

# Transforming West Africa

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# AT A GLANCE

ESTB  
2013

EMPLOYEES  
26

AVG AGE  
28

## PROJECT LOCATIONS

Sierra Leone, The Gambia, Liberia, Uganda

## VERTICALS

Fintech, Consulting, Cloud Solutions, Labour  
Market Solutions

## FOCUS AREAS

Open Data, Open APIs,  
E-governance, Digital Financial Services



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We are an inquisitive & passionate community of developers, designers & researchers from around the world with the common aim of using technology to drive social change.



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# GLOBAL TEAMWORK



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# CLIENTS

We work with companies, governments and organizations who show willingness to embrace change for themselves and their communities.



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## AWARDS & ACHIEVEMENTS



### UNDP Innovation Award

Development of the country's first jobs board, connecting job seekers to employers through internet & SMS

2013



### UPS International Disaster Relief Award

Biometric Verification & Registration of Ebola Response Workers and a Digital Payments System to ensure timely dispersal of their hazard pay

2016



### Queen's Young Leaders Award

Given to Salton Massally, Chief Technology Officer of iDT Labs, for leading change in Sierra Leone through ICT

2016



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## CORE CAPABILITIES

# FINANCIAL INCLUSION THOUGHT LEADERSHIP

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We work with the Sierra Leone Microfinance Association to migrate MFIs to an open source loan management system



We are the strategic knowledge and technology partners to commercial banks, community banks, and microfinance institutions, providing core banking systems, mobile financial services, digital payments facilitation, payroll management and other value-added services.



We co-founded and currently serve as the chair of the Sierra Leone Fintech Association.



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## SPOTLIGHT

# Contributions to Global Open Source Community for Financial Inclusion

- iDT Labs supports and contributes to the [Mifos Initiative](#) to enable new business models that create and distribute value throughout the financial inclusion sector in West Africa.
- Our team of 10 engineers are proud supporters of answering the queries and helping other developers, as well as opening up developed modules to the greater community with proper documentation so that others can build upon the solutions.



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## CORE CAPABILITIES

# FINTECH INCUBATIONS

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We believe in collaborating with products and services which are reducing the financial inclusion gap in Sierra Leone.



We provide our technical and managerial expertise to fintech products and services centered around the themes of low-cost savings for base-of-pyramid users as well as those making mobile money transactions more convenient and accessible for everyone.

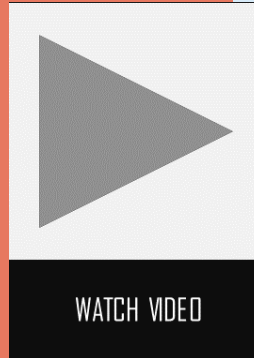


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INCUBATED



- miKashBoks is a goal oriented soft commitment savings platform aiming to enhance financial and food security for smallholder farmers in Sierra Leone.
- It enables farmers to save via mobile money during harvests and market seasons to purchase crop inputs through e-vouchers at the next growing season, voluntarily binding and nudging them to reach pre-defined goals.



Learn more about us at: [www.mikashboks.com](http://www.mikashboks.com)



