

EQUALITY IMPACT ASSESSMENT RECORD

Title of policy/ practice/ strategy/ legislation etc.	Scotland's Artificial Intelligence (AI) Strategy	
Minister	Kate Forbes MSP, Cabinet Secretary for Finance (Minister for Public Finance and Digital Economy when work began)	
Lead official	John Fotheringham, Data Policy Manager	
Officials involved in the EQIA	name	team
	Scott Nowbaveh, Data Policy Officer Jeremy Darot, Head of Data Innovation	Data and Digital Identity Division
Directorate: Division: Team	Digital Directorate Data, Statistics and Digital Identity Division Analytical Data Infrastructure Team	
Is this new policy or revision to an existing policy?	<p>New policy.</p> <p>The Strategy will be Scotland's first specifically focused on AI.</p> <p>It will build on and complement both <i>Realising Scotland's Full Potential In A Digital World: A Digital Strategy For Scotland</i>¹ and the <i>Scottish Technology Ecosystem Review</i>², published by the Scottish Government in March 2017 and August 2020 respectively.</p> <p>It will likely also link to other policies and strategies, such as on Fair Work, Health and Social Care and International Trade.</p>	

¹ [Realising Scotland's full potential in a digital world: a digital strategy for Scotland - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/scottish-technology-ecosystem-review/)

² <https://www.gov.scot/publications/scottish-technology-ecosystem-review/>

Screening

Policy Aim

Describe in this paragraph what the purpose of your policy/strategy/plan is and its desired outcomes and to which National Outcome(s) it contributes.

S.1. The Scottish Government's commitment to developing an AI strategy for Scotland was set out in *Protecting Scotland's Future*³, the 2019-2020 Programme for Government. The strategy will help to ensure that Scotland maximises the potential economic and social benefits of AI, and send a strong signal to the world about our ambition.

S.2. The strategy will set out a vision for AI in Scotland and the principles that will guide our work towards realising this. It will also set out our objectives to develop and strengthen Scotland's AI ecosystem, and the actions that we will take to achieve these. The development process is being overseen by a Steering Committee, supported by professional facilitators⁴. In autumn 2019, the committee discussed and developed outline proposals for the Strategy^{5,6}, which it was highlighted will need to focus on:

- AI in Scotland is both an enabling technology and an industry;
- The strategy needs to be ambitious and not constrained by fears or current limitations;
- The vision for Scotland is for 'socially just' AI that is embraced by society;
- Whether there is space for Scotland to be a global leader/role model – top five in the World
- The strategy should reflect ambitions in the National Performance Framework⁷ (NPF); and
- Scotland has the capacity to succeed (and there is commonality between diverse interests)

S.3. The proposals were formally set out in a scoping document⁸, *The AI Of The Possible: Developing Scotland's AI Strategy*, published on 24 January 2020.

S.4. The degree of alignment with the NPF will be considered further as the development process progresses. However, it is anticipated that the strategy will contribute towards achieving all of the National Outcomes, with an overarching focus on helping to make Scotland fairer, greener, more prosperous and outward looking through the ethically and socially responsible use of AI.

³ [Protecting Scotland's Future: the Government's Programme for Scotland 2019-2020 - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/protecting-scotland-s-future/pages/introduction.aspx)

⁴ [About — Scotland's AI Strategy \(scotlandaistrategy.com\)](https://scotlandaistrategy.com/about)

⁵ [First Steering Committee meeting report now available — Scotland's AI Strategy \(scotlandaistrategy.com\)](https://scotlandaistrategy.com/first-steering-committee-meeting-report)

⁶ [Outputs from second Steering Committee workshop now available — Scotland's AI Strategy \(scotlandaistrategy.com\)](https://scotlandaistrategy.com/outputs-from-second-steering-committee-workshop)

⁷ [National Performance Framework | National Performance Framework](https://www.gov.scot/publications/national-performance-framework/pages/introduction.aspx)

⁸ [Scoping Document published! — Scotland's AI Strategy \(scotlandaistrategy.com\)](https://scotlandaistrategy.com/scoping-document)

Who will it affect?

Reflect here on how the policy – and the changes it will make in the world - might or will have an impact on people. Include how people – and different groups of people and/or communities - might be affected by this policy, directly or indirectly, and who might benefit from the policy and in what ways.

S.5. Although around for decades, AI technologies have developed considerably over the last 10-15 years^{9,10,11} and their adoption and use have increased significantly over this time. Many people use AI already without realising it – when using a smart phone, searching online or speaking with a voice assistant.

S.6. AI offers many opportunities – for how we live our lives, our economy, our public services and society – that we need to harness thoughtfully and sensitively. Scotland is well-placed to take part in this data-driven revolution^{12,13}, building on our achievements to date, a closely connected community of innovators, excellent universities, the quality and richness of our data, and our other resources and size. But we have to work together to realise this potential, and secure the trust of the public in doing so.

