



From Data to Decisions: A Policy Framework for Leveraging AI in India's Development by 2047

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Abstract

India is working towards becoming a developed nation by 2047. This vision needs better decisions, faster services, and fair systems. Artificial Intelligence (AI) can help us achieve development quicker if used judiciously. This chapter explains how India can use AI for national development by suggesting a simple policy model. The model uses real data to make smart and ethical choices. It links AI with education, health, finance, and governance. It also shows how to include rural and poor communities. The chapter uses case studies from India and other developing countries. It ends with a roadmap to build trust, reduce bias, and improve public services through AI. This chapter gives a simple plan to use AI for India's progress by 2047. It explains fair rules, feasible tools, and how AI can help develop Indian villages. The chapter shows real stories from India and other places. It shares clear steps that leaders can follow.

Keywords: Development, Viksit Bharat, Technology, Sustainable Development Goals.

Introduction

India has set a goal to become a developed nation by 2047. This is the year when the country will complete 100 years of independence. Achieving this goal needs quick decisions, efficient services, and fair systems. Artificial Intelligence can help in reaching this goal. It uses data to make predictions, give advice, and support better choices. It can assist humans in every sector be it education, healthcare, finance, and

governance and make our lives smoother in the era of technology. If used judiciously, AI can make services available quicker, at a cheaper rate, and with accurate and reliable results.

However, apart from the pros, AI can also cause harm if it is biased, and unfair. It can exclude people who do not have access to technology thus adding up to digital divide. It can make decisions that are hard to explain. Therefore, India needs a clear policy framework to guide the use of this technology. The framework should put people first. The judiciary should ensure that AI is used judiciously and results drawn by AI are transparent, accountable, and trustworthy. It must include rural communities and marginalized groups in order to ensure equality.

This chapter explains such a framework that is based on best practices practiced globally and is as per the requirements of people. It offers a roadmap to link AI with national development goals. It shows how to use AI for accessing public service, economic growth, and social inclusion while protecting privacy and human rights of its citizens.

Literature Review

Artificial intelligence uses data to make decisions. It can help in policy, planning, and implementing public services (Brynjolfsson & McAfee, 2017; Mikalef et al., 2019). Though this technology accomplishes many tasks quicker, and with more accuracy than humans but it can also make mistakes.

Countries are making use of AI in different ways. Estonia makes use of chatbots to answer citizens' queries (Misuraca & Van Noordt 2020). Singapore uses AI tools to manage traffic and plan housing (Ng, 2020). India is making usage of AI in various sectors be it healthcare, farming, education, and transport (NITI Aayog, 2018). Farmers can get advice from AI apps (Tripathy et al., 2020). Schools and other educational institutions use AI for teaching plan that fits every child (Gupta 2021). Hospitals and health centers use AI to read X-rays, and other test reports and then reach to treatment plans (Topol 2019).

AI usage is in finance sector too. Banks use it from detecting frauds to checking credit scores of customers (Bose & Mahapatra 2021). Mobile AI banking services have potential to improve financial access for people in rural villages by offering convenient, low-cost solutions (Singh & Kaur, 2020). However, these technologies come with significant risks. AI systems often learn from biased data, which can lead to discriminatory outcomes, especially for marginalized or low-income groups (Eubanks, 2018; Mehrabi et al., 2021). This can worsen existing inequalities. Additionally, many villages lack reliable internet infrastructure, limiting access to such digital services (Banerjee & Duflo, 2019). Without addressing these challenges such as bias, exclusion, and connectivity, AI banking may fail to serve the very populations it aims to help.

People are more likely to trust AI when it feels clear, fair, and respectful of their rights (Floridi et al., 2018; Jobin, Ienca, & Vayena, 2019). The EU's AI Act offers a useful model by linking rules to the level of risk (European Commission, 2021). India can adapt this approach to suit local needs and contexts. AI can help achieve the Sustainable Development Goals—improving healthcare, education, jobs, and climate action (Vinuesa et al., 2020). But for Vision 2047, AI must be designed to be affordable, inclusive, and user-friendly. Most importantly, humans must stay in charge of all major decisions.

