

Case Study: Data Science Ethics Public Dialogue

In December 2015 the Government Digital Service (GDS), supported by Sciencewise, commissioned a public dialogue to inform the development of the Framework for Data Science Ethics being developed by the Government Data Science Partnership (GDSP). This framework is designed to enable data scientists and policymakers to maximise the potential for data science within government, whilst also managing potential legal and ethical questions of impact on the public.

1. Background

Government understands that it is vital to engage with the public on new technologies and communicate effectively as these technologies develop¹. This motive led to the commissioning of a public dialogue to inform the Framework for Data Science Ethics. The GDSP defines data science as a field which “combines statistics, programming, machine learning, automatic processing of unstructured data (including text mining) and visualisation.”² It is a fast growing field which is recognised by the Alan Turing Institute as posing “pressing issues of fairness, responsibility, and respect of human rights.”



Figure 1. Image from project Dialogue Report.

A Framework for Data Science Ethics, informed by robust public dialogue will help to ensure that the benefits can be realised without this infringing on public interests.

At the start of the dialogue, an 18-strong AG (Advisory Group) was convened to advise on the dialogue’s scope and process, and information provided to participants and review all project outputs. The dialogue was evaluated to have been an effective and successful process: “The dialogue met, or is on the process of meeting, all its objectives. It will inform the Ethical Framework, provide feedback to departments on their case studies, help shape future communications with the public and is influencing external stakeholder’s approaches to their own data ethics approach.”³

2. Impact

GDS and stakeholders involved with the project noted that, as result of the dialogue, they had now a greater appreciation of the added value which public engagement could bring to the policy process. Government has focussed on continually learning and developing with

¹ Interview with Senior Civil Servant in August 2018.

² Reynolds, C. 2016. Public dialogue on the ethics of data science in Government. 3KQ. Pg3.

³ Reynolds, C. 2016. Public dialogue on the ethics of data science in Government. 3KQ. Pg29.

this technology as shown in the Data Ethics Framework published in June 2018. Members of the AG noted numerous impacts. For example, one member was particularly positive about the value of engaging with the public, noting that “*some citizen’s perspectives were both technically and ethically more mature than either policy makers give credit for or understand themselves*” and that the dialogue had shown “*how nuanced and sophisticated public views were.*”⁴ Others felt that the dialogue had evidenced not just the value of engaging with the public, but also of the importance of developing and consolidating best practice on how to engage on such a complex topic as data science.

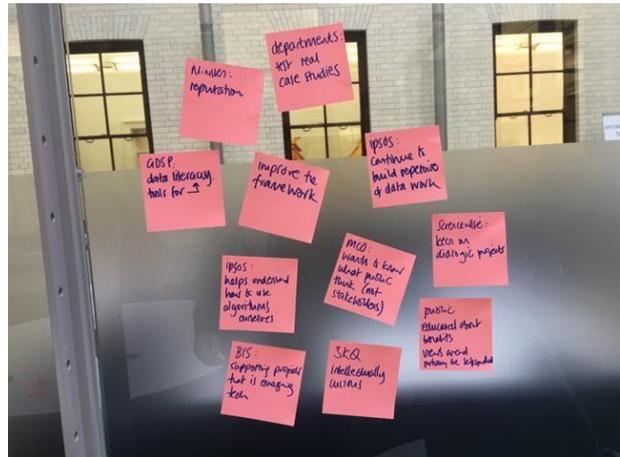


Figure 2. Image from project Evaluation Report.

In an interview following the dialogue, an Advisory Group member said that the dialogue had helped them in developing their organisation’s code of practice and had also led them to using a non-specialist to review a recent project and provide a lay perspective⁵. Outcomes such as these demonstrate how this public dialogue has had both specific impact on the framework and more wide-ranging impact on building confidence in, and embedding good practice of dialogue in the sector.

The beta version of the Data Science Ethical Framework, published as the dialogue was still underway, shows how early findings, prior to the formal report, can have impacts. The framework outlines seven key principles which broadly align with the concerns and values expressed by the public during the dialogue. For example, the first principle is ‘start with clear user need and public benefit’ which was a key concern highlighted by the public during the dialogue and the fourth principle is to ‘be alert to public perceptions’ which was integral to the dialogue. Following on from this, the fourth and fifth principles refer to being engaged with public perceptions, and being open, accountable and accessible to the public.

A senior civil servant concluded “*The Sciencewise dialogue has shown that clarity around defining our objectives and describing our approaches is key in engaging the public and wider community. This has and will continue to significantly impact our government work in this area.*”⁶

3. Vital Statistics

Commissioning Body	GDS
Duration of Process	December 2015 – May 2016
Number of Participants	68 members of the public, 20 special interest group representatives and 2,003 online survey participants
Budget of Project	£190,000
Dialogue Contractor	Ipsos MORI
Evaluation Contractor	3KQ

⁴ Reynolds, C. 2016. Public dialogue on the ethics of data science in Government. 3KQ. Pg27.

⁵ Reynolds, C. 2016. Public dialogue on the ethics of data science in Government. 3KQ. Pg27.

⁶ Quote given by senior civil servant in August 2018



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