



Studio/Jan.52,A31a.General Election Scenes in Delhi (Jan. 1952)..The Election Head Office of the K.M.P.P. Party in New Delhi.  
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## Clouding Citizenship: The Digital State

*The last two decades have seen a steady transformation of how welfare delivery has happened in India creating a "Digital State". Notwithstanding economic efficiency gains and ease of "targeting", this shift has purportedly risked the subordination of citizenship to administrative convenience. By transferring accountability from state to citizens, such a digital state often obscures the human costs and complexities involved in accessing rights. Governance strategies increasingly prioritise scale over accuracy and deprioritise consent. A participatory approach and a legal framework for digital accountability is likely to make welfare delivery more inclusive and less prone to potential misrepresentation of individuals' needs and realities.*

# Clouding Citizenship: The Digital State

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A person born in rural India today encounters the state first through a digital identifier. Her birth is recorded, and an Aadhaar number is issued – most likely a Bal Aadhaar. A student identity card follows. Scholarships are delivered through Aadhaar. A health identity number is generated. Land and credit are further mapped through additional registries. Old-age pensions for rural individuals are based on demographic details as recorded in Aadhaar. From cradle to old age, recognition and access to services and welfare rely on digital identities and database systems (see Table 18.1 for a partial list of digital identities in welfare). In doing so, digital infrastructure has become the curator, arbitrator and primary interpreter of legitimacy in people’s lives (Yahaya and Nyamwire 2024).

A recurrent theme across multiple chapters in this handbook is that access to welfare is increasingly mediated through digital interfaces, resulting in what we call a ‘digital state’. Given the scale of operationalising a welfare state in India, the promises of efficiency, cost savings and seamless delivery offered by digitisation

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are noteworthy and the emergence of a digital state is often treated as inevitable (Government of India, Ministry of Information and Broadcasting 2024). However, experience and research suggest that the process is not always seamless, and calculations of efficiency seldom account for the human costs borne by citizens navigating these systems. The steady entrenchment of such a digital state reflects a broader shift towards what is often described as the ‘datafication’ of individuals: the rendering of social life into digital data that can be stored, analysed and acted upon at each stage of life (Mayer-Schönberger and Cukier 2013). We extend this argument to suggest that the expansion of datafication is reshaping not only administrative processes but also the architecture of citizenship.

## 18.1 Background and context

Identification, registration and classification of people are as old as the conception of the state itself. In India, as a constitutional democracy, these practices have been shaped by a commitment to social justice. Welfare policies are designed to address entrenched inequalities of caste, class and gender and to translate constitutional ideals into practice. However, the outcomes of these policies have depended critically on the institutions through which they are implemented. Institutions, as Douglass North argues, are created to establish order and reduce uncertainty in exchange (North 1991). These institutions extend beyond formal rules to include informal constraints such as customs, norms and social hierarchies.

It is within this complex architecture of institutions, power structures and social hierarchies that most welfare policies operate. Yet contemporary policymaking has increasingly come to be governed by an ‘economic style of reasoning’, in which questions of power, hierarchy, justice and equality are recast as problems of efficiency, optimisation and resource allocation (Popp-Berman 2022). Within this framework, the capacity of welfare policies to transform unequal social relations becomes secondary.

Targeting the delivery of welfare emerged as a central tool in this pursuit of efficiency. However, it is inherently prone to two well-known types of errors: exclusion and inclusion. Exclusion errors occur when eligible individuals are denied rights and entitlements, often resulting in severe deprivation. Inclusion errors, on the other hand, involve the wrongful allocation of entitlements to ineligible individuals.

While both have long been recognised as administrative challenges, the 1990s marked a shift in their interpretation. International development agencies increasingly prioritised inclusion errors as indicators of corruption and poor governance, tying development assistance to demonstrations of ‘good governance’. Consequently, technological solutions appeared attractive, particularly because of their promise to bypass intermediaries and tighten ‘beneficiary’ identification.

These approaches aligned with broader neoliberal shifts associated with structural adjustment. At the same time, rapid advances in information and communication technologies (ICTs) made large-scale digital databases administratively feasible. As governance became increasingly preoccupied with minimising inclusion errors, advances in ICTs proved too tempting for the bureaucracy to ignore.

Electronic governance, or e-governance, became the new buzzword in the corridors of power, and commitment to development became synonymous with support for digital technologies in governance. It was within this technocratic milieu that the Indian state began to acquire a digital facelift. Mapping individuals numerically became vital for this project, translating the ‘thick’ social identities of persons into ‘thin’ standardised data categories (Bowker and Star 1999). The idea of a unique identification system gained traction, culminating in the launch of Aadhaar in 2009. Although early discussions around a unique identification number were tied to national security concerns, the convergence of structural adjustment and technocratic enthusiasm in welfare delivery reframed it as a necessary instrument of good governance (Ramakumar 2010).

