Unique WASH ID

A Digital Public Infrastructure for improved Water, Sanitation, and Hygiene (WASH) services

Addressing SDGs 5, 6, 17 & 13

DPI4PP | October 6, 2025

DPI for People and Planet
Innovation Challenge

Akvo.

The water challenge: Fragmented and siloed WASH data

2.1B
people lack access to safe drinking water *(JMP, 2025)*

40%
of water points non-functional *(WPDX, 2022)*

200M
hours spent collecting water *(Water.org)*

1.2B
wasted annually in failed systems *(World Bank, 2024)*

In Liberia:

All agencies collect and store their own data, resulting in duplicate efforts and wasted resources.

Water points and hand pumps often break down, leaving communities without access

Community members walk for miles daily to collect water, particularly young girls.

Water data bottlenecks from users:

Project Officer for the Ministry of Health:

"Each ministry manages its own MIS and **data doesn't flow** between them, limiting decision making."

Senior Engineer at the district water utility:

"I spend weeks merging **inconsistent data** to decide where to send maintenance teams."

Chief Functionary of a WASH NGO:

"Communities often **report** water point **problems**, but reports don't reach the right authority."

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Solution overview: Unique WASH ID

A Digital Public Infrastructure for improved WASH services in Liberia

Multiple agencies with fragmented data → **Unique WASH ID registry** → **Harmonised and complete data for informed investments and/or infrastructure decisions**

🏷️ What is it:

- A **unique ID** for every **natural** and **engineered** public WASH asset in Liberia
- All agencies use the same ID to share data about the asset
- Unique WASH IDs are anchored to a set of **core parameters** (GPS location, asset type), while additional data remains in agency databases
- Acts as a '**digital thread**' connecting multiple databases, without replacing them

⚙️ Core features:

- **Asset registration** and unique WASH ID generation
- **AI-powered deduplication** to prevent redundant entries.
- Secure, **API-based** data querying across agency databases.
- **Governance and user management** portal.

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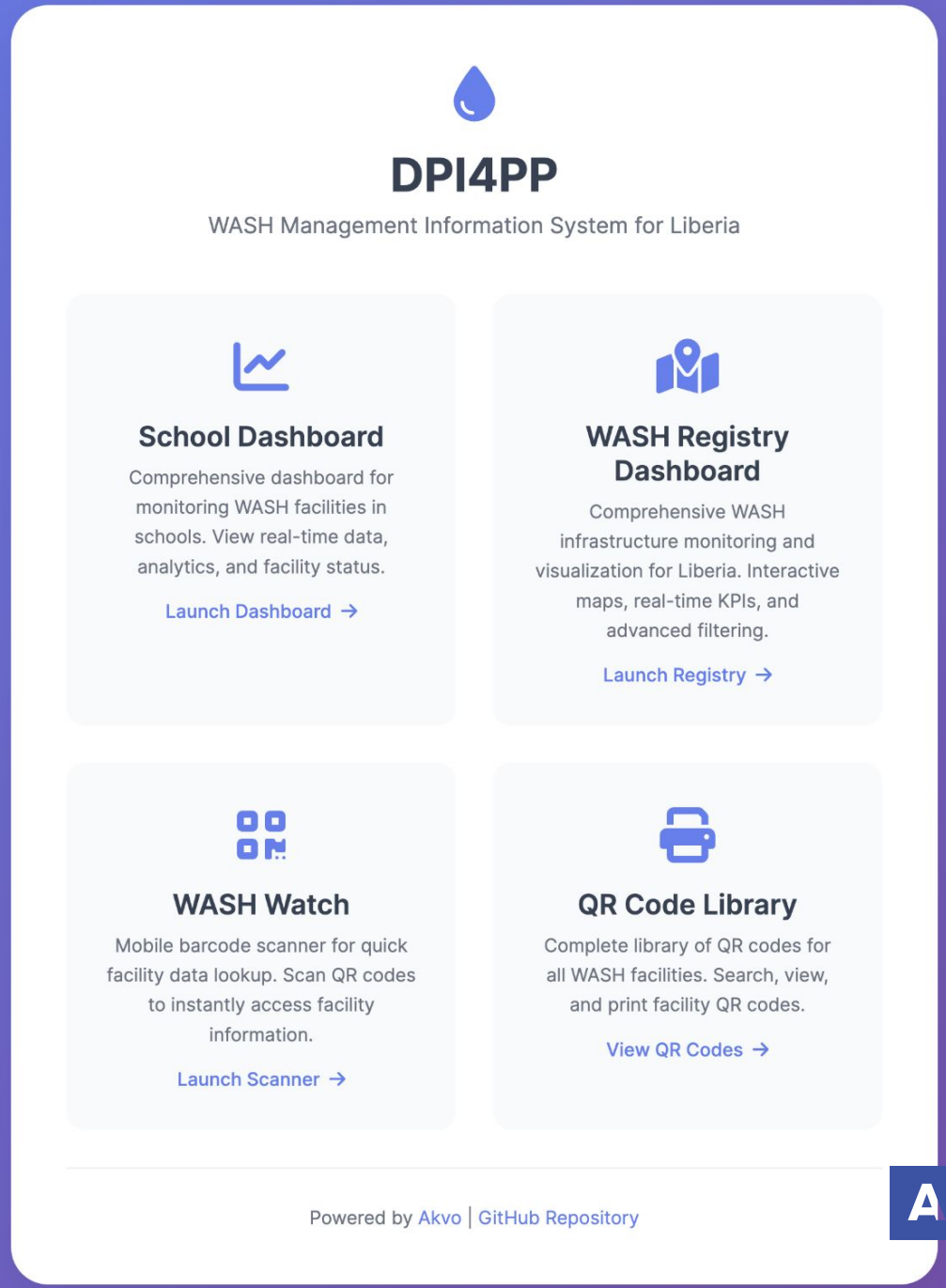
Solution overview: Live prototype.

