

Al and Data Governance in the Social Sector

A Resource Guide



CONTACT US:



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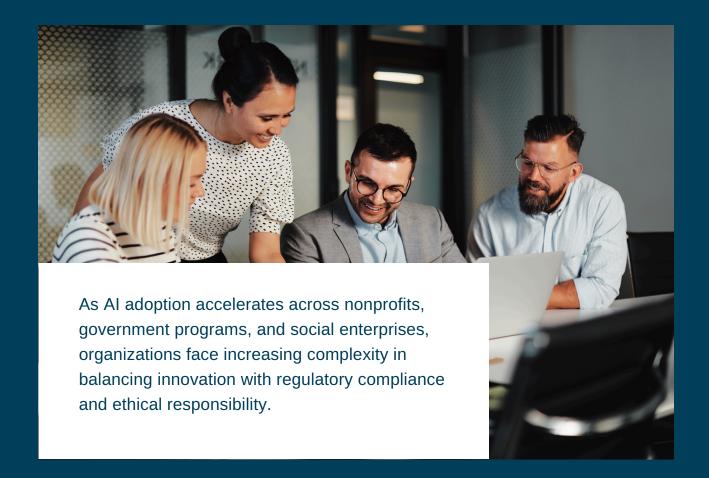


aviral@nusocia.com

Disclaimer: Designed for social sector leaders, program managers, data officers, Al developers, legal advisors, and community advocates seeking to navigate regulations, protect privacy, and drive equitable social impact.



Introduction



India's social sector increasingly leverages AI for healthcare delivery, education access, financial inclusion, and disaster response. However, these applications often involve sensitive personal data, automated decision-making affecting basic services, and populations with limited digital literacy. This context demands governance frameworks that go beyond standard compliance, embedding ethical considerations and community participation throughout the AI lifecycle.

This guide serves program managers implementing AI-driven solutions, data protection officers ensuring compliance, AI developers building socially impactful technology, legal advisors navigating regulatory requirements, and community advocates safeguarding beneficiary rights. Whether you're launching your first AI pilot or scaling existing initiatives, this resource provides the structured framework needed to operate responsibly within India's evolving regulatory landscape.



Demystify compliance

Gain clarity on how India's existing regulatory landscape and upcoming Alspecific regulations apply at every stage of the Al lifecycle. From data collection and model development to deployment and long-term monitoring, understand what compliance looks like in practice and how to avoid common pitfalls.

Identify key stakeholders

Map out who plays a role in responsible AI deployment. From program managers and data officers to legal advisors, technologists, and community representatives. Learn how responsibilities shift across design, implementation, and evaluation phases, ensuring accountability at every level.

Build internal capacity

Demystify complex legal and technical concepts through simple explanations and visual guides, helping teams with non-technical backgrounds understand their roles in compliance and ethical Al. Strengthen your organization's ability to self-govern and engage with regulators.

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Establish sustainable practices

Develop long-term strategies that go beyond one-time compliance, embedding ethics, inclusivity, and community trust into daily operations. Learn how to innovate responsibly, ensuring your AI projects create meaningful social impact without compromising rights or dignity.



Why AI & Data Governance Matter in the Social Sector

Non-compliance and gaps in AI and data governance within India's social and public sector have led to tangible harms across legal, social, security, and trust dimensions



Legal and Constitutional Impact

The Aadhaar-linked welfare automation was challenged in court for violating Articles 14 and 21 of the constitution by excluding manual laborers and elderly beneficiaries due to biometric failures, yet alternate identification processes proved inadequate, undermining fundamental rights.



Exclusion and Social Harm

The Aarogya Setu rollout overlooked accessibility and equity, excluding millions without smartphones and limiting contact-tracing accuracy. With no alternative channels or stakeholder engagement, the response left vulnerable groups underserved.



Privacy, Security, and Data Breaches

India has witnessed several high-profile data breaches in social sector platforms: in 2021, unsecured hosting exposed thousands of COVID-19 test reports; in 2022, the Swachh City Platform leak compromised data of 16 million citizens; and in 2024, the Uttar Pradesh Marriage Assistance Scheme portal was hacked, leading to fraudulent applications and financial fraud.



Trust and Reputational Damage

Repeated exclusion errors and high-profile breaches have undermined citizen trust in digital ID and welfare programs, making communities reluctant to share data.

Non-explainable AI models and lack of transparency deter NGOs from scaling AI solutions, fearing backlash over potential bias and data misuse undermining beneficiary trust.



