

AI and Public Law: Automated Decision-Making in Government

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Introduction

1. Digital government has the potential to deliver huge efficiency savings in the administration of public services. Artificial intelligence (AI) could make countless tasks performed daily by public sector workers better, faster and cheaper. Earlier this year, Keir Starmer described AI as the “defining opportunity of our generation” and stated that it will bring a range of benefits, including speeding up government decision-making, saving money and bringing government closer to citizens.¹ In a similar vein, Darren Jones (Chief Secretary to the Prime Minister) recently stated that “this Government is determined that digital transformation of the state and our public services will deliver better outcomes for people, and ensure every pound of taxpayers money is spent well.”²
2. A 2024 survey by the UK's National Audit Office found that although AI was not yet widely implemented in government bodies, 70% were piloting and planning to use it.³
3. However, alongside the realisation of AI's potential benefits, there is an increasing recognition that the automation of administrative decision-making creates significant risks in terms of enhancement of state power in relation to the individual, loss of responsiveness to individual circumstances and the potential to undermine important values which the state should be striving to uphold,

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¹ Keir Starmer, ‘PM Speech on AI Opportunities Action Plan: 13 January 2025’ (GOV.UK, 13 January 2025) <https://www.gov.uk/government/speeches/pm-speech-on-ai-opportunities-action-plan-13-january-2025> accessed 25 July 2025.

² Press Release, ‘Government to take a ‘test and learn’ approach with spending on AI and digital to push innovation’, Department for Science, Innovation and Technology (10 March 2025), < [Government to take a ‘test and learn’ approach with spending on AI and digital to push innovation - GOV.UK](#)> (accessed 3 November 2025).

³ National Audit Office, ‘Use of Artificial Intelligence in Government’ (2024) HC 612 <https://www.nao.org.uk/reports/use-of-artificial-intelligence-in-government/> accessed 18 July 2025.

including human dignity and basic human rights.⁴ The emergent digital revolution in Government resources and the delivery of public services therefore poses a central challenge to the values of good administration, and in turn to administrative law.

4. In this lecture, I will explore some of those challenges by focusing on the ways in which administrative law (specifically, judicial review methodology⁵) is and is not yet adequately suited to scrutinising the use of AI and Automated Decision-Making (ADM) in the administrative sphere.
5. Before turning to the substantive issues which lie at the heart of this lecture, I will first briefly define some terms so we can all understand what I am talking about. And I will outline some background context about the increasing use and benefits of AI and ADM.

What is meant by AI and ADM?

6. I use 'AI' to refer to self-directed and self-adaptive computer activity, which arises where computer systems perform more complex tasks which previously required human intelligence and the application of on-the-spot judgment. In some cases, AI involves machine learning, whereby an algorithm optimises its responses through experience as embodied in large amounts of data, with limited or no human interference.⁶
7. AI thus involves machines which are capable of analysing situations and learning for themselves and then generating answers which may not even be foreseen or controlled by their programmers. It arises from algorithmic programming, but due to the complexity of the processes it carries out, the outcome of the programming cannot be predicted by humans, however well informed. Here, the machine itself seems to be interposed between any human agency and what it, the machine, does.

⁴ See e.g., DK Citron and F Pasquale, 'The Scored Society: Due Process for Automated Predictions' (2014) 89 Wash L Rev 1.

⁵ It is acknowledged that judicial review is by no means the only, or even primary, method of regulating AI, but it will certainly be an important aspect of any framework that seeks to address the novel challenges of the automated state.

⁶ Financial Stability Board, "Artificial Intelligence and machine learning in financial services" (1 November 2017); on developments in AI, see Richard Susskind, *Online Courts and the Future of Justice* (Oxford University Press, 2019) 268–271.

8. I use ‘Automated decision-making’ or ‘ADM’ as a wider term, covering both AI and also simpler digitised systems and aids integrated in human decision-making processes. A simple form of ADM might be a computerised decision tree or pathway to guide decision-making in stages.

Increasing use and benefits of AI and ADM

9. ADM, with increasing emphasis on AI forms of it, is already in widespread use in the private sector and it is clear that it is becoming increasingly prevalent in public administration. For instance, the UN Special Rapporteur on Extreme Poverty, in his 2019 digital welfare report, noted that “systems of social protection and assistance are increasingly driven by digital data and technologies that are used to automate, predict, identify, surveil, detect, target and punish.”⁷ It seems inevitable that public authorities will adopt AI systems with even greater frequency in the future. There is optimism about the potential value of ADM and, in particular, AI systems in a variety of contexts. To give just one example of such optimism, in the press release for the recently promulgated ‘New blueprint for AI Regulation’, the Secretary of State for Science, Innovation and Technology notes that “currently, a typical housing development application racks up 4,000 pages of documentation and takes as long as 18 months from submission to approval. By reviewing regulations to explore how AI could support officials, those times could be slashed - speeding up decision making and putting the government’s plans to build 1.5 million new homes by the end of the current Parliament in the fast lane.”⁸
10. There is also an idealistic dimension to this optimism, as regards the conception of the state and the values which it exists to serve. If used imaginatively, AI and ADM are capable of making administration more responsive to individual needs, by putting the individual into a conversation with the administration.⁹ They may enable the state to ‘see’ the citizen more clearly. They could create the conditions in which a new conception of equality of citizens is fostered, moving away from

⁷ Report A/74/48037, presented on 18 October 2019, para 77.

⁸ Press Release (‘New blueprint for AI regulation could speed up planning approvals, slash NHS waiting times, and drive growth and public trust’), Department for Science, Innovation and Technology, 21 October 2025 <[Ai-for-All_an-introduction-to-artificial-intelligence-in-the-civil-service_CSL.docx](#)> (accessed 3 November 2025).

