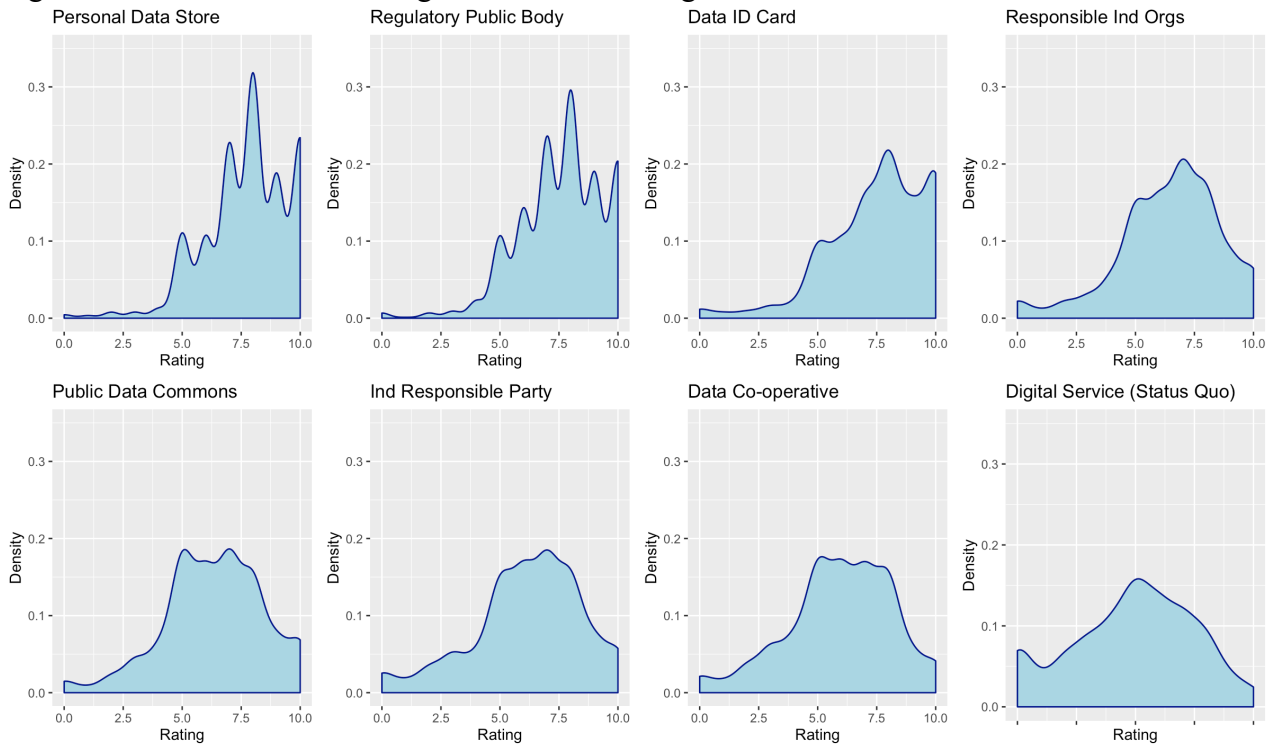


## Supplemental Appendix

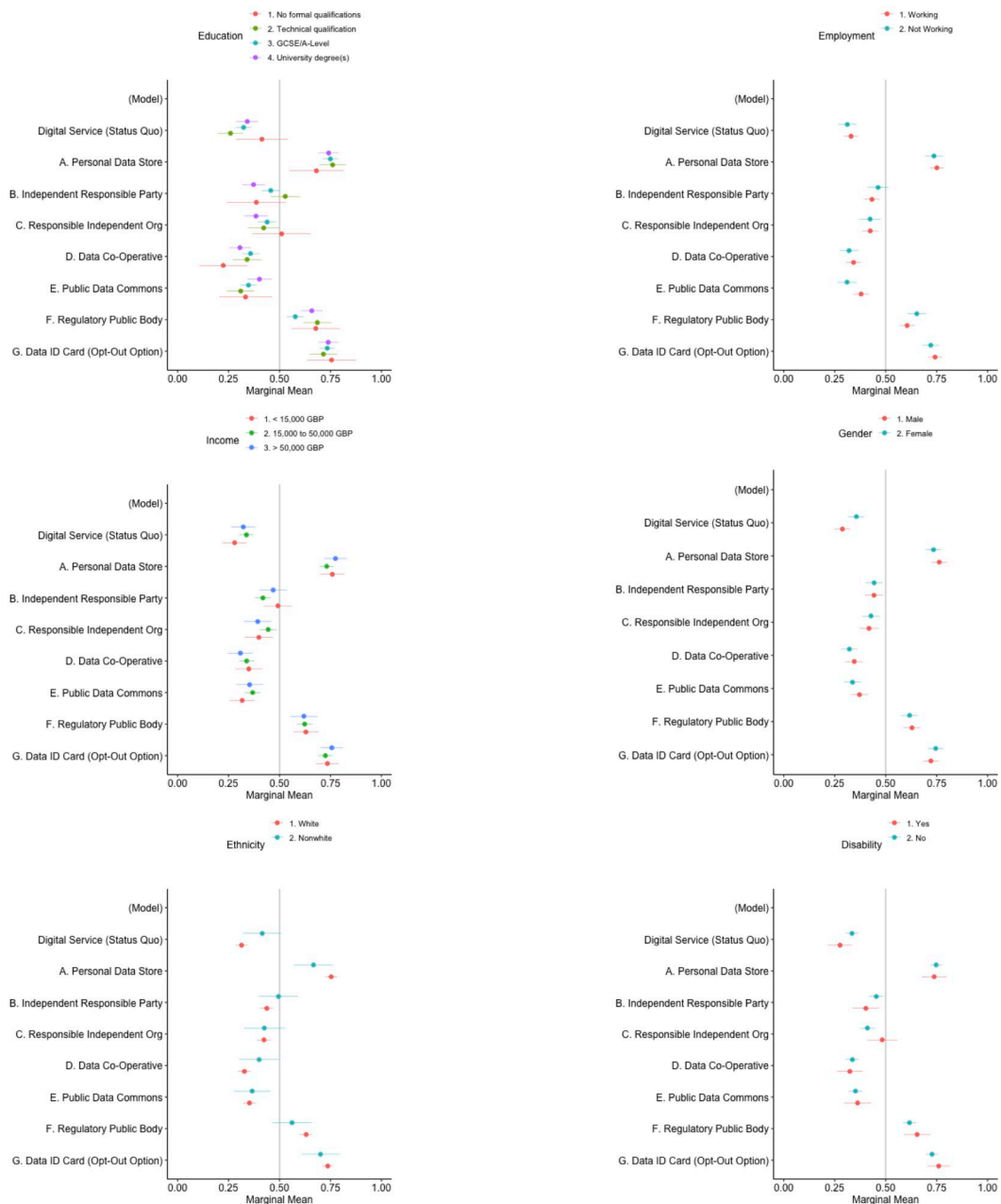
### Public perceptions of good data management: findings from a UK-based survey

