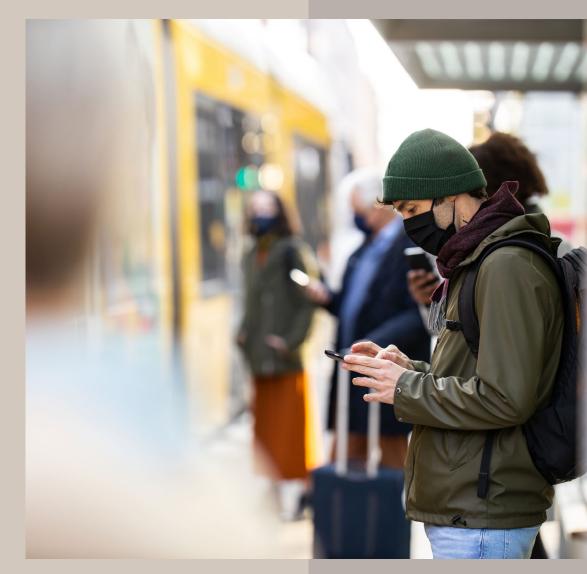
Of those who recalled this, those who downloaded their main browser were far more likely to set the location of the browser on their phone. Pre-installed browsers were mainly left in the default location.



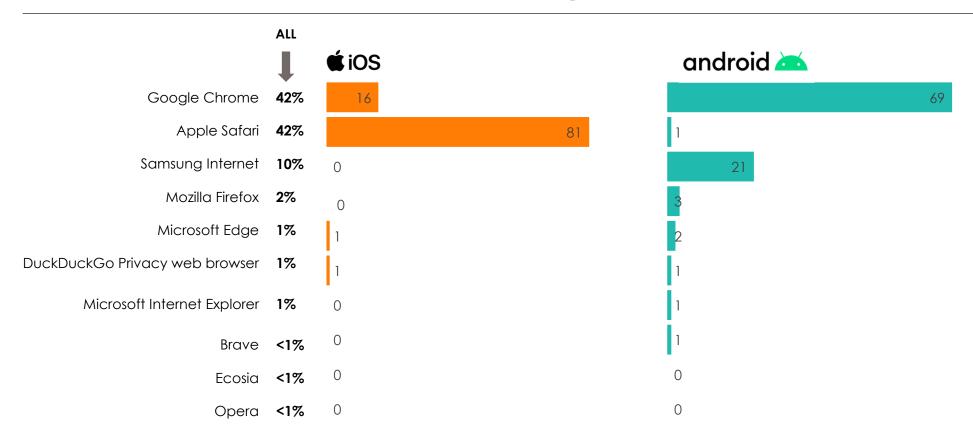
BROWLOC2 - Just to check, did you (or someone else) move your web browser to this location or was it there already when you started using your current smartphone? All All who knew location on smartphone of their most-used browser.(n=2,938) Pre-installed (2,031) Transferred (181) Downloaded (475) Verian

48

8. Default settings in browsers (including in-app browsing)



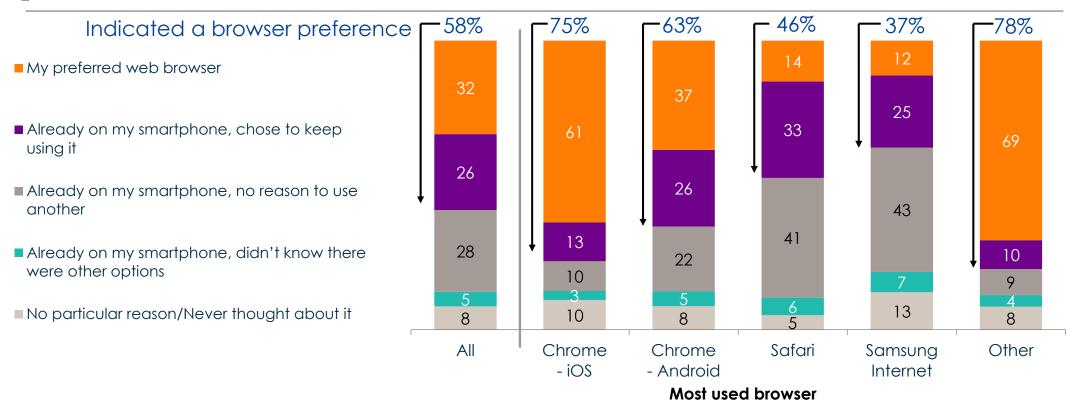
Default browsers reflect earlier findings on most used browser.



BROWDEF Of the web browsers that you have on your phone, which one of these would you say is your 'default web browser'? All who knew their default browser (2,659) iOS (1,388) Android (1,213).

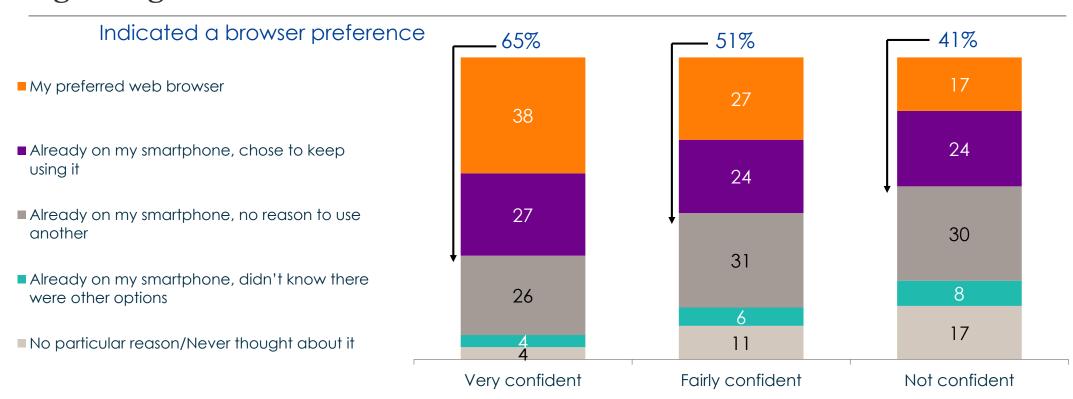
Verian

Safari & Samsung Internet users most likely to passively accept default browser settings, Chrome-iOS & non-mainstream browser users most likely to indicate a preference of main browser.



