# DPIs from a Sectoral Lens

12 June 2025

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

**How are 'Sectoral DPI' evolving?**
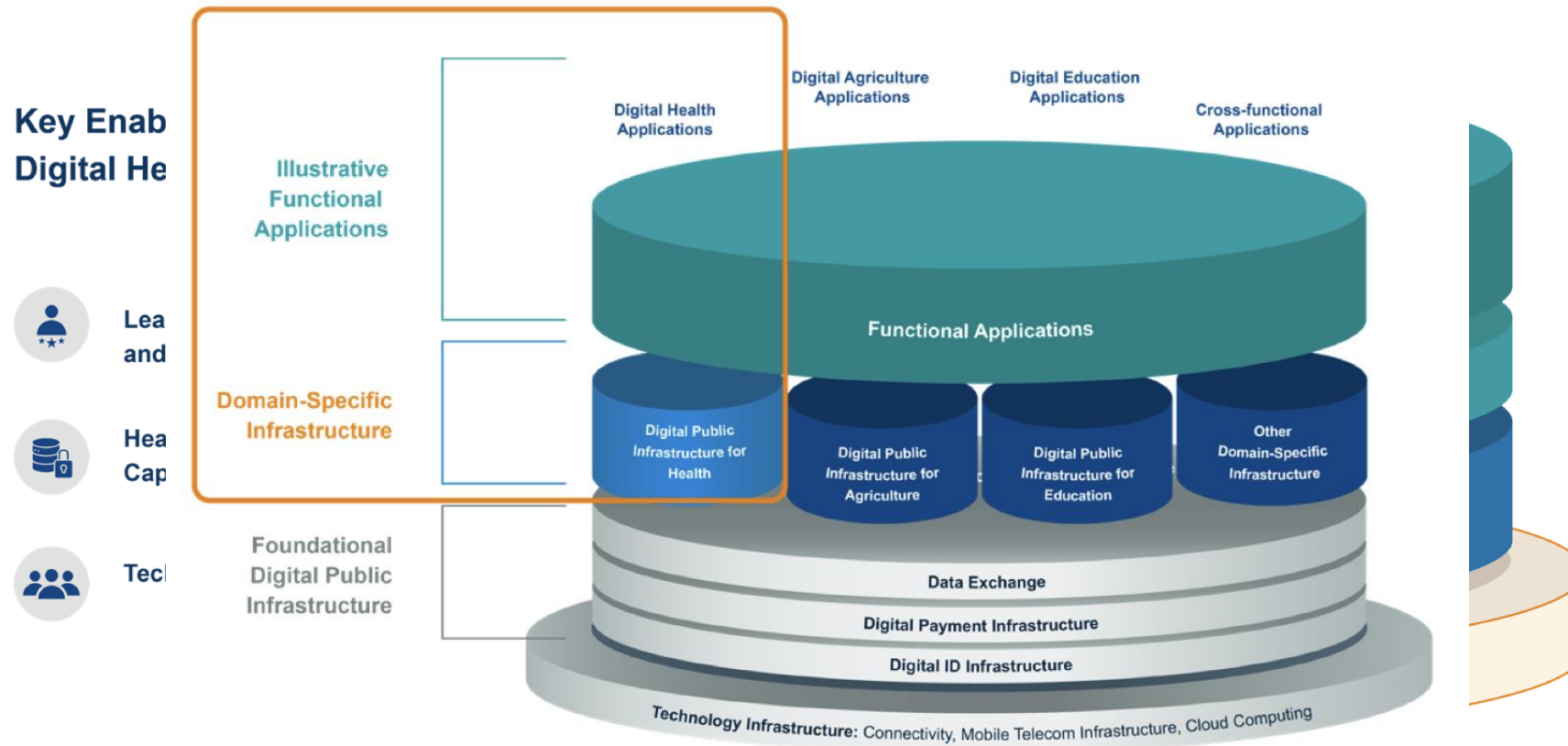
1. Digital Public Infrastructure in Health
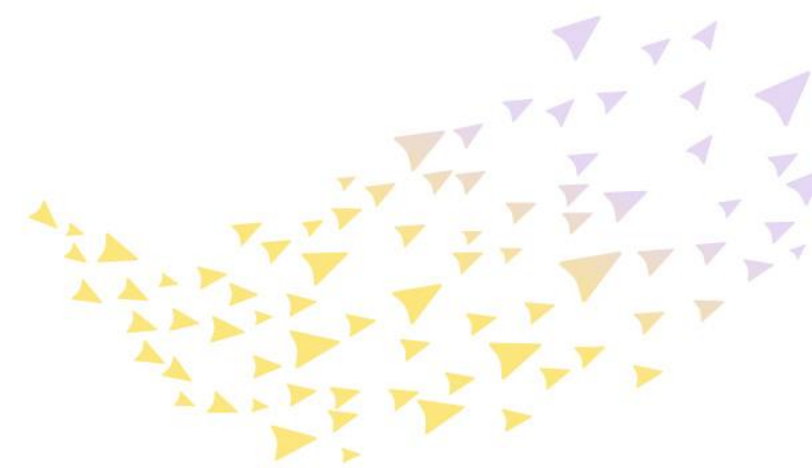
2. Digital Agriculture 'Stacks'

