2. Survey Questionnaire

CAWI Questionnaire

Q001 - Intro_Text Text

Not back

This month's questionnaire is interested in people's attitudes toward new technologies. Each of the technologies explored in this questionnaire involves the use of artificial intelligence (AI) to varying degrees.

What is AI?

Al is a term that describes the use of computers and digital technology to perform complex tasks commonly thought to require intelligence.

All systems typically analyse large amounts of data to take actions and achieve specific goals, sometimes autonomously (without human direction).

Q162 - Intro_Text_2

Text

Not back

[CAWI: The following screens will describe to you several new technologies that use artificial intelligence (AI) to varying degrees, and will ask you some questions about each of them.][CATI: Throughout this interview I will be describing to you several new technologies that use artificial intelligence (AI) to varying degrees, and will ask you some questions about each of them.]

Before we look at any specific technologies, [CAWI: we][CATI: I] would first like to ask you some questions about you and new technologies in general. When answering these questions please think about your overall opinion toward new technologies. This may involve new forms of technology that use AI, as well as new technologies that do not.

Q002 - Techinte Single coded

Not back

Overall, how interested are you in new technologies?

Not sure *Fixed

Normal

5

1 Very interested *Fixed
2 Fairly interested *Fixed
3 Not very interested *Fixed
4 Not at all interested *Fixed

Q003 - Techinfo Single coded

Not back

And, overall, how well informed do you feel about new technologies?

<u>Normal</u>

1	Very well informed *Fixed
2	Fairly well informed *Fixed
3	Not very well informed *Fixed
4	Not at all informed *Fixed
5	Not sure *Fixed

Q004 - Dig_Lit Matrix

Not back | Number of rows: 8 | Number of columns: 5

On the whole, how confident are you in your ability to do each of the following:

Rows: Random | Columns: Normal

Rendered as Dynamic Grid

	Very confident *Fixed	Fairly confident *Fixed	Not very confident *Fixed	Not at all confident	Don't know *Fixed
Use the internet to find information that helps you solve problems	•	•	•	0	0
Attach documents to an email and share it	O	O	O	O	O
Create documents using word processing applications (e.g. a CV or a letter)	•	•	•	•	0
Set up an email account	O	O	O	O	O
Organise information and content using files and folders (either on a device, across multiple devices, or on the Cloud)	•	•	•	•	0
Recognise and avoid suspicious links in emails, websites, social media messages and pop-ups	•	•	•	•	0
Pay for things online	O	O	O	O	O
Set up an online account that enables you to buy goods and services (e.g. Amazon account, eBay, John Lewis)	•	•	•	0	0

Not back | Number of rows: 5

People often have different views toward new technologies.

[CAWI: On the screen are two contrasting statements. Please select a point on the line between the two statements that you feel best reflects your **personal opinion** toward new technologies.]

[CATI: Soon I will read you two opposing statements. On a scale of 0 to 10, I would like you to tell me the number that you feel best reflects your **personal opinion** toward the two statements.

For example, if the first statement is '0. You are hungry' and the second statement is '10. You are full', answering 0 would mean you strongly agree that 'you are hungry' whereas answering 10 would mean you strongly agree that 'You are full'. Answering 5 would mean that you are between hungry and full. Does that make sense to you? Ok let's give it a try.]

[CAWI: I][CATI: You] do not seek out new technologies or gadgets	12345678910	When new technologies or gadgets are introduced, [CAWI: I][CATI: You] like to try them
Overall, new technologies make [CAWI: my][CATI: your] quality of life worse	12345678910	Overall, new technologies improve [CAWI: my][CATI: your] quality of life
[CAWI: I][CATI: You] find it difficult to keep up to date with new technologies	12345678910	[CAWI: I][CATI: You] find it easy to keep up to date with new technologies
[CAWI: I][CATI: You] do not like my online activity being tracked	12345678910	[CAWI: I am][CATI: You are] fine with my online activity being tracked
So long as the technology works, [CAWI: I][CATI: You] don't need to know how it works	12345678910	Knowing how new technologies work is important to [CAWI: me][CATI: you]

Not back | Number of rows: 2

We'd now like you to think about the impact of new technologies on society.

[CAWI: Please select a point on the line between the two statements that you feel best reflects your opinion, overall, on the impact of new technologies on society.]

[CATI: Once again, I will read you two opposing statements. On a scale of 0 to 10, I would like you to tell me the number that you feel best reflects opinion toward the two statements. When answering, please think about the **impact of new technologies on society overall.**]

On the whole, new technologies:

Normal

Are changing society too quickly	12345678910	Are changing society at a good pace
Are making society worse	12345678910	Are making society better

B004 - Survey_Intro End block

B006 - Face_Recog	Begin block
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Q008 - Prelim_CasesFR	Text
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Not back

[CAWI: We will now look at some examples of new technologies that use artificial intelligence (AI) to varying degrees, and ask you some questions about each of them.][CATI: I will now describe to you some examples of new technologies that use artificial intelligence (AI) to varying degrees, and ask you some questions about each of them.]

Q009 - Face_RecogText

Text

Not back

FACE RECOGNITION

Face recognition technologies are AI technologies that can compare and match human faces from digital images or videos against those stored elsewhere.

The technology works by first being trained on many images, learning to pick out distinctive details about people's faces.

These details, such as distance between the eyes or shape of the chin, are converted into a face-print, similar to a fingerprint.

Q010 - Mobile_Phone

Text

Not back

USING FACE RECOGNITION TO OPEN A PHONE

One use of face recognition technology is for unlocking mobile phones and other personal devices.

Such devices use this technology by scanning the face of the person attempting to unlock the phone through the camera, then comparing it against a saved face-print of the phone's owner.

Q011 - Aware_MP

Single coded

Not back

Before today, had you heard of the use of face recognition technology to unlock a phone or other personal device?

Normal

1 Yes *Fixed

2 No *Fixed

3 Not sure *Fixed

Ask only if Q011 - Aware_MP,1

Q012 - Exp_MP1 Single coded

Not back

How much personal experience have you had, if any, with use of **face recognition technology** to unlock a phone or other personal device?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q011 - Aware_MP,2

Q013 - Exp_MP2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **face recognition technology** to unlock a phone or other personal device?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if **Q011 - Aware_MP**,3

Q014 - Exp_MP3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **face recognition technology** to unlock a phone or other personal device?

Normal

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Not back

To what extent do you think that the use of **face recognition technology** to unlock a phone or personal device will be beneficial?

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q016 - BenB_MP Multi coded

Not back | Min = 1

Which of the following, if any, are ways you think the use of **face recognition technology** to unlock a phone or personal device will be beneficial?

Please select all that apply.

Random

1	It is faster to unlock a phone or personal device
2	People's personal information will be more safe and secure
3	Something else (please specify) *Fixed
4	None of these *Fixed *Exclusive
5	Don't know *Fixed *Fxclusive

Q017 - ConA MP	Single coded
QUIT - COIIA_IMP	Single coded

Not back

To what extent are you concerned about the use of **face recognition technology** to unlock a phone or personal device?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q018 - ConB_MP Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **face recognition technology** to unlock a phone or personal device?

Please select all that apply.

Random

1	The technology will be unreliable, making it take longer to unlock your phone or personal device
2	The technology will gather personal information which could be shared with third parties
3	The technology will make it easier for other people to unlock your phone or personal device
4	People's personal information will be less safe and secure
5	Some people may find it difficult to use the technology
6	The technology will be less effective for some groups of people in society than others
7	Something else (please specify) *Open *Fixed
8	None of these *Fixed *Exclusive
9	Don't know *Fixed *Exclusive

Q019 - Border_Control	Text

Not back

FACE RECOGNITION AT BORDER CONTROL

Another use of face recognition technology is to assist with border control.