⁹ Cf John Micklethwaite & Adrian Wooldridge, *The Fourth Revolution: The Global Race to Reinvent the State* (Allen Lane, 2014) 269-270.

rules directed at the homogenous treatment of categories of people (where the individual human is barely perceived at all) to systems in which each individual is afforded equal respect and attention according to their individual circumstances, pursuant to principles of singularity, reciprocity and communality.¹⁰

11. In this context, important potential benefits of AI and ADM can be emphasised. The first is efficiency. Automation increases the speed of decision-making while at the same time reducing the labour costs. That can be good news for the citizen wanting a decision in their case. It is also good for the public body's accounts, which is a powerful incentive in an era of stretched public resources. AI and ADM also offer the potential – if it can be realised - to tailor delivery of assistance in a more fine-grained way, to feed through resources to those who need them most.
12. Secondly, an algorithm can often read patterns and trends that humans might overlook, thereby making decisions more accurately than a human decision-maker. For example, research has shown that doctors who use AI to assess echocardiograms are more accurate and more confident in their decision-making.¹¹
13. Thirdly, automated systems can be programmed to leave a good audit trail to allow for *ex post* review of decisions. If systems are properly constructed, that could facilitate the giving of reasons to the citizen, allowing them - and reviewers in cases where there is dispute - to understand how power has been exercised in their case.
14. Fourthly, through accuracy and uniformity, ADM is capable of promoting the rule of law. One aspect of this is the elimination of capriciousness through the consistent application of rules. Where the volume of decisions is very large, as in the immigration or social welfare contexts, a human decision-maker would not be able to check their reasoning against the reasoning of all past decisions to make sure that they are being consistent, as is possible with ADM. Humans are also

¹⁰ Cf Pierre Rosanvallon, *The Society of Equals* (Harvard University Press, 2013); in which the society of equals is conceived of as a society of individuals (at 222).

¹¹ National Institute for Health and Care Research, “Doctors making AI-assisted decisions more accurate and confident in decision-making” (17 December 2021): <https://oxfordbrc.nihr.ac.uk/doctors-making-ai-assisted-decisions-more-accurate-and-confident-in-decision-making/> (accessed on 12 July 2024).

liable to make decisions based upon their subjective will or whim, even if only subconsciously. Subject to allowing for problems of building in biases through programming or distortions in data bases used for machine learning, ADM can operate free of this.

15. However, it would be naïve to suppose that the spread of ADM through government will necessarily bring us closer to an ideal of administrative decision-taking. The risks of automation are as important as the potential benefits. The increasing demand for administrative efficiencies may overwhelm an appreciation of the value of achieving substantive justice for the individual. This may give rise to a new variation on the theme of the impatience for administrators (their ‘eternal contempt’) regarding law and legal process, for whom respect for human rights, individual-focused procedural protections and any requirement to give reasons or justify actions to a court are impediments to effective decision-making, as identified by Hannah Arendt.¹²
16. The challenge then is how to regulate ADM in a way that allows administrators - and the public realm - to reap the benefits while protecting the citizens who constitute that public realm from its risks. There is a tension between different models of legal regulation. I am not going to address them all. Today I will focus on examining the ways in which the methodology of judicial review, a core feature of administrative law’s regulation of decision-making by officials, will need to adapt to the challenges posed by the automated state.

The principal features of judicial review methodology

17. What, then, are the principal features of judicial review and its methodology, as a model of regulation? The Administrative Court’s judicial review jurisdiction has developed a number of distinctive features that determine not only *what* the court reviews, but also the process and procedure for *how* the court carries out that review. Typically, the Court does not consider the merits of a decision. Instead, it will consider whether there has been some error in the decision-making process (procedural impropriety), whether the decision has been made within the

¹² See Christian Volk, *Arendtian Constitutionalism: Law, Politics and the Order of Freedom* (Hart Publishing, 2015) 120

legal limits of the power that the decision-maker held (illegality),¹³ and/or whether the decision was outside the range of reasonable responses open to the decision-maker (irrationality)¹⁴ (and in some cases, whether the decision was proportionate).¹⁵ More specifically on procedural impropriety, administrative law requires that a decision-maker should follow a fair procedure, which means not being biased in the sense of having a stake in the outcome of the decision,¹⁶ hearing from the right people, and in some circumstances giving reasons for its decision.¹⁷ The decision-maker must also take into account all the right considerations and only the right considerations in reaching its decision,¹⁸ it must act for proper purposes,¹⁹ and it must not fetter²⁰ or delegate²¹ its discretion.

18. As to the court's procedural processes in carrying out that review, several features are significant. There is ordinarily no oral evidence,²² because factual disputes do not normally need to be resolved by the court in judicial review claims. The issues arising are generally matters of law rather than of disputed fact. There is usually no expert evidence unless the court requires it to understand the relevant technical context.²³ There is also ordinarily no order for disclosure and inspection of documents.²⁴ As Lord Bingham explained in the *Tweed* case, "... the process of disclosure can be costly, time-consuming, oppressive and unnecessary ...".²⁵ The general approach has therefore been to reject applications

¹³ *Pendragon Plc v Revenue and Customs Commissioners* [2015] UKSC 37, [2015] 1 WLR 2838, [49]-[51].

¹⁴ *Associated Provincial Picture Houses v. Wednesbury Corporation* [1948] 1 KB 223; *Civil Service Unions v Minister for the Civil Service* [1984] UKHL 9, [1985] AC 374.

¹⁵ *R (Keyu) v Secretary of State for Foreign and Commonwealth Affairs* [2015] UKSC 69, [2016] AC 1355.

¹⁶ *R (Jackson) v Amber Valley DC* [1985] 1 WLR 298.

¹⁷ *R (Institute of Dental Surgery) v UFC* [1994] 1 WLR 242.

¹⁸ *R (Soblen) v Governor of Brixton Prison* [1963] 2 QB 243, 302.

¹⁹ *Padfield v Minister of Agriculture and Fisheries* [1968] AC 997; *R (Trafford) v Blackpool BC* [2014] EWHC 85 (Admin), [2014] PTSR 989.

²⁰ *British Oxygen v Minister of Technology* [1971] AC 610.

²¹ Save where a form of delegation (though different from delegation in the usual legal sense) is permissible according to the *Carltona* doctrine: *Carltona v Commissioners of Works* [1943] 2 All ER 560.

²² Albeit, in an appropriate case, it is possible for oral evidence to be heard: see Civil Procedure Rules ("CPR") 8.6(2).