WHYMOSTI - 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? All who name a browser on their phone (2,992) iOS Chrome (364) Android Chrome (1,098) Safari (1,085) Samsung Internet (n=175) Other (213) Verian

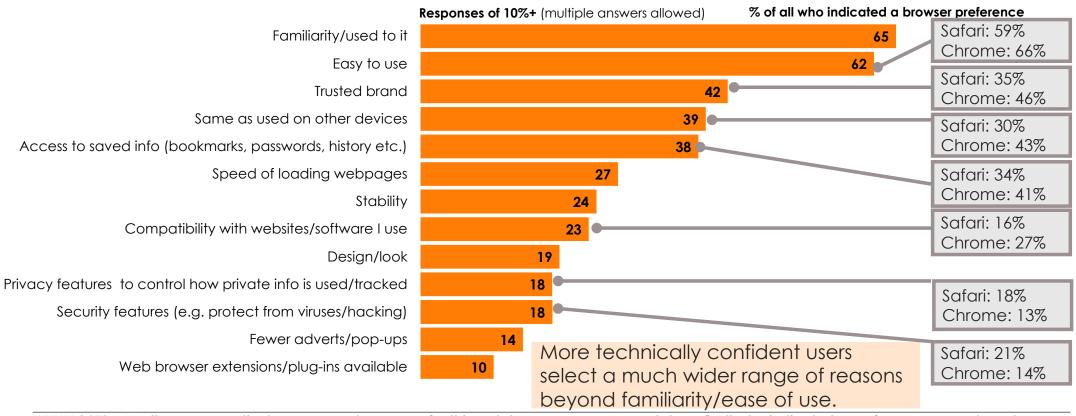
More technically confident users most likely to indicate a preference regarding most-used browser



Perceived confidence using smartphone/apps

WHYMOST1 - 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? All who name a browser on their phone (2,992) Very confident (1,591) Fairly confident (1,228) Not confident (173) Verian

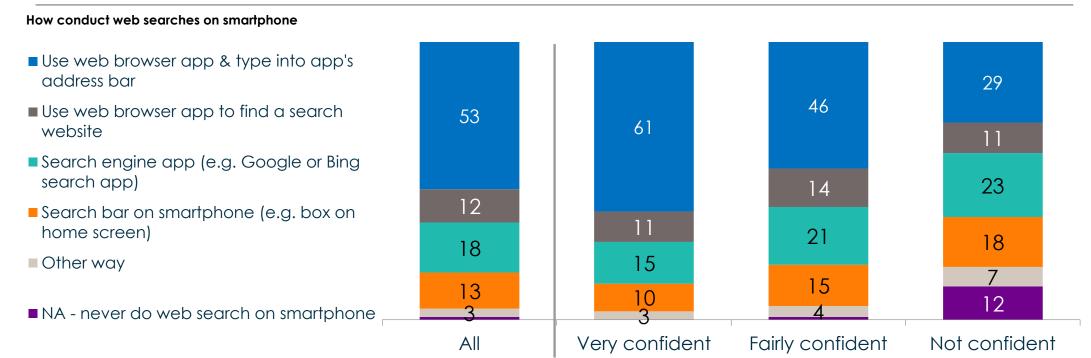
Most who indicated a browser preference did so based on familiarity and ease of use. Chrome users more likely to choose based on brand & compatibility, Safari users prioritize security and privacy more.



WHYMOST2 - Are there any particular reasons why you prefer this web browser on your smartphone? All who indicated a preference re most used browser (1,716) Chrome (997) Safari (485)

Verian

When doing a web search, half use web browser app directly, much higher for technically confident users. Non-confident more likely to use search engine apps & 12% never web-search on smartphone.

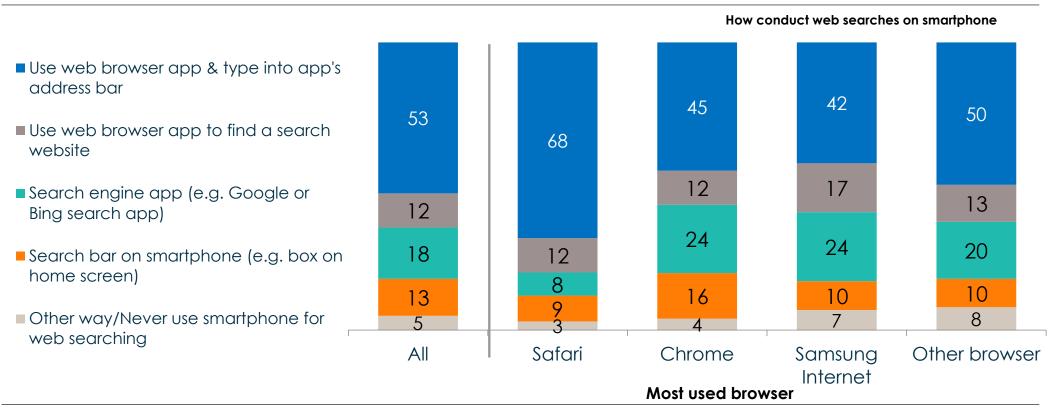


Perceived confidence using smartphone/apps

LOOKFOR - Below are some of the different ways that you can look for information on the web when using a smartphone. When you want to do this on your smartphone, which of the following do you do most often? All (3,060) Very confident (1,614) Fairly confident (1,255) Not confident (191)

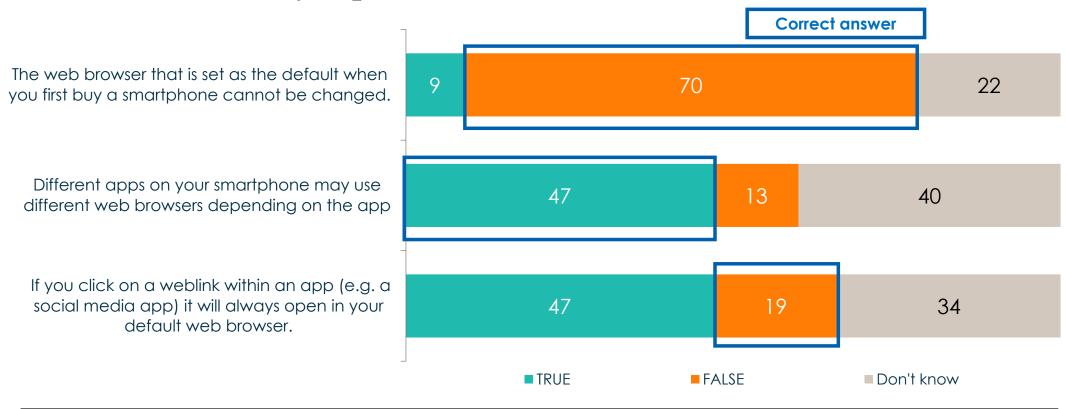
54

When doing a web search, Safari users much more likely to use web browser app directly. Higher use of search engine apps on all other browsers.



