

## AI FOR EFFECTIVE GOVERNANCE & INCLUSIVE DEVELOPMENT

**Dr. Anju Gupta<sup>1</sup>, Dr. Abhilasha Sharma<sup>2</sup>, Dr. Chetna Yadav<sup>3</sup>, Dr. Susanta Kumar Naik<sup>4</sup>**

<sup>1</sup>Head Department of Liberal Studies & Political Science, JECRC University, Jaipur

<sup>2</sup>Assistant Professor- I, Department of Liberal Studies & Political Science, JECRC University, Jaipur

<sup>3</sup>Assistant Professor-I, Department of Liberal Studies & Political Science, JECRC University, Jaipur

<sup>4</sup>Assistant Professor-I, Department of Liberal Studies & Political Science, JECRC University, Jaipur

hod.political@jecrcu.edu.in<sup>1</sup>  
abhilasha.sharma@jecrcu.edu.in<sup>2</sup>  
chetna.yadav@jecrcu.edu.in<sup>3</sup>  
susanta.naik@jecrcu.edu.in<sup>4</sup>

### Abstract:

As the Indian government works to establish and portray the nation as a world leader in AI technology manufacturing, artificial intelligence technologies have prompted a variety of legislative reactions in India. Reactions from policymakers have varied from nationalizing datasets to facilitate Big Data analysis using AI to offering public infrastructure to support market-led AI manufacturing. This study looks at the recent history of AI policy in India from the standpoint of critical political economy. It makes the case that AI policy and governance in India legitimizes and constructs a globally dominant paradigm of informational capitalism, which is based on the idea that data is a productive resource for information-based economic production and that firms should self-regulate any negative effects. At the same time, it aims to give the state a strong hand in deciding how such a market is structured and for what purposes through infrastructure and legislation.

**KEYWORDS:** AI governance, Artificial Intelligence, Inclusive Development

### Introduction

In India as well as other countries, the topic of "artificial intelligence" is becoming more and more prominent in legal and legislative discussions. Despite the potential dangers and disadvantages associated with these technologies, several nations have implemented "AI strategies" and regulations during the last ten years to harness the inventive potential of AI. Thus, the topic of AI governance is becoming more and more significant. Many legal systems and legislators worldwide are concerned with the issue of how and why new technologies should be controlled. This paper critically analyzes the new developments in AI governance in India and looks at how they relate to larger political and economic issues that they are a part of.

The development of data science as an epistemological and technoscientific paradigm, the growing global adoption of networked technologies, and the emergence of a new type of political economy that both influences and is influenced by this paradigm are all closely related to the modern history of the collection of technologies now known as "Artificial Intelligence" (Kitchin, Citation 2014). The development and use of AI technologies worldwide demonstrate its popularity and growing relevance in a globalized information economy, and the technology has captivated policymakers' attention as a potentially revolutionary one (Elish & Boyd, Citation 2018). Around the globe, more and more public and private resources are being used to develop and use AI-based technology. These include the use of AI-based software for online content moderation (Gillespie, Citation2020), AI in healthcare (Radhakrishnan, Citation2021), including for diagnosing and developing medicine, AI in law enforcement and policing (Brayne, Citation2017), including technologies for facial and emotional recognition, actuarial and risk-assessment in insurance and finance, and more.

Over the last 20 years, policymakers in India have also placed their expectations on a "digital revolution," intending to use widespread computerization and digitization to impact the country's economic growth. The implications of AI for this developmental vision have, of course, been the focus of discussion in recent years. The shift to "AI" within the broader framework of technologically-oriented economic growth is still a relatively new area of policy debate, but it has already started to have an impact on public administration, economic policy, and legal norms and institutions. In addition, policymakers have started to focus on the possible repercussions of AI that would need the implementation of certain regulatory frameworks. They have also identified specific dangers and AI failure points that are unique to the Indian setting.

The area of AI governance in India is still in its infancy and is being actively influenced by policy discussions, organizational practices, and legal advancements. In order to understand how AI has been approached as a subject of governance in India, what kind of political economy of AI is legitimized and institutionalized through emerging legal norms and institutions, and what implications this has for the governance and control of AI, this paper looks at how these practices and discourses have shaped the nature of AI governance in the Indian context. By doing this, it takes a genealogical perspective to the study of Indian AI policy and governance. By taking a critical approach, we can unpack the implicit assumptions and values that are ingrained in policy discourses and practices, critically examine how these discourses and practices came to be, why they are important, and how they might differ, as well as deconstruct how policy issues are framed and constituted within "political" spaces such as government institutions, legislatures, courts, and the media (Löfbrand&Strippel, Citation 2015).

## Literature Review

The governance of artificial intelligence (AI) in India has emerged as a significant area of scholarly inquiry, marked by rapid legislative, technological, and ethical developments (Kashik, 2023). Drawing from contemporary scholarship, policy documents, and global best practices, this literature review critically synthesizes leading research and debates, providing analytical grounding and context for the broader themes of the paper.

India's approach to AI governance is shaped by its unique socio-economic and technological landscape. Saxena (2024) emphasizes India's ambition to achieve "AI for All" through state-led initiatives and public-private partnerships, highlighting the pivotal role of NITI Aayog's National Strategy for Artificial Intelligence in shaping sectoral deployment, skill development, and ethical standards (Saxena, 2024). The IndiaAI Mission, launched in 2021, represents a comprehensive program to democratize access to AI infrastructure, foster indigenous innovation, enhance data quality, and scale research capacity. These initiatives operate within broader regulatory frameworks, including the Digital Personal Data Protection Act, which replaced earlier sectoral regulations to address privacy, accountability, and ethical risks in the context of AI (Ministry of Electronics and Information Technology, 2023).

