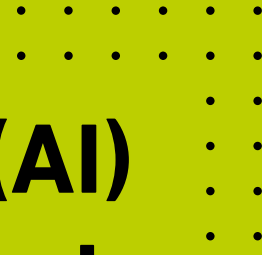


Artificial Intelligence(AI) regulation – Transforming outcomes for all



How can AI advance equality of opportunity, help eliminate discrimination and foster inclusion for marginalised and underrepresented groups in public life?
A BCS, The Chartered Institute for IT (BCS) roundtable with the Office for AI.

Introduction

In June 2023, this BCS roundtable with the UK government's Office for AI brought together experts in AI from underrepresented groups to give their views on the question: *How can AI Principles deliver for different communities and groups?* – what are AI's opportunities and threats on marginalised communities now and in the future?

The roundtable was held in response to the government's open consultation: *AI regulation: a pro-innovation approach*. BCS is a leading voice on AI regulation and standards, education and skills, advocating that the best approach isn't to pause but to help AI grow responsibly.



Key Themes

- **AI principles should prioritise avoidance of harm, drive fairness and promote inclusivity.** Historical biases will likely be embedded at scale, rolling back progress on diversity, equity and inclusion, unless resourced and representative advocacy and guardrails exist.
- **Community trust through meaningful and resourced engagement** Technology has often fallen short of catering to the specific needs of communities. They must be able to challenge negative impacts and leverage AI tools for inclusive public benefit. With resourced co-creation and collaboration with marginalised communities, personalised AI could be an opportunity for change.

- **Different principles hold different significance for different communities.** Embed a virtuous cycle of community feedback and review of AI Principles to understand needs and opportunities.
- **Clear implementation timeframes and action plans with defined accountability is critical for transparency and redress.** Principles of fairness, contestability/redress, alongside informed decision-making through language accessibility, diverse representation, and monitoring of consumer trust, hold significance for marginalised communities.
- **Open, transparent and inclusive data governance processes and data collection** is essential to monitoring and enabling equity of access to AI across all communities.
- **Embedding digital and AI literacy and skills across education and learning is vital to enable marginalised and disadvantaged groups to access and benefit from AI.** 97% of girls drop computer science as a subject at 13 years old[1], the system needs fundamental reform to deliver equitable outcomes.

1

Round Table Participants:

- Matthew Bellringer, Chair, BCS NeurodiverseIT Specialist Group
- Amanda Brock, CEO, OpenUK
- Marc Goblot, Deputy chair of the BCS NeurodiverseIT Specialist Group, founder of Tech For Disability, a Tech London Advocates group, Greater London Network chair for the Cabinet Office Disability Unit and a Director of We and AI
- Lella Violet Halloum, Global Student Outreach Leader at IBM
- Brittany Hsieh, Senior Policy Advisor, The Royal Academy of Engineering
- Dr. Anne-Marie Imafidon MBE, CEO Stemettes
- Kavita Kapoor FBCS, Senior Lecturer Product Management for Emerging Technology at Code University, & Chair, PRIDE in BCS Specialist Group
- Resham Kotecha, Global Head of Policy, Open Data Institute
- Adam Leon Smith FBCS, BCS Fellow and Chair of the BCS Fellows Technical Advisory Group
- Mark Martin MBE, Co-founder UKBlack Tech
- Afagh Mulazadeh, Senior Parliamentary Researcher at the UK House of Lords
- Jack Painter, Interim Head of Policy, Diversity and Inclusion, Women into Science and Engineering (WISE)
- Tristi Tanaka, Healthcare technology expert, member of BCSWomen and BCS Digital Divide Specialist Groups
- Dr Elsa Zekeng, Scientist, Entrepreneur and founder of BCS Embrace Specialist Group

Observed by Gabriela Commatteo from the UK Government's Office for AI.

Participants were asked to reflect on the White Paper's principles and their potential opportunities and impacts on the marginalised and disadvantaged communities.

Question 1: How can AI make life better for marginalised and disadvantaged communities?

The panel unanimously said AI could improve life for marginalised and disadvantaged communities. Still, the benefits would depend on government leadership, trusted industry partnerships, and meaningful and resourced engagement with professional technologists and communities over the long term.

