OpenEMIS Logistics

Manage and track shipments

OpenEMIS Logistics is a web and mobile friendly application used to manage and track the delivery of education commodities to any location in the world. Shipments are centrally planned and monitored to make sure deliveries reach the intended schools.

The system is highly flexible and available in any language that can be customized to any context.

Centralized Management

All shipments are organized by orders that consist of consignments of various packages.

The OpenEMIS Logistics map shows all shipments that are active in the system. Narrow down the results by area, location, order, and shipment.

Monitoring Dashboards

Check the progress of deliveries and the efficiency of shipments.

View the detailed activities of shipments, and monitor the key performance indicators on the OpenEMIS Logistics dashboard.

Community Engagement

An informed community is likely to keep distributors accountable throughout the delivery.

The system increases transparency by engaging parents and teachers in the shipment process through SMS and IVR notifications.
OpenEMIS Logistics & Blockchain

What is Blockchain?

A blockchain is a decentralized, distributed and public digital ledger that is used to record transactions across many computers so that the record cannot be altered retroactively without the alteration of all subsequent blocks and the collusion of the network.

This makes blockchains secure and suitable for the recording of vital events, digital currencies, persistent digital IDs, property registration, smart contracts, health records, and education records.

Blockchain enables the exchange of value without powerful intermediaries acting as arbiters of money and information. A blockchain database is managed autonomously using a peer-to-peer network and a distributed timestamping server.

How will Blockchain work with OpenEMIS Logistics?

When the Ministry of Education orders books from a publisher, a blockchain token is generated. Each token is associated to a shipment that is tracked all the way through to the final destination, while recording data on the responsible actor, the shipment’s location, and the date and time it was recorded; this is the “block” in blockchain.

Shipments are inspected to see if all, some, or none of the conditions of the tokens have been met (e.g., delivered on time, complete shipment count, no damages). Once verified, the token triggers payment to the responsible actor.

The results-based financing model can leverage blockchain technology to trigger cash transfers when verified milestones are met.
OpenEMIS Logistics & Blockchain Model

- **Ministry of Education**
  - Textbook budget
  - EMIS (monitoring reports)

- **Publisher & Shipper**
  - Printing and Packing
  - Warehouse
  - In Transit

- **Community**
  - Track location and scan ISBN at home to verify delivery

- **School**
  - Receive and confirm delivery

- **Generate blockchain tokens**
  - A token is associated with each shipment and tracked at every stage up to the final destination

- **Buy Textbooks**

- **Release token value**: penalty if late, no payment if wrong or damaged

- **Inspection**: correct order, on time, no damage

- **Shipper fee**, **T&T fee**

Reach out to contact@openemis.org if you are interested in OpenEMIS Logistics!
**OpenEMIS Logistics Pricing**

No matter the size of the distribution, track deliveries from beginning to end

<table>
<thead>
<tr>
<th>Category</th>
<th>Small (Less Than 100,000 items)</th>
<th>Medium (100,000 ~ 1,000,000 items)</th>
<th>Large (More Than 1,000,000 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost (USD)</td>
<td>$0.39/item*</td>
<td>$0.11/item*</td>
<td>$0.10/item*</td>
</tr>
</tbody>
</table>

**Implementation Services:** Installation and Configuration, Data Management, Project Management

**Technical Support Services:** Cloud Hosting, Upgrades, Service Desk, Local Support, SMS Bundle

**Capacity Building:** OpenEMIS Logistics Training and Advisory Services

**Advocacy Materials:** Poster Design, Production, Delivery

*Average cost, based on a 3 year project

---

**System Integrations**

- **OpenEMIS Logistics**
  - Web Application

- **OpenEMIS SMS**
  - RapidPro

- **OpenEMIS Scanner**
  - Mobile Application

**System Requirements**

**Operating System**

- Linux, Windows, or Macintosh

**Webserver**

- Apache with PHP or IIS with PHP v5.4

**Database**

- MySQL v5, PostgreSQL or SQL Server

**Browser**

- IE, Chrome, Firefox or Safari

Reach out to [contact@openemis.org](mailto:contact@openemis.org) if you are interested in OpenEMIS Logistics!