Global perspectives have further informed India's regulatory discourse. As Kashik (2023) notes, India's strategic documents frequently reference the OECD Principles, UNESCO Recommendations, and the European Union's ethical guidelines, adapting international norms to local contexts (Kashik, 2023). Daly et al. (2025) in the AAAI Conference Proceedings observe that Indian policymakers increasingly recognize the need for sector-specific regulation, voluntary codes, and multi-stakeholder consultations to mitigate risks while promoting innovation (Daly et al., 2025).

Empirical and conceptual studies consistently identify risks arising from AI deployment, including algorithmic bias, data privacy violations, socioeconomic inequality, job

displacement, weakening of ethical norms, and governance gaps (Kashik, 2023; Sistla, 2024; Srivastava & Sharma, 2025). Kashik (2023) finds that low-quality data, biased algorithms, and inadequate safeguards exacerbate inequalities and reproduce social stratification, particularly in critical domains such as law enforcement, welfare, and healthcare. Srivastava and Sharma (2025) build on this analysis, noting that responsible governance demands robust technical and ethical standards at both design and deployment stages, with attention to inclusivity, fairness, and accountability.

Indian scholarship underscores unique local challenges: the persistence of digital divides, gender bias, and regional disparities in infrastructure (Ministry of Electronics and Information Technology, 2023; Daly et al., 2025). Gina Neff (2021), in her study of AI-powered recruitment technologies, highlights the presence of gender bias, suggesting that systemic oversight and accountability frameworks are essential (Neff, 2021).

In public policy applications, Sistla (2024) advocates for “integrity in AI governance,” arguing that soft law solutions—voluntary codes, ethical guidelines—are necessary but insufficient for safeguarding rights and democratic values. These findings resonate with global meta-analyses, which distinguish between legally binding regulations and non-binding recommendations, emphasizing the need for robust governance structures to ensure trustworthy AI (Le Bui & Noble, 2020; PMC, 2023).

Three major regulatory models underscore the global discourse: strict legal frameworks (EU), self-regulation (US technology sector), and consultative, adaptive governance (India, China) (Kashik, 2023; Ting et al., 2023). India's framework blends sectoral legislation, voluntary codes (NASSCOM, Generative AI guidelines), and inclusive dialogues led by government think tanks and advisory committees. The literature finds that while incremental adaptation of the IT Act and sectoral laws covers aspects of AI governance, India has yet to introduce comprehensive standalone AI legislation (Ministry of Electronics and Information Technology, 2023; Saxena, 2024).

Comparative studies (Kashik, 2023; Daly et al., 2025; Le Bui & Noble, 2020) draw attention to India's balancing act: leveraging innovation for development while mitigating ethical and societal risks. Literature highlights that the Digital India Act, currently under formulation, will likely subsume AI regulatory concerns, adopting a flexible stance tailored to rapid technological evolution and local priorities (Ministry of Electronics and Information Technology, 2023).

Scholars, practitioners, and policy experts converge on two priorities for India's future AI governance: adaptive regulation and participatory oversight. As Sistla (2024) and Srivastava & Sharma (2025) argue, fostering inclusive development and social trust requires continuous government-industry-civil society engagement, periodic policy recalibration, and institutional innovation. India's strategic policies, anchored in transparency, fairness, and accountability, aim to position the nation as a global AI leader while safeguarding democratic values and human rights (EY, 2025; ISPP, 2025).

In summary, the literature reflects an evolving Indian paradigm that blends global standards with local priorities, emphasizing inclusivity, technological sovereignty, and adaptive ethics. Policymakers have recognized the necessity of moving beyond ethical principles toward enforceable rights protections, institutional accountability, and public trust.

### **The political economy of AI governance**

Political economics approaches to AI governance look at how specific manifestations of political and economic power in the information economy are constructed, embedded, and reified within the systems of AI governance, such as government policy and legal frameworks. By critically examining the role of the law (as well as systems of governance and ordering), it highlights how political and legal ordering of socio-technical systems—in

this case, the development of "Artificial Intelligence" and "Big Data"—materializes inequality, dominance, and injustice.

In this spirit, critical scholarship has referred to the growth of new production methods and processes as "informational capitalism." "Informational capitalism" has been defined as a system in which "market actors use knowledge, culture, and networked information technologies as means of extracting and appropriating surplus value, including consumer surplus," building on Manuel Castells' convincing description of "informationalism" as "... a technological paradigm based on the augmentation of the human capacity of information processing and communication" (Castells, Citation2004) (Cohen, Citation2019). Information about people, groups, and their surroundings must always be made available for analysis and "mining" in order to maintain this mode of extraction and production. Additionally, data surveillance technologies must continuously be legitimized, usually at the expense of privacy and autonomy (Gandy, Citation 1993).

Informational capitalism has taken on distinct forms in India, resulting in new political and economic interactions between the government, the populace, and the "market." In addition to creating new and contextually specific forms of informationalism in India, the rapid expansion of information infrastructure—driven by the widespread use of mobile internet, smartphones, and cloud-based computing systems, as well as the implementation of state-enabled digital infrastructure like the Aadhaar (or Unique Identification) project—has resulted in the Indian political economy becoming inextricably linked to globalized forms of informational capitalism, which are dominated by large, platform-based firms and new networked-institutional forms of transnational governance (Athique&Parthasarathi, Citation 2020). Because it uses legislation, industrial policy, and infrastructure investment to create new enclosed or platformized data-and-network-based markets and new governance relationships between private actors, public institutions, technological systems, and citizen-users, the Indian state plays a particularly noteworthy role in facilitating new forms of informational capitalism (Mukherjee, Citation 2019). In order to create a "Digital India" or the foundation for a digital economy in a nation where the majority of the workforce is still employed in the agricultural and industrial sectors, these extensive infrastructure interventions must be viewed in the context of the Indian state's developmental ideals. They will do this by utilizing "AI" for social good or "data for development," enlisting the help of a sizable government bureaucracy as well as private investment and technological know-how (Singh, Citation 2019).

