

**1. What is your gender?**

- Female
- Male
- Other

**SD01 Gender**

1 = Female  
2 = Male  
3 = Other  
-9 = Not answered

**2. How old are you?**

I am  years old

**SD02\_01 I am ... years old**

Free input (integer)

### 3. General perceptions and concerns about privacy

Please indicate the extent to which you agree or disagree with each statement by ticking the appropriate number.

	Strongly disagree 1	Somewhat disagree 2	Neutral 3	Somewhat agree 4	Strongly Agree 5
I am aware of the privacy issues and practices in our society.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I follow the news and developments about the privacy issues and privacy violations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I keep myself updated about privacy issues and the solutions that companies and the government employ to ensure our privacy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared to others, I am more sensitive about the way companies handle my personal information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To me, it is the most important thing to keep my information privacy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared to others, I tend to be more concerned about threats to my information privacy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<b>PP02_01</b> I am aware of the privacy issues and practices in our society.
<b>PP02_02</b> I follow the news and developments about the privacy issues and privacy violations.
<b>PP02_03</b> I keep myself updated about privacy issues and the solutions that companies and the government employ to ensure our privacy.
<b>PP02_04</b> Compared to others, I am more sensitive about the way companies handle my personal information.
<b>PP02_05</b> To me, it is the most important thing to keep my information privacy.
<b>PP02_06</b> Compared to others, I tend to be more concerned about threats to my information privacy.
1 = Strongly disagree [1]
2 = Somewhat disagree [2]
3 = Neutral [3]
4 = Somewhat agree [4]
5 = Strongly Agree [5]
-9 = Not answered

	Never	Rarely	Sometimes	Often	Very often
	1	2	3	4	5
How often have you been a victim of what you felt was an improper invasion of privacy?	<input type="radio"/>				
How much have you heard or read during the past year about the use and potential misuse of the information collected from the Internet?	<input type="radio"/>				
How often have you experienced incidents where your personal information was used by a company without your authorization?	<input type="radio"/>				

**PP06\_01** How often have you been a victim of what you felt was an improper invasion of privacy?

**PP06\_02** How much have you heard or read during the past year about the use and potential misuse of the information collected from the Internet?

**PP06\_03** How often have you experienced incidents where your personal information was used by a company without your authorization?

1 = Never [1]  
 2 = Rarely [2]  
 3 = Sometimes [3]  
 4 = Often [4]  
 5 = Very often [5]  
 -9 = Not answered

**On the next page, you will watch a video with sound. Please activate the speakers of your device or use headphones.** TextSoundcheck

To confirm that sound is activated, play the audio clip below.

Soundcheck

0:00 / 0:00

Enter the number spoken in the audio clip (in digits):

**F105\_01** Enter the number spoken in the audio clip (in digits)  
 Free input (integer)

Reminder: This page requires sound, keep using your speakers or headphones.

**Please attentively watch this video (1:44 minutes) about the privacy implications of voice data.**

The 'next' button will automatically appear when you are done watching the video.

VIDEO EINBINDUNG

THE VIDEO USED IN THE STUDY IS AVAILABLE HERE:  
[https://www.youtube.com/watch?v=Gr22YqS1\\_VA](https://www.youtube.com/watch?v=Gr22YqS1_VA)

0:00 / 1:44



vid\_delay

**4. Please enter the code displayed in the video.**

(not case-sensitive)

**PP12** Video code (attention check)

-2 = other text response

-9 = Not answered

**PP12s** Video code (attention check) (free text)

Free text

**5. Before you watched the video, were you aware that these types of information can be inferred from voice recordings?**

	Not at all 1	Slightly 2	Somewhat 3	Quite well 4	Very well 5
Geographical origin	<input type="radio"/>				
Gender and age	<input type="radio"/>				
Mental health information	<input type="radio"/>				
Physical health information	<input type="radio"/>				
Level of intoxication	<input type="radio"/>				
Moods and emotions	<input type="radio"/>				
Sleepiness and fatigue	<input type="radio"/>				
Personality traits	<input type="radio"/>				

**PP07\_10** Geographical origin**PP07\_02** Gender and age**PP07\_03** Mental health information**PP07\_01** Physical health information**PP07\_08** Level of intoxication**PP07\_09** Moods and emotions**PP07\_07** Sleepiness and fatigue**PP07\_04** Personality traits

1 = Not at all [1]

2 = Slightly [2]

3 = Somewhat [3]

4 = Quite well [4]

5 = Very well [5]

-9 = Not answered

**6. How worried are you about these possible inferences?**

- Not at all worried     
  Slightly worried     
  Somewhat worried     
  Quite worried     
  Very worried

**PP14 Worries**

- 1 = Not at all worried  
 2 = Slightly worried  
 3 = Somewhat worried  
 4 = Quite worried  
 5 = Very worried  
 -9 = Not answered

**7. Why do you feel this way? Please explain your reasoning in two or more sentences.****PP09\_01 [01]**

Free text

**8. Prior to this questionnaire, how often have you consciously thought about this issue when using a microphone-equipped device?**

