

Artificial Intelligence: Challenges & Opportunities in Governance

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Why AI should be on India's National Agenda

AI opportunity for India



Improving Governance: AI Innovation enables evidence-based policy development and public administration, improving the efficiency of governance and **bringing targeted social benefits to citizens**



Fostering the Digital Economy: India's ambitions of a Trillion Dollar Digital economy **rests on our ability to harness the potential of AI**



Catalyzing Social Transformation: AI has the power to **leapfrog** traditional **development cycle** and **catalyze large-scale social development** through transformation of **critical sectors**



Harnessing the Potential of Data: AI has the power to harness the potential of data, complementing MeitY's **National Data Governance Policy**



Global Partnership on AI (GPAI): India has been appointed the **Lead Chair for GPAI** and is entrusted to lead global efforts on increasing responsible AI development and adoption

1



Artificial Intelligence (AI) and automation will create **47 Lakh new tech jobs by 2027**

2



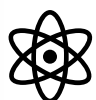
AI is expected to add **\$967 Bn to the Indian economy by 2035** and USD 450–500 billion to India's GDP by 2025, accounting for **10% of the country's USD 5 trillion GDP target**

3

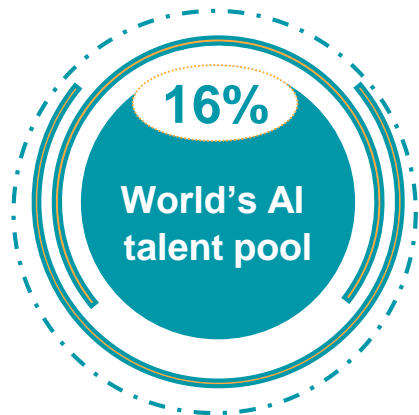


AI is critical for enabling data-driven decision-making for more effective public service delivery

4



AI can boost innovation and productivity in India – India has **Seven AI unicorns as of 2023**, with a total **enterprise valuation of \$25.4 billion**



Large Technical Talent Pool

- Ranks **1st** in AI skill penetration
- **Second largest talent pool** of highly-skilled AI, machine learning and big data talent



Rising Digitisation

- **Largest connected nation** with more than 800 million internet users
- Implementation of Digital Programs at the Population Scale **ex Aadhaar-largest biometric ID system**



Growing Startup & Innovation Ecosystem

- Over **3000+** Deep Tech Start-ups growing at **53% CAGR** over last 10 years
- **5th** in the Number of Newly Funded AI Companies by Geographic Area

1

Improving Public Service Delivery

Leveraging the power of AI to provide **services in all Indian languages and also through voice**

2

Evidence based Decision Making

AI enables evidence-based decision making and policy formulation that can ensure **targeted social benefits to citizens.**

3

Driving Inclusive Development

AI can **transcend traditional barriers** to inclusive development & enable large-scale social transformation for all.