# Health

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# DPI - Health

# DPI – Health / User Journeys

o User-journey-based approach to identify the components of
   DPI-H that would enable a range of health applications.

o Looking into details of the user journeys, associated digital health interventions and
   functionalities, and the underlying DPI-H needed for scaled operation.

- User Journey 1: **Client Engagement with Primary Health Services**

- User Journey 2: **Improving Healthcare Provider Performance and Efficiency**

- User Journey 3: **Strengthening Surveillance and Outbreak Management**

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# DPI – Health / Mapping Journeys with Infrastructural Requirements

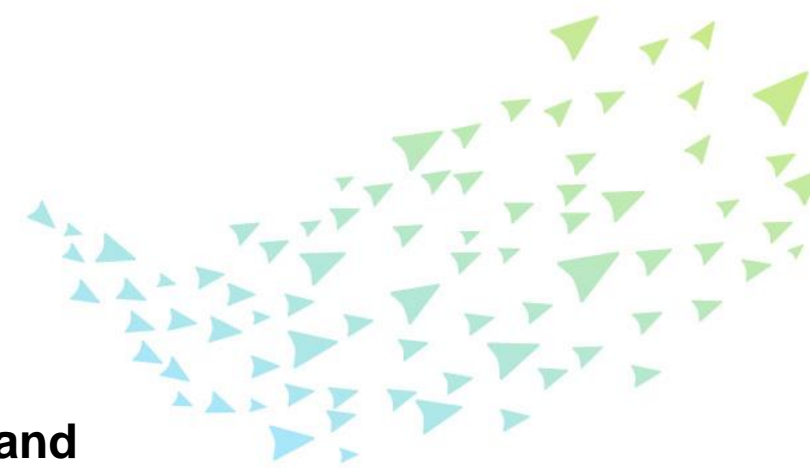| Layer | Category | Sub-item | Care Service Discovery | Continuity of Care | Access to Medication | Precision Public Health | Digital Payment & Vouchers | Streamlined Data Capture and Messaging | Remote Consultation | Risk-Based Client Prioritization | Online HCW Training, Support and Guidance | Direct Communication: Health Officials and HCW | Integrated Outbreak Analytics | Outbreak Forecasting and Alert Capabilities |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Supporting DPGs and Functional Applications | Illustrative Supporting DPGs and Global Goods | Open Curated Data | | | | | | | | | | X | | X |
| | | Open AI Models | | | | X | | | | X | | | | X |
| | | Open Curated Content | | | | X | | | | | | | | |
| DPI-H | Health Data Security Framework | Consent, Security, and Authorization Protocols | X | X | X | X | X | X | X | X | X | X | X | X |
| | Canonical Registries | Facility Registry | X | X | X | | | X | X | X | | X | X | X |
| | | Product Registry | X | | X | | | | X | | X | | | X |
| | | Client Registry | | X | | X | | | X | X | | | X | |
| | | Health Worker Registry | | X | | | | X | X | X | | X | X | X |
| | | Terminology Service | | X | | | X | X | X | | | X | | |
| | Health Domain Interoperability | Interoperability Layer, Messaging Standards & Orchestration | X | X | X | X | X | X | X | X | X | X | X | X |
| | Scaled Health Services | SHR | | X | X | X | | | X | X | | X | | |
| | | EIR | | X | X | | | | X | X | | | | X |
| | | LMIS | | X | X | | | | X | X | | | | X |
| | | LIS | | X | X | | | | X | X | X | X | | X |
| | | HRIS | | X | | | | | X | X | X | X | X | X |
| | | IDSR | | | | | | | | | | | X | X |
| | | IMIS | | X | X | | X | X | X | | | | | |
| | Central Data Repositories | Data Warehouses and Analytics | | | | | X | | | | X | X | X | X |
| Foundational DPI and Technology Infrastructure | Foundational Digital Public Infrastructure | Mapping Infrastructure | X | | | | | | | | | X | X | X |
| | | Payments Infrastructure | | | | | X | | | | | | | |
| | | Cross-Sector Data Exchange Infrastructure | | | | | | | | | | | | X |
| | | Identity Infrastructure | | | | | X | X | X | | X | | X | |
| | Technology Infrastructure | Connectivity | X | X | X | X | X | X | X | X | X | X | X | X |
| | | GSM Messaging Networks | | | | X | X | X | X | | | X | X | X |
| | | Cloud Computing | | | | X | | | X | | | | | X |

