Ofcom

A demographic deep dive into internet adoption

Analysis using Ofcom's Technology Tracker 2024
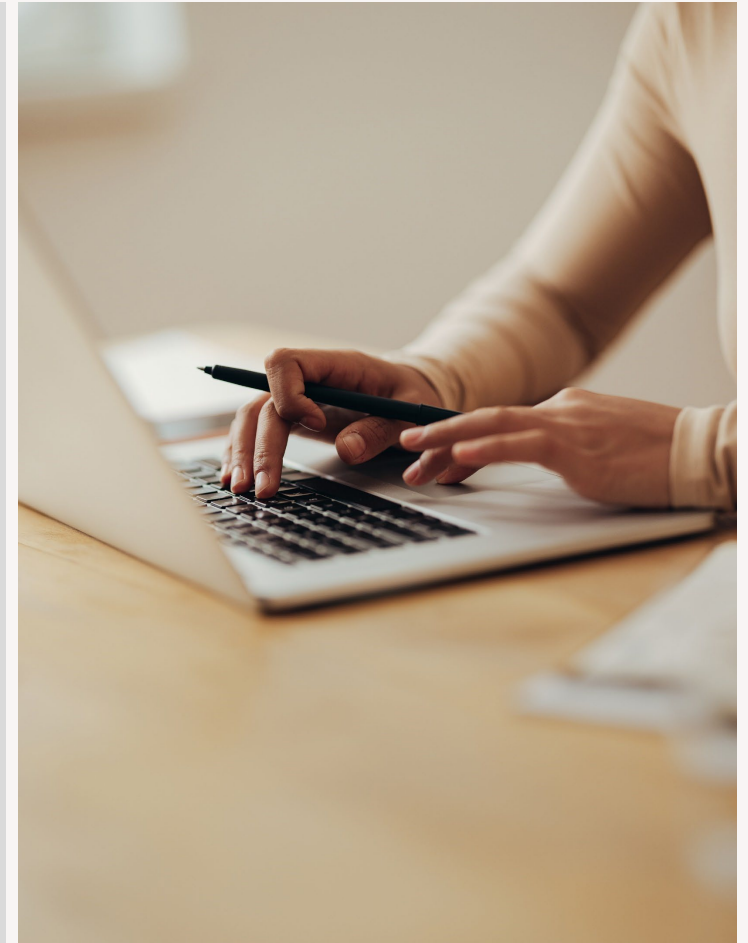
March 2025

Executive Summary

Ofcom has long recognised the importance of understanding the scale of households in the UK who remain offline. As more services across the economy move online, broadband take-up numbers are lagging significantly behind availability.

Through in-depth analysis of our long-running Technology Tracker survey, in conjunction with a qualitative research study into digital disadvantage, this report explores the demographic makeup of those who do not have, or do not use, home broadband connectivity. It reflects Ofcom's commitment to explore the barriers to broadband take-up expressed in our report to Government on the Future of TV Distribution*.

The report focusses on three groups: 1) non-users, 2) mobile data-only users, 3) external-only users, meaning those who use the internet but only outside the home, such as at a library or friends' house.

Report highlights
- Age is a predictor for not having internet access at home, but the analysis shows it is much stronger for those aged 85+ than those aged 75-84.
- Despite this, more than half of those without internet access at home are younger than 75.
- People living in households where the chief income earner is either not in work, retired and reliant on state pensions, or semi or unskilled workers** account for more than half of those without internet access at home.
- 1% (0.4m users) have internet connectivity at home that they do not use.
- The analysis shows renting from a social landlord is a predictor for not having home broadband access.

*https://www.ofcom.org.uk/tv-radio-and-on-demand/public-service-broadcasting/future-of-tv-distribution/
**Social grades DE: a classification system based on chief income earner in the household. D: semi or unskilled manual worker, E: not employed or retired and reliance on state pension only.

Introduction

Description of the report's content

This report summarises findings from an exploratory analysis of survey participants who do not use the internet and/ or who do not have broadband connections at home, using data from the Ofcom Technology Tracker, 2024*.

This analysis has three parts, summarised below with a more detailed description in the accompanying technical appendix.

1. Combining survey responses to key survey questions to identify different groups (described on slide 6-7 in more detail, but can be broadly summarised as: non-users, mobile data-only users, external-only users, meaning those who use the internet but only outside the home).

2. A standard demographic breakdown (described as 'descriptive analysis' in the technical report) of each of the three groups has been undertaken. A selection of these demographic splits has been summarised in this document.