S.7. AI has the potential to benefit individuals, help businesses transform their operations, improve the provision and quality of public services and help the third sector in supporting people. However, whilst the use of AI can be positive, it is also recognised that it has the potential to have disproportionately negative impacts for some groups and communities, such as on certain employment sectors and jobs, minority ethnic people, those with fewer digital skills and, potentially, to exacerbate existing inequalities. A key issue is the potential for algorithmic bias, where the data used to train algorithms used in AI technologies is not fully representative, meaning that they can produce unfair outcomes in use. In addition, it is recognised that AI presents specific challenges and opportunities for children. We will therefore carry out a detailed Child Rights and Wellbeing Impact Assessment, and shape the strategy accordingly.

S.8. The strategy has the potential to impact on all people in Scotland, including those actively working on the development, adoption and use of AI, such as technical research and development in academia and industry; wider private, public and third sector organisations interested in AI, and the general public. Reflecting our aim to develop an approach that will enable the people of Scotland to flourish through the adoption of AI, with no one left behind, we are keen to ensure that the strategy is developed collaboratively by people across Scotland. Everyone can and should be empowered to play a part – individuals, communities and organisations, public, private and third sector – in helping develop a productive and inclusive approach to realising the potential benefits of AI in Scotland. It is also intended for the strategy to set out ambitions for Scotland to play a bigger role on the global AI stage, so it may have impacts elsewhere in time.

⁹ [The Past Decade and Future of AI's Impact on Society | OpenMind \(bbvaopenmind.com\)](https://openmind.com)

¹⁰ [The biggest tech breakthroughs of the last decade \(cityam.com\)](https://cityam.com)

¹¹ [Here's how technology has changed the world since 2000 | World Economic Forum \(weforum.org\)](https://weforum.org)

¹² [Data driven innovation in Scotland - Scottish Enterprise \(scottish-enterprise.com\)](https://scottish-enterprise.com)

¹³ [Why Scotland's the place to do great things with data \(sdi.co.uk\)](https://sdi.co.uk)

What might prevent the desired outcomes being achieved?

Set out here any factors that might prevent the desired outcomes being achieved.

S.9. The scoping document¹⁴ states that the strategy will set out what Scotland needs to do over the next five years in order to realise the potential of AI, and create the right ecosystem for people in Scotland to benefit from the adoption of AI as a trusted, responsible and ethical tool. It also recognises the need to work together to realise this potential, and secure the trust of the public in doing so.

S.10. Securing and sustaining public trust in the development, adoption and use of AI is the foundation on which the strategy must build. The strategy will be Scotland's first ever policy on AI, and there are many evidence gaps, key being a lack of evidence on what people in Scotland think and feel about the potential impacts of AI.

S.11. Ethics and regulation have featured prominently in discussions held as part of the development process. The challenge is complex but governance will be key to creating trusted, responsible and ethical AI, which in turn will determine the readiness and willingness of organisations and individuals to adopt and engage with AI. Furthermore, AI is not an industry or technology readily defined by geographic boundaries, meaning that Scotland will require a system of governance that recognises the global nature of AI.

S.12. The strategy will set out what Scotland needs to do in order to realise the potential of AI. However, it is important to note that AI is diverse and dynamic, as are the fields and technologies within it, and things can change and grow quickly. In light of this, the strategy will set out a vision for AI in Scotland and key activities – leaving scope to respond to emerging developments and opportunities.

S.13. In addition, whilst the strategy is a key development with specific regards to AI, other policy initiatives around the digital economy, broader digital and data driven innovation will also play an important role.

¹⁴ Reference 8

Stage 1: Framing

Results of framing exercise

Set out here a summary of the initial findings of your framing exercise which helped identify existing evidence and potential impacts.

1. Will your policy affect people, or will your policy impact on another policy that affects people?

F.1. Yes, as noted above - potentially, all people in Scotland, including those actively working on the development, adoption and use of AI, such as technical research and development in academia and industry; wider private, public and third sector organisations interested in AI, and the general public. As also noted above, it is recognised that AI may have potentially disproportionate impacts on certain groups and communities. This will be explored in the other impact assessments – Child Rights and Wellbeing, Fairer Scotland Duty and Islands Communities – that will be conducted done as part of the development process. Taken together, these will help inform the mitigating measures that will be set out in the strategy.

2. Will your policy affect other policies, organisations or work which could affect equality?

F.2. At this point there is a direct link to the Scottish Government's Fair Work agenda, where the Gender Pay Gap Action Plan sets out a commitment to consider the potential impacts of AI on women's employment¹⁵; the strategy will need to provide for this. There may also be implications arising from General Data Protection Regulation¹⁶ provisions on the data rights of people and how these are applied when AI systems are involved¹⁷.

