

# Journalist Fellowship Paper

# How to hold algorithms accountable in India

By Karen Rebelo

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# Introduction

In March 2025, Urban Company, an Indian tech start-up, ran an advert for "Insta Maids", promising the services of a domestic worker within 15 minutes, at an <a href="introductory offer">introductory offer</a> of just 49 rupees (57 cents) an hour.<sup>1</sup>

The backlash was immediate: critics condemned the name, the price point, and the broader exploitation of women from marginalised castes and impoverished communities. In response, Urban Company rebranded the service to "Insta Help".

It was not their first encounter with controversy; nine months earlier, the start-up previously <u>faced protests</u> over questionable treatment of beauty salon gig workers.<sup>2</sup>

Urban Company, and gig economy businesses like it, are not the only actors making troubling waves with technology in India. The government's ambitious drive to expand digital public infrastructure (DPI) has placed technology at the centre of welfare, employment, and even basic rights.

DPI refers to platforms such as Aadhaar, India's twelve-digit unique ID; the Unified Payments Interface (UPI), which powers billions of transactions; and a network of application programming interfaces (APIs) that allow third parties to build services on top of state-backed digital systems. DPI has been promoted as a cornerstone of India's development strategy, enabling financial inclusion and delivering welfare more efficiently.

The COVID-19 pandemic and India's presidency of the G20 in 2023 accelerated these efforts, with New Delhi actively pitching DPI as a global model. Far from being

<sup>&</sup>lt;sup>1</sup> Das Sharma, S (2025) *Urban Company launches 15-minute 'Insta Maids': Price, cities, offers; 'expected better', say netizens*, Livemint, (15, March) Available at:

https://www.livemint.com/companies/news/urban-company-launches-15-minute-insta-maids-price-cities-offers-expected-better-say-netizens-11742022292744.html Accessed on (25 April 2025)

<sup>&</sup>lt;sup>2</sup> Business & Human Rights Resource Centre (2024) India: Urban Company women gig workers protest against 'horrific' work conditions, work hours and work targets. Business & Human Rights Resource Centre, 10 June. [Online]. Available at: <a href="https://www.business-humanrights.org/en/latest-news/india-urban-companys-gig-workers-protest-against-horrific-work-conditions-work-hours-and-work-targets/">https://www.business-humanrights.org/en/latest-news/india-urban-companys-gig-workers-protest-against-horrific-work-conditions-work-hours-and-work-targets/</a> (Accessed: 24 June 2024).

confined within national borders, India's vision of digital governance is now an element of its diplomatic influence.

But the model being exported is rarely community-based, open-source, or accountable. Instead, the rollout of new platforms often substitutes digital systems for real infrastructure and governance. As the following examples will show, these systems often create fresh barriers instead of dismantling old ones.

When Telangana, a state in southern India, <u>tweeted in March</u>: "Did you know? No Aadhaar = No School Admission", they were in direct contravention of India's Right To Education Act and the Supreme Court's ruling on Aadhaar, which states no person can be denied fundamental rights for lack of Aadhaar.<sup>3</sup>

Similarly, in Tamil Nadu, Anganwadi workers – who look after small children and pregnant and lactating mothers – are now overburdened with updating apps created by the centre and state.<sup>4</sup>

This project explores how journalism can hold such technologies accountable. It focuses on three domains: the use of technology in welfare and employment guarantee schemes; its role in governing gig work; and the deployment of artificial intelligence in public spaces. To investigate these themes, I interviewed eight journalists, researchers, lawyers, and civil society actors who have scrutinised the intersection of technology, policy, and rights in India.

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<sup>&</sup>lt;sup>3</sup> Mee Seva [@TGMeeSeva] (2025) Did you know? No Aadhaar = No School Admission! An Aadhaar card is a must for your child's education. Apply today if you haven't already... [Tweet], 1 March. Available at: <a href="https://x.com/TGMeeSeva/status/1897609859404910642">https://x.com/TGMeeSeva/status/1897609859404910642</a> (Accessed: 25 April 2025).