Figure A1. Distributions of ratings toward data management models



Notes: This figure displays the distribution of ratings (on an 11-point scale) for each data management approach. It shows high mean ratings for the top three approaches – PDS, oversight by a regulatory public body, and opting out – occur because ratings for these models are overwhelming positive, with very few ratings under the midpoint on the scale. In contrast, responses to the other approaches to managing data have more ‘bell-curve’ shaped distributions, reflecting a broader range of opinions about them, some positive and some negative.

**Figure A2: Subgroup responses to the single-attribute conjoint experiment (marginal means)**



Notes: This figure displays the average proportion of respondents selecting each data management model from the single-attribute conjoint experiment; these average proportions are also known as marginal means. By design, marginal means average 0.5, which is indicated by the vertical line; values above 0.5 indicate that respondents prefer a given approach, and values below 0.5 indicate that respondents do not like the approach. In addition, 95% error bars are included around each plot point. This figure allows visual comparison of the eight different data management models by key demographic factors, though, there appear to be few pronounced differences in selecting a data management approach by demographic factors.

**Table A1: Percent agreement with statements about data collection and use**

<b>Statement</b>	<b>% Agree</b>
<i>I want companies to be held accountable if they misuse my personal data.</i>	96.1
<i>I want clear, easy-to-find explanations about what happens to my data when I share it online.</i>	92.2
<i>I want people to be able to exercise their rights over their personal data.</i>	92.1
<i>I want more control over my personal data.</i>	89.0
<i>I want more control over how my personal data is used by organisations</i>	86.9
<i>I'm concerned about social media companies selling my personal data to advertisers.</i>	85.6
<i>It should be difficult for organisations to collect sensitive personal data (e.g. genetic information).</i>	84.8
<i>I'm concerned about the privacy of my personal data online.</i>	84.6
<i>I'm concerned about the security of my personal data online.</i>	84.2
<i>I want data to be gathered, analysed and managed in ethical ways.</i>	84.0
<i>I want collective approaches to data that work for everyone so that the most vulnerable people in society are protected.</i>	81.2
<i>I'm against corporate profit-making from personal data.</i>	78.3
<i>I'm concerned about services using my personal data to generate personalised recommendations.</i>	74.3
<i>I believe that businesses should publish open data in the same way as governments.</i>	69.4
<i>I would rather companies only use open data instead of personal data.</i>	69.4
<i>I want data to be used for the social good.</i>	68.8
<i>I believe in making data available for science, research or technical experimentation in ways that benefit society.</i>	67.3
<i>I want an alternative model for managing personal data to what currently exists.</i>	62.0
<i>I want to profit personally from my own data.</i>	60.7
<i>I don't understand what happens to my personal data when I share it online.</i>	60.0
<i>I'm comfortable with any organisation using information about me so long as it has been anonymised first.</i>	59.2
<i>I support sharing my personal data when it's used for research in the public's interest.</i>	52.7
<i>I believe in the social benefits of gathering, aggregating and analyzing data.</i>	51.9
<i>I support sharing my personal data with my energy company if it means getting more accurate assessments of my energy use.</i>	51.1
<i>I'm in favour of personal data being collectively managed by a community of users who the data is about.</i>	40.2
<i>I'm in favour of open data.</i>	39.3
<i>I don't mind sharing my personal data with commercial organisations to help them develop new products.</i>	37.5
<i>I believe in making data available for science, research or technical experimentation for commercial purposes (i.e. making a profit).</i>	34.8
<i>I don't have strong opinions about personal data collection and use.</i>	21.5

**Table A2. Stimulus materials used in the multiple-attribute conjoint experiment**

<b>In this scenario the data is</b>	<p>Online behavioural data (eg your social media interactions or Amazon purchases)</p> <p>Medical data (eg information about you from your GP)</p> <p>Media data (eg your viewing history on Netflix)</p> <p>Financial data (eg your pension and benefits details)</p> <p>Location data (eg your geographical movements, collected by your mobile phone)</p>
<b>The data is controlled by</b>	<p>You</p> <p>A trustee you choose to nominate</p> <p>A trustee like a city council or the government</p> <p>A trustee like a public service organisation</p> <p>A people's collective you are a member of</p> <p>A commercial organisation or service provider</p>
<b>You will be able to</b>	<p>Know what data is held about you, by whom and what they do with it</p> <p>Access the data yourself</p> <p>Have a say in who to share data with</p> <p>Exercise your rights (e.g. for portability, erasure or rectification)</p> <p>Have more control over what happens to it</p> <p>Know that it is secure</p> <p>Know that someone official is overseeing the data so it's not misused</p>
<b>The data will be used for these reasons &amp; generate these benefits</b>	<p>So you can get insights and value from your personal data</p> <p>So profit can be generated by offering services from your personal data</p> <p>So your data can be used in ways that you feel benefits society</p>