²³ *R (Lynch) v General Dental Council* [2003] EWHC 2987 (Admin), [2004] 1 All ER 159, [22]-[25]. Where it is admitted, expert evidence must comply with the rules in CPR 35: *R (British American Tobacco UK Ltd) v Secretary of State for Health* [2016] EWCA Civ 1182, [2018] QB 149.

²⁴ CPR 54 makes no mention of disclosure. Paragraph 12.1 of the Practice Direction provides: "Disclosure is not required unless the court orders otherwise". An application for specific disclosure will be determined in accordance with CPR 31: see r 31.12. The provisions of CPR 31 will be relevant in any judicial review case where disclosure is ordered.

²⁵ *Tweed v Parades Commission for Northern Ireland* [2006] UKHL 53, [2007] 1 AC 650, [2].

for disclosure to go behind or controvert a defendant's evidence unless there is material before the court to suggest it may be inaccurate.²⁶ Instead, there is reliance on the duty of candour, which requires the public authority defendant to provide the court with full explanations of all facts relevant to the issues that the court must decide.²⁷

19. The use of ADM and AI in government, and specifically in administrative decision-making, poses a number of novel challenges to those traditional methodological elements. Against that background, I can now turn to some of those particular challenges.

Opacity vs Proper Purposes and Reason-Giving

20. 'Blackbox' algorithms have properties that can make them opaque, so that it is difficult to understand not only how but also why a decision was reached. Unlike traditional statistical algorithms, in which variables are selected by humans and resulting coefficients can be pointed to as explaining specified amounts of variation in a dependent variable, learning algorithms effectively discover their own patterns in the data and do not generate results that associate explanatory power to specific variables.²⁸
21. Opacity might be intentional, involving the deliberate concealment of the system's workings so as to protect intellectual property. Opacity might also result from computer illiteracy, whereby systems are not comprehensible to those who cannot read and write computer code. Or opacity might be intrinsic: that is, a system's decision-making process might be so complex that it is inherently difficult for any human to understand. Of course, these three forms of opacity can also operate in combination. The result is that an ADM process, and in particular an AI process, might be difficult to understand, or impossible to evaluate, even for experienced systems designers and engineers, let alone non-technical reviewers such as judges.

²⁶ *R (Islington LBC and London Lesbian and Gay Centre) v Secretary of State for the Environment* [1992] COD 67.

²⁷ *R (Quark Fishing Ltd) v Secretary of State for Foreign and Commonwealth Affairs* [2002] EWCA Civ 1409, [50].

²⁸ Cary Coglianese, "Administrative Law in the Automated State" (2021) 150 *Daedalus* 104, 108.

22. There are already several instances of the use of opaque algorithms in administrative decision-making in the UK. For example, the Home Office has used a ‘visa streaming’ tool to grade entry visa applications, assigning risk ratings that significantly impact application outcomes.²⁹ Another example is the Department for Work and Pensions using an opaque algorithm to determine which claims for universal credit it would investigate.³⁰ Local authorities in the UK have also been applying difficult to scrutinise algorithms to support decisions on transportation, houses in multiple occupation, and children’s social care.³¹
23. Blackbox algorithms create a tension with the administrative law requirement of exercising powers for proper purposes and, where applicable, the duty to give reasons. Their use may reduce opportunities to identify errors, as well as the chances that decisions will be subjected to meaningful scrutiny and thereby that decision-making may be improved in future. More generally, the legitimacy of certain decisions may depend on the transparency of the decision-making process as much as on the decision itself, and so that element of legitimacy may be lost.
24. A further problem with the lack of transparency in the rationale of a decision taken by ADM is the possibility of bias or discrimination, depending on the learning input the algorithm received. While an advantage of AI may be to reduce arbitrary decisions, an AI trained only on statistical data may infer, incorrectly, certain trends that result in a bias against certain groups.³² The opacity of the system could make it very difficult to detect such bias or discrimination, at least until the ADM system has produced a substantial number of decisions in which patterns can be identified.
25. Opacity will also have procedural consequences in judicial review processes. In order to mount an effective challenge to a decision taken by ADM, the claimant may need to secure disclosure of the coding in issue. If it is commercially

²⁹ See Joint Council for the Welfare of Immigrants, “We Won! Home Office to Stop Using Racist Visa Algorithm” (JCWI, 2020) at <https://www.jcwi.org.uk/news/we-won-home-office-to-stop-using-racist-visa-algorithm> (accessed on 10 July 2024).

³⁰ See “Work and Pensions Committee” (Parliamentlive.tv, 24 November 2021, 10:48) at <https://parliamentlive.tv/event/index/d4766433-5e00-4060-8e24-a5e4030da3d3?in=10:47:54> (accessed on 10 July 2024).

³¹ Thomas Vogl and others, “Smart Technology and the Emergence of Algorithmic Bureaucracy: Artificial Intelligence in UK Local Authorities” (2020) 80 Public Administration Review 946, 951.

³² See Simon Chesterman, *We, the Robots? Regulating Artificial Intelligence and the Limits of the Law* (Cambridge University Press, 2021).

sensitive, the court might have to impose confidentiality rings, as happens in intellectual property and competition cases. Courts will also need to demonstrate more willingness to admit expert evidence insofar as it can educate the court as to how the particular algorithm works. This will be expensive and time-consuming. In addition, courts may have to allow oral evidence and cross-examination of experts put forward by each side, in a way which is alien to the traditional judicial review process.