Underscoring the argument that Aadhaar would reduce corruption through efficient targeting, its architect Nandan Nilekani said in his acceptance speech at the 22nd Nikkei Asia Prize in 2017: *‘As India built a welfare state with pensions, employment guarantees, scholarships, etc., it was deploying a large part of its budget to such social benefits. However, the lack of a proper ID system meant that in every welfare scheme, there were lots of ghost and duplicate beneficiaries.’*<sup>1</sup>

Corruption and leakage were framed primarily as technical problems requiring technological solutions in this narrative. Aadhaar thus became the foundation for a broader digital transformation of the Indian state, layered atop pre-existing hierarchies of power and offering a ‘new approach to governing Indian citizens through their data’ (Singh 2020).

## 18.2 Five dimensions of datafication

Drawing on the preceding discussion of welfare delivery in India, we posit an expanded understanding of datafication in the digital state along five dimensions:

1. **The subordination of persons to digital identifiers:** This occurs when access to a scheme becomes conditional on the accuracy of a person’s digital identifier instead of the person’s physical presence.
2. **Selective reliance on dashboard metrics to construct narratives of efficiency and good governance, or the Rashomon Effect of Data:**<sup>2</sup> Administrative authorities often assume that dashboard metrics reflect ground realities

<sup>1</sup> Quoted in Singh (2020).

<sup>2</sup> The Rashomon effect refers to how the same event can be perceived, experienced and remembered differently by different people. The term derives from Akira Kurosawa’s Japanese film *Rashomon*, in which multiple characters describe the same crime in conflicting ways. The central premise is that truth is not necessarily singular but may instead exist through multiple perspectives.

without examining how those numbers are produced. However, ground realities may present an altogether different version of truth. This results in what we call the ‘Rashomon Effect of Data’.

3. **Shifting the burden of accountability from the State to citizens:** While the State has pushed for digitisation without consultation with rights holders and other stakeholders, the burden of correcting errors and ensuring documentary compliance is transferred almost entirely to citizens.
4. **Governance regimes that deprioritise consent:** The incorporation of rights holders into digital platforms is rarely based on informed consent. In practice, citizens are often given little choice but to comply with administrative diktats or risk losing access to their rights and entitlements.
5. **The growing primacy of scale over accuracy:** In the digital state, officials are given strict targets to onboard rights and entitlement holders onto digital platforms. As administrative infrastructure has failed to keep pace with digital infrastructure, the process is frequently error-prone, leading to new forms of exclusions.

These dimensions are not mutually exclusive; rather, they overlap and often reinforce one another.

### 18.2.1 Subordination of persons to digital identifiers

Digital identifiers have begun to assume a significance greater than the persons they are meant to represent, as illustrated by two instances at opposite ends of the age spectrum. Consider the case of the Automated Permanent Academic Account Registry (APAAR) identifier in education. Generating an APAAR identifier depends on the seamless integration of three distinct data systems: handwritten school registers, the Unified District Information System for Education Plus (UDISE+) portal and Aadhaar. Minor inconsistencies – such as improvised birth dates, spelling variations and typographical errors, all of which are common in rural India – can cascade across systems, making it difficult, if not impossible, to generate the identifier.

Although the government claimed that the APAAR identifier is optional, the Central Board of Secondary Education (CBSE) recently made it mandatory for Class 10 and Class 12 board examinations. Such conditionalities have significant implications for children from vulnerable communities, including those from rural areas, migrant populations and low-income households, with some students reportedly being prevented from registering for board examinations (Bose 2025). Invoking Article 21 (Right to Life), the Delhi High Court held in *Master Prabhnoor Singh Virdi v. The Indian School* (2023) that every child has a right to take board examinations.<sup>3</sup>

<sup>3</sup> Master Prabhnoor Singh Virdi (Minor Son) through Father Karamjeet Singh Virdi v. The Indian School & Anr. 2023. W.P.(C) 584/2023, Delhi High Court, decided 17 January 2023. <https://indiankanoon.org/doc/196611322/>

Prima facie, the CBSE's decision to mandate APAAR identification appears to contravene this order. More broadly, the APAAR system illustrates how, in the digital state, administrative recognition increasingly depends not on lived reality – in this case, the existence of genuine students – but on coherence and consistency across digital systems, or what can be stabilised across databases. In effect, the digital identifier begins to carry more weight than the person it is meant to represent.

