

INTERNATIONAL JOURNAL FOR LEGAL RESEARCH AND ANALYSIS



Open Access, Refereed Journal Multi-Disciplinary
Peer Reviewed

www.ijlra.com

DISCLAIMER

No part of this publication may be reproduced or copied in any form by any means without prior written permission of Managing Editor of IJLRA. The views expressed in this publication are purely personal opinions of the authors and do not reflect the views of the Editorial Team of IJLRA.

Though every effort has been made to ensure that the information in Volume II Issue 7 is accurate and appropriately cited/referenced, neither the Editorial Board nor IJLRA shall be held liable or responsible in any manner what sever for any consequences for any action taken by anyone on the basis of information in the Journal.

Copyright © International Journal for Legal Research & Analysis

EDITORIALTEAM

EDITORS

Dr. Samrat Datta

Dr. Samrat Datta Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Samrat Datta is currently associated with Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Datta has completed his graduation i.e., B.A.LL.B. from Law College Dehradun, Hemvati Nandan Bahuguna Garhwal University, Srinagar, Uttarakhand. He is an alumnus of KIIT University, Bhubaneswar where he pursued his post-graduation (LL.M.) in Criminal Law and subsequently completed his Ph.D. in Police Law and Information Technology from the Pacific Academy of Higher Education and Research University, Udaipur in 2020. His area of interest and research is Criminal and Police Law. Dr. Datta has a teaching experience of 7 years in various law schools across North India and has held administrative positions like Academic Coordinator, Centre Superintendent for Examinations, Deputy Controller of Examinations, Member of the Proctorial Board



Dr. Namita Jain



Head & Associate Professor

School of Law, JECRC University, Jaipur Ph.D. (Commercial Law) LL.M., UGC-NET Post Graduation Diploma in Taxation law and Practice, Bachelor of Commerce.

Teaching Experience: 12 years, AWARDS AND RECOGNITION of Dr. Namita Jain are - ICF Global Excellence Award 2020 in the category of educationalist by I Can Foundation, India. India Women Empowerment Award in the category of "Emerging Excellence in Academics by Prime Time & Utkrish Bharat Foundation, New Delhi. (2020). Conferred in FL Book of Top 21 Record Holders in the category of education by Fashion Lifestyle Magazine, New Delhi. (2020). Certificate of Appreciation for organizing and managing the Professional Development Training Program on IPR in Collaboration with Trade Innovations Services, Jaipur on March 14th, 2019

Mrs.S.Kalpna

Assistant professor of Law

Mrs.S.Kalpna, presently Assistant professor of Law, VelTech Rangarajan Dr.Sagunthala R & D Institute of Science and Technology, Avadi. Formerly Assistant professor of Law,Vels University in the year 2019 to 2020, Worked as Guest Faculty, Chennai Dr.Ambedkar Law College, Pudupakkam. Published one book. Published 8Articles in various reputed Law Journals. Conducted 1Moot court competition and participated in nearly 80 National and International seminars and webinars conducted on various subjects of Law. Did ML in Criminal Law and Criminal Justice Administration.10 paper presentations in various National and International seminars. Attended more than 10 FDP programs. Ph.D. in Law pursuing.



Avinash Kumar



Avinash Kumar has completed his Ph.D. in International Investment Law from the Dept. of Law & Governance, Central University of South Bihar. His research work is on "International Investment Agreement and State's right to regulate Foreign Investment." He qualified UGC-NET and has been selected for the prestigious ICSSR Doctoral Fellowship. He is an alumnus of the Faculty of Law, University of Delhi. Formerly he has been elected as Students Union President of Law Centre-1, University of Delhi. Moreover, he completed his LL.M. from the University of Delhi (2014-16), dissertation on "Cross-border Merger & Acquisition"; LL.B. from the University of Delhi (2011-14), and B.A. (Hons.) from Maharaja Agrasen College, University of Delhi. He has also obtained P.G. Diploma in IPR from the Indian Society of International Law, New Delhi. He has qualified UGC – NET examination and has been awarded ICSSR – Doctoral Fellowship. He has published six-plus articles and presented 9 plus papers in national and international seminars/conferences. He participated in several workshops on research methodology and teaching and learning.