<sup>4</sup> Raghu, A (2025) *From Caregivers To Data Workers: The Hidden Burden On Tamil Nadu's Anganwadi Workers*, Behan Box, (14 May) Available at: <a href="https://behanbox.com/2025/05/14/from-caregivers-to-data-workers-the-hidden-burden-on-tamil-nadus-anganwadi-workers/">https://behanbox.com/2025/05/14/from-caregivers-to-data-workers-the-hidden-burden-on-tamil-nadus-anganwadi-workers/</a> Accessed on 28 June 2025

# Welfare systems: a short overview of the landscape of digital exclusion

Researchers and software engineers at civil-society organisation LibTech India scrape transaction-level data from government databases and combine it with field research to produce advocacy reports. They also build monitoring dashboards and train grassroots organisations.

Since launching in 2012, <u>LibTech India</u> has exposed several flaws caused by the arbitrary introduction of technology into India's welfare and employment-delivery systems. Its work has highlighted problems of payment delays in systems like the National Rural Employment Guarantee (NREGA) scheme, uncovered delays in food rations, wrongful <u>job-card deletions</u>, and other unfair exclusions caused by technology.

# Tech rollouts in welfare

Scheme/tool	Year	Purpose	Problem reported
Samagra Vedika (Telangana)	2016 (scaled to welfare by 2018)	Data/AI integration to "verify" beneficiaries	Thousands wrongfully excluded (reported 2024)
Family Identity Data Repository / Parivar Pehchan Patra (Haryana)	2020 (statewide launch)	Family ID for pension/benefit eligibility	Some living residents marked "dead"; benefits denied
NMMS attendance app (MGNREGA)	2021 (mandatory from 2023)	Monitor daily-wage work via geo-tagged photos	No pilot; glitches; arbitrary exclusions
Aadhaar-based Payment System (ABPS) for MGNREGA wages	2024 (nationwide mandate; transition through 2023)	Route wages to Aadhaar-linked bank accounts	Name/account mismatches; wage denials and delays

"[Whatever] tests they push you to go through, you have to [take]," said Chakradhar Buddha, senior researcher at LibTech India. "The relationship is: you are not trusting your citizens at all."

"I think the biggest problem with technology is it's like you have to prove your chastity every day. You have to prove you're a genuine person." – Buddha, LibTech India

# Samagra Vedika, Telangana: AI 'verification' that cut people off from food

Like Buddha and LibTech, lawyer-researcher Divij Joshi investigates the governance of digital societies. Working with journalists Tapasya and Kumar Sambhav, he examined how algorithmic systems deployed by Indian states were affecting people's access to essentials. Their reporting showed that Telangana's Samagra Vedika data-matching stack <u>wrongly denied subsidised rations</u> to thousands.<sup>5</sup>

"Over the last few years, it's become such that technology [is] seen as solutions to widespread social issues," Joshi said. "Whether it's trying to deal with poverty, for which Aadhaar was formed, or things like education, healthcare, labour... People seem to [assume] that if you throw some tech at it, it will get better."

Samagra Vedika was initiated in 2016 and extended to welfare. Joshi first scoped the story in 2019–2020 after noticing several states at different stages of deploying AI in social protection. COVID-19 paused the work; post-pandemic, the team secured a Pulitzer Center grant and spent more than a year on research: filing RTIs, field reporting, co-ordinating with collaborators, and consulting foreign investigative journalists. The investigation was published in January 2024.

### **Key lessons from this story**

• Intermediation hasn't disappeared; it has just changed shape. Joshi rejected the claim that technology removed middlemen from welfare: "In [the public distribution system], the ration-shop operator used to be the intermediary. Aadhaar didn't take

<sup>&</sup>lt;sup>5</sup> Tapasya, Kumar, Joshi, S. D. (2024) '*How an algorithm denied food to thousands of poor in India's Telangana*', Al Jazeera, 24 January. Available at: <a href="https://www.aljazeera.com/economy/2024/1/24/how-an-algorithm-denied-food-to-thousands-of-poor-in-indias-telangana">https://www.aljazeera.com/economy/2024/1/24/how-an-algorithm-denied-food-to-thousands-of-poor-in-indias-telangana</a> (Accessed: 5 May 2025).

