

Algorithmic transparency in the public sector

Policy Hackathon

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In recent years, public sector organisations in the UK and abroad have increasingly made use of algorithms to assist in decision making. From moderating examination results to detecting financial fraud, hiring staff to allocating police resources, a growing number of applications for algorithm use has emerged in the public sector.

Advances in this area can bring large benefits – algorithm assisted decision making may be more consistent and accurate than human decision making. However, concerns exist that the use of algorithms to make complex, high-impact decisions – such as whether a person is eligible for benefit payments or social housing – may lead to unfair outcomes and reinforce existing biases. Many stress that technological innovation must be matched by a high level of public accountability and scrutiny over safe algorithm use.

Greater transparency has been posited as a solution to a number of the problems posed by algorithm use in the public sector. Transparent access to key information such as the data on which algorithms are trained and validated, their levels of effectiveness and bias, their documented effects on individuals and society, and the role that human beings play in the decision-making loop can help build public trust and bring necessary scrutiny to decision-making processes. Establishing confidence in the use of algorithm assisted decision making will be crucial in allaying fears about the dangers of so-called “government by algorithm” – the idea that algorithms are increasingly displacing human decision making in harmful ways.

However, algorithmic transparency poses technical and ethical challenges of its own. Concerns have been raised that even if algorithms are made more transparent, they may remain inaccessible and unintelligible to the general public and that greater transparency may have undesirable implications for privacy and data security. Most importantly, though “transparency” may be touted as a solution to the problems posed by greater algorithm use in the public sector, the steps necessary to achieve it have been given insufficient attention.

On Wednesday 7th April 2021, *Reform*, in partnership with Imperial College London’s *The Forum*, held a virtual Policy Hackathon on the topic of “Algorithmic transparency in the public sector” to consider these challenges. Working closely with the Centre for Data Ethics and Innovation (CDEI) and the Government Digital Service (GDS), *Reform* identified a set of scenario-based problems exemplifying key challenges around algorithmic transparency in the public sector that attendees were tasked to solve during the event.

This report presents a summary of the main solutions discussed by attendees. Hackathon participants were asked to work through specific policy challenges related to algorithmic transparency across four different stages:

01 | The Early Design Stage

02 | The Development Stage

03 | The Implementation Stage

04 | Redress and Remediation

Reform and Imperial would like to extend their thanks to participants in the Policy Hackathon for their work and ideas to make this document possible.

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01 | The Early Design Stage

POLICY CHALLENGE I – Transparency over why

Beyond the legal obligations in the General Data Protection Regulation (GDPR) 2018, Data Protection Act 2018 and the Freedom of Information Act 2000, there are no formal requirements to explain why an algorithm is being considered for use in the public sector. Public sector leaders can find it difficult to establish a baseline of performance against which they can compare algorithms to. What transparency requirements should exist on explaining why an algorithm is being considered for use in the public sector?

SOLUTIONS

- Public sector organisations should produce a comprehensive case for why they are considering using an algorithm to make a decision with high impacts on the public and why the algorithm they are considering using best serves the purpose they set out to achieve. The Government Office for AI and Central Digital and Data Office's 'Guide to using artificial intelligence in the public sector' provides useful guidance in this regard.¹ A standardised template document on setting out a "case" for algorithm use should be developed and added to the existing guidance.
- This case should be published on the organisation's website alongside other material on algorithm use and linked to a dedicated GOV.UK page documenting algorithm use across the public sector. This page should be searchable by organisation and locality to account for the use of algorithms outside of central government. Publishing accessible material early will help facilitate public discussion on the appropriateness of algorithm use in particular policy areas before the development stage.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees noted that information relevant to answering why an algorithm is being considered will emerge *throughout* the design phase – for instance, after data has been surveyed in depth. Public sector organisations should make this clear in the initial cases they present and continue to inform the public as new, relevant information emerges.

Attendees suggested that a greater diversity of voices within organisations must be heard in the initial assessment process to ensure that a full range of potential benefits and harms of algorithmic use are considered. At all stages of the design process, social scientists, ethicists, and system designers must work collaboratively to ensure that internal consultation is as representative as possible.

¹ Government Office for AI and Central Digital and Data Office. "A guide to using artificial intelligence in the public sector", Webpage, 10 June 2019.