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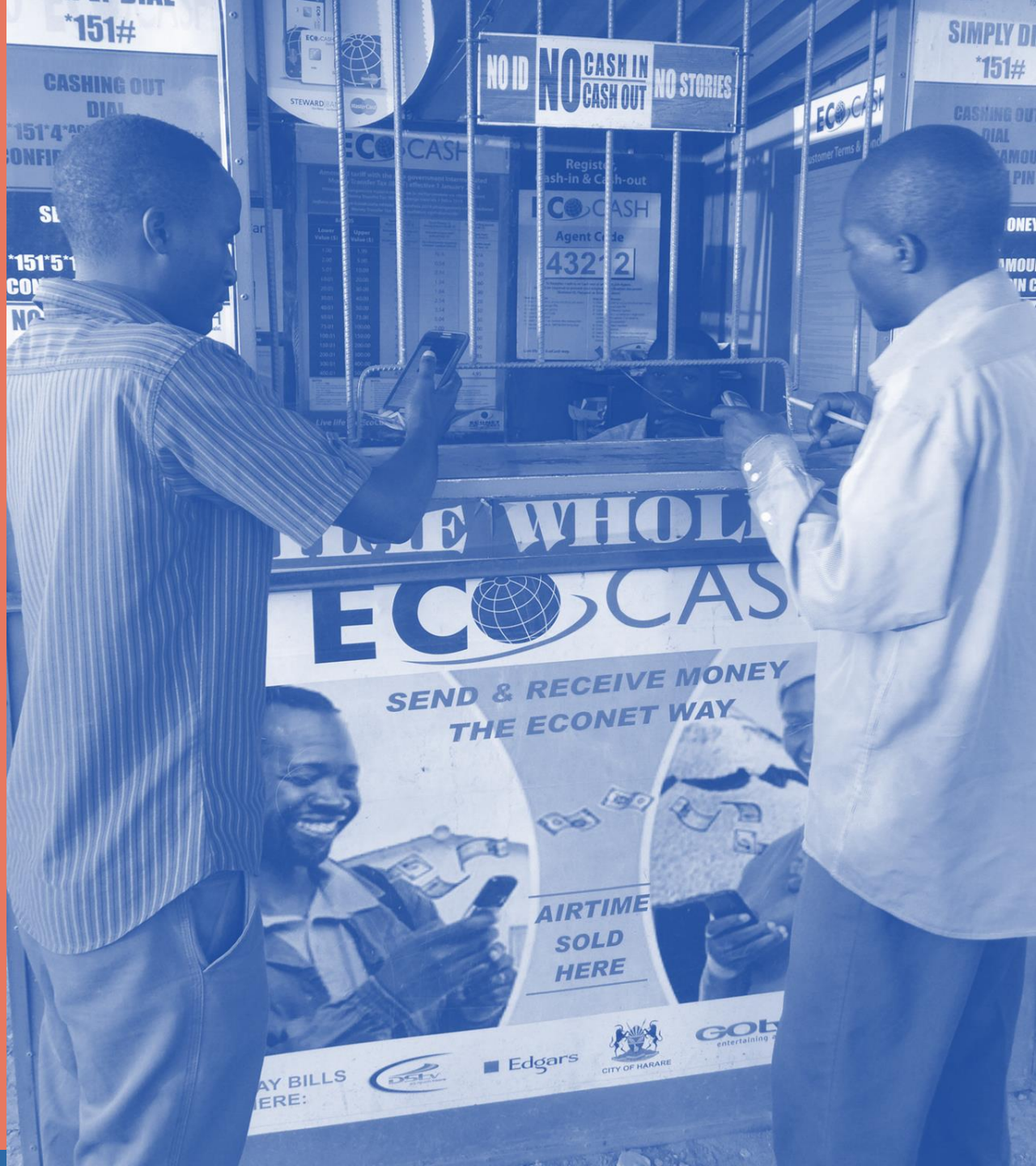
INCUBATED



- Noory makes it possible for businesses, fintechs, microfinance institutions and banks to plug into digital transaction networks at minimal cost and effort.
- Noory's open API platform enables anyone to reach a significantly larger customer base without running up costs of integration and distribution.
- Noory contributes to development of fintech products and services



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## CORE CAPABILITIES

# DATA COLLECTION AT SCALE

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During the Ebola outbreak in 2014, we mobilized a team of 35 mobile verification officers for carrying out biometric registration and payment distribution to 30,000 response workers. [here.](#)



We have worked with IBM Research Africa to carry out the proof of concept and pilot evaluation for EPiC, an infectious disease surveillance system.



We have experience in creating and running Human Centered Design based iterations, surveys and focus group studies.



We have conducted the first ever large-scale SMS-based survey in Sierra Leone for the World Bank, building both the software system to conduct the survey and implement it as well.





## SPOTLIGHT

# Assisting Relief Efforts after Freetown Floods Through Data Collection & Mapping

- We started a platform called Flood Aid Salone right after the mudslide and floods hit Freetown to provide updates on the local situation, satellite mapped data, survivor stories and a list of organisations to donate to.
- We mobilized volunteers to work with the UN to collect data to assess how lack of financial services led to the loss of life savings and drove the victims deeper into the cycle of poverty. The full report can be viewed here:  
<https://unsierraleone.exposure.co/no-place-to-save>



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## CORE CAPABILITIES

# CLOUD COMPUTING & OPEN SOURCE

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We are at the forefront of helping West African governments realise the economies of scale, vendor independence, future proofing and tremendous cost savings that adopting cloud computing and open source results in.



We have helped deploy government payment systems, judiciary case management systems and large scale document management systems based on open source technology.



We developed and operate a cloud based SaaS platform to help West African small and medium sized enterprises enjoy the efficiencies of automating but avoid the costs and pitfalls of off the shelf systems.



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SPOTLIGHT

# Investing in SME Solutions-the iDT HR Management Software

Through our affordable and tailored cloud based SME Solutions, we help optimize businesses.