- that away necessarily. You now have enrolment agents and staff at the seva (service centres) actual people who still intermediate transactions."
- How to report on "AI"? Following the money trail is one of the easiest ways to launch into accountability investigations. Procurement trails tenders, bids, and company press releases often reveal deployments; memoranda of understanding can obscure them. "One of the big red flags is when people say 'AI for X'. What do you mean when you say you used AI for this? What system are you using? How did you identify? Where did the data come from? All those things."
- The pursuit of data sovereignty is often a front for crony capitalism, Joshi argued. Domestic champions close to the state get rich off claims of enabling data sovereignty while ignoring the sovereignty of individuals and communities subjected to their homegrown surveillance and automated decisions.

Parivar Pehchan Patra, Haryana: a family-ID database that marked the living as 'dead' Investigative journalist Kumar Sambhav, working with Divij Joshi, filed close to a hundred RTIs (with several appeals) plus local reporting and court filings to trace how Parivar Pehchan Patra (Family Identity Data Repository) was denying pensions, disability benefits and widow allowances at scale.<sup>6</sup>

In multiple instances, the database erroneously tagged living people as "dead", cutting them off from welfare overnight.

The team's early RTIs were ambitious: requesting lists of all rejected beneficiaries over multiple years. "We had very grand ideas," Sambhav said. "But then we had hundreds of thousands of names and addresses [and no] resources to go knock on the door of every person and ask what happened". Instead, they narrowed their scope by triangulating names with cases found in local media and activist petitions already before the courts.

A striking pattern emerged: errors were treated as routine "administrative" issues rather than technology failures with rights impacts.

Sambhav said efforts to access the source code developed by a private start-up were stonewalled on intellectual-property (IP) grounds. "Now I'm sure there is a there is

<sup>&</sup>lt;sup>6</sup> Tapasya, Kumar, Joshi, S. D. (2024) 'In India, an algorithm declares them dead; they have to prove they're alive', Al Jazeera, 25 January. Available at: <a href="https://www.aljazeera.com/economy/2024/1/25/inindia-an-algorithm-declares-them-dead-they-have-to-prove-theyre">https://www.aljazeera.com/economy/2024/1/25/inindia-an-algorithm-declares-them-dead-they-have-to-prove-theyre</a> (Accessed: 12 May 2025).

an argument to be made by private parties about IP," he said. "But I think that needs to be debated – that needs to be played out in the court of law." His argument: when code is deployed by the state and directly alters people's legal status and entitlements, it should be auditable by courts, regulators, and independent experts.

And, despite the government's efforts to dilute RTI law, he said they still work – because the system is decentralised. "You can file an RTI at the block level or even at a *gram panchayat* (village council) level and get information."

# **Key lessons from this story**

- **Database errors are rights violations.** A 'dead' flag is not a clerical quirk; it terminates income and care.
- Treat 'family-ID' registries as high-risk systems. They fuse identity, residence and eligibility in one place; one bad rule cascades harm.
- **Auditability over IP.** If proprietary code determines rights, public audit must trump vendor secrecy.
- **Follow the paper trail, locally.** Pair decentralised RTIs with court records and activist files to map the system's real-world behaviour.
- Frame it as a tech problem, not just an admin one. Many advocates fight the symptom (benefit denial) but not the logic and data pipelines that produce it.

# NMMS attendance app: two selfies a day or no pay

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) provides a legal guarantee of at least 100 days of wage employment per year to adult members of rural households. In 2021, the National Mobile Monitoring System (NMMS) app was introduced to record attendance: workers must upload two geotagged photos from their worksite each day. If they fail to do so, they do not get paid for that day of labour.

Libtech's Buddha stressed that this technology – and many others like it – was introduced without first speaking to people directly affected.

"There is no public participation in any of these initiatives, there is no discussion with any other stakeholders. Things like the MGNREGA is the obvious example, he said. "It's basically some bureaucrats sitting and deciding that this is good for the country and they just rolled it out."

When the attendance app for daily wage workers was introduced, Buddha filed an RTI request asking if a pilot study was conducted. He got a reply saying no pilot was conducted. Then things took a comical turn. "After I filed an RTI they realised that they might get into trouble, so they did some pilot in Alwar district of Rajasthan. And that too at one work site. Many of these decisions are taken very arbitrarily."

