



# Free Open-Source Software for Social Protection Programs

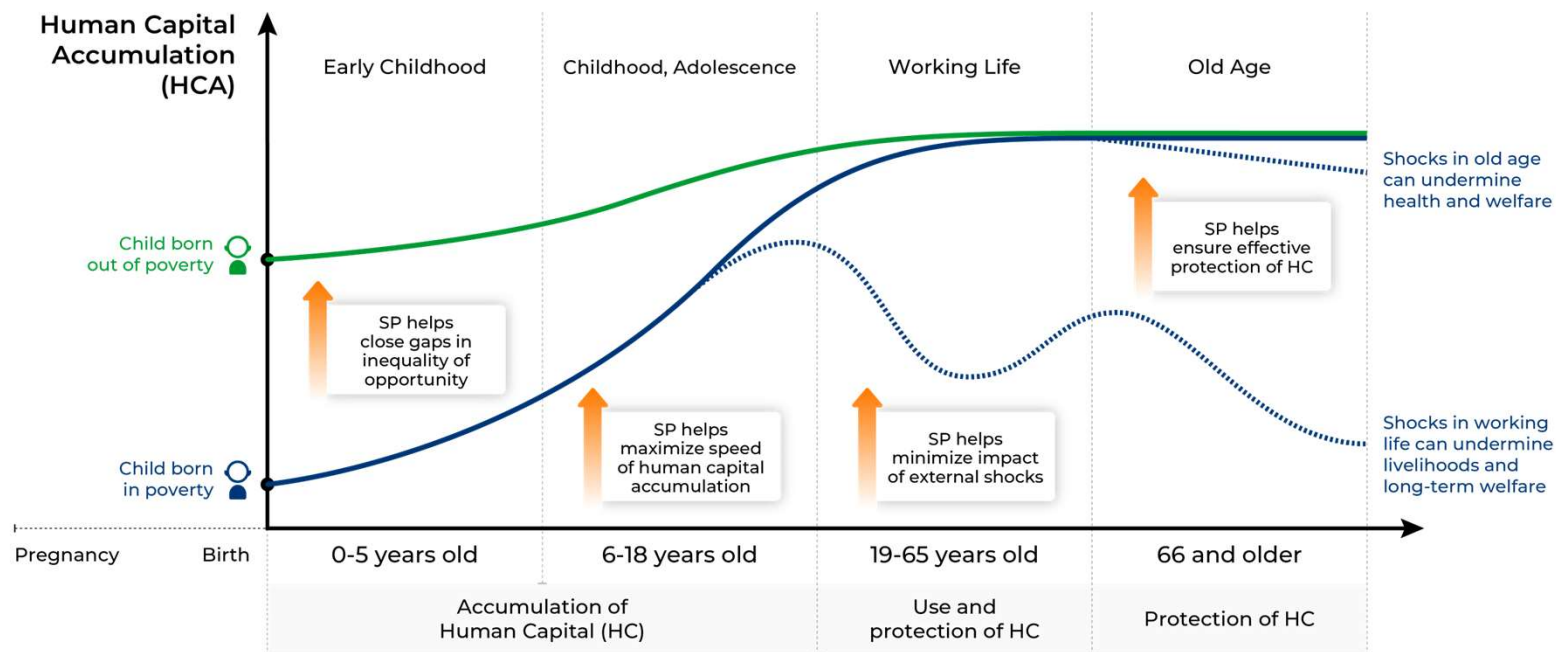
7 February 2024  
openIMIS Community Connect