LOOKFOR - Below are some of the different ways that you can look for information on the web when using a smartphone. When you want to do this on your smartphone, which of the following do you do most often? All (3,060) Safari (1,084) Chrome (1,520) Samsung (175) Other browser (213)

Most know that the default browser can be changed. Half understand that apps can use different web browsers but only one in five know that weblinks don't always open in default browser

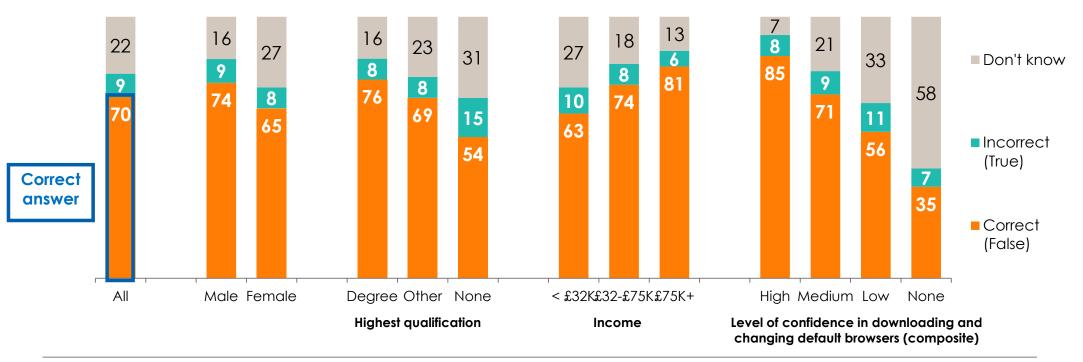


TFGRID2 - For each of the next statements, please tell us whether you think the statement is true, false or if you are unsure either way. Total sample (3,060)

Verian

Understanding that default can be changed higher for males, more educated, higher incomes and higher confidence in managing browsers

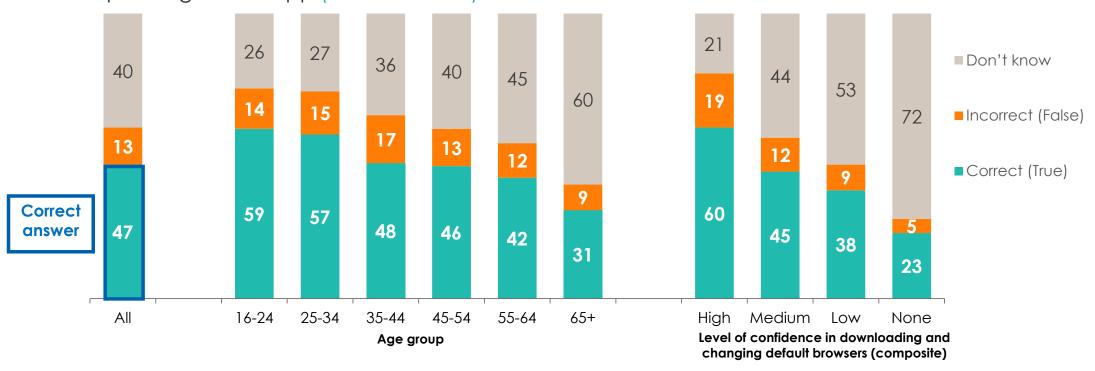
The web browser that is set as the default when you first buy a smartphone cannot be changed (Correct= FALSE)



TFGRID2 The web browser that is set as the default when you first buy a smartphone cannot be changed (True/false). All (3,060) Male (1,407) Female (1,630) Highest qual Degree (1,236) Highest qual Other (1,504) No quals (313) Low income (954) Medium income (1,101) High income (524) Browser confidence: High (1,109) Medium (1,156) Low (448) None (347)

In-app browsing: Understanding that apps can use different web browsers higher for youngest and most technically literate

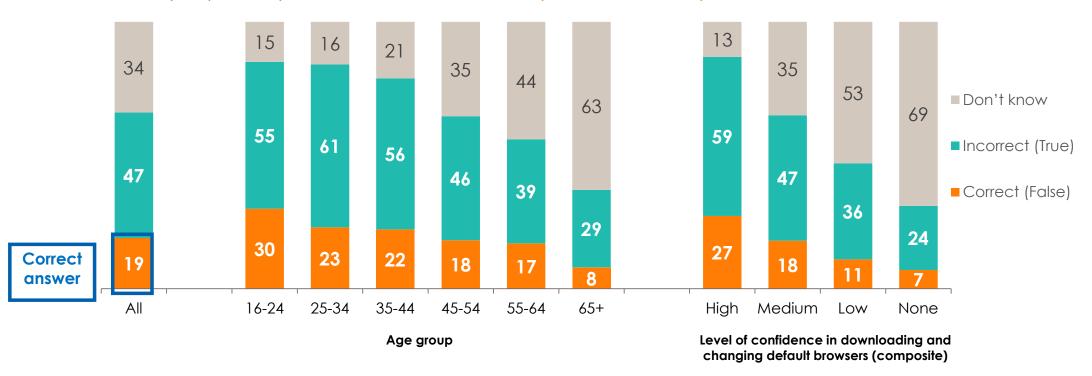
Different apps on your smartphone may use different web browsers depending on the app.(Correct= TRUE)



TFGRID2 Different apps on your smartphone may use different web browsers depending on the app (True/false). All (3,060) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (482) 65+ (574) Browser confidence: High (1,109) Medium (1,156) Low (448) None (347)

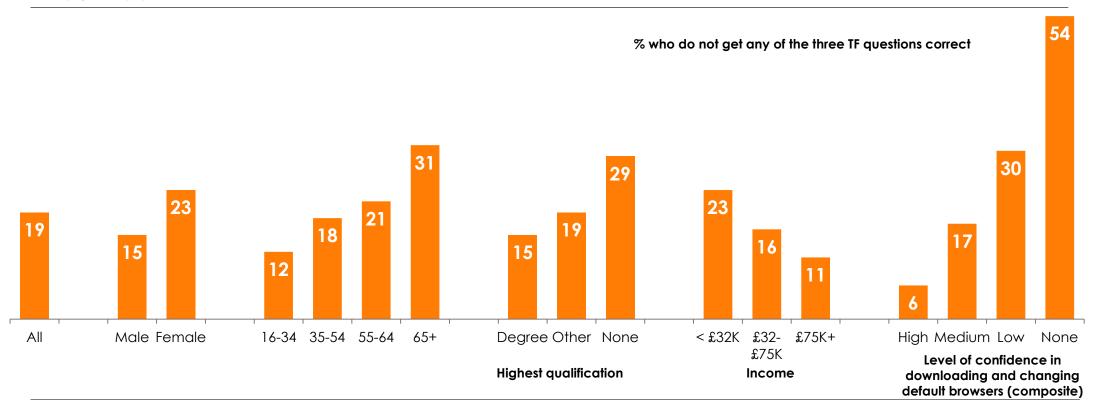
In-app browsing: Understanding that weblinks don't always open in default browser higher for youngest and most technically literate.