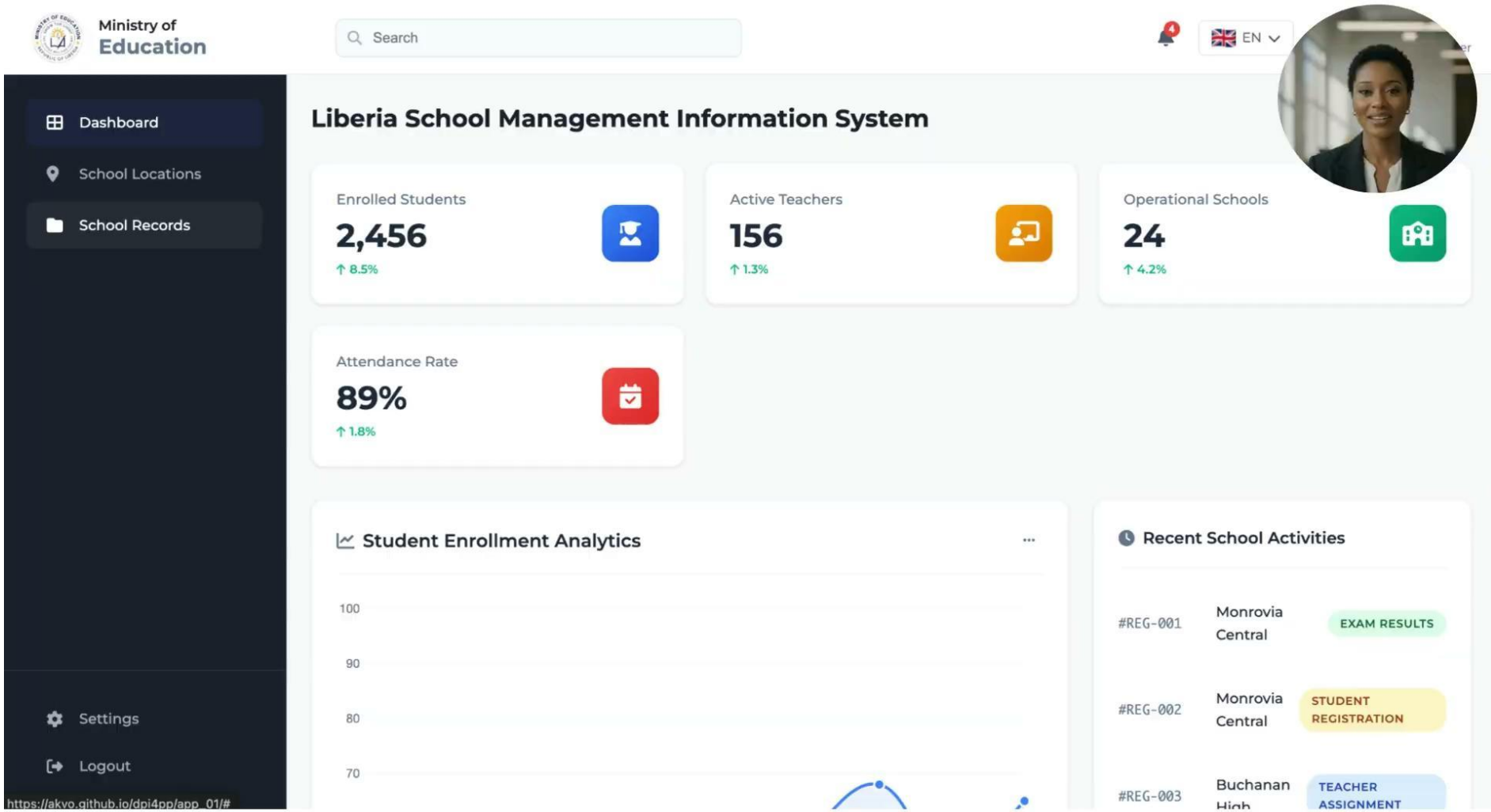
https://akvo.github.io/dpi4pp/

1. School dashboard
2. WASH registry dashboard