POLICY CHALLENGE II – Transparency over how

Government's Data Ethics Framework and 'Guide to Using AI in the public sector' offer guidance on ethical algorithm use in the public sector but greater transparency is required to ensure public servants systematically think about and explain how algorithms will be deployed, where they shouldn't be deployed, and where in the decision-making process they will be deployed. How can greater transparency be built into discussions on *how* algorithms will be used in the public sector? How can we ensure that central government guidance trickles down to local government and other public sector agencies (e.g., police forces, NHS trusts, child services)?

SOLUTIONS

- GDS should establish principles governing human computer interactions in the public sector. These should stress the ongoing importance of human agency and discretion at all points in the decision-making process. Individual departments and organisations should issue detailed guidance on how staff should approach algorithm use.
- CDEI should expand its work in documenting algorithm use in local authorities and in public sector organisations outside of central government.² It should publish "best practice" guidance on algorithm use across the wider public sector to ensure that algorithm use by local authorities, police forces and community services are subject to adequate scrutiny.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees reflected on the risks of 'over-documentation', where key details may be obscured from public view by the sheer quantity of information recorded. They also reflected that simply producing more guidance and information provides little value if it is difficult to locate and access. For this reason, a recurring theme in this session and in the hackathon as a whole was the need to better catalogue information related to algorithm use in the public sector on government websites. The standardisation of documentation requirements and ensuring that information can be easily located is essential for public scrutiny.

² Centre for Data Ethics and Innovation, *Local government use of data during the pandemic*, 2020.

POLICY CHALLENGE III – Transparency over data quality

There is currently no transparency requirement on the quality of the data (defined by its five constitutive elements of coverage, completeness, accuracy, integrity and validity) used to train and validate public sector algorithms. Organisations (both public and private) do not have to report on data quality and private sector organisations might hold this data as proprietary information. How do we ensure transparency over data and allay concerns over poor quality data usage in public sector algorithms?

SOLUTIONS

- Public sector organisation's using data in ways that may result in a high risk to individuals are required to produce a Data Protection Impact Assessment (DPIA). DPIAs present information on the way in which data is processed, identify potential risks and set out strategies for mitigating them. DPIAs contain a section on data quality which should be expanded to include analysis of the representativeness, relevance, and "source integrity" (how it was gathered) of data.
- In addition to providing this information as part of a DPIA, organisations should publish "Data Fact Sheets" which provide high level information on data sets used for training and validating algorithms in a simplified form. This will help reassure the public that adequate consideration is being given to issues of data quality. These should be published on the websites of organisations using algorithms in decision and linked to a searchable GOV.UK page on public sector algorithm use.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees noted that discussions of "data quality" tend to be dominated by technical, quantitative analysis. This means that in-depth discussions about issues of integrity in data collection and use tend to be less of a focus in public sector organisations. For this reason, it is important to involve a more representative range of voices in discussions on data collection and use. This may require seeking consultation with external groups including academic ethicists and researchers in social sciences, and non-government organisations focused on data misuse in the public sector.

POLICY CHALLENGE IV – Transparency over risks

The GDPR dictates that individuals must be given information about whether they are subject to automated decision making and have modes and mechanisms of challenge communicated to them. However, members of the public are often concerned that potential risks of algorithm use are not made clear sufficiently early in the process (i.e. when public sector organisations are considering using algorithms in decision making). How can we ensure that risks are presented transparently and in an accessible manner to the public? What information around risk should they be presented with?

SOLUTIONS

- Public sector organisations should publish “Algorithmic Impact Assessments” (AIA) similar to those which have been trialled internationally and on a smaller scale in the UK.³ AIAs are comprehensive studies carried out before an algorithmic system is deployed which identify potential risks and propose means to mitigate them. A Stakeholder Impact Assessment (SIA) should be included as a sub-section of the AIA and consider in more detail the impacts that an algorithm may have on groups that may be particularly affected by the use of an algorithm. These assessments should be published on a dedicated GOV.UK page, searchable by department, organisation and local authority (where relevant).
- SIAs should be used as the basis for public engagement on algorithm use. Public sector organisations should engage in prospective consultations over the potential risks of using an algorithm and reach out to specific stakeholders such as charities, trade bodies, and associations which represent particular groups that may be especially impacted.
- Guidance should exist on which kind of algorithms qualify for an AIA. They should be restricted to those which affect the public rather than the internal operations of an organisation, or those deemed “high risk”. Documentation may be necessary to explain why an algorithm was classified in a particular risk category.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees agreed that public consultation was a useful mechanism for building trust but noted that it raises challenges of its own over which organisations should be invited to take part and in what capacity. Attention needs to be paid to making sure that consultation involves representative, independent bodies.