**Table A3. Average Marginal Component Effects (AMCE) from the single-attribute conjoint experiment**

Model	Attribute – Level	Estimate (Std Error)
	(baseline: digital service / status quo)	
	Personal data store	0.42*** (0.02)
	Independent responsible party	0.12*** (0.02)
	Responsible independent organisation	0.10*** (0.02)
	Data co-operative	0.01 (0.02)
	Public data commons	0.03 (0.02)
	Regulatory public body	0.30*** (0.02)
	Data ID card (opt-out option)	0.41*** (0.02)

$N = 1,486$  (because some models were identical resulting in missing data). \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Table A4. Average Marginal Component Effects (AMCE) from the multiple-attribute conjoint experiment**

Attribute – Level	Estimate (Std Error)
The data is...	
(baseline: online behavioural)	
Financial	-0.00 (0.01)
Location	0.01 (0.01)
Media	0.02 (0.01)
Medical	0.04** (0.01)
The data is controlled by...	
(baseline: commercial organisation)	
People's collective	0.07*** (0.02)
Trustee (govt)	0.06** (0.02)
Trustee (public service)	0.07*** (0.02)
Trustee (nominated)	0.11*** (0.02)
You	0.30*** (0.02)
You will be able to...	
(baseline: exercise your rights)	
Access data yourself	0.06*** (0.02)
Have a say	0.02 (0.02)
Have more control	0.04* (0.02)
Know data is secure	0.03 (0.01)
Know official is overseeing	0.00 (0.02)
Know what data is held	0.01 (0.01)
The data will be used for...	
(baseline: for profit)	
For insights	0.18*** (0.01)
To benefit society	0.19** (0.01)

$N = 2,087$ . \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Table A5. Regression results for data management model ratings**

	Public Data Store	Independent Responsible Party	Responsible Independent Organisation	Digital Service Status Quo	Data Co-operative	Public Data Commons	Regulatory Public Body	Data ID Card Opt Out
<b>Gender</b>	<b>0.18</b>	<b>-0.20</b>	<b>-0.12</b>	<b>-0.15</b>	<b>-0.25</b>	<b>-0.35*</b>	<b>-0.03</b>	<b>0.11</b>
Female	(0.12)	(0.16)	(0.15)	(0.18)	(0.16)	(0.15)	(0.12)	(0.15)
<b>Age</b>	<b>0.02</b>	<b>-0.30</b>	<b>-0.09</b>	<b>-0.79***</b>	<b>-0.34*</b>	<b>0.23</b>	<b>-0.14</b>	<b>0.10</b>
34 – 54 yrs old	(0.13)	(0.17)	(0.17)	(0.19)	(0.17)	(0.16)	(0.13)	(0.16)
55+ yrs old	0.19	0.05	-0.01	-0.77***	-0.38	0.30	-0.02	0.29
	(0.18)	(0.24)	(0.22)	(0.27)	(0.23)	(0.21)	(0.19)	(0.22)
<b>Education</b>	<b>0.07</b>	<b>-0.06</b>	<b>0.58</b>	<b>-0.40</b>	<b>-0.64</b>	<b>0.22</b>	<b>0.10</b>	<b>-0.04</b>
Technical/other qualification	(0.27)	(0.37)	(0.35)	(0.40)	(0.34)	(0.32)	(0.26)	(0.33)
GCSE/A-Level	0.05	0.08	0.21	-0.55	-0.62	-0.16	0.11	-0.10
	(0.26)	(0.35)	(0.33)	(0.37)	(0.32)	(0.30)	(0.24)	(0.31)
University degree	0.11	-0.00	0.25	-0.81*	-0.58	0.10	0.07	-0.32
	(0.27)	(0.37)	(0.35)	(0.39)	(0.34)	(0.32)	(0.26)	(0.33)
<b>Employment</b>	<b>0.24</b>	<b>-0.30</b>	<b>-0.66***</b>	<b>-0.24</b>	<b>-0.17</b>	<b>0.03</b>	<b>-0.14</b>	<b>-0.11</b>
Part-time	(0.16)	(0.21)	(0.20)	(0.23)	(0.21)	(0.20)	(0.17)	(0.19)
Retired	-0.07	-0.60*	-0.47	-0.92**	-0.58*	0.05	0.18	0.27
	(0.21)	(0.28)	(0.26)	(0.31)	(0.27)	(0.25)	(0.22)	(0.25)
Unemployed	0.00	-0.01	-0.28	-0.28	-0.31	-0.02	-0.04	-0.06
	(0.16)	(0.20)	(0.19)	(0.23)	(0.19)	(0.19)	(0.16)	(0.19)
<b>Income</b>	<b>0.15</b>	<b>0.30</b>	<b>0.10</b>	<b>-0.00</b>	<b>0.17</b>	<b>-0.33</b>	<b>0.23</b>	<b>-0.09</b>
£15k to < £30k	(0.16)	(0.20)	(0.20)	(0.23)	(0.20)	(0.19)	(0.16)	(0.19)
£30k to < £50k	0.16	0.40	-0.01	0.42	0.07	-0.15	0.10	0.18
	(0.17)	(0.22)	(0.21)	(0.25)	(0.22)	(0.21)	(0.17)	(0.21)
> £50k	-0.02	0.43	-0.21	-0.06	0.14	-0.07	0.22	0.07
	(0.19)	(0.25)	(0.23)	(0.28)	(0.24)	(0.23)	(0.19)	(0.23)
<b>Knowledge</b>	<b>0.84*</b>	<b>-0.77*</b>	<b>-0.29</b>	<b>-1.28**</b>	<b>-1.17**</b>	<b>0.76</b>	<b>0.90**</b>	<b>0.05</b>
	(0.35)	(0.44)	(0.42)	(0.49)	(0.44)	(0.42)	(0.35)	(0.41)
Non-white	0.18	0.28	-0.10	0.19	0.56*	0.16	-0.10	0.26
	(0.21)	(0.23)	(0.24)	(0.27)	(0.25)	(0.23)	(0.19)	(0.22)
Disabled	-0.23	0.21	-0.19	-0.03	-0.12	0.19	0.14	0.30
	(0.14)	(0.18)	(0.17)	(0.21)	(0.18)	(0.17)	(0.14)	(0.17)