- Never     
  Rarely     
  Sometimes     
  Often     
  Very often

**PP16 Prior thoughts**

- 1 = Never  
 2 = Rarely  
 3 = Sometimes  
 4 = Often  
 5 = Very often  
 -9 = Not answered

**9. What do you think, how common is it for companies to draw such inferences from voice recordings?**

- Very uncommon     
  Somewhat uncommon     
  Undecided     
  Somewhat common     
  Very common

**PP11 Prevalence estimation**

- 1 = Very uncommon  
 2 = Somewhat uncommon  
 3 = Undecided  
 4 = Somewhat common  
 5 = Very common  
 -9 = Not answered

**10. Please rate how concerned you would be if a company used voice recordings to infer personal information about you without your awareness.**

Geographical origin

Unconcerned	Slightly concerned	Somewhat concerned	Quite concerned	Very concerned
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Gender and age

Unconcerned	Slightly concerned	Somewhat concerned	Quite concerned	Very concerned
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Mental health information

Unconcerned	Slightly concerned	Somewhat concerned	Quite concerned	Very concerned
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Physical health information

Unconcerned	Slightly concerned	Somewhat concerned	Quite concerned	Very concerned
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Level of intoxication

Unconcerned	Slightly concerned	Somewhat concerned	Quite concerned	Very concerned
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Moods and emotions

Unconcerned	Slightly concerned	Somewhat concerned	Quite concerned	Very concerned
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Sleepiness and fatigue

Unconcerned	Slightly concerned	Somewhat concerned	Quite concerned	Very concerned
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Personality traits

Unconcerned	Slightly concerned	Somewhat concerned	Quite concerned	Very concerned
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**PP10\_10** Geographical origin  
**PP10\_02** Gender and age  
**PP10\_03** Mental health information  
**PP10\_01** Physical health information  
**PP10\_08** Level of intoxication  
**PP10\_09** Moods and emotions  
**PP10\_07** Sleepiness and fatigue  
**PP10\_04** Personality traits  
 1 = Unconcerned [1]  
 2 = Slightly concerned [2]  
 3 = Somewhat concerned [3]  
 4 = Quite concerned [4]  
 5 = Very concerned [5]  
 -9 = Not answered

## 11. Voice-controlled virtual assistant

A virtual assistant is a software agent that can perform tasks based on voice commands, without the requirement for keyboard input. Some examples of commercially available virtual assistants are Apple's Siri, Amazon Alexa, Microsoft's Cortana, and Google Assistant. Among other capabilities, virtual assistants can set reminders, manage contacts, play music, take purchase orders, send messages and calls, provide weather reports, and manage smart home devices.

How often do you use a voice-controlled virtual assistant in your daily life?

Never

Rarely

Sometimes

Often

Very often

### PP05 VCVA use

- 1 = Never
- 2 = Rarely
- 3 = Sometimes
- 4 = Often
- 5 = Very often
- 9 = Not answered

Are you interested in starting or continuing to use a voice-controlled virtual assistant?

Not at all  
interested

Slightly interested

Somewhat  
interested

Quite interested

Very interested

### PP15 VCVA usage interest

- 1 = Not at all interested
- 2 = Slightly interested
- 3 = Somewhat interested
- 4 = Quite interested
- 5 = Very interested
- 9 = Not answered

**12. Please indicate the extent to which you agree or disagree with each statement by ticking the appropriate number.**

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
	1	2	3	4	5
Other people come to me for advice on new technologies	<input type="radio"/>				
In general, I am among the first in my circle of friends to acquire new technology when it appears	<input type="radio"/>				
I can usually figure out new high-tech products and services without help from others	<input type="radio"/>				
I keep up with the latest technological developments in my areas of interest	<input type="radio"/>				
I enjoy the challenge of figuring out high-tech gadgets	<input type="radio"/>				
I find I have fewer problems than other people in making technology work for me	<input type="radio"/>				
I prefer to use the most advanced technology available	<input type="radio"/>				
Show that you are paying attention by skipping this row without making a tick	<input type="radio"/>				
I find new technologies to be mentally stimulating	<input type="radio"/>				
Learning about technology can be as rewarding as the technology itself	<input type="radio"/>				

<b>F102_01</b> <input type="checkbox"/>	Other people come to me for advice on new technologies
<b>F102_02</b> <input type="checkbox"/>	In general, I am among the first in my circle of friends to acquire new technology when it appears
<b>F102_03</b> <input type="checkbox"/>	I can usually figure out new high-tech products and services without help from others
<b>F102_04</b> <input type="checkbox"/>	I keep up with the latest technological developments in my areas of interest
<b>F102_05</b> <input type="checkbox"/>	I enjoy the challenge of figuring out high-tech gadgets
<b>F102_06</b> <input type="checkbox"/>	I find I have fewer problems than other people in making technology work for me
<b>F102_07</b> <input type="checkbox"/>	I prefer to use the most advanced technology available
<b>F102_11</b> <input type="checkbox"/>	Show that you are paying attention by skipping this row without making a tick
<b>F102_08</b> <input type="checkbox"/>	I find new technologies to be mentally stimulating
<b>F102_09</b> <input type="checkbox"/>	Learning about technology can be as rewarding as the technology itself
	1 = Strongly disagree [1]
	2 = Somewhat disagree [2]
	3 = Neutral [3]
	4 = Somewhat agree [4]
	5 = Strongly agree [5]
	-9 = Not answered