³ The Ada Lovelace Institute and the NHS AI Lab are currently exploring the potential for algorithmic impact assessments in health care. See: Ada Lovelace Institute, “Algorithmic impact assessment in healthcare.”, Webpage, 10 March 2021.

02 | The Development Stage

POLICY CHALLENGE I – Transparency over safety

High level guidance exists on how to ensure safety and monitoring of algorithms, but outside of healthcare, there are currently no hard regulations to prove the safety of an algorithm in the public sector. This means that there is no regulation on the type of evidence that is needed (e.g., retrospective study, RCT, etc.) and a lack of clarity over who is responsible for checking safety. What requirements should exist on public sector actors over algorithmic safety and how can they be effectively communicated to the public?

SOLUTIONS

- The Government Digital Service (GDS) should develop and publish a high-level definition of algorithmic safety. This should set out both the principles that underlie a “safe” algorithm as well as what constitutes safe usage. Individual government departments and other public sector organisations should produce more context specific definitions of algorithmic safety in their policy area and define the standards of evidence and documentation required to prove the safety of different types of algorithms.
- Teams developing algorithms should conduct Automated Bias Testing to provide assurance of AI components that are continuously changing (for instance, machine learning algorithms). They should make documentation on these tests available upon request to help mitigate risk and build public trust in the effectiveness of their algorithm.
- Based on definitions and risk typologies published by GDS, Departments and other public sector organisations, different oversight arrangements should be put in place. For high-risk algorithms an independent third party should be tasked with carrying out safety assessments (as occurs in health care, where the Medicines and Healthcare products regulatory agency designates specialised Approved Bodies to assess the safety of new medical products). Technical specialists and civil society organisations who may represent at risk groups could be accredited for this purpose and Government should create a framework to accredit these organisations.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees noted that specialist regulators in different policy areas are best placed to safeguard the public from algorithmic harm. However, efforts should be made to streamline the regulatory process between different regulators to enhance public confidence that oversight is consistent across government.

POLICY CHALLENGE II – Transparency over managing risk

Civil servants and developers across public sector organisations may find it difficult to define acceptable levels of risk and prepare mitigation strategies against risk when developing algorithms. How can transparency around acceptable risk levels and risk management be ensured? How can risks in the development stage be effectively communicated to those who may be subject to algorithmic decision making?

SOLUTIONS

- GDS should help departments define what risk means in the context of public sector algorithms. It must ensure that the full scope of potential risks is defined including wider societal outcomes of algorithm use and the disproportionate impact that the algorithm might have on particular groups.
- GDS, Departments and other public sector organisations should construct governance structures which are proportionate to the risk identified. For instance, low risk algorithms may require consultation with potentially impacted communities, medium risk algorithms may require more extensive forms of performance monitoring, and high-risk algorithms may require the establishment of a dedicated independent review body.
- At times, algorithmic systems may be developed or procured to meet the demands of an emergency. GDS and Departments should create frameworks for regulation in these instances. This will ensure that trade-offs to ensure that slow oversight processes do not compromise the timely roll out of technology are discussed and scrutinised before emergencies occur.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees noted that risk assessment tends to be carried out by experts in artificial intelligence and technology. Whilst they may be effective in recognising ‘technical’ risk – for instance, problems with an algorithm’s effectiveness, a diverse range of experts from other professional backgrounds must be consulted to make sure that other risks (e.g., legal and ethical risks) are considered and mitigated during the development stage.

POLICY CHALLENGE III – Transparency about effectiveness and performance

Within Departments, analysts may establish cost-benefit thresholds on algorithms to establish whether they provide good value to taxpayers. Outside Departments in other public sector agencies, such as police forces and NHS trusts, and in Local Government, questions exist about how to assess the cost effectiveness of algorithmic decision making, particularly where public servants lack technical knowledge. What kind of transparency requirements should exist on establishing cost-benefit thresholds for algorithmic use? How can these cost-benefit thresholds be communicated effectively to a non-specialist audience?