<b>Intercept</b>	<b>6.86*** (0.39)</b>	<b>6.65*** (0.50)</b>	<b>6.77*** (0.48)</b>	<b>7.09*** (0.56)</b>	<b>7.74*** (0.48)</b>	<b>5.92*** (0.46)</b>	<b>6.81*** (0.38)</b>	<b>7.33 (0.46)</b>
<b><math>R^2</math></b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.02</b>	<b>0.02</b>
<b><math>N</math></b>	<b>1,070</b>	<b>1,060</b>	<b>1,067</b>	<b>1,054</b>	<b>1,045</b>	<b>1,051</b>	<b>1,063</b>	<b>1,06</b>

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .



## **Table A6. Full survey and topline results**

### **Public Views on Data Handling and Management (N = 2,169)**

#### **Q1 Consent to Participate in Research**

##### **I. Purpose of this Research**

The purpose of this study is to learn about people's views on how data is handled by organisations.

##### **II. Procedure**

You will read some background information about this issue and then complete a short, web-based questionnaire. This should take you 15 to 20 minutes to complete.

##### **III. Anonymity and Confidentiality**

Your answers to this survey are completely anonymous. Your responses will be combined with those of other respondents to enable researchers to look at overall patterns.

##### **IV. Freedom to Withdraw**

Your participation in this survey is voluntary. You can choose not to answer specific questions without penalty, and you are free to withdraw from the study at any time.

##### **V. Researchers**

The researchers on this project are Professor Helen Kennedy, Dr Todd Hartman and Dr Robin Steedman from the University of Sheffield.

**Q2** Do you confirm that you have read the terms and conditions outlined above and agree to participate in this research?

- I have read the Informed Consent above and agree to participate in this research study.
- I DO NOT agree to participate in this research study [END]

##### **Screeners**

Before we begin, we'd like to ask a few questions about you to make sure we have different types of people represented in the survey.

**Q3** What is your gender?

47.4% Male

52.2% Female

0.3% Non-binary

0.1% Other

**Q4** Which of the following categories best describes your age?

12.5% 18-24

20.2% 25-34

18.6% 35-44

19.6% 45-54

15.9% 55-64

13.4% 65 or older

**Q5** Which country do you currently live in?

100.0% United Kingdom [END if any other country is selected]

**Q6** What is the highest educational or work-related qualification you have obtained?

5.2% No formal qualifications

0.7% Youth training certificate/skillseekers

2.8% Recognised trade apprenticeship completed

1.1% Clerical and commercial

4.4% City and Guild certificate

2.5% City and Guild certificate - advanced

0.3% ONC

2.0% CSE grades 2-5

15.9% CSE grade 1, GCE O level, GCSE, School Certificate

0.3% Scottish Ordinary/ Lower Certificate

19.9% GCE A level or Higher Certificate

2.4% Scottish Higher Certificate

0.9% Nursing qualification (eg SEN, SRN, SCM, RGN)

1.6% Teaching qualification (not degree)

5.6% University diploma

20.6% University or CNAA first degree (eg BA, B.Sc, B.Ed)

6.6% University or CNAA higher degree (eg M.Sc, Ph.D)

7.3% Other technical, professional or higher qualification

**Q7** Which of these best describes what you were doing last month?

44.2% Working full time (30 or more hours per week)

- 15.3% Working part time (8-29 hours a week)
- 1.6% Working part time (less than 8 hours a week)
- 4.3% Unemployed and looking for work
- 4.1% Full time university student
- 1.3% Other full time student
- 14.6% Retired
- 12.3% Not in paid work for any other reason
- 2.4% Other

**Q8** What is your annual household income before tax?

- 4.4% Less than 5,000 GBP
- 6.5% 5,000 to less than 10,000 GBP
- 10.3% 10,000 to less than 15,000 GBP
- 12.1% 15,000 to less than 20,000 GBP
- 9.7% 20,000 to less than 25,000 GBP
- 11.1% 25,000 to less than 30,000 GBP
- 7.7% 30,000 to less than 35,000 GBP
- 7.9% 35,000 to less than 40,000 GBP
- 5.8% 40,000 to less than 45,000 GBP
- 4.8% 45,000 to less than 50,000 GBP
- 8.0% 50,000 to less than 60,000 GBP
- 5.1% 60,000 to less than 70,000 GBP
- 5.0% 70,000 to to less than 100,000 GBP
- 1.7% More than 100,000 GBP

**1. What do you already know?**

**Q9** Today, many of the things we do produce ‘digital data’, a term which means information stored in a computer. This often includes personal information about individuals.

In this section, we’re going to ask you some questions to find out what you know about data gathering and use. Lots of people don’t know much about these topics, and it’s completely OK if you’re one of them! Just answer the questions honestly to help us understand exactly what people know.

Please don't look the answers up, because it's important for us to get a sense of how much the public knows about this topic. We'll provide you with the correct answers after you have answered the questions as best you can.