26. As to reason giving, there is no general duty on public bodies to give reasons for their actions or decisions.³³ However, such a duty may be imposed by statute, and the law will usually imply a duty to give reasons in decisions which are judicial or quasi-judicial in nature.³⁴ So in *Doody*, the House of Lords held that a Home Secretary setting a tariff of imprisonment must show “how his mind is working”.³⁵ There may also be a duty to give reasons where the principle of fairness requires it, depending on the circumstances.³⁶
27. Some public bodies using ADM systems may attempt to circumvent the requirement to give reasons by providing retrospective justifications. However, courts have displayed a marked resistance to accepting post hoc rationalisation of decisions taken by humans, at least where the decision-maker seeks to give new reasons. The concern is that decision-makers, even acting in good faith, may attempt to rationalise a decision in such a way as to meet a question arising upon a challenge to it. It is therefore not ordinarily open to a decision-maker, who has been required to give reasons at the time of a decision, to amplify, expand upon or to change them at a later date, particularly if they are not supported by any contemporaneous record.³⁷ Such concerns should apply equally in the ADM context.
28. Where no contemporaneous reasons have been given, the courts have been prepared to consider reasons given in later correspondence in an attempt to explain the decision.³⁸ On other occasions, courts have accepted that

³³ *R (Doody) v Secretary of State for the Home Department* [1994] 1 AC 531, 564.

³⁴ *R (Cunningham) v Civil Service Appeal Board* [1991] 4 All ER 310.

³⁵ *Doody* (n 33) 565.

³⁶ *R (Institute of Dental Surgery) v Higher Education Funding Council* [1994] 1 All ER 651.

³⁷ *R (Bancoult) v Secretary of State for Foreign & Commonwealth Affairs* [2007] EWCA Civ 498, [2008] QB 365, [70].

³⁸ *R (B) v London Borough of Merton* [2003] EWHC 1689 (Admin), [2004] All ER 280, [42].

supplementary reasons given after the event are adequate or have used the fact that adequate reasons have been given before the matter gets to court as a discretionary barrier to granting relief, since no useful purpose would be served by requiring them.³⁹ In principle, administrative law should be more amenable to this approach in the ADM context given it will often be difficult for the system to provide ‘on the spot’ reasons for its decisions, at least without potentially undermining its speed of operation and its efficiency. The courts should, however, continue to scrutinise post hoc reasons with care, especially where the human public official accountable for the system is unable to explain for themselves the reason why the ADM system reached a particular decision.

Accountability

29. Administrative law establishes that where legislation requires that a decision be made by a particular person, it should not be delegated to others, since this means that the person designated to take the decision does not in fact do so; and improper delegation may mean that they shuffle off responsibility and accountability which is properly theirs.⁴⁰ It also cannot be assumed that a statutory authority vested in a Minister which extends by implication to a properly authorised officer within their department according to the *Carltona* doctrine,⁴¹ will also extend to an automated system; nor that statutory authority to delegate to a human decision-maker will permit ‘delegation’ to an automated system. Using AI in decision-making therefore raises issues of accountability and legal designation of the effective decision-taker, especially since when enacting statutory duties legislators will very often not have turned their mind to ADM even for modern statutes (and not at all for statutes of even a few years of vintage).
30. The first and fundamental question a public official or body will need to ask itself when considering the adoption of ADM is: do I have the legal power to make decisions in this way at all? With ‘human-in-the-loop’ systems, where AI is used as an aid by an active human decision-taker, this may not be a significant issue. But with ‘human-out-of-the-loop’ systems, or systems where the human sits ‘over

³⁹ *Swords v Secretary of State for Communities & Local Government and others* [2007] EWCA Civ 795, [2008] HLR 17, [47].

⁴⁰ *Noon v Matthews* [2014] EWHC 4330 (Admin), [2015] ACD 53.

⁴¹ See Supperstone, Goudie and Walker, *Judicial Review* (LexisNexis Butterworths, 7th ed, 2024), ch 14.

the loop’ and does not participate in decision-making in individual cases, it may be argued that the nature of the decision-making has indeed changed, so as to raise a question as to whether the public body has the legal power to act in this way.⁴² In particular, the courts will have to grapple with whether the decision by the ADM system is a ‘decision’ in the relevant legal sense for the purposes of the source of the power or duty.⁴³

Fettering of Discretion

31. Exercise of discretionary powers by officials is crucial for effective government. As has been observed, “relatively little can be done merely by passing Acts of Parliament. There are far too many problems of detail, and far too many matters that cannot be decided in advance.”⁴⁴ Where a decision-maker has a discretionary power, they should take individual circumstances into account when exercising it, they should make each decision on its merits rather than adopting a one-size-fits-all approach, and they should be prepared to depart from policies or guidelines where appropriate. Otherwise, they may have acted illegally by fettering their discretion.⁴⁵
32. Often Parliament has created a scheme whereby it clearly intended that a particular person or body should make the decision in question, not the person to whom the discretion has been delegated.⁴⁶ Improper delegation might include putting a decision “into the hands of a third person or body not possessed of statutory or constitutional authority”⁴⁷ or abdicating powers, such as when the Home Secretary acted as a ‘rubber stamp’ on the advice of others without making his own decision.⁴⁸ Where a public sector body is given an element of discretion, it must put its mind to the decision and not follow any policy it adopts blindly and

⁴² For an account of these different types of human/AI interactions, see Philip Sales, “Information Law and Automated Governance” [2023] *Judicial Review* 280; and see Carol Harlow and Richard Rawlings, “Proceduralism and Automation: Challenges to the Values of Administrative Law” in Elizabeth Fisher, Jeff King and Alison Young (eds), *The Foundations and Future of Public Law* (Oxford University Press, 2020), arguing that computerisation is “apt to change the nature of an administrative process, translating public administration from a person-based service to a dehumanised system” (at 295).

⁴³ See The Hon Justice Melissa Perry, “iDecide: Digital Pathways to Decision” in Janina Boughey and Katie Miller (eds) *The Automated State* (The Federation Press, 2021), 6.

⁴⁴ William Wade, Christopher Forsyth and Julian Ghosh, *Administrative law* (Oxford University Press, 2022), 4

⁴⁵ *British Oxygen* (n20).

⁴⁶ *Barnard v National Dock Labour Board* [1953] 2 QB 18.

⁴⁷ *Ellis v Dubowski* [1921] 3 KB 621.