At the other end of the age spectrum is Lalitha, an octogenarian retired school teacher from Kolkata living in Bangalore and the mother of one of the authors of this chapter. To continue receiving her monthly pension, she must submit an annual life certificate proving that she is alive. Before 2015, this certificate could be obtained directly from the bank by visiting the branch. In late 2014, however, the government introduced Jeevan Pramaan, a digital life certificate system requiring pensioners' demographic details and biometric information to be uploaded to the Central Identities Data Repository and verified through biometric authentication. Authentication is deemed successful when fingerprints match records in the database. If repeated attempts fail, iris scans are used; failing that, the pensioner must approach a state office for manual verification.

A government press release on Jeevan Pramaan stated: *'The proposed digital certification will do away with the requirement of a pensioner having to submit a physical life certificate in November each year in order to ensure continuity of pension being credited into his account'* (Government of India, Prime Minister's Office 2014). A few years after digital life certificates became mandatory, Lalitha's biometric authentication repeatedly failed at Canara Bank. She was directed to several digital seva centres, where her biometrics failed again, before finally obtaining a life certificate at the Employees' Provident Fund Organisation office. The entire ordeal took a full day, cost her more than ₹700 and involved climbing several flights of stairs – a difficult task for an octogenarian with arthritis. In exasperation, she asked the authorities; *'When I am here in flesh and blood, why is it that you fail to trust me but rely on my fingerprints to prove who I am? My fingerprints are not my identity. Is my presence not proof that I am alive?'*

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The central thrust of this case is the steady shift from the authentic to authenticating: a technocratic reconfiguration of citizens with rights into 'datafied beneficiaries' subordinate to a digital state (Narayanan and Sinha 2025). Lalitha's sustenance did not depend on her pension, and she possessed the advantages of English-language fluency and social agency. Yet such challenges are magnified in the case

of individuals without formal literacy in rural settings (Yadav 2026). For lakhs of rural women pensioners, pensions are not supplementary income but are their only source of sustenance. Lalitha's experience therefore underscores how the digital state can cut across class lines in shaping people's encounters with the state. As Virginia Eubanks observes in *Automating Inequality*: 'Only the poor were put under the diagnostic microscope of scientific clarity. Today, we all live among the digital traps we have laid for the destitute' (Eubanks 2018).

### 18.2.2 **Pervasive reliance on dashboard metrics or the Rashomon Effect of Data**

The second aspect of the digital state is its pervasive reliance on metrics collected through data dashboards to construct narratives of good governance that are often at odds with ground realities. Equally important is the selective use of indicators and dashboards that shapes what counts as evidence. For many administrators, dashboards appear to be a single source of truth, while reality presents a Rashomon Effect.

We present this through two examples: one from the Unique Identification Authority of India (UIDAI) and another from the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

#### **Unique Identification Authority of India**

Premni Kunwar, a single woman, was a resident of Korta village in Garhwa, Jharkhand. She used to receive a monthly pension in her Aadhaar-linked bank account. However, from October 2017 onwards, she stopped receiving it because her pension had been diverted to another account. Around the same time, access to food grains at ration shops was made contingent on Aadhaar-based biometric authentication with the ration dealer. By the end of November, Kunwar had also run out of food grains at home. She approached her ration dealer to obtain rations. But the dealer was out of stock and suggested that she complete her Aadhaar-based biometric authentication so that ration could be disbursed on priority once fresh stock arrived in December. It was common practice for individuals to make multiple visits: several for biometric authentication and another for collecting rations. Kunwar completed biometric authentication in November 2017, but before she could receive her rations, she died on 1 December 2017.

In its fact-finding report, the Right to Food Campaign concluded that the diversion of pensions and denial of rations had led to starvation (Scroll Staff 2017). In contrast, the UIDAI's report and the official narrative arrived at a different conclusion. Relying solely on dashboard data, the UIDAI noted that the timestamp of Kunwar's biometric authentication had been recorded at the end of November and that pensions had indeed been deposited – albeit into a different account – and

therefore ruled out starvation as the cause of death. The incident thus produced two competing versions of truth: one derived from dashboard metrics and another from ground investigation.

A Comptroller and Auditor General (CAG) report on the UIDAI raised serious concerns about the veracity of its dashboard metrics (CAG 2021). First, the CAG noted that nearly three-fourths of all biometric updates were voluntary updates by residents ‘for faulty biometrics after payment of charges’. Questioning the very purpose of the UIDAI, the CAG observed that this ‘huge volume of voluntary updates indicated that the quality of data captured to issue initial Aadhaar was not good enough to establish uniqueness of identity’. Second, the CAG flagged that the UIDAI did not have a system to ‘analyse the factors leading to authentication errors’. As a result, while the total number of biometric authentications was reported, the number of attempts remained unknown. Third, in breach of its own regulations, the UIDAI provided authentication services free of charge to banks, mobile operators and other agencies.