ABOUT US

INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANALYSIS ISSN- 2582-6433 is an Online Journal is Monthly, Peer Review, Academic Journal, Published online, that seeks to provide an interactive platform for the publication of Short Articles, Long Articles, Book Review, Case Comments, Research Papers, Essay in the field of Law & Multidisciplinary issue. Our aim is to upgrade the level of interaction and discourse about contemporary issues of law. We are eager to become a highly cited academic publication, through quality contributions from students, academics, professionals from the industry, the bar and the bench. INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANALYSIS ISSN 2582-6433 welcomes contributions from all legal branches, as long as the work is original, unpublished and is in consonance with the submission guidelines.

ALGORITHMIC WELFARE: DUE PROCESS, TRANSPARENCY AND ACCOUNTABILITY IN AUTOMATED PUBLIC SERVICES

AUTHORED BY - NUPUR & SRISHTI YADAV

Introduction

Algorithmic welfare systems the deployment of automated decision-making (ADM) tools in public-benefit programs are rapidly reshaping social assistance globally.¹ Governments now use algorithms to scan tax, employment, and social data to decide who is eligible for benefits, detect fraud, and calculate aid amounts.² Promoters tout efficiency and cost-savings (the UK's Department of Work & Pensions, for example, forecasted £1.6 bn in fraud savings by 2030-31³). But real-world experience shows serious legal and human-rights problems. Across dozens of countries, similar ADM tools have *wrongly* cut off benefits or tagged recipients as cheats, with large groups forced to repay debts they did not owe⁴. As one expert put it, "governments around the world are rushing to automate the delivery of public services, but it is the most marginalized in society that are paying the highest price".

These errors violate basic principles of fairness. By substituting "black-box" systems for human judgment, public agencies threaten due-process rights (notice, hearing, reasoned decision) and obscure accountability. The United Nations Special Rapporteur on extreme poverty has warned that a "digital welfare state" where assistance is increasingly "driven by digital data and technologies that are used to automate, predict, identify, surveil, detect, target and punish" risks ushering society "stumbling... into a digital welfare dystopia"⁵. A growing scholarly consensus calls for rigorous safeguards: transparency (making algorithmic logic auditable and explainable), accountability (clear human oversight and remedies), and due process⁶ (protecting rights of recipients)⁷. This paper surveys those issues in depth, with

¹ Philip Alston, U.N. Doc. A/74/493 (2019)

² Victoria Adelmant, *Global Perspectives on Automated Welfare: Comparative Considerations for Assessing Impacts* (2024),

³ Guardian, DWP Algorithm Wrongly Flags 200,000 (2024)

⁴ Johnson v. Sec'y of State for Work & Pensions, [2020] EWHC 310 (Admin)

⁵ Puttaswamy, (2017) 10 SCC 1

⁶ Maneka Gandhi v. Union of India, (1978) 1 SCC 248

⁷ GDPR, art. 22, Regulation 2016/679 (EU)

comparative cases and legal perspectives worldwide. We focus on how algorithmic welfare systems work in practice, the legal challenges they raise, and the regulatory or judicial responses that can ensure fair treatment of vulnerable beneficiaries.

Algorithmic Welfare Systems

Modern welfare administrations employ a variety of automated tools. Some programs use rule-based filters (if X, then flag), while others use machine-learning risk models trained on vast administrative data. For example, Australia's *Robodebt* scheme⁸ (2016-2019) cross-referenced fortnightly benefit payments against annual tax data. Its simple algorithm averaged a claimant's yearly income into biweekly estimates and flagged discrepancies as overpayments⁹ More complex systems may assign each household a fraud-risk score from multiple inputs (age, family size, employment, housing data, etc.). Others use predictive analytics to identify which applicants are *likely* eligible or which claims to audit. In India, several states built "360-degree profiles" of citizens by linking welfare, tax, and civil databases to automatically verify eligibility.