'eGates' at many international airports use face recognition technologies to attempt to automatically verify travellers' identities by comparing the image on their passport with an image of their face taken by a camera at the gate.

If the technology verifies the person's identity, the eGate will open and let them through, otherwise they will be sent to a human border control officer.

Q020 - Aware_BC Single coded

Not back

Before today, had you heard of the use of face recognition technology at border control?

Normal

3

Not sure *Fixed

1	Yes *Fixed
2	No *Fixed

Ask or	nly if Q020 - Aware_BC ,1
Q021 - Exp_BC1 Single coded	

Not back

How much personal experience have you had, if any, with the use of **face recognition technology** at border control?

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Ask only if Q020 - Aware_BC,2

Q022 - Exp_BC2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **face recognition technology** at border control?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q020 - Aware_BC,3

Q023 - Exp_BC3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **face recognition technology** at border control?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Q024 - BenA_BC Single coded

Not back

To what extent do you think that the use of **face recognition technology** at border control will be beneficial to society?

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q025 - BenB_BC Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **face recognition technology** at border control will be beneficial?

Please select all that apply.

Random

1 Processing people at border control will be faster 2 People will not have to answer personal questions sometimes asked by border control officers 3 The technology will be more accurate than border control officers at detecting people who do not have the right to enter 4 The technology will be less likely than border control officers to discriminate against some groups of people in society 5 People's personal information will be more safe and secure The technology will save money usually spent on human resources 6 7 Something else (please specify) *Open *Fixed 8 None of these *Fixed *Exclusive 9 Don't know *Fixed *Exclusive

Q026 - ConA_BC Single coded

Not back

To what extent are you concerned about the use of **face recognition technology** at border control?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q027 - ConB_BC Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **face recognition technology** at border control?

Please select all that apply.

Random

	1	The technology will be unreliable and cause delays when it breaks down
:	2	The technology will not be as accurate as border control officers at detecting people who do not have the right to enter
;	3	The technology will gather personal information which could be shared with third parties
	4	People's personal information will be less safe and secure
	5	The technology will be more likely than border control officers to discriminate against some groups of people in society
	6	Border control officers will rely too heavily on the technology rather than their professional judgements
	7	Some people may find it difficult to use the technology
1	8	It will lead to job cuts. For example, for trained border control officers
	9	If the technology makes a mistake, it will be difficult to know who is responsible for what went wrong
	10	It will be more difficult to understand how decisions are reached
	11	Something else (please specify) *Open *Fixed
	12	None of these *Fixed *Exclusive
	13	Don't know *Fixed *Exclusive

Q028 - Policing_Surveillance

Text

Not back

FACE RECOGNITION IN POLICING AND SURVEILLANCE

Another use of face recognition technology is in policing and surveillance.

Some police forces in Britain and elsewhere use this technology to compare video footage from CCTV cameras against face databases of people of interest, such as criminal suspects, missing persons, victims of crime or possible witnesses.

Q029 - Aware_PS Single coded

Not back

Before today, had you heard of the use of face recognition technology in policing and surveillance?

Normal

1 Yes *Fixed

2 No *Fixed

3 Not sure *Fixed

Ask only if Q029 - Aware_PS,1

Q030 - Exp_PS1 Single coded

Not back

How much personal experience have you had, if any, with the use of **face recognition technology** in policing and surveillance?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q029 - Aware_PS,2

Q031 - Exp_PS2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **face recognition technology** in policing and surveillance?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q029 - Aware_PS,3

Q032 - Exp_PS3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **face recognition technology** in policing and surveillance?

Normal

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Not back

To what extent do you think that the use of **face recognition technology** in policing and surveillance will be beneficial?

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q034 - BenB_PS Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **face recognition technology** in policing and surveillance will be beneficial?

Please select all that apply.

Random

1	The technology will make it faster and easier to identify wanted criminals and missing persons
2	The technology will be more accurate than police officers and staff at identifying wanted criminals and missing persons
3	The technology will be less likely than police officers and staff to discriminate against some groups of people when identifying criminal suspects
4	The technology will save money usually spent on human resources
5	People's personal information will be more safe and secure
6	Something else (please specify) *Open *Fixed
7	None of these *Fixed *Exclusive
8	Don't know *Fixed *Exclusive

Q035 - ConA_PS	Single coded
-	

Not back

To what extent are you concerned about the use of face recognition technology in policing and surveillance?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q036 - ConB_PS Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **face recognition technology** in policing and surveillance?

Please select all that apply.

Random

1	The technology will be unreliable and will cause delays identifying wanted criminals and missing persons
2	The technology will not be as accurate as police officers and staff at identifying wanted criminals and missing persons
3	If the technology makes a mistake it will lead to innocent people being wrongly accused
4	If the technology makes a mistake, it will be difficult to know who is responsible for what went wrong
5	The technology will be more likely than police officers and staff to discriminate against some groups of people in society
6	The technology will gather personal information which could be shared with third parties
7	People's personal information will be less safe and secure
8	It will lead to job cuts. For example, for trained police officers and staff
9	Police officers and staff will rely too heavily on the technology rather than their professional judgements
10	Something else (please specify) *Open *Fixed
11	None of these *Fixed *Exclusive
12	Don't know *Fixed *Exclusive

B006 - Face_Recog	End block
_ 3	

Q037 - Elig_DecText

Text

Not back

TECHNOLOGIES THAT CALCULATE ELIGIBILITY

Some organisations use AI technologies to help them decide whether someone is eligible for the programmes or services they offer.

These AI technologies draw on data from previous eligibility decisions to assess the eligibility of a new applicant.

The recommendations of the technology are then used by the organisation to make the decision.

Q038 - Elig_Welfare Text

Not back

TECHNOLOGIES THAT CALCULATE ELIGIBILITY FOR WELFARE

Al technologies that assess eligibility are sometimes used to determine a person's eligibility for welfare benefits, such as Universal Credit, Jobseeker's Allowance or Disability Living Allowance.

Here, Al technologies are trained on lots of data about previous applicants for similar benefits, such as their employment history and disability status, learning patterns about which features are associated with particular decisions.

Many applications will only be considered for the benefit once the computer has marked them as eligible.

Q039 - Aware_Wel Single coded

Not back

Before today, had you heard of the use of **Al technologies for assessing eligibility** for welfare benefits?

Normal

1	Yes *Fixed
2	No *Fixed
3	Not sure *Fixed

Ask only if Qo	039 - Aware_Wel,1
Q040 - Exp_Wel1	Single coded

Not back

How much personal experience have you had, if any, with the use of **Al technologies for assessing eligibility** for welfare benefits?

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Ask only if Q039 - Aware_Wel,2

Q041 - Exp_Wel2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **Al technologies for assessing eligibility** for welfare benefits?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q039 - Aware_Wel,3

Q042 - Exp_Wel3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **Al technologies for assessing eligibility** for welfare benefits?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Q043 - BenA_Wel Single coded

Not back

To what extent do you think that the use of **Al technologies for assessing eligibility** for welfare benefits will be beneficial?

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q044 - BenB_Wel Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think that the use of **Al technologies for assessing eligibility** for welfare benefits will be beneficial?

Please select all that apply.