Tristi Tanaka said, *“We must be intentional about listening and involving those who are most likely to experience the cumulative harms of persistent monitoring and analysis for decision-making that uses data points lacking originating context.”*

Mark Martin likened the rise in AI popularity to a gold rush – a sentiment that Amanda Brock and others shared on the panel. Amanda called for AI to be democratised and opened so everyone could access it:

“The risk is that we see this technology sitting in the hands of a very few as we progress, and that’s a real concern.”

Mark said learning from previous mistakes made by AI regarding minority communities was crucial:

“We know in the past AI has been ‘done to’ marginalised communities. What has been done to change this? Where are the significant solutions put in place from challenges that we faced historically?”

Dr Anne-Marie Imafidon agreed with Mark and added that AI principles could be a way to reinforce consideration of intention and motivation when designing, developing and deploying AI:

“So there is capacity, if it’s done the right way, for us to be able to promote fairness using AI, but it has to be intentional.”

Tristi Tanaka commented that *“the charity, goodwill and intention of experts and professionals are insufficiently matched against the industrial and economic drive to profit from AI innovations, with unclear regard to mitigating the risks of the AI gold rush to people and the planet”*.

Jack Painter said AI has the potential to be used to make recruitment and performance management more objective as it could remove the individual biases that affect judgement. For Jack, it boiled down to having ethical, competent people trained in diversity and inclusion with professional certification to prove they could develop unbiased systems that dealt with core public life areas such as recruitment.

But Mark warned of the dangers of entirely anonymising data from an inclusion and representation perspective. Data governance, insights and application must be developed in partnership with communities to be inclusive and add value.

Discussing the Government’s AI White Paper, Kavita Kapoor said it was essential to ensure all voices are represented, including the LGBTQIA+ community who don’t have a clear advocate in this space:

“You need the marginalised and disadvantaged communities that we’re identifying to be co-creating quite a lot of what’s coming through. Looking at the guidance, you should be able to transparently push back and challenge if things are actually impacting you negatively.”

There is a need for multidisciplinary, intersectional approaches to developing AI, said Matthew Bellringer:

“A real focus on the potential benefits for marginalised groups is understanding complexity and tracking it. Also, using it ourselves gives people a little more agency in managing things sometimes. However, that also raises many questions about who else can access that data and what happens to it.”

Moreover, historically, AI has not served marginalised communities well, he said, raising concerns about whether it will “**replicate at scale and speed the existing power imbalances that exist.**”

Marc Goblot added, “*When it comes to people with disabilities, technology often falls short in catering to their specific needs.*”

While there is great potential for personalisation to enhance their lives, particularly with independent living technology, he said it needs to be more flexible for those who use it.

Achieving this, he added, required a collaborative effort through co-creation, where disabled people are actively involved in shaping the technology that will make their lives easier.

He pointed out that success would rely on people having access to funding, infrastructure and ecosystems developed with the specific intention of facilitating people with disabilities to live better lives with AI.

Adam Leon Smith pointed to a challenging intrinsic issue with AI regarding modelling it to perform effectively across many different groups:

“It will reduce its performance and accuracy for the so-called average person; there could be technical ways around that in the future, but there’s no solution coming in the next five years or so.”

Brittany Hsieh emphasised the importance of continually assessing the impact of AI on marginalised communities to ensure it is “*transparent and it doesn’t harm them*”. Ensuring best practice is taking place would mean:

“Carefully monitoring and documenting algorithmic unfairness to generate clear and good justification for using models we deploy. Especially because AI works off of the information we feed it, and we as people are biased in the systems in place.”

Echoing a concern from all, Brittany said creating a genuine and non-tokenistic approach to soliciting feedback was crucial.

Mark said digital literacy posed a challenge as the language used with AI systems often alienated further already marginalised groups. He said it was imperative to make the language surrounding AI and technology generally more accessible and inclusive for all communities, a point echoed by Anne Marie, championing a need for educational reform to embed digital literacy in schools.

- • • • • •
- • • • • •
- •
- •
- •
- •



Question 2: What are the issues with the current system of AI regulation for your group, and how can this be improved by the White Paper proposals?

Anne-Marie is a trustee at the Institute for the Future of Work (IFOW) and highlighted their report showing that 52% of workers in retail and logistics did not understand why their employers collect their data. Transparency must be improved, she added, to address this concern and make changes happen in partnership with stakeholders and explain this was happening in an accessible and understandable way:

"Everyone has to be part of this, not just historically marginalised groups".