⁴⁸ *R (Walsh) v Home Secretary* [1992] COD 240.

inflexibly. Adoption and application of a general policy or rule is acceptable provided that the authority does not refuse to listen at all.⁴⁹ But an administrative authority is not allowed to “pursue consistency at the expense of the merits of individual cases.”⁵⁰

33. An immediate concern with ADM is that it may become common practice for a decision-maker to rely unthinkingly upon an algorithmic result in the exercise of discretionary power. The courts are conscious of the fact that ADM systems are grounded in logic and rules-based programs that apply rigid criteria to factual scenarios. They respond to input information entered by a user in accordance with predetermined outcomes, uniformly applying a single statistical model to all decisions. In theory this produces consistent outputs but may not facilitate individualised consideration of the particulars of the case at hand. Given this, courts may determine that ADM systems are inappropriate for decisions where discretionary powers are likely to need to be exercised on a case-by-case basis (and the relevant algorithm is insufficiently sensitive), or in other situations where a policy may generally be applied but where exceptions are likely to need to be permitted.⁵¹ More generally, certain decisions require an evaluative judgment, for example whether a person is ‘of good character’, or whether they pose a ‘danger to the community’, and (certainly at the moment) AI is not well adapted to take such decisions. Furthermore, there is always the possibility that someone will present with factors that are relevant but for which the algorithm was not trained. The human decision-maker must not refuse to exercise their discretion to consider such factors.⁵²
34. In light of this, in circumstances where the decision-maker has been granted a discretionary power it may be unlawful to adopt an ADM system in which there is no oversight by the person to whom the power has been conferred. Instead, it may be that the ‘fettering discretion’ doctrine should lead to AI only being used as an aid to decision-making, for example as a triage system raising ‘red flags’ for more detailed consideration by a human decision-maker. It is vital that

⁴⁹ *British Oxygen* (n20), 625.

⁵⁰ *Merchandise Transport Ltd v British Transport Commission* [1962] 2 QB 173.

⁵¹ Jennifer Cobbe, “Administrative Law and The Machines of Government: Judicial Review of Automated Public-Sector Decision-Making” (2019) 39 LS 636, 647.

⁵² Marion Oswald, ‘Algorithm-assisted decision-making in the public sector: framing the issues using administrative law rules governing discretionary power’ (2018) 376 PTRS 2128, 2145.

attention is paid to the human-algorithmic interface, together with the underlying organisational structure and processes to determine when an ADM system's forecasts should be overridden, to minimise the risk of 'judgmental atrophy' leading to improper delegation to an algorithm.⁵³ Courts have previously held that decision-makers who take advice from others have not necessarily delegated their authority to them, provided this does not amount to the decision-maker having had the decision dictated to them.⁵⁴ The use of ADM could therefore be lawful where a human decision-maker can show that they have exercised meaningful oversight of the decision, rather than just as a token gesture; that they have the authority and competence to change the decision; and that they have considered all of the relevant data.

35. On the other hand, administrative law is gradually evolving its view on policies, with growing acceptance that a consistently applied policy (with appropriate exceptions where necessary to accommodate unusual cases) can provide benefits for good governance, consistency, and predictability.⁵⁵ Equal treatment in the exercise of discretionary powers has been cast by the Supreme Court as generally desirable but not amounting to a free-standing principle of administrative law in and of itself.⁵⁶ Yet, there have been cases in which the Supreme Court has held that, in certain circumstances, where the state has adopted an internal policy on how it will determine applications, an individual has a right to have their application determined in accordance with that policy. This derives from a principle related to the doctrine of legitimate expectations, but distinct from it.⁵⁷ Or as Laws LJ put it, it is based on "a requirement of good administration, by which public bodies ought to deal straightforwardly and consistently with the public."⁵⁸ The courts should therefore be mindful of the extent to which ADM systems can help promote these principles through consistency in applying a policy.

⁵³ See Mireille Hildebrandt, "Law as Computation in the Era of Artificial Legal Intelligence: Speaking Law to the Power of Statistics" (2018) 68(1) UTLJ 12.

⁵⁴ *H Lavender & Son v Minister of Housing and Local Government* [1970] 1 WLR 1231.

⁵⁵ *R (Lumba) v Secretary of State for the Home Department* [2011] UKSC 12, [2012] 1 AC 245.

⁵⁶ *R (Gallaher Group Ltd) v The Competition and Markets Authority* [2018] UKSC 25, [2019] AC 96, [24]–[30].

⁵⁷ *Mandalia v Secretary of State for the Home Department* [2015] UKSC 59, [2105] 1 WLR 4546, [29].

⁵⁸ *R (Nadarajah) v Secretary of State for the Home Department* [2005] EWCA Civ 1363, [68].

36. At the same time, courts should remain mindful of when it may be legitimate for the state not to adopt the pre-determined outcome proposed by the ADM system in line with its published policy. For example, the Supreme Court has observed that if political issues overtake a promise given by the government and a decision is taken in good faith and on genuine policy grounds not to adhere to the original promise, it will be difficult for a person who holds a legitimate expectation to enforce compliance with it.⁵⁹ As a matter of fairness, they may have to be given an opportunity to make representations before a policy which is favourable to them is departed from.⁶⁰

Relevant and Irrelevant Considerations

37. As Lord Greene observed in the well-known *Wednesbury* decision: “If, in the statute conferring the discretion, there is to be found expressly or by implication matters which the authority exercising the discretion ought to have regard to, then in exercising the discretion it must have regard to those matters.”⁶¹
38. As developed in later case law, failure to comply with this directive may render a decision ultra vires for failure to take into account a relevant consideration. Conversely, if there are matters to which a decision maker clearly should not have regard, a decision may be ultra vires for taking into account an irrelevant consideration, if such factors are indeed taken into account.
39. This duty will be particularly challenging in the context of ADM. To take into account an ADM system’s prompt to the exclusion of other factors that ought to affect the decision might see a decision-maker effectively fail to take account of relevant considerations. Alternatively, in cases where a decision-maker uses the output of an ADM system out of context, to make a decision that the output was not intended to support, they may be found to be taking account of an irrelevant consideration. The authority may have to contend that an intermediate position

⁵⁹ *In the matter of an application by Geraldine Finucane for Judicial Review (Northern Ireland)* [2019] UKSC 7, [2019] 3 All ER 191, [76].