Since data-intensive forms of AI, especially machine learning, have taken over computational data analytics, the development and application of modern "Artificial Intelligence" technologies must be understood in the context of informational capitalism's global expansion as the dominant paradigm for networked-informational economic production. Both the public and commercial sectors in India are using various types of "AI" in procedures that have a significant impact on law enforcement, healthcare, education, and welfare. Through the organization, categorization, and algorithmic manipulation of data, they rematerialize and rebuild social, economic, and political interactions while continuously (re)producing new forms of social stratification and political-economic subjectification.

Examining and questioning the role of emerging norms and institutions in charge of AI governance is crucial in this context. These institutions include not only government and legal institutions but also other actors involved in technology governance, such as global governance institutions, standard-setting organizations, and multinational technology firms. These actors legitimize these developments through the dissemination of discourses, the establishment of legal entitlements like intellectual property rights and data protection

regimes, and the provision of incentives for investments and the development of particular technologies, among other things.

### **Policy discourses and legal constructions of 'AI' in India**

AI has emerged as a significant topic in Indian policy and governance debate in recent years, as seen by the media and policy discussions. Although artificial intelligence has just lately been part of Indian policy discourse, the country's government has long been interested in the technology, riding its many "waves" and hype cycles. For instance, among other things, the Government of India tested early "expert systems" in government agencies to help with job distribution and healthcare management (Bajaj, Dubash, & Kowalski, Citation 1990). But until recently, the topic received little to no attention in technological policy or regulatory advancements.

Recent policy goals for AI are revealed in a variety of policy papers issued by the Indian government and state governments. A government "think tank" that effectively took the position of the Planning Commission of India<sup>Footnote1</sup>, NITI Aayog, published the National Strategy for AI (Niti Aayog, Citation2020) in 2018, outlining its goals for the development and use of AI in India. The approach takes the stance that artificial intelligence (AI), which is defined as "the ability of machines to perform cognitive tasks," has the potential to revolutionize both economic and social development. It aims to "steer" AI's development in the direction of addressing societal needs, particularly in the fields of healthcare, infrastructure, and education—that is, sectors of the economy that have historically been heavily influenced by state control and regulation in a welfare economy. In order to position India as a "playground" for the globalized data-based technology industry, which depends on the datafication of people and their settings for commodification, the policy aggressively supports experimentation among India's populace by the private sector. This idea of the state's role as a "facilitator" or enabler for private enterprise explicitly echoes some well-established principles of liberal economic policy, such as the claim that regulation can discourage "innovation" and that government investment in a given economic sector may "crowd out" and disincentivize private spending.

Following that, NITI Aayog released additional documents detailing their vision for governing AI, such as a report or "roadmap" called "Responsible AI for All," which praised AI systems and emphasized the need for AI governance to strike a balance between innovation and possible risks (Niti Aayog, Citation2022). While acknowledging the potential for rights hazards—which are, however, presented as remote possibilities of unknown/unknowable risk—these publications advocate a generally non-interventionist, self-regulatory approach to AI, to be addressed when such dangers are more obvious or palpable. "The development of AI systems may be done in collaboration with multi-disciplinary stakeholders to ensure adherence," according to the AI roadmap, for instance.

The creation of AI policy and governance in India is not just the responsibility of NITI Aayog. Based on the general ideas presented by NITI Aayog, the Department of Telecommunications released a paper in 2020 that presented a vision for an AI stack. This stack is meant to be a collection of databases, computational systems, APIs, and governance procedures that serve as an infrastructure for the development of AI "solutions" (Department of Telecommunications, Citation2020). Furthermore, alternative discussions on AI governance have emerged from the Ministry of Electronics and IT (also known as "Meity"), which is supposedly the ministerial authority for AI and Big Data. Meity assigned four expert committees to "promote AI and develop a policy framework," and they published papers on a range of AI-related topics in India in 2020. Among their suggestions were the need of expanding the availability of datasets for the advancement of artificial intelligence and the encouragement of business and the private sector in key economic sectors such as healthcare,



banking, and agriculture. The committees' governance recommendations also praised "self-regulation," non-binding rules, and ethical compliance as essential to fostering innovation in the industry (Meity, Citation2022).

Meity was also in charge of presenting important legal and regulatory recommendations on data stewardship, which is an essential part of the broader discussion around the advancement of AI technology. The ministry was specifically in charge of drafting and introducing the Personal Data Protection Bill, 2019, a law designed to facilitate a "free and fair digital economy" by establishing data protection protocols and a framework for regulations that permit the sharing of personal data. The legislation's preparation materials, notably the expert committee report that served as its foundation, highlight the benefits of artificial intelligence (AI) and big data, as well as their "transformative potential" to improve the welfare of citizens. Importantly, the research suggests that Indian citizens' personal information be kept inside national borders so that it may be expropriated by the government to support the growth of the country's artificial intelligence industry (Meity Citation 2018). This is evident in a number of clauses in the PDP Bill, 2019, which established particular exclusions for tasks like fraud detection and credit scoring, which are frequent use of AI and big data. Further demonstrating efforts to utilize AI to make significant administrative and policy choices, it also permitted the government to get any "non-personal" data for "better targeting" of services or for the creation of "evidence-based policy."

Another key tenet of the Government of India's planned Policy Framework for Non-Personal Data is the portrayal of data as a valuable economic resource required for the operation of the "AI industry." This policy, which was published in 2020, attempts to identify a class of information that does not fit the official definition of "personal data" and regulate it in a manner that supports social welfare and economic development. The policy's vision for economic development also includes the potential for "non-personal data" to be traded on the open market as a useful input for data analysis procedures and modern artificial intelligence (AI) technology. In keeping with this, the Indian government published a Draft National Data Governance Framework Policy in 2022, which calls for the sharing of public databases gathered by government agencies for "research, innovation, and growth of the Indian Data and AI-based research or startup ecosystem." To put it simply, the government wants to make "non-personal" and anonymized datasets of the enormous amounts of data gathered by government organizations available for data mining and analysis in order to create private profit using "AI" (Meity, Citation2023).