SOLUTIONS

- Government Departments should publish case studies on how the Green Book, HM Treasury's guidance on appraising and evaluating the cost effectiveness of public sector projects, has been used to make business cases for the use of algorithms in public services. Case studies would help public sector organisations better understand how to establish and communicate the cost effectiveness of commissioning or designing algorithmic systems.
- Public sector organisations should ensure that cost-benefit analyses of algorithmic use take into account a broader range of potential results. They should focus on less tangible costs and benefits such as social or environmental impact. Cost-benefit analyses must consider impacts both on those impacted by algorithmic decision making and on those responsible for deploying algorithms.
- Organisations should make documentation on cost-benefit analyses on algorithm procurement available on request. This allows external researchers and analysts to scrutinise whether the procurement of algorithmic systems generates both value for money and positive non-monetary impacts.

SUCCESS FACTORS FOR IMPLEMENTATION

Metrics for assessing effectiveness tend to be very focused on quantifiable properties (e.g., accuracy rates, error intervals). Less easily quantifiable ways of measuring effectiveness may be overlooked, such as the wider social value that might accrue from using an algorithm. Public sector organisations must make sure that these quantifiable metrics are supplemented with qualitative research on effectiveness, and this may involve consultation with a wider group of experts.

POLICY CHALLENGE IV – Transparency in procurement

When algorithms are produced by a private organisation, they may argue that details about their product cannot be shared due to commercial sensitivities and intellectual property. Concerns exist that without publishing the details of how a decision was reached, a lack of scrutiny exists on whether or not the algorithm could produce biased or unfair decisions. How can we ensure that key information is available to commissioners and the public without compromising the intellectual property of private vendors?

SOLUTIONS

- GDS should establish high level guidance on the critical requirements commissioners need to consider when procuring algorithmic systems. These should be supplemented with guidance issued by specific departments and other public sector organisations for commissioning arrangements in their area of focus.
- Public sector organisations responsible for procuring AI systems should draft System Transparency Specification, a set of transparency requirements that need to be satisfied for a contract to be awarded. Relevant documentation on transparency specifications should be published on the Government's Contract Finder website.
- As recommended by the CDEI, Cabinet Office and the Crown Commercial Service should update model contracts and framework agreements for public sector procurement to incorporate a set of standards around expected levels of transparency over AI use. This would ensure consistency across government in the procurement of algorithmic system and build public trust in the transparency of this process.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees reflected on problems related to recording contracts awarded to private vendors in this space. They argued that greater specificity must be recorded in contracts and on contract finding websites about the type of system being procured as often this form of procurement is catalogued in a very generic way (e.g., as "IT Expenditure").

03 | The Implementation Stage

POLICY CHALLENGE I – Transparency of algorithmic decisions

Those affected by algorithmic decisions often seek an explanation for why a particular decision was made. The explanations given to them are often seen as being too technical and inaccessible. This potentially impedes the aim of ensuring transparency in decision making. How can public sector organisations ensure transparency over decisions made to those affected and effectively explain their basis to a non-technical audience?

SOLUTIONS

- GDS should issue guidance to public sector organisations on various ways to communicate algorithmic decisions to those subject to them. Guidance could outline:
 - Demographic based explanations (providing anonymised profiles of individuals classified in the same way);
 - Input-influence based explanations (indicating the relative influence of various factors on the outcome);
 - Case-based explanations (presenting characteristics of another decision subject with the same outcome); and
 - Sensitivity-based explanations (specifying factors about the decision subject which would need to change to get a different result).
- Departments and their associated regulators should provide oversight to ensure that organisations offer explanations of algorithmic decisions that can be understood by those affected. As part of their auditing and oversight functions they should consider how decisions were explained to affected individuals and whether they were satisfied with the explanation they were given. Doing so would provide important feedback on what constitutes a “meaningful” explanation and help public sector organisations improve guidance in this area.

SUCCESS FACTORS FOR IMPLEMENTATION

Some attendees suggested that a legal framework should be put in place to clarify what constitutes a meaningful explanation. However, others argued that this may prove difficult given the ambiguity of the concept of “explainability”.

Diverse skills and backgrounds are required in organisations to make sure that explanations are not overly technical. Sharing of “best practice” on algorithmic explanations between organisations can help ensure that non-technical, understandable explanations become the norm across the public sector.

POLICY CHALLENGE II – Transparency about data quality over time

Concerns exist that while algorithms may have been trained and validated on high quality data sets that mechanisms to assess the quality of the data being used in a 'live setting' are less clear. What transparency requirements should exist on the quality of new information being fed into a system over time?