An investigation by Decode reported that <u>photos of nondescript vegetation</u> were posted against the names of daily wage workers in Rajasthan in three muster rolls in the app.<sup>7</sup>

### **Key lessons from this story**

- Who carries the burden of proof? Attendance systems that withhold wages for app failures invert the burden of proof onto workers.
- **Pilot first, with workers**: run process audits and connectivity tests before mandating digital attendance.
- Keep an analogue fallback (paper muster roll) for outages and device failures.

# Aadhaar-based payment system (ABPS): mismatches and wage delays

Post-2019, the Aadhaar-based payment system (ABPS) was pushed through MGNREGA, with a nationwide mandate from 2024. ABPS involves <u>multiple steps</u> of linking ("seeding"), authenticating and mapping a workers' Aadhaar details with their job cards and bank account. Any mismatch along this chain of seeding, authenticating, and mapping can delay or deny wages. The burden of fixing backend errors falls on workers who have the least capacity to navigate enrolment desks and service centres.

Buddha explained how many Adivasis (indigenous people of India), have multiple names with alternate spellings. A mismatch of even a single letter in their name on their job card or Aadhaar ID can lead to their exclusion.

<sup>7</sup> Rizwan, H. 2024. Digital Divide and Corruption: How MGNREGA Fails Bihar's Rural Workers. Decode, 22 July. Available at: <a href="https://www.boomlive.in/decode/digital-divide-and-corruption-how-mgnrega-fails-bihars-rural-workers-25942">https://www.boomlive.in/decode/digital-divide-and-corruption-how-mgnrega-fails-bihars-rural-workers-25942</a> (Accessed 9 July 2025).

"When we are analysing some of these initiatives, one thing we have to keep in mind is these initiatives are not for the people; they are for the administration. They are for administrative convenience," he said.

Buddha's critique is not of the law itself — the original NREGA already mandates social audits be carried out on new systems. "There is no problem with the law," he explained. "All the problems are with the way the systems are designed."

Consultations were scant; process audits weren't done up front; and the promise that digitisation would remove "middlemen" proved hollow as new intermediaries (enrolment agents, seva-centre operators) emerged between people and their pay.

"Two things: there should be a lot of investment that has to go in building capacities of grassroot organisations in understanding process audits, conducting them, design and all. Secondly, before you roll out on any intervention the government itself should conduct process audits. I think that's an excellent way of looking at what could go wrong in the end-to-end process."

Independent technology journalist Varsha Bansal encountered an even starker narrative about MNREGA tech during her investigations. "I found this engineering student who was part of this team that built the MNREGA app," said Bansal. "And he was like, 'Yeah, you know, we just built it; it was part of a hackathon we did. And it wasn't fully functional, but they deployed it and there were a lot of glitches'. That app was responsible for [workers'] payments."

### **Key lessons from this story**

- Treat ABPS failures as design defects, not one-off "admin issues": the chain (job card to Aadhaar to bank) must be robust to errors. Provide clear, local redress (time-bound grievance desks; help with re-seeding/bank fixes). And publish failure-rate dashboards (rejections, seeding errors, unpaid transactions) so problems are visible, and fixable.
- Use the right language. LibTech India uses "'rightsholders" instead of beneficiaries in its research, explaining that welfare is a right encoded in the law and not charity undertaken by the government toward its citizens. "Most of our team members come from movements for social justice," said Buddha. "With the increasing discussion and debate over so-called 'freebies', I think usage of such language is extremely important. We believe welfare is a fundamental right."

# Gig work and algorithmic management

The early promise of gig work was flexibility and upward mobility: people moved to cities, took loans, bought cars. The current reality is app-driven control: dropping earnings, punitive metrics, and little recourse when systems fail.

Independent technology journalist Varsha Bansal has written for *TIME*, *Fortune*, *MIT Technology Review*, *Mint*, and *Wired*. Her work highlights how the gig economy is not just disrupting traditional business models, but also the lives of gig workers.

"I think it created this dream where, you know, 'I have flexibility; I will earn as much as I work', and this was like an ideal situation," Bansal said. "But of course that didn't last very long."