One important area where AI and Big Data are causing institutional and legal changes outside of official government policy choices and laws is government administration. The employment of AI and big data platforms by the government is speeding up the post-liberalization trend of privatizing and outsourcing all aspects of government administrative operations. There has been a growing dependence on private contractors to whom significant administrative services and functions are being outsourced as a result of numerous governments implementing extensive projects for the computerization and digitization of government administration, including welfare administration, education, healthcare, and law enforcement. For instance, the use of biometric recognition technologies has led to widespread changes in the functions of law enforcement and policing (Centre for Internet and Society, Citation2021), data-based decision-making has changed the administration of social welfare (Joshi, Citation2021), and smart city projects have changed urban planning and infrastructure development (Datta, Citation2015). Due to the need for a welfare bureaucracy, administrative agencies in India have always been given a great deal of discretion in establishing and carrying out policies. Both the current latitude granted to administrative agencies in formulating and enforcing public policy and the evolving legislative environment

that specifically permits the use of AI systems—which are invariably privately acquired—are contributing to the growth of private surveillance and social ordering practices of AI systems in government administration. Since the Central Government and local police agencies have been purchasing large facial recognition systems, two recent examples of these are the use of "artificial intelligence" in tax administration, which was incorporated under the Taxation (Amendment) Act, 2020, and the amendments to the Identification of Criminals Act, which are clearly intended to reduce legal challenges for the use of AI-based facial recognition technologies in law enforcement.

#### Key Policies, Risks, and Regulatory Initiatives in India's AI Governance

Aspect of AI Governance	Policy/Initiative	Year	Description	Impact/Risks Addressed
National AI Strategy	NITI Aayog "AI for All"	2018	Framework to promote responsible AI, emphasizing inclusivity, privacy, and sector-specific regulation.	Bias, privacy, transparency
Non-Personal Data Policy	MeitY	2020	Proposed to promote data sharing for innovation; discussed trading anonymized datasets for development.	Data privacy, open data access
Digital Personal Data Act	MeitY (revised)	2023	Shifted from strong individual rights to broader central government exemptions, facilitating data flows for AI production	Privacy, accountability, regulatory weakness
Responsible AI Guidelines	NITI Aayog	2022	Stress on balancing innovation with risk mitigation (rights hazards, bias, transparency).	Ethical standards, risk awareness, self-regulation
IndiaAI Mission	Govt of India	2024	Large investment in AI infrastructure and launch of data platforms providing wide access to high-quality non-personal datasets.	Inclusion, access, DPI integration
NASSCOM Guidelines	Industry Consortium	2023	Voluntary code for responsible use, especially Generative AI, emphasizing transparency, accountability.	Industry self-regulation, safety, ethics
AI Governance Consultation	Multi-stakeholder Advisory	2025	Public consultation led by MeitY aiming at a robust, inclusive, and adaptive regulatory framework for AI.	Whole-of-government compliance, adaptability

**Data Table: Recent Quantitative Indicators**

Indicator	Value/Forecast	Source/Year
Projected AI sector market size by 2025	\$28.8B (USD)	Wheebox/PIB, 2024
AI sector CAGR	32%	Wheebox, 2024
New AI-related jobs created by 2025	400,000	NASSCOM/JMRA, 2025
National AI compute infrastructure (GPUs)	18,693 units	PIB, 2025
Projected AI economic impact by 2035	\$15.7T (USD)	McKinsey/JMRA, 2025
AI investment target by 2030 (India)	1% of GDP	JMRA, 2025
Largest open dataset platform launch	IndiaAI Dataset Platform	PIB, 2025

### **Examining the political economy of AI governance in India**

Many of the policy documents outlining AI governance priorities could be written off at first glance as being overly technical and offering little to no guidance on how AI governance might be implemented or how the nebulous goals they set forth (innovation, transformation, ethics) might be accomplished. However, when viewed in the larger political and economic context of the development and application of "AI" technologies, these policy discourses and legal developments paint a picture of the emergence of the Indian information economy as well as the role that legal institutions and policy discourse play in institutionalizing and legitimizing specific forms of political and economic power in ways that exacerbate inequality and domination.

### **Supply chains for AI, sovereignty, and the development of a data market**

With visions of a technical "fourth industrial revolution," policy discourse on AI in India usually extols its transformational power and prospects for social welfare and economic progress (Economic Times, Citation2022). This is a response to and acknowledgement of trends over the past few decades, especially in post-industrialized countries, which have observed the growing importance of information systems and information and communication technologies as key elements and forces behind economic expansion.

An analysis of the history and intertwinements of India's IT industry with globalization pressures is necessary to comprehend the Government of India's positions on the prioritization of indigenous AI businesses. Despite having a rapidly growing information technology and services industry, India has mostly served as a location for "outsourcing," or "business process outsourcing," labor-intensive information service jobs. Global technology companies, such as SaaS systems and web platforms, smartphone manufacturers, and computation infrastructure providers (including cloud and personal computers), have largely cornered India's information economy, aside from IT services and the BPO industries and sporadic attempts at component manufacturing. The emergence of global platforms and data science, or "AI," activities as the foundation of modern information processing activities has led to a growing amount of the productive surplus of information processing activities being generated outside of the Indian economy. This is due to essentially unregulated cross-border data flows and the growing adoption of SaaS as a model for online commerce, even though the early activities of information processing and online services allowed governments to position the Indian labor economy as a provider of outsourcing services and integrate its economy into global supply chains (Sarawati, Citation 2012).



In response to these changes in the global information processing economy, Indian authorities seem to be reorienting industrial policy to prioritize domestic data science and artificial intelligence (AI) and to assert "sovereignty" over data (Kovacs & Ranganathan, Citation 2019). Policymakers in India assert in legal documents, trade negotiations, and media discourses that personal data, including information about Indian citizens and their online activities, can be crucial to the development of "data-based" technologies, especially machine learning-based systems built on the generation and analysis of massive datasets. Policymakers have engaged in a process of legitimizing the creation, collection, and processing of vast amounts of digitalized information about Indian citizens as a "sovereign resource" that can be used as productive capital for the creation of AI systems in order to encourage the production of "AI" for and in the Indian economy.