⁶⁰ *R (Mullen) v Secretary of State for the Home Department* [2004] UKHL 18, [2005] 1 AC 1, [60].

⁶¹ *Wednesbury* (n14), 228.

applies, where a decision-maker has a discretion whether to take account of a consideration or not.⁶²

40. When reviewing whether relevant factors have been taken into account, and irrelevant factors have not been taken into account, in the ADM context, courts should scrutinise whether the human decision-maker has considered, in particular, (i) the relevance of the input factors to the context of the decision, in particular whether they have an explainable and ultimately justifiable link to the purpose in hand, (ii) the ADM system's performance and accuracy in the live environment, (iii) the relative importance of extrinsic external factors (those not factored into the algorithm) to the overall decision, and (iv) the level of uncertainty around causal relationships between the inputs and the prediction claimed.⁶³
41. In most cases, in setting out expressly or implicitly under statute factors that a decision-maker ought or ought not to take into account, Parliament will not have had ADM in mind. Courts will therefore have to make a judgment in the light of the doctrine that an Act of Parliament is taken to be 'always speaking'. The courts will also need to grapple with the underlying rationale of those factors: were they to ensure consistency in outcomes (in which case input factors in ADM systems may not necessarily pose any problems)? Or were they grounded in more abstract notions such as fairness, dignity, or morality, i.e. notions that ADM systems are unlikely to consider of 'relevance' in the manner envisaged by the statute? Parliament is best placed to provide guidance to decision-makers as to how they should approach their duties in this respect, setting out the extent to which adopting ADM systems may in certain cases be inappropriate. But this involves legislative effort directed to the modern situation, whereas parliamentary time is in short supply and may not be allocated to this task. In the meantime, therefore, courts in judicial review claims will need to approach these issues in the light of established principles, incrementally on a case-by-case basis.

Fairness and Dignity

⁶² *R (Corner House Research) v Director of the Serious Fraud Office* [2008] UKHL 60, [2009] AC 756, [40]. See on this point *R (Friends of the Earth) v Heathrow Airport Ltd* [2020] UKSC 51 at [116]-[121].

⁶³ Oswald (n 52) 2143.

42. Research suggests that people's acceptance of public authorities' decisions, as well as their acceptance of legal rules, is linked with their assessment of the fairness of the procedures and processes through which the decision has been made and the rules applied.
43. Fairness is a human conception: "The individual elements of fairness, such as empathy, decency, proper consideration and open-mindedness are not abstract qualities. They are human responses which are given legal character and effect through requirements of fairness."⁶⁴ This could also be viewed as being rooted in individual dignity. Providing people with notice and an opportunity to put their case is a means by which the law can acknowledge the innate value of people and their views.⁶⁵ Accordingly, it may be a requirement of procedural fairness that, in certain circumstances, a public body should hold an oral hearing at which an individual affected by a decision can make representations. Although its primary value lies in giving the affected individual an opportunity to offer her own views on the matter, which may provide the decision-maker with information that is relevant to the decision at hand, value also lies in giving the affected individual the subjective experience of being listened to by a fellow human being. Human decision-making processes provide the decision-maker with an opportunity to acknowledge, and to empathise with, the subjective reality of that individual's experience.⁶⁶
44. In addition, because models underlying ADM systems are often based on the assumption that past behaviours are the most reliable predictors of future behaviour, they fail to take account of the nature of individuals as moral agents, as persons with wills of their own and the capacity to break free of past habits, behaviours, and preferences. This, too, undermines an individual's right to be treated with dignity and respect, and risks eroding recognition of individuals' capacity for autonomy and self-determination.⁶⁷ These considerations reinforce the need for human decision-makers to remain in the loop when reviewing ADM system outputs, at least in certain areas of decision-making.

⁶⁴ Matthew Groves, 'Fairness in Automated Decision-Making' in Janina Boughey and Katie Miller (eds) *The Automated State* (The Federation Press, 2021), 14-15.

⁶⁵ Ibid, 20.

⁶⁶ Karen Yeung, "Why Worry About Decision-Making by Machine?" in Karen Yeung and Martin Lodge (eds) *Algorithmic Regulation* (OUP, 2019), 31.

⁶⁷ Jeremy Waldron, "How Law Protects Dignity" [2012] CLJ 200.

45. Furthermore, there is an ‘equitable’ discretion in human decision-making which will not be adequately accommodated unless human decision-makers remain in the loop to act as ‘safety-valves’ to produce fair results in certain individual cases. This may be particularly important in areas such as welfare provision and social housing allocation on which many individuals’ livelihoods depend.
46. More broadly, a legitimate public law system should incorporate systemic checks on threats to human dignity. These will likely draw from a range of tools but ideally should include judicial scrutiny on how ADM systems could be applied to individuals in a manner that contravenes contemporary dignitarian ideas.
47. As another facet of fairness, machine learning systems are known to give rise to issues relating to bias.⁶⁸ In law, bias can arise through “the presence of some factor which could prevent the bringing of an objective judgment to bear, which could distort... judgment.”⁶⁹

Evidence and the Burden and Standard of Proof

48. Judicial review relies heavily on written evidence. Although oral evidence can be required or permitted, in practice that is exceptional. Factual disputes do not normally need to be resolved by the court in judicial review claims; disputes will usually be about the rationality of the decision that the public authority has made, or the manner in which it has applied the law to the facts, or the way it has interpreted or applied the law. Expert evidence is permissible only where it is reasonably required to determine relevant issues.⁷⁰ Live evidence and cross-examination will generally only be permitted where the justice of the case demands it, for example where the court has to determine a precedent fact in order to see whether the decision was lawful.⁷¹
49. Expert evidence is already playing a significant and growing role in judicial review. In *R (Law Society) v Lord Chancellor*⁷² the Administrative Court suggested that one of the instances where expert evidence may be relevant is

⁶⁸ See e.g. Solon Barocas and Andrew Selbst, “Big Data’s Disparate Impact” (2016) 104 California Law Review 671.

⁶⁹ *Davidson v Scottish Ministers* [2004] UKHL 34, [2005] 1 SC 7, [6].

