Future of
Digital Transformation

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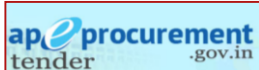**3 Sep 2024**

My digital journey !

PC 2 QC – 3 decades !

30+ eGov Projects

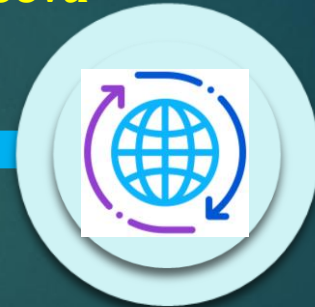**10** National Frameworks

1990's

Social Pensions
COMPACT
CARD
e-Seva

2000's

e-Procurement (AP & Karnataka), AP Online
MCA21, BangaloreOne, **Passport Seva**
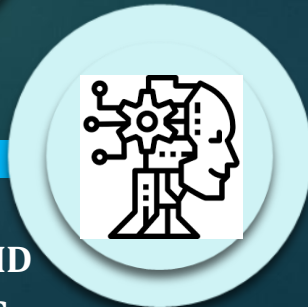
2010-14

WebLand, **Mee Seva, eTAAL**
MeghRaj, CORE, e-Office

2015-20

BharatNet, IndEA 1.0
Digital Service Standard
Agile IndEA, **NDHB, PMJAY**
Aadhaar Seva Kendra

2021….

[InDEA 2.0]
NDEAR-S, AYUSH GRID
AI4AI, FIRST Cancer Care
ADeX, AgriJSON,
Digital Health Blueprints for 4 countries..

The Digital India Decade

- **Aadhaar** – the largest Digital ID System in the world

- **UPI** – the largest digital payment ecosystem

- **GSTN** – the largest tax network

- **PM Jan Aarogya Yojana** – the largest health insurance system

- **FASTag** – nationwide network of toll collection

- **DigiLocker** – the largest system of verifiable credentials

- … and more

See the result here→ **https://etaal.gov.in**

The emerging TechAde

1. **From citizen-*centric* to citizen-*driven* & *citizen-controlled***

- Data Protection | Data Sovereignty

2. **From IT to ET**

- ET = Ecosystem Technologies
- ET = Emerging Technologies

3. **From Transformation to Sustainability**

- GreenTech | ESG | Circular Economy

4. **The Age of DPI -**

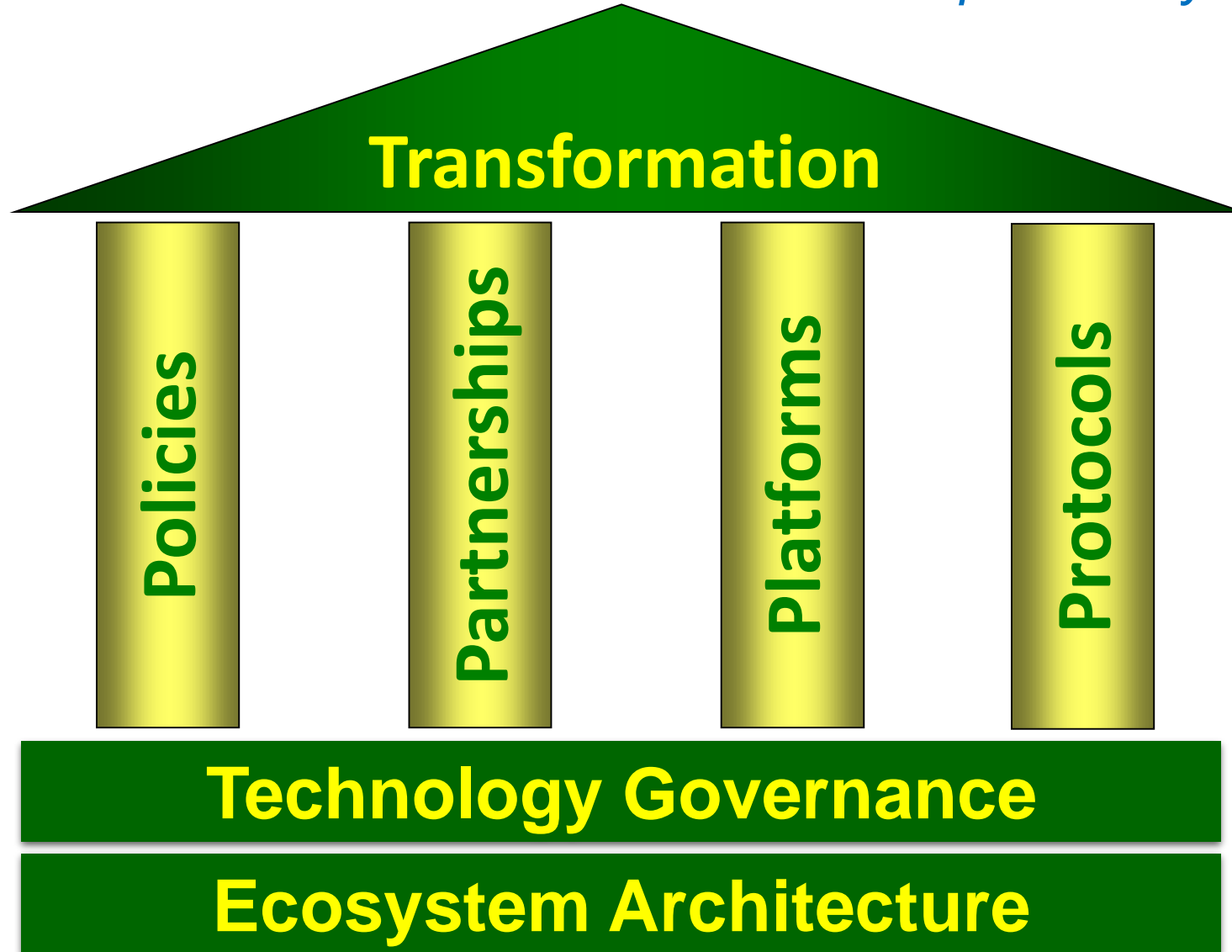- Create & spread the Knowledge & Capacities on DPI

