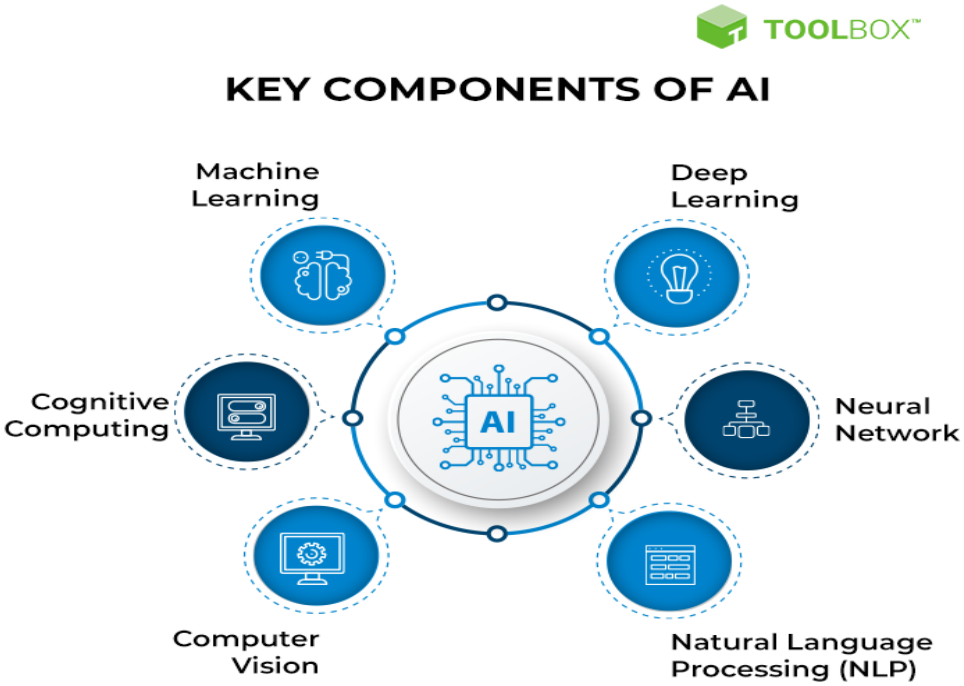
AI in Governance

Why in news?

The role of Artificial intelligence in transforming governance in India is immense due to the scale and size of data availability and rapidly digitization in India to revolutionize governance, in India.

What is Artificial Intelligence?

- **Artificial Intelligence** – AI refers to the ability of machines to do cognitive functions such as thinking, perception, learning, problem-solving and decision-making.
- **Objective** – To create machines that can emulate capabilities and carry out diverse tasks, with enhanced efficiency and precision.
- **Techniques** – AI can be achieved through components like Machine Learning, Natural Language Processing, Computer Vision and Robotics.
- **AGI (Artificial General Intelligence)** – It refers to a machine or a software that can perform any intellectual task that a human can do.



What is the role of AI in governance?

- **AI in governance (GovAI)** – It is the use of AI in governance in every aspect of service delivered by government.

- **Killer app of AI** – It is believed that *governance is the biggest application of AI.*
- AI in governance will make government sharper, more targeted and give life to the idea of ***maximum governance***.
- **Digital transformation in governance** – Integrating AI with Digital Public Infrastructure (DPI) will bring AI enabled platforms DPI in Aadhaar, UPI and Digi Locker that will revolutionize governance.

Digital Public Infrastructure (DPI) is a digital framework that allows governments, businesses and citizens to interact, share resources, and expand economic opportunities.

To know more about DPI, click here

- **Trends of emerging data ecosystem** – The recent trends in India on data repository indicates biggest potential on AI application.
- **Largest data repositories** – As more Indians access and use the internet and the digital environment, they consume and ***generate massive amounts of data.***
- And these data are stored as vast stores of personal and non-personal data with the help of DPIs and digitalization process.

90-crore Indians are connected to the Internet and by 2026 that figure will touch 120 crore, making India the largest connected and digitalized country in the world.

- **Application in wide range of sectors** – AI can also benefit various sectors such as healthcare, agriculture, education, infrastructure, fisheries, animal husbandry, national disaster and climate prediction, smart mobility and transportation.

GovAI can accelerate the IndiaAI ecosystem, resulting in a vast network of companies and innovators developing AI models, solutions and platforms.

What are the benefits of integrating AI in governance?

- **Efficient government** – With the intersection of DPI and AI, the government can become more efficient and ensure that the same resources can be used to make an ***impact across a broader spectrum*** of society.
- **Enhanced decision-making –** Data-driven policy and scheme designing by evidence-based data analytics, stakeholder consultation, and pilot programs to address socio-economic challenges effectively.
- **Improved service delivery –** AI-powered automation can streamline public services, ***reduce delays*** and ***enhance the accessibility***.
- **Inclusive governance** – AI-powered tools bridge language barriers by ***Language translation*** and promote communication, education, and cultural exchange in diverse, multilingual societies.

- **Increased transparency and accountability –** AI systems help *monitor processes*, detect anomalies and *reduce corruption*, *fostering trust* in governance.
    - Transparent and fair *procurement in public sector* contracting ensure accountability.
- **Attaining of maximum governance** – By reducing government intervention in the common man's day-to-day activities and empowering the people to ensure their own as well as the country's growth and development.
    - It also includes making government processes easier by reducing red-tapism and corruption and encouraging e-governance.
- **Better resource allocation** – AI optimizes the allocation of financial and material resources, ensuring efficient utilization in critical areas like infrastructure, healthcare and education.
    - Optimized tax collection and curbing evasion for robust public finances and sustainable development.
- **Better healthcare prediction and medicine discovery** – AI-driven models *predict disease outbreaks* and *accelerate drug discovery* and *personalized medicine*.
- **Enhanced national security and cybersecurity** – Advanced surveillance and threat detection boost security to ensure a safe and law-abiding environment.
- **Enhanced National disaster and climate prediction** – Predictive analytics using satellite data enhance the early warning systems and disaster preparedness by mitigating risks to safeguard communities.
- **Growth in Agriculture, fisheries, animal husbandry** – Data-driven practices improve yield, resource efficiency, and sustainability, ensuring food security and better livelihoods for rural populations.

What are the challenges?

- **Lack of competence** – Advances in AI are being slowed by shortage of workers with skills and experience in deep learning, natural language processing and robotic process automation.
- **Minimal data ecosystems** – Limited availability of high-quality, organized and interoperable datasets restricts potential of AI**.**
- **High resource costs** – Developing and deploying AI systems requires significant investment in infrastructure, expertise, and maintenance, posing a barrier for budget-constrained entities.
- **Lack of awareness** – Low awareness about AI's capabilities and potential among policymakers and citizens limits adoption and trust in AI-driven initiatives.
- **Privacy and security issues** – In using data of public as India doesn't have any explicit legislation regarding data anonymization.
- **Lack of collaborative strategy** – Fragmented efforts and insufficient coordination among government agencies, private entities, and academia hinder scalable and impactful AI integration.

What lies ahead?

- Initiate structural collaboration between the government and entrepreneurs and startups in the innovation ecosystem, with the goal of developing AI models.

- Develop localized AI solutions to cater India's linguistic diversity, rural challenges, and unique socio-economic conditions.
- Increase AI adoption in every aspect of governance, driving automation, predictive analytics, and real-time decision-making
- Focus on capacity building by investments in education, skill development, and research will address the skill gap, equipping the workforce to develop and manage AI solutions.

Reference

The Indian Express |Reimagining Governance with AI