# Content

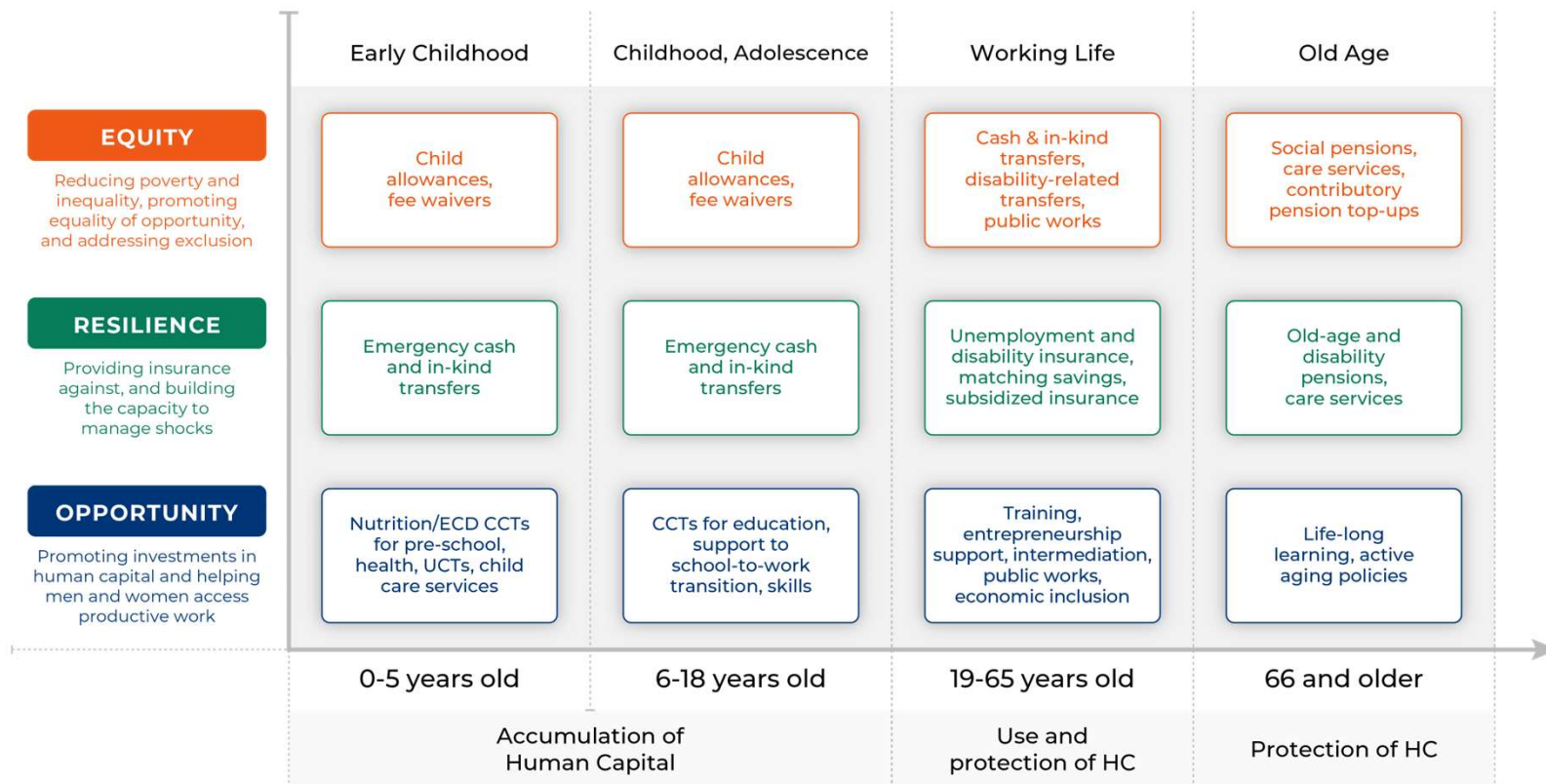
- **INTRODUCTION TO SOCIAL PROTECTION (SP)**
- **SP DELIVERY CHAIN**
- **CORE-MIS OVERVIEW**
- **FUNCTIONALITIES**

# Social protection consists of policies and programs designed to reduce poverty and vulnerability

by preventing, managing, and overcoming situations that adversely affect people's well-being.