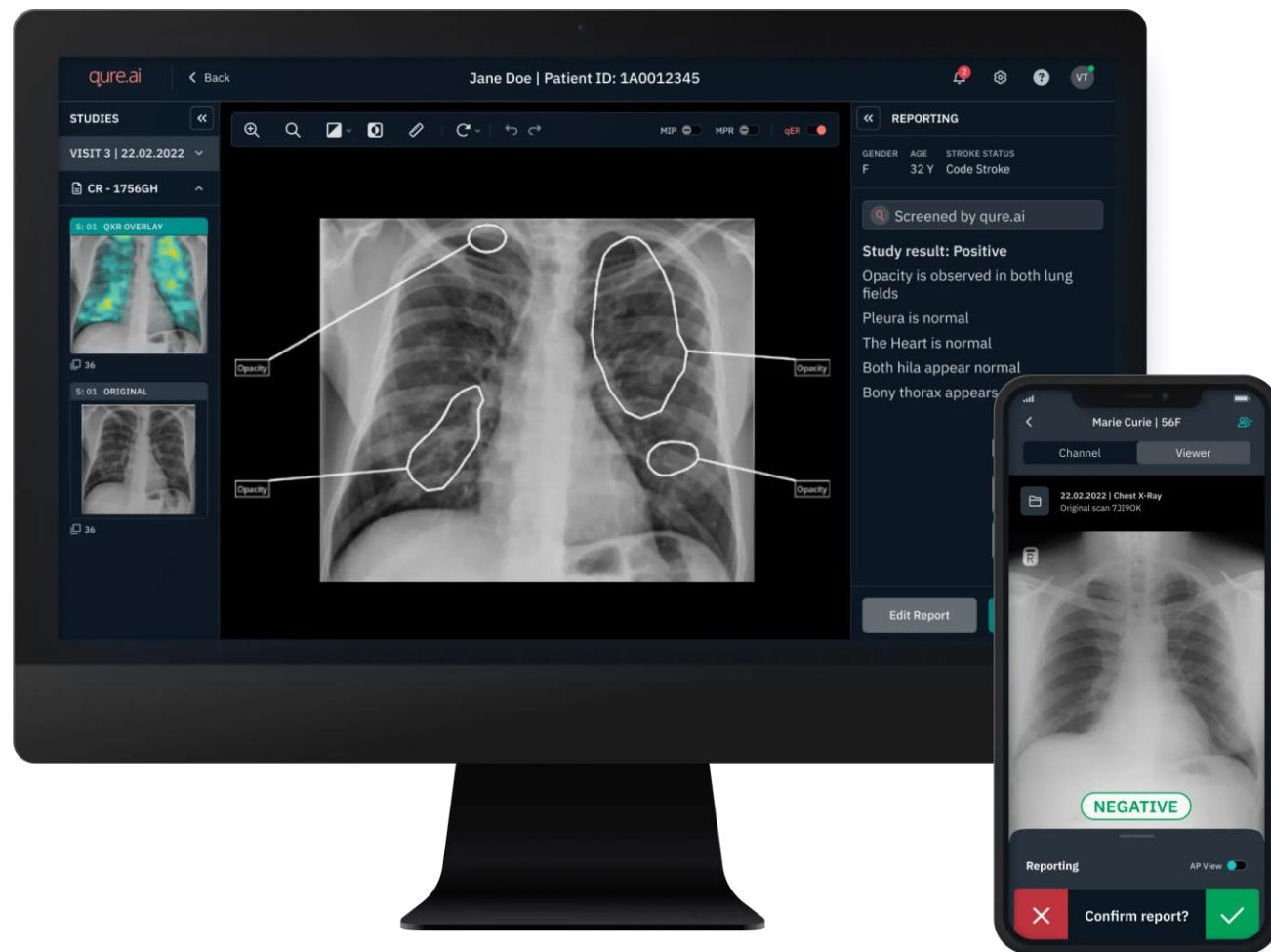
4

Empowering Citizens

MyGov Helpdesk - Intelligent Virtual Assistant (IVA) brings accurate information about coronavirus to citizens

Using AI for Detecting TB through Automated X-Ray Analysis

- Automated reading of **Chest X Rays with AI and Computer Vision**
- Can also detect **retinopathy, breast cancer**
- Training **Asha & Aanganwadi workers** in use of AI tools for disease surveillance
- **AI** is also used to predict and **prevent early drop-out** of TB patients



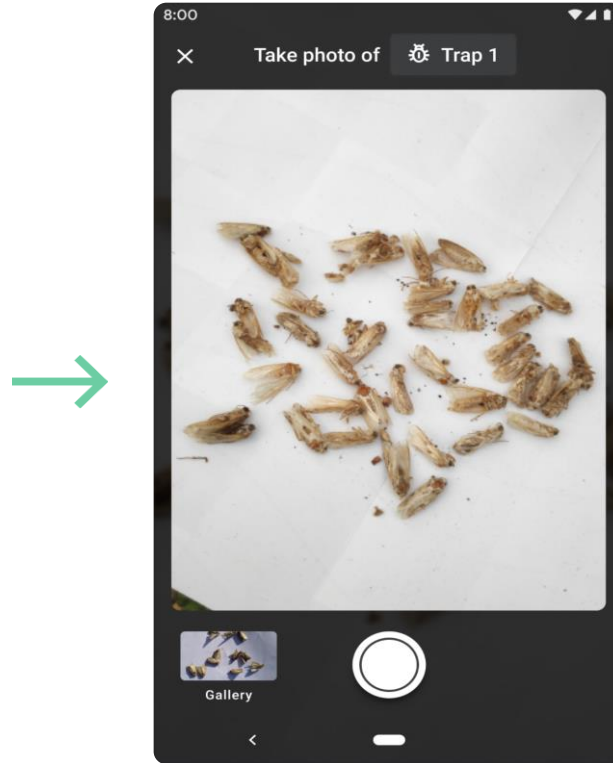
TB Diagnosis being implemented in around 25 States

AI Based Pest Management Solution for Cotton Crop

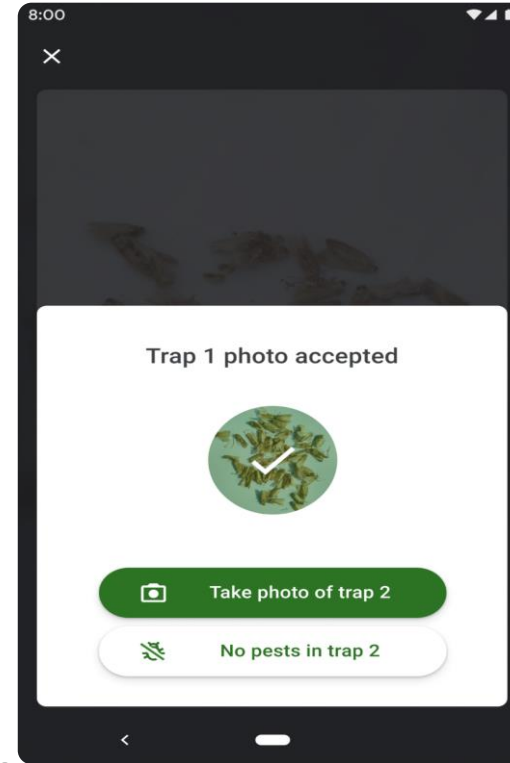
Farmer empties the moths from the pheromone trap