3. Predictive modelling analysis was conducted to calculate the role of demographic characteristics as predictors of being in a usage group when controlling for other factors.
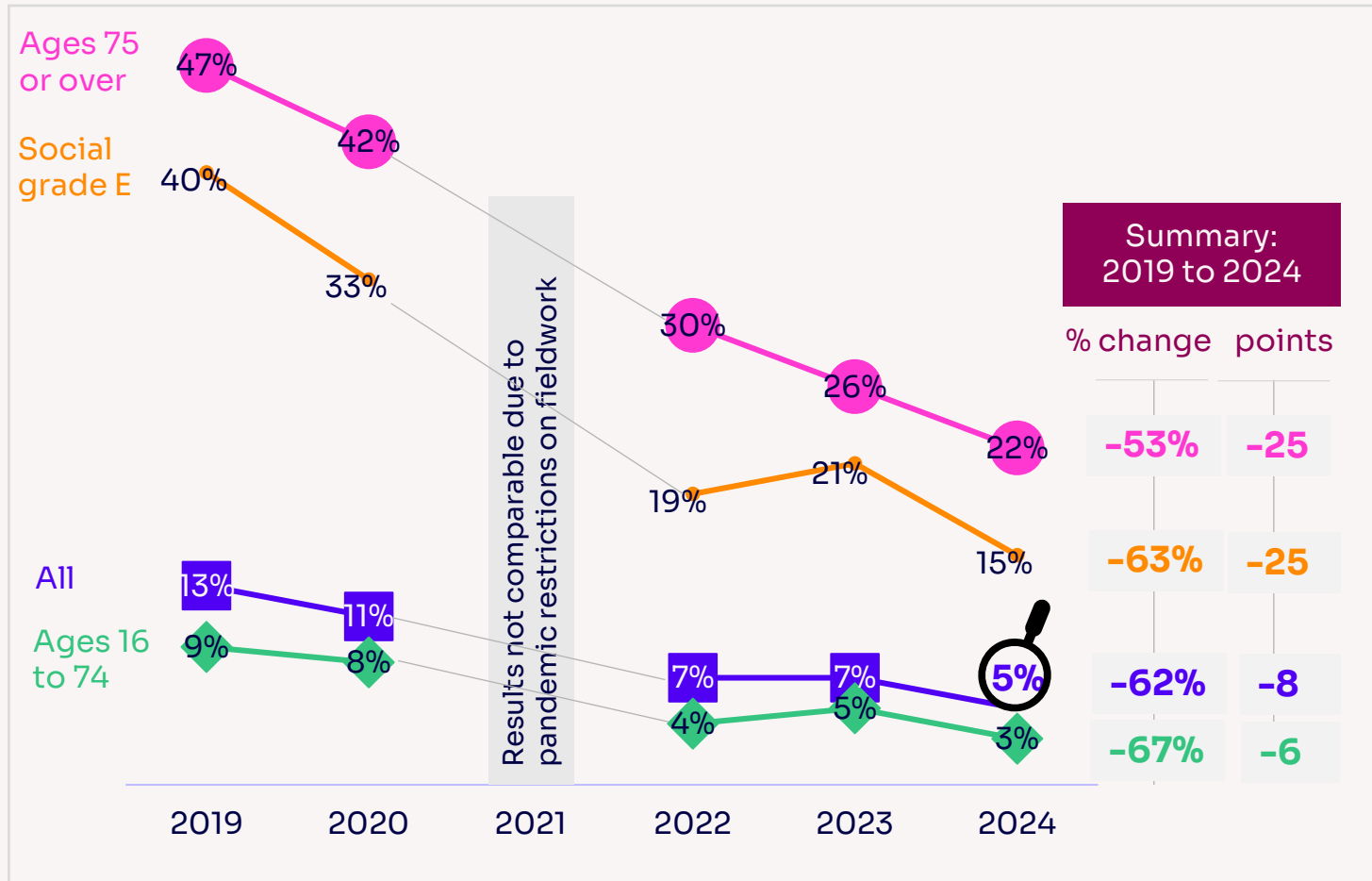

NOTE: Ofcom is aware that many factors have the potential to influence an individual's ability and propensity to access and use the Internet**. **The analysis summarised in this report (a demographic deep dive into Internet adoption) looks at specific aspects related to the means, access, or methods of those without broadband at home or who do not use the Internet** and, as such, provides insights related to specific aspects linked to digital exclusion and not a holistic overview of digital exclusion overall.

*Ofcom Technology Tracker (a nationally representative survey of those aged 16+ in the UK), for more information see:
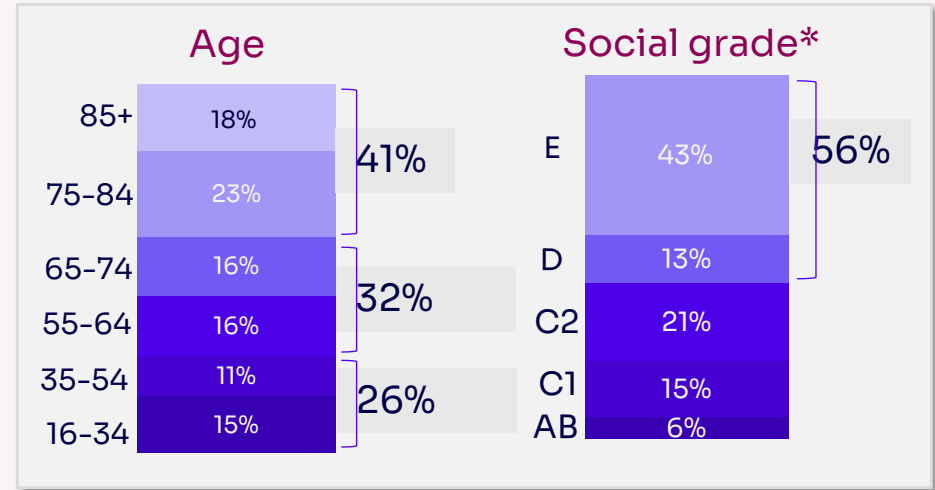questionnaire Technology Tracker questionnaire 2024   data tables: Technology Tracker data tables 2024 technical report: Technology Tracker technical report 2024 **Digital exclusion: a review of Ofcom's research on digital exclusion among adults in the UK

Analysis context: 5% of UK aged 16+ do not have home internet access: an 8 point decline since 2019

(UK; no internet access at home 2019 to 2024)