### **Mahatma Gandhi National Rural Employment Guarantee Act**

Management Information Systems have become the de facto implementation engine for most welfare programmes in India. Numerous cash transfer programmes have been grouped under the umbrella of Direct Benefit Transfer (DBT). A total of 324 schemes across 56 ministries are currently listed under various DBT programmes, with ‘estimated gains’ amounting to ₹4,31,138.05 crore (Government of India n.d.). Estimated savings under the MGNREGA between April 2023 and March 2024 are reported to be ₹15,524.84 crore, while cumulative savings up to March 2024 are estimated at ₹58,058.98 crore. The stated reason for these savings is the ‘deletion of 1.26 crore fake and duplicate job cards’. Since each job card may include multiple workers, the number of deleted workers is likely to be significantly higher. On the surface, the dashboard presented this as an administrative achievement; closer scrutiny, however, suggested otherwise.

Until recently, the Aadhaar-based Payment System (ABPS) for wage payments under MGNREGA existed as an option alongside the traditional account-based payment system. However, in 2023, the Union government made the ABPS mandatory. For this system to function, at least three conditions had to be met: a worker’s job card had to be linked to her Aadhaar number; her bank account had to be linked to Aadhaar; and the bank branch maintaining her account had to be digitally mapped with the National Payments Corporation of India. In practice, this transition was implemented hastily, and officials were given no clear protocols for dealing with spelling mismatches across records. Consequently, when demographic details differed across documents, officials resorted to deleting workers from the MGNREGA database. The Union government, for its part, claimed that these were

‘fake’ or ‘duplicate’ workers and described the deletions as a ‘routine exercise’ (Government of India, Ministry of Rural Development 2025). It also maintained that no workers had been deleted because of ABPS (Government of India, Ministry of Rural Development 2023). However, several ground reports suggested otherwise.

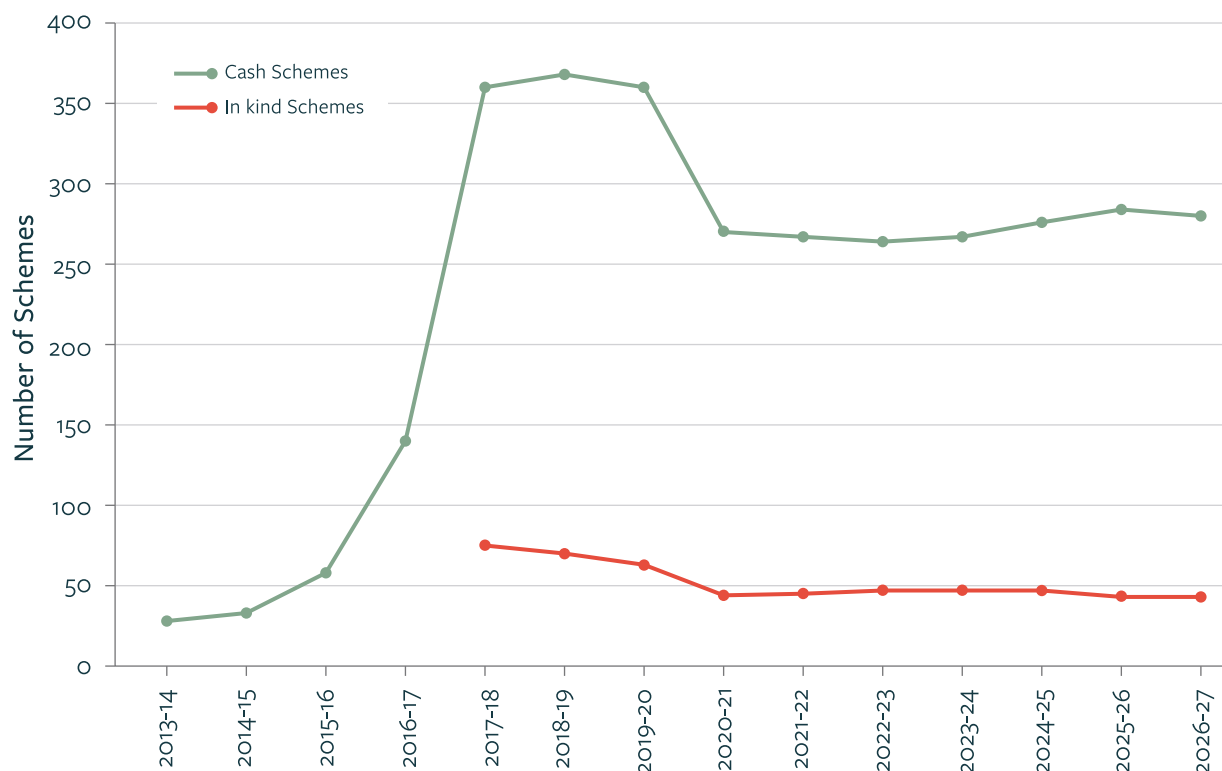
Even a difference of a single letter between documents resulted in worker deletions (Nair 2023). Within one year of ABPS becoming mandatory, more than five crore workers were deleted, reflecting a 247 per cent increase in worker deletions (Buddha and Tamang 2023). Further, in ongoing work by Nanditha Ajith, Chakradhar Buddha and Rajendran Narayanan, the authors statistically estimate that nearly two-thirds of all deleted workers nationwide were removed on the grounds of being ‘unwilling to work’. Under MGNREGA, such grounds cannot legally justify worker deletions, and the very presence of this category in the information system raises serious concerns. By combining large-scale data analysis with right to information (RTI) responses and immersive fieldwork, researchers have debunked the government’s efficiency claims regarding ABPS, which were based largely on dashboard metrics (Bhaskar, Sarkar and Singh 2024; Bheemarasetti et al. 2025).