3. WASH Watch
4. QR code library



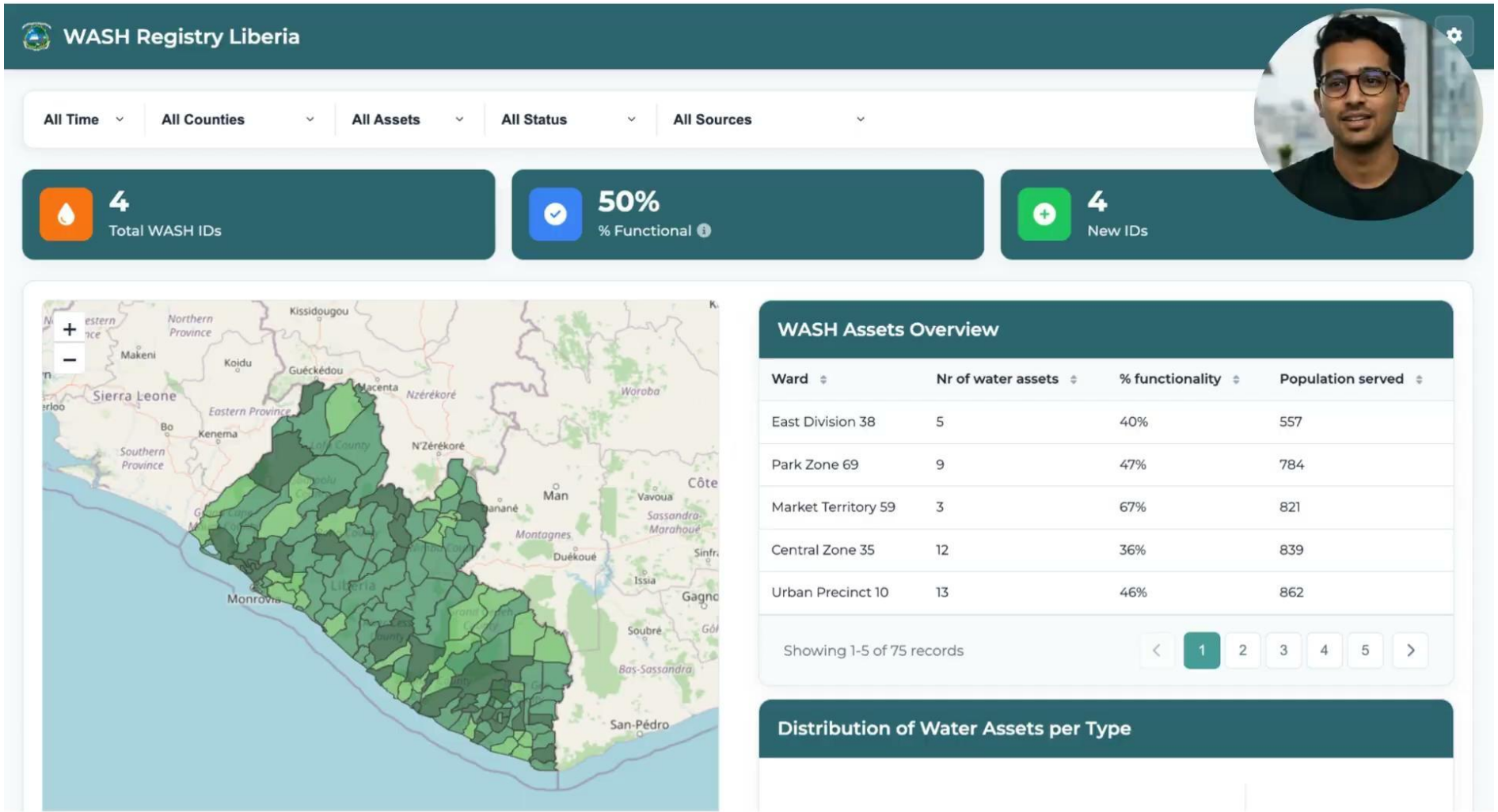
User stories: Ministry to ministry data sharing