⁷⁰ CPR 35.1. See also CPR 54.16.8 for guidance on the circumstances when expert evidence may be admissible in a claim for judicial review.

⁷¹ *R (A) v Croydon London Borough Council* [2009] UKSC 8, [2009] 1 WLR 2557.

⁷² [2018] EWHC 20984 (Admin), [2018] 5 Costs LR 937, [36].

where “it is alleged that the decision under challenge was reached by a process of reasoning which involved a serious technical error.” Challenges to decisions reached by ADM processes are likely to fit within this existing gateway. In this context, the courts will increasingly need detailed evidence to assess whether ADM systems are lawful: evidence about how systems work and how they affect people.⁷³ To establish this, litigants will have to resort to new fact-finding techniques. The evidential emphasis will likely shift more towards documents produced in the course of designing ADM systems. Digital-led systems also typically come with a need for official training manuals and digital support mechanisms. This generates a need for documentation which explains system operation in clear language. This will pose challenges for claimants and lawyers: collecting the often inaccessible, technical details about a public authority’s ADM systems; briefing experts; and doing all this in the short timeframes provided for judicial review. It will also pose challenges for judges: familiarising themselves with automated systems; and managing potentially large volumes of evidence and cross-examination of experts.

50. The courts may also be required to adapt existing rules on the burden and standard of proof when seeking to establish legal errors in ADM systems. A tailored approach ought to be developed. Given that ADM systems rest on a central logic, one critical question is whether judicial review of such a system will require proof that the entire system is flawed. If so, this would present a much more substantial battle for claimants in an already difficult terrain while providing the public authority with another shield. One possible reaction might be for the courts to adjust the standard of review depending on the nature and extent of the opacity in a particular system.⁷⁴ Similarly, the courts could explore at which point the duty shifts to the public authority to explain how an ADM system works.⁷⁵ For instance, where the concerns about ADM processes are premised upon the risks posed by the algorithm, then use could potentially be made of a *Tameside*-style duty on the public authority to inquire, which requires that a decision-maker takes “reasonable steps to acquaint [itself] with the relevant information” in order to

⁷³ See Joe Tomlinson, Katy Sheridan and Adam Harkens, “Judicial review evidence in the era of the digital state” [2020] Public Law 740.

⁷⁴ Ibid, 759.

⁷⁵ Ashley Deeks, “The Judicial Demand for Explainable Artificial Intelligence” (2019) 119(7) Columbia Law Review 1829.

decide a matter, to include reasonable examination of the risks of bias in the ADM system it chooses to use.⁷⁶

51. A final feature of evidence in judicial review which is relevant for present purposes is that, instead of the court ordering disclosure of documents, there is typically reliance on the duty of candour.⁷⁷ It requires that public authority defendants “co-operate and ... make candid disclosure by way of [witness statement] of the relevant facts and (so far as they are not apparent from contemporaneous documents which have been disclosed) the reasoning behind the decision challenged.”⁷⁸ This is so even where such material is adverse to the defendant’s case. A failure to comply with this duty may lead to a costs order against the defendant.⁷⁹
52. The duty of candour “endures from the beginning to the end of the proceedings.”⁸⁰ There is some debate as to precisely what stage triggers the duty: there is some support for the proposition that it applies at the pre-action stage.⁸¹ I would suggest that it is preferable for the duty to apply at the pre-action stage where the challenge is to a decision of an ADM system. Given the opacity and complexity of these systems, claimants will need information of how they operate at a very early stage in order to put together submissions to persuade a court that it is at least arguable that the decision was unlawful in order for permission to be granted in the first place.

Systemic Issues

53. The current administrative law model is based primarily on individual justice. However, automation can lead to the implementation of systemic bias and systemic breaches of rights that affect a large number of persons in a similar way.

⁷⁶ *Secretary of State for Education and Science v Tameside MBC* [1977] AC 1014, 1065; *R (Khatun) v Newham LBC* [2004] EWCA Civ 55, [2005] QB 37.

⁷⁷ The usual rules of disclosure under CPR Part 31 are not generally applicable in judicial review proceedings. CPR Part 54, dealing with judicial review, makes no provision for disclosure. Practice Direction 54A states that the duty of candour requires that a defendant in its evidence or detailed grounds identifies any relevant facts (para 11.1) but that “disclosure is not required unless the court orders otherwise” (para 11.2).

⁷⁸ *Belize Alliance of Conservation Non-Government Organisations v Department of the Environment* [2004] UKPC 6, [2004] Env LR 38, [86].

⁷⁹ *R (Al-Sweady) v Secretary of State for Defence* [2009] EWHC 2387 (Admin), [2010] HRLR 2, [13] and [44].

⁸⁰ *R (Bilal Mahmood) v Secretary of State for the Home Department* [2014] UKUT 439, [23].

⁸¹ See *R (HM and Others) v Secretary of State for the Home Department* [2022] EWHC 2729 (Admin) at [16].

Mistakes in algorithms can be rapidly and widely replicated. This is a concern as there is currently no formal process for the Administrative Court to undertake an aggregate or group examination of review applications which involve a common algorithmic underpinning.

54. In light of this, courts and litigants could become more proactive in identifying cases which raise systemic issues and marshalling them together in a composite procedure, by using pilot cases or group litigation techniques.
55. There have also been suggestions⁸² that courts could take inspiration from the “structural review” approach adopted in *Lord Chancellor v Detention Action*.⁸³ However, such an approach should be treated with caution. In the *A* case,⁸⁴ the Supreme Court held that where the question is whether a policy itself (rather than an individual application of the policy) is unlawful, the issue must be addressed looking at whether the policy can be operated in a lawful way or whether it imposes requirements which mean that it can be seen at the outset that a material and identifiable number of cases will be dealt with in an unlawful way.⁸⁵ A test of systemic inherent unfairness in relation to a legal scheme provides no criterion of what makes a risk count as unacceptable.⁸⁶ Significantly, the Court observed that an assertion that the courts have a power to review a government policy in such a way “in relation to functions (the operation of administrative systems and the statement of applicable policy) which are properly the province of the executive government would represent an unwarranted intrusion by the courts into that province”.⁸⁷ Moreover, it generates a risk that a court will be asked to conduct a statistical exercise to see whether there is an unacceptable risk of unfairness, which it not well equipped to do.⁸⁸

⁸² See Maria O’Sullivan, “Automated Decision-Making and Human Rights: The Right to an Effective Remedy” in Janina Boughey and Katie Miller (eds) *The Automated State* (The Federation Press, 2021).