Ages 75 or over
Social grade E
All
Ages 16 to 74

47% 42% 30% 26% 22%
40% 33% 19% 21% 15%
13% 11% 7% 7% 5%
9% 8% 4% 5% 3%

Results not comparable due to pandemic restrictions on fieldwork

2019 2020 2021 2022 2023 2024

Summary: 2019 to 2024	
% change	points
−53%	−25
−63%	−25
−62%	−8
−67%	−6

Profile of those without home internet access (5% of UK) (2024)

Age		Social grade*	
85+	18%	E	43%
75–84	23%		
65–74	16%	D	13%
55–64	16%	C2	21%
35–54	11%	C1	15%
16–34	15%	AB	6%

41% 32% 26%
56%

Compared to pre-pandemic levels, there has been a sharp fall in those without internet access at home, now at 3% among 16 to 74 year olds.
This sharp downward shift was also evident among those aged 75 or over—a fifth are without access, half the 2019 level.
Also…
- a quarter without home access are under the age of 54,
- a fifth are social grades ABC1, and a fifth are C2.

Source: Ofcom Technology Tracker. QE1. Do you or does anyone in your household have access to the internet at HOME (via any device, e.g. PC, mobile phone etc), and if so, do you personally use the internet at home? Base: All respondents: 2019 (3909) 2020 (3959) 2022 (4003) 2023 (3997) 2024 (4000)/ 2024 only respondents with no internet access (245)*Social grade: classification used in market research/ suveys to group types of occupations related to qualifactions and type of work and reliance on benefits for income. Based on chief income earner in the household. Summarised as - A: Higher level managerial roles/ professional, B: Intermediate managerial/ professional, C1: Supervisory, clerical, junior management, C2: Skilled manual worker, D: semi or unskilled manual worker, E: not employed or retired and reliance on state pension only. This has been used for analysis because income data was only provided by around half the survey sample

While 'no need/ not interested' is the most common reason (69%), for those without internet access and not planning to get it, 40% give this as their <u>sole reason</u>

- Most (7 in 10) Technology Tracker survey participants unlikely to get an online service at home in the next 12 months said that this was due to a lack of need or interest in having such a connection; 3 in 10 said this **and also** selected another response.
- As well as other than a lack of need or interest, reasoning for not getting a connection included factors such as 'someone can go online for me' (17%) 'using the internet is too complicated' (13%), and reasons related to 'cost' (27%) (either of services or hardware).
- This question does not provide any exploratory or contextual information and is part of a longer survey covering many other aspects of technology. It is likely to reflect 'top of mind' reasoning, in what may be a fairly complex issue.
- <u>Qualitative research</u> (not related to the Technology Tracker) indicates that those who do not have internet at home may not always perceive a benefit to them. This may be based on not having had a good experience going online or because they are able to access any essential services through other means (via another person's connection, for example).
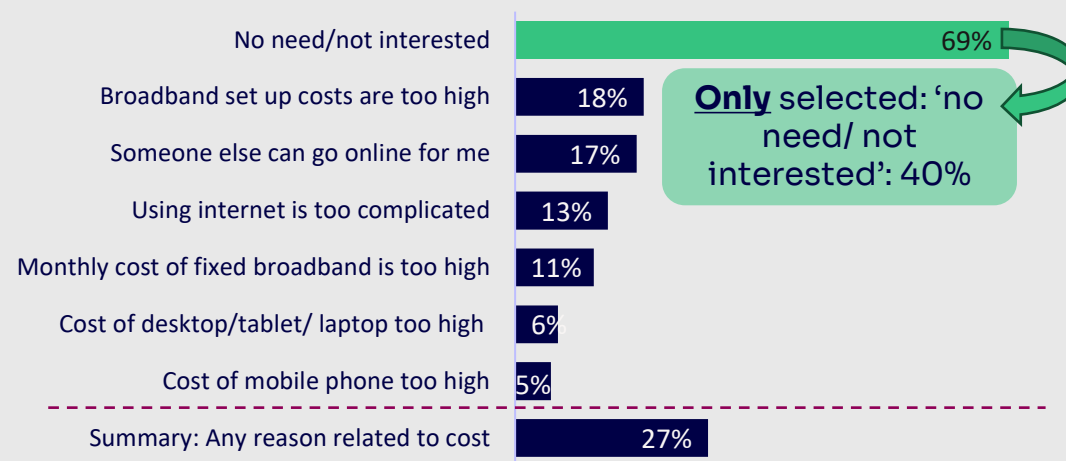
5% of UK 16+ live in a household with no internet access

82% of those with no access were unlikely or certain not to get internet access in the next 12 months

69% of those unlikely to get access in the next 12 months said this was because they had 'no need/ not interested'

No need/not interested	69%
Broadband set up costs are too high	18%
Someone else can go online for me	17%
Using internet is too complicated	13%
Monthly cost of fixed broadband is too high	11%
Cost of desktop/tablet/ laptop too high	6%
Cost of mobile phone too high	5%
Summary: Any reason related to cost	27%