[Randomized]

**Q10\_** Please choose whether you think each statement is true or false.

**1** Any information that can be used to identify an individual is personal data. [T]

92.3% True

7.7% False

**2** Location data collected by your mobile phone is not personal data [F]

26.4% True

73.6% False

**3** Open data does not generally include personal data [T]

49.1% True

50.9% False

**4** Open data can only be used, modified, and shared for non-commercial purposes [F]

51.7% True

48.3% False

**5** The General Data Protection Regulation (GDPR) governs the processing of personal data (collection, storage, and use) [T]

93.4% True

6.6% False

**6** The General Data Protection Regulation (GDPR) allows for 'data portability' meaning that you can take your data from one organisation and give it to another [T]

52.8% True

47.2% False

**7** There are still no financial penalties for companies that do not comply with the General Data Protection Regulation (GDPR) [F]

31.0% True

69.0% False

**8** The General Data Protection Regulation (GDPR) does not give you the right to access the personal data organisations hold about you [F]

27.7% True

72.3% False

**Q11** As promised, here are the answers to the questions we just asked you about. Please review this information carefully because you'll need it to answer questions later in the survey.

**Personal data is:** any information that can be used to identify someone. If all features that identify a person have been irreversibly removed from the data, then it is considered 'anonymised' and is no longer personal data.

**Open data is:** data that anyone can freely use, modify, and share for any purpose. Open data generally does not include personal data. Examples of open data include bus timetables or the average salary of the people who live in a particular town.

**The General Data Protection Regulation (GDPR)** is: a new EU-wide law that governs the 'processing' of personal data, meaning how it is collected, stored, and used. Under GDPR, organisations that misuse personal data can face heavy fines, and they must follow additional rules if they want to process 'sensitive personal data' (e.g. genetic information or information about political or religious beliefs).

GDPR gives citizens the right to:

- Know how organisations process their data
- Access the personal data organisations hold about them
- Take their personal data from one organisation and give it to another
- Ask for incorrect, incomplete, or inaccurate personal data to be corrected
- Request their personal data be erased in certain circumstances

## **Section 2. Views on data collection and use**

In this section, we will ask about your views on data collection and use.

[Randomized]

**Q12\_** Please indicate how much you agree or disagree with each of the following statements.

**1** I don't have strong opinions about personal data collection and use.

- 5.1% Strongly agree
- 16.4% Somewhat agree
- 22.0% Neither agree nor disagree
- 32.7% Somewhat disagree
- 23.9% Strongly disagree

**2** I don't understand what happens to my personal data when I share it online.

- 19.9% Strongly agree

40.1% Somewhat agree  
20.6% Neither agree nor disagree  
15.6% Somewhat disagree  
3.8% Strongly disagree

**3** I want clear, easy-to-find explanations about what happens to my personal data when I share it online.

62.3% Strongly agree  
29.9% Somewhat agree  
6.0% Neither agree nor disagree  
1.2% Somewhat disagree  
0.7% Strongly disagree

**4** I want more control over how my personal data is used by organisations.

54.5% Strongly agree  
32.4% Somewhat agree  
10.2% Neither agree nor disagree  
2.3% Somewhat disagree  
0.7% Strongly disagree

**5** I'm concerned about the security of my personal data online.

46.0% Strongly agree  
38.2% Somewhat agree  
9.5% Neither agree nor disagree  
5.1% Somewhat disagree  
1.3% Strongly disagree

**6** I'm concerned about the privacy of my personal data online.

45.7% Strongly agree  
38.9% Somewhat agree  
9.0% Neither agree nor disagree  
5.3% Somewhat disagree  
1.2% Strongly disagree

**7** I want companies to be held accountable if they misuse my personal data.

80.5% Strongly agree  
15.7% Somewhat agree  
3.0% Neither agree nor disagree  
0.3% Somewhat disagree  
0.6% Strongly disagree

**8** I'm concerned about services using my personal data to generate personalised recommendations.

35.5% Strongly agree  
38.8% Somewhat agree  
16.8% Neither agree nor disagree  
7.2% Somewhat disagree  
1.7% Strongly disagree

**Q13** There are more statements on the next page.

[Randomized]

**Q14\_** And please indicate how much do you agree or disagree with each of the following statements.

**1** I'm concerned about social media companies selling my personal data to advertisers.

57.6% Strongly agree  
28.1% Somewhat agree  
9.8% Neither agree nor disagree  
2.9% Somewhat disagree  
1.7% Strongly disagree

**2** I support sharing my personal data when it's used for research in the public's interest.

12.6% Strongly agree  
40.2% Somewhat agree  
26.8% Neither agree nor disagree  
13.2% Somewhat disagree  
7.2% Strongly disagree

**3** I support sharing my personal data with my energy company if it means getting more accurate assessments of my energy use.

12.2% Strongly agree  
38.9% Somewhat agree  
25.8% Neither agree nor disagree  
14.9% Somewhat disagree  
8.2% Strongly disagree

**4** I don't mind sharing my personal data with commercial organisations to help them develop new products.

5.1% Strongly agree  
32.5% Somewhat agree

31.1% Neither agree nor disagree

20.0% Somewhat disagree

11.4% Strongly disagree

**5** I think it should be difficult for organisations to collect sensitive personal data (e.g. genetic information).

53.9% Strongly agree

30.9% Somewhat agree

10.9% Neither agree nor disagree

3.0% Somewhat disagree

1.3% Strongly disagree

**6** I'm comfortable with any organisation using information about me so long as it has been anonymised first.

18.4% Strongly agree

40.8% Somewhat agree

21.3% Neither agree nor disagree

11.8% Somewhat disagree

7.7% Strongly disagree

**7** I would rather companies only use open data instead of personal data.

30.5% Strongly agree

38.9% Somewhat agree

26.0% Neither agree nor disagree

3.5% Somewhat disagree

1.2% Strongly disagree

**8** To check that you're reading the statements, please select "Strongly disagree".

0.0% Strongly agree [END]

0.0% Somewhat agree [END]

0.0% Neither agree nor disagree [END]

100.0% Somewhat disagree

0.00% Strongly disagree [END]

### **3. Different approaches for managing data**

**Q15** When you use services online, most companies collect data about you. They have very significant control of the data, where it is stored and how it is used. But other approaches to data collection and storage are being considered, which many people believe would be better for individuals and society.