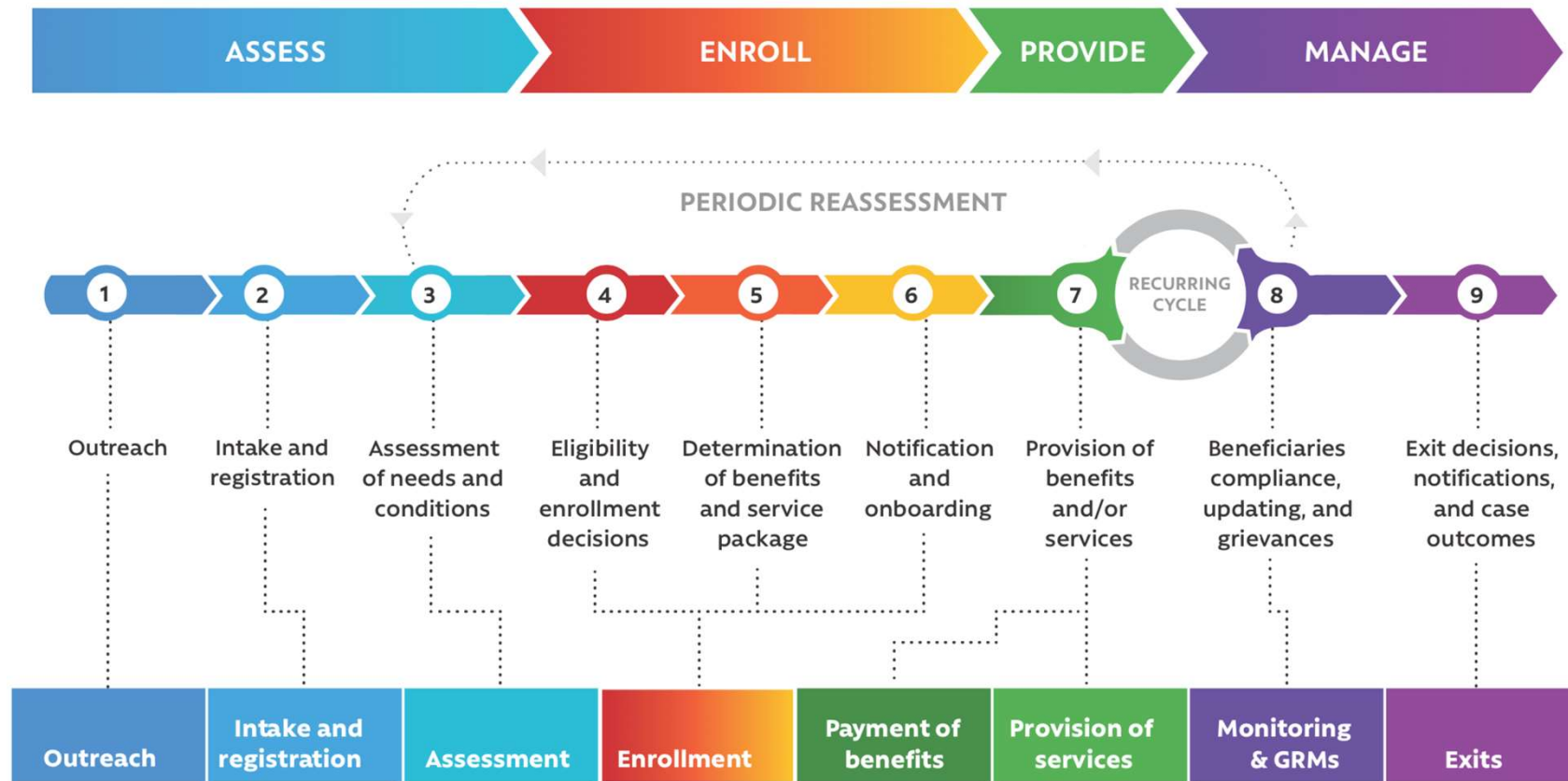


# Three key goals for an effective Social Protection system provided through the lifecycle



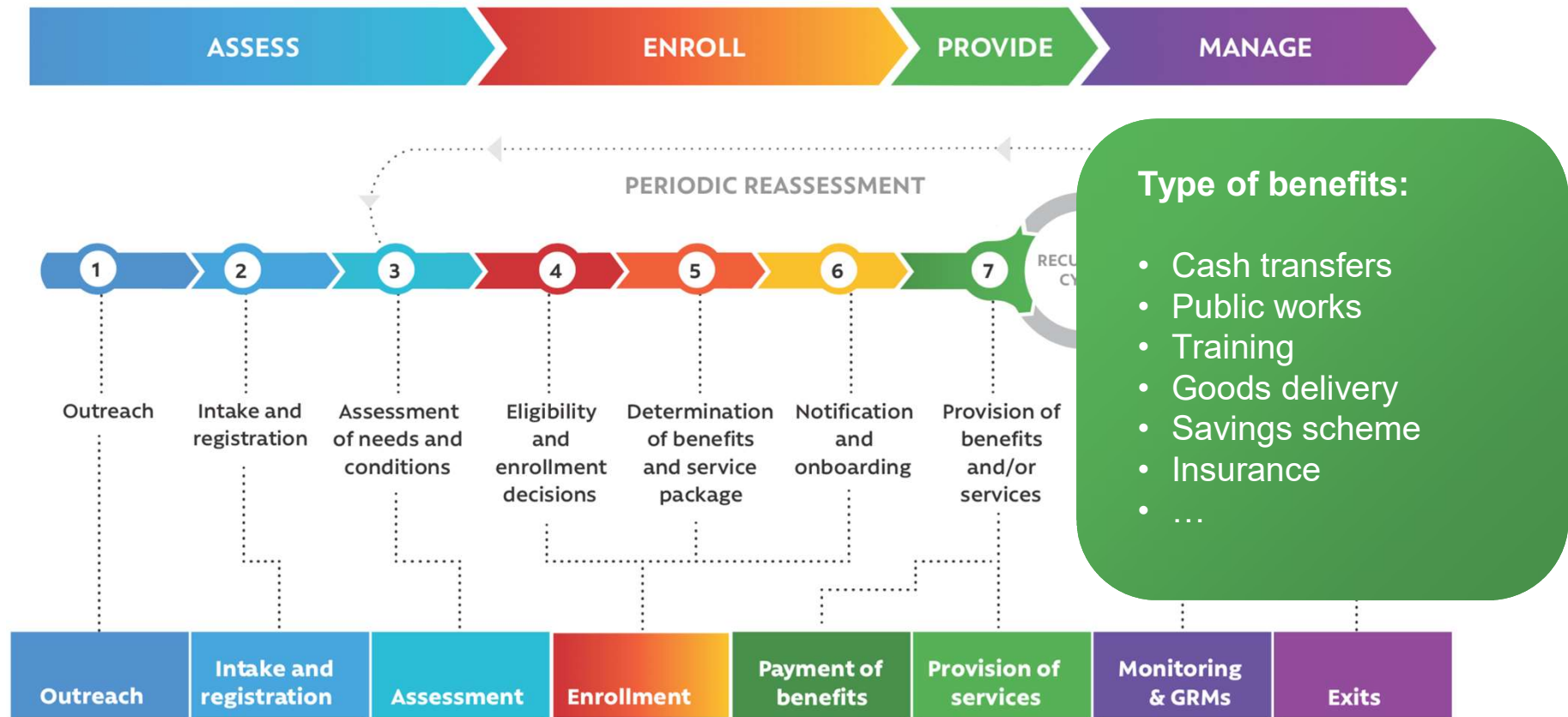
Source: *Charting a course towards Universal Social Protection - Resilience, Equity, and Opportunity for All* (World Bank, 2022)