Only selected: 'no need/ not interested': 40%

Specific reasons included in chart are those selected by 5% or more, other reasons provided by >0.5% were: 'monthly cost of a mobile phone service' (3%), 'happy to use the internet at work/elsewhere' (2%), 'broadband is too slow where I live' (2%), 'concerned about security/ fraud' (4%), 'poor eyesight' (2%)
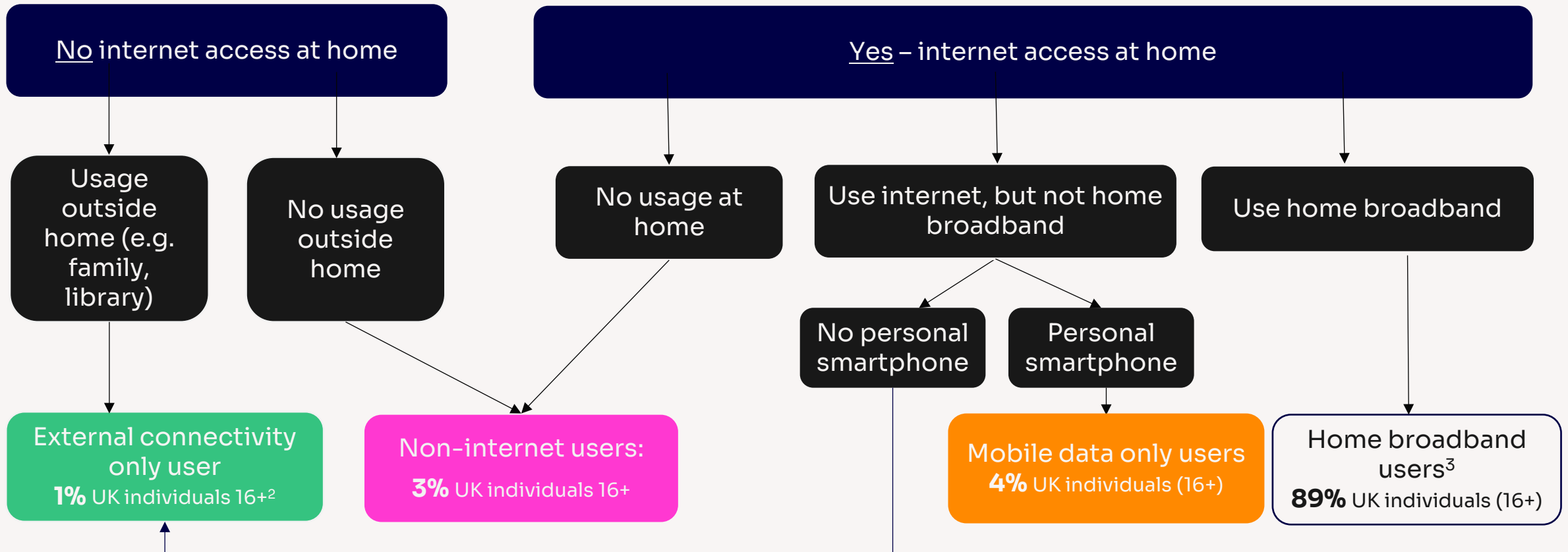
Not all with access <u>use</u> the Internet, and there are variances in the means of connectivity

To understand more about those who **do not have a home broadband connection or do not use the internet** different usage 'typologies' groups have been developed[1]. These groups are mapped out in the diagram below, using questions in the Technology Tracker survey.

No internet access at home	Yes – internet access at home

Usage outside home (e.g. family, library)

No usage outside home

No usage at home

Use internet, but not home broadband

Use home broadband

No personal smartphone

Personal smartphone

External connectivity only user
1% UK individuals 16+[2]

Non-internet users:
3% UK individuals 16+

Mobile data only users
4% UK individuals (16+)

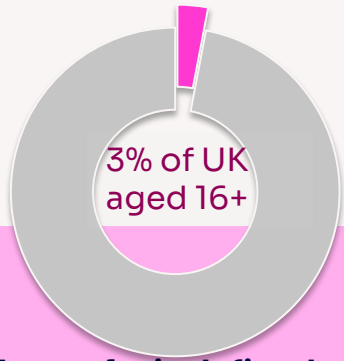**Home broadband users[3]**
89% UK individuals (16+)

NOTES:
1. Internet use will vary across these user groups, regardless of access method. Ofcom's Adult Media Literacy Tracker provides more insight here.
2. Totals from each group above will not total 100%. This is because 2% of research participants answered 'don't know' to whether they had internet access at home, as well as reporting findings in whole figures.
3. Includes 4% who use broadband from a mobile network connecting via a USB/ dongle/ mobile WiFi router/ or built in SIM connectivity with a laptop/ tablet

Analysis groups: Definitions and estimates of sizing:
(All UK, aged 16+) For specific definitions see technical appendix

Note: Percentages based on survey research are shown to the nearest whole number. Population estimates are based on the percentage score from the survey including decimal points and then rounded to the nearest 100,000
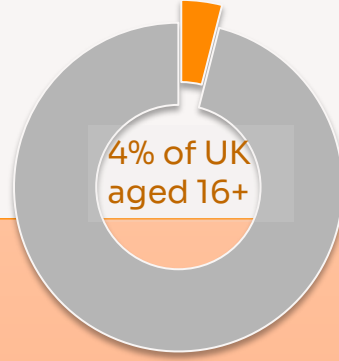
Non-internet users	Mobile data only users	External connectivity only users

Non-internet users

3% of UK aged 16+

(approximately 1.9 million)

Mobile data only users

4% of UK aged 16+

(approximately 2.1 million)

External connectivity only users

Note this group has a very small base and is indictive only

1% of UK aged 16+

(approximately 0.5 million)

For analysis defined as:

- Those who do not have access to any kind of internet connectivity at home
- Those who have access at home that they do not use. NB: 1% 0.4m have internet access at home that they **do not use**

AND do not use the Internet outside the home [Included here for completeness but no respondents identified who did not use the Internet at home who did use the Internet outside the home]
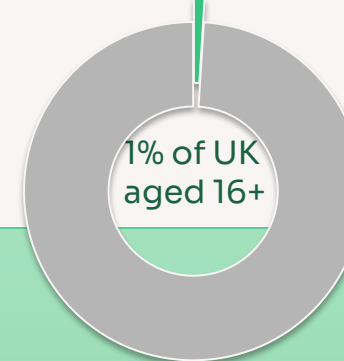
For analysis defined as:

- Those who only use their OWN mobile data at home (including smartphone only users, and those who use mobile data for other devices such as laptops)

[Note: some of this group will find a mobile meets all their current digital needs. Others within the group will feel inhibited by relying on mobile data (as noted in xxx report).]