If you click on a weblink within an app (e.g. a social media app) it will always open in your default web browser(Correct= FALSE)



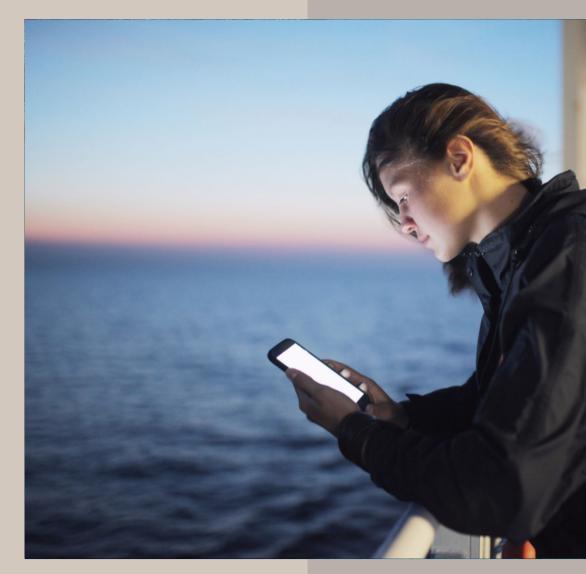
TFGRID2 If you click on a weblink within an app (e.g. a social media app) it will always open in your default web browser (True/false). All (3,060) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (482) 65+ (574) Browser confidence: High (1,109) Medium (1,156) Low (448) None (347)

Large minorities of females, aged 65+, low education, low income and with low confidence in managing browsers get all three TF questions incorrect.

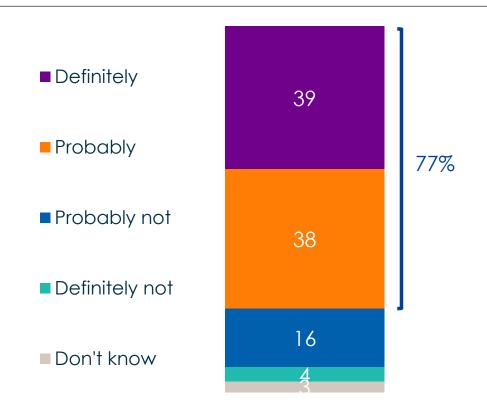


TFGRID2 - For each of the next statements, please tell us whether you think the statement is true, false or if you are unsure either way. Total sample (3,060) Male (1,407) Female (1,630) 16-34 (867) 35-54 (1,137) 55-64 (482) 65+ (574) Highest qual Degree (1,236) Highest qual Other (1,504) No quals (313) Low informe (954) Medium income (1,101) High income (524) Browser confidence: High (1,109) Medium (1,156) Low (448) None (347)

9. User journey to change default browser



Eight in ten users thought they could switch their default browser if they wanted to, without seeking help/searching online.

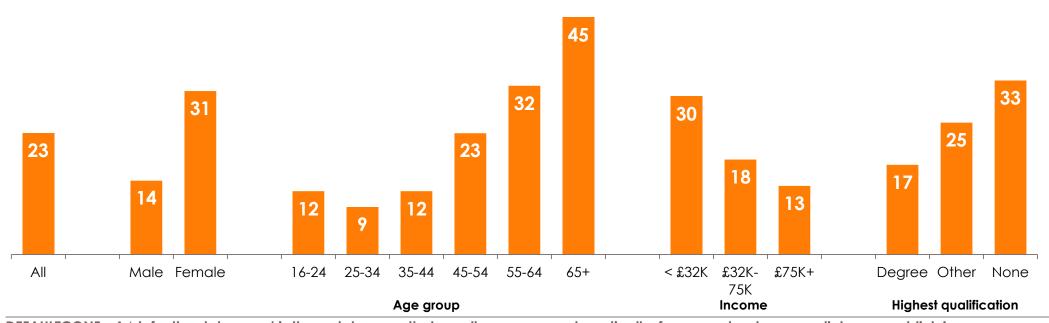


DEFAULTCONF - A 'default web browser' is the web browser that usually opens up automatically, for example when you click on a weblink in a message. Imagine that you are asked to change which web browser on your smartphone is set as the default browser. Do you think you could work out how to do this on your own, without needing to ask someone else or search for information online? Total sample (3,060)

Verian

Lack of confidence in switching default concentrated among females, older groups, and lower incomes and education.

% who say they probably or definitely could <u>NOT</u> work out how to change default browser

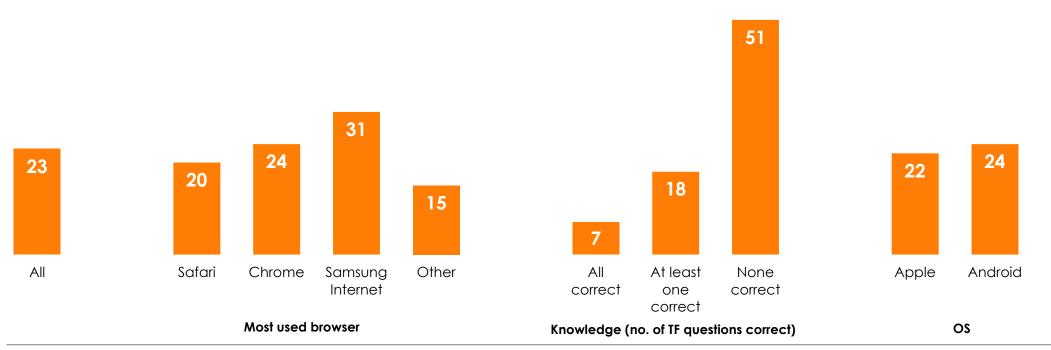


DEFAULTCONF - A 'default web browser' is the web browser that usually opens up automatically, for example when you click on a weblink in a message. Imagine that you are asked to change which web browser on your smartphone is set as the default browser. Do you think you could work out how to do this on your own, without needing to ask someone else or search for information online? All (3,060) 16-24 (366) 25-34 (501) 35-44 (588) 45-54 (549) 55-64 (482) 65+ (574) Male (1,407) Female (1,630) Low income (954) Medium income (1,101) High income (524) Highest qual Degree (1,236) Highest qual Other (1,504) No quals (313)

Verian

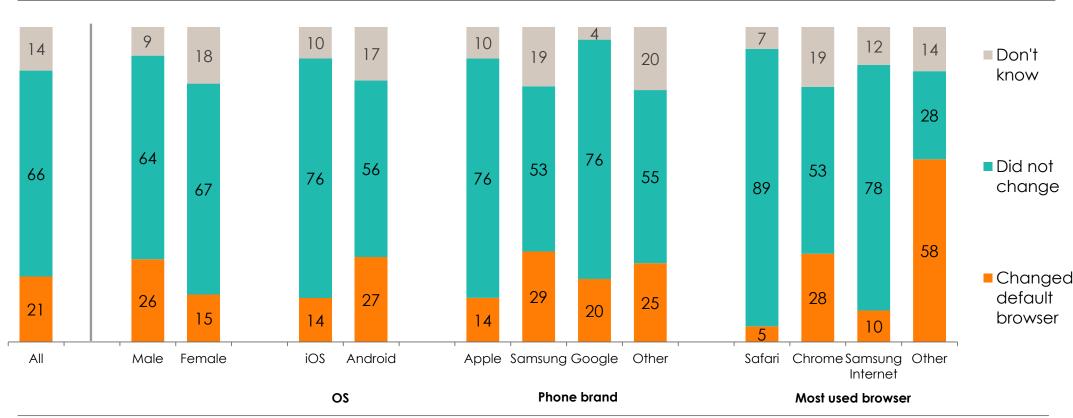
Low confidence in switching default concentrated among Samsung Internet users and those with low knowledge. No difference by OS.