SOLUTIONS

- Public sector organisation should regularly publish updated information on data being processed in the live setting. This would allow researchers and external experts to check and help maintain the quality of data. Simplified "Data Fact Sheets", considered at an earlier stage, could document this information in a more accessible form and be used to assure ongoing public trust.
- Regulators should carry out regular "data audits" to document how data collected in the live setting meets the coverage, completeness, accuracy, integrity and validity requirements outlined above. Where an algorithm has been developed by a private vendor, they should be mandated to submit regular documentation to departments and regulators on ongoing data collection.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees noted that alongside regular data auditing, regulators must also ensure that data protection and security is a priority at this stage. Ongoing DPIAs can help address concerns over data protection.

POLICY CHALLENGE III – Post-market surveillance

Outside of healthcare, there is a lack of clarity about the post-market surveillance responsibilities of both public and private sector organisations who have deployed an algorithm. This means that there is no standardised monitoring of performance or ongoing risk assessment requirements in place. How can we ensure transparency exists over the ongoing performance of an algorithm after it has been deployed?

SOLUTIONS

- Post-market surveillance responsibilities needed to be established and clearly delineated from the early design stage. Information on post-market surveillance responsibilities must be clearly published on both GOV.UK's dedicated web collection on algorithm use in the public sector and on individual departmental and

organisational websites. Transparency in this area will help assure the public that the establishment of adequate surveillance mechanisms is a key feature of discussions in the design and development process. It also provides a vehicle for external analysts to scrutinise the comprehensiveness of monitoring arrangements in advance of an algorithm's deployment.

- After an algorithm has been deployed, regulators should engage in “bias audits” to establish whether algorithmic decisions have had a disproportionate and discriminatory impact on specific groups. Regulators should assess the fairness of randomised samples of algorithmic decisions and give detailed attention to decisions made on members of groups identified in existing stakeholder impact assessments.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees noted that regulation could occur in different ways. Attendees agreed that sector specific regulators would provide a higher degree of specialist knowledge and could more appropriately assess algorithmic harm in their policy area. However, some argued that in an emerging area such as the use of AI systems in the public sector, citizens may feel more confident knowing that a cross-government AI regulator has ultimate responsibility.

POLICY CHALLENGE IV – Transparency about materialised risk

Once an algorithm is deployed in the public sector questions are raised over how often its risk-level/risk register should be (re)assessed and what actions an organisation should take to mitigate risk. What requirements should exist on communicating risks that may have materialised following the deployment of an algorithm?

SOLUTIONS

- Organisations responsible for deploying algorithms should publish regular “Algorithmic Impact Evaluations” on their websites. These would complement the AIAs carried out prior to deployment and clarify what risks have materialised and whether mitigation strategies put in place remain suitable in light of them. Publishing impact evaluations can help increase public trust that post-market surveillance is being carried out effectively and increase scrutiny on high impact algorithm use.
- Stakeholder Impact Assessments should be updated and published frequently to ensure that attention is paid to the interests of those most affected by an algorithmic decision. Given public concern that algorithmic decision making may have disproportionate impacts on particular groups, regular evaluation in this area and

transparency over its findings is essential for building trust in the fairness of algorithm use.

SUCCESS FACTORS FOR IMPLEMENTATION

Perceptions of conflict of interest may exist where organisations implementing algorithms also produce impact assessments. Making impact assessments publicly available will allow affected stakeholders and citizen organisations to play a greater role in scrutinising impacts. Consultation with affected stakeholders can help feed in to the impact evaluation process.

04 | Redress and Remediation

POLICY CHALLENGE I – Clarity about redress and remediation

Several channels exist for individuals to appeal algorithmic decisions in the public sector. However, there is often a low level of awareness amongst the public about their right to appeal and processes for doing so. How can we ensure that individuals are aware of mechanisms and modes of redress available to them?

SOLUTIONS

- As is the case in France, a legal obligation should exist on public sector organisations using algorithms to present information on how an algorithm was used in the decision-making process alongside documentation on the decision reached in individual cases. This information should include guidance on available options for redress, named accountable individuals/groups, and relevant contact details to ensure that affected stakeholders have information to hand and certainty over where to appeal.
- Awareness raising campaigns should be launched to notify individuals of modes of redress available to them in the case of algorithmic decision making. These would operate in a similar way to awareness campaigns over issues such as scamming and identity theft. This could be particularly effective where controversies over particular algorithms have emerged (for instance, the Department for Education's grading algorithm).