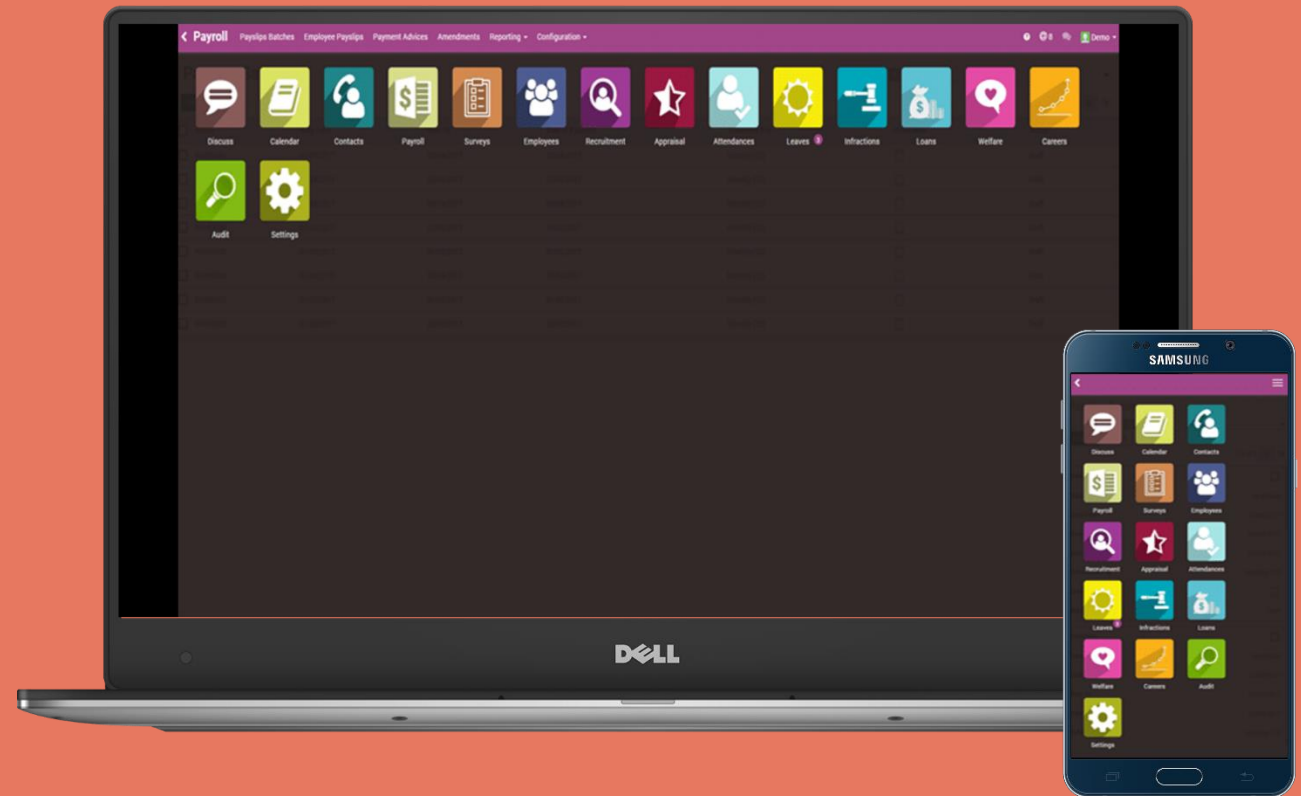
Some highlights of the HR Management Software include:

- Already set up tax bands
- Configuration for PC connectivity for local market
- 24/7 client support from an expert in Freetown
- One central point to manage all HR processes and data, from payroll to leaves
- Military strength security for data

CONSTANT SUPPORT

TAILORED TO YOUR NEEDS

DIFFERENT PRICE POINTS



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## CORE CAPABILITIES

# WEB & MOBILE APPLICATION DEVELOPMENT

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We have developed Sierra Leone's first jobs board to connect job seekers and employers via a centralized web based platform.



We have worked with the Corporate Affairs Commission of Sierra Leone to create fully responsive online business registration system to ease business registration all over the country and help the CAC manage their affairs in a fully automated way. (Case study on slides 21-23)



We worked with the Government of Sierra Leone to develop the first Android based Case Management System. (Case study on slides 24-25)



## SPOTLIGHT

# Careers.sl-Connecting Youth to Employment

Careers.sl is a job search engine where employers can publish their job ads and receive applications from a wide and diverse talent pool (as compared to newspapers) and job seekers can look for suitable job opportunities at zero cost.