You are about to be shown some of these other approaches to managing access and use of data, and we will ask you how you rate them.

[Randomly display 4 of the 8 models]

MODEL 1: You are given a secure place to collect, store and manage the data about you which has been collected by other services. This is called a **personal data store, or PDS**. You have access to this data, and you can decide who else can access this data, how they can use it and under what circumstances. **The purpose of the PDS is to give you personal control over your data, which you can manage in a secure way.**

**Q16** How would you rate this approach for managing data?

Poor										Excellent
0	1	2	3	4	5	6	7	8	9	10
0.4%	0.3%	0.6%	0.6%	1.0%	9.1%	8.7%	18.6%	26.2%	15.2%	19.3%

MODEL 2: You are given a way to nominate **an independent responsible party** to oversee collection, storage and access of your personal data. They have legal responsibilities to look after your data. In line with your wishes, the nominated party can make decisions on your behalf about who accesses your data, what they can do with it and under what circumstances. **You have a say over what happens to your data, but you are not personally responsible for looking after it.**

**Q17** How would you rate this approach for managing data?

Poor										Excellent
0	1	2	3	4	5	6	7	8	9	10
3.0%	1.6%	3.6%	5.5%	4.9%	16.2%	16.7%	18.7%	16.5%	7.3%	6.2%

MODEL 3: **Responsible independent organisations** manage your data in different contexts (eg one for health data, one for finance data, etc). These organisations make decisions about who can access your data, what they can do with it and under what circumstances. **They have legal responsibilities to manage access to your data in ways that represent the interests of *all parties involved*.**

**Q18** How would you rate this approach for managing data?

Poor										Excellent
0	1	2	3	4	5	6	7	8	9	10
2.6%	1.0%	2.3%	3.0%	5.6%	15.9%	15.7%	21.1%	17.7%	8.3%	6.9%

MODEL 4: You sign up to a new **digital service** (eg an online shop) that collects and uses your data. You are asked to agree to terms of use and a privacy policy beforehand. These describe how

the service will collect, store and manage data about you. You are given settings you can alter, but you are not able to change or negotiate these terms or see how your data is used. **This approach gives services control over your data (this is what usually happens now).**

**Q19** How would you rate this approach for managing data?

Poor										Excellent
0	1	2	3	4	5	6	7	8	9	10
9.4%	3.4%	7.0%	9.1%	11.0%	17.2%	13.8%	12.3%	10.2%	4.0%	2.6%

MODEL 5: You become a member of a **data co-operative** that manages the collection and storage of its members' data and is accountable to its members. As a member, you can put yourself forward to sit on a board of representatives and make decisions about who has access to members' data, how it is used and under what circumstances. Or you can vote for other co-operative members to do these things. **The purpose of the data co-operative is that your data is managed collectively, by the people whose data is in the co-operative.**

**Q20** How would you rate this approach for managing data?

Poor										Excellent
0	1	2	3	4	5	6	7	8	9	10
2.4%	1.5%	3.9%	6.4%	7.3%	18.3%	16.9%	16.7%	16.7%	5.4%	4.4%

MODEL 6: You access data online about your area and community using an open data platform that is accessible to all citizens under commons law. This is called a **public data commons**. The data commons collects, stores and manages access to open data which can be used for various purposes. Everyone can access and use this data, in line with the commons' rules of engagement. **The purpose of the public data commons is to make data accessible so everyone can benefit from it.**

**Q21** How would you rate this approach for managing data?

Poor										Excellent
0	1	2	3	4	5	6	7	8	9	10
1.7%	0.8%	2.3%	4.6%	5.9%	19.4%	16.2%	18.7%	16.0%	7.1%	7.4%

MODEL 7: You have been given the details of a new **regulatory public body** that oversees how organisations access and use data, acting on behalf of UK citizens. This public body provides oversight over how organisations collect, store and use personal data. It can hold organisations accountable for misuse (eg fine organisations when they breach terms of use). **The purpose of the regulatory body is to ensure that personal data are collected, stored and used in legal and fair ways.**

**Q22** How would you rate this approach for managing data?

Poor											Excellent
0	1	2	3	4	5	6	7	8	9	10	
0.6%	0.1%	0.6%	0.7%	1.9%	8.8%	11.6%	19.3%	24.3%	15.4%	16.8%	

MODEL 8: You have the ability to choose whether to opt out of online data collection, storage and use – this is called your data preferences. Your data preferences are stored on a **data ID card**. You can use this card to log onto online sites. The card automatically opts you out of data collection, storage and use according to your preferences and whenever this is possible. **The purpose of the data ID card is to give people the option of opting out of having their data collected.**

**Q23** How would you rate this approach for managing data?

Poor											Excellent
0	1	2	3	4	5	6	7	8	9	10	
1.3%	0.7%	0.9%	1.7%	1.9%	10.4%	9.9%	15.8%	22.6%	14.2%	20.7%	

[Conjoint experiment = randomly chosen pairs of profiles; repeated 3 times in total]

**Q24** Now you will see 3 pairs, 6 approaches for managing data in total. The two approaches you see in each pair are randomly generated. This means that it is possible that two or more pairings are identical.

**Q25-Q27** Based on the descriptions below, which of these options for managing data would you prefer?

The models are randomly selected, so if they happen to be the same, then just choose ‘The descriptions of these two models are the same’.