# System needs to support the SP delivery chain flow



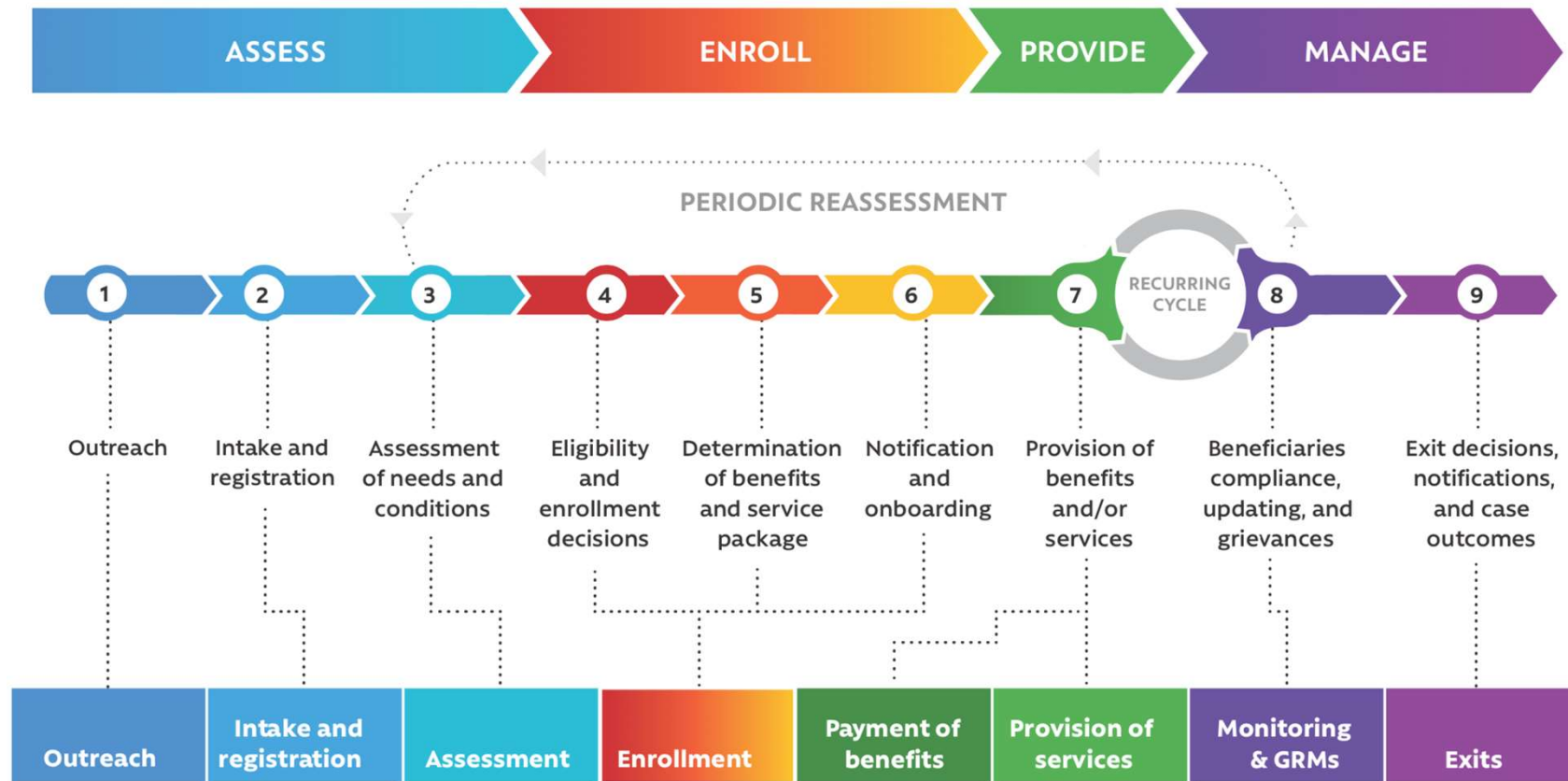
Source: Sourcebook on the Foundations of Social Protection Delivery Systems, Fig. 2.2 (World Bank, 2020)