### Some of our core services include:

- Head hunting, Recruitment & Selection
- Employer Branding
- Talent Acquisition Trainings

#1

Sierra Leonean website

120k

Monthly visitors

700+

Candidates employed yearly

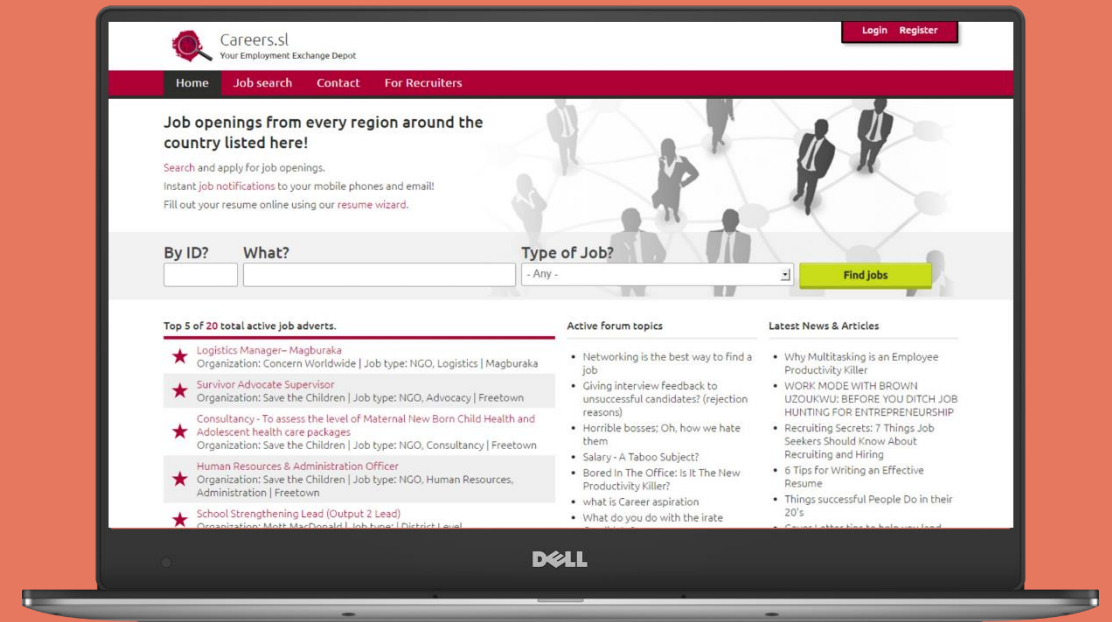
400+

Registered employers

APPLICATION TRACKING SYSTEM

FREE REGISTRATION

UPDATES VIA SMS & WHATSAPP



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CASE STUDY I

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# Automated Worker Registration System and Payroll Database for Ebola Response Workers

During the Ebola crisis, iDT Labs mobilized a team of 35 mobile verification officers to biometrically register 27,000 health workers and built an open source digital payment system that allows rapid distribution of incentive pay to Ebola workers via mobile money



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# AUTOMATED WORKER REGISTRATION SYSTEM ,BIOMETRIC VERIFICATION & DIGITAL PAYMENTS DURING EBOLA CRISIS

Client: UNDP Sierra Leone . Duration: Dec 2014-May 2015 . Recognition: Winner of Responsible Business Award 2016

## PROBLEM

- Ebola Response Workers (ERWs) were not receiving hazard pay at the height of the Ebola crisis in
- Due to non-payment, ERWs were threatening to go on strike, putting the international response work in danger of derailment and the crisis from turning into a pandemic

## SOLUTION

- We developed a worker registration and payment system that was integrated with the existing mobile payments ecosystem
- We leveraged open source components and rolled out a solution in two weeks. We rapidly verified the identity of 27,000 ERWs in all 14 districts of Sierra Leone via biometric verification and distributed hazard payments directly to them via mobile money.