These examples illustrate how the politics of data play out in the digital state. The ruling political establishment repeatedly cites savings figures generated through dashboards, even though little transparency exists regarding the methodologies used to produce them. As these claims enter popular discourse, they begin to function as a single source of truth, while the erosion of legal rights is relegated to a footnote.

### **18.2.3 Shifting accountability from state to citizens**

The third – and perhaps one of the most insidious – aspects of datafication is the shifting of the burden of accountability from the state to citizens. Building on social movements concerning socio-economic rights and aided by an ‘activist judiciary’, several rights-based legislations concerning information, education, employment and food, among others, were enacted between 2005 and 2013. In 2014, this trajectory underwent a significant shift when the National Democratic Alliance came to power on the promise of *vikas* (development).

The blueprint for this new phase was outlined in the third chapter of the Economic Survey 2014–15. Modestly titled ‘Wiping every tear from every eye’, it proposed the JAM trinity: Jan-Dhan, Aadhaar and Mobile. As Drèze (2015) noted, its proponents envisioned rolling ‘all subsidies into a single lump-sum cash transfer to households’ (George and Subramanian 2015). That vision has, to a large extent, materialised, as indicated in Figure 18.1, which shows the emergence of a new welfare regime in which direct cash transfers to bank accounts have become the new norm.

**Figure 18.1: Union government schemes across ministries over time**

Sources and notes: Direct Benefit Transfer website, Government of India.

Several of these cash transfer schemes introduced in recent years have prominently featured the Prime Minister's name and/or image. This has, in turn, laid the groundwork for a seismic shift in the role of the state in welfare provision. Increasingly, the prime minister, rather than merely serving as the head of a democratically elected government, is portrayed as a benefactor, while citizens possessing constitutional rights are reconfigured as *labharthis* or beneficiaries. As Yamini Aiyar argues, this has involved the 'careful positioning of welfare as the individualistic pursuit of a duty-bound citizen rather than state responsibility toward rights-bearing citizens'. The appeal of DBT lies partly in the direct emotional connection they create between the 'benefactor' and the 'beneficiary' through a digital channel (Aiyar 2023).

Earlier modes of welfare delivery involved multiple intermediaries who acted as the citizens' interface with the state. Responsiveness, however uneven, at least had a visible human face. DBTs appear to have rendered this responsiveness invisible by outsourcing accountability to opaque systems — ironically, without significantly reducing the number of intermediaries involved (Vivek et al. 2018). Access to welfare schemes is now, in many ways, contingent on Aadhaar-based system requirements. Consider maternity entitlements under the Pradhan Mantri Matru Vandana Yojana (PMMVY), which, as argued in the chapter on maternity entitlements in this Handbook, is itself a diluted version of the entitlements guaranteed under the National Food Security Act. A successful transfer depends on Aadhaar

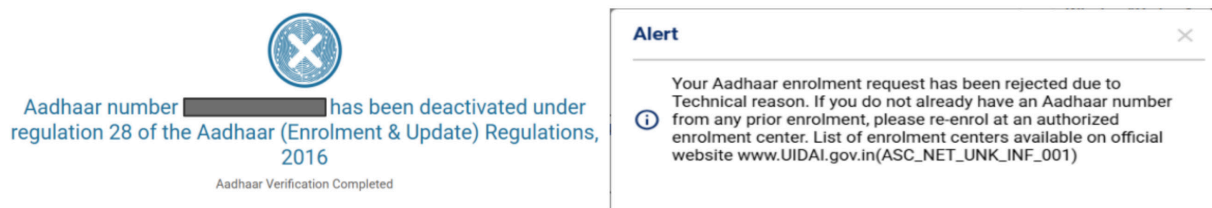
authentication, correct bank linkage and accurate data entry in online portals. When any of these processes fail, the burden of correction falls entirely on the claimant. This burden is especially pronounced in rural contexts and our observations here draw on immersive fieldwork on rural social policies conducted by [LibTech India](#).<sup>4</sup>

Among newly married women, many do not independently control their documents or mobile-linked bank accounts. Correcting errors such as name mismatches requires visiting Aadhaar enrolment or update centres, which are often located far from villages, involving multiple visits and biometric re-verification. For women in late pregnancy, the very group PMMVY seeks to support, travelling long distances or standing in queues can be especially difficult. Drawing on his experience in Raichur district in Karnataka and ASR district in Andhra Pradesh, Kuruva Venkatesh of LibTech India observes that officials often fail to explain the technical reasons for rejection, leaving many women uncertain whether the issue lies in Aadhaar linkage, portal entry or account status. As a result, many depend on intermediaries to navigate this digital maze, undermining the stated purpose of DBTs.