% who say they probably or definitely could <u>NOT</u> work out how to change default browser



DEFAULTCONF - A 'default web browser' is the web browser that usually opens up automatically, for example when you click on a weblink in a message. Imagine that you are asked to change which web browser on your smartphone is set as the default browser. 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? Total sample (3,060) Safari (1,084) Chrome (1,520) Samsung Int (175) Other browser (213) All correct (350) At least one correct (2,129) None correct (581) Apple (1,536) Android (1,455)

One in five had changed their default browser: higher among males, Android, Samsung phones, Chrome and 'other' browser users.



BROWDEFHOW - Just to check, have you or someone else changed the default web browser on your current personal smartphone? All who cite a named browser on their phone (2,992) Male (1,380) Female (1,590) iOS (1,501) Android (1,426) Apple (1,508) Samsung (924) Google (165) Other (395) Safari (1,084) Chrome (1,520) Samsung Int (175) Other browser (213)

One in five had changed their default: higher among those with higher rates of objective knowledge and among the more technically confident.



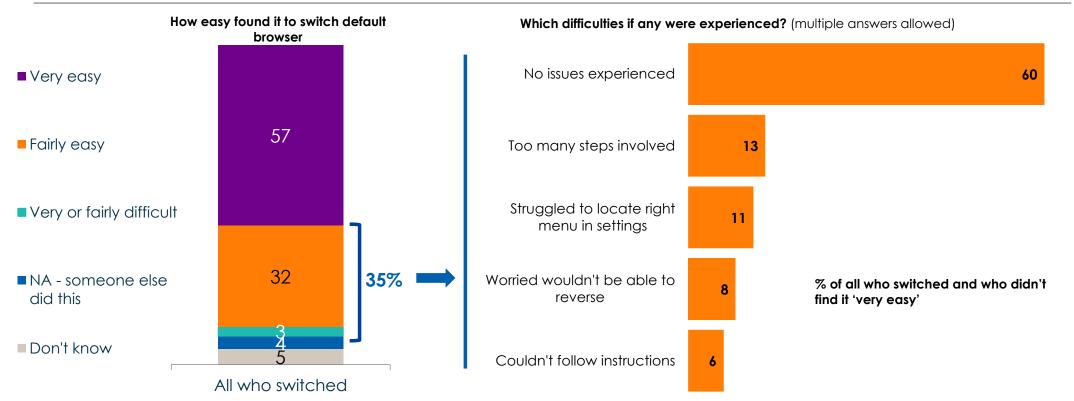
Knowledge (no. of TF questions correct)

Confidence using smartphones/apps

BROWDEFHOW - Just to check, have you or someone else changed the default web browser on your current personal smartphone? All who cite a named browser on their phone (2,992) All correct (347) At least one correct (2,097) All incorrect (548) Very confident (1,591) Fairly confident (1,228) Not confident (173)

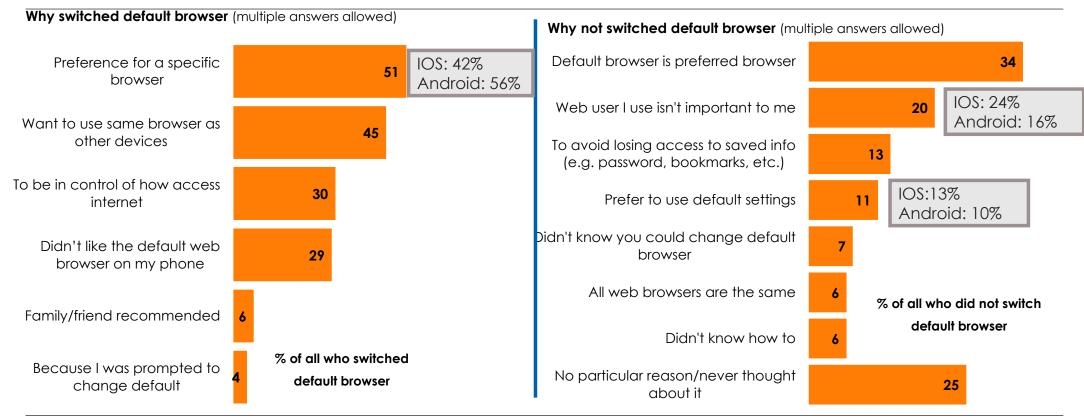
Verian

Of those who had switched, most found it easy (57% very easy). Only 3% had difficulties. Among those who switched but didn't find it 'very easy', relatively few problems were identified.



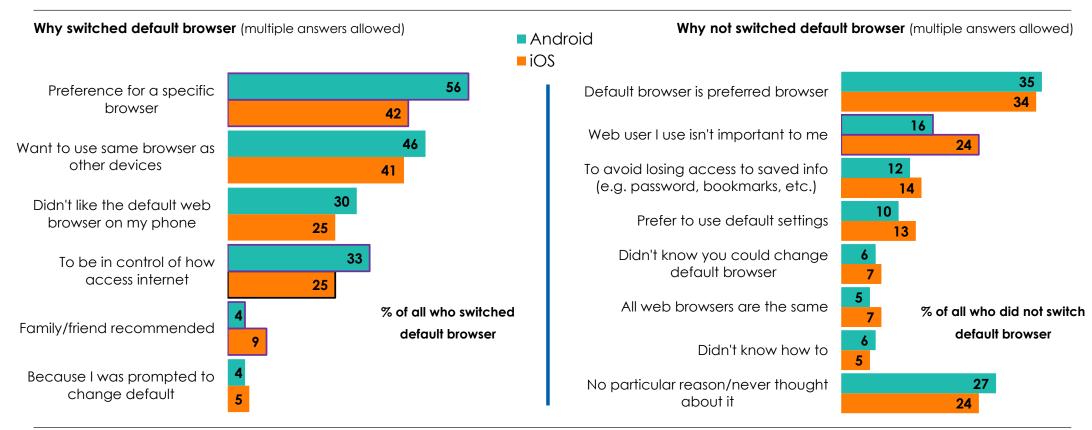
SWITCHEASE - How easy or difficult was it to change the default web browser on your current personal smartphone? All who switched (602) WHYDIFF -Which of the following issues, if any, did you experience when changing the default web browser on your current personal smartphone? All who found it fairly easy or difficult (217) Verian

Main reasons for switching were browser preference and compatibility across devices. Main reasons for not switching were preference for default, because it isn't important which browser is used, or never thought about it.