These tools promise consistent, error-free processing (an algorithm applies the same rules uniformly). (As one commentator observed, "automated decision-making systems pose serious risks including entrenching bias... and [the] absence of procedural fairness, transparency and contestability").¹⁰ Even rule-based systems can be disastrously wrong if their rules are flawed or fed bad data.

A key problem is opacity. Agencies often treat the code and criteria as proprietary or too complex to disclose. Many ADM tools are "black boxes" to both the public and even administrators. For instance, when the Dutch SyRI welfare-fraud program was challenged, judges found that "the actual details of the ADM system used were so opaque... that it is impossible to know whether [machine learning] techniques were actually involved"^{11, 12} Similarly, an Amnesty report on the Netherlands' 2013 childcare-benefit algorithm documented that officials did not explain why certain parents were flagged, and designers made no requirement to inform citizens their cases were being scored by a self-learning system. This

⁸ *Amato v. Commonwealth of Australia*, [2019] FCA 1134

⁹ Jeannie Paterson & Tim Miller, *The Flawed Algorithm at the Heart of Robodebt*, Pursuit (July 22, 2020)

¹⁰ OECD, *AI in the Public Sector* (2022)

¹¹ Dutch Parliamentary Inquiry Report (2021)

¹² Vessela Zajko, *Automated Decision-Making, Bureaucracy, and Surveillance: Rethinking Digital Welfare Systems*, 21 *Surveillance & Soc'y* 133 (2023)

lack of clarity makes it extremely difficult for affected individuals to understand or contest adverse decisions.

In short, “algorithmic welfare” refers broadly to any social-benefits mechanism driven by automated rules or AI. Whether rule-based or adaptive, these systems are becoming prevalent in developed and developing countries alike. Their appeal reduced costs, faster processing must be balanced against legal norms. As we explain below, law students and policymakers must scrutinize how automated public services are designed and deployed to safeguard fundamental rights.

Due Process and Fairness

A cornerstone of democratic governance is that deprivation of welfare benefits should follow fair procedures. In legal terms, this means notice, an opportunity to be heard, reasoned decisions, and the ability to appeal. Algorithmic welfare systems often undermine these due-process guarantees.

First, consider errors and wrongful denials. Automated profiling tools have repeatedly produced mass mistakes. In Australia’s Robodebt, half a million inaccurate debts were generated by income-averaging a method later ruled unlawful.¹³ Many recipients, bewildered by unexplained debt notices, were forced to collect payslips and bank statements under great stress, reversing the burden of proof onto citizens. Likewise, investigative journalism in India revealed that opaque welfare algorithms wrongfully excluded thousands: for example, Telangana’s “Samagra Vedika” system tagged slum-dwellers as car owners and inflated income estimates for widows, cutting them off from subsidized rations¹⁴. In one case, a poor widow lost benefits because an algorithm confused her record with another family that owned a vehicle. In the UK, Freedom of Information data showed that a housing-benefits algorithm flagged 200,000 claims for fraud investigations over three years, yet two-thirds of those cases were actually legitimate.¹⁵ Thus, algorithms often cast innocent claimants into investigation pipelines without justification.

¹³ Victoria Legal Aid, *Learning from the Failures of Robodebt - Building a Fairer, Client-Centred Social Security System* (2021)

¹⁴ The Hindu, *Ration Cards Cancelled in Telangana* (2018)

¹⁵ Robert Booth, *DWP Algorithm Wrongly Flags 200,000 People for Possible Fraud and Error*, Guardian (June 23, 2024)

Second, affected individuals frequently lack a meaningful opportunity to challenge algorithmic decisions. In Robodebt, once an automated debt notice arrived, recipients had to disprove the error themselves. There was no human reconciliation of income data until forced by court action. Similarly, in India's welfare cases, journalists reported that "the onus was on the removed beneficiaries to prove... they were entitled to the welfare benefits. Even when they did so, officials often favored the decisions of the algorithms".¹⁶ In other words, people were presumed cheats and had the reverse burden, a stark departure from normal welfare procedures. No personalized explanation of the algorithm's reasoning was given; applicants often could not even see how their own data was interpreted.