# Uber: facial-recognition lockouts and DIY reporting

One of Bansal's most impressive stories showed how Uber India's facial recognition system <u>locked drivers out of the app</u> with slight changes to their appearances.<sup>8</sup>

Unable to access Uber's source code, Bansal crowd-sourced evidence. She created a survey in multiple Indian languages, spoke to drivers at airports (until moved on by staff), and—working with two journalism students—gathered 300 responses across Bengaluru, Pune, Hyderabad, Chennai and Delhi, cleaning them down to 150. Beneath the pattern of facial recognition misfires she found where the real stories of missed shifts and lost income.

"Whether it's private or public, we need more accountability," Bansal said. "What has happened over the last seven or eight years is that there's been a haphazard deployment of technology without any consultation, without any understanding of onground consequences and also sometimes the technology is not fully refined," she said.

https://www.technologyreview.com/2022/12/06/1064287/ubers-facial-recognition-is-locking-indian-drivers-out-of-their-accounts/ (Accessed: 7 July 2025).

<sup>&</sup>lt;sup>8</sup> Bansal, V. (2022) 'Uber's facial recognition is locking Indian drivers out of their accounts', MIT Technology Review, 6 December. Available at:

# **Key lessons from this story**

- When platforms won't disclose, gather primary data. Crowd-sourced surveys and field interviews can document systemic harm.
- **Biometrics fail in the wild.** Small appearance changes lead to lockouts, resulting in immediate income loss; the appeals process should not be opaque.
- **Design for scale.** Multilingual forms and simple cleaning rules make self-reported data usable.

## Urban Company: targets, auto-assignment, and identity 'polish'

Bansal has also written about Urban Company, mentioned in the introduction. Her reporting revealed the <u>impossible targets set</u> for women salon workers, as well as the dangers inherent in a feature where jobs were <u>automatically assigned</u>, removing workers' ability to choose.<sup>9</sup>

"The narrative from the company was that, 'oh, you might miss this important booking where you're going to miss out on your income," she said. "I think that's a big problem: the lack of flexibility and the control aspect. And it becomes a bigger issue when there are female workers involved because then there are a lot of other responsibilities that come with female workers."

In a separate story reported by Decode, Urban Company was found to have <u>used</u> generative AI to alter <u>profile photos</u> of its service partners to give them a more "professional" look, without the consent of gig workers. <sup>10</sup>

### **Key lessons from these stories**

• Apps can be monitored in the same spirit that managers are. Auto-assignment and performance targets shift power from workers to opaque systems.

<sup>&</sup>lt;sup>9</sup> Bansal, V. (2023) *'Urban Company lured women into the gig economy—then pushed them out'*, Wired, 4 August. Available at: <a href="https://www.wired.com/story/urban-company-women-gig-economy-pushed-them-out/">https://www.wired.com/story/urban-company-women-gig-economy-pushed-them-out/</a> (Accessed: 10 June 2025).

<sup>&</sup>lt;sup>10</sup> Rizwan, H., 2025. Urban Company's AI Photo Is Changing How Gig Workers Are Seen And Paid. Decode, 8 July. Available at: <a href="https://www.boomlive.in/decode/urban-companys-ai-photo-is-changing-how-gig-workers-are-seen-and-paid-28829">https://www.boomlive.in/decode/urban-companys-ai-photo-is-changing-how-gig-workers-are-seen-and-paid-28829</a> (Accessed 9 July 2025)

- Consent isn't a toggle. AI-altered profile images change how workers are perceived and booked; this should be opt-in and explained. Are workers aware of what they have consented to?
- **Gendered impacts matter.** Loss of scheduling control hits women workers hardest.

# Swiggy: gamified benefits and shrinking safety nets

Bansal reported that <u>health insurance for delivery partners was gamified</u> and linked to performance. Essential benefits became conditional on hitting shifting, often unrealistic targets – precarity disguised as incentives. <sup>11</sup>

"When it comes to food delivery workers or cab drivers, I think there was a massive drop in earnings. You're working 20 hours and 15 hours a day but you're not really making enough money. You don't have any protection. Even if you have any issues, you don't have a proper grievance redressal mechanism, you don't have someone to reach out to."

## **Key lessons from this story**

- **Benefits shouldn't be a game.** Tie health cover to employment status or hours, not leaderboards.
- **Publish the rules.** If metrics change, workers need advance notice and clear thresholds
- **Build real redress.** Independent dispute channels beat in-app loops that lead nowhere.