Random

1	Determining eligibility for benefits will be faster and easier
2	The technology will be more accurate than welfare officers at determining eligibility for welfare benefits
3	There will be less human error in determining eligibility for benefits
4	The technology will be less likely than welfare officers to discriminate against some groups of people in society
5	The technology will save money usually spent on human resources
6	People's personal information will be more safe and secure
7	Something else (please specify) *Open *Fixed
8	None of these *Fixed *Exclusive
9	Don't know *Fixed *Exclusive

Q045 - ConA_Wel Single coded

Not back

To what extent are you concerned about the use of **Al technologies for assessing eligibility** for welfare benefits?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q046 - ConB_Wel Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **Al technologies for assessing eligibility** for welfare benefits?

Please select all that apply.

Random

1	The technology will be unreliable and will cause delays to allocating welfare benefits
2	The technology will not be as accurate as welfare officers at determining eligibility for welfare benefits
3	The technology will be more likely than welfare officers to discriminate against some groups of people in society
4	The technology will gather personal information which could be shared with third parties
5	People's personal information will be less safe and secure
6	It will lead to job cuts. For example, for trained welfare officers
7	It will be more difficult to understand how decisions about allocating welfare benefits are reached
8	Welfare officers will rely too heavily on the technology rather than their professional judgements
9	If the technology makes a mistake, it will be difficult to know who is responsible for what went wrong
10	The technology will be less able than welfare officers to take account of individual circumstances
11	Something else (please specify) *Open *Fixed
12	None of these *Fixed *Exclusive
13	Don't know *Fixed *Exclusive

Q047 - Dev_Wel Matrix

Not back | Number of rows: 4 | Number of columns: 5

The Department for Work and Pensions (DWP) may ask an outside organisation to produce AI technologies for assessing eligibility for welfare benefits for them.

Thinking about each of the groups below, how concerned do you feel, if at all, about each of them producing new computer technologies for assessing eligibility for welfare benefits?

Rows: Random | Columns: Normal

Rendered as Dynamic Grid

	Very concerned *Fixed	Somewhat concerned	Not very concerned *Fixed	Not at all concerned	Not sure
Private companies	O	O	O	O	O
Not for profit organisations (e.g. charities)	O	O	O	O	O
Another governmental body or department	O	O	O	O	O
Universities/academic researchers	O	O	O	O	O

Q048 - Elig_Job Text

Not back

TECHNOLOGIES THAT CALCULATE ELIGIBILITY FOR A JOB

One use of AI technologies for assessing eligibility is for reviewing people's job applications. The technology will look at a person's job application or CV and automatically determine if they are eligible for a job.

Here, AI technologies are trained on lots of data from decisions about previous applicants for similar roles, learning patterns about which features are associated with particular hiring outcomes.

Many employers who use this technology will only read the applications that the computer has marked as an eligible match for the role.

Q049 - Aware_Job Single coded

Not back

Before today, had you heard of the use of **Al technologies for assessing eligibility** for jobs?

Normal

1	Yes *Fixed
2	No *Fixed
3	Not sure *Fixed

A	Ask only if Q049 - Aware_Job ,1
Q050 - Exp_Job1	Single coded

Not back

How much personal experience have you had, if any, with the use of **Al technologies for assessing eligibility** for jobs?

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Ask only if **Q049 - Aware_Job**,2

Q051 - Exp_Job2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **Al technologies for assessing eligibility** for jobs?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q049 - Aware_Job ,3	

Q052 - Exp_Job3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **Al technologies for assessing eligibility** for jobs?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Q053 - BenA_Job Single coded

Not back

To what extent do you think that the use of Al technologies for assessing eligibility for jobs will be beneficial?

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q054 - BenB_Job Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think that the use of **Al technologies for assessing eligibility** for jobs will be beneficial?

Please select all that apply.

Random

1	Reviewing job applications will be faster and easier for employers and recruiters
2	The technology will be more accurate than employers and recruiters at reviewing job applications
3	There will be less human error in determining eligibility for a job
4	The technology will be less likely than employers and recruiters to discriminate against some groups of people in society
5	The technology will save money usually spent on human resources
6	People's personal information will be more safe and secure
7	Something else (please specify) *Open *Fixed
8	None of these *Fixed *Exclusive
9	Don't know *Fixed *Exclusive

Q055 - ConA_Job Single coded

Not back

To what extent are you concerned about the use of **Al technologies for assessing eligibility** for jobs?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q056 - ConB_Job Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **Al technologies for assessing eligibility** for jobs?

Please select all that apply.

Random

1	The technology will be unreliable and cause delays to assessing job applications
2	The technology will not be as accurate as employers and recruiters at reviewing job applications
3	The technology will be less able than employers and recruiters to take account of individual circumstances
4	The technology will be more likely than employers and recruiters to discriminate against some groups of people in society
5	The technology will gather personal information which could be shared with third parties
6	People's personal information will be less safe and secure
7	It will lead to job cuts. For example, for trained recruitment staff
8	If the technology makes a mistake, it will be difficult to know who is responsible for what went wrong
9	Employers and recruiters will rely too heavily on the technology rather than their professional judgements
10	It will be more difficult to understand how decisions about job application assessments are reached
11	Something else (please specify) *Open *Fixed
12	None of these *Fixed *Exclusive
13	Don't know *Fixed *Exclusive

B007 - Eligibility_Decisions	End block
B007 - Eligibility_Decisions	End block

Q057 - Pred_RiskText

Text

Not back

TECHNOLOGIES THAT PREDICT RISK

Al technologies may be used by organisations to predict the risk of something happening.

When predicting the risk, these AI technologies draw on a wide range of data about the outcomes of many people to calculate the risk for an individual.

The recommendations these technologies make are then used by organisations to make decisions.

Q058 - Risk_Cancer

Text

Not back

TECHNOLOGIES THAT PREDICT THE RISK OF CANCERS

One use of AI technologies for calculating risk is for assessing a medical scan to identify a person's risk of developing some types of cancer.

Here, AI technologies are trained on many scans from past patients, learning patterns about which features are associated with particular diagnoses and health outcomes.

The technology can then give a doctor a prediction of the likelihood that a new patient will develop a particular cancer based on their scan.

Q059 - Aware_Can Single coded

Not back

Before today, had you heard of the use of Al technologies that predict the risk of developing cancer?

Normal

1	Yes *Fixed
2	No *Fixed
3	Not sure *Fixed

Ask onl	y if Q059 - Aware_Can ,1
Q060 - Exp_Can1	Single coded

Not back

How much personal experience have you had, if any, with the use of **Al technologies that predict the risk** of developing cancer?

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Ask only if Q059 - Aware_Can,2

Q061 - Exp_Can2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **Al technologies that predict the risk** of developing cancer?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q059 - Aware_Can,3

Q062 - Exp_Can3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **Al technologies that predict the risk** of developing cancer?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Q063 - BenA_Can Single coded

Not back

To what extent do you think that the use of **Al technologies to predict the risk** of developing cancer will be beneficial?

Normal

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q064 - BenB_Can Multi coded

Not back | Min = 1

Which of the following, if any, are ways you think the use of **Al technologies that predict the risk** of developing cancer will be beneficial?

Please select all that apply.

1	The technology will enable earlier detection of cancer, allowing earlier monitoring or treatment
2	There will be less human error when predicting people's risk of developing cancer
3	The technology will be more accurate than a human doctor at predicting the risk of developing cancer
4	The technology will reduce discrimination in healthcare
5	People's personal information will be more safe and secure
6	Something else (please specify) *Open *Fixed
7	None of these *Fixed *Exclusive
8	Don't know *Fixed *Exclusive

Q065 - ConA_Can Single coded

Not back

To what extent are you concerned about the use of **Al technologies that predict the risk** of developing cancer?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q066 - ConB_Can Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **Al technologies that predict the risk** of developing cancer?