Mechanisms for correcting details in Aadhaar often involve disproportionate requirements, such as obtaining gazette notifications, which can pose major hurdles for rural citizens. Although local digital access points exist in some villages, blocks and districts to rectify DBT-related errors, citizens frequently have to rely on centralised Aadhaar Seva Kendras (ASKs). Ongoing ethnographic research on Aadhaar enrolment and update centres by Devahuti Sarkar in Jharkhand and B.D.S. Kishore in Andhra Pradesh, both associated with LibTech India, highlights several challenges. Many local centres are either closed or not authorised to process all applications, while inadequate operator training often compels individuals to travel from villages to city-based centres. Even when applications are processed locally, they face disproportionately high rejection rates. Weak mechanisms for tracking correction requests further render grievance redressal ineffective. As a result, applicants are pushed into making repeated visits to already overcrowded ASK offices – a situation further exacerbated by vague technical messages (Figure 18.2) that even officials struggle to interpret and routinely dismiss as ‘technical errors in the backend process’.

Curiously enough, this tendency to recast governance failures as ‘technical errors’ is not confined to Aadhaar. It also characterises deeply contested and visibly political domains such as land ownership and control. For instance, a farmer in Rangareddy district in Telangana discovered that his digital land information had disappeared overnight from [Dharani](#), the state’s digital land infrastructure. When he visited the revenue office, he found that he was merely one among hundreds of farmers whose names had been erased from the state’s digital land-records platform to facilitate the establishment of an industrial park. Officials dismissed this too

<sup>4</sup> See [LibTech India](#), ‘Who we are’.

**Figure 18.2: Vague technical messages for Aadhaar corrections**

Sources and notes: By Devahuti Sarkar, LibTech India

as ‘a technical error that occurred in the backend process’. The matter eventually reached the courts ([Ramakumar and Ramesh 2023](#)). Such recasting of systemic failures as mere technical errors weakens the grounds on which citizens can hold the state accountable, narrows avenues for redress and transfers the burden of correction onto citizens themselves.

#### 18.2.4 Deprioritising consent

The fourth dimension involves governance operating through regimes that deprioritise consent, as data about citizens is increasingly observed rather than actively provided or volunteered. In his work, *Seeing Like a State*, James Scott argues that evolving technologies have aided in the creation of the ‘high modernist’ state, whose goal is to make people ‘legible’ to the state ([Scott 1998](#)). Scott’s idea of legibility refers to the fundamental tendency of modern states to render society simplified, readable and administratively intelligible so that it can be monitored, administered, taxed and controlled. States seek to transform complex social realities into standardised categories that can be seen, measured and governed.

The digital state differs in that it operates through the power to make things ‘visible’ rather than merely ‘legible’. While legibility increases governability in Scott’s formulation, visibility enables the power to ‘influence and intervene’. Unlike the data that provide legibility, these newer forms of data are often of unknown reliability and tend to reflect not populations but ‘users and markets’ ([Taylor and Broeders 2015](#)). In contemporary regimes of datafication, data are derived as by-products of technology use rather than collected through surveys or census methods.

Michel Foucault, in his seminal work on governmentality, shows how the modern state derives power not simply from commanding people but from producing knowledge about them and shaping the conditions in which they live ([Foucault 1991, 98–102](#)). These conditions are often altered through tactics and technologies that people themselves may neither fully perceive nor understand, thereby creating new forms of subjectivity. As Foucault writes:

*‘The population now represents more the end of government than the power of the sovereign; the population is the subject of needs and aspirations, but it is also the object in the hands of the government, aware, vis-à-vis the government, of what it wants, but ignorant of what is being done to it (emphasis added)’*  
(Foucault 1991, 100)

Thus, in the current trend of datafication, data are continuously generated and processed through an ensemble of institutions, procedures, analyses, calculations and tactics that enable the exercise of a very specific form of power. This power operates through the production of continuous and observable information about populations, making such knowledge central to governance. Additionally, these data exist as part of larger ‘data assemblages’ (Kitchin 2014); wider systems comprising databases, software, legal rules, bureaucratic procedures, financial investments, expert knowledge, and political decisions. A dataset becomes meaningful only because it is embedded within these wider systems. What gets counted, how people are classified, who can access information and how it is used are all shaped by institutional priorities and state power.