F.3. It is possible that the strategy may affect other areas depending on how the proposals evolve. A number of governments around the world are developing AI strategies and we will actively seek to learn from their experiences as we progress.

3. Will individuals have access to, or be denied access to, a service or function as a result of your policy or the changes you propose to make?

F.4. It is not anticipated that the strategy itself will have any direct impacts on access to services or functions. Indeed, the adoption of AI has the potential to improve individuals' access to services, such as the use of chatbots to triage initial inquiries and signpost more effectively. The strategy will also set out proactive steps, perhaps along the lines of a code of practice, to address the potential risks of AI being discriminatory or enhancing inequalities. These risks exist in a number of domains such as personal insurance¹⁸, financial services¹⁹ and recruitment²⁰, to name but a few.

¹⁵ [A fairer Scotland for women: gender pay gap action plan - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/gender-pay-gap-action-plan/pages/1-1-introduction.aspx)

¹⁶ <https://gdpr-info.eu/>

¹⁷ [Rights related to automated decision making including profiling | ICO](https://ico.org.uk/for-organisations/articles-and-guidance/intermediate-articles/2018-05-01-rights-related-to-automated-decision-making-including-profiling/)

¹⁸ <https://www.gov.uk/government/publications/cdei-publishes-its-first-series-of-three-snapshot-papers-ethical-issues-in-ai>

¹⁹ [CDEI AI Barometer - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/cdei-ai-barometer)

²⁰ [CDEI publishes review into bias in algorithmic decision-making - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/cdei-publishes-review-into-bias-in-algorithmic-decision-making)

4. Will the implementation of your policy directly or indirectly result in: individuals being employed, a change in staffing levels, terms and conditions, employer or location?

F.5. It is possible that the strategy's provisions to foster AI development, adoption and use will help to create jobs AI firms (start-ups and SMEs), research organisations and, more broadly, in businesses that decide to utilise AI. Some people in employment may see their responsibilities change depending how and what AI is used in their organisation; by extension, there is the potential for certain roles to be rendered obsolete.

F.6. *Technological Change and the Scottish Labour Market*²¹, a joint Scottish Government and Scottish Trades Union Congress (STUC) report published in 2018, sets out how digitisation, automation and other innovations will affect the Scottish labour market. It cites studies suggesting that a sizeable proportion of jobs, including whole occupations, in Scotland were vulnerable to new technologies within the next 10- 20 years, including some previously regarded as immune to displacement. In light of this, and wider interest in the impact of AI on employment, the STUC were invited to be represented on the Strategy Steering Committee, and the skills and knowledge working group.

5. Is there a change in the size of the budget, or an impact on resources, and will this change (potentially) impact on individuals? (For example, will a service be withdrawn, changed or expanded?)

F.7. There will be a requirement for discrete resources to enable taking forward the actions set out in the strategy. These are expected to include public engagement sessions, activities to increase awareness and understanding of AI and, potentially, AI skills development. However, it is not anticipated that there will be direct impacts on individuals.

²¹ <https://www.gov.scot/publications/technological-change-scottish-labour-market/>

Extent/Level of EQIA required

Following gathering and analysing your evidence of the (potential) impacts of your policy on each of the protected characteristics, set out here your consideration of the extent/level of assessment required.

Include any further evidence gathering and external engagement that is required to demonstrate that you are giving “due regard” to the equality duty of eliminating discrimination, promoting equality of opportunity and fostering good relations.

F.8. From the outset of work to develop the strategy our approach has actively sought to be open, transparent and collaborative, with details of our activities made available on the Scotland’s AI Strategy website.

F.9. Published in January 2020, the scoping document sets out initial proposals for how the strategy will frame what Scotland needs to do over the next five years in order to realise the potential of AI, and create the right ecosystem for people to benefit from the adoption of AI as a trusted, responsible and ethical tool. It also sets out the steering committee’s aim to develop an approach that will enable the people of Scotland to flourish through the adoption of AI, with no one left behind, and their keenness to ensure that the strategy is developed collaboratively by people across Scotland.

F.10. A consultation on the proposals ran from 17 February to 22 May 2020²². It received a total of 83 responses, from 29 individuals and 52 organisations. Responses came from those developing and using AI, or who are interested in the opportunities and challenges that it presents. Whilst there was a broad degree of support for the proposals as a starting point several issues were also highlighted, and suggestions made; the top five issues that emerged from the analysis of responses were:

- The need for an ethical approach – perhaps presented as a code, framework or set of principles – to guide the development, adoption and use of AI in Scotland.
- The value of making the strategy people-centred and aligned with Scotland’s National Performance Framework.
- The need to provide skills and training so that all people in Scotland can understand, engage with and use AI in a way appropriate to their needs.
- The value of case studies of AI having been developed and used responsibly to deliver benefit, and for these to be easily explainable.
- The need for a continuing public dialogue on AI in Scotland to ensure that our approach is and remains fair and inclusive.