Biometric verification & registration



Payments via mobile money

**27,0000**

Number of ERWS

**14 districts**

Areas of Implementation

**\$10.7m**

Money saved to Government

**\$80,000**

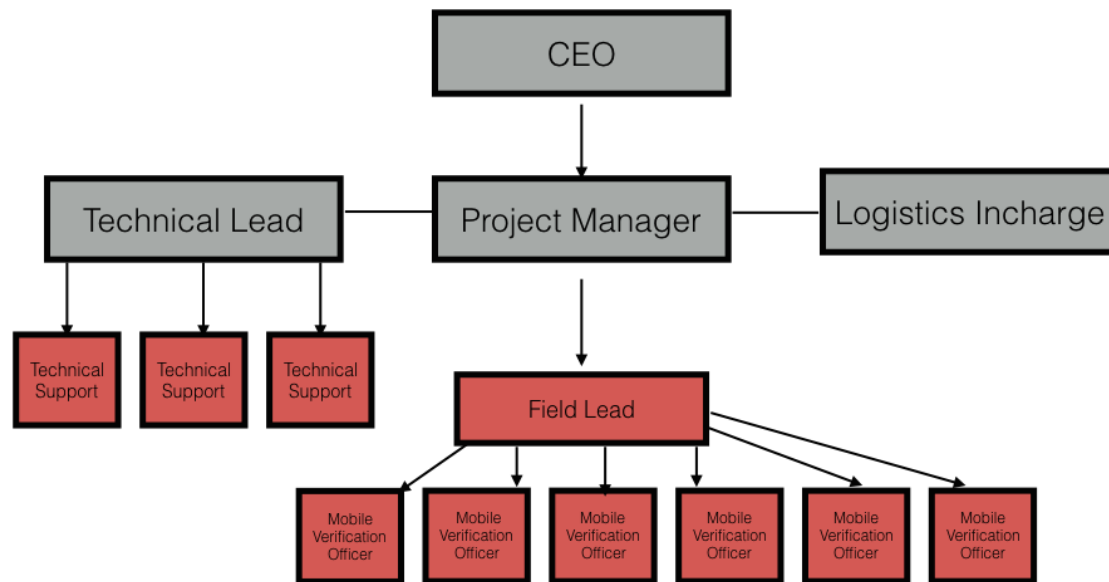
Money saved to ERWS



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# AUTOMATED WORKER REGISTRATION SYSTEM ,BIOMETRIC VERIFICATION & DIGITAL PAYMENTS DURING EBOLA CRISIS

Client: UNDP Sierra Leone . Duration: Dec 2014-May 2015 . Recognition: Winner of Responsible Business Award 2016




## PROJECT MANAGEMENT

- **Field Leads:** 5 field leads reported to a project manager, with each lead heading 6 mobile officers
- **Project Steering Committee:** Made up of representatives from major stakeholders, ensured equality in decision making on all matters which enabled the on ground teams to work non-stop
- **Issue Resolution Desk:** Enabled stakeholders to log problems related to payment and/or verification work. The issues were investigated asap.
- **Best Practices & KPIS:** We also established best case practices and KPIS to ensure all work was accomplished on time. Every officer was trained to complete the verification of one individual within 5 minutes.
- **Weekly Goals:** Quantitative goals set at the start of every week plus a detailed work plan in collaboration with NERC, UNDP and UNCDF.
- **Logistics & Security:** Outreach conducted with police, army and local authorities to ensure safety and access for teams.



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## CASE STUDY 2

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# Digitizing Nationwide Registration & Licensing of Business

iDT Labs helped improve Sierra Leone's ranking in ease of business registration from 99 to 87 by working with the Corporate Affairs Commission to build a convenient digital access for companies to register, apply & pay for licenses among many other business related functions



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# DIGITIZING NATIONWIDE REGISTRATION & LICENSING OF BUSINESSES

Client: Corporate Affairs Commission Sierra Leone. Duration: Dec 2014-May 2015

## PROBLEM

- The Corporate Affairs Commission in Sierra Leone needed a fully automated and large scale system to adequately fulfill its promise of a 24 hour registration turnaround for businesses in the country as well as ensure compliance with laws and foster an enabling environment for doing business.

## SOLUTION

- Our proposed solution consisted of an **online Information Management System** based on a Service Oriented Architecture and powered by **the Odoo open source Enterprise Resource Planning (ERP) framework**.
- This formed the main nerve center of our solution and was directly responsible for managing core workflows and a robust Application Programming Interface (API) which other micro services and interfaces can interact with.



87

Improvement in ranking in ease of business registration from 99 to 87



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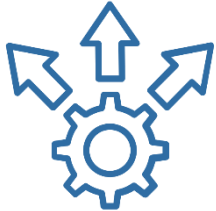


# DIGITIZING NATIONWIDE REGISTRATION & LICENSING OF BUSINESSES

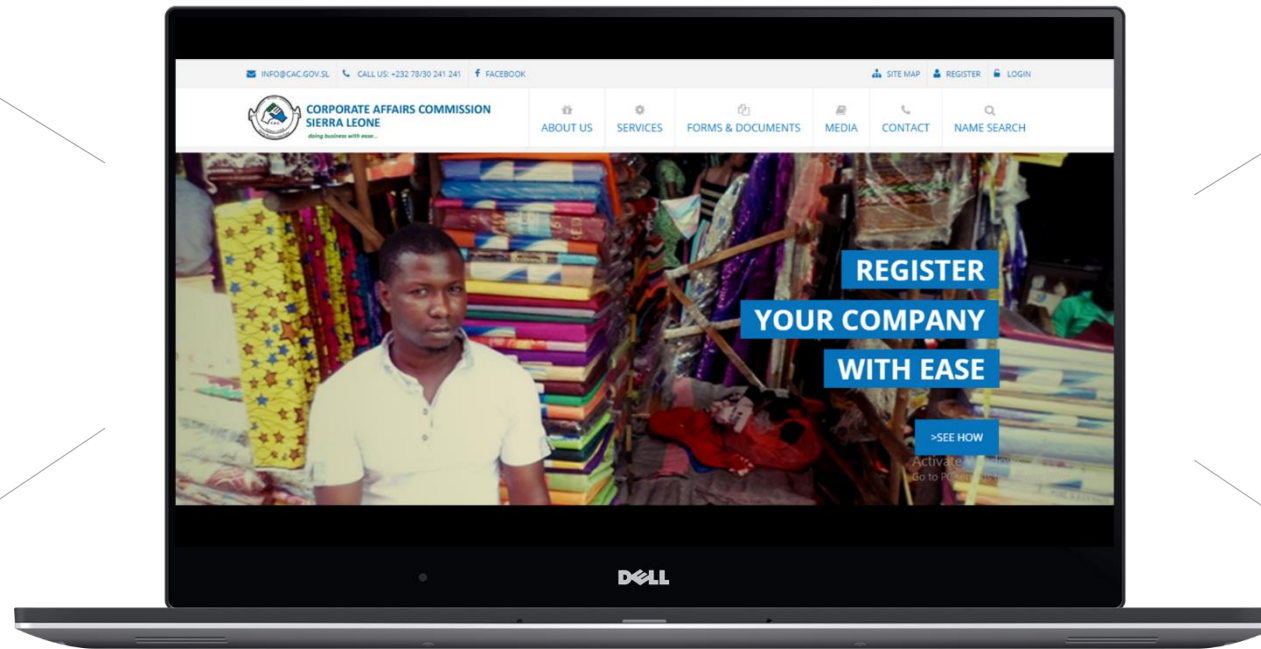
Client: Corporate Affairs Commission Sierra Leone. Duration: Dec 2014-May 2015