# System needs to support the SP delivery chain flow



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## Context: Significant demand for open-source SP platforms

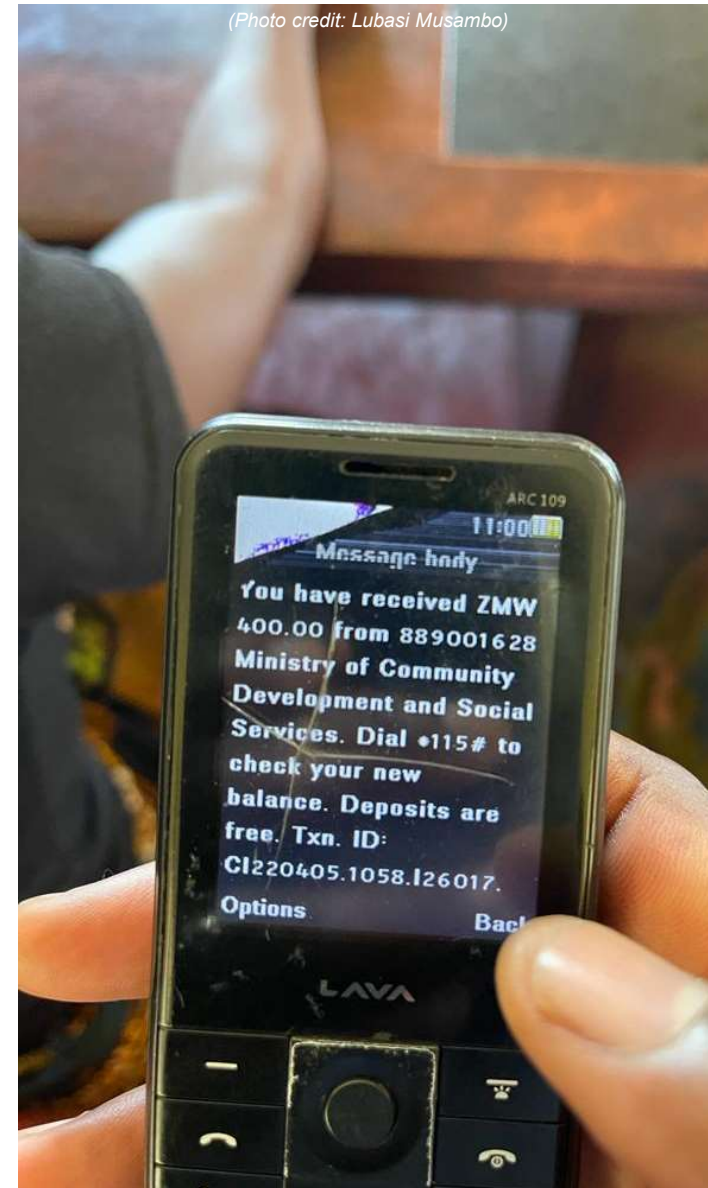
- **Digital Platforms Essential for SP Delivery:** Access to affordable, robust digital platforms is crucial for effective social protection, especially in emergencies.
- **Need for Streamlining Development:** Countries experience delays and inefficiencies as they independently create systems, leading to redundancy and hampered progress.
- **Capacity Challenges:** Contracting and developing tools pose significant challenges, often resulting in complications such as vendor lock-in.
- **Open-Source Solutions:** There's a clear need for reliable open-source platforms that can be easily tailored to specific requirements, ensuring swift implementation and customization.





## Background: CORE-MIS Pilot

- **CORE-MIS Development:** In 2020, the Bank developed CORE-MIS, a Java-based platform, to support rapid emergency cash transfers during the COVID-19 pandemic.
- **Comprehensive Functionality:** CORE-MIS, aligned with the SP standard delivery chain flow, boasts 18+ modules covering diverse use cases, enhancing its versatility.
- **Africa Pilots:** CORE-MIS is piloted across multiple African countries, notably in Zambia, where it supports country's largest SCT program (GEWEL), has been officially adopted by IT Ministry, ZIZPIS.