Click below to watch the video



User stories: Centralised WASH registry.

Click below to watch the video

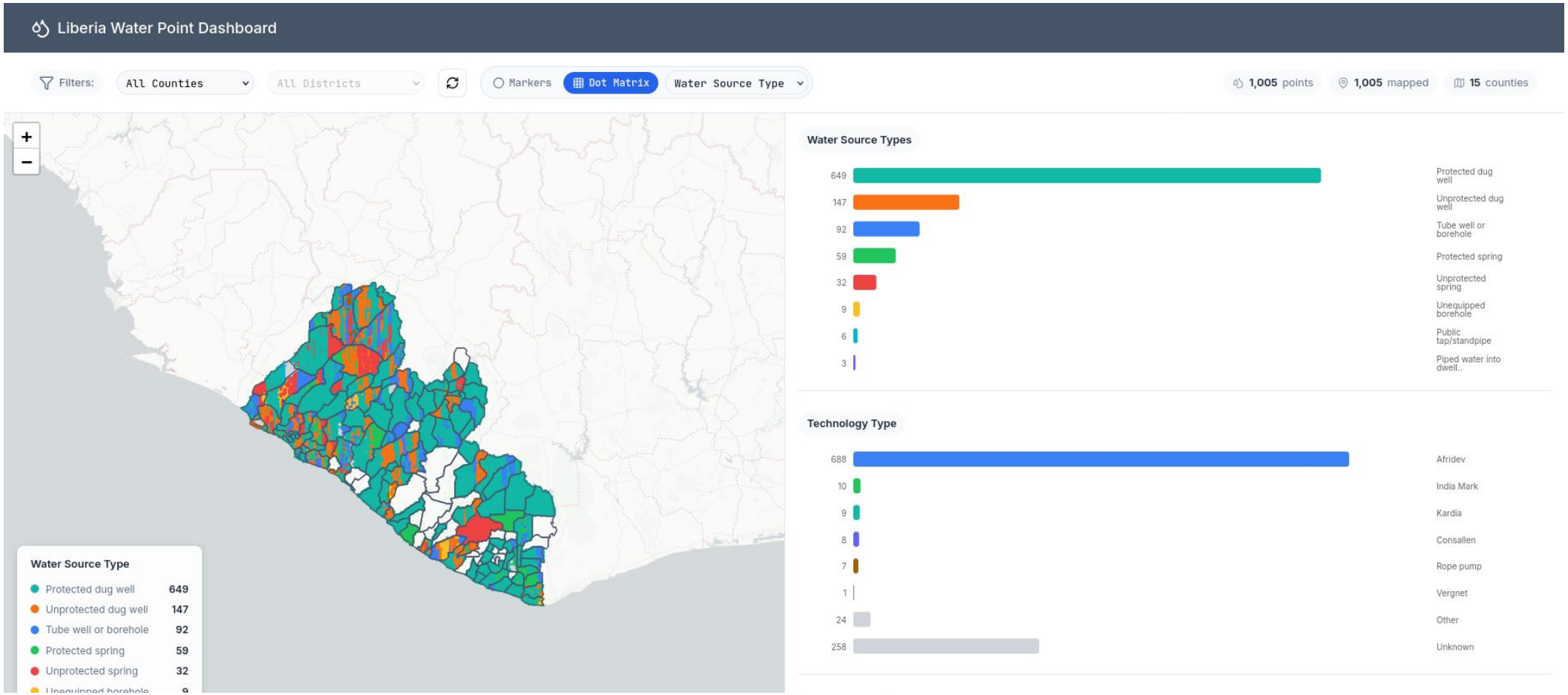


User stories: Enabling innovations through public API.