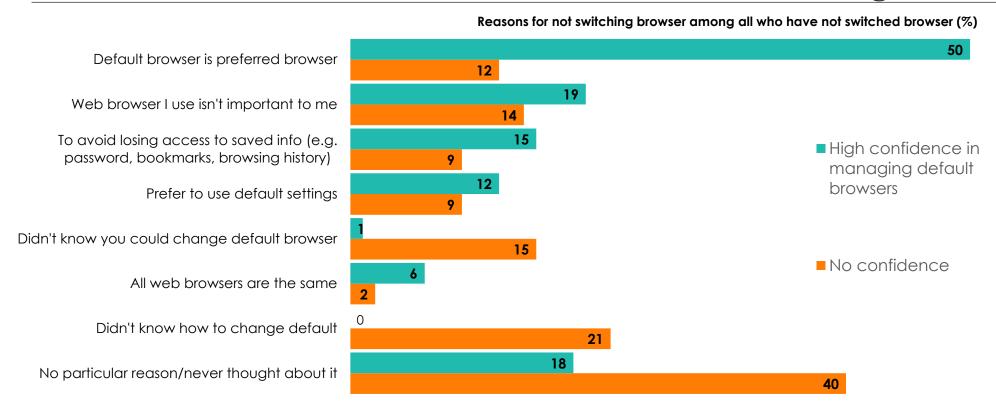
WHYSWITCHDEF - Why did you change the default web browser on your current personal smartphone? All who switched default (602) iOS (203) Android (388) WHYNOCHANGE - Are there any particular reasons why you have not changed the default web browser on your smartphone? All who did not switch default (2,390) iOS (1,298) Android (1,038)

Reasons for switching and not switching default browsers were largely the same across Android and iOS users.



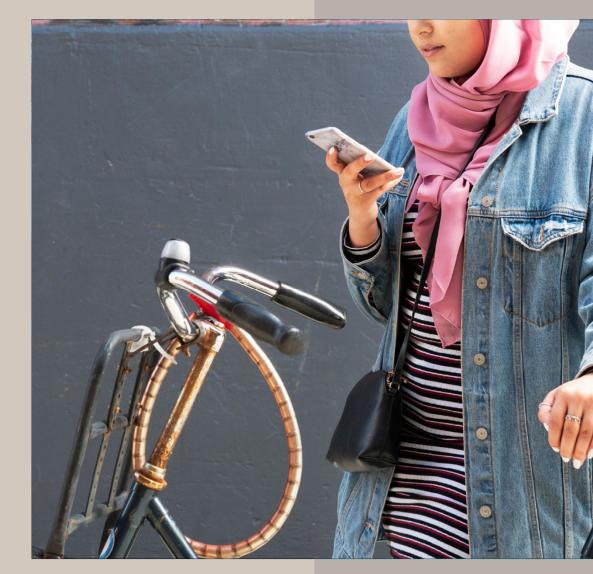
WHYSWITCHDEF - Why did you change the default web browser on your current personal smartphone? All who switched default (602) iOS (203) Android (388) WHYNOCHANGE - Are there any particular reasons why you have not changed the default web browser on your smartphone? All who did not switch default (2,390) iOS (1,298) Android (1,038)

Among those who didn't switch default, high confidence users mainly said this was because they preferred the default, while for low confidence users reasons focused more on lack of knowledge.



WHYNOCHANGE - Are there any particular reasons why you have not changed the default web browser on your smartphone? All who did not switch default (2,390) High confidence managing defaults (737) No confidence (292) Note: 'High confidence' group self-reported 'definitely' on both DOWNCONF and DEFAULTCONF; 'No confidence' group self-reported 'probably not' or 'definitely not' on both DOWNCONF and DEFAULTCONF.

10. Prompts and notifications to switch or change default browser



Among those who had switched default, around three in five had seen 'change back default' type prompts, no difference by OS

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.

≰iPhone



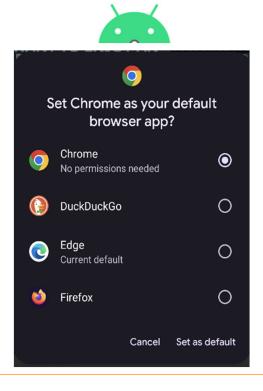
You can now use Chrome any time that you tap links in messages, documents and other apps.

by default

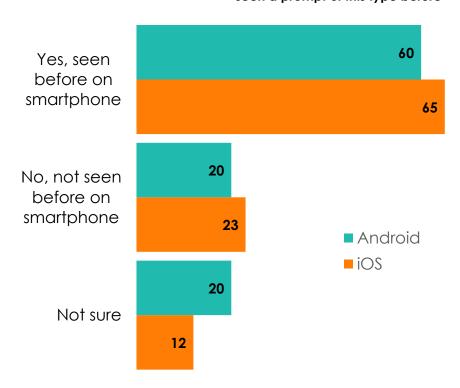
Open Settings
 Tap Default browser app
 Select Chrome

Make default in settings...

No Thanks

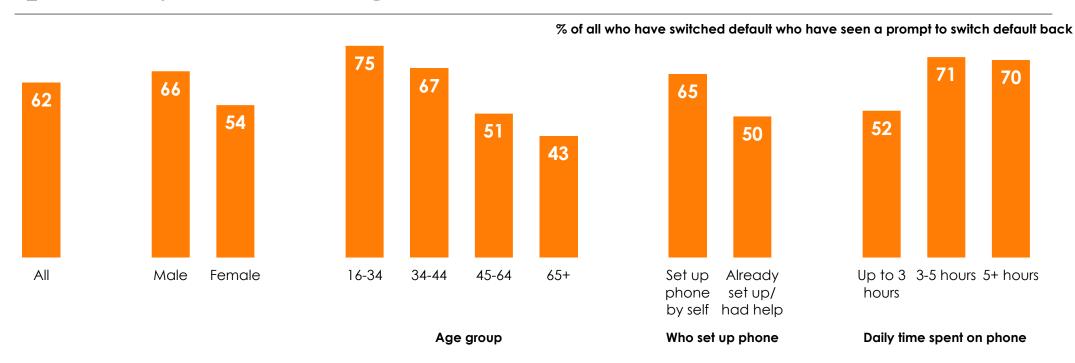


Whether users who changed default browser had seen a prompt of this type before



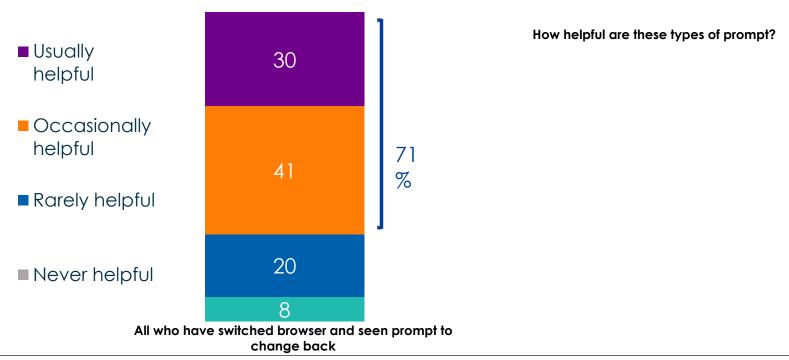
PROMPTSEEN - Have you ever seen a pop-up message similar to this on your smartphone, which asks if you want to change your default web browser back to a previous default browser? All who changed default browser (n=591) Android (388) iOS (203)

Among those who had switched defaults, awareness of prompts higher among men, youngest, those who set up phone by self, and high-volume users.