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# DPI– Health / Closer look at systems

# Agriculture

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# Initiatives

**Multiple initiatives across the sector; mix of country specific/focused and global approaches**

- **AgStack (Global)**

- **AgriStack (Country specific: India)**

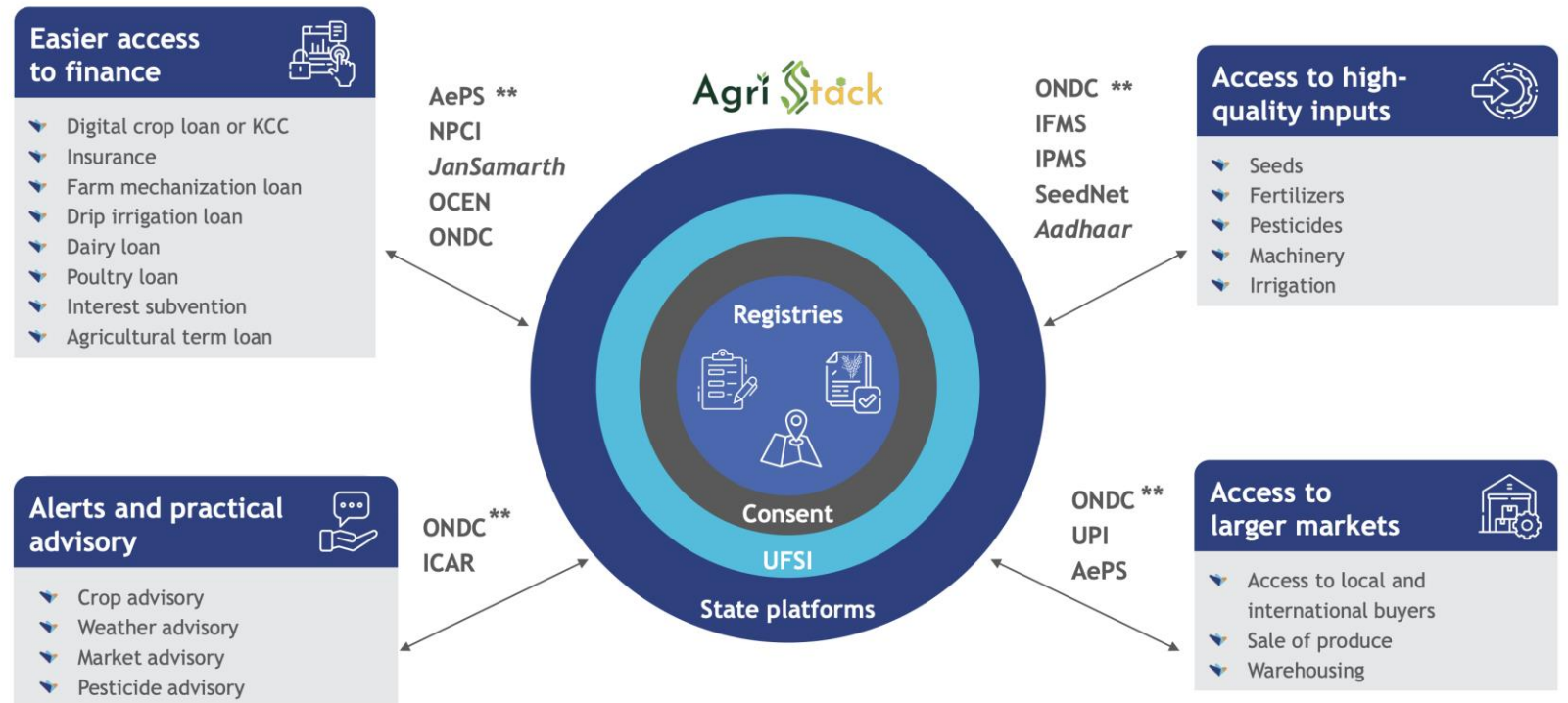- **FarmStack (Country specific: Ethiopia)**