Al Lifecycle Stages: Regulations & Policy to Practice

This section provides a stage-by-stage roadmap for responsibly deploying AI in India's social sector. For each phase, from initial needs assessment through final evaluation, we detail the specific legal and policy requirements under India's regulatory landscape, highlight steps to operationalise the best practices, and identify the key stakeholders responsible for ensuring compliance and ethical practice.







Needs Assessment and Problem Definition

Regulations, Policies & User Guidelines

- **Digital Personal Data Protection (DPDP) Act, 2023:** Purpose limitation, transparency obligations.
- Right to Information Act, 2005: Suo Motu Public Records
 Maintenance, Publication of Relevant Facts, Decision Rationale
 Disclosure
- Constitution of India: Articles 14 & 21: Equality and Privacy Rights (Puttaswamy Judgment)
- Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016: Alternative Authentication Mechanisms



Data Principals' Involvement in Policy Formulation

Policy to Practice

Outcome: Clearly defined, community-validated problem scope and lawful data purposes.

- Identify social objectives and legal constraints review DPDP Act & Constitutional rights
 Program Manager
- Convene initial stakeholder mapping workshop include vulnerable groups, community leaders Community Engagement Lead
- Draft Data Use Charter articulating specific, lawful purposes comply with DPDP Act Program Manager
- Develop Privacy Notice template covering data purposes, processing details, and DPO contacts – DPDP Act – Data Protection Officer
- Plan and schedule public consultations (gram sabhas, focus groups) RTI Act Public Information Officer
- Conduct consultations, collect input on needs and risks ensure inclusive participation
 Community Engagement Lead
- Record consultation minutes and publish on RTI portal RTI Act Public Information Officer
- Finalize problem definition document incorporating community feedback Domain Expert



Design & Planning

Regulations & Policies

- Digital Personal Data Protection Act, 2023: Privacy-by-Design Requirements
- Information Technology Act, 2000: Reasonable Security Practices and Procedures
- SPDI Rules under IT Act, 2011: Rule 3–6: Secure Storage, Retention, and Disposal of Sensitive Data
- MeitY Draft Al Rules, 2025 (under Consultation): Clauses on Design-Phase Impact Assessments and Controls
- NITI Aayog "National Strategy for AI" (AI for AII) Draft, 2022 : Ethical Design and Governance Frameworks



Policy to Practice

Outcome: System architecture and ethical design verified against privacy and security requirements.

- Conduct Privacy Impact Assessment (PIA) to map data flows and risks DPDP Act Data Protection Officer
- Perform Ethical Impact Assessment against IEEE 7000 and ISO/IEC 38507 Ethics Board
- Define data minimization rules and anonymization techniques DPDP Act §5 & SPDI Rules Al Architect
- Specify technical safeguards: encryption, access controls, logging IT Act & DPDP Act–
 Al Architect
- Create Model Card template documenting design choices, data sources, and limitations *Transparency Lead*
- Obtain legal review and sign-off on design documentation Legal Advisor



Data Collection & Preparation

Regulations & Policies

- Digital Personal Data Protection Act, 2023: Notice Requirements, Consent Management
- SPDI Rules under IT Act, 2011: Data Retention and Deletion Periods
- Aadhaar Act, 2016: Consent and Authentication Safeguards
- CERT-IN Directions on Secure Data Practices, 2024
- National Digital Health Mission (Ayushman Bharat)
 Health Data Management Policy, 2023: Data
 Minimization and Consent Protocols



Policy to Practice

Outcome: Secure, consented, and minimized dataset ready for modeling.

- Implement informed consent workflow (opt-in/out) in local languages DPDP Act –
 Data Steward
- Collect only essential data attributes as per minimization policy DPDP Act Field Team Lead
- Store raw data in encrypted repositories with role-based access SPDI Rules & DPDP
 Act IT Security Team
- Log data processing activities and consent records GDPR equivalence *Compliance Officer*
- Apply anonymization and metadata standards World Bank Toolkit Data Engineer
- Define and configure automated retention and deletion schedules SPDI Rules Data Engineer





Model Development & Testing

Regulations & Policies

- Digital Personal Data Protection Act, 2023: Prohibition of Discriminatory Profiling
- Draft Al Rules (MeitY), 2025: Mandatory Impact Assessments for High-Risk Al
- NITI Aayog Draft Al Policy, 2022: Algorithmic Impact Assessment Requirements
- Bureau of Indian Standards (BIS) Code on Al Ethics (under development)
- Credit Information Companies (Regulation) Act, 2005:
 Fair and Transparent Automated Credit Decisions



Policy to Practice

Outcome: Fair, validated model with documented performance and bias controls.