F.11. A few respondents highlighted that some issues arising from the use of AI – such as safety, security and transparency – would require further consideration. A related issue was the need for investment in certain areas – such as enterprise support, skills and training – to help deliver the strategy’s aims. Other recurring issues were the importance of ensuring diversity, equality and inclusion in harnessing AI – many stressing the importance of having ethical and governance frameworks in place to safeguard this and mitigate risks – and the need for openness and transparency around the use of AI.

²² [The AI Of The Possible: Developing Scotland's Artificial Intelligence \(AI\) Strategy - Scottish Government - Citizen Space \(consult.gov.scot\)](https://www.gov.scot/citizen-space/consultations/the-ai-of-the-possible-developing-scotland-s-artificial-intelligence-ai-strategy)

F.12. Much feedback noted the need for the strategy to set out measures on reskilling and upskilling of those in work affected by AI, as well as broader skills and training. Several cited the potential of AI to improve efficiency and productivity, particularly in certain industries, and the impact it may have on employment. It was observed that the adoption of AI will replace and create jobs – many of them high value – but has potential to cause job losses, more so in specific sectors, and the associated economic and social costs.

F.13. A public engagement programme to help inform the development of the strategy was conducted in spring and summer 2020²³. Originally scheduled to take place in person, the Covid-19 pandemic required activities to be carried out online. Echoing the majority of respondents to the consultation, participants were largely optimistic about the potential of AI to improve their lives and positively transform a range of sectors, such as education, in Scotland. However, there remained concerns about issues, such as bias, and trade-offs, such as privacy, that currently accompany the use of AI. Other issues highlighted were the absence of a shared but informed understanding of AI, an impediment to education and awareness raising, a potential urban-rural divide in the creation of tech jobs and digital/data infrastructure, and the importance of skills and training. The outputs from the series of strategic theme working groups²⁴ conducted in summer 2020 broadly concurred with the opportunities, challenges and issues identified by the consultation and engagement activities. It should be noted that members of the groups were recruited by open competition and, in some cases, invitation so as to ensure an appropriate mix of knowledge, skills and experience.

F.14. A recurring theme was that the strategy's vision and goals should state the need for fairness, inclusion and a rights-based approach, and the need to identify and address risks and threats. The importance of ensuring diversity, equality and inclusion in harnessing AI was highlighted, with many respondents/participants stressing the importance of having ethical and governance frameworks in place to safeguard this and mitigate risks. Several cited the need for openness and transparency around the use of AI. The importance of data quality, particularly issues such as biases – that can be built into algorithms depending on the data used to train them – and implications for fairness was also raised.

F.15. Reflecting on this evidence base a detailed assessment is needed to help inform the development of the strategy. Once the strategy itself is published, there is a clear demand for ongoing public engagement to help ensure that the approach to AI in Scotland remains focused on fairness and inclusion. Several platforms can be considered to deliver this engagement, and there may also be scope to discuss AI alongside dialogue on other topics, such as by developing links to the Scottish Government's Citizens' Assembly programme, or by linking with relevant stakeholders such as the British Computer Society²⁵ or Royal Society of Edinburgh²⁶, who ran a series of 'RSE Investigates AI' events in spring 2020. Resources available for engagement would need to be established before commitments are made in the strategy.

²³ https://www.scotlandaistrategy.com/s/DS_The-AI-Of-The-Possible-Engagement-Report.pdf

²⁴ [Key findings from the Working Group discussions](#)

²⁵ [Artificial intelligence \(AI\) | BCS](#)

²⁶ [Royal Society of Edinburgh - Royal Society of Edinburgh \(rse.org.uk\)](https://www.rse.org.uk)

Stage 2: Data and evidence gathering, involvement and consultation

Include here the results of your evidence gathering (including framing exercise), including qualitative and quantitative data and the source of that information, whether national statistics, surveys or consultations with relevant equality groups.