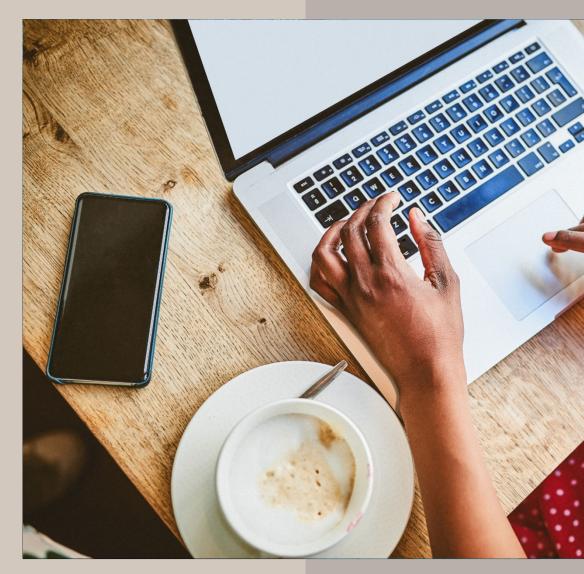
PROMPTSEEN - Have you ever seen a pop-up message similar to this on your smartphone, which asks if you want to change your default web browser back to a previous default browser? All who changed default browser (591) 16-34 (185) 35-44 (131) 45-64 (200) 65+ (75) Male (344) Female (241) Set up phone (482) Already set up/had help (109) Up to 3 hours (262) 3-5 hours (199) 5+ hours (120)

Among switchers who had seen this type of prompt, seven in ten found this helpful overall, though most of this subgroup said it was only 'occasionally helpful'.

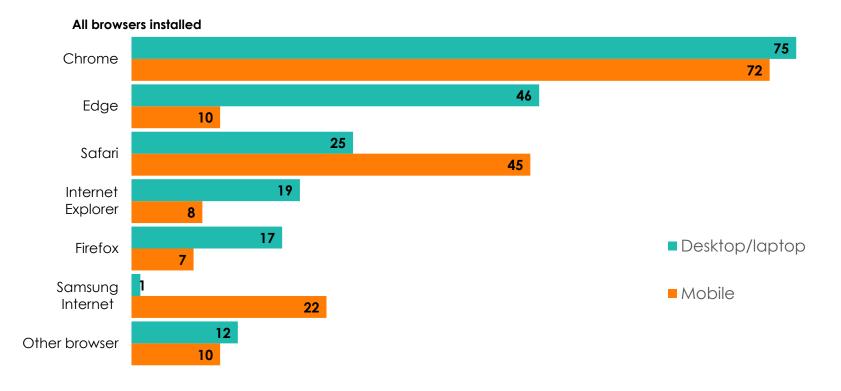


PROMPTPURP - And still thinking about pop-up prompts that ask you to confirm which browser you want to use as your default browser. To what extent do you find these kinds of prompts helpful? All who have switched default browser and seen prompts (365)

11. Browser behaviour on desktops/laptops



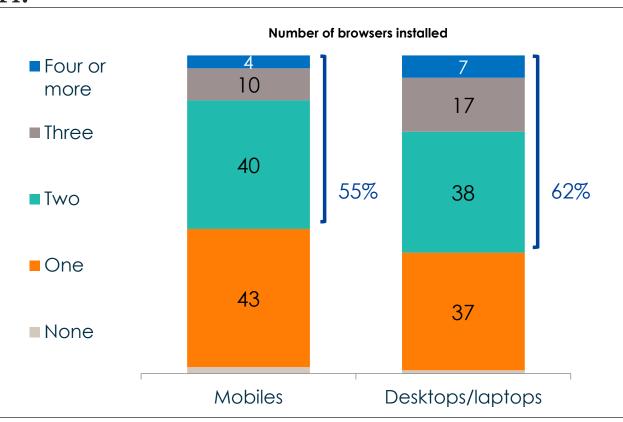
All browsers installed: Edge, IE and Firefox far more common on laptops than smartphones.



BROWINSTALL/COMPBROWINSTALL - Which web browsers do you currently have installed [on your smartphone/on this computer]? All mobile users (3,060) All who also have computer (2,282) Verian

76

All browsers installed: Slightly greater spread of browsers on computers vs mobile. More cross-use of Chrome across devices compared with Safari.



Most used computer browser by most used mobile browser

Of all computer users who mostly use Safari on mobile:

- 35% also use mostly Safari on computer
- 39% mostly use Chrome
- 17% mostly use Edge
- 9% mostly use other browser

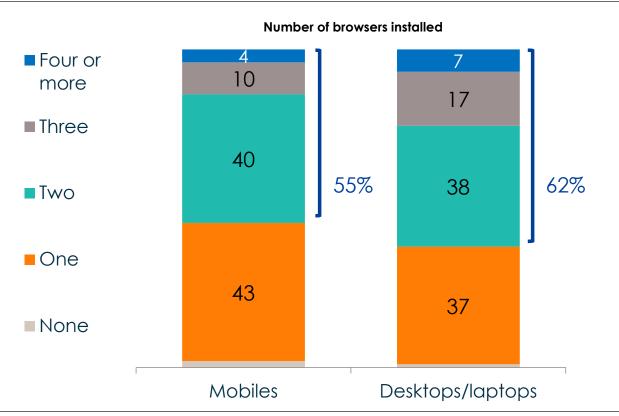
Of all computer users who mostly use Chrome on mobile:

- 75% also mostly use Chrome on computer
- 14% mostly use Edge
- 3% mostly use Safari
- 8% mostly use other browser

BROWINSTALL/COMPBROWINSTALL - Which web browsers do you currently have installed [on your smartphone/on this computer]? All mobile users (3,060)
All who also have computer (2,282). All who mostly use Safari on mobile (n=820) All who mostly use Chrome on mobile (n=1,108)

Verian | 77

All browsers installed: Slightly greater spread of browsers on computers vs mobile. More cross-use of Chrome across devices compared with Safari.



Most used mobile browser by most used computer browser

Of all computer users who mostly use Safari on computer:

- 86% also use mostly Safari on mobile
- 10% mostly use Chrome
- 4% mostly use other browser

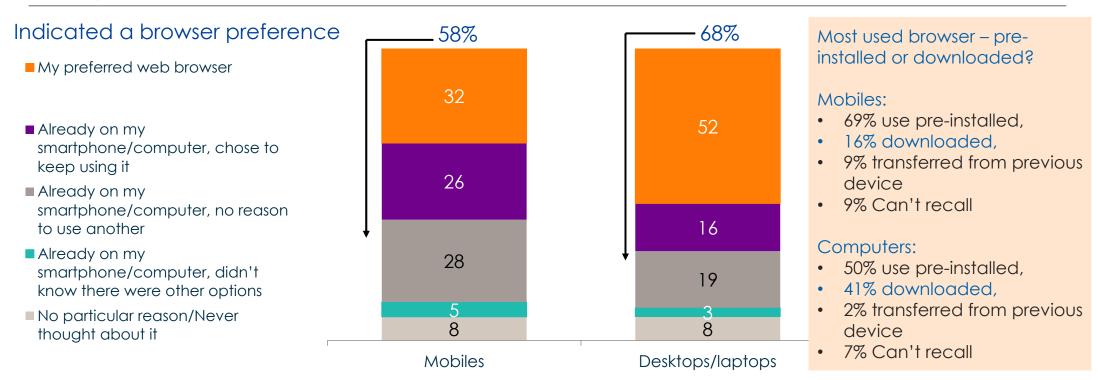
Of all computer users who mostly use Chrome on computer:

