Supply Chain Visibility and Control Through Cloud Computing Platform in Africa

The Republic of Rwanda’s Ministry of Health (MOH) was searching for a way to better manage the end-to-end fulfilment and delivery of medical supplies throughout the country.

1. Solution Context

For the MOH, making accurate and timely delivery of critical pharmaceuticals to its people was challenging and labour intensive. This was exacerbated by the fact that the fulfilment system was largely paper-based and filled with manual processes.

The MOH knew that to overcome these challenges, their new fulfilment system needed to be cloud-based, easy to implement and deploy and flexible enough to overcome the challenges of operating within a developing country.

2. Opportunities for Improvement

High Level of Effort
- Intensive Manual, Paper Record
- Long and Delayed Order Processing Period
- Higher Inventory Operating Costs

Lack of Visibility
- Low Reporting Rates
- Lack of Capability to Track Items

Not Real-Time
- Lack of Ability to Project Stockouts
- Lack of Information On Consumed Items and Expiries
- Inability to Track or Measure Performance Indicators
- Lack of Real Time Supply and Demand Planning Data
- Disparate Systems

3. Objectives

Design, build, and implementation of a computerized logistics management information system (eLIMS) that will provide health commodity logistics data and order processing functionalities.

4. Challenges

- Power
- Connectivity
- Language
- Data Interfaces

5. Functional Scope

- Forecasting
- Consumption
- Replenishment
- Order Collaboration

6. Execution

Critical Success Factors:
- GOR Leadership/Commitment
- Early Champion Identification
- USAID/GF Partnership
- Stakeholder Buy-In
- Effective Risk Identification Management

Documentation:
- Project Charter
- Project Management Plan
- Project Work Breakdown Structure
- Budget and Financial Plans
- Communication Plan
- Risk Management Plan
- Readiness Assessment Plan
- Change Management Plan
- Training Plan
- Testing Plan
- Implementation Plan

7. eLIMS Critical Functions

- Inventory Management
- Warehouse Management
- Supply and Demand Planning
- Visibility
- Real Time Data
- Transportations Management

8. Results

Impact on Supply Chain
- Availability of medicines at the right time, right place
- Reduction in Supply Chain
- LDC and Cycle Time
- Capture and availability of transactional data real time
- Visibility of stock outs, emergency orders
- Supply and demand planning
- Visibility and analytics
- Real time Data Capture

Impact on Beneficiaries
- Government of Rwanda
- Patients
- Ministry of Health
- Donor Partners
- Users

9. Impact

- Automated processes with real-time visibility and availability
- Significantly reduced carrying costs, LOE and Cycle Time
- Real time data availability and tracking items to last mile
- Availability of consumption data, facility minimax, days of supply and reorder levels
- Scalable and interoperable system
- Capability to perform supply and demand planning, project stock outs, run replenishment engines
- Capture actual daily consumption; track and manage expiries
- Track and measure all key performance indicators

10. Stakeholders