Please select all that apply

1	The technology will be unreliable and cause delays to predicting a risk of cancer
2	The technology will gather personal information which could be shared with third parties
3	People's personal information will be less safe and secure
4	The technology will not be as accurate as a human doctor at predicting the risk of developing cancer
5	The technology will be less effective for some groups of people in society than others, leading to more discrimination in healthcare
6	Doctors will rely too heavily on the technology rather than their professional judgements
7	If the technology makes a mistake, it will be difficult to know who is responsible for what went wrong
8	It will be more difficult to understand how decisions about potential health outcomes are reached
9	Something else (please specify) *Open *Fixed
10	None of these *Fixed *Exclusive
11	Don't know *Fixed *Exclusive

Q067 - Dev_Can Matrix

Not back | Number of rows: 4 | Number of columns: 5

Hospitals may ask an outside organisation to produce AI technologies that predict the risk of developing cancer for them.

Thinking about each of the groups below, how concerned do you feel, if at all, about each of them producing Al technologies that predict the risk of developing cancer?

Rows: Random | Columns: Normal

Rendered as Dynamic Grid

	Very concerned *Fixed	Somewhat concerned *Fixed	Not very concerned *Fixed	Not at all concerned *Fixed	Not sure *Fixed
Private companies	O	O	O	O	O
Not for profit organisations (e.g. charities)	O	O	O	O	O
A governmental body or department	O	O	O	O	O
Universities/academic researchers	O	O	O	O	O

Q068 - Risk_Loan	Text

Not back

TECHNOLOGIES THAT PREDICT THE RISK OF REPAYING A LOAN

One use of AI technologies for calculating risk is to assess how likely a person is to repay a loan, including a mortgage.

Here, Al technologies are trained on data about how well past customers have kept up with repayments, learning which characteristics make them likely or unlikely to repay.

When a new customer applies for a loan, the technology will assess a range of information about that person and compare it to the information it has been trained on. It will then make a prediction to the bank about how likely the new customer will be able to repay the loan.

Q069 - Aware_Loan Single coded

Not back

Before today, had you heard of the use of Al technologies that predict the risk of being able to repay a loan?

Normal

1	Yes *Fixed
2	No *Fixed
3	Not sure *Fixed

	Ask only if Q069 - Aware_Loan ,1
Q070 - Exp_Loan1	Single coded

Not back

How much personal experience have you had, if any, with the use of **Al technologies that predict the risk** of being able to repay a loan?

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Ask only if Q069 - Aware_Loan,2

Q071 - Exp_Loan2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **Al technologies that predict the risk** of being able to repay a loan?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q069 - Aware_Loan,3

Q072 - Exp_Loan3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **Al technologies that predict the risk** of being able to repay a loan?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Q073 - BenA_Loan Single coded

Not back

To what extent do you think that the use of **Al technologies to predict the risk** of being able to repay a loan will be beneficial?

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q074 - BenB_Loan Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **Al technologies to predict the risk** of being able to repay a loan will be beneficial?

Please select all that apply.

1	Applying for a loan will be faster and easier
2	The technology will be more accurate than banking professionals at predicting the risk of repaying a loan
3	There will be less human error in loan decisions
4	The technology will be less likely than banking professionals to discriminate against some groups of people in society
5	The technology will save money usually spent on human resources
6	People's personal information will be more safe and secure
7	Something else (please specify) *Open *Fixed
8	None of these *Fixed *Exclusive
9	Don't know *Fixed *Exclusive

Q075 - ConA_Loan Single coded

Not back

To what extent are you concerned about the use of **Al technologies that predict the risk** of being able to repay a loan?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q076 - ConB_Loan Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **Al technologies that predict the risk** of being able to repay a loan?

Please select all that apply.

1	The technology will be unreliable and cause delays to assessing loan applications
2	The technology will gather personal information which could be shared with third parties
3	People's personal information will be less safe and secure
4	Banking professionals may rely too heavily on the technology rather than their professional judgements
5	The technology will not be as accurate as banking professionals at predicting the risk of repaying a loan
6	The technology will be more likely than banking professionals to discriminate against some groups of people in society
7	It will be more difficult to understand how decisions about loan applications are reached
9	If the technology makes a mistake, it will be difficult to know who is responsible for what went wrong
10	It will lead to job cuts. For example, for trained banking professionals
11	The technology will be less able than banking professionals to take account of individual circumstances
12	Something else (please specify) *Open *Fixed
13	None of these *Fixed *Exclusive
14	Don't know *Fixed *Exclusive

B008 - Risk_Decisions	End block

Text

Q077 - Targ_AdText

Not back

TARGETED ADVERTISEMENTS ONLINE

Targeted advertising on the internet tailors adverts to a specific user. These kinds of ads are commonly found on social media, online news sites, and video and music streaming platforms.

The technology uses lots of data generated by tracking people's activities online to learn about people's characteristics, attitudes and interests.

The technology then uses this data to generate ads tailored to each user.

Q078 - SocialMedia_Con Text

Not back

TARGETED SOCIAL MEDIA ADVERTISING FOR CONSUMER PRODUCTS

Targeted adverts on social media are sometimes used by companies to suggest consumer products such as clothes, gadgets and food.

These ads are targeted at people according to their personal characteristics and previous behaviour on social media. They are intended to encourage people to buy particular products.

Q079 - Aware_SMC Single coded

Not back

Before today, had you heard of the use of targeted social media advertising for consumer products?

Normal

1	Yes *Fixed
2	No *Fixed
3	Not sure *Fixed

Ask only if Q079 - Aware_SMC,1		
Q080 - Exp_SMC1 Multi coded		

Not back | Min = 1

How much personal experience have you had, if any, with the use **of targeted social media advertising** for consumer products?

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Ask only if Q079 - Aware_SMC,2

Multi coded Q081 - Exp_SMC2

Not back | Min = 1

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of targeted social media advertising for consumer products?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- Not sure *Fixed

Ask only if Q079 - Aware_SMC,3

Q082 - Exp_SMC3 Multi coded

Not back | Min = 1

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of targeted social media advertising for consumer products?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- Not sure *Fixed

Q083 - BenA_SMC Single coded

Not back

To what extent do you think that the use of **targeted social media advertising** for consumer products will be beneficial?

Normal

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q084 - BenB_SMC Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **targeted social media advertising** for consumer products will be beneficial?

Please select all that apply.

1	People will be able to find products online faster and more easily
2	The adverts people see online will be more relevant to them than adverts that are not targeted
3	It will help people discover new products that might be of interest to them
4	Something else (please specify) *Open *Fixed
5	None of these *Fixed *Exclusive
6	Don't know *Fixed *Fxclusive

Q085 - ConA_SMC Single coded

Not back

To what extent are you concerned about the use of targeted social media advertising for consumer products?

Normal

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q086 - ConB_SMC	Multi coded
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Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **targeted social media advertising** for consumer products?

Please select all that apply

1	The technology will be inaccurate and will show people adverts that are not relevant to them
2	The technology will gather personal information which could be shared with third parties
3	People's personal information will be less safe and secure
4	The technology invades people's privacy
5	Something else (please specify) *Open *Fixed
6	None of these *Fixed
7	Don't know *Fixed

Text

Not back

TARGETED SOCIAL MEDIA ADVERTISING FOR POLITICAL PARTIES

Targeted adverts on social media are sometimes used by political parties to suggest political content to users.