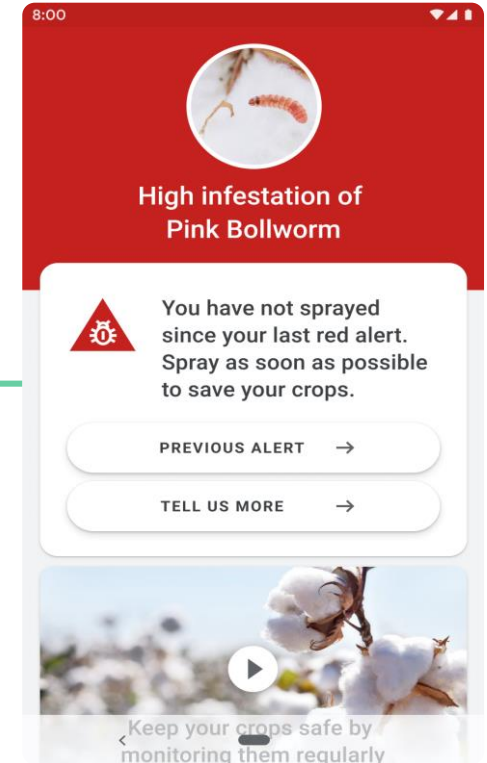
Opens the app and captures 2 trap images



Pests are detected & counted from the image uploaded



Advisory is then generated on the app



App Flow

Deployed in 10 States

Using AI & Computer Vision for Urban Mobility

Infrastructure Monitoring

- Potholes, Manhole covers
- Non-functional traffic lights & streetlights
- Garbage dumping
- Civic infra damage



Traffic Violations

- Over speeding & Rash driving
- Not wearing seatbelt,
- Broken tail/head lights etc.



Being used by NHAI, Municipal Corporations, PWD, Police

A Contactless Air Travel Solution

- Download Digiyatra App & register with mobile number & OTP
- Link your Identity Credentials using DigiLocker or Offline Aadhaar.
- Take a selfie picture when prompted & upload onto the app.
- Update your Boarding Pass on the DigiYatra App and share with the departure airport.
- Scan your Boarding Pass on DigiYatra E-Gate
- Look into the camera & get your face scanned
- The E-Gate will open to let you enter inside the Terminal



Current Challenges



India's public **AI compute infrastructure lags** global leaders (USA, China, UK,)



Current foundational models are often **biased** and do not capture India's **linguistic & cultural diversity**



Lack of **data discoverability** and access to quality datasets due to **siloeed data efforts**



Deep-tech startups often face constraints in **accessing risk capital**



Technical education infrastructure is not in line with needs of delivering Data & AI training



Most **AI Governance tools** are built on western datasets & not contextualized to India

IndiaAI Mission: Overview

Government of India has approved the comprehensive national-level IndiaAI mission with a budget outlay of Rs.10,371.92 crore. The Mission will be implemented through 7 pillars

IndiaAI Mission

1

**IndiaAI
Compute
Capacity**
INR 4563.36 Cr

Provide access to modern, hyper-scale AI Compute Infrastructure as a service (10,000 GPUs or more)

2

**IndiaAI
Innovation
Centre**
INR 1971.37 Cr

Development & deployment of indigenous Large Multimodal Models & domain-specific foundational models in critical sectors

3

**IndiaAI
Datasets
Platform**
INR 199.55 Cr

Streamline access to quality, non-personal datasets to catalyze data-driven governance and innovation

4

**IndiaAI
Applications
Development
Initiative**
INR 689.05 Cr

Develop, scale, and promote the adoption of impactful AI solutions across critical sectors

5

**IndiaAI
FutureSkills**
INR 882.94 Cr

Promote AI in BTech, MTech, Ph.D.& Post Doc programs & set up Data & AI Labs in Tier 2 & Tier 3 cities to impart foundational AI skills

6

**IndiaAI
Startup
Financing**
INR 1942.5 Cr

Support & accelerate deep-tech AI startups & provide them streamlined access to funding for futuristic AI Projects

7

**Safe &
Trusted**
INR 20.46 Cr

Develop tools & frameworks, self-assessment checklists for innovators, & other guidelines & governance frameworks

Key Challenges and Risks

Unprecedented Pace



Ethical Considerations



Misinformation, Privacy and Security



High Cost of Development & Increasing Carbon Footprint



Job Displacements

AI does NOT understand boundaries.
One Country's Regulation = Another Country's Comp Advantage

Thank You



सत्यमेव जयते

**Ministry of Electronics
& Information Technology**
Government of India