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# AgriStack

"AgriStack attempts to enable farmers to access and use digital services, primarily for credit, advisories, inputs, and market linkage"

**Focused on 3 key components**
- Farmer registry
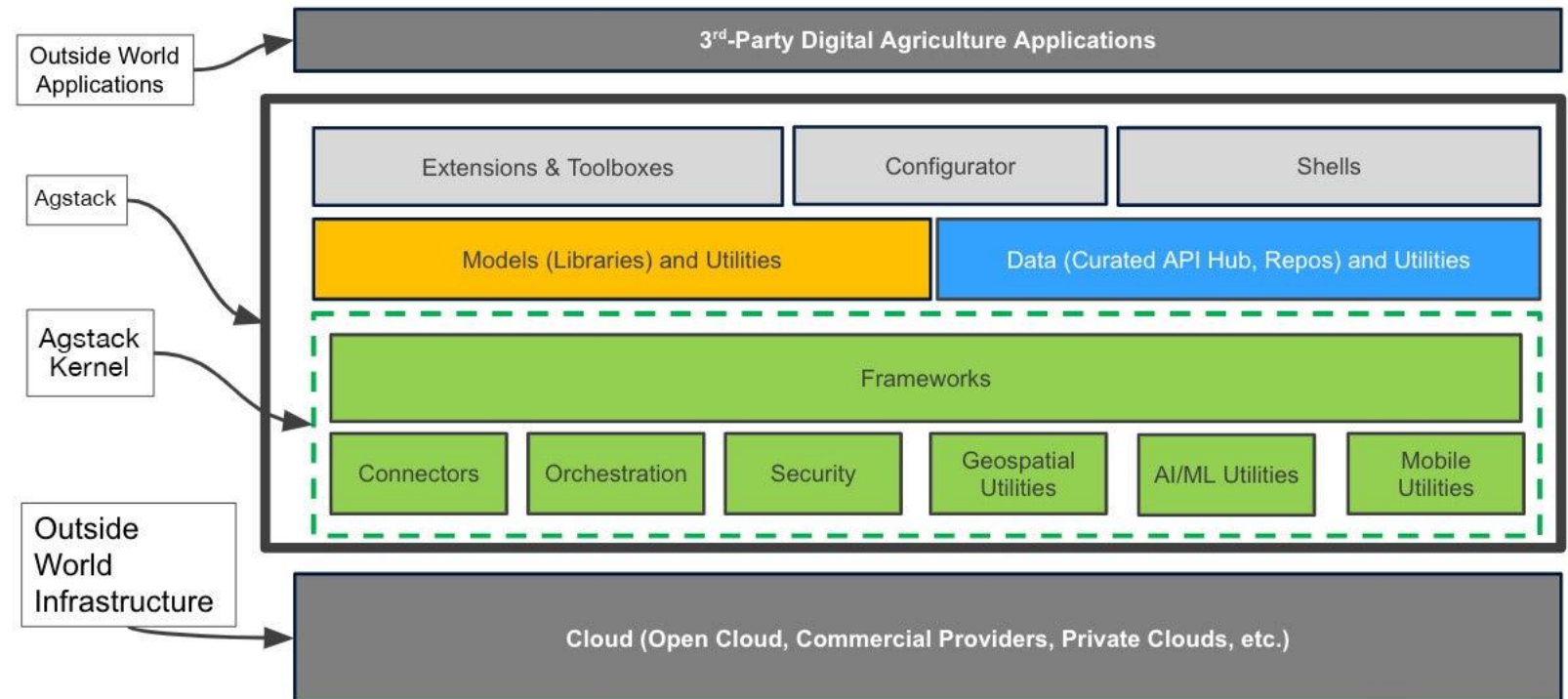- Georeferenced maps registry
- Crop sown registry