These ads are targeted at people according to their personal characteristics and previous behaviour on social media. They are intended to encourage people to support a specific political party.

Not back

Before today, had you heard of the use of targeted social media advertising for political parties?

- 1 Yes *Fixed
- 2 No *Fixed
- 3 Not sure *Fixed

Ask only if Q088 - Aware_SMP,1

Q089 - Exp_SMP1 Single coded

Not back

How much personal experience have you had, if any, with the use of **targeted social media advertising** for political parties?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q088 - Aware_SMP,2

Q090 - Exp_SMP2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **targeted social media advertising** for political parties?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if **Q088 - Aware_SMP**,3

Q091 - Exp_SMP3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **targeted social media advertising** for political parties?

Normal

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Q092 - BenA_SMP	Single coded
-----------------	--------------

Not back

To what extent do you think that the use of targeted social media advertising for political parties will be beneficial?

- 1 Very beneficial *Fixed
- 2 Fairly beneficial *Fixed
- 3 Not very beneficial *Fixed
- 4 Not at all beneficial *Fixed
- 5 Don't know *Fixed

Q093 - BenB_SMP Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **targeted social media advertising** for political parties will be beneficial?

Please select all that apply.

Random

1	People will be able to find political information online faster and more easily
2	The political adverts that people see online will be more relevant to them than political adverts that are not targeted
3	It will help people discover new political representatives who might be of interest to them
4	It will increase the diversity of political perspectives that people engage with
5	Something else (please specify) *Open *Fixed
6	None of these *Fixed *Exclusive
7	Don't know *Fixed *Exclusive

Not back

To what extent are you concerned about the use of targeted social media advertising for political parties?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q095 - ConB_SMP Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **targeted social media advertising** for political parties?

Please select all that apply

1	The technology will be inaccurate and will show people political adverts that are not relevant to them
2	The technology will gather personal information which could be shared with third parties
3	People's personal information will be less safe and secure
4	It will reduce the diversity of political perspectives that people engage with
5	The technology invades people's privacy
6	Something else (please specify) *Open *Fixed
7	None of these *Fixed *Exclusive
8	Don't know *Fixed *Exclusive

B009 - Data_Linking End block

B010 - Virtual_Assistance	Begin block

Q096 - Virt_AsText

Text

Not back

VIRTUAL ASSISTANT TECHNOLOGIES

Virtual assistant technologies are devices or software that are designed to assist people with tasks like finding information online or helping to arrange appointments. The technologies can often respond to voice or text commands from a human.

The technologies work by being 'trained' on lots of information about how people communicate through language, learning to match certain words and phrases to actions that they have been designed to carry out.

Q097 - VirtualAssistance_Smart

Text

Not back

VIRTUAL ASSISTANT SMART SPEAKERS

One example of a virtual assistant technology is a smart speaker.

These technologies are small computers that are connected to the internet and which can respond to voice commands to do things such as, turn appliances in the home on and off, answer questions about any topic, set reminders, or play music.

Q098 - Aware_VASS

Single coded

Not back

Before today, had you heard of the use of virtual assistant smart speakers?

Normal

1 Yes *Fixed

2 No *Fixed

3 Not sure *Fixed

Ask only if Q098 - Aware_VASS,1

Single coded **Q099 - Exp_VASS1**

Not back

How much personal experience have you had, if any, with the use of virtual assistant smart speakers?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- Not sure *Fixed

	Ask only if Q098 - Aware_VASS ,2	
O-Eyn VASS2		Single coded

Q100 - Exp_VASS2

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of virtual assistant smart speakers?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if **Q098 - Aware_VASS**,3

Q101 - Exp_VASS3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **virtual assistant** smart speakers?

Normal

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Q102 - BenA_VASS	Single coded
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Not back

To what extent do you think that the use of virtual assistant smart speakers will be beneficial?

Normal

5

Don't know *Fixed

Very beneficial *Fixed
Fairly beneficial *Fixed
Not very beneficial *Fixed
Not at all beneficial *Fixed

Q103 - BenB_VASS Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **virtual assistant** smart speakers will be beneficial? *Please select all that apply.*

Random

1	The technology will allow people to carry out tasks faster and more easily
2	The technology will allow people with difficulty using devices to access features more easily
3	People's personal information will be more safe and secure
5	People will be able to find information more accurately
6	Something else (please specify) *Open *Fixed
7	None of these *Fixed *Exclusive
8	Don't know *Fixed *Exclusive

Not back

To what extent are you concerned about the use of virtual assistant smart speakers?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q105 - ConB_VASS Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **virtual assistant** smart speakers? *Please select all that apply.*

Random

1	The technology will be unreliable and cause delays to doing tasks
2	The technology will not always give accurate responses
3	The technology will be less effective for some groups of people in society than others
4	Some people may find it difficult to use the technology
5	The technology will gather personal information which could be shared with third
6	People's personal information will be less safe and secure
7	Something else (please specify) *Open *Fixed
8	None of these *Fixed *Exclusive
9	Don't know *Fixed *Exclusive

Q106 - VirtualAssistance_Health

Text

Not back

VIRTUAL ASSISTANTS IN HEALTHCARE

One example of a virtual assistant is for assessing information about a person's health.

These AI technologies aim to respond to healthcare queries online, including about appointments or current symptoms.

The technologies are able to automatically suggest a possible diagnosis or advise treatment. For more serious illnesses, the technologies may suggest a person seeks further medical advice, for example by booking a GP appointment or by going to hospital.

Q107 - Aware_VAH Single coded

Not back

Before today, had you heard of the use of **virtual assistants** in healthcare?

Normal

4	1/	
1	res	*Fixed

2 No *Fixed

3 Not sure *Fixed

Ask only if Q107 - Aware_VAH,1

Q108 - Exp_VAH1 Single coded

Not back

How much personal experience have you had, if any, with the use of **virtual assistants** in healthcare?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q108 - Exp_VAH1,2

Q109 - Exp_VAH2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **virtual assistants** in healthcare?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q107 - Aware_VAH,3

Q110 - Exp_VAH3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **virtual assistants** in healthcare?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Q111 - BenA_VAH Single coded

Not back

To what extent do you think that the use of **virtual assistants** in healthcare will be beneficial?

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q112 - BenB_VAH Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **virtual assistants** in healthcare will be beneficial? *Please select all that apply.*

Random

9

1 It is a faster way to get help for your health and symptoms than speaking to a healthcare professional 2 The technology will be more accurate than a healthcare professional at suggesting a diagnosis and treatment options 3 The technology will be less likely than healthcare professionals to discriminate against some groups of people in society 4 The technology will be easier for some groups of people in society to use, such as those who have difficulty leaving their home 5 The technology will save money usually spent on human resources People's personal information will be more safe and secure 6 7 Something else (please specify) *Open *Fixed 8 None of these *Fixed *Exclusive

Don't know *Fixed *Exclusive

Q113 - ConA_VAH Single coded

Not back

To what extent are you concerned about the use of **virtual assistants** in healthcare?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q114 - ConB_VAH Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **virtual assistants** in healthcare? *Please select all that apply.*

1	The technology will be unreliable and cause delays to getting help
2	The technology will not be as accurate as a healthcare professional at suggesting a diagnosis and treatment options
3	The technology will be less able than healthcare professionals to take account of individual circumstances
4	The technology will be less effective for some groups of people in society than others
5	Some people may find it difficult to use the technology
6	The technology will gather personal information which could be shared with third parties
7	People's personal information will be less safe and secure
8	It will lead to job cuts. For example, for trained healthcare professionals
9	If the technology makes a mistake, it will be difficult to know who is responsible for what went wrong
10	It will be more difficult to understand how decisions about diagnoses and treatments are reached
11	Something else (please specify) *Open *Fixed
12	None of these *Fixed *Exclusive
13	Don't know *Fixed *Exclusive

B010 - Virtual_Assistance	End block

Q115 - Robotics_Text

Text

Not back

ROBOTICS

Robotic technologies are computer-assisted machines which can interact with the physical world automatically, sometimes without the need for a human operator.