SUCCESS FACTORS FOR IMPLEMENTATION

Though attendees agreed that civic participation and awareness was necessary, programmes for public engagement often fail to communicate important messages to affected stakeholder groups. Diverse approaches to communication were deemed necessary to make education in this area effective.

Attendees noted that conflicts of interest may be perceived if departments using algorithms in decision making are themselves responsible for awareness raising. For this reason, public engagement campaigns may be best overseen by arms-length regulatory bodies.

POLICY CHALLENGE II – Transparency over continuity and potential harm

When significant risks have materialised following the deployment of an algorithm, decisions may be reached to dispense with the use of algorithmic decision making altogether. How can we ensure that conversations over continuity or dispensation are transparent and engage with public concerns?

SOLUTIONS

- Public sector organisations should facilitate public consultation over algorithmic harm where it occurs. Engaging in public consultation allows individuals affected by an algorithmic decision and organisations which represent them to air their grievances, contribute to discussions over the continued use of an algorithm, and help develop new mitigation strategies for algorithmic harm. Public consultation must be appropriately documented, and information shared with regulatory bodies.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees noted that public consultation exercises often struggle to engage groups that may be most impacted by decisions. This is particularly the case where these groups may be vulnerable, face obstacles in communication or are difficult to reach for policy makers. Efforts must be made to seek out consultation rather than simply call for members of the public to come forward to express concerns.

POLICY CHALLENGE III – Transparency over accountability

Public concern often exists that there is a lack of transparency over who is ultimately responsible for an algorithmic decision. Some fear that Government ministers, civil servants, and developers may pass on blame for algorithmic decision making on to others. Concern also exists among the public that decision makers will abrogate responsibility to the algorithm itself. How can accountability over algorithmic decision making be made more transparent?

SOLUTIONS

- Organisations commissioning, developing and deploying algorithms should identify clear roles and lines of accountability early in the design process. These should be clearly documented on departmental and organisational websites to address public

concerns that accountability arrangements are only established as a result of negative publicity around algorithmic impacts.

- To allay public concerns that algorithm use has undermined human agency and discretion, a section on the GOV.UK web page dedicated to public sector algorithm use should define lines of accountability for algorithm deployment. It should make clear that although algorithmic decision making is relatively new, this does not change the fact that accountability lies with public servants. Documenting lines of accountability helps allay public concerns over so-called “government by algorithm” and establishes public trust that ultimate responsibility remains with human decision makers.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees stressed that responsibility for algorithmic harms needed to be shared across organisations rather than lying with a single named individual. A “responsibility culture” rather than a “blame culture” is necessary and organisations should seek out the root cause of decisions rather than blaming individuals.

POLICY CHALLENGE IV – Transparency and public awareness

Citizens tend to lack awareness of how prevalent the use of algorithms in the public sector is and express concern that they have only become aware of algorithmic use when high profile failures occur. This may make it more difficult for citizens to challenge algorithmic decisions that apply to them and reduce the debate on the algorithmic decision-making in the public sector. How can we build wider transparency to ensure an engaged public conversation on algorithmic use in the public sector?

SOLUTIONS

- GDS should oversee the establishment of an “algorithm register” similar to those in place in Amsterdam and Helsinki. Public sector organisations should list and document their use of algorithms, their operating logic and their governance arrangements. This register should be published on a dedicated, searchable GOV.UK page. Constructing a searchable register will provide the public with information on the prevalence of algorithm use by public sector organisations and the ways in which algorithmic decision making affects them. This both increases awareness and facilitates greater scrutiny over the appropriate use of algorithms by public sector organisations.

- Registers should include algorithms used in local authorities and other public sector organisations outside of central government. As well as making the register searchable by department and organisation, users should be able to search by locality. This facilitates better public knowledge on the use of algorithms across the public sector and scrutiny at a local level.

SUCCESS FACTORS FOR IMPLEMENTATION

Attendees noted that algorithm registers should be restricted to documenting algorithms with a direct impact on the public, given the large number of ‘algorithmic’ systems used internally by organisations. Restricting the number of algorithms recorded in the register would also mitigate against the risk of over-documentation, making relevant information easier to access for the public.



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