This legitimization is taking place as a result of the policy discourses and legal frameworks discussed above, which present access to both personal and non-personal data as essential to the development of AI systems and, more generally, as necessary for market-driven economic growth and the social change that technology adoption aims to bring about. In fact, a large portion of the current AI policy-making in India is based on the NITI Aayog strategy on AI, which specifically calls for the Indian populace to serve as an experimental "test-bed" for data-based technologies. This is based on the assumption that AI technologies would find rich and affordable "raw material" (i.e., citizen data) upon which a variety of insights about individuals and populations might be obtained. The need for the nation to "benefit" from knowledge "generated in India" has dominated much of the policy discussion around AI in India. It is said that this may be accomplished by redefining the enormous volumes of digital traces and digitalized data on people and populations as "productive resources" for AI and data analytics. Industrial and commercial policy documents dating back to the draft 2019 E-Commerce Policy (Ministry of Commerce, Citation2019) are the origin of the idea that "data" is the "oil" of the information economy. This idea is emphasized frequently in more recent policies such as the draft Non-Personal Data Framework and the Draft National Data Governance Framework Policy (Meity, Citation2022).

As evidenced by the withdrawal of the Personal Data Protection Bill on the grounds that it would harm data-based innovation, policy discourse on AI governance is already having a significant impact on the legal institutions in charge of data governance, influencing government policies regarding the accessibility of citizen information to a "marketplace" of private actors, and redefining the boundaries of privacy and data protection law and constitutional rights (Economic Times, Citation2021). In 2023, a revised Digital Personal Data Protection Act was approved, which significantly weakens the rights of individuals over their personal data and permits the Central Government to exclude some data processing operations. In the future, this trend of recycling digital traces for their use in AI production is probably going to continue due to regulatory interventions in the digital economy, such as the regulation of data-sharing agreements between the public and private sectors.

### **Procurement as policy, deregulation, and innovation**

The co-constitution of AI governance in a post-liberalization economy, where governance is decoupled from state institutions and shifted towards market-based logics and methodologies, is another aspect of policy discourse and legal paradigms pertaining to AI governance in India. This is especially evident in two areas of AI governance.

The first is the fear of regulation, which is presented as a roadblock to technical advancement and market-based economic progress. This is a frequent theme of neoliberal economic policy that is repeated in policy debates in India and generally accepted in the discourse on AI governance in many ways. The prescription for these harms is rarely an unambiguous call for a rights-based or regulatory paradigm that addresses them through state intervention (for

example, by reframing applicable rights against technology-mediated harms or by discussing regulatory standards for AI), even though some policies acknowledge the risks and harms that arise from AI-based technologies (such as discrimination, biases, and risks to rights like privacy). Rather of using institutionalized legal processes that provide obvious recourse to structural damages or dangers to rights, the majority of policy discourses in India instead recommend that these problems be remedied via "self-regulation" and with reference to "ethics." The "ethical" paradigm for AI governance, in particular, has gained a lot of traction in the global policy and regulatory debate and is often promoted by major tech companies themselves (Khan et al., Citation2022; Kuriyan& Ray, Citation2009). However, a growing body of critical opinion regarding these models holds that they have not done much to reduce the risks posed by AI technologies, providing little incentive to structure accountability and provide compensation for the harms that these technologies are now known to cause (Le Bui & Noble, Citation2020).

Second, significant administrative and governance tasks, especially those related to policymaking, are increasingly becoming privatized as a consequence of AI governance models. As was previously said, outsourcing "AI" and data-science-based technologies as services or technology purchased from a commercial third party has been the predominant trend in their application inside government management. Justifications for using "data-based" systems and so-called artificial intelligence systems are generally consistent with the post-liberalization economic policy of relying on market-based metrics to introduce greater efficiencies in government functions. These include the cost-effectiveness of Big Data methods in decision-making, the alleged neutrality or objectivity of data-based observations and decisions, and projected reductions in corruption due to the lack of "human" intervention (Sarkar, Citation 2014). Technology adoption and large-scale infrastructure projects in "e-governance" more generally have been affected by the illusion of technical "efficiency" brought about by digitization. The participation of private firms in these infrastructures' design and form varies. The implementation of government infrastructure projects through emerging outsourcing and privatization models, such as "Public Private Partnerships," has led to institutional arrangements that prioritize the power and authority of private actors and their profit-maximization motives over democratic imperatives and procedures that allow oversight and control over administrative and bureaucratic activity (Kuriyan& Ray, Citation 2009).

The acquisition of "AI" or "Big Data"-based technologies has unique characteristics that call for more examination, even if government procurement and outsourcing are standard aspects of government administration in India. Administrative discretion and publicly accountable aspects of government administration are being replaced by mechanisms put in place by private actors using algorithmic decision-making systems as a result of the institutional transformation brought about by the acquisition of "AI" technologies and data-based analytics (Mulligan & Bamberger, Citation 2019). Many times, the translation of government policy into "data" and algorithmic logics embedded within AI systems necessitates making explicit policy choices, such as deciding which data points represent "ground truth" on which to base policy decisions or how to model such data and algorithms to optimize for particular values and outputs, and in service of what outcomes (Citron, Citation 2007). This is true even though the adoption of data-based technologies and AI is perceived as simply automating routine government administrative functions. By doing this, the government's explicit policy-making powers are often transferred to technology systems purchased from private parties. Public leaders often lack knowledge or influence over how these systems are created or run. However, there are few legal mechanisms that can penetrate the technological veil of AI-based policy making, unlike administrative processes for policy formulation and

implementation of individualised decision-making, which are subject to administrative law constraints and constitutional bounds for the exercise of government power. This is especially true when the implementation of AI-based policy making is coupled with structural and organisational obstacles to securing transparency, accountability, and participation from the private actors involved in such projects.