To enable new and support existing use cases.

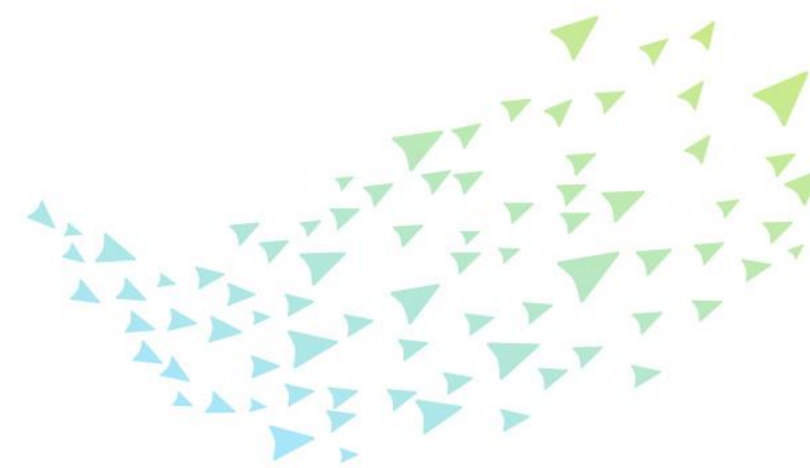## Transformation of the agricultural ecosystem: Use cases

**Easier access to finance**
- Digital crop loan or KCC
- Insurance
- Farm mechanization loan
- Drip irrigation loan
- Dairy loan
- Poultry loan
- Interest subvention
- Agricultural term loan