## A new integrated Tool

- **Integrated Open-Source Solution (March 2023):** World Bank, BMZ, and SDC announced a new open-source software, merging CORE-MIS features into the Python-based openIMIS toolkit.
- **Modular Open-Source Solution:** openIMIS supports health insurance, employment injury insurance, and voucher schemes. supported by a global community with widespread implementations.
- **Comprehensive Digital Public Good:** Newly integrated software becomes a valuable digital public good, capable of handling diverse schemes, including cash transfers, economic inclusion programs, health insurance, employment injury insurance, and voucher schemes.
- **Focus on interoperability standards** as part of the Digital Convergence Initiative



openIMIS

- Health insurance (formal & informal)
- Voucher scheme
- Employment Injury Insurance

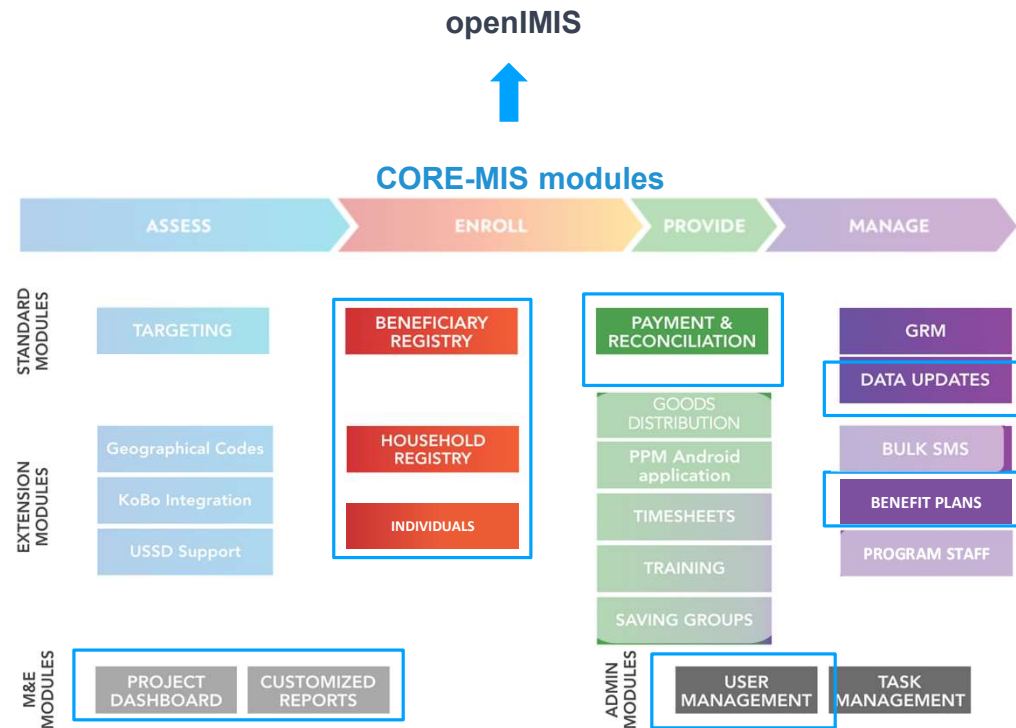
- Cash transfer programs
- “cash plus” & “public works”
- Economic inclusion programs
- Grievance Redress Mechanism



CORE - MIS

# SP Functionalities

- CORE-MIS functionalities are being added to the already extensive capabilities of openIMIS.
- The current main use case is **unconditional CT**:
  - **Import and manage beneficiaries** of SP program(s)
  - **Generate and reconcile payments** via API
  - **Analyze data** through interactive, customizable dashboards
  - Basic Social Beneficiary Registry
- Migration of functionalities is performed by developers contracted by GiZ, with guidance from the WB team.
- Additional modules planned for release in the upcoming months (including Targeting, Social Registry, GRM)



# Current SP Functionalities (2023.10 release)

## BENEFICIARY REGISTRY

### Beneficiary Registry

- Edit beneficiary status
- Update beneficiary info

## HOUSEHOLD REGISTRY

### Household Registry

- View of household (group) members

## INDIVIDUALS

### Individuals

- Advanced search of individuals
- Data export

## BENEFIT PLANS

### Programs / Benefit plan

- Create edit program
- Upload beneficiaries via external file

## PAYMENT & RECONCILIATION

### Payments

- Create a payment plan
- Customize formula and filter subgroup of beneficiaries
- Group invoices (bills) in payrolls
- Reconcile payrolls via API

# Current SP Functionalities (2023.10 release)

## TASK MANAGEMENT

### Task management

- Granular maker-checker logic
- Actions are not performed until confirmed by authorized user
- Support for customizable multi-level approval