For analysis defined as:

- Those who only access the Internet outside of the home (e.g. public WiFi, library or workplace Internet)
- Those who do not have their own mobile data to use at home [Included here for completeness but no respondents identified]

Contextual information from Tech Tracker 2024, QE1.
Internet access (any) at home: 94%, no internet access at home: 5%, 1% 'don't know'

Summary of key findings from analysis

Non-internet users

- Compared to the overall profile of the Technology Tracker sample, those who do not use the internet at home or elsewhere skew towards older age groups (particularly those aged 85+), DE social grades, social housing rental, the unemployed or not working, and those who have an impacting or limiting condition.

Predictive modelling analysis suggests these characteristics (other than presence of an impacting condition overall) increases the likelihood of an individual of being a non-internet user, compared to someone who does not have that characteristic.

Mobile data only users

- Compared to the overall profile of the Technology Tracker sample, those who only use a mobile data connection at home skew towards those aged 18–24 and those who rent social housing.

Predictive modelling analysis suggests renting private or social housing increases the likelihood of an individual of being a mobile data only user, compared to other forms of tenure. However, age is not a factor.

External connectivity only users

- Compared to the overall profile of the Technology Tracker sample, those who only go online outside the home skews towards those aged 18–24 and those renting from a social landlord.

Predictive modelling analysis suggests these characteristics increase the likelihood of an individual being an external connectivity-only user, compared to someone who does not have that characteristic.

Additional demographic analysis is available in the technical report, including by Nation/ Region. Predictive modelling suggests that living in Yorkshire and Humberside increases the likelihood of being a non-internet user compared to someone who is not from that region. However, it is important to note that the Technology Tracker has not been designed to be representative by region, and as described in the technical report.

Non-internet users: profile and predictive modelling analysis

Data and analysis on slide

Non-internet users
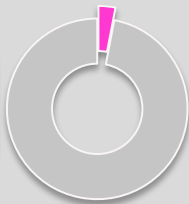
3% of UK aged 16+
(Technology Tracker, 2024*)

Breakdowns
Age, Social Grade, Working status, Tenure, Impacting/ limiting condition
Additional demographic analysis is available in the technical report, including analysis by Nation/ Region.
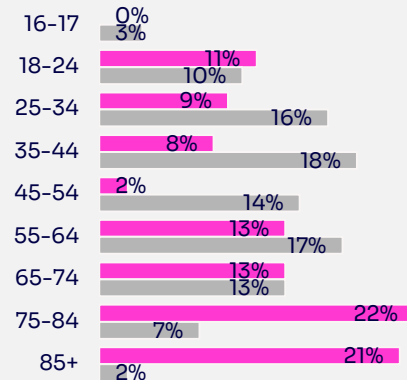
Analysis type

A. Profile
Percentage of non-internet users by demographic characteristic vs. total sample

B. Predictive modelling findings
The estimated impact of specific demographic characteristics (e.g. being aged 85+) as a predictor of being a non-internet user, compared to those without that characteristic (e.g. not aged 85+).

This analysis uses RFE (Recursive Feature Elimination) regressions and controls for other factors and therefore will not correspond to comparisons using standard data breakdowns. RFE analysis attempts to isolate the impact of the individual characteristic from other demographic characteristics which may be correlated, for example, a higher proportion older people are retired. NB: this is rounded to a whole number in charts, a more precise figure is available in the technical report

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A. Age of non-users vs. total sample

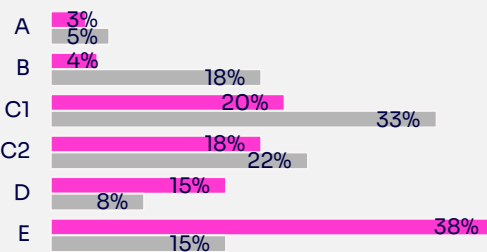| Age	Non-users	Total
16-17	0%	3%
18-24	11%	10%
25-34	9%	16%
35-44	8%	18%
45-54	2%	14%
55-64	13%	17%
65-74	13%	13%
75-84	22%	7%
85+	21%	2%