- **Proposed Policy Framework**

India needs a clear plan for using AI. The plan must help the country reach Vision 2047. People must be kept at the center of every step.

The framework has five main pillars. Each pillar makes AI safe, fair, and useful.

Pillar 1 – Data Quality

AI works well only with good data. Data must be correct, and complete. Also, it should be updated time to time.

Pillar 2 – Ethics and Fairness

AI should treat everyone with fairness and respect. It must never harm or exclude anyone, especially vulnerable and marginalized groups. To build trust, we must carefully check for hidden bias in data and decisions and remove it. Only then can AI truly serve all people, regardless of who they are or where they live.

Pillar 3 – Inclusion

AI must reach rural areas and include all regardless of gender, caste, creed, nation, region, and so on. It must support poor and marginalized groups. AI should be able to provide services in local languages as well to increase reach.

Pillar 4 – Transparency and Trust

People have a right to understand how AI makes decisions that affect their lives. Explanations should be simple, clear, and in everyday language. When AI is easy to understand, it builds trust and helps people feel more in control.

Pillar 5 – Skills and Capacity

People must learn how to use AI and it is the responsibility of the state to enrich people with skills so that digital divide and technological divide can be reduced and then inequality can be controlled. Training must be given to officers, teachers, doctors, and workers.

- **Five Pillars of the AI Policy Framework**

The AI policy framework rests on five main pillars. Each pillar addresses a core requirement for fair, safe, and effective use of artificial intelligence in public life.

Table 1 presents these pillars, their key focus, and the main actions needed to put them into practice. Together, they form the base for achieving Vision 2047.

Table 1: Five Pillars of the AI Policy Framework

Pillar	Key Focus	Main Action
Data Quality	Correct and updated data	Build verified public databases
Ethics and Fairness	No bias or harm	Audit AI systems regularly
Inclusion	Reach all groups	Create tools in local languages
Transparency and Trust	Open decision process	Use public AI dashboards
Skills and Capacity	Train people	Set up AI training programs