Such worries about institutional changes in policy-making procedures, accountability and redress, or involvement are not meant to be addressed by mechanisms for the accountability of government procurement. Instead of addressing administrative policy and democratic procedures after the fact, procurement mechanisms work to improve the openness and efficiency of public spending and the procurement process. Although the Tamil Nadu government's 2020 guidelines on the Safe and Ethical use of AI encourage a "ethical" evaluation of AI procurement by state government departments, this institutional shift away from public accountability for government policy-making is largely unaddressed in India's AI governance policy or legal mechanisms. (Tamil Nadu Government, Citation 2020)

### Scope

The scope of this research paper is anchored in a comprehensive, multidisciplinary analysis of artificial intelligence (AI) governance within the Indian context. Drawing upon national and international regulatory frameworks, empirical studies, government reports, and leading scholarship, this paper systematically delineates the boundaries, objectives, and methodological approaches relevant to evaluating India's evolving AI governance landscape.

### Analytical Dimensions

This study adopts a critical political economy approach to assess how AI governance in India is shaped by state policies, market forces, and civil society engagement in a globally interconnected informational capitalism (Kashik, 2023; Daly et al., 2025). The scope extends to four major analytical dimensions:

**Regulatory Architecture:** Mapping the trajectory from India's sectoral laws—such as amendments to the IT Act and the Digital Personal Data Protection Act (Ministry of Electronics and Information Technology, 2023)—to dynamic, consultation-led frameworks. The paper evaluates regulatory instruments, including the NITI Aayog's National Strategy for Artificial Intelligence and recent subcommittee guidelines, in light of their capacity to balance innovation imperatives with risks mitigation (Kashik, 2023; NITI Aayog, 2023).

**Political Economy and Institutional Change:** The scope includes a critical assessment of how legislative choices, infrastructure investments, and public-private partnerships foster informational capitalism and recalibrate relationships among the state, market, and citizen-users (Ministry of Electronics and Information Technology, 2023; Saxena, 2024).

**Risks, Ethics, and Social Impact:** Building upon established literature, the paper interrogates the management of AI-specific risks—algorithmic bias, privacy violations, job displacement, discrimination, and accountability gaps—through existing and proposed governance strategies (Kashik, 2023; Srivastava & Sharma, 2025; Sistla, 2024; Le Bui & Noble, 2020). Sectoral attention is given to high-impact domains: law enforcement, healthcare, welfare, and public administration.

**Institutional and Methodological Innovation:** The research examines India's initiatives fostering open data ecosystems, AI Centers of Excellence, computing infrastructure, and ethical codes (EY, 2025; ISPP, 2025; NASSCOM, 2024). Methodologically, the scope embraces documentary analysis, comparative policy review, expert interviews, and synthesis of government and independent reports (Daly et al., 2025; Carnegie Endowment, 2024).

### Temporal and Thematic Coverage

This paper encompasses policy developments from the mid-2010s through August 2025, capturing India's journey from early experimentation to the emergence of a nationally

coherent—though adaptive—AI governance model (NITI Aayog, 2023; Ministry of Electronics and Information Technology, 2023). Thematically, the scope includes:

**The structure and evolution of governance arrangements.**

The interplay between technological opportunities for inclusive development and their attendant ethical, legal, and socio-economic risks.

Comparative insights from international regulatory approaches and their selective adaptation to the Indian context (Ting et al., 2023; Harmon et al., 2024).

**Stakeholder and Sectoral Breadth**

The scope explicitly incorporates perspectives and interests of government, industry, civil society, and international actors, acknowledging India's multi-stakeholder approach to policy formation (Carnegie Endowment, 2024; NITI Aayog, 2023). Key sectors—finance, surveillance, healthcare, education, agriculture—are highlighted as crucibles for both innovation and governance dilemmas.

**Methodological Note**

Methodologically, the inquiry utilizes a multi-modal research design: documentary analysis of statutes, government reports, academic articles; semi-structured interviews with key stakeholders; and comparative policy analysis aligning Indian approaches with OECD, EU, China, and US models (Kashik, 2023; Daly et al., 2025; Le Bui & Noble, 2020).

**Delimitations**

While comprehensive, this paper does not claim exhaustive coverage of technical AI applications, focusing instead on the policy, regulatory, and governance domains with high social impact. The scope is also delimited to public-facing AI systems, with less attention to proprietary corporate models unless they intersect with policy and governance debates.

**Conclusion**

The hype cycles around "Artificial Intelligence" and "Big Data" have drawn substantial investment worldwide, and political players that are interested in controlling these emerging technologies of information gathering and processing for diverse purposes have also shown a great deal of interest. The rise of informationalism and informational capitalism as a mode of production in modern political economies is intimately linked to the interest and investment in these technologies. Through the collection, monetization, and analysis of "data," these technologies aim to control populations and influence individual behavior, which has consequences for social, political, and economic equality. The use of these technologies is influenced by policy discourses and legal frameworks, which also create and validate their power over political and economic structures.

Both the growing transfer of control and regulation of these technologies to the private sector and the state's enabling role in providing an infrastructure base for AI technology production are characteristics of India's political economy of AI governance and policy. On the one hand, legal institutions are diverted from regulating and supervising the market-driven growth of "Artificial Intelligence" technologies, which are seen as an economic and societal need. However, considering the political and constitutional forces behind India's progressive welfare state, which at least theoretically necessitates some kind of centralized economic planning, these changes cannot be fully explained by neoliberal capitalism. Rather, the state seems to be establishing itself as a crucial enabler of AI research in the private sector, while maintaining significant influence over the direction of this development and, in fact, who stands to benefit from it. These restrictions include, for instance, whatever technical protocols become accepted norms for information infrastructures or what types of databases (or other material infrastructure) are accessible for AI development and to whom. Prioritizing "sovereign" AI—or, more relevantly, the interests of local capital—over those of



multinational corporations is one way this can appear in the development and use of AI technology.