B. Estimated impact of age as a predictor of being a non-user

Being **aged 85+** increases likelihood by a factor of **8**

Being **aged 75-84** increases likelihood by a factor of **2**

A. Social grade of non-users vs. total sample

Grade	Non-users	Total
A	3%	5%
B	4%	18%
C1	20%	33%
C2	18%	22%
D	15%	8%
E	38%	15%

B. Estimated impact of social grade as a predictor of being a non-user

Social grade alone was not a good predictor of non-use

A. Tenure of non-users vs. total sample

Tenure	Non-users	Total
Mortgage	4%	28%
Owned Outright	32%	31%
Rented from Social Landlord	37%	18%
Rented from Private Landlord	7%	15%
Don't know/Prefer not to say	20%	7%
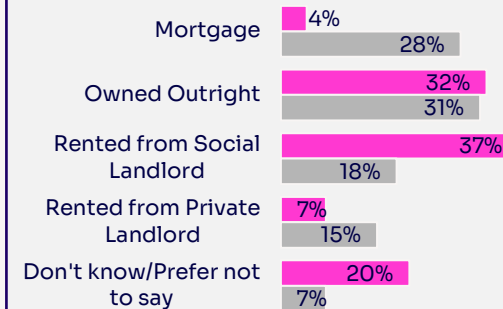
B. Estimated impact of tenure as a predictor of being a non-user

Renting from a **social landlord** increases likelihood by a factor of **2**

A. Working status of non-users vs. total sample

Status	Non-users	Total
Full-time work	10%	47%
Retired	62%	24%
Part-time work	5%	12%
A student	0%	6%
Unemployed	11%	6%
Full-time in home	6%	4%

B. Estimated impact of working status as a predictor of being a non-user

Being **retired** increases likelihood by a factor of **3**

Having f**ull-time responsibility of the home/family** increases likelihood by a factor of **4** (NB this category includes carers and stay-at-home parents).

IMPORTANT NOTES ON THE DATA

Total sample size (unweighted): 4000
Non-user sample size (unweighted): 145

The 'increased likelihood' figures come from modelling based on relatively low numbers of respondents and so can be used as information about how people access or do not access the internet, but should not be treated as precise estimates
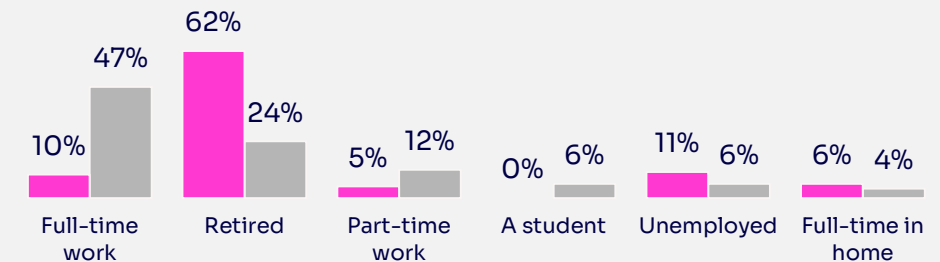
Mobile data only users: profile and predictive modelling analysis

Data and analysis on slide

Mobile data only

4% of UK aged 16+ (Technology Tracker, 2024*)

Breakdowns**

Age, Social Grade, Working status, Tenure, financial wellbeing

Additional demographic analysis is available in the technical report, including analysis by Nation/ Region.

Analysis type

A. Profile
Percentage of mobile only users by demographic characteristic vs. total sample

B. Predictive modelling findings***
The estimated impact of specific demographic characteristics (e.g. being aged 85+) as a predictor of being a non-internet user, compared to those without that characteristic (e.g. not aged 85+).

This analysis uses RFE (Recursive Feature Elimination) regressions and controls for other factors and therefore will not correspond to comparisons using standard data breakdowns. RFE analysis attempts to isolate the impact of the individual characteristic from other demographic characteristics which may be correlated, for example, a higher proportion older people are retired. NB: this is rounded to a whole number in charts, a more precise figure is available in the technical report

A. Age of mobile data only vs. total sample

Age	Mobile data only	Total sample
16-17	7%	3%
18-24	20%	10%
25-34	18%	16%
35-44	12%	18%
45-54	21%	14%
55-64	9%	17%
65-74	11%	13%
75-84	3%	7%
85+	0%	2%

B. Estimated impact of age as a predictor of being a mobile data only user

Age alone was not a good predictor of being mobile-data only user

A. Tenure of mobile data only vs. total sample

Tenure	Mobile data only	Total sample
Mortgage	19%	28%
Owned Outright	13%	31%
Rented from Social Landlord	31%	18%
Rented from Private Landlord	27%	15%
Don't know/Prefer not to say	7%	7%

B. Estimated impact of tenure as a predictor of being a mobile data only user

Renting from a **social landlord** increases your likelihood by a factor of **2**

Renting from **private landlord** increases your likelihood by a factor of **3**

A. Social grade of mobile data only vs. total sample

Grade	Mobile data only	Total sample
A	3%	5%
B	11%	18%
C1	18%	32%
C2	34%	22%
D	12%	8%
E	20%	15%

B. Estimated impact of social grade as a predictor of being a mobile data only user

Social grade alone was not a good predictor of being mobile-data only user

A. Respondent opinion of their financial wellbeing mobile data only vs. total sample

	Mobile data only	Total sample
Doing Well	19%	26%
Getting By	53%	58%
Struggling	23%	10%
Don't know	4%	6%

B. Estimated impact of respondent opinion of their financial wellbeing as a predictor of being a mobile data only user

Financial wellbeing alone was not a good predictor of being mobile-data only user

IMPORTANT NOTES ON THE DATA
Total sample size (unweighted): 4000
Non-user sample size (unweighted): 130

For questions used for demographic splits, see Technology Tracker questionnaire

The 'increased likelihood' figures come from modelling based on relatively low numbers of respondents and so can be used as information about how people access or do not access the internet, but should not be treated as precise estimates