These technologies use large amounts of data generated by machines, humans and sensors in the physical world to 'learn to' carry out tasks that would previously have been carried out by humans.

Q116 - Rob_Vacuum

Text

Not back

ROBOTIC VACUUM CLEANERS

One example of robotic technologies are robotic vacuum cleaners, sometimes called a 'smart' vacuum cleaner.

This is a vacuum cleaner that can clean floors independently, without any human involvement.

Robotic vacuum cleaners use sensors and motors to automatically move around a room while being able to detect obstacles, stairs and walls.

Q117 - Aware_RVC Single coded

Not back

Before today, had you heard of the use of robotic vacuum cleaners?

Normal

1	Voc	*Fixed
1	Y ES	"HIXEA

- 2 No *Fixed
- 3 Not sure *Fixed

Ask only if Q117 - Aware_RVC,1

Q118 - Exp_RVC1 Single coded

Not back

How much personal experience have you had, if any, with the use of robotic vacuum cleaners?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q117 - Aware_RVC,2

Q119 - Exp_RVC2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **robotic** vacuum cleaners?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q117 - Aware_RVC,3

Q120 - Exp_RVC3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **robotic** vacuum cleaners?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Q121 - BenA_RVC Single coded

Not back

To what extent do you think that the use of **robotic** vacuum cleaners will be beneficial?

Normal

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **robotic** vacuum cleaners will be beneficial? *Please select all that apply.*

Random

The technology will do the vacuuming, saving people time

The technology will be more accurate than a human at vacuuming

It will make vacuuming possible for people who have difficulty doing manual tasks

Something else (please specify) *Open *Fixed

None of these *Fixed *Exclusive

Don't know *Fixed *Exclusive

Q123 - ConA_RVC Single coded

Not back

To what extent are you concerned about the use of **robotic** vacuum cleaners?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q124 - ConB_RVC Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of robotic vacuum cleaners?

Random

1	The technology will be unreliable and not always work, for example, the motion sensors will not detect steps or surface changes
2	The technology will not be as accurate as a human at vacuuming
3	The technology will be a safety hazard, you might trip on them
4	The technology will gather personal information which could be shared with third parties
5	People's personal data will be less safe and secure
6	Some people may find it difficult to use the technology
7	The technology will be less effective for some groups of people in society than others
8	Something else (please specify) *Open *Fixed
9	None of these *Fixed *Exclusive
10	Don't know *Fixed *Exclusive

Not back

ROBOTIC CARE ASSISTANTS

One example of robotic technologies are robotic care assistants. These technologies are being developed to help carry out physical tasks in care settings such as hospitals and nursing homes.

Robotic care assistants are designed to support specific tasks, such as helping patients with mobility issues to get in and out of bed, to pick up objects, or with personal tasks such as washing and dressing.

When these technologies are used, a human care assistant will be on-call if needed.

Not back

Before today, had you heard of the use of robotic care assistants?

Normal

2

1	Yes *Fixed

3 Not sure *Fixed

No *Fixed

Q127 - BenA_RCA Single coded

Not back

To what extent do you think that the use of **robotic** care assistants will be beneficial?

Normal

1	Very beneficial *Fixed		

2 Fairly beneficial *Fixed

3 Not very beneficial *Fixed

4 Not at all beneficial *Fixed

5 Don't know *Fixed

Q128 - BenB_RCA Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **robotic** care assistants will be beneficial? *Please select all that apply.*

Random

- 1 The technology will make caregiving tasks easier and faster
- The technology will be able to do tasks such as lifting patients out of bed more accurately than caregiving professionals
- 3 The technology will be less likely than caregiving professionals to discriminate against some groups of people in society
- 4 The technology will save money usually spent on human resources
- 5 Something else (please specify) *Open *Fixed
- 6 None of these *Fixed *Exclusive
- 7 Don't know *Fixed *Exclusive

Q129 - ConA_RCA Single coded

Not back

To what extent are you concerned about the use of robotic care assistants?

- 1 Very concerned *Fixed
- 2 Somewhat concerned *Fixed
- 3 Not very concerned *Fixed
- 4 Not at all concerned *Fixed
- 5 Don't know *Fixed

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **robotic** care assistants? *Please select all that apply.*

1	The technology will be unreliable and cause delays to urgent caregiving tasks
2	The technology will not be able do tasks such as lifting patients out of bed as accurately as caregiving professionals
3	The technology will be less effective for some groups of people in society than others
4	It will lead to job cuts. For example, for trained caregiving professionals
5	The technology will not be safe, it could hurt people
6	If the technology makes a mistake, it will be difficult to know who is responsible for what went wrong
7	The technology will gather personal information which could be shared with third parties
8	Patients will miss out on the human interaction they would otherwise get from human carers
9	Something else (please specify) *Open *Fixed
10	None of these *Fixed *Exclusive
11	Don't know *Fixed *Exclusive

B011 - Robotics_Home	End block
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B012 - Robotics_Other	Begin block

Text

Not back

DRIVERLESS CARS

Another use of robotic technologies is for driverless cars. These are vehicles that are designed to travel on roads with other cars, lorries and vans, but which drive themselves automatically without needing a human driver.

Driverless cars can detect obstacles, pedestrians, other drivers and road layouts by assessing their physical surroundings using sensors and comparing this information to large amounts of data about different driving environments.

Q132 - Aware_DC Single coded

Not back

Before today, had you heard of the use of driverless cars?

Normal

1 Yes *Fixed

2 No *Fixed

3 Not sure *Fixed

Q133 - BenA_DC Single coded

Not back

To what extent do you think that the use of driverless cars will be beneficial?

Normal

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q134 - BenB_DC Multi coded

Not back | Min = 1

Which of the following, if any, are ways you think that having **driverless cars** on the roads will be beneficial? *Please select all that apply.*

1	It will make travel by car easier
2	It will free up time to do other things while driving like working, sleeping or watching a movie
3	Driverless cars will drive with more accuracy and precision than human drivers
4	Driverless cars will be less likely to cause accidents than human drivers
5	It will make travel by car easier for disabled people or for people who have difficulty driving
6	The technology will save money usually spent on human drivers
7	Something else (please specify) *Open *Fixed
8	None of these *Fixed *Exclusive
9	Don't know *Fixed *Exclusive

Q135 - ConA_DC Single coded

Not back

To what extent are you concerned about the use of driverless cars?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Q136 - ConB_DC Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **driverless cars**? *Please select all that apply.*

1	The technology will not always work, making the cars unreliable
2	Getting to places will take longer as the cars will be overly cautious
3	Driverless cars will not be as accurate or precise as humans are at driving
4	The technology will gather personal information which could be shared with third parties
5	The technology will be less effective for some groups of people in society than others
6	Some people may find it difficult to use the technology
7	It will lead to job cuts. For example, for truck drivers, taxi drivers, delivery drivers
8	If the technology makes a mistake, it will be difficult to know who is responsible for what went wrong
9	It will be more difficult to understand how the car makes decisions compared to a human driver
10	Driverless cars will be more likely to cause accidents than human drivers
11	Something else (please specify) *Open *Fixed
12	None of these *Fixed *Exclusive
13	Don't know *Fixed *Exclusive

Q137 - Auto_Weapons

Text

Not back

AUTONOMOUS WEAPONS

Another use of robotic technologies is for autonomous weapon systems used by the military.