Thank You
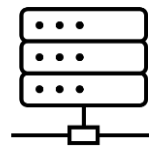
j.satya@nic.in

Digital Ecosystems

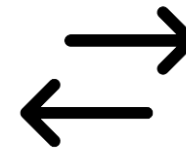*A confederation of autonomous and interoperable systems*

Policies

- **Digital Transformation Policy**
  - Citizen-First , Digital-First
  - Opportunity assessment
- **Innovation Policy**
- **Data Protection Law**
- **Data Management Policy**
- **Cybersecurity Policy**
- **Policy on Business Process Transformation**

Platforms

- **Open Data Platform**
- **Data Exchanges/ Gateways**
- **Citizen Engagement platform**
- **Digital & Financial Literacy Platform(s)**
- **Digital Identity Platform**
- **Digital Payment Platforms**
- **Sectoral Sandboxes**

Protocols

- **Protocols for interoperability**
  - Intra and ross-sectoral data exchange
  - Cross-border transactions
- **Metadata Standards**
- **Data Formats**
- **Open API Framework**
- **Taxonomies / Ontologies**

Partnerships

- **Frameworks for PPP, PPC, Pvt-Pvt collaborations**
- **Partnerships for developing**
  - Public Digital Infrastructure
  - Public Digital Goods
- **Capacity Building**
- **Alliance on 'Future of Work'**
- **Responsible development of emerging technologies**

Technology Governance

- **Meta-Framework for Technology Governance**
- **Framework of Agile Governance**
- **Framework for Investment in Inclusivity**

Ecosystem Architecture

- **Principles of Digital Ecosystem**
- **Principles and structure of Federated Architecture**
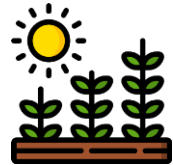- **Institutional structure for developing 'core building blocks**

AI4AI - Saagu-Baagu

- Saagu-Baagu means 'Economic advancement through Agriculture'.
- It is a pilot implementation of AI4AI Framework that advocates integrated deployment of multiple technologies across the value chain to benefit the farmer.
- Implemented on a PPP Model for Chili farmers in Khammam District during 2022-2023

52,000 Farmers (2024)

Chili crop

Use cases piloted

Crop advisory using AV/Chatbot

AI based soil testing; result in 20-30 mins

AI based quality testing and certification

Connecting farmers to market using e-commerce

*Independent evaluation by IMPACT reported a **18%** increase in net income due to a mix of advisories, quality testing and market connect, attributable to Saagu-Baagu initiative.*

Based on the results of pilot phase, the Telangana State government has launched phase II of the initiative to touch 500,000 farmers of five crops in ten districts during 2024-25.

MeghCanCare

WORLD
ECONOMIC
FORUM

- Use of Technology to combat Cancer through 3 methods
  - Screening, early detection & referrals
  - Capacity building at all levels
  - Mass campaign for Cancer awareness
  - Oncology Data Model

- Govt of Meghalaya launched the program in December 2022
  - With Apollo Telehealth Network Foundation as Partner

- Focus on 5 types of cancer
  - Breast, Cervical, Lung, Oral & esophageal

- Over 4 lakh screenings done to 1.2 lakh persons

About DPI

- A DPI is a set of open **digital capabilities** that can create **impact at scale**, enable an **ecosystem** to be developed and contains **effective safeguards** for the protection of the interests of the stakeholders.

Understanding the key attributes of a DPI

Digital Capabilities include

- Systems & Solutions
- Laws, Policies
- Human & Institutional Capacities
- Platforms
- Partnerships
- Protocols

Societal Impact @ Scale implies

- National or State Scale
- Sector-wide spread
- Promoting Innovation
- Ensuring equity & inclusion

Enabling ecosystem involves

- Interoperability
- Openness
- Participation
- Modularity
- Competition
- Network Effect

Safeguards include

- Robust governance
- Privacy-by-design
- Security-by-design
- Anti-monopoly
- Accountability
- Transparency

The DPI Academy
Knowledge | Capacity | Community

- A new institution dedicated to the cause of DPI in the developing countries

- Based on three pillars of the Academy
  - Knowledge Creation & Dissemination
  - Capacity Building at top & mid levels
  - Promoting DPI Communities

- A joint initiative of Artha Global & eGov Foundation

- Being soft launched on **19 June 2024**

- Programs to be run in partnership with premier training institutions & industry
  - 1 to 3-day CB programs designed