## USER MANAGEMENT

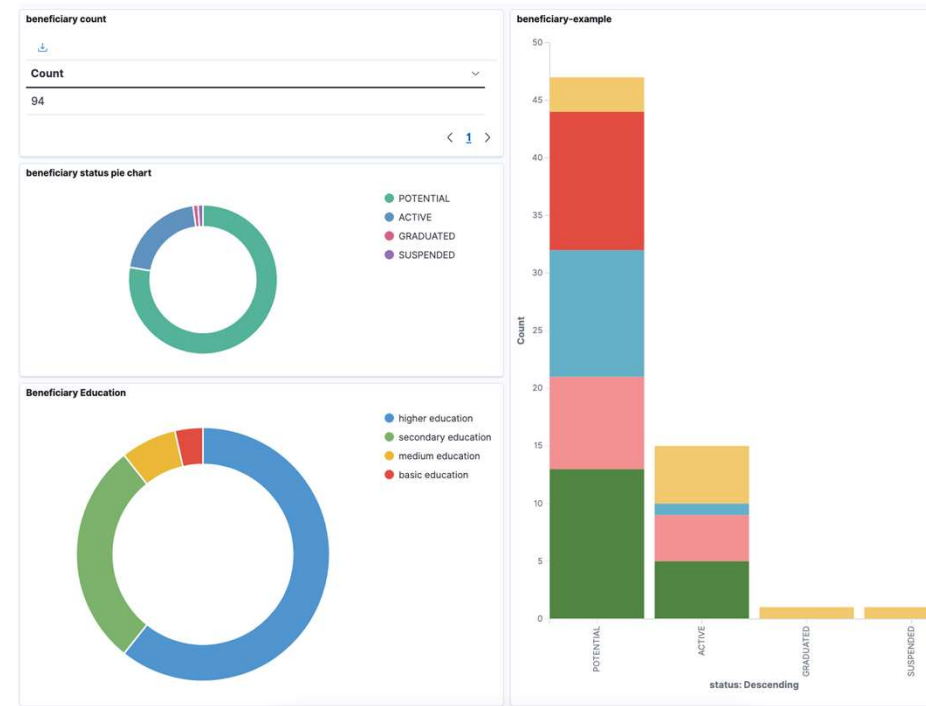
### User management

- Customizable profile creation

## PROJECT DASHBOARD

### Dashboard and Reports

- Customizable dashboard for overview of the project activities
- Reports can be created directly from the front-end
- Charts are dynamic, enabling online analysis and checks



# SP Functionalities – future releases

## TARGETING

### Targeting

- Customizable workflow for different implementation approaches (e.g., listing → enumeration → PMT assessment → community validation)
- Configurable PMT formula or categorical targeting using a combination of filters
- Supports import from different data sources

## SOCIAL REGISTRY

### Social Registry

- Expand Individuals module (beyond beneficiaries)
- Intake and registration
- Cross-check information from separate systems
- Eligibility assessment
- Duplicates flagging

## GRM

### Grievance Redress Mechanism

- Record grievance and manage redressing

## PPM Android application

### Payments

- Integration with PPM app to track delivery of offline payments, including GPS and photo evidence

## TIMESHEETS

## TRAINING

## SAVING GROUPS

### Economic Inclusion programs

- Improvements to UI and configurability



Q & A

# Technology

The core platform provides generic components and is split in 3 layers:

- **Frontend Layer (Web User Interface):**

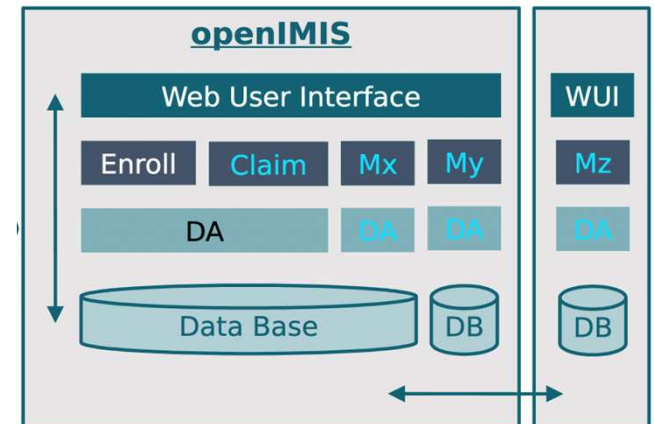
This is a **React**-based frontend with design guidelines from Material Design.

- **Backend Layer:**

This is **Python**-based backed backend which uses the **Django** framework to build a modular microkernel architecture, in which modules can be customized and replaced without necessary updating the whole backend.

- **Database Layer:**

The database layer is currently made up of two core technologies. **PostgreSQL** and **OpenSearch**. OpenSearch powers the rich visualizations Dashboards that give more insight into data indexed into PostgreSQL near real time.