Afagh Mulazadeh emphasised the need to safeguard young people from malicious actors who may exploit technology, such as AI, to inflict harm, especially on those from disadvantaged societies.

The COVID-19 pandemic has eroded trust within marginalised communities, argued Dr Elsa Zekeng. Elsa said the language used in the discourse of COVID-19 and practices enacted continue to marginalise people, and lessons must be learned. Elsa pointed to clinical trials often excluding marginalised communities, resulting in technologies that do not adequately serve their needs:

"It would be interesting to understand how AI regulation can ensure data used to develop technologies effectively includes black and ethnic minority communities. They are quite a few different case studies that have shown how AI has been used to develop, for instance, a skin cancer test that doesn't detect on Black and ethnic minority skin because not enough data was inputted."

Regulatory measures should engage individuals from minority and marginalised communities to rebuild trust. This is a broader issue than just AI and relates to a problem of public trust in technology across the population. We know the public doesn't trust computer algorithms to make decisions about them across all aspects of public life, and this trust is lower for underrepresented communities. This will continue to entrench inequality if communities aren't consulted meaningfully and actions taken and communicated effectively.



- •
- •
- •
- •
- • • • • •
- • • • • •

Question 3: What do particular principles such as fairness and contestability/redress mean for these communities, and what would they find useful in how these are addressed by regulators?

For Brittany, the principles of transparency and trust are essential as historically, data had been used to disadvantage minority groups. She said:

“It is important to acknowledge that the current approach to consultation is not geared towards underrepresented groups.”

“Long-term planning is vital, as the UK seemed to be very ‘reactionary’ regarding regulation, and there must be more thought about accessing and consulting marginalised groups.”

Lella Violet Halloum championed the need to “connect the unconnected” and that a lot of what is happening in the ‘AI Gold Rush’ meant young people need help to understand what was true and what wasn’t while trying to understand the technology itself:

“The curriculum can’t keep up with the pace of innovation; industry must take charge using tech to teach tech.”

Lella said there was a need for nuance and understanding and listening to what young people had to say. So, less about scaremongering about what AI might do and more about how it could be used beneficially. Education shouldn’t only be about learning digital skills but also about understanding more broadly what technology can create. And it must be inclusive:

“I challenge you to have this conversation with young people who are completely digitally excluded, people whose basic literacy and human rights are challenged beyond the digital world, so we actually do understand truly where we’re going with this because otherwise, we’re just innovating as the fortunate few.”

Regardless of any potential bans, young people will inevitably engage with AI, she said. Therefore, it was necessary to educate communities about its impacts. BCS analysis shows that 97% of girls drop computer science as a subject at 13 years old, and the system needs fundamental reform to deliver equitable outcomes.

Mark agreed that schools and communities needed to be supported to understand the impact of AI. To increase diversity in tech, he added:

“Policymakers need to facilitate black innovators’ participation and ensure they have equal opportunities regarding the supply side of tech.”

The round table agreed the gap between those who understand tech and those who don’t will continue to compromise progress. As technology is ubiquitous in society, Matthew said it was essential to consider deeply how all people can access and understand these new technologies:

“We are all technologists, and for many of us, it’s a challenge to understand the implications of this stuff. That’s why we’re having this conversation. For people whose main interest is not this, it’s damn near impossible.”

“The language used to define AI must change”, said Afagh. All people have biases, and instead of trying to remove them, the aim should be to get people to understand them and intentionally assess their utility and implications in designing AI. She also wanted to see more transparency and protection around the use of data.

Measures such as a separate AI ‘stream’ for entrepreneurs from marginalised and underrepresented backgrounds to identify funding and support should be part of an AI strategy to benefit all of society.

A final note of concern came from Kavita on the government’s timeline, how long will it take for its AI strategy to become law? “Other countries, such as the US and China, were ahead of us; the UK market could lose business to countries with standards and regulations.”

BCS, The Chartered Institute for IT, is the professional body for the tech sector. We promote the education of computing and professionalism. We are a charity with just under 70,000 members and over fifty specialist groups.

[1] www.bcs.org/policy-and-influence/education/bcs-landscape-review-computing-qualifications-in-the-uk