We illustrate this with two examples. On 28 November 2025, India’s telecom ministry privately asked smartphone manufacturers to preload all new devices with the Sanchar Saathi app, directing that it remain ‘visible, functional and enabled’ upon first setup. Although the app was presented as a tool for blocking and tracking lost or stolen mobile phones using the device’s International Mobile Equipment Identity (IMEI) number, it was also permitted to make and manage phone calls, send messages, access call and message logs, access files and photographs and use the phone camera. Following widespread criticism from civil society organisations and opposition parties, the government withdrew the directive (Kalra and Vengattil 2025).

Similar concerns emerged around platforms such as the CoWIN (the COVID-19 vaccination portal). This shift from episodic data collection to continuous observation alters the terms of engagement between citizens and the state, producing a form of ‘digital behaviourism’ in which individuals become knowable through continuous data capture and algorithmic interpretation rather than explicit participation (Issar and Aneesh 2021). Such digital behaviourism also expands the scope for ambient, embedded and routine surveillance, blurring the boundary between service provision and a panoptic state and further tilting the already unequal balance between citizens and the state. In this rapidly evolving reconfiguration of citizen-state relations, the Digital Personal Data Protection (DPDP) Act, 2023 raises additional concerns. Rule 23 of the DPDP Act grants the Union government unconditional powers to demand any information about individuals from digital platforms and telecom companies without the consent of those concerned.

In this context, the increasing deployment of facial recognition technologies – whether in welfare systems such as *anganwadi* centres or in policing – raises intersecting concerns regarding automated exclusions, manufactured consent, violations of privacy and the shifting of accountability from the state to citizens.

### 18.2.5 Scale over accuracy

The final dimension of the digital state and datafication concerns the growing primacy accorded to scale over accuracy. The emphasis on large volumes of data enables a discourse that privileges reach and coverage while often sidelining concerns about data quality and ground-level realities. A useful example is the widely cited case of ration cards cancelled in Jharkhand because of ‘failures’ in linking them to Aadhaar, even though they belonged to genuine households. While the government claimed that most of these cards belonged to ‘ghost beneficiaries’, a J-PAL study by Muralidharan, Niehaus and Sukhtankar (2020) found that 88 per cent of the cancelled ration cards belonged to genuine households. In this instance, what mattered more was the ability to claim savings and efficiency on the grounds of scale, irrespective of the accuracy of the process.

## 18.3 Discussion

The five interrelated and overlapping aspects of the digital state and the datafied citizens outlined above represent a new normal – one with significant implications for the growing centralised institutional capacity of the state to move contestable socio-political issues into a space of reduced negotiation. Datafication has become symptomatic of a governance assemblage in which the ‘space for immediate negotiability has been reduced in algorithmically managed input-output systems’, provoking deeper questions about how citizens engage with a digital state and what forms of mediation, contestation and collective action remain possible (Issar and Aneesh 2021).

The idea of a digital state is premised, among other things, on the assumption that digitally linking citizens to the state is sufficient to reduce corruption and leakages. While this may hold true in some cases, it overlooks the pervasive ways in which corruption actually operates in welfare systems. In practice, rights holders are usually not the principal agents of corruption but are instead co-opted by middlemen and local elites. Across welfare programmes, from children in Integrated Child Development Services (ICDS) scheme to old-age pensioners, digital technologies have increasingly been used to authenticate, monitor and verify rights holders rather than intermediaries. Consequently, such systems often fail to address the very problems they were intended to solve. As digital authentication has itself become a verb in rural India — reflected in everyday expressions such as ‘*eKYC kar diya*’ (completed the eKYC) — inadequate attention has been paid to how

these technologies have spawned new forms of corruption and, in some instances, resulted in violations of rights, including access to foodgrains through the Public Distribution System and in attendance at worksites (Panda and Dash 2025; Buddha and Kuruva 2026). By triangulating programme data from the management information system with nationally representative government surveys, researchers have found that corruption and leakage in MGNREGA have not, in fact, reduced over time (Drèze and Somanchi 2025).

Within this reconfigured architecture of the digital state, the centralised state has effectively granted itself quasi-omniscient powers to determine who can be recognised within state systems and on what terms. If metrics shape narratives of performance and efficiency, and continuous observation expands administrative reach, then digital identifiers provide the basic infrastructure through which individuals are rendered visible, reshaping both the contours and meaning of citizenship. Citizenship rights, following T.H. Marshall's foundational typology, encompass civil rights (which enable personal freedom), political rights (which enable participation in the exercise of power) and social rights (which guarantee economic welfare and human well-being) (Marshall 1950). It is these rights and the means through which citizens claim them that constitute the practice of active citizenship.