AePS **
NPCI
*JanSamarth*
OCEN
ONDC

**Agri Stack**

Registries

Consent

UFSI

State platforms

ONDC **
IFMS
IPMS
SeedNet
*Aadhaar*

**Access to high-quality inputs**
- Seeds
- Fertilizers
- Pesticides
- Machinery
- Irrigation

**Alerts and practical advisory**
- Crop advisory
- Weather advisory
- Market advisory
- Pesticide advisory

ONDC**
ICAR

ONDC **
UPI
AePS

**Access to larger markets**
- Access to local and international buyers
- Sale of produce
- Warehousing

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# AgStack

- **Coordinated by the Linux Foundation**
- **Multi-stakeholder engagement**
  - IT product dev. Industry
  - Academia
  - Development cooperation
  - Standards agencies (eg. GS-1)
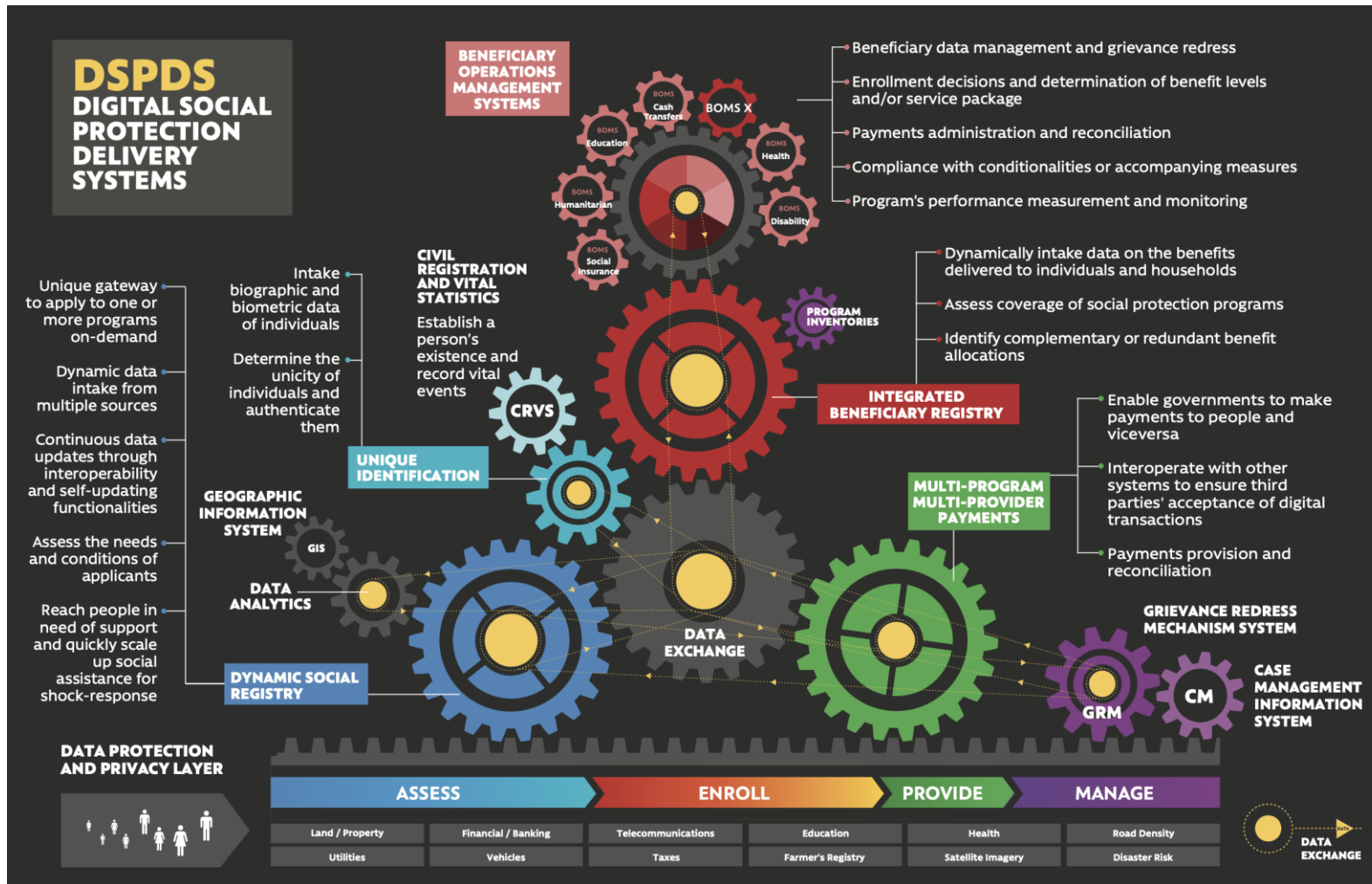
https://agstack.org/projects/