AGE

Evidence gathered and Strength/quality of evidence
<p>There is evidence that discusses the potential for AI to have discriminatory impacts on the basis of age. This includes in the provision of goods and services e.g. financial products or insurance and, potentially, other areas such as criminal justice.</p> <p>This potential was also cited in responses to the consultation and by participants in the public engagement workshops. In the latter, participants raised concerns about accountability and redress in cases when algorithmic bias results in discrimination or when automated decision making causes grave errors.</p> <p>It has also been observed that AI can potentially have adverse impacts for children, in specific areas such as finance, and law enforcement, particularly forms of AI such as facial recognition technologies. In light of this, a Children's Rights and Wellbeing Impact Assessment will also be completed as part of the development process in order to inform specific mitigating provisions in the strategy.</p>
Data gaps identified and action taken
<p>GAP: There was less evidence available on the potential for AI to discriminate against older people.</p> <p>ACTION: The consultation and public engagement reports were re-read to ensure none had been overlooked, and a further trawl completed. No further evidence having been found, this topic will be explored further in the public engagement that will be part of the strategy's development and delivery. Access to AI is also contingent upon access to digital infrastructure (such as devices and connections) and digital skills, which might vary depending on age, disability, socio-economic factors as well as geography. Therefore we will also work with the Scottish Government policy team leading on the Digital Strategy to ensure those issues are captured.</p>
Source
<p>Discrimination in the Age of Artificial Intelligence OHRH (ox.ac.uk)</p> <p>Close-the-Gap-response-to-the-Scottish-Governments-AI-Strategy-Consultation---March-2020.pdf</p> <p>https://www.scotlandaistrategy.com/resources</p> <p>https://www.gov.uk/government/publications/cdei-ai-barometer/cdei-ai-barometer#financial-services</p> <p>https://www.gov.uk/government/publications/cdei-ai-barometer/cdei-ai-barometer#criminal-justice</p> <p>https://www.gov.uk/government/publications/cdei-publishes-briefing-paper-on-facial-recognition-technology/snapshot-paper-facial-recognition-technology</p>

<https://www.gov.scot/publications/report-independent-advisory-group-use-biometric-data-scotland/>

<https://www.unicef.org/globalinsight/featured-projects/ai-children>

<https://www.gov.scot/policies/digital/>

DISABILITY

Evidence gathered and strength/quality of evidence

There is a range of evidence highlighting the potential of AI to help support the delivery of health and social care and other services to those affected by disability. This potential is also recognised in other policies being taken forward by the Scottish Government, NHS and other public bodies. For example, in their consultation response Scottish War Blinded outlined how AI could augment and improve clinical diagnosis, treatment and care for those affected by visual impairment, whilst the potential of AI to help improve accessibility has also been acknowledged.

However, it has also been noted that AI could have a detrimental impact on those affected by disability on account of algorithmic bias, and that the positive potential of AI may be over-emphasised.

Data gaps identified and action taken

GAP: There was limited evidence on how AI could potentially impact on those affected by long-term mental health problems. Whilst there is acknowledgment of AI's potential to help with clinical diagnosis and treatment, there is limited evidence on how AI could impact on patients themselves.

ACTION: Further research, as well as exploring this topic in public engagement and liaising with relevant colleagues within the Scottish Government and NHS Scotland.

Source

[Algorithmic discrimination in Europe: Challenges and Opportunities for EU equality law | European Futures \(ed.ac.uk\)](#)

<https://petrieflom.law.harvard.edu/events/details/artificial-intelligence-and-disability-dependency#:~:text=%20AI%20can%20improve%20the%20lives%20of%20people,the%20underlying%20data%20used%20to%20develop%20the%20algorithms.>

[Artificial intelligence and disability: too much promise, yet too little substance? | SpringerLink](#)

<https://wid.org/2019/06/12/ai-and-accessibility/>

https://researcher.watson.ibm.com/researcher/view_group.php?id=9666

[Artificial Intelligence for Mental Health and Mental Illnesses: an Overview - PubMed \(nih.gov\)](#)

SEX

Evidence gathered and strength/quality of evidence

Some consultation responses noted that AI can have gender-specific impacts, and disproportionate impacts in certain employment sectors. This has already been

<p>recognised in Scottish Government policy, namely <i>A Fairer Scotland for Women: Gender Pay Gap Action Plan</i>.</p> <p>In parallel with the development of the AI Strategy, the Scottish Government Digital Directorate is conducting a programme of work exploring sex and gender in data. The output from this is expected to be guidance on how sex and gender data is gathered and used by Scottish public bodies. This will need to be taken into account in any of the data-related actions that will be set out in the strategy.</p>
<p>Data gaps identified and action taken</p>
<p>GAP:</p> <p>ACTION:</p>
<p>Source</p> <p>PLP-Apps-Algorithms-and-AI-paper-final.pdf (cloisters.com)</p> <p>https://consult.gov.scot/data-innovation/artificial-intelligence-ai-strategy/consultation/view_respondent? b_index=60&uuld=848954836</p> <p>https://consult.gov.scot/data-innovation/artificial-intelligence-ai-strategy/consultation/view_respondent? b_index=0&uuld=953271514</p> <p>https://www.gov.scot/publications/fairer-scotland-women-gender-pay-gap-action-plan/</p>