Option A
You are given a secure place to collect, store and manage the data about you which has been collected by other services. This is called a personal data store, or PDS. You have access to this data, and you can decide who else can access this data, how they can use it and under what circumstances. The purpose of the PDS is to give you personal control over your data, which you can manage in a secure way.

Option B
<p>You are given a way to nominate an independent responsible party to oversee collection, storage and access of your personal data. They have legal responsibilities to look after your data. In line with your wishes, the nominated party can make decisions on your behalf about who accesses your data, what they can do with it and under what circumstances. You have a say over what happens to your data, but you are not personally responsible for looking after it.</p>

- Option A
- Option B
- The descriptions of these two models are the same.

#### 4. Views on future data management scenarios

**Q28** You are about to be shown some scenarios which represent different ways in which different kinds of data might be gathered, stored, managed and used. You will see 3 pairs, 6 scenarios in total. The two scenarios you see next to each other in each pair are randomly generated. In each pair, please tell us which scenario you would prefer.

[ Conjoint experiment = Randomly generated profile pairs from a list of attributes, which allows us to determine which factors increase/decrease the likelihood of choosing that particular profile ]

**Q29, Q33, Q37** Based on the descriptions below, which of these options would you prefer?

	Option A	Option B
In this scenario the data is	Medical data	Financial data
The data is controlled by	You	A trustee like a city council or the government
You will be able to	Have full control over what happens to it	Know what data is held about you, by whom and what they do with it

The data will be used for these reasons, and generate these benefits	So you can get insights and value from your personal data	So an organisation can use your data to benefit the public
--	---	--

- Option A
- Option B

**Q30, Q34, Q38** Why did you choose this option? (Optional question) [Open-ended]

**Q31, Q35, Q39** How would you rate Option A?

Poor Excellent

0      1      2      3      4      5      6      7      8      9      10

**Q32, Q36, Q40** How would you rate Option B?

Poor Excellent

0      1      2      3      4      5      6      7      8      9      10

## 5. Views on data uses and public data services

In this section we will ask about your views on data uses and public data services.

[Randomized]

**Q41\_** Please indicate how much you agree or disagree with each of the following statements.

**1** I believe in the social benefits of gathering, aggregating and analyzing data.

12.1% Strongly agree  
39.8% Somewhat agree  
34.3% Neither agree nor disagree  
10.4% Somewhat disagree  
3.3% Strongly disagree

**2** I'm against corporate profit-making from personal data.

53.4% Strongly agree  
24.9% Somewhat agree  
14.7% Neither agree nor disagree  
4.6% Somewhat disagree  
2.4% Strongly disagree

**3** I want an alternative model for managing personal data to what currently exists.

23.2% Strongly agree  
38.8% Somewhat agree  
34.2% Neither agree nor disagree  
3.2% Somewhat disagree  
0.6% Strongly disagree

**4** I'm in favour of open data.

9.6% Strongly agree  
29.7% Somewhat agree  
38.5% Neither agree nor disagree  
14.8% Somewhat disagree  
7.5% Strongly disagree

**5** I'm in favour of personal data being collectively managed by a community of users who the data is about.

8.6% Strongly agree  
31.6% Somewhat agree  
37.5% Neither agree nor disagree  
15.4% Somewhat disagree  
6.9% Strongly disagree

**6** I want more control over my personal data.

59.7% Strongly agree  
29.3% Somewhat agree  
8.9% Neither agree nor disagree  
1.8% Somewhat disagree  
0.4% Strongly disagree

**7** I want to profit personally from my own data.

27.6% Strongly agree  
33.0% Somewhat agree  
26.3% Neither agree nor disagree  
8.7% Somewhat disagree  
4.2% Strongly disagree

**8** I want data to be used for the social good.

26.9% Strongly agree  
41.9% Somewhat agree  
23.6% Neither agree nor disagree  
5.4% Somewhat disagree

2.3% Strongly disagree

**9** I believe in making data available for science, research or technical experimentation in ways that benefit society.

25.2% Strongly agree

42.1% Somewhat agree

24.4% Neither agree nor disagree

6.0% Somewhat disagree

2.3% Strongly disagree

**10** I believe in making data available for science, research or technical experimentation for commercial purposes (i.e. making a profit).

9.4% Strongly agree

25.5% Somewhat agree

33.0% Neither agree nor disagree

22.4% Somewhat disagree

9.8% Strongly disagree

**11** I want people to be able to exercise their rights over their personal data.

63.2% Strongly agree

28.9% Somewhat agree

6.6% Neither agree nor disagree

0.9% Somewhat disagree

0.4% Strongly disagree

**12** I want data to be gathered, analysed and managed in ethical ways.

48.4% Strongly agree

35.6% Somewhat agree

13.4% Neither agree nor disagree

1.7% Somewhat disagree

0.9% Strongly disagree

**13** I believe that businesses should publish open data in the same way as governments.

32.5% Strongly agree

36.9% Somewhat agree

22.7% Neither agree nor disagree

5.8% Somewhat disagree

2.1% Strongly disagree

**14** I want collective approaches to data that work for everyone so that the most vulnerable people in society are protected.

44.7% Strongly agree

36.5% Somewhat agree  
 15.8% Neither agree nor disagree  
 2.2% Somewhat disagree  
 0.9% Strongly disagree

**15** To check you are reading the statements, please select ‘Somewhat agree’

0.0% Strongly agree [END]  
 100.0% Somewhat agree  
 0.0% Neither agree nor disagree [END]  
 0.0% Somewhat disagree [END]  
 0.0% Strongly disagree [END]

[Randomized]

The UK government has set aside money to support the creation of new data-driven services for the public good.

**Q42\_** What categories of services would you be most interested in seeing be developed? These could be services you would enjoy using and that you would benefit from personally, or they could be services that you feel would be good for UK citizens. Please select all that you would like to see developed.