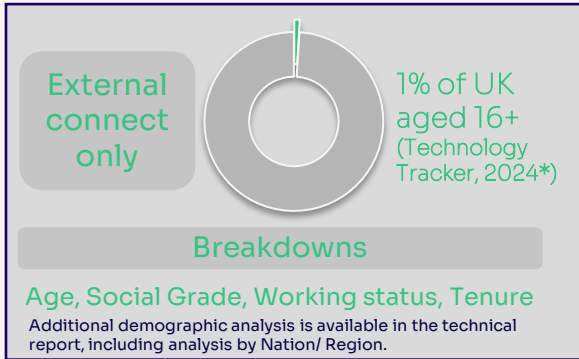### A. Working status of mobile data only vs. total sample

Status	Mobile data only	Total sample
Full-time work	37%	47%
Retired	14%	24%
Part-time work	14%	12%
A student	11%	6%
Unemployed	21%	6%
Full-time in home	3%	4%

B. Estimated impact of employment status as a predictor of being a mobile data only user
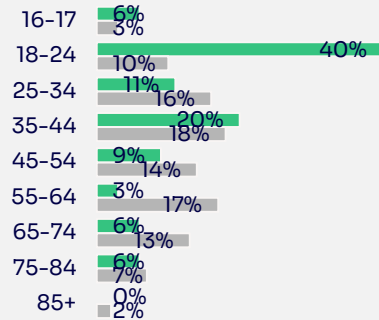
Employment status alone was not a good predictor of being mobile-data only user

External connectivity only users: profile and predictive modelling analysis (note low sample size)
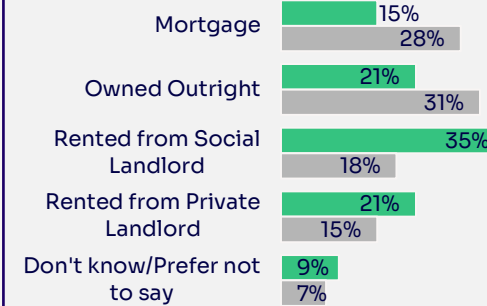
Data and analysis on slide

External connect only

1% of UK aged 16+ (Technology Tracker, 2024*)

Breakdowns

Age, Social Grade, Working status, Tenure

Additional demographic analysis is available in the technical report, including analysis by Nation/ Region.

Analysis type

A. Profile
Percentage of external only connectivity users by demographic characteristic vs. total sample

B. Predictive modelling findings
The estimated impact of specific demographic characteristics (e.g. being aged 85+) as a predictor of being a non-internet user, compared to those without that characteristic (e.g. not aged 85+).

This analysis uses RFE (Recursive Feature Elimination) regressions and controls for other factors and therefore will not correspond to comparisons using standard data breakdowns. RFE analysis attempts to isolate the impact of the individual characteristic from other demographic characteristics which may be correlated, for example, a higher proportion older people are retired. NB: this is rounded to a whole number in charts, a more precise figure is available in the technical report
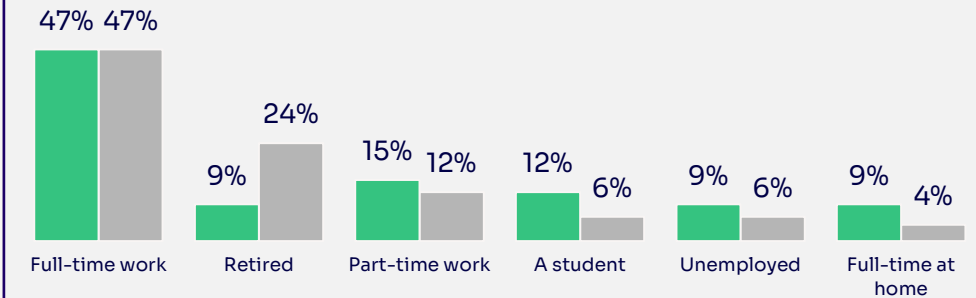
A. Age of external connectivity only vs. total sample

Age	External connectivity only	Total sample
16-17	6%	3%
18-24	40%	10%
25-34	11%	16%
35-44	20%	18%
45-54	9%	14%
55-64	3%	17%
65-74	6%	13%
75-84	6%	7%
85+	0%	2%

B. Estimated impact of age as a predictor of being an external connectivity only user

Being **aged 18–24+** increases your likelihood by a factor of **2**

A. Social grade of external connectivity only vs. total sample
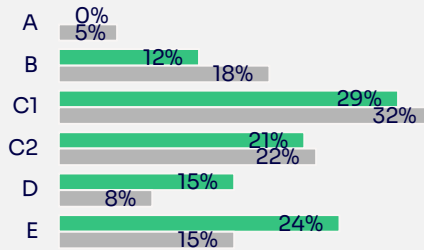
Social grade	External connectivity only	Total sample
A	0%	5%
B	12%	18%
C1	29%	32%
C2	21%	22%
D	15%	8%
E	24%	15%

B. Estimated impact of social grade as a predictor of being an external connectivity only user

Social grade alone was not a good predictor of being an external connectivity only user

IMPORTANT NOTES ON THE DATA

Total sample size (unweighted): 4000
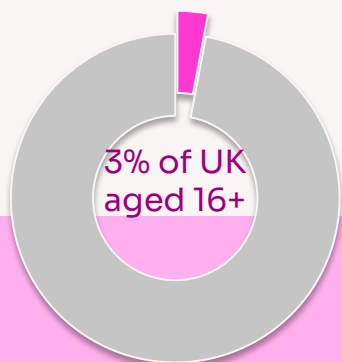Non-user sample size (unweighted): 42 **INDICATIVE ONLY**

