



Data Science and Society

1. Introduction

Thank you for taking part in DataKind UK's first community survey on best practice in data science and AI!

We are interested to hear thoughts from the DataKind UK community on data science/AI and responsible data. This will guide the support we offer both to you, as a volunteer, and the non profit organisations we work with.

The survey should take a maximum of 20 minutes (if you are providing detailed answers!).

All results are, and will remain, anonymous.

If you have any questions about participating in this survey, or about DataKind UK's work on responsible data, please contact Tracey (tracey@datakind.org.uk)

2. Responsible Data & Society

When you think about the present and future impact of data and AI on humanity, are you overall: *

- ☐ Positive
- ☐ Negative
- ☐ Not sure

Comments: Please tell us why

Which aspects of the current and upcoming use of data in society concern you, if any? Please rate on a scale from 1: Not worried at all to 5: Very worried *

	1	2	3	4	5
Algorithms will make important decisions without clear recourse or explainability (e.g. 'why is my credit score so low? Who knows!')	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The possibilities and benefits of AI will be limited due to excess caution about negative consequences and bias.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unemployment due to the automation of jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increase in surveillance and loss of privacy due to facial recognition and affect recognition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radicalization of algorithm-driven content (e.g. in an ad-driven online economy, the most extreme opinions get the clicks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preservation and reinforcement of existing biases through AI (e.g. Google learning from existing images that a doctor is male and a nurse female)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Superintelligence/singularity issues (grey goo, mass control of humans etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other [please add what concerns you in the field of data science and AI]

Who do you think is responsible for thinking about the potential impacts and risks of data science and AI? Please rate from 1- Very unlikely to be responsible to 5 Very likely to be responsible: *

	1	2	3	4	5
Government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The developers/data scientists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	1	2	3	4	5
Project managers/people overseeing the delivery of a specific model or algorithm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regulators e.g. Information Commissioner's Office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C suite/level executives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industry leaders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Educators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-profits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Who should bear most responsibility?

CASE STUDY: Imagine you are the CEO of a micro-finance non profit which provides business loans for people on low incomes to start or grow a business. When deciding who to give loans to, which of the following would influence your decision: *

	Yes	No	Unsure
Purpose of the loan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borrower's education and employment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borrower's area of residence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potential social impact of the loan (number of employees they will hire)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Belonging to an underrepresented group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Risk of the type of business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borrower's credit history	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borrower's social media activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borrower's family/social associates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: Please explain your response

Considering real-world implementation of AI and data-heavy tools as a whole, which of the following do you most agree with: *

- ☐ Use of AI is moving ahead too slowly - there's too much caution and we're missing out on benefits
- ☐ Use of AI is moving at about the right pace, with a balance between protecting against risk and embracing opportunities
- ☐ Use of AI is moving ahead too quickly without enough protection against unintended consequences

Please explain your response:

What words do you associate with: ETHICS IN DATA SCIENCE & AI Please use commas to separate the words

Imagine that you were asked to write code for a purpose or product that you believe could be used in a harmful way. Do you write the code anyway? *

- ☐ No
- ☐ Depends on what it is
- ☐ Yes

Please explain your response.

3. Avoiding negative or unintended consequences

Your experiences at work

Do you find the media attention on data ethics helpful to you achieving your goals at work? *

- ☐ Very Unhelpful
- ☐ Unhelpful
- ☐ Neutral
- ☐ Helpful
- ☐ Very Helpful

Please explain your reasoning

Have you signed up to a professional code of ethics/code of conduct that covers data ethics? (e.g. the ACM Code of Conduct, D4D Global Data Ethics Pledge) *

- ☐ Yes
- ☐ No

Can you please tell us which professional code of ethics/code of conduct you have signed up to?

Can you tell us why you haven't signed up to a professional code of ethics/code of conduct?

6. Avoiding negative or unintended consequences

Does your company have: *

	Yes	No	Under development	Don't know	N/A
A code of conduct or set of principles for data science/AI?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A governance/accountability framework for data science/AI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Have you had concerns about the following at work in the past year?DATA *

	Never	Infrequently	Sometimes	Often	Very Often	N/A
Data provenance, e.g.- data is from questionable sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data quality, e.g. incomplete data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data applicability, e.g. data with caveats that prevent it being used well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data retention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data sharing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other— please specify

Have you had concerns about the following at work in the past year?ANALYSIS/MODELLING *

	Never	Infrequently	Sometimes	Often	Very Often	N/A
Accuracy of models	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relevancy of model over time e.g. based on old data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other— please specify

Have you had concerns about the following at work in the past year?TEAM *

	Never	Infrequently	Sometimes	Often	Very Often	N/A
Inadequate technical/analytical skills (e.g. a team or workers are using a technique without understanding its effects)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inadequate subject area expertise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor diversity within team/organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other— please specify

Have you had concerns about the following at work in the past year?DATA SUBJECTS & SOCIETY *

	Never	Infrequently	Sometimes	Often	Very Often	N/A
Using data without consent or an imbalance of power dynamics e.g. personal data in exchange for free services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using data in a way that the subject of the data would not expect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How a model is being applied in practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interpretability/explainability and communications with users/clients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effect of your work on existing societal issues, e.g. exacerbating exclusion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of recourse/appeals, e.g. those affected by the model are unable to understand what happened and why	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other— please specify

If you do have concerns at work about the unintended (or intended) negative consequences of data science or AI, what would you do? Select all that apply: *