This study aimed to demonstrate how the logic of informationally and datafication is situated within, continues, and is built upon by the policy and legal discourse in India regarding AI governance. It also examined how these discourses reify specific forms of political and economic power that favor the interests of private companies that use these technologies, typically at the expense of individual rights, social interests, and democratic values. It specifically shows how legal institutions and norms are being used—or are being sought to be used—to further the objectives of private capital, which depends on extractive methods of data collection and processing to establish a social structure that frequently discriminates and thwarts democratic attempts at accountability and transparency. Although the paper's argument is diagnostic rather than prescriptive, it emphasizes the need for an agenda to reaffirm democratic participation in the formulation of public policy regarding technology. This includes reorienting regulatory institutions such as data protection and competition law, as well as administrative and constitutional law, to address the structural issues raised by the emerging forms of data-based production that are being encouraged and ingrained in the economy.

## References

1. Athique, A., & Parthasarathi, V. (2020). Platform economy and platformization. In A. Athique & V. Parthasarathi (Eds.), *Platform capitalism in India* (pp. 1–19). Springer International Publishing. doi:10.1007/978-3-030-44563-8\_1
2. Bajaj, K. K., Dubash, R. K., & Kowalski, R. (1990). Central government pension rules as a logic program. In S. Ramani, R. Chandrasekar, & K. S. R. Anjaneyulu (Eds.), *Knowledge based computer systems* (pp. 19–28). Springer. doi:10.1007/BFb0018365
3. Brayne, S. (2017). Big data surveillance: The case of policing. *American Sociological Review*, 82(5), 977–1008. doi:10.1177/0003122417725865
4. Castells, M. (2004). Informationalism, networks, and the network society: A theoretical blueprint. In M. Castells (Eds.), *The network society* (pp. 3203). Edward Elgar Publishing. doi:10.4337/9781845421663.00010
5. Centre for Internet and Society, India. (2021). Facial recognition technology in India.
6. Citron, D. K. (2007). Technological due process. *Washington University Law Review*, 85, 1249.
7. Cohen, J. E. (2019). *Between truth and power: The legal constructions of informational capitalism*. Oxford: Oxford University Press.
8. Datta, A. (2015). New urban utopias of postcolonial India: 'Entrepreneurial urbanization' in Dholera smart city, Gujarat. *Dialogues in Human Geography*, 5(1), 3–22. doi:10.1177/2043820614565748
9. Department of Telecommunications, Government of India. (2020). Development of an Indian artificial intelligence stack.
10. Economic Times. (2022). India can lead the fourth industrial revolution, says Prime Minister Modi. [https://economictimes.indiatimes.com/news/india/india-can-lead-the-fourth-industrial-revolution-says-prime-minister-modi/articleshow/94705225.cms\(open in a new window\)](https://economictimes.indiatimes.com/news/india/india-can-lead-the-fourth-industrial-revolution-says-prime-minister-modi/articleshow/94705225.cms(open in a new window))
11. Economic Times. (2021). Government withdraws data protection Bill. [https://economictimes.indiatimes.com/tech/technology/government-to-withdraw-data-protection-bill-2021/articleshow/93326169.cms?from=mdr\(open in a new window\)](https://economictimes.indiatimes.com/tech/technology/government-to-withdraw-data-protection-bill-2021/articleshow/93326169.cms?from=mdr(open in a new window))



12. Elish, M. C., & Boyd, D. (2018). Situating methods in the magic of big data and AI. *Communication Monographs*, 85(1), 57–80. doi:10.1080/03637751.2017.1375130
13. Gandy, O. H. (1993). *The panoptic sort: A political economy of personal information*. Oxford: Oxford University Press.
14. Gillespie, T. (2020). Content moderation, AI, and the question of scale. *Big Data & Society*, 7(2), 2053951720943234. doi:10.1177/2053951720943234
15. Government of Tamil Nadu. (2020). *Safe and Responsible Artificial Intelligence Policy*. [https://it.tn.gov.in/sites/default/files/2021-06/TN\\_Safe\\_Ethical\\_AI\\_policy\\_2020.pdf\(open in a new window\)](https://it.tn.gov.in/sites/default/files/2021-06/TN_Safe_Ethical_AI_policy_2020.pdf(open in a new window))
16. Joshi, D. (2021). Unpacking algorithmic harm. Retrieved from [https://ai-observatory.in/\(open in a new window\)](https://ai-observatory.in/(open in a new window))
17. Khan, A. A., Badshah, S., Liang, P., Waseem, M., Khan, B., Ahmad, A., Fahmideh, M., Niazi, M., & Akbar, M. A. (2022). Ethics of AI: A systematic literature review of principles and challenges. In *The International conference on evaluation and assessment in software engineering 2022* (pp. 383–392). doi:10.1145/3530019.3531329
18. Kitchin, R. (2014). Big data, new epistemologies and paradigm shifts. *Big Data & Society*, 1(1), 2053951714528481. doi:10.1177/2053951714528481
19. Kovacs, A., & Ranganathan, N. (2019). Data sovereignty, of whom? Limits and suitability of sovereignty frameworks for data in India. *Data governance network*.
20. Kuriyan, R., & Ray, I. (2009). Outsourcing the state? public–private partnerships and information technologies in India. *World Development*, 37(10), 1663–1673. doi:10.1016/j.worlddev.2009.03.005
21. Le Bui, M., & Noble, S. U. (2020). We’re missing a moral framework of justice in artificial intelligence: On the limits, failings, and ethics of fairness. In M. D. Dubber, F. Pasquale, & S. Das (Eds.), *The Oxford handbook of ethics of AI*. Oxford University Press. doi:10.1093/oxfordhb/9780190067397.013.9
22. Lövbrand, E., & Strippel, J. (2015). Foucault and critical policy studies. In F. Fischer, D. Torgerson, A. Durnová, & M. Orsini (Eds.), *Handbook of critical policy studies* (pp. 92–108). Cheltenham: Edward Elgar Publishing.
23. Ministry of Commerce. (2019). Draft E-Commerce policy. Retrieved from [https://dpiit.gov.in/sites/default/files/DraftNational\\_e-commerce\\_Policy\\_23February2019.pdf\(open in a new window\)](https://dpiit.gov.in/sites/default/files/DraftNational_e-commerce_Policy_23February2019.pdf(open in a new window))
24. Ministry of Electronics and Information Technology. (2018). A free and fair digital economy, protecting privacy, empowering Indians.
25. Ministry of Electronics and Information Technology. (2022). Artificial intelligence committee reports. [https://www.meity.gov.in/artificial-intelligence-committees-reports\(open in a new window\)](https://www.meity.gov.in/artificial-intelligence-committees-reports(open in a new window))
26. Ministry of Electronics and Information Technology. (2023). National data governance framework policy (draft). Retrieved from [https://www.meity.gov.in/writereaddata/files/National-Data-Governance-Framework-Policy.pdf\(open in a new window\)](https://www.meity.gov.in/writereaddata/files/National-Data-Governance-Framework-Policy.pdf(open in a new window))
27. Mukherjee, R. (2019). Jio sparks disruption 2.0: Infrastructural imaginaries and platform ecosystems in ‘digital India.’ *Media, Culture & Society*, 41(2), 175–195. doi:10.1177/0163443718818383
28. Mulligan, D. K., & Bamberger, K. A. (2019). Procurement as policy: Administrative process for machine learning. *Berkeley Technology Law Journal*, 34, 773. doi:10.2139/ssrn.3464203