Third, there is usually no distinct human review or appeal channel. Many automated systems feed directly into a final agency determination. In the Netherlands SyRI case¹⁷, the court faulted the law because it provided no duty to inform individuals that automated profiling was happening. Without knowing an algorithm triggered an action, claimants can't even begin an appeal. Where appeals exist, agencies may still rubber-stamp the automated decision: Amnesty noted that Dutch families flagged in the childcare scandal "were given no answers to questions about what they had done wrong"¹⁸. In Michigan, a class-action arose because the unemployment office's computer system (MiDAS)¹⁹ was accused of arbitrarily stripping benefits without adequate review. Eventually 3,000 falsely accused claimants shared a \$20 million settlement²⁰. One lawyer on the case emphasized that claimants needed to be "heard and properly compensated for the harm caused by the use of algorithms instead of people".²¹

These failures violate basic justice principles. In India, for example, Article 14 of the Constitution requires that state action be "fair, just and reasonable"²², and Article 21 (by Supreme Court precedent) includes a right to a fair procedure. If a person is denied benefits by an opaque data filter, they can challenge that denial under Article 14 and the Maneka Gandhi doctrine of fair procedure. Similarly, in Europe the rule of law demands that administrative

¹⁶ Tapasya & Rituparna Shrivastava, *How We Investigated Welfare Algorithms in India (Part I)*, Pulitzer Ctr. (Mar. 2024)

¹⁷ ECLI:NL:RBDHA:2020:1878 (Neth.)

¹⁸ Amnesty International, *Xenophobic Machines* (2021)

¹⁹ *Barry v. Lyons*, No. 17-000017-MM (Mich. Ct. Cl. 2024) Settlement

²⁰ Mich. Advance, \$20M Settlement Report (2024)

²¹ Allison R. Donahue, *Thousands of Michiganders Falsely Accused of Unemployment Fraud Get \$20M Settlement*, Mich. Advance (Jan. 24, 2024)

²² Art. 14, 21, Constitution of India + PUCL v. Union of India, (2013) 2 SCC 688

decisions be reasoned; under the European Convention on Human Rights,²³ arbitrary administrative action can violate privacy or family-life rights. In SyRI, the Dutch court expressly held that privacy was breached because the system lacked a fair balance between fraud detection and personal rights. The court insisted the agency could not hide behind technological complexity: it found SyRI “too opaque,” collecting too much data without clear justification.²⁴

As one UK review put it, reliance on judicial review (case-by-case court appeals) is no longer sufficient to protect citizens when thousands could be affected by hidden algorithms. Legal commentators therefore urge that any public algorithmic tool must be subject to procedural safeguards reflecting natural justice and fairness.²⁵

Transparency and Explainability

Transparency is the linchpin of both due process and accountability. An affected individual needs to know *why* a decision was made in order to contest it. Yet many algorithmic welfare systems operate in secrecy. Hidden code, proprietary models, or complex machine-learning inner workings mean neither beneficiaries nor outside auditors can see the logic. This opacity undermines trust and thwarts informed challenge.

Scholars warn that opaque systems create an “explainability gap.” In the Dutch SyRI case, judges criticized that “the risk model and its indicators were not public. Additionally, the legislation contained no duty to inform people their data had been processed.” Because “the working of SyRI was not revealed by the state,” the court noted a risk it could be biased against the poor. Similarly, in the Netherlands childcare scandal, the algorithm was a “black box” of racial profiling: Amnesty reported that civil servants had no information as to why someone was flagged, leading to a “black hole of accountability”.²⁶ Parents repeatedly asked, “What did I do wrong?” and got no answer.