- ☐ Discuss with Manager/Mentor
- ☐ Raise within team or project meetings
- ☐ Raise on designated ethics channel e.g. independent phone service, or an ethics board contact form
- ☐ Discuss with colleague(s) privately, e.g. face-to-face or on messaging channel
- ☐ Discuss with union or employee organisation
- ☐ Speak with an external contact, e.g. journalist or online forum
- ☐ Don't know
- ☐ Nothing- it's not my responsibility
- ☐ Other— please specify

Is there a general whistleblowing policy in your organisation where you are supported to raise areas of concern? *

- ☐ Yes
- ☐ No
- ☐ Don't know

Would there be any impact on your job security if you raise an ethical issue to your manager? *

- ☐ Yes, negative impact
- ☐ Yes- positive impact
- ☐ No
- ☐ Don't know

Comments: Please tell us why

7. Avoiding negative or unintended consequences

Think about the last time you discussed questions of data ethics/impacts of your work (or your organisation's work) with colleagues. How long ago was it?

- ☐ In the past week
- ☐ In the past month
- ☐ One to six months ago
- ☐ Six to twelve months ago
- ☐ Over a year ago
- ☐ Never
- ☐ Not applicable

Think about the last time you discussed issues of data ethics/impacts in the wider world (ie not from your work) with colleagues. How long ago was it?

- ☐ In the past week
- ☐ In the past month
- ☐ One to six months ago
- ☐ Six to twelve months ago
- ☐ Over a year ago
- ☐ Never
- ☐ Not applicable

8. What should DataKind UK do to support best practice in data science and AI?

Tell us your ideas!

WHAT DO YOU THINK DATAKIND UK SHOULD DO TO SUPPORT DATA SCIENTISTS/ANALYSTS: To champion the positive impact for data science and AI

To reduce the potential for negative impacts of data science and AI

9. What should DataKind UK do to support best practice in data science and AI?

Tell us your ideas!

WHAT DO YOU THINK DATAKIND UK SHOULD DO TO SUPPORT NON PROFIT ORGANISATIONS/LOCAL GOVERNMENT: To champion the positive impact for data science and AI

To reduce the potential for negative impacts of data science and AI

10. About You

Which of the following describe you? Please select all that apply. *

- ☐ Data or business analyst
- ☐ Data scientist or machine learning specialist
- ☐ Data Engineer
- ☐ Developer
- ☐ Senior management/C-suite executive (CEO, CTO, etc.)
- ☐ Designer
- ☐ Product manager/Project manager
- ☐ Educator or academic researcher
- ☐ Marketing or sales professional
- ☐ Student
- ☐ None of the above. Please state

What type of organisation do you work for? *

- ☐ Private firm or business, a limited company,
- ☐ Public company, plc
- ☐ Yourself (freelancer)
- ☐ Nationalised industry or state corporation

- ☐ Central Government, Civil Service
- ☐ Local government or council (incl. police, fire services & local authority controlled schools or colleges)
- ☐ University or other grant funded educational establishment
- ☐ Health authority or NHS trust
- ☐ Charity, voluntary organisation or trust
- ☐ Your family (home maker)
- ☐ Armed forces
- ☐ None (unemployed)
- ☐ Other (please specify):

Which of the following best describes the industry you work in? If you or your employer are involved in several industries, please choose the one most relevant to the products or services you work on. This information will be kept private.

- ☐ Cloud-based solutions or services
- ☐ Consulting
- ☐ Data and analytics
- ☐ Financial technology or services
- ☐ Healthcare technology or services Information technology
- ☐ Media, advertising, publishing, or entertainment
- ☐ Retail or eCommerce
- ☐ Software as a service (SaaS) development
- ☐ Web development or design
- ☐ Other software development
- ☐ Other industry not listed here. Please state

Do you currently reside in the UK? *

- ☐ Yes
- ☐ No (please specify your current country of residence):

Which of the following do you currently identify as? If you prefer not to answer, you may leave this question blank:

- ☐ Female
- ☐ Male

☐ Non-binary, genderqueer, or gender non-conforming

☐ Prefer not to say

☐ Other (please specify):

Which of the following do you identify as? If you prefer not to answer, you may leave this question blank.

- **White**
- **Asian or Asian British**
- **Mixed**
- **Black or Black British**
- **Other Ethnic Group**

☐ British

☐ Irish

☐ Other

☐ Indian

☐ Pakistani

☐ Bangladeshi

☐ Chinese

☐ Any other Asian background

☐ White and black Caribbean

☐ White and black African

☐ White and Asian

☐ Any other mixed background

☐ Caribbean

☐ African

☐ Any other black background

☐ Any other Ethnic Group

☐ Other (please specify):

What is your age? If you prefer not to answer, you may leave this question blank.

☐ under 18

☐ 18-24

☐ 25-34

☐ 35-54

☐ 55-64

☐ 65+

Do you have a disability? If you prefer not to answer, you may leave this question blank.

- ☐ No disability
- ☐ Disability but doesn't affect daily life
- ☐ Disability and affects daily life

11. About this survey

Just a few questions to help us to improve the survey experience for others

How do you feel about the length of the survey that you just completed?

- ☐ The survey was too short
- ☐ The survey was an appropriate length
- ☐ The survey was too long

How easy or difficult was this survey to complete?

- ☐ Very Easy
- ☐ Easy
- ☐ Neutral
- ☐ Difficult
- ☐ Very Difficult

Would you like to stay in touch with DataKind UK work on best practice in data science and AI?

If yes please e-mail Tracey@datakind.org.uk with the subject heading "Responsible data- yes please!"