**1** Learning and skill development (for example learning a new language)

39.5% Selected

**2** Education or career (to support you in your education and career paths)

43.3% Selected

**3** Accessing TV and music (for example, services like iPlayer, Netflix and Spotify)

22.8% Selected

**4** Finance and budgeting (to help with everyday money matters)

44.9% Selected

**5** Politics (for example, telling you how your MP voted or how new policies affect your area)

33.2% Selected

**6** Home-based DIY (for example, cooking, gardening, crafts, building communities around these interests)

22.6% Selected

**7** Citizen science (so you can take part in activities that generate data to help solve big issues)



- 33.9% Selected
- 8** Communication (connecting you with friends and family)
- 27.6% Selected
- 9** Health and wellbeing (for example, about physical and mental health and support)
- 66.3% Selected
- 10** Family services (aimed at helping with family life)
- 41.5% Selected
- 11** Sport, fitness and healthy living (to help with physical fitness and eating well)
- 30.9% Selected
- 12** Environment (to help people and communities reduce their carbon footprints)
- 53.6% Selected
- 13** Local community (for example, bringing people together around events and issues)
- 43.2% Selected
- 14** Entertainment and quizzes (for example, entertaining games or personal quizzes)
- 16.2% Selected
- 15** Digital archives (this could be making your own or exploring existing archives of images, videos or stories)
- 22.0% Selected
- 16** Travel (for example, learning about places and culture and tips for experiencing the world)
- 29.5% Selected
- 17** School and education (for example, services to help children, teachers and parents)
- 50.8% Selected
- 18** Everyday life (for example, content, advice and support based on real life scenarios)
- 36.2% Selected
- 19** Personal goals (for example, setting targets, getting support and tracking progress)
- 23.1% Selected
- 20** Debate and discussion (so you can explore your views and the views of others)
- 19.0% Selected

**Q43** If you would like to see anything that is not on the list, please add a sentence on this here:  
Open text box [ ]

**Q44\_** Who would you like to provide these services? [ Select any that apply]

- 1** Commercial organisations
- 18.3% Selected

**2** Publicly funded organisations

40.2% Selected

**3** Digital co-operatives

21.1% Selected

**4** Government

45.6% Selected

**5** I don't know

25.7% Selected

## **6. Information about you**

Finally, we have some questions about you. These questions help us make sure that we have different types of people represented in our survey.

**Q45** Overall, how confident do you feel using computers, smartphones, or other electronic devices to do the things you need to do online?

53.3% Very confident

41.3% Somewhat confident

4.9% Not very confident

0.5% Not at all confident

**Q46** How often would you say that you use the internet?

47.2% Almost constantly

47.2% Several times a day

4.4% About one a day

0.8% Several times a week

0.1% A few times a month

0.1% Rarely

0.1% Never

[Randomized]

**Q47\_** Do you ever use any of the following social media sites?

40.3% **1** Twitter

46.1% **2** Instagram

79.5% **3** Facebook

25.1% **4** Snapchat

67.7% **5** YouTube

5.0% **6** Tumblr

- 10.1% 7 Reddit
- 8.5% 8 None of these sites

[Randomized]

**Q48\_** Do you access the Internet at least occasionally on a computer, mobile phone, tablet, or other device? [Select all that apply]

- 83.9% 1 Mobile phone
- 53.6% 2 Tablet
- 41.8% 3 Desktop computer
- 65.7% 4 Laptop computer
- 19.5% 5 Game console
- 31.0% 6 Smart TV
- 8.5% 7 Ebook reader
- 0.4% 8 Other (Please specify)

**Q49** Which region of the UK do you currently live in? [ Dropdown ]

- 8.2% 1 East Midlands
- 7.9% 2 East of England
- 10.3% 3 London
- 5.5% 4 North East
- 12.5% 5 North West
- 2.2% 6 Northern Ireland
- 8.5% 7 Scotland
- 13.6% 8 South East
- 8.3% 9 South West
- 4.9% 10 Wales
- 9.4% 11 West Midlands
- 8.8% 12 Yorkshire and the Humber

**Q50** Which of these groups do you belong to (choose one)? [ Dropdown ]

- 85.3% White British
- 5.3% Any other white background
- 0.7% White and Black Caribbean
- 0.4% White and Black African
- 1.0% White and Asian
- 0.6% Any other mixed background

- 1.4% Indian
- 1.1% Pakistani
- 0.3% Bangladeshi
- 0.6% Any other Asian background
- 0.9% Black Caribbean
- 0.9% Black African
- 0.3% Any other black background
- 0.5% Chinese
- 0.8% Other ethnic group

**Q51** Under the Equality Act (2010), a disability is defined as any long-term impairment which has a substantial adverse effect on your ability to carry out day-to-day activities. Examples include conditions which affect your learning, mobility, physical coordination, mental health, speech, hearing or eyesight, as well as conditions such as diabetes and epilepsy which may normally be controlled via medication.

Within the definition of the Equality Act, do you consider you have a disability?

- 20.9% Yes
- 79.1% No

**Q52\_** Please select which categories of disability apply to you:

- 5.7% **1** Deaf or hard of hearing
- 2.5% **2** Blind or visually impaired
- 7.1% **3** Musculo-skeletal (including coordination, dexterity, mobility, wheelchair-user)
- 21.9% **4** Mental health (including serious depression, bipolarity)
- 3.3% **5** Learning and cognitive disabilities (including dyslexia, Down's Syndrome, autism)
- 9.1% **6** Long-term illness or debilitating disease
- 38.7% **7** Other (including physical or mental conditions such as diabetes, epilepsy, arthritis, asthmas, speech impairments, facial disfigurement)

**Q53** Finally, do you have any questions or comments for us? If not, that's OK!

Open text box [ ]