PREGNANCY AND MATERNITY

<p>Evidence gathered and strength/quality of evidence</p> <p>There is little evidence available on AI in relation to pregnancy and maternity, and that which is focuses on the application of AI in clinical diagnosis and pre/post-natal care.</p> <p>It suggests that AI may have a broadly positive impact on the provision of clinical care, particularly in helping to identify and inform treatment of certain complications or disorders that can affect the mother and foetus. Further exploration of the potential of AI is recommended.</p>
<p>Data gaps identified and action taken</p>
<p>GAP: As noted, evidence on AI’s potential impacts in this area is limited.</p> <p>ACTION: Ongoing monitoring for further developments and evidence, and liaison with relevant stakeholders.</p>
<p>Source</p> <p>Artificial Intelligence in Pregnancy: A Scoping Review IEEE Journals & Magazine IEEE Xplore</p>

GENDER REASSIGNMENT

Evidence gathered and strength/quality of evidence
There is limited evidence on the potential of AI to impact on those affected by gender reassignment.
Data gaps identified and action taken
GAP:
ACTION: Engagement during the development and implementation of the strategy with a diverse representation of the Scottish public.
Source
Artificial Intelligence and Gender Equality and Gender Equality (unesco.org)
https://www.techregister.co.uk/will-gender-equality-be-the-victim-as-artificial-intelligence-drives-development/

SEXUAL ORIENTATION

Evidence gathered and strength/quality of evidence
There is limited evidence on the potential of AI to impact on the grounds of sexual orientation.
Data gaps identified and action taken
GAP:
ACTION: Engagement during the development and implementation of the strategy with a diverse representation of the Scottish public.
Source
Discrimination, artificial intelligence, and algorithmic decision-making (coe.int)

RACE

Evidence gathered and strength/quality of evidence
AI can potentially have a differential impact based on race in a number of areas. Amongst the most well-known and discussed is in law enforcement, particularly forms of AI such as facial recognition technologies.
One of the means potentially of ensuring digital inclusion was to develop AI through an ethos of public good. Consultation respondents and engagement participants were broadly unanimous that the advantages of AI should benefit all of Scottish society, including low income and ethnic minority groups. This was also apparent from the safeguards they felt needed to be put into place to protect those sections of the population vulnerable to algorithmic bias and discrimination.
AI Public Engagement Report - As in the case of monitoring and health, it was clear to participants that the use of surveillance and profiling for public safety would involve trade-offs and give rise to other tensions, such as ethnic and racial profiling. A small number of participants had first-hand experience with surveillance technology and recognised its potential for misuse. Others acknowledged that it was still early days but

that, without safeguards, vulnerable members of the community would continue to be unfairly profiled - a point also linked to bias.
Data gaps identified and action taken
GAP:
ACTION:
Source
Artificial Discrimination Zurich Insurance

RELIGION OR BELIEF

Evidence gathered and strength/quality of evidence
<p>Despite multiple searches there is limited evidence exploring the potential impacts of AI on people of different religions or beliefs as such, though discrimination based on race might by proxy translate into discrimination based on religion.</p> <p>Not directly relevant but of interest are a number of philosophical and theological discussions on the relationship between religious belief and AI. There is also evidence that cultural and moral values influence what individual perceive as “ethical” behaviour of AI systems such as autonomous vehicles. The ethical principles construct that will guide the approach to AI in Scotland will be secular in content and nature.</p>
Data gaps identified and action taken
<p>GAP: Limited evidence on AI’s potential impact on this characteristic.</p> <p>ACTION: As the strategy’s development and delivery progress, evaluate any emerging relevant evidence.</p>
Source
<p>https://thehumanist.com/magazine/winter-2021/features/the-relationship-of-artificial-intelligence-and-religion-to-secular-morality</p> <p>http://ohrh.law.ox.ac.uk/discrimination-in-the-age-of-artificial-intelligence/</p> <p>https://www.gresham.ac.uk/lectures-and-events/ai-religion</p> <p>https://www.nature.com/articles/d41586-018-07135-0</p>

Stage 3: Assessing the impacts and identifying opportunities to promote equality

Having considered the data and evidence you have gathered, this section requires you to consider the potential impacts – negative and positive – that your policy might have on each of the protected characteristics. It is important to remember the duty is also a positive one – that we must explore whether the policy offers the opportunity to promote equality and/or foster good relations.

Do you think that the policy impacts on people because of their age?

AGE	Positive	Negative	None	Reasons for your decision
Eliminating unlawful discrimination, harassment and victimisation	X			The strategy will set out actions to ensure that AI is developed, adopted and used in an ethical and socially responsible way.
Advancing equality of opportunity	X			Evidence obtained from consultation responses, the public engagement programme and working groups points to a common desire that every person in Scotland should be able to equally benefit from the opportunities afforded by AI and that this would need to start with equal access - to learn, use, and understand AI - and transparency, crucial to securing trust in AI. The strategy will set out a number of relevant actions to help achieve this.
Promoting good relations among and between different age groups	X			Mindful of the potential impacts of AI on them, two separate workshops with children and young people were included in the public engagement programme, This, alongside the CRWIA outputs, will help to inform specific actions in the strategy, such as the adoption or development of guidance or other initiatives.