- Acquire representative training and validation datasets confirm demographic coverage – Data Scientist
- Run bias detection and mitigation using IBM AI Fairness 360 or similar tools Data Scientist
- Conduct Algorithmic Impact Assessment for high-risk features MeitY Draft Al Rules Validation Team
- Record model performance, fairness metrics, and audit logs ML Engineer
- Present findings and mitigation plan to Ethics Board for approval Ethics Board
- Publish bias audit report and model evaluation summary Transparency Lead





Implementation & Deployment

Regulations & Policies

- Digital Personal Data Protection Act, 2023: Technical Safeguards (Encryption & Access Controls)
- Information Technology Act, 2000: Data Breach Notification Obligations
- CERT-IN Incident Response Guidelines, 2024
- MeitY "Standard Operating Procedures for Al Deployment" (Draft, 2025)
- National Critical Information Infrastructure Protection Centre (NCIIPC) Guidelines, 2023



Policy to Practice

Outcome: Securely deployed AI system with transparency and incident readiness.

- Configure runtime encryption, authentication, and access controls DPDP Act Security Operations
- Implement breach detection mechanisms and notification workflows IT Act Compliance Officer
- Publish Model Card and Transparency Report detailing capabilities, limitations, and governance measures *Transparency Lead*
- Train operations and support staff on secure use, incident response procedures Operations Manager
- Conduct pre-deployment vulnerability assessment and remediate findings IT Security Team
- Go-live system monitoring and log setup Security Operations



Monitoring & Maintenance

Regulations & Policies

- Digital Personal Data Protection Act, 2023: Periodic Audits and Compliance Updates
- **Draft Al Rules (MeitY), 2025:** Continuous Performance Monitoring Mandates
- SPDI Rules under IT Act, 2011: Audit Trails and Record keeping
- **ISO/IEC 27001:** Information Security Management (Adopted by Indian Organizations)
- ITU AI for Good Toolkit: Monitoring and KPI Dashboards



Policy to Practice

Outcome: Ongoing assurance of performance, fairness, and security compliance.

- Deploy real-time monitoring dashboards for KPIs, bias, and security alerts ITU AI
 Toolkit AI Governance Committee
- Schedule and perform quarterly compliance and security audits DPDP Act & ISO/IEC 27001 Internal Audit Team
- Automate anomaly detection for model drift and performance deviation Data Engineer
- Update and retrain models using new data and community feedback ML Engineer
- Maintain change logs and version control of models and data pipelines Configuration Manager



Evaluation & Feedback

Regulations & Policies

- Digital Personal Data Protection Act, 2023: Grievance Redressal Mechanism
- Public Records Act, 1993: Right to Access Evaluation Reports of Government Projects
- Right to Information Act, 2005: Exemption and Disclosure Balancing for Personal Information
- MeitY Guidelines on Al Impact Evaluation (Draft, 2025)
- **IEEE 7010:** Well-Being Metrics for System Evaluation (International Standard Adopted in India)



Policy to Practice

Outcome: Measured social impact with stakeholder-driven improvements.

- Operate multi-channel grievance redressal with defined SLAs DPDP Act *Grievance Redressal Officer*
- Design and conduct participatory evaluation Impact Evaluator
- Publish evaluation and audit reports in open-access formats; process RTI requests –
 Public Records Act & RTI Act Transparency Officer
- Host community feedback forums and document action plans Community Engagement Lead
- Incorporate evaluation findings into next iteration's problem definition and design Program Manager



Challenges

Implementing this exhaustive governance checklist poses significant challenges for many social sector organizations:

Limited Expertise

Many NGOs lack dedicated data protection, legal, or evaluation specialists.

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Resource Constraints

Budget and infrastructure for audits, monitoring dashboards, and impact assessments are often unavailable.

Technical Capacity

Teams may be unfamiliar with privacy impact assessments, bias detection, and standardized evaluation methods.

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Sustained Engagement

Maintaining community consultations and grievance mechanisms requires ongoing coordination.



NuSocia's Offerings

As a Social Impact Advisory, NuSocia bridges these gaps by offering:



Strategy, Framework Design, M&E, & Assessment Services : Develop participatory evaluation plans, theory of change models, and well-being metrics aligned with MeitY Guidelines.



Technology Assessment & Consultancy: Assess your AI Readiness through our proprietary <u>AI Readiness Framework</u>, create a technology action plan in line with regulations and build on our tools to amplify your social impact.



Capacity Building Workshops: Train staff on PIA/EIA methods, participatory user research, need assessment and problem definition, and standardised evaluation techniques.



Documentation & Journey Mapping for Clarity: Organize and document inclusive consultations, feedback forums, and co-creation workshops.