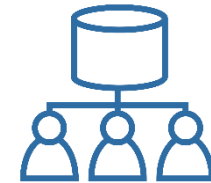
Online registration for  
business



Integration with other  
government agencies



Online document  
retrieval and management

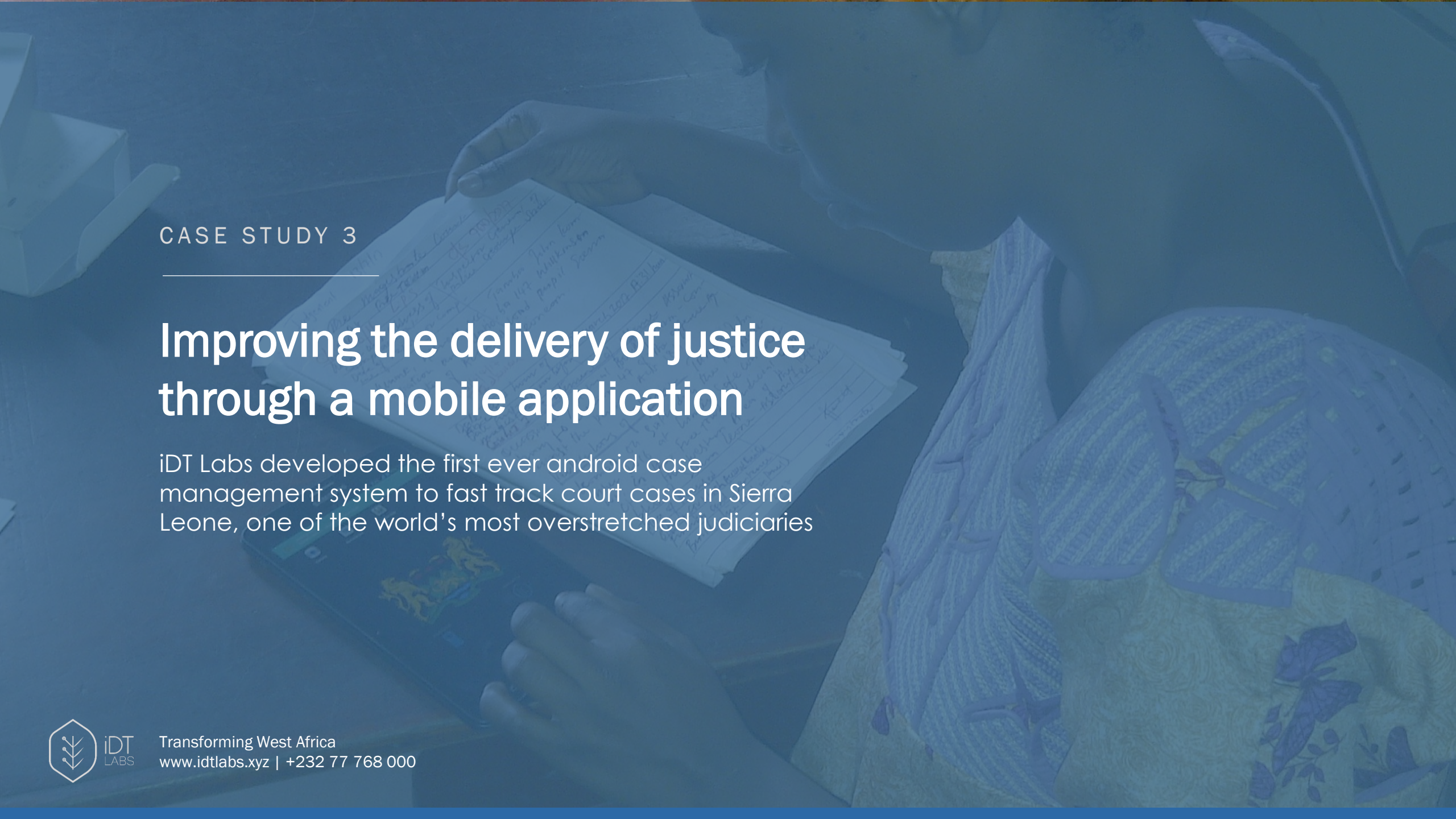


A Customer Relationship  
Management System(CRM)



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## CASE STUDY 3

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# Improving the delivery of justice through a mobile application

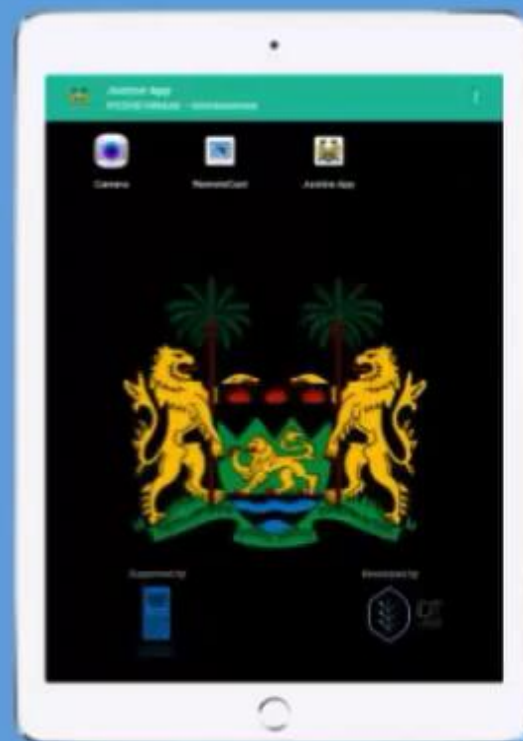
iDT Labs developed the first ever android case management system to fast track court cases in Sierra Leone, one of the world's most overstretched judiciaries



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WATCH VIDEO



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## CASE STUDY 4

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# Building digital rails to develop Digital Financial Services ecosystems in small & fragile West African markets

iDT Labs invests in building platforms and open API digital assets from the ground up which can be used to incentivize financial service providers and third parties to bring financial inclusion solutions to small, fragmented markets



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# DIGITAL FINANCIAL SERVICES(DFS) ECOSYSTEM DEVELOPMENT IN FRAGILE STATES

## Research & Development Work of iDT Labs



### EZ BANK

EZ BANK is a suite of core banking solutions offered both as a cloud subscription and standalone deployment to microfinance institutions & community banks, relieving them from the costs of purchasing and managing tech infrastructure



### iAGENT

Using real time geo location and clever path finding algorithms to connect consumers at each side of the cash in and cash out transactions that can most effectively meet needs, reducing reliance on traditional agents