India’s experience underscores the need for transparency. The Right to Information (RTI) Act has become a vital tool for public algorithmic accountability. Journalists filed dozens of RTIs

²³ Mark Latonero, *Governing AI* (2019)

²⁴ Lokke Moerel, *Digital Welfare Fraud Detection and the Dutch SyRI Judgment*, Int’l Ass’n of Privacy Prof’ls (Mar. 3, 2020)

²⁵ LSE Pub. Pol’y Rev., *Automated Public Decision-Making and the Need for Regulation*, 4 LSE Pub. Pol’y Rev. (2023),

²⁶ Amnesty Int’l, *Xenophobic Machines: The Dutch Child Benefit Scandal* (Oct. 28, 2021)

on welfare databases and uncovered key details. For instance, RTI appeals forced the Odisha government to admit it had secretly used an IBM algorithm to screen 5.4 million ration-card applicants²⁷. In another case, officials responded to an RTI by admitting “algorithmic decision-making” had cut off an individual’s entitlements, without confirming whether it was correct. These disclosures show how transparency laws can lift the veil. Without them, affected Indians would have remained entirely in the dark about automated exclusions. Notably, the RTI activists had to overcome government resistance; one official cited “commercial confidentiality” to refuse revealing the source code. This illustrates the tension: agencies often treat algorithms as secret property, even when they govern public programs.

By contrast, Europe is moving toward legal transparency mandates for algorithms. The proposed EU Artificial Intelligence Act (AIA) classifies public-sector AI as “high risk,” triggering specific rules. Under Article 13 of the AIA, high-risk systems must be “designed... to ensure that their operation is sufficiently transparent.” In effect, governments would have to document and possibly publish how decisions are made. (A UK commentator notes that if EU law still applied, such standards would compel transparency in welfare algorithms). Similarly, the GDPR indirectly promotes explainability. While Article 22’s “right not to be subject to solely automated decisions” has unclear scope, it implies individuals should have information about the logic involved. EU guidance suggests data subjects are entitled to “meaningful information about the logic involved” in automated decisions.

In the US, there is no overarching algorithmic transparency law yet. Some state-level actions exist: for example, Illinois’s AI Video and Audio Privacy Act and the federal Executive Order on AI (2023) urge notice when AI is used, and the White House’s draft “Blueprint for AI Bill of Rights” emphasizes accountability (including explanations). But these lack enforcement teeth. Thus, in practice, victims often rely on freedom-of-information suits or litigation to pry out details. Without these, “the citizenry should know that an AI tool is being used and how it works,” as one Indian analysis recommended.

Transparency also includes making the data processes auditable. Some countries experiment with “algorithmic impact assessments” or mandatory audits. For example, the UK Information Commissioner’s Office has begun reviewing how local authorities use welfare algorithms, though one early report controversially found no evidence of harm in sample cases. This

²⁷ Pulitzer Center, Investigating Welfare Algorithms (2024)

contrasts with the Guardian’s finding of systemic errors and suggests that opaque audit methodologies can understate problems. Civil society has pushed for registers of public ADM tools (the UK’s Public Law Project tracked 55 uses by August 2024) and for disclosure of risk-assessment frameworks. Transparency groups and academics²⁸ insist that open algorithms or at least open criteria are necessary to uncover bias and ensure legitimacy.²⁹ In summary, without transparency *and* explainability, algorithmic welfare decisions become a black box beyond effective challenge.

Accountability and Oversight

Accountability asks: Who is responsible when an algorithm harms someone? and how can victims obtain remedy? In automated public services, accountability often falls between the cracks. The development and operation of welfare algorithms typically involves multiple actors: government agencies, private contractors, and even outsourced software providers. This fragmentation can obscure liability. Governments may claim they are not “directly” deciding, since a computer did it, or point to contractors under contract. Meanwhile, individuals face uphill battles in court or in appeals, because establishing what went wrong inside a machine is difficult.