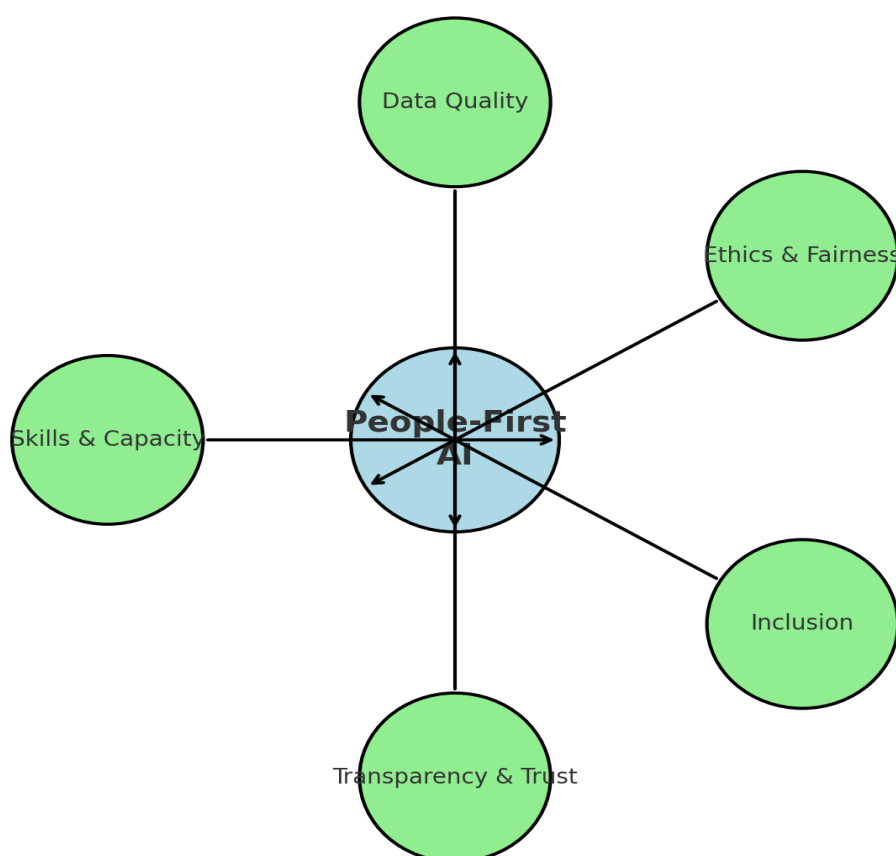


Figure 1: People-First AI Policy Framework

Source: Developed from the proposed AI policy model described in the chapter.

The diagram shows a People-First AI approach at the center, represented by a large blue circle. Surrounding it are five green circles, each representing a pillar of the AI policy framework: Data Quality, Ethics & Fairness, Inclusion, Transparency & Trust,

and Skills & Capacity. Arrows connect each pillar to the center, showing that all five support the main goal of creating AI systems that serve people first.

Application Areas

AI can support healthcare, education, financial sector and jobs, but it must focus on solving real, everyday problems that people truly face. AI can support various sectors. In every country, each sector has its own challenges in integrating it with AI. AI must work within these conditions.

- **Education**

AI can give each student a customized plan. These lessons can match the child's pace and build interest of student in learning. Teachers can use AI to evaluate assignments quickly by making use of technology. AI can differentiate in students who need more attention and design personalized content and provide better pedagogical technique. Local language tools can help rural schools. In India, the challenge is that we are a multi-lingual country and low digital access in rural schools. The solution is to build AI tools in local languages and work offline when internet connection is poor.

- **Healthcare**

AI can read X-rays and medical scans better than humans. It can detect illness at its very initial stage. AI can send reminders to take medicine at devices. In rural areas, AI can guide health workers when no doctor is nearby. AI can guide health workers with step-by-step help in local languages.

- **Finance**

Proper applications of AI can help in detecting fraud with ease. It can check if a person is eligible for getting a loan by computing credit score for loans. AI mobile apps can bring banking to our door steps. People can access most of the facilities without visiting the Bank branch. The challenge in India is low digital literacy and fear of fraud that has led to a lower acceptance rate of e-services in rural areas. To fix this issue simple usage of apps with voice help and training for first-time users can be provided.

- **Governance**

AI can track the progress of public projects. It can warn officers when there are delays. Chatbots can answer citizens' questions at any time and any place. This saves time of both people and staff. In India, the challenge with governance is different rules in different states and delay in policy implementation, especially in smaller towns. The solution is to start with simple AI tools that follow state laws and train local officers in these for better reach.

- **Rural Development**

AI can help farmers pick crops suitable for their soil. It can give weather alerts. It can guide fishing schedules. It can connect village craftsmen, farmers to the

electronic markets. The challenge is patchy internet and limited awareness. AI tools should be made accessible offline as well.

- **AI in Different Sectors**

Artificial intelligence is already being used in most of the sectors to solve specific problems and improve services. Table 2 lists five sectors where AI has made a clear impact. The table shows the main use in each sector and the direct benefit for people. These examples can guide how India can apply AI under Vision 2047.

Table 2: Use of AI in Different Sectors

Sector	Main Use	Benefit
Education	Custom learning plans	Better student results
Healthcare	Read scans	Early illness detection
Finance	Fraud checks	Safer banking
Governance	Track projects	Faster service
Rural Development	Crop advice	More farmer income

Source: Adapted from multiple sectoral AI applications in education, healthcare, finance, governance, and rural development as discussed in the chapter.