**13. Do you own any devices that have a microphone? Select all that apply.**

- Phone / smartphone
- Laptop
- Tablet
- Smartwatch
- Camera
- Smart speaker (e.g., Amazon Echo, Google Home, Google Home)
- Car with voice control interface
- Voice-enabled remote control

Other (please specify)

**DT01** Owned Devices: Residual option (negative) or number of selected options

Integer

**DT01\_01** Phone / smartphone

**DT01\_02** Laptop

**DT01\_03** Tablet

**DT01\_04** Smartwatch

**DT01\_05** Camera

**DT01\_07** Smart speaker (e.g., Amazon Echo, Google Home, Google Home)

**DT01\_08** Car with voice control interface

**DT01\_10** Voice-enabled remote control

**DT01\_09** Other (please specify)

1 = Not checked

2 = Checked

**DT01\_09a** Other (please specify) (free text)

Free text

**14. What is the highest level of education you have obtained?**

- Finished school with no qualifications  
 Still in secondary school  
 GCSE Level education (e.g. GCSE, O-Levels, Standards)  
 A-Level education (e.g. A, AS, S-Levels, Highers)  
 Some undergraduate education (i.e. university examinations but not completed degree)  
 Degree or Graduate education (e.g. BSc, BA)  
 Post-graduate education (e.g. MSc, MA)  
 Doctorate degree  
 Vocational education (e.g. NVQ, HNC, HND)  
 Other degree or qualification (please specify):

**SD12 Level of education**

16 = Finished school with no qualifications  
 17 = Still in secondary school  
 13 = GCSE Level education (e.g. GCSE, O-Levels, Standards)  
 14 = A-Level education (e.g. A, AS, S-Levels, Highers)  
 3 = Some undergraduate education (i.e. university examinations but not completed degree)  
 4 = Degree or Graduate education (e.g. BSc, BA)  
 5 = Post-graduate education (e.g. MSc, MA)  
 18 = Doctorate degree  
 6 = Vocational education (e.g. NVQ, HNC, HND)  
 12 = Other degree or qualification (please specify):  
 -9 = Not answered

**SD12\_12 Other degree or qualification (please specify)**

Free text

**15. Do you have professional experience in the following areas?**

## Data protection law

no experience	little experience	some experience	much experience	very much experience
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## Computer science (e.g. as a programmer, technical IT consultant, or system administrator)

no experience	little experience	some experience	much experience	very much experience
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## Data mining

no experience	little experience	some experience	much experience	very much experience
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## Information technology security (IT security)

no experience	little experience	some experience	much experience	very much experience
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**SD25\_01** Data protection law**SD25\_02** Computer science (e.g. as a programmer, technical IT consultant, or system administrator)**SD25\_03** Data mining**SD25\_04** Information technology security (IT security)

1 = no experience

2 = little experience

3 = some experience

4 = much experience

5 = very much experience

-9 = Not answered

**16. What is your monthly net income?**

Net income is defined as your total income after tax and social security deductions.

The amounts below are in British Pound (£). In case you need to convert: €1 is roughly equal to £0.9, \$1 is roughly equal to £0.8.

- I do not have a personal income
- less than £250
- £250 up to £500
- £500 up to £1000
- £1000 up to £1500
- £1500 up to £2000
- £2000 up to £3000
- £3000 up to £4000
- £4000 up to £5000
- £5000 or more
- Decline to answer

**SD17** Income

11 = I do not have a personal income

1 = less than £250

2 = £250 up to £500

3 = £500 up to £1000

4 = £1000 up to £1500

5 = £1500 up to £2000

6 = £2000 up to £3000

7 = £3000 up to £4000

8 = £4000 up to £5000

9 = £5000 or more

10 = Decline to answer

-9 = Not answered

**17. What was this study about?**

To show if we have expressed ourselves clearly enough, please tick the description that best reflects the topic of this study.

- Health effects of urban air pollution
- Privacy concerns related to voice recordings
- Telecommunications in India
- Professional music production
- Health concerns about wireless device radiation
- Landlord and tenant privacy rights

**F101 Attention check**

- 1 = Health effects of urban air pollution
- 2 = Privacy concerns related to voice recordings
- 3 = Telecommunications in India
- 4 = Professional music production
- 5 = Health concerns about wireless device radiation
- 6 = Landlord and tenant privacy rights
- 9 = Not answered

**Would you like to comment this questionnaire, or would you like to add information for us to better understand your answers?**

Do you think, this questionnaire needs improvement? Did you feel some question were unclear, or did you feel unpleasant answering specific questions? Please leave us notes.

**SD18\_01 [01]**

Free text