These include missile systems, drones and submarines that, once launched, can automatically identify, select or attack targets without further human intervention.

These technologies decide when to act by assessing their physical surroundings using sensors and comparing this information to large amounts of data about different combat environments.

Q138 - Aware_AW Single coded

Not back

Before today, had you heard of the use of autonomous weapon systems?

Normal

1 Yes *Fixed

2 No *Fixed

3 Not sure *Fixed

Q139 - BenA_AW Single coded

Not back

To what extent do you think that the use of autonomous weapon systems will be beneficial?

Normal

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Not back | Min = 1

Which of the following, if any, are ways you think that the use of **autonomous weapon systems** will be beneficial? *Please select all that apply.*

1	The technologies will enable faster military response to threats
2	The technologies will preserve the lives of some soldiers
3	The technologies will be more accurate than human soldiers at identifying targets
4	The technologies will be less likely than human soldiers to target people based on particular characteristics
5	The technologies will lead to fewer civilians being harmed or killed
6	The technology with save money usually spent on human resources
7	Something else (please specify) *Open *Fixed
8	None of these *Fixed *Exclusive
9	Don't know *Fixed *Exclusive

Q141 - ConA_AW Single coded

Not back

To what extent are you concerned about the use of autonomous weapon systems?

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed

Q142 - ConB_AW Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **autonomous weapon systems**? *Please select all that apply.*

1	The technologies will be unreliable and may miss or not fire at targets
2	The technologies will lead to more civilians being harmed or killed
3	The technologies will not be as accurate at identifying targets as human soldiers
4	The technologies will be more likely than human soldiers to target people based on particular characteristics
5	Defence staff will rely too heavily on the technologies rather than their professional judgements
6	It will lead to job cuts. For example, for trained defence staff
7	If the technologies make a mistake, it will be difficult to know who is responsible for what went wrong
8	It is more difficult to understand how military decisions are reached
9	The technologies will lead to more soldiers being harmed or killed
10	Something else (please specify) *Open *Fixed
11	None of these *Fixed *Exclusive
12	Don't know *Fixed *Exclusive

B012 - Robotics_Other	End block

B013 - Advancing_Knowledge Begin block
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Not back

ADVANCING KNOWLEDGE THROUGH SIMULATIONS

New computer technologies are being developed to advance human knowledge about the past and the future.

These technologies work by taking large amounts of data that we already have, and using this to create realistic simulations about how things were in the past, or how they might be in the future.

These 'simulation technologies' aim to allow people to study and learn about places and events that would otherwise be impossible or difficult to directly experience.

Q144 - ClimateChange_Research

Text

Not back

SIMULATIONS FOR CLIMATE CHANGE RESEARCH

One example of using new simulation technologies for advancing knowledge is for research about climate change.

New simulation technologies can analyse large amounts of past data in order to simulate the future impacts of climate change in particular areas. This data could come from weather and environmental data, pollution data, and data on energy usage from individual homes.

For example, these technologies can help scientists and governments to predict the likelihood of a significant flood occurring in a particular region over the next 10 years, along with how the flood may impact agriculture and health.

Q145 - Aware_CCR Single coded

Not back

Before today, had you heard of the use of **new simulation technologies** to advance climate change research?

Normal

1	Yes *Fixed
2	No *Fixed
3	Not sure *Fixed

Q149 - BenA_CCR Single coded

Not back

To what extent do you think that the use of **new simulation technologies** to advance climate change research will be beneficial?

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q150 - BenB_CCR Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **new simulation technologies** to advance climate change research will be beneficial?

Please select all that apply.

Random

1	The technology will be more accurate than scientists and government researchers alone at predicting
	climate change effects

- 2 The technology will make it faster and easier for scientists and governments to predict climate change effects
- The technology will predict issues across a wider range of regions and countries, meaning more people will experience the benefits of climate research
- 4 This technology will allow more people to understand the possible effects of climate change
- 5 Something else (please specify) *Open *Fixed
- 6 None of these *Fixed *Exclusive
- 7 Don't know *Fixed *Exclusive

	_
Q151 - ConA_CCR	Single coded

Not back

To what extent are you concerned about the use of **new simulation technologies** to advance climate change research?

1	Very concerned	*Fixed
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- 2 Somewhat concerned *Fixed
- 3 Not very concerned *Fixed
- 4 Not at all concerned *Fixed
- 5 Don't know *Fixed

Q152 - ConB_CCR Multi coded

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **new simulation technologies** to advance climate change research?

Please select all that apply.

Random

1	The technology will be unreliable making it harder to predict the impacts of climate change and extreme
	weather

- The technology will not be as accurate as scientists and government researchers alone at predicting climate change events
- 3 The technology will gather personal information which could be shared with third parties
- The technology will predict issues in some regions better than others, meaning that some people do not experience the benefits of these technologies
- 5 Something else (please specify) *Open *Fixed
- 6 None of these *Fixed *Exclusive
- 7 Don't know *Fixed *Exclusive

Q153 - Virtual_Reality

Text

Not back

VIRTUAL REALITY FOR CULTURE AND EDUCATION

One example of using new simulation technologies for advancing knowledge is the development of virtual reality (VR) for education.

Here, a person can wear a VR headset at home or school that will show them a 3-dimensional simulation of a museum or historical site, using a range of data about the museum or historical site.

These technologies are designed to allow people to learn more about history or culture through games, videos and other immersive experiences.

Q154 - Aware_VR Single coded

Not back

Before today, had you heard of the use of **new simulation technologies** for educational purposes?

Normal

3

Not sure *Fixed

1	Yes *Fixed
2	No *Fixed

Ask only if Q154 - Aware_VR,1			
Q155 - Exp_VR1	Single coded		

Not back

How much personal experience have you had, if any, with the use of **new simulation technologies** for educational purposes?

1	A great deal of personal experience *Fixed
2	Some personal experience *Fixed
3	No personal experience *Fixed
4	Not sure *Fixed

Ask only if Q154 - Aware_VR,2

Q156 - Exp_VR2 Single coded

Not back

Even though you had not heard of it before today, how much personal experience do you think you have had, if any, with the use of **new simulation technologies** for educational purposes?

Normal

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Ask only if Q154 - Aware_VR,3

Q157 - Exp_VR3 Single coded

Not back

Even though you were unsure if you had heard of it before today, how much personal experience do you think you have had, if any, with the use of **new simulation technologies** for educational purposes?

- 1 A great deal of personal experience *Fixed
- 2 Some personal experience *Fixed
- 3 No personal experience *Fixed
- 4 Not sure *Fixed

Q158 - BenA_VR Single coded

Not back

To what extent do you think that the use of **new simulation technologies** for educational purposes will be beneficial?

Normal

1	Very beneficial *Fixed
2	Fairly beneficial *Fixed
3	Not very beneficial *Fixed
4	Not at all beneficial *Fixed
5	Don't know *Fixed

Q159 - BenB_VR Multi coded

Not back | Min = 1

Which of the following, if any, are ways that you think the use of **new simulation technologies** for educational purposes will be beneficial?