### NOORY

Noory is a real time mobile payments open API Gateway where businesses of any size can relatively easily plug into the mobile payment ecosystem



### miKashBoks

miKashBoks is a mobile money based conditional savings instrument helping smallholder farmers to buy inputs for the next growing season



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# DIGITAL FINANCIAL SERVICES(DFS) ECOSYSTEM DEVELOPMENT IN FRAGILE STATES

Research & Development Work of iDT Labs

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## DIGITAL CREDIT BUREAU

Powering digital credit solutions and providing access to and control of digital credit histories.



## ISO8583 ATM/POS INTEGRATION

Connecting deposit taking Microfinance institutions with global payment gateways like Mastercard and Visa.



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## CASE STUDY 5

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# Community Initiatives to mobilise change at grassroots level in the Civic Tech and Fintech space

iDT Labs invests in building platforms and open API digital assets from the ground up which can be used to incentivize financial service providers and third parties to bring financial inclusion solutions to small, fragmented markets



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# CODE FOR SIERRA LEONE

Incubated at iDT Labs | Key partner: Code for Africa | Support to: StoryLab Academy, Hacks/Hackers Africa, Civic tech projects & community

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Code for Sierra Leone is a **non partisan civic data and civic tech “change agent”**. Incubated at iDT Labs and a chapter of Code for Africa, we use civic tech Africa, we use civic tech and open data to build digital democracies that afford citizens timely access to actionable information that empowers them to make informed decisions