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<sup>&</sup>lt;sup>11</sup> Bansal, V. (2024) 'Swiggy takes away health insurance when workers don't meet quotas', Rest of World, 12 April. Available at: <a href="https://restofworld.org/2024/swiggy-health-insurance-quotas/">https://restofworld.org/2024/swiggy-health-insurance-quotas/</a> (Accessed: 10 June 2025).

# Surveillance and 'safety' technology

Sci-fi film *Minority Report*, set in the year 2054, imagines a "pre-crime" police department that attempts to prevent offences before they happen. In 2021, the capital city of Uttar Pradesh, Lucknow, announced an "<u>emotion recognition project</u>" that would monitor women's faces for signs of distress to "prevent harassment in public spaces".<sup>12</sup>

By 2024, under India's Safe City programme, the North Indian city had spent ₹98 crore (\$11.4 million) on 1,200 AI cameras. In an article for The Plank magazine, technology policy researcher Disha Verma wrote that she felt deeply sceptical of AI-powered emotion recognition.<sup>13</sup>

"There is no one right way of expressing an emotion; it varies from person to person," she told me. "So, what can be distress for AI might be my resting bitch face. Or it just might be something completely unrelated: I'm just on a call with someone I'm agitated with. It could be anything."

Verma's scepticism was prescient: the emotion recognition project was scrapped, but replaced with a larger AI-surveillance infrastructure, owned and operated by Allied Digital Services, and trained on 45 different crime scenarios.

I asked her about the implications of a private company having unrestricted access to the collection of sensitive data, including people's faces.

"They're storing the facial data and they're using AI to identify. So, I asked this guy, 'You have so much facial data, what are you going to do with it?' I asked him about privacy concerns: 'Are you going to sell it? What are you going to do with the data?' He said, 'No, no, no: nothing of this sort. Right now, the only use for this facial data

<sup>&</sup>lt;sup>12</sup> Chandran, R. (2021) 'Privacy fears as Indian city readies facial recognition to spot harassed women', Reuters, 22 January. Available at: <a href="https://www.reuters.com/article/us-india-tech-women-trfn/privacy-fears-as-indian-city-readies-facial-recognition-to-spot-harassed-women-idUSKBN29R0X5/">https://www.reuters.com/article/us-india-tech-women-trfn/privacy-fears-as-indian-city-readies-facial-recognition-to-spot-harassed-women-idUSKBN29R0X5/</a> (Accessed: 27 May 2025).

<sup>&</sup>lt;sup>13</sup> Verma, D. (2024) 'The AI Eyes That Refuse To See', *The Plank*, 29 December. Available at: <a href="https://www.theplankmag.com/ai-safe-city">https://www.theplankmag.com/ai-safe-city</a> (Accessed: 27 May 2025).

is that we can train our AI on it. The more faces we scan the stronger our AI gets so that a few years from now, when it's foolproof, we can sell it to private clients."



Verma's reporting on Lucknow's Safe City programme gave her access to the Allied Digital Services and the smart camera control room. What perturbed her most was not the number of people involved in monitoring, or the need to manually flag verified suspicious activity to the police, but the absence of women.



"This entire conversation is about women's safety, but I didn't speak to a single woman in my investigations in Lucknow," she said. "All the people calling the shots on this project were men."

Karen Hao, AI reporter and author of *Empire of AI*, told me: "We should never accept exclusions, especially when it comes to accessing basic human rights and basic quality of life."

Hao trains journalists to carry out algorithmic accountability investigations through the Pulitzer Center's AI Spotlight series.

"The early exclusions are the canary in the coalmine for much more fundamental societal problems later on," she said.

### **Key lessons from this story**

- **Emotion recognition isn't a neutral sensor.** It encodes assumptions about how people "should" look and routinely misfires.
- **Function-creep is the default.** Failed "safety" pilots often pivot into surveillance rather than retreat.
- **Purpose limitation matters.** Vendors banking facial data to train models for future clients undermines consent.
- **Design with those affected.** A "women's safety" project that excludes women from decisions is mis-designed from the start.
- Treat early exclusions as red flags. Don't normalise "edge cases": they signal deeper design and governance failures.