Click below to watch the video

Unique WASH ID: The WASH asset registry.

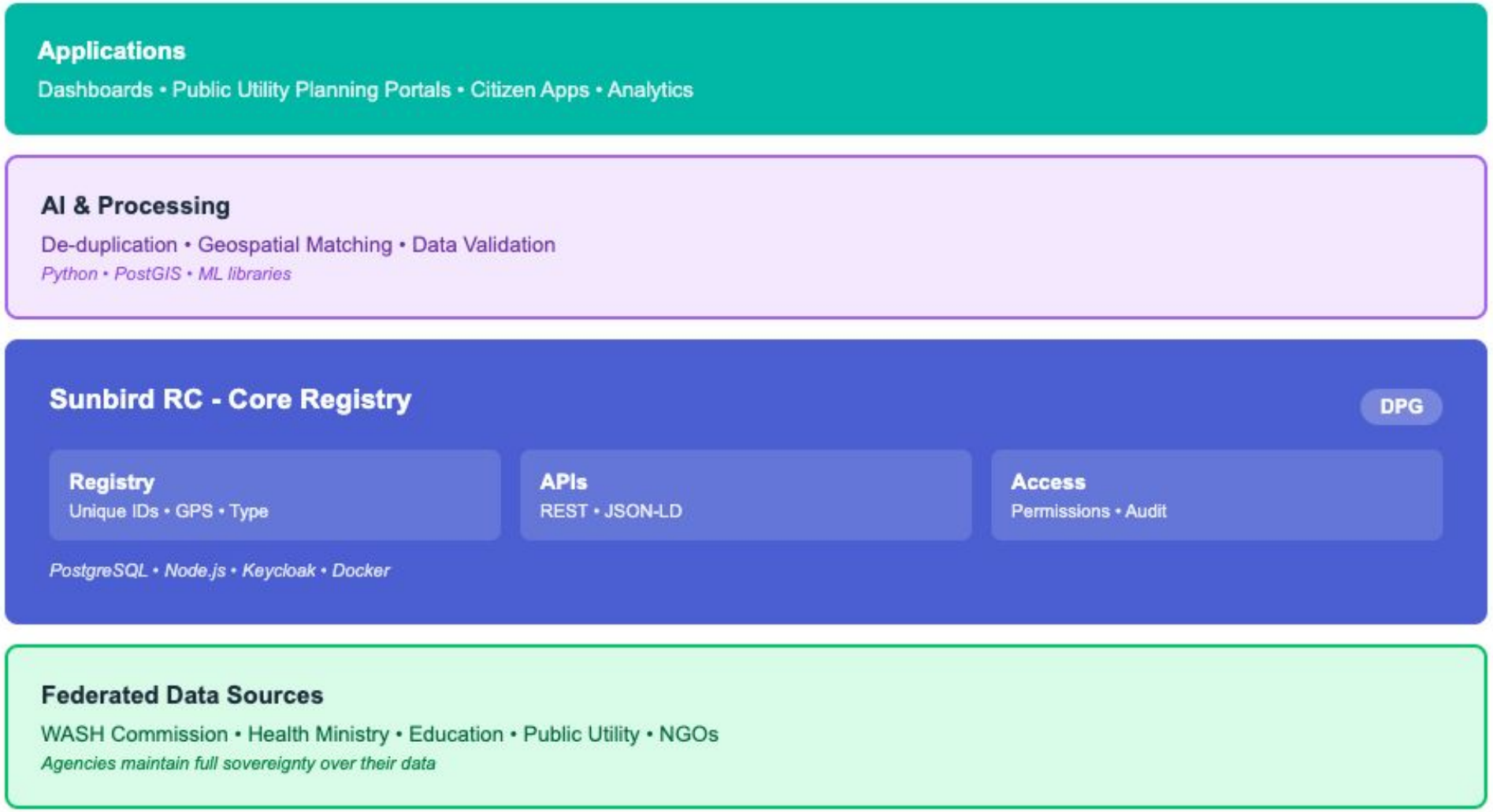
The registry - owned by Liberia's WASH commission - showing data density and distribution from Liberia's water point registries.