Do you think that the policy impacts disabled people?

DISABILITY	Positive	Negative	None	Reasons for your decision
Eliminating unlawful discrimination, harassment and victimisation	X			The strategy will set out actions to ensure that AI is developed, adopted and used in an ethical and socially responsible way.
Advancing equality of opportunity	X			<p>Evidence obtained from consultation responses, the public engagement programme and working groups points to a common desire that every person in Scotland should be able to equally benefit from the opportunities afforded by AI and that this would need to start with equal access - to learn, use, and understand AI - and transparency, crucial to securing trust in AI. The strategy will set out a number of relevant actions to help achieve this.</p> <p>Much work on AI technologies' development can often be done very effectively from home, which may help make it more accessible as a career opportunity for disabled people.</p>
Promoting good relations among and between disabled and non-disabled people	X			

Do you think that the policy impacts on men and women in different ways?

SEX	Positive	Negative	None	Reasons for your decision
Eliminating unlawful discrimination	X			This will need explanation, particularly about AI in recruitment (i.e. are sifting algorithms biased?) and its use in the workplace (potentially impacting more on jobs/sectors that have a higher proportion of women i.e. part time retail jobs)
Advancing equality of opportunity	X			
Promoting good relations between men and women	X			

Do you think that the policy impacts on women because of pregnancy and maternity?

PREGNANCY AND MATERNITY	Positive	Negative	None	Reasons for your decision
Eliminating unlawful discrimination			X	No provisions directly or indirectly relate to this.

Advancing equality of opportunity			X	
Promoting good relations			X	

Do you think your policy impacts on people proposing to undergo, undergoing, or who have undergone a process for the purpose of reassigning their sex? (NB: the Equality Act 2010 uses the term ‘transsexual people’ but ‘trans people’ is more commonly used)

GENDER REASSIGNMENT	Positive	Negative	None	Reasons for your decision
Eliminating unlawful discrimination			X	No provisions directly or indirectly relate to this. However, as the strategy’s development progresses, we will draw from the guidance <u>being</u> produced by the Scottish Government’s Sex and Gender in Data Working Group; https://www.gov.scot/groups/sex-and-gender-in-data-working-group/ .
Advancing equality of opportunity			X	
Promoting good relations			X	

Do you think that the policy impacts on people because of their sexual orientation?

SEXUAL ORIENTATION	Positive	Negative	None	Reasons for your decision
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Eliminating unlawful discrimination			X	No provisions directly or indirectly relate to this.
Advancing equality of opportunity			X	
Promoting good relations			X	

Do you think the policy impacts on people on the grounds of their race?

RACE	Positive	Negative	None	Reasons for your decision
Eliminating unlawful discrimination	X			In light of the sensitivities around use of facial recognition and the use of AI in recruitment and service delivery, it is recognised that clear ethical principles might go some way to addressing relevant issues such as algorithmic biases, . The EU is considering these issues, particularly the use of facial recognition technologies, and we will actively monitor policy developments to help inform our thinking.
Advancing equality of opportunity	X			It was also noted that this level of transparency with data would also make it easier to mitigate algorithmic bias by making it easier to identify where bias may have been introduced.

Promoting good race relations	X			
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Do you think the policy impacts on people because of their religion or belief?

RELIGION OR BELIEF	Positive	Negative	None	Reasons for your decision
Eliminating unlawful discrimination			X	No impact was identified apart from that potentially arising indirectly from race.
Advancing equality of opportunity			X	
Promoting good relations			X	

Do you think the policy impacts on people because of their marriage or civil partnership?

MARRIAGE AND CIVIL PARTNERSHIP ⁴	Positive	Negative	None	Reasons for your decision
Eliminating unlawful discrimination			X	No provisions directly or indirectly relate to this.

In respect of this protected characteristic, a body subject to the Public Sector Equality Duty (which includes Scottish Government) only needs to comply with the first need of the duty (to eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010) and only in relation to work. This is because the parts of the Act covering services and public functions, premises, education etc. do not apply to that protected characteristic. Equality impact assessment within the Scottish Government does not require assessment against the protected characteristic of Marriage and Civil Partnership unless the policy or practice relates to work, for example HR policies and practices.

Stage 4: Decision making and monitoring

Identifying and establishing any required mitigating action

If, following the impact analysis, you think you have identified any unlawful discrimination – direct or indirect - you must consider and set out what action will be undertaken to mitigate the negative impact. You will need to consult your legal team in SGLD at this point if you have not already done so.

Have positive or negative impacts been identified for any of the equality groups?	Yes – please see above.
Is the policy directly or indirectly discriminatory under the Equality Act 2010 ²⁷ ?	Neither.
If the policy is indirectly discriminatory, how is it justified under the relevant legislation?	Not applicable.
If not justified, what mitigating action will be undertaken?	Not applicable.