# Bias, accountability & how to investigate

"We should have been doing this a decade ago," said Gabriel Geiger, investigative journalist at <u>Lighthouse Reports</u> who specialises in surveillance and algorithmic accountability reporting. "Algorithms are increasingly making life-changing decisions about people in social welfare systems, in criminal justice systems, in health systems, and journalists have been pretty late to catch up to this growing trend, despite the fact that it affects so many people."

While multinational institutions like the <u>World Bank</u> and <u>United Nations</u> have encouraged the rollout of more DPIs, Geiger said discussions around adoption tend to focus on benefits and not so much on risks.

In his own work <u>investigating AI in European welfare systems</u>, he uncovered issues like bias in predictive AI systems which make decisions about people.

Geiger believes citizens of democracies should be judged on their current behaviour, and not data from their past. "But even if you disregard that really fundamental question, which is I think where a lot of the issues arise from, there's so many places where you can go wrong when building these systems – starting with the training data itself."

If any stage of an offline system is biased, then an AI model built using that data would reflect those same biases. "Governments oftentimes aren't sitting on neutral data that would allow them to build something that isn't technically problematic."

This is where journalism comes in.

# A step-by-step guide to algorithmic accountability investigations

Geiger has developed a system for approaching these stories.

# Step 1: Press office query

He starts by sending a list of four or five basic questions to the press office of a government agency, sometimes inviting them to brag about the benefits of using a particular system.

# Step 2: Formulate RTI requests

Their response is used to formulate right to information requests. You can either ask for everything in one go, or split your query into smaller requests, depending on local RTI laws.

This includes asking for documents of assessments, contracts, and the companies involved.

# Step 3: Ask for technical docs

Using RTI, ask for a user manual, and the data protection impact assessment (if it's a country under a law like GDPR).

The technical request includes asking for the manual for data scientists, types of data used, documentation on the training data and evaluations of how the system is working.

# Step 4: Try to find the source code

The final step, which is often the hardest, is to get access to the source code. Use the paperwork you already have. If your RTIs yield documents like the Statement of Work/contract, check them for audit rights and IP ownership.

If the state owns or co-owns the code, ask for access to the version actually deployed (not a demo build). Ask for the source code and the evaluation artefacts (model cards, validation reports, error rates, impact assessments). If full code is refused, these often contain enough detail to build your case.

When they cite IP/security, narrow the ask: redacted code (rules/parameters), evaluation results, or a view-only inspection. Public-interest grounds make these asks reasonable.

A one-line request you can drop into an RTI/FOI: "Please provide the source code for the deployed version of [system], or, if that is refused, the evaluation documents (model card, validation report, error rates, impact assessment) and any redacted code showing rules or parameters used in production."

### Step 5: Team up with experts, lawyers, civil society groups

If all of that sounds like Greek, Geiger recommends working with academics to evaluate both your documents and code. Academics are often incentivised to help, as they need to publish new research.

He also said he always tries to find lawyers or civil society groups working with people affected by these systems. "That's always effective because a lawyer who's helping someone who's had issues has a legal right to request this person's file. That file can include some interesting stuff – like whether they may have been selected by an automated system."

# Step 6: Good old-fashioned source building needed

When all else fails (and even when it doesn't), Geiger said journalists doing these investigations need to cultivate sources with access.

"I think it's something that we like often don't do a lot of because we're focused on RTI or focused on data or focused on like this very 'humans who have suffered consequences' angle. But if you look at how people report on other really closed industries, like the surveillance industry, for example, that type of reporting is almost entirely source based. And yet in our space, in algorithmic accountability, you see very little reporting that relies on old-fashioned journalism source work."

# Reporter's toolkit: interrogating tech

Step	What to request	Why it matters
Press-office Qs	Purpose, scope, safeguards, claimed benefits	Establish official story to test
RTIs/FOIs	Contracts, DPIAs, user manuals, vendor names	Create a paper trail of accountability
Technical docs	Data schema, training/eval docs, error metrics	Reveal assumptions and failure modes
Source code	Rules/model implementation	Enable independent audit of the logic
Legal/civil partners	Client case files, pleadings	Trace real decisions and appeal paths
Source-building	Staff/contractor insights	Context missing from documents

# Law, politics, and rights

Apar Gupta is a lawyer and the founding director of the Internet Freedom Foundation, a civic tech organisation that files up to 400 RTIs a year and uses strategic litigation in its advocacy. He argues that India's digital public infrastructure (DPI) enjoys elite consensus with too little scrutiny.