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# Common themes

- **Leveraging foundational DPI**

- **Use of Digital Public Goods (DPGs)**

- **Use cases/user perspective led**

- **'Unlocking' new opportunities**

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# Social Protection

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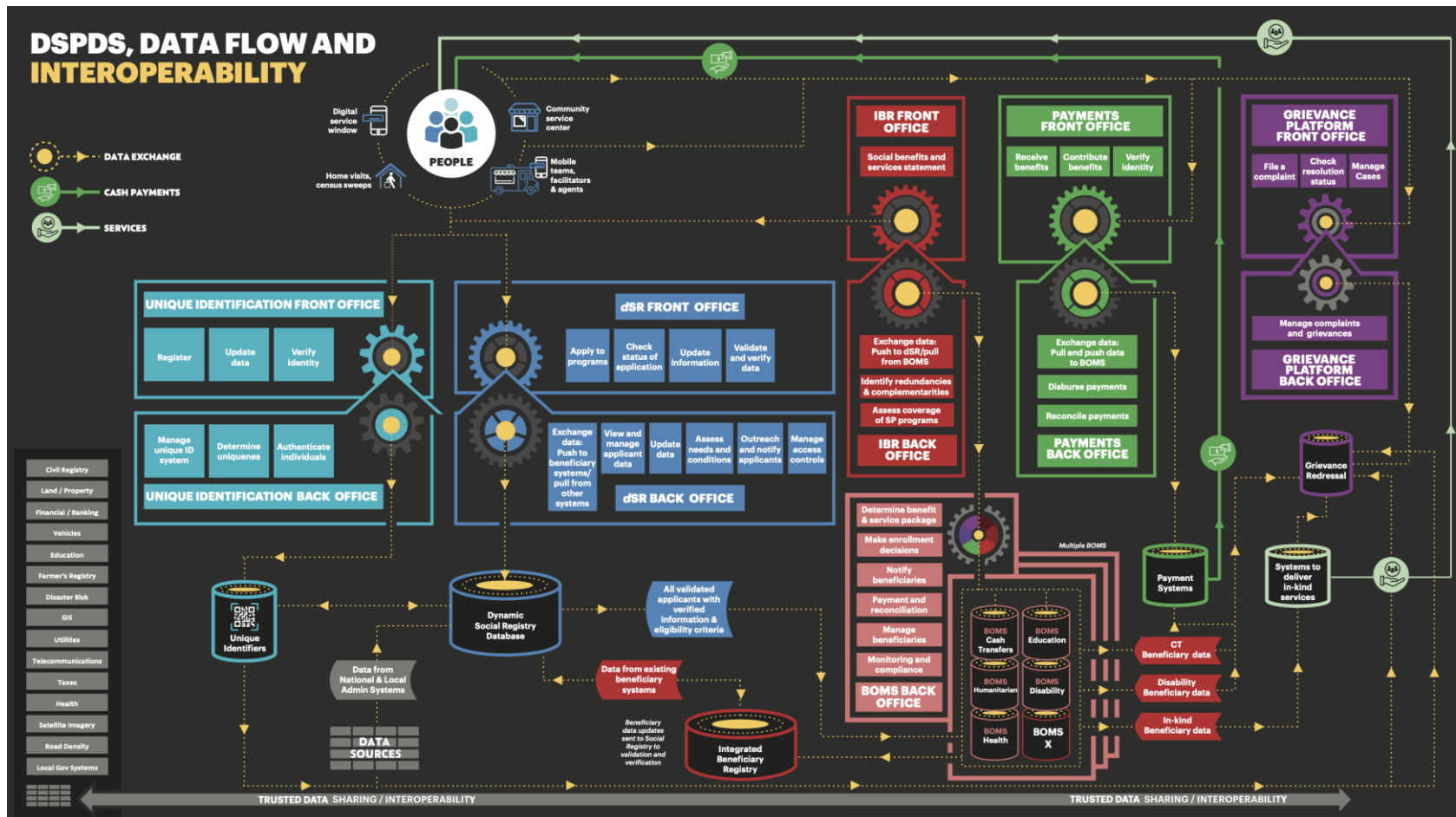# Playbook on Digital Social Protection Delivery Systems



Link to download

# Playbook on Digital Social Protection Delivery Systems

# Thanks!

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