The case of Robodebt illustrates the accountability gap. For years, Australian officials treated the computer-generated debts as routine administration. Only after a Federal Court challenge (Black v. Evans, 2019) declared the program unlawful did the government reverse course. By then, the scheme had inflicted enormous harm: one Royal Commission report described Robodebt as “crude and cruel,” causing financial ruin and stress for thousands³⁰. The court decision itself noted that Robodebt’s practice sending debt notices based solely on averaged data had “no basis in Australian law”.³¹ Yet by the time the scheme was halted and a \$1.2 billion settlement approved,³² the algorithm’s designers and political champions had largely evaded individual sanction. Even today, the final Royal Commission recommendations focus on systemic reforms and redress, not criminal penalties for those responsible.

In contrast, the Netherlands shows a different accountability response. The childcare-benefit

²⁸ Sonia Katyal, *The Paradox of Source Code Disclosure* (2019)

²⁹ Victoria Adelmant, SSRN (2024)

³⁰ Royal Commission Into the Robodebt Scheme, Final Report (2023)

³¹ Jeannie Paterson & Tim Miller, *The Flawed Algorithm at the Heart of Robodebt*, Pursuit (July 22, 2020)

³² Meghna Chakrabarti, *What Happened When AI Went After Welfare Fraud*, WBUR On Point (Mar. 13, 2025)

scandal led to the collapse of the ruling coalition government and a public apology. The Dutch parliament is implementing reforms to prevent such algorithmic abuse. Victims (so-called “toeslagen” families) have received compensation: a court ordered that each of about 20,000 families wrongly accused be repaid roughly €32,000 on average. Dutch courts and legislators have also moved to ban the use of nationality or ethnicity data in fraud profiling. These measures show a commitment to retrospective accountability, but only after immense damage.

A powerful remedy in democratic systems is judicial review. In Europe, welfare agencies’ decisions remain subject to administrative appeal and court oversight, though this is often slow and onerous. As a UK commentator noted, ordinary citizens should not have to resort to burdensome High Court challenges for every misapplied algorithmic decision. The LSE review suggests creating specialized administrative bodies or tribunals to handle algorithm-related disputes. One proposal is an “Automated Decisions Tribunal” akin to existing social-security appeal tribunals, where citizens could swiftly contest an automated determination. Another is a regulator with investigatory powers: for example, the authors envision an AI oversight authority that can audit tools, require suspension of a flawed system, and compel human redress. These ideas, while not yet realized, point toward an accountability framework specific to algorithmic governance.

In India, accountability often relies on ad hoc remedies. Affected citizens have sometimes taken complaints to welfare agencies or courts; knowing the system’s workings requires RTI applications. There is no statutory “right to explanation,” and neither the Digital Personal Data Protection Act nor Aadhaar Act³³ currently guarantees appeals against algorithmic exclusions. Experts recommend establishing clear grievance procedures (for example, “AI grievance cells” or mandatory human review of adverse automated outcomes). This reflects a broader view: public officials should not abdicate judgment to machines. The Jus Corpus analysis argues that if an automated decision is “just not believable,” the human reviewer must intervene otherwise “constitutional protections fall away”. In Robodebt, critics argued that Centrelink caseworkers became mere rubber stamps for the computer, whereas legal norms require a reasoned human decision.

The European Union’s approach seeks to bind accountability into law. Under the proposed AI Act, violations of rules by public-sector AI could incur heavy fines and mandates to cease use.

³³ Justice K.S. Puttaswamy v. Union of India, (2017) 10 SCC 1

The Act also implicitly supports victims' rights: by treating welfare algorithms as "high-risk," it triggers strict conformity obligations (quality of data, documentation, traceability). If implemented, agencies would need to build and demonstrate risk-mitigation and allow audits. The EU's General Data Protection Regulation likewise bolsters accountability through data protection authorities: misuse of personal data in welfare algorithms could violate GDPR and lead to enforcement actions (especially if profiling leads to discrimination).