Claim-making is an essential element of active citizenship. It involves ordinary practices – such as filing an application, attending a meeting or approaching a local official – through which social rights are activated and citizenship is practised (Kruks-Wisner 2018). Crucially, these are also the practices through which relations between citizens and the state are negotiated, contested and realised. Against this backdrop, datafication is reshaping everyday practices of claim-making by altering both the channels through which citizens access the state and the information available to them about it. Claims are increasingly routed through digital systems where errors are often hidden within opaque backend processes, while redress requires navigating multiple portals, operators and offices.

Worryingly, the shifting burden of accountability from the state to citizens has now entered the very domain of establishing citizenship itself through the Special Intensive Revision (SIR) exercise. Drawing from the technocratic playbook refined within the welfare architecture of the digital state, the ongoing revision of electoral rolls by the Election Commission of India reflects a similar logic (Buddha and Narayanan 2025). In both contexts, individuals are repeatedly required to verify, authenticate and prove their eligibility, transforming entitlements into claims that must be continuously performed and defended within a datafied regime. Similarly, contentious legislation such as the DPDP Act legalises opacity and erodes structures intended to hold the state accountable (Bharadwaj and Johri 2026).

Over time, these institutional shifts are likely to – and in many ways already do – reshape how citizens engage with the state. This is because the institutional architecture of the datafied regime, spanning welfare systems, legal frameworks and regulatory bodies, constitutes the everyday terrain through which state–citizen relations are experienced and understood. Each time a citizen struggles to claim her rights, she learns both what claims are possible and whether speaking up can meaningfully alter her circumstances or those of others. The challenge, therefore, is not simply to make digital systems more efficient but to ensure that they remain aligned with democratic accountability and attentive to the power structures within which they operate.

As the former techno-utopian Kentaro Toyama forcefully argues in his critique of technological solutionism in social policy:

*‘New vaccines are good, but not while health-care systems go unfunded. Educational technology might be helpful, but not if good teachers and institutional support are lacking. Elections are great, but not if social norms and government institutions don’t support democracy. Technocratic means might be a part of the solution, but with so much attention on them, who’s working on the other parts?’* (Toyama 2015).

**Table 18.1: Partial list of digital identifiers in welfare**

Stage of life/purpose	Digital identifier	Intended purpose
Birth/early childhood	Aadhaar (Unique Identification Number) (Bal Aadhaar for children aged 0–5 years)	Establish a unique resident identity from early life onwards
Health (lifelong)	ABHA ID (Ayushman Bharat Health Account)	Create a unified digital health identity
Nutrition and maternity (Integrated Child Development Services (ICDS) Scheme)	Poshan Tracker ID (Poshan Tracker System ID)	Enable tracking of nutrition services, growth monitoring and anganwadi benefits
School education	APAAR ID (Automated Permanent Academic Account Registry)	Create a lifelong academic identity
Scholarships (claim-based)	NSP OTR ID (National Scholarship Portal One-Time Registration ID)	Track and process scholarship claims

**Table 18.1 (contd.): Partial list of digital identifiers in welfare**

Stage of life/purpose	Digital identifier	Intended purpose
Rural employment	MGNREGA Job Card ID (Mahatma Gandhi National Rural Employment Guarantee Act job card number)	Establish worker identity for employment and wage payments
Unorganised labour	e-Shram UAN (e-Shram Universal Account Number)	Create a national and portable worker identity
Construction workers	BOCW Worker ID (Building and Other Construction Workers Worker ID)	Identify construction workers for welfare benefits
Agriculture	Farmer ID (AgriStack Farmer Registry ID)	Establish verified farmer identities for agricultural services
Land/property	ULPIN (Unique Land Parcel Identification Number)	Provide a unique digital identity for land parcels to enable integrated land governance
Farmer income support	PM-KISAN ID (Pradhan Mantri Kisan Samman Nidhi ID)	Identify farmers for income-support transfers
Food security	Digitised Ration Card (National Food Security Act ration card number)	Identify eligible households for Public Distribution System entitlements
Insurance (life/accident)	PMJJBY / PMSBY policy number (Pradhan Mantri Jeevan Jyoti Bima Yojana / Pradhan Mantri Suraksha Bima Yojana policy number)	Identify insured persons for claims processing
Maternity cash transfer	PMMVY ID (Pradhan Mantri Matru Vandana Yojana ID)	Identify women eligible for maternity benefits
Old age/disability/ widowhood	Pension Scheme Number (National Social Assistance Programme / state pension number)	Identify pension recipients for transfers
Pension continuation	Jeevan Pramaan ID (Digital Life Certificate for Pensioners)	Authenticate the life status of pensioners

Sources and notes: Collated by the authors

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