- 67% also mostly use Chrome on mobile
- 26% mostly use Safari
- 7% mostly use other browser

BROWINSTALL/COMPBROWINSTALL - Which web browsers do you currently have installed [on your smartphone/on this computer]? All mobile users (3,060) All who also have computer (2,282). All who mostly use Safari on computer (n=321) All who mostly use Chrome on computer (n=1,241)

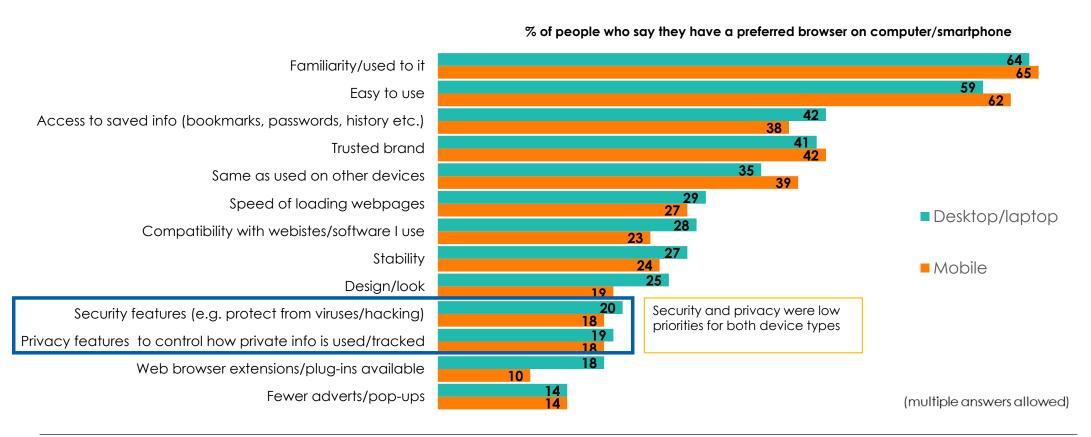
Verian | 78

Why is this your most used browser? Computer users more likely than mobile users to choose based on preference, less likely to passively use pre-installed browser. Download or use pre-installed? Computer users more likely to download their most used browser.



WHYMOST1/COMPWHYMOST1 - You mentioned that [BROWMOST] is your most used web browser on your [personal smartphone/ computer]. Why do you use this particular web browser on your [smartphone/computer]? All who name a browser on their phone (2,992) All who name a browser on their computer (2.249) Verian ^{*}

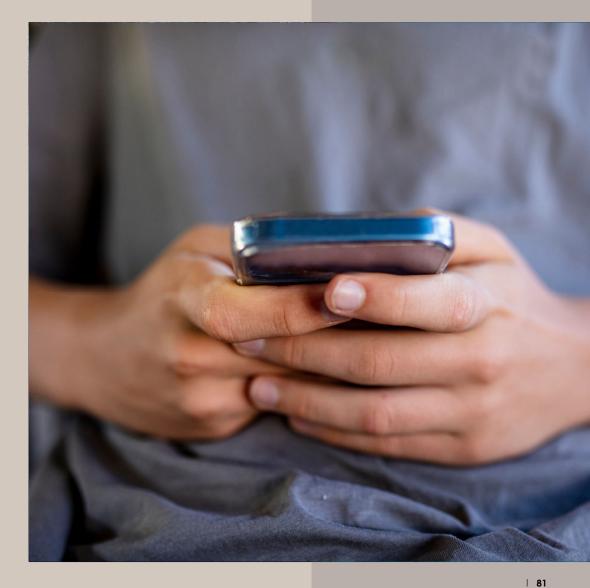
Of those who indicated a browser preference, reasons for browser preference were broadly similar across devices.



WHYMOST2/COMPWHYMOST2 - Are there any particular reasons why you prefer this web browser on your [smartphone/computer]? All who specify a preferred web browser on smartphone (1,716) All who specify a preferred web browser on computer (1,525)

80

12. Summary/ Conclusions



Key findings (1)

- When choosing a new phone, OS loyalty is strong. Most important factors driving purchase were price and brand. Pre-installed web browsers, security and privacy were among the least important factors driving purchases.
- 2 iOS has a younger and more affluent profile than Android.
- Managing browsers on smartphone is a low salience topic, most had rarely or never engaged with these issues before the survey.
- Just under 4 in 10 self-identified as having high technical confidence in managing smartphone browsers. Self-reported low confidence was more concentrated among women, older people, lower income and education.
- 5 Android users were aware of a greater number of browsers than iOS users
- iOS users almost exclusively use Safari and Chrome (Safari most used). Android users use a broader spread of browsers (Chrome by far most used).
- Most rely on pre-installed browsers, only 16% having downloaded a different preferred browser. When used as a main browser, Safari and Samsung Internet were usually pre-installed, while Chrome on iOS and less mainstream browsers were more likely to have been downloaded.
 - 6 in 10 indicated a browser preference, with choice mostly based on familiarity & ease of use. Compared to Safari, Chrome was more likely to be chosen based on brand trust & cross-device compatibility. Privacy/security were not major drivers in browser choice, but Safari users were slightly more likely than Android users to choose on this basis.

Key findings (2)

- Of those who could state the location of their browser, there was an equal split between those who positioned 9 their browser and those who left position as per default. Older, females, least technically confident and iOS least likely to set browser location.
- Apps are preferred over websites, with apps being especially popular among younger people, with higher 10 incomes, the more digitally confident and iOS users.
- Based on true/false guiz scores, most (70%) already knew that the default smartphone browser can be changed, but there was weaker knowledge of issues related to in-app browsing.
- One in five had changed their default browser, higher for Chrome and 'other' browser users. 12
 - Main reasons for switching were browser preference and cross-device compatibility.
 - Around 3 in 5 switchers had seen a 'change default' prompt; most found these helpful to some degree.
- 8 in 10 had **not** changed default smartphone browser. Main barrier to switching for high confidence users was 13 preference for default, while for low confidence users it was lack of knowledge about switching/how to switch.
 - There was more active browser management on computers/laptops vs mobiles: computer users were more likely to choose/download a browser based on preference and less likely to passively use pre-installed browser.

Mobile Browsers Quantitative Consumer Research

14

Mobile Browsers Quantitative Consumer Research

Findings presented to Mobile Browsers and Cloud Gaming Inquiry Group

Becky Hamlyn & Tom Luckwell, Verian Group

30 May 2024