Yet laws can only do so much. In practice, accountability often emerges from public and political pressure. Civil society groups worldwide (from NGOs to journalists' networks) have begun monitoring automated welfare tools.

Comparative Case Studies

Examining specific national experiences highlights common themes and divergent approaches. Below we survey prominent cases from several jurisdictions, illustrating how automated welfare systems have played out in practice.

- **Netherlands:** The Supreme Court of the Netherlands ruled that the SyRI (2020) program violated privacy and accountability principles and transparency standards, while the "childcare benefits scandal" revealed how biased algorithms led to false accusations against thousands of migrant households³⁴. Public outcry ended the government, led to legislation forbidding algorithms based on national origin, and compensation programs for victims, illustrating how unchecked bias in algorithms leads to legal and political responsibility across systems.
- **Australia:** The Robodebt system (2015-2019) used a discredited methodology of income averaging to raise mass debt notices to the Australian government, subsequently criticized in courts and a Royal Commission as 'crude and cruel.' The Robodebt scandal convinced the government to refund almost A\$1.8 billion, as well as enact policy reforms to ensure human oversight and impact assessments, demonstrating how automation must still comply with procedural justice, including statutory accuracy and fairness.
- **India:** Algorithmic exclusions in social welfare schemes, such as ration cards based in the Aadhaar system and state-run platforms (Telangana, Haryana,³⁵ Odisha), cut

³⁴ UNHCHR, The Right to Privacy in the Digital Age (2018)

³⁵ Indian Express, Algorithm Marks Pensioners as Dead (2022)

millions off from services without any due process³⁶. Many survivors appealed to invoke constitutional rights (Arts. 14, 21) with the assistance of the RTI Act to dispute the neglect of procedural justice. Leading experts are signing petitions for alternative grievance redress mechanisms and AI tax liabilities; several observational groups call for more accountability cells. Current reforms, such as the Digital India Act,³⁷ may provide more structured guardrails in perpetuity, but citizen accountability warrants ongoing change based on PILs, media reporting, and RTIs.³⁸

- **United Kingdom:** Automated fraud detection in welfare and housing benefits mistakenly identified thousands of individuals, increasing costs and exposing families to unwarranted investigations. While no major case has advanced to the courts, general administrative law permits rationality review, and academics³⁹ are advocating for statutory safeguards, transparency audits and specialized tribunals for the algorithmic context.⁴⁰
- **United States:** State-level systems, such as Michigan's MiDAS, wrongly accused tens of thousands of individuals of fraud, resulting in settlements of millions of dollars. The absence of a federal legal framework means accountability develops through litigation, local advocacy efforts and the non-binding AI Bill of Rights, leaving due process protections sporadic and predominantly reactive.⁴¹

Democratic countries have different foundational concepts of accountability: European democracies based their ideology around fundamental rights, while Australia has the statutory question, and in India this looks to fairness on a constitutional regularity, and in the UK/US this relies on pressure of the public and subsequent action in the Courts. Notably, across the different jurisdictions, the key lesson appears to be the systematic harm was all be avoided with algorithmic welfare with due process, transparency and human accountability built in and evidenced.

Legal and Policy Frameworks

Given the global spread of algorithmic welfare systems, legal scholars advocate robust regulatory frameworks. Key elements include: mandatory impact assessments, transparency

³⁶ Scroll.in, Aadhaar-Based Ration Distribution (2019)

³⁷ Internet Freedom Foundation, Algorithmic Governance (2022)

³⁸ Indian J. L. & Tech., Algorithmic Exclusion in India (2023)

³⁹ Julie Cohen, Between Truth and Power (2019)

⁴⁰ Reuben Binns, Algorithmic Decision-Making (2021)

⁴¹ U.S. Dep't of Labor, Office of Inspector Gen., *Oversight of the Unemployment Insurance Program* (2023)

rules, bias audits, and clear appeal rights.