Describing how Equality Impact analysis has shaped the policy making process

In this section, set out a narrative that describes how the equality impact analysis has shaped and informed your policy development. Include, for example:

²⁷ See EQIA – Setting the Scene for further information on the legislation.

- ◆ Explaining whether any changes have been made to the policy as a result of the impact analysis and clearly identifying those changes. Or, explaining why no changes have had to be made.

D.1. Recognising the breadth and strength of evidence and feedback, the strategy will clearly set out overarching ethical principles as a 'golden thread' that will guide the development, adoption and use of AI in Scotland in a fair and socially responsible way. It is anticipated that the principles may be set out in a framework, and be woven through the entire document, and may also draw from others used elsewhere.

- ◆ Describing any new steps that have been / will be taken as a result of the data and evidence gathered through the EQIA process, for example: adding a new piece of work to ensure that the policy implementation includes ethnic minorities, or working with delivery partners to ensure they fully understand the equality impacts.

D.2. Making sure that further work to develop and, in time, deliver the strategy includes further dialogue with underrepresented groups and communities. The strategy itself will also set out actions to ensure there is continued engagement with the public across Scotland, including underrepresented groups and communities, and those more likely to be adversely impacted by AI.

D.3. We recognise the potential impacts of AI on children and the strategy will set out specific actions, informed by the Child Rights and Wellbeing Impact Assessment, to mitigate these. Making sure that the strategy is even clearer on expectations around the ethical and socially responsible development, adoption and use of AI. Likely inclusion of targeted provisions to address impacts of AI on specific groups e.g. children.

- ◆ Explaining if there have been, or will be, any implications on costs, resources etc. arising from the EQIA analysis, e.g. has the budget changed because of the EQIA?

D.4. The indicative budget remains unchanged as a result of the EqIA. From the development activities and research conducted to date, it is anticipated that the strategy will set out provisions for relating to AI skills, including reskilling and upskilling those whose jobs are affected by AI. If so, it is possible that this will require an increase in budget, more so if actions relate to needs from certain jobs/sectors.

- ◆ You should also include a paragraph on how the EQIA has helped you develop better outcomes for people and communities²⁸.



D.5. Reflecting on the evidence gained from the consultation, engagement programme and working groups, alongside that from research, has reinforced our intent that the strategy will clearly set out an ethical and socially responsible approach to AI in Scotland. This will be reflective of our values and principles, as set out in the NPF, and help towards achieving our outcomes. This has always been our intent but the depth and strength of feeling in the evidence highlight its importance.

Monitoring and Review

In this section, explain how you will monitor and evaluate this policy to measure progress on equality issues identified in the EQIA. Include information on when the monitoring and evaluation will take place, and who is responsible for undertaking it. This should be part of the regular monitoring and evaluation mechanisms you devise for your policy.

D.6. The strategy will set out the governance construct that will oversee its delivery, and the metrics and mechanisms that will be used to measure progress. The construct will likely include a strategic board, project groups and a secretariat, and channels for public participation.

D.7. The metrics are expected to be milestones for each action set out in the strategy, with the mechanism to be devised by the board and secretariat. Delivery progress reporting will likely be weekly, monthly or quarterly; it is anticipated that there will be a formal annual report published given public interest in AI.

D.8. Reflecting the breadth and depth of feedback on the need for an ethical and fair approach to AI in Scotland, it is also expected that the strategy will set out a number of specific actions relating to equality. These are likely to follow on from work to date, such as the CivTech[®] Sprint Challenge on ethical and explainable AI in the public sector.

²⁸ The EHRC consider that a critical purpose of the EQIA is to achieve better outcomes for people and communities.

Stage 5 - Authorisation of EQIA

Please confirm that:

- ◆ This Equality Impact Assessment has informed the development of this policy:

Yes No

- ◆ Opportunities to promote equality in respect of age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation have been considered, i.e.:

- Eliminating unlawful discrimination, harassment, victimisation;
- Removing or minimising any barriers and/or disadvantages;
- Taking steps which assist with promoting equality and meeting people's different needs;
- Encouraging participation (e.g. in public life)
- Fostering good relations, tackling prejudice and promoting understanding.

Yes No

- ◆ If the Marriage and Civil Partnership protected characteristic applies to this policy, the Equality Impact Assessment has also assessed against the duty to eliminate unlawful discrimination, harassment and victimisation in respect of this protected characteristic:

Yes No Not applicable

Declaration

I am satisfied with the equality impact assessment that has been undertaken for the development of Scotland's AI Strategy and give my authorisation for the results of this assessment to be published on the Scottish Government's website.

Name: Albert King
Position: Chief Data Officer, Scottish Government

Authorisation date: 11 May 2022