⁸³ [2015] EWCA Civ 840, [2015] 1 WLR 5341.

⁸⁴ *R (A) v Secretary of State for the Home Department* [2021] UKSC 37, [2021] 1 WLR 3931.

⁸⁵ *Ibid.*, [63].

⁸⁶ *Ibid.*, [65].

⁸⁷ *Ibid.*

⁸⁸ *Ibid.* An alternative approach could be for the courts to refer cases in which there are potential systemic issues to an algorithm commission which would have the technical expertise and all the knowledge necessary to be able to interrogate specific coding designed for specific functions. In this respect, see the discussion in: Philip Sales, “Algorithms, Artificial Intelligence and the Law” (2020) 25(1) JR 46, 54-57.

56. However, where there are indications of systemic issues in the operation of an ADM system, an appropriate response may be for the courts to shift the burden away from the applicant and on to the underlying public authority decision-maker to provide an adequate explanation of its operation and outcomes beyond its application in the specific case. It is the authority that will have such information within its possession and which is therefore best placed to assist the court. In various legal contexts, the burden of explanation is placed on the litigant with possession of the information relevant to a decision to be taken by the court. For example, in the *Abaco* case,⁸⁹ concerning provision of security for costs in environmental litigation, the Privy Council observed that the applicant had provided no information, which was within its knowledge rather than that of the defendant authority, regarding (i) its supporters who had an interest in opposing the development and who might be able to put the applicant in funds to provide security for costs so as to enable it to proceed with the claim, and (ii) whether it was acting to protect any private interest as distinct from acting purely or predominantly to promote the public interest. The applicant therefore failed to discharge the burden upon it of showing that its claim would be stifled.⁹⁰ Similarly, in contexts where a party could provide a witness to explain relevant factual matters but omits to do so, inferences may be drawn adverse to that party.⁹¹

Remedial Discretion and Procedural Issues

57. Where, on a claim for judicial review, the court concludes that a particular decision or action was unlawful, it has a discretion as to whether to grant or refuse a final remedy and, if it does grant a final remedy, what that remedy should be.⁹² However, in practice a court will not refuse a final remedy unless there is good reason to do so.⁹³

⁸⁹ *Responsible Development for Abaco (RDA) Ltd v The Right Honourable Perry Christie and others* [2023] UKPC 2, [2023] 4 WLR 47.

⁹⁰ *Ibid*, [71] and [84].

⁹¹ *Wisniewski v Central Manchester Health Authority* [1998] Lloyds Rep Med 223, 240; *Herrington v British Railways Board* [1972] AC 877, 930; *The Law Debenture Trust Co Plc v Elektrim* [2009] EWHC 1801 (Ch), [176].

⁹² *Inland Revenue Commissioners v National Federation of Self-Employed and Small Businesses Ltd* [1982] AC 716, 656, See section 31(2) of the Senior Courts Act 1981.

⁹³ *R (Edwards) v Environmental Agency* [2008] UKHL 22, [2008] 1 WLR 1587, [63].

58. A particular issue that may arise in circumstances where a court determines that a decision made by an ADM system in respect of an individual was unlawful, is that there may have already been a large number of similar (unlawful) decisions made against other individuals over a significant period of time. How should the court address these historic cases in the exercise of its discretion in a way that will not impose an excessive burden on the relevant public authority that adopted the ADM system? Statements have been made to the effect that the court “will not listen readily to suggestions of ‘chaos’.... Even if chaos should result, still the law must be obeyed”; and that “whatever inconvenience or chaos might be involved in allowing the appeal, the court would not be deterred from doing so if satisfied that the valuation officer had acted illegally.” However, it is difficult to identify cases where the court has ordered relief where it actually expected chaos to result. By contrast, there are several cases where the court has relied on adverse public consequences as an additional ground for refusing relief. Time precludes full consideration of what a court may be required to do in the ADM context outlined above, but it may be that “one must face up to a choice between the high ground of purist principle and the more pragmatic, utilitarian approach”. Courts may have to be creative in fashioning forms of order which, while doing justice between the parties, do not have the effect that an expensive and generally effective AI system has to be scrapped and which allow a public authority time to take remedial action in relation to it.
59. Finally, it should be noted that some aspects of ordinary judicial review procedure are, if not given flexible application, likely to create near-insuperable impediments in terms of securing access to justice in an ADM context. An example is the application of the usual time requirement for bringing a claim. An application for permission to apply for judicial review must be made promptly and in any event within three months from the date when grounds for the application first arose, though there is scope to extend that in the interests of justice. Since ADM systems are often opaque and non-transparent so far as outsiders are concerned, building an evidential case in this period of time may be very difficult. The courts should therefore be more amenable to exercise their discretion to extend limitation periods in appropriate cases where the challenge is against the decision of an ADM system.

Conclusion

60. In some respects, it could be said that the existing judicial review machinery has ready-made tools to scrutinise decisions reached by ADM systems. Judges will confront many of the same difficulties scrutinising machine learning algorithms as they have confronted in the past with respect to other statistical and technical aspects of administration. Nevertheless, it is clear that the adoption of ADM systems by public authorities presents a number of novel challenges for administrative law. Absent explicit guidance in tailored legislation produced by Parliament, the courts will have to adapt existing concepts and procedures to accommodate and respond to those challenges. The object should be for judicial review methodology to continue to inject important principled legal values as requirements for decision-making, but so as to accommodate the automated state in a manner that does not undermine the speed, efficiency and social benefits which AI has to offer. Development and adaptation of judicial review principles and methodology will not be a complete answer to the problems that ADM generates, but will be essential elements of any effective regulatory framework for the emergent forms of digital government.