- **European Union:** The EU has both hard and soft law. Under the *Charter of Fundamental Rights*, any administrative measure affecting citizens must comply with principles of legality, proportionality, and good administration. The Charter's Article 41 guarantees the right to be heard in proceedings affecting one's interests. The GDPR's Article 22 restricts "solely automated" decisions; although its exact scope is debated, it implies data subjects can demand meaningful information about the logic applied. Critically, the proposed EU Artificial Intelligence Act (2021) would categorize public-benefit algorithms as "high risk." In Annex III, public administration tools are listed, triggering requirements for data quality, documentation, transparency, human oversight, and post-market monitoring. For instance, Article 13 would require that high-risk systems "be designed and developed in such a way as to ensure that their operation is sufficiently transparent," meaning agencies must provide explanations of their output. The AIA also mandates that AI systems have human-in-the-loop options and allow users to opt out of profiling in certain contexts. Although the Act has not yet been fully implemented (and its fate post-Brexit is uncertain for the UK), it represents one of the first comprehensive legal regimes aimed at automated public services.
- **United Kingdom:** Pre-Brexit, the UK contributed to EU digital rulemaking, but now it must chart its own path. There is no omnibus algorithm law yet. The Data Protection Act 2018 (GDPR) does not grant an explicit "right to explanation," but Information Commissioner guidance suggests public-sector ADM must still meet "lawfulness, fairness and transparency" requirements. In 2023-24, the UK government indicated interest in AI ethics but primarily in private-sector uses; welfare AI remains underregulated. The LSE review above argues that current judicial review is inadequate and calls for a specialized statutory regime. In practice, the UK enforces algorithmic fairness through general administrative law (legality, rationality) and through Data Protection law if personal data is involved. Local authorities must follow the Children's Code (UK data protection code of practice) when using data-driven decision tools for children, which could impact welfare programs involving minors.

In summary, while legal frameworks vary, a convergence of norms is emerging: impact assessment, minimum transparency, bias auditing, and remedy procedures are increasingly seen as essential. For example, experts suggest government AI tools in "high-risk" domains (welfare, policing, credit) should face mandatory bias audits and public reporting.

Conclusion

Algorithmic welfare systems embody a promising but perilous innovation. They hold the appeal of efficiency and consistency for public services, yet they risk entrenching errors and biases at scale. The stakes are high: welfare recipients are often among society's most vulnerable, without means to lobby for themselves. As this survey shows, automated tools have already caused serious injustices from cancelled pensions to wrongful fraud accusations when deployed without adequate safeguards.

Legal systems are only beginning to catch up. Key lessons emerge from the comparative analysis:

- **No harm is too small:** Welfare decisions deeply affect people's lives. Automated errors (however statistically "rare") cannot be brushed aside as mere inconvenience.
- **Transparency is non-negotiable:** Hidden algorithms undermine trust. Effective remedies require that individuals (and auditors) know how a decision was reached. Laws should mandate disclosure of criteria, risk models, or at least summary rationales for automated decisions.
- **Procedural fairness must be preserved:** Due process notice, reasons, hearing remains essential, even if a machine is involved. Any automated program must include human review for adverse actions and safeguard against reverse onus schemes.
- **Accountability mechanisms are needed:** Victims need clear channels for complaint and redress. This may require new institutions (e.g. algorithmic ombudsmen or tribunals) and explicit liability standards for public bodies.
- **Regulation should be forward-looking:** Learning from past fiascoes, governments should enforce rigorous impact assessments *before* deploying welfare algorithms.

In conclusion, algorithmic welfare is not inherently unfair, but it requires robust legal guardrails. Automation does not exempt state authorities from the rule of law. As one commentator sternly warned, no government should allow AI to "make decisions on access to benefits... with little independent oversight". Law students and practitioners have a critical role in shaping this emerging field: by advocating for legal clarity and defending citizens' rights, they can ensure that public services leverage technology without betraying fundamental rights. The time to act is now, before more "algorithmic welfare" programs entrench injustices.⁴²

⁴² EPIC, Algorithmic Transparency Report (2023)