Unique WASH ID: Tech Stack

DPG criteria:
Open License
Adherence to privacy and laws
Platform independence
Documentation

Built on DPGs proven at scale



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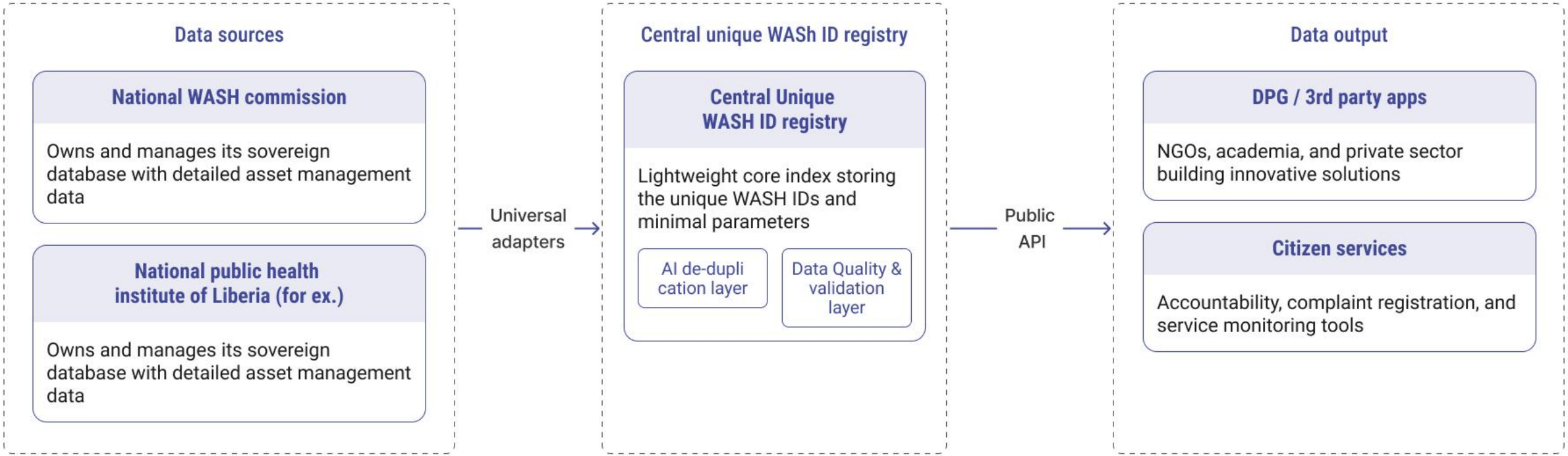
Unique WASH ID: Data flow model



The road to sustainability: Our open core business model

Product

High quality & purpose driven WASH registry

- Aligned with principles of **equity, sustainability, and collaboration**.
- Coordination with **minimal consensus** and easy self-installation
- **Capacity building** and user support

Open Core Business Model

Core DPG:
Free, open, and provides the core WASH registry for data sharing.

Premium features & customisation:
Revenue supports continuous improvement, maintenance, and innovation.

Pricing

Core WASH registry: free

Country services | deepen

Implementation starter get started and contextualize

Data acceleration package increase your data foundation

Run services host, manage, support and maintain

Partner services | scale

Community of practice (CoPs) set up within the countries

Capacity building of the CoPs and implementation partners to contribute to the unique WASH ID

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From vision to impact: Clean water for all 💧

The opportunity:

An initial investment in this Digital Public Good can create a model that can be scaled globally.

Today

Pilot in Liberia

With the WASH commission

Year 2

Deepen nationally

Strengthen, leverage, & contextualise

Year 5

Scale globally

Across multiple countries

What is your biggest data challenge?

Find out more at Akvo.org

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Akvo is headquartered in **Amsterdam** (the Netherlands). We also have offices in **Bamako** (Mali), **Ouagadougou** (Burkina Faso), **Nairobi** (Kenya), **Delhi** (India), **Bali** (Indonesia), and **Berkeley** (US).