"There seems to be a lack of critical examination," he said. "DPI may be a very large concept, but does it actually serve a practical use and fulfil its objectives in specific deployments?"

# Fundamental rights are not bargaining tools

We discussed the pushback against meaningful consent in digital systems, which is often framed as if people relying on the state for rations or wages don't care about consent. Gupta was unequivocal: "As a constitutional lawyer, I would say that one cannot give up their fundamental rights and they cannot be posed in a bargain with the state because there's an unequal power which is present there."

He continued: "A person who's poor or suffers from the constant insecurity of food rations will never be able to express their rights; they need to be guaranteed through safeguards which are there."

Ignoring consent is also dehumanising, he said: not only at enrolment but through ongoing surveillance and monitoring. He pointed to the MGNREGA attendance app requiring photographs at work sites: "A lot of them would not be having the best clothes. There are women who work there, so there would be unique concerns which come through in a patriarchal society: where those pictures would be used, how they are dressed, etc. And it's a dehumanising experience. I think so many people who say that the poor don't care about consent have never been poor."

### Beyond the technologist halo

Gupta argues for a political articulation of technology in India: "I would say that the solution for a lot of the problems which are being presented by technology [is] for it to become an issue in which more people engage in a way which determines voting choices, and political parties also engage on it on an electoral plane."

Rather than reacting to technology only as regulation, censorship or surveillance, parties need capacity and depth. "I am not saying that till we as a country have a

political understanding of technology nothing will happen [... but we] need to build capacity and engage with these issues much more deeply. Because quite candidly, if you look at political parties across the spectrum (except the left parties), [they] have embraced digitisation to such an extent where it is an unquestioned virtue."

He also notes the halo around technologists: "The minute you say oh that person is a technologist, there's an implicit value [that] this person is not corrupt, this person works hard, this person has set up things which are of value – of economic value – and they're doing a favour by being in public service."

# **Key lessons from Apar Gupta**

- **Consent is not a luxury.** Power imbalances mean rights must be safeguarded, not traded for access to welfare.
- **Design for dignity.** Seemingly minor design choices (e.g., mandatory photos) can expose women and vulnerable workers to harm.
- Make tech a political issue. Demand concrete positions, capacity and scrutiny from parties, beyond slogans about "Digital India".
- **Question the technologist halo.** Expertise is not a substitute for accountability or rights-based design.

# **Conclusion**

India's wager that technology can fix structural problems sits at the heart of many of the harms described here. Given the impact on people's lives when code substitutes for governance, the need for transparency is urgent.

This is not a problem confined to the subcontinent: India's ambition to export this model to the rest of the world calls for even higher standards of accountability.

Too often these systems are built without consulting the people they are meant to serve. Employment guarantee schemes like MGNREGA have powerful provisions for social auditing built into them, but those provisions are not being utilised. The result is familiar: unfair exclusions, denied rations, delayed wages; and the more insidious harms of surveillance, data misuse, and the shift of power from accountable public entities to opaque private companies.

Journalism can be a powerful check. The reporters profiled in this project show what works: speaking with communities; filing sustained RTIs to follow procurement, requesting technical documentation, and examining (or demanding to examine) source code; collaborating across disciplines; crowdsourcing and building our own datasets. It is telling that the stories highlighted were produced by independent journalists supported by grants rather than by mainstream news outlets.

Language and law matter, too. Groups like LibTech India insist on "rightsholders", not "beneficiaries". And recognising gig workers as workers – in law and in practice – is a prerequisite to checking the power of apps that function as de facto managers.

This project argues for collaboration across journalism, civil society, technologists, lawyers and even politicians – not just to audit systems after the fact, but to shape how they are conceived. The baseline is clear: consult before rollout, run process audits and real pilots, keep an analogue fallback, publish error and appeal rates, impose purpose limitation on data, enable independent audit (including of code), and provide time-bound redress.

Whether the gig economy or the public sector, we need to advocate for systems centred on the rights of the people they serve.

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