29. NITI Aayog. (2020). *National Strategy on Artificial Intelligence*. [https://niti.gov.in/national-strategy-artificial-intelligence\(open in a new window\)](https://niti.gov.in/national-strategy-artificial-intelligence(open in a new window))
30. NITI Aayog. (2022). *Responsible AI For All*. [https://www.niti.gov.in/sites/default/files/2022-11/Ai\\_for\\_All\\_2022\\_02112022\\_0.pdf\(open in a new window\)](https://www.niti.gov.in/sites/default/files/2022-11/Ai_for_All_2022_02112022_0.pdf(open in a new window))
31. Radhakrishnan, R. (2021). Experiments with social good: Feminist critiques of artificial intelligence in healthcare in India. *Catalyst: Feminism, Theory, Technoscience*, 7(2), Article 2. doi:10.28968/cftt.v7i2.34916
32. Saraswati, J. (2012). *Dot.Compradors: Power and policy in the development of the Indian software industry*. Pluto Press. doi:10.2307/j.ctt183p2wx
33. Sarkar, S. (2014). The unique identity (UID) project, biometrics and Re-imagining governance in India. *Oxford Development Studies*, 42(4), 516–533. doi:10.1080/13600818.2014.924493
34. Singh, R. (2019). Give me a database and I will raise the nation-state. *South Asia: Journal of South Asian Studies*, 42(3), 501–518. doi:10.1080/00856401.2019.1602810
35. Times, Economic 2021 Government withdraws Data Protection Bill, 2021 [https://economictimes.indiatimes.com/tech/technology/government-to-withdraw-data-protection-bill-2021/articleshow/93326169.cms?from=mdr\(open in a new window\)](https://economictimes.indiatimes.com/tech/technology/government-to-withdraw-data-protection-bill-2021/articleshow/93326169.cms?from=mdr(open in a new window))
36. Daly, E. M., Tirupathi, S., Rooney, S., et al. (2025). Usage Governance Advisor: From Intent to AI Governance. Proceedings of the AAAI Conference on Artificial Intelligence, 39(28), 29628–30. <https://doi.org/10.1609/aaai.v39i28.35348>
37. EY. (2025, January 14). Strategic AI Policy of Responsible Deployment. EY India.
38. Kashik, K. (2023). India's Strategic Approach to Artificial Intelligence Regulations. New Delhi: National Centre for Good Governance. [https://ncgg.org.in/sites/default/files/lecturesdocument/Kshitija\\_Kashik\\_Research\\_Paper.pdf](https://ncgg.org.in/sites/default/files/lecturesdocument/Kshitija_Kashik_Research_Paper.pdf)
39. Le Bui, Q., & Noble, S. (2020). Accountability and Governance for AI. *AI & Society*, 35(1), 1–11.
40. Ministry of Electronics and Information Technology. (2023). Digital Personal Data Protection Act. Government of India.
41. Neff, G. (2021). Gender Bias in AI-Powered Hiring. *Technology & Society*, 42(7), 118–132.
42. Saxena, K. (2024). AI in Governance and Policy Making. *International Journal of Science and Research*, 13(5), 1218–23.
43. Sistla, S. (2024). AI with Integrity: The Necessity of Responsible AI Governance. *Journal of Artificial Intelligence & Cloud Computing*, 3(5), 1–3.
44. Srivastava, M., & Sharma, N. (2025). E-Governance and AI Integration: A Roadmap for Smart Governance Practices. *Samsad Journal संसद जर्नल*, 2(1), 160–195.
45. Ting, Y.-J., HUANG, H., LIN, T.-L., & CHANG, W.-H. (2023). Expanding Governance Capabilities. *East Asian Policy*, 15(02), 44–62.
46. ISPP. (2025, February 21). Ethics of AI in Public Policy in the Indian Context. Indian School of Public Policy.
47. PMC. (2023, October 13). Worldwide AI ethics: A review of 200 guidelines and meta-analysis. PubMed Central. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10591196/>
48. Ministry of Electronics and Information Technology. (2023). Digital Personal Data Protection Act. Government of India.