The 'increased likelihood' figures come from modelling based on relatively low numbers of respondents and so can be used as information about how people access or do not access the internet, but should not be treated as precise estimates

A. Tenure of external connectivity only vs. total sample

Tenure	External connectivity only	Total sample
Mortgage	15%	28%
Owned Outright	21%	31%
Rented from Social Landlord	35%	18%
Rented from Private Landlord	21%	15%
Don't know/Prefer not to say	9%	7%

B. Estimated impact of tenure as a predictor of being an external connectivity only user

Renting from a **social landlord** increases your likelihood by a factor of **3**

A. Working status of external connectivity only vs. total sample

Working status	External connectivity only	Total sample
Full-time work	47%	47%
Retired	9%	24%
Part-time work	15%	12%
A student	12%	6%
Unemployed	9%	6%
Full-time at home	9%	4%

B. Estimated impact of working status as a predictor of being an external connectivity only user

Working status alone was not a good predictor of being an external connectivity only user

Summary of predictive modelling analysis

(All UK, aged 16+) For specific definitions see technical appendix

Note: Percentages based on survey research are shown to the nearest whole number. Population estimates are based on the percentage score from the survey including decimal points and then rounded to the nearest 100,000

Non-internet users	Mobile data only users	External connectivity only users

3% of UK aged 16+ (approximately 1.9 million)

4% of UK aged 16+ (approximately 2.1 million)
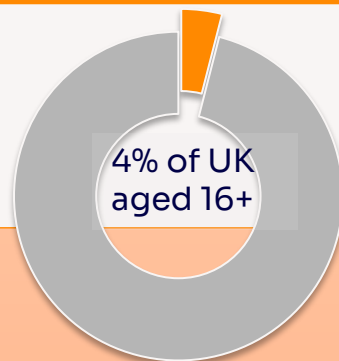
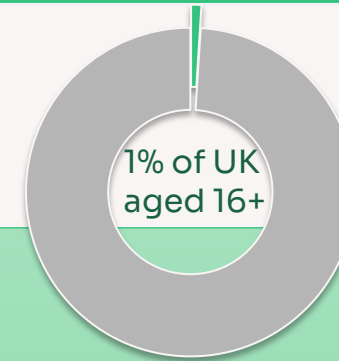**1% of UK aged 16+** (approximately 0.5 million)

Characteristics identified from predictive modelling as increasing the likelihood of an individual being a non-internet user:

- Being aged 85 or more (x8)
- Full-time responsibility for home/ family (x4)
- Retired (x3)
- Being aged 75-84 (x2)
- Renting from social landlord (x2)

Characteristics identified from predictive modelling as increasing the likelihood of an individual being a mobile data only user:

- Renting from private landlord (x3)
- Renting from social landlord (x2)

Characteristics identified from predictive modelling as increasing the likelihood of an individual being an external connectivity only user

- Renting from social landlord (x3)
- Being aged 18-24 years old (x2)

Additional demographic analysis is available in the technical report. For example, this shows a predictive factor of 3 associated with Yorkshire and Humberside, and non-internet users. However, it is important to note that the Technology Tracker has not been designed to be representative by region, as described in the technical report.

Next steps and relevance for other work

- This analysis contributes to ongoing work on digital inclusion, including DSIT's Digital Exclusion Action Plan, and complements our existing Media Literacy programme. Findings that might be particularly relevant:
  - ❖ The higher levels of exclusion associated with being over 85 suggests the design of interventions for over 85s may well need to be different to younger pensioners.
  - ❖ When promoting adoption of digital services, it's important to think about whether using it would require a home broadband connection, or whether a mobile or out of home connection would be sufficient to enable users to participate.
  - ❖ Rental from a social landlord is a predictor of being a non user/ non user of home-broadband
- Ofcom will continue to work with industry and the UK Government to ensure that consumers, particularly those who are vulnerable, are supported and protected through transitions away from legacy services.

- As one example, in the first instance this analysis can help inform the considerations in Government on the Future of TV Distribution. Of particular relevance:
  - ❖ This report puts in one place the best estimates we have of the take-up gap today – showing approximately 4.5m people do not access home broadband.
  - ❖ However, we also find that approximately 0.4m people may not be broadband users but have it in the home – this may be ready for TV use in those homes, with sufficient support.
  - ❖ While some mobile only customers would be able to connect that connection to their TV, many will not be able to rely on this.
  - ❖ Even for those who are home broadband users, other barriers such as useability will continue to be relevant. We published research last year on these barriers, and the companion qualitative study to this document further explores the different ways using digital services such as IP TV can be challenging.

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A demographic deep dive into internet adoption: Relevant links

Survey/ report	Link
Technical appendix to report	A demographic deep dive into internet adoption – technical report
Technology Tracker survey 2024	Technology Tracker 2024 Questionnaire
	ofcom.org.uk/siteassets/resources/documents/research-and-data/data/statistics/2024/technology-tracker/technology-tracker-2024-data-tables.pdf?v=374153
	Technology Tracker 2024 Technical Report
Adults Media Literacy	Adults' Media Literacy Core Survey 2024 Data Tables
Exploring Digital Disadvantage report	Exploring Digital Disadvantage – Research report
Digital exclusion review 2022	https://www.ofcom.org.uk/siteassets/resources/documents/research-and-data/media-literacy-research/adults/adults-media-use-and-attitudes-2022/digital-exclusion-review-2022.pdf?v=327651