# Community and Resources

- Homepage
- Wiki
- Forum
- Document Share
- Chatgroup
- Service Desk
- Issue Tracker
- Code Repository
- Internationalization
- Demo Server
- Documentation
- Weekly implementers and developers calls

The image displays a composite of three screenshots related to the openIMIS project. The top-left screenshot shows the GitHub organization page for openIMIS, featuring a search bar, navigation tabs for Overview, Repositories (120), Projects (1), and Packages, and a list of repositories including 'openimis-be-claim', 'openimis-be-self', 'openimis-fe-claim', and 'openimis-fe-language\_en-tz\_js'. The top-right screenshot shows the openIMIS homepage with a welcome message, a sitemap, and a 'Latest Version' section. The bottom-center screenshot shows the 'openIMIS Service Desk' interface, which includes a 'Wobei können wir Ihnen helfen?' section with options to 'Question about openIMIS', 'Report a bug', and 'Request a new feature'. The bottom-right screenshot shows a 'View as: Member' notification and a 'People' section with a grid of user avatars.

# Customization and Deployment approach

## IMPORTANT:

- ❖ This is not Software as a service (SaaS)
- ❖ The application should be deployed in secure servers chosen and managed by the client
- ❖ The client is responsible for maintaining the integrity of stored data and for hosting the platform

## Software

- No license costs
- No costs for joining the initiative

## Customization and deployment costs

- Requirements specific to the scheme and interoperability needs

## Hosting costs

- Procurement of hosting  
(physical and/or cloud)

## Maintenance costs

- Capacity Building costs
- Maintenance costs

# Source code and Release cycle

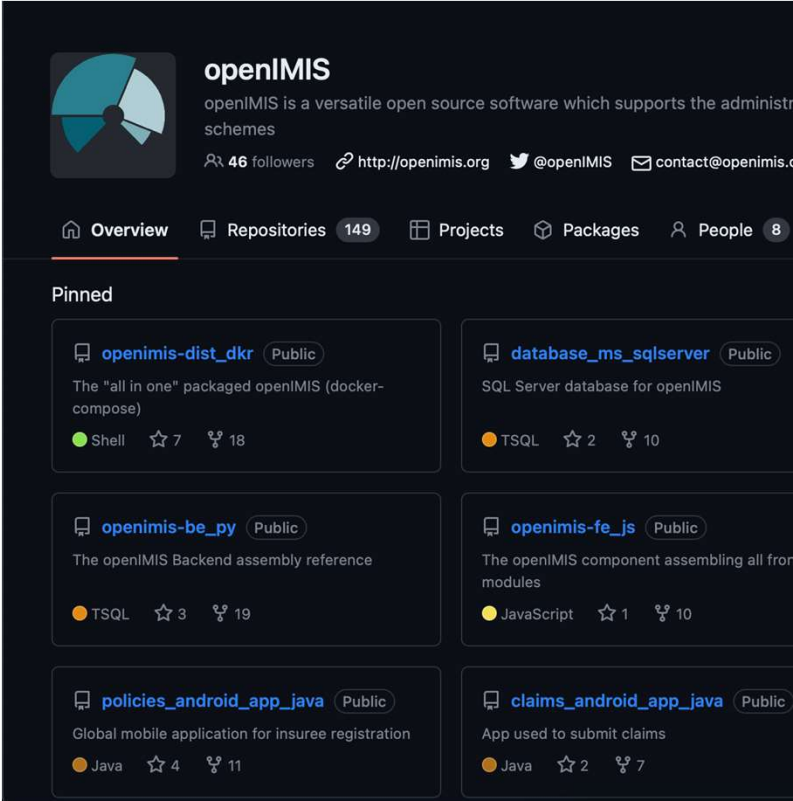
Source code: [github.com/openimis](https://github.com/openimis)

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Standard release cycle is every 6 months (April and October).

Upcoming Release 2024-04 is planned for April 2024.



The screenshot shows the GitHub profile for openIMIS. The profile includes a bio, 46 followers, and links to the website, Twitter, and contact email. The navigation bar shows Overview, Repositories (149), Projects, Packages, and People (8). The Pinned section displays six repositories:

- openimis-dist\_dkr** (Public): The "all in one" packaged openIMIS (docker-compose). Shell, 7 stars, 18 forks.
- database\_ms\_sqlserver** (Public): SQL Server database for openIMIS. TSQL, 2 stars, 10 forks.
- openimis-be\_py** (Public): The openIMIS Backend assembly reference. TSQL, 3 stars, 19 forks.
- openimis-fe\_js** (Public): The openIMIS component assembling all front modules. JavaScript, 1 star, 10 forks.
- policies\_android\_app\_java** (Public): Global mobile application for insuree registration. Java, 4 stars, 11 forks.
- claims\_android\_app\_java** (Public): App used to submit claims. Java, 2 stars, 7 forks.