- **AI in Different Sectors (India-Focused)**

Table 3 shows how artificial intelligence can be applied in key sectors in India. It also highlights local challenges in each sector and practical solutions that can work in the Indian context.

Table 3: AI in Different Sectors with Challenges and Solutions

Sector	Main Use	Benefit	Challenge	Solution
Education	Custom learning plans (Holmes et al., 2019)	Better student results	India has over 22 official languages (Census of India, 2011). Many AI tools work only in English or Hindi.	Create AI learning apps in local languages. Use offline modes for schools with weak internet (Gupta, 2021).
Healthcare	Read scans (Topol, 2019)	Early illness detection	Rural clinics lack trained doctors (World Health Organization, 2021). Internet may be slow or absent.	Train local health workers to use AI tools offline. Sync data when internet is available.
Finance	Fraud checks (Bose & Mahapatra, 2021)	Safer banking	Many rural people have no formal credit history (Singh & Kaur, 2020).	Use alternative data such as payment patterns or farming records. Design AI to work on simple mobile phones.

Governance	Track projects (Mikalef et al., 2019)	Faster service	Data from different states may not follow the same format (NITI Aayog, 2018).	Create a single national data standard. Make it easy for states to upload updates.
Rural Development	Crop advice (Tripathy et al., 2020)	More farmer income	Farmers may not trust AI advice if it is too technical (Banerjee & Duflo, 2019).	Use voice messages in simple words. Share advice through trusted local groups and cooperatives.

Source: Adapted from sectoral AI applications in India's education, healthcare, finance, governance, and rural development.

Implementation Roadmap

AI is contributing in making India developed but this will take time. It has to move in small steps, so that tasks can be achieved smoothly.

First, the basic infrastructure for accessing AI- Internet, mobile phones. Not patchy, but strong connectivity. People in government must learn the simple use of AI. Not all at once but atleast enough to start. Then, try it out. AI should be implemented in projects in health, farming, and education. Start where it matters the most. Watch the AI usage closely. If there are mistakes, fix them before committing more. Last comes the full rollout. Cities and villages should see the same benefits, minimizing the regional divide. Keep teaching people as AI is still on its developing stage and new tools will keep on coming. The goal is not just to use AI, but to make sure it works for people, making development exclusive.

Challenges and Risk Mitigation

As discussed earlier as well, AI is on its developing stage so challenges are not clear completely. One big challenge is bias. If the data is wrong, the results will be wrong. That can hurt people, especially the poor and marginalized. The fix is simple to say but hard to do — check the data often, and remove bias when found.

Trust is one of the biggest challenges in using AI. People won't use something they don't understand or feel safe with. That's why AI systems must be clear, honest, and easy to explain. The digital divide also remains a serious barrier, many villages still lack fast, reliable internet. Without it, people are left out of the benefits AI can bring. We must bridge this gap so everyone can take part.

Privacy is another key concern. AI often uses personal data, and that data must be kept safe. Only the right people should have access. Then there's the issue of skills. Many people, from senior officials to grassroots workers, don't yet know how to use AI tools. Training must reach all levels to ensure no one is left behind.

To manage these risks, we need to audit systems, explain decisions clearly, expand internet access, protect privacy, and invest in training. Only then can AI grow safely and fairly.

Conclusion and Policy Recommendations

AI can play a big role in helping India reach its Vision 2047 goals, but only if we use it with care and purpose. The goal isn't just to add more technology, but to improve people's lives in meaningful ways.

First, AI must put people first. It should solve real problems without harming or leaving anyone behind. Second, strong and clear rules are needed. These laws must protect fairness, privacy, and safety for everyone. Third, access must be equal. People in both cities and villages should benefit, with support for local languages and offline options. Fourth, we need to build skills. Everyone, from students to government workers should get regular training to use AI with confidence. Lastly, trust is essential. AI systems should be open and easy to understand. Clear explanations build public confidence. By following these steps, AI can support better healthcare, education, farming, finance, and governance and truly help every citizen, not just a privileged few.

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