Random

People will gain a more accurate understanding of historical events and how people lived in the past

The technology will make it easier and faster to learn about history and culture

The technology will increase the quality of education by providing more immersive experiences

The technology will allow more people to learn about history and culture

Something else (please specify) *Open *Fixed

None of these *Fixed *Exclusive

Don't know *Fixed *Exclusive

Q160 - ConA_VR Single coded

Not back

To what extent are you concerned about the use of **new simulation technologies** for educational purposes?

Normal

1	Very concerned *Fixed
2	Somewhat concerned *Fixed
3	Not very concerned *Fixed
4	Not at all concerned *Fixed
5	Don't know *Fixed

Not back | Min = 1

Which of the following, if any, are concerns that you have about the use of **new simulation technologies** for educational purposes?

Please select all that apply.

1	Some people will not be able to learn about history and culture in this way as they will not have access to the technology
2	People will gain a less accurate understanding of historical events and how people lived in the past
3	The technology will gather personal information which could be shared with third parties

- 4 The technology will be unreliable, making it harder to learn about history and culture
- The technology will allow those developing the technology to control what people learn about history or culture
- 6 Something else (please specify) *Open *Fixed
- 7 None of these *Fixed *Exclusive
- 8 Don't know *Fixed *Exclusive

B013	- Adva	ncina	Know	anhal
DU 13	- Auva	nonig	KIIOW	ieuge

End block

Q163 - ExplainB Single co	oded
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Not back

Many AI systems are used with the aim of making decisions faster and more accurately than is possible for a human. However, it may not always be possible to explain to a person how an AI system made a decision.

Below are four statements that reflect different opinions toward explaining how AI systems make decisions. Overall, which statement do you feel best reflects your personal opinion?

- 1 Making the most accurate AI decision is more important than providing an explanation *Fixed
- In some circumstances an explanation should be given, even if that makes the AI decision less accurate *Fixed
- 3 An explanation should always be given, even if that makes all AI decisions less accurate *Fixed
- 4 Humans, not computers, should always make the decisions and be able to explain them to the people affected *Fixed
- 5 Don't know *Fixed

Q164 - Governance Multi coded

Not back | Min = 1 | Max = 2

Who do you think should be most responsible for ensuring Al is used safely? You can only select up to two options.

1	The companies developing the AI technology
2	Scientists and researchers working in universities or research institutions
3	The Government
4	An independent regulator
5	International standards bodies
6	An independent oversight committee with citizen involvement
7	The people using the AI (e.g. companies, public services)
9	Other (please specify) *Open *Fixed *Exclusive
8	No one should be responsible for ensuring AI is used safely *Fixed *Exclusive
10	Don't know *Fixed *Exclusive

Q165 - Morecomf Multi coded

Not back | Min = 1

Which of the following, if any, would make you more comfortable with AI technologies being used? *Please select all that apply.*

1	Clear explanations of how AI systems work and make decisions
2	More human involvement and control in AI decisions
3	Clear procedures in place for appealing to a human specialist against a decision made by Al
4	The AI has been deemed acceptable by a government regulator
5	Laws and regulations that prohibit certain uses of technologies, and guide the use of all AI technologies
6	People's personal information is kept safe and secure
7	The AI technology is regularly evaluated to ensure it does not discriminate against particular groups of people
9	Something else (please specify) *Open *Fixed
8	None of these, I am already comfortable with the use of AI systems. *Fixed *Exclusive
11	Nothing will make me more comfortable with AI technologies *Fixed *Exclusive
10	Don't know *Fixed *Exclusive

B014 - Closing_Questions	End block

B015 - Online_Safety	Begin block

Q166 - PrelimSafety

Text

Not back

You are nearly at the end of the questionnaire.

The last couple of questions are interested in your online experiences.

Some of the questions may be sensitive, so please only answer the questions that you feel comfortable answering.

Q167 - Intro_Safety

Text

Not back

Some people are concerned that social media platforms such as Twitter and Facebook are exposing their users to harmful content, including hate speech, false information, fake images, bullying, violence and self-harm promotion.

Q168 - Witnessed Single coded

Not back

To what extent have you witnessed content which you consider to be harmful on social media platforms in the past?

Please note, 'witnessed' indicates you observed harmful content, but that it was not intended for you. For example, a social media post that does not explicitly name you or your username.

- 1 [CAWI: I][CATI: You] have witnessed harmful content on social media many times *Fixed
- 2 [CAWI: I][CATI: You] have witnessed harmful content on social media occasionally, from time to time *Fixed
- 3 [CAWI: I][CATI: You] have witnessed harmful content on social media very rarely, only once or twice *Fixed
- 4 [CAWI: I][CATI: You] have never witnessed harmful content on social media *Fixed
- 5 Not sure *Fixed
- 6 [CAWI: Prefer not to say][CATI: READ OUT: Prefer not to say] *Fixed

Q169 - Received Single coded

Not back

To what extent have you **directly received** content which you consider to be harmful on social media platforms in the past?

Please note, 'directly received' indicates the content was directly intended for you. For example, it was sent by direct message (DM), or it explicitly named you or your username.

Normal

6

[CAWI: I][CATI: You] have directly received harmful content on social media many times *Fixed

[CAWI: I][CATI: You] have directly received harmful content on social media occasionally, from time to time *Fixed

[CAWI: I][CATI: You] have directly received harmful content on social media very rarely, only once or twice *Fixed

[CAWI: I][CATI: You] have never directly received harmful content on social media *Fixed

Not sure *Fixed

[CAWI: Prefer not to say][CATI: READ OUT: Prefer not to say] *Fixed

Q170 - Scorepon Multi coded

Not back | Min = 1

What, if anything, do you think social media platforms should do to tackle content they host that poses a risk of harm? *Please select all that apply.*

1	Remove harmful content
2	Ban or suspend users who create harmful content
3	Add warning labels to harmful content
4	Make it easier for people to report harmful content to the platform
5	Make harmful content difficult to find through search terms
6	Stop paid promotion of harmful content
7	Give users greater control over what they see on social media platforms, for example by allowing them to choose how their social media feeds are organised.
9	Something else (please specify) *Open *Fixed
10	None of the above *Fixed *Exclusive
8	Nothing - social media platforms should not do anything to tackle harmful content *Fixed *Exclusive
11	Don't know *Fixed *Exclusive

Q171 - Govrespon Multi coded

Not back | Min = 1

What, if anything, do you think that the government should do to tackle content that poses a risk of harm on social media platforms? *Please select all that apply.*

Normal

1	Implement large fines for platforms that fail to deal with harmful content
2	Force platforms to systematically report how much harmful content they host and how they are attempting to combat this harmful content
3	Launch legal proceedings against platforms that fail to deal with harmful content
4	Publicly name and shame platforms that fail to deal with harmful content
5	Prevent platforms that fail to deal with harmful content from operating
6	Force platforms to introduce strict age verification procedures
8	Something else (please specify) *Open *Fixed
9	None of the above *Fixed *Exclusive
7	Nothing - there should be no consequences for platforms that fail to deal with harmful content *Fixed *Exclusive
10	Don't know *Fixed *Exclusive

Q1149 - ThankU	Text

Not back

Thank you, you have completed the questionnaire.

[CAWI: Please click forward to claim your voucher.][CATI: I will now update your contact details, then we can process your voucher.]

B015 - Online_Safety End block

*Please note, there was 'Prefer not to say' option for Telephone respondents and those who tried to clickthrough without answering a question.