THE  
ENGINE  
ROOM

HACKS  
HACKERS  
africa



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1

## OPEN GOV FELLOWSHIP

Enabling outstanding local change makers

3

## M-WASH

A platform map access to safe drinking water points all over Freetown

2

## STORYLAB ACADEMY

A platform to help newsrooms in Sierra Leone to keep up with digital tools of reporting

4

## FLOODAID SALONE

Coordinated relief efforts for the victims of heavy flooding and mudslides in Freetown in Aug 2017



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# SIERRA LEONE FINTECH ASSOCIATION

Incubated at iDT Labs | Key partners: Afcom, FSD Africa, BSL | Support to: Local fintech ecosystem

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The SL Fintech Association is a platform developed to facilitate collaboration between all market participants and stakeholders in the Fintech ecosystem.

Supported by iDT Labs, the Association represents the industry and supports to build relationships within the community and collaborate with regional and international Fintech organisations.



Learn more about us at  
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[www.sierraleonefintech.org](http://www.sierraleonefintech.org)



## CASE STUDY 6

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# Open data readiness assessment test – what it takes to launch a nationwide open data movement

iDT Labs worked with the World Bank to help the Government of Liberia to evaluate, design and launch open data initiatives to improve and build systems for greater accountability and transparency.



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# OPEN DATA READINESS ASSESSMENT- LIBERIA

Collaboration with World Bank to implement the Open Data Readiness Assessment (ODRA) in other West African states



iDT Labs worked with the World Bank to help the Government of Liberia (GoL) to evaluate, design and launch open data initiatives to improve and build systems for greater accountability and transparency.

Learn more about the Open Data Readiness Assessment <http://opendatatoolkit.worldbank.org/en/odra.html>

Read our complete report <https://goo.gl/hZAqSM>



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## CASE STUDY 7

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# Military Integrated Open Logistics Information System

Prepared for the Sierra Leone Ministry of Defense

iDT Labs worked with the Ministry of Defense (MoD) to develop a system to manage and monitor the life cycle of its inventory, which includes equipment, munitions, vehicles and other assets.



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# MILITARY INTEGRATED OPEN LOGISTICS INFORMATION SYSTEM

Client: Ministry of Defense (MoD) Sierra Leone. Duration: Dec 2014-May 2015

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## PROBLEM

- The MoD needs a well defined, systematic and automated process of managing and monitoring the life cycle of its inventory, which includes equipment, munitions, vehicles and other assets-from supply to use and ultimately disposal, in an efficient and secure manner.
- The MoD needs comprehensive insight into the status of these and control of the entire logistical process including authorizations, tracking and tracing and return flows.
- To do this the MoD needs a single integrated solution that provides a single version of the truth for military activities and the resulting usage, demand and the ability of the supply chain to replenish.

## SOLUTION

- Our MILIS at its core is an ERP composed of
  1. A warehouse management system
  2. Inventory tracking system
  3. Fleet Management System
  4. GPS and Barcoding capabilities
  5. Configurable reporting and alerting system
- It coordinates the flow of assets in and around the military warehouses and locations across all armed services
- Rather than deploying multiple siloed systems at each warehouse, it administers hundreds of warehouses providing a rule-based single system that supports many configuration and quality management.
- It is underpinned by the best and latest in large-scale Enterprise Resource Planning and built upon industry best practice in web, security and database technologies.



# MILITARY INTEGRATED OPEN LOGISTICS INFORMATION SYSTEM

Client: Ministry of Defense (MoD) Sierra Leone. Duration: Dec 2014-May 2015

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Our Wall-to-wall ERP solution provides the following core functionalities:

- 1 PURCHASE OF ASSETS, VEHICLES, MUNITIONS & EQUIPMENT
- 2 ASSET MANAGEMENT, MONITORING & ASSIGNMENT
- 3 ASSET MAINTENANCE, REPAIRS & DEPRECIATION
- 4 FLEET MANAGEMENT, CONTRACTING, MAINTENANCE & FEULING
- 5 GPS & BARCODE TAGGED ASSETS
- 6 100% TRACEABILITY OF ALL INVENTORY MOVES
- 7 REPORTS ON THE STATES OF MOD ASSETS PER LOCATION
- 8 AUTOMATED ALERTS ON STOCK LEVELS
- 9 BROWSER BASED FOR EASY ROLLOUT



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# MILITARY INTEGRATED OPEN LOGISTICS INFORMATION SYSTEM

Client: Ministry of Defense (MoD) Sierra Leone. Duration: Dec 2014-May 2015

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## KEY BENEFITS

1. Provides a coherent and 360 degree view of the MoD's assets, ensuring traceability throughout the entire life-cycle of an asset
2. High level and drilled down customizable reports that show the status of all categories of inventory per location with configurable alerts supports proactive and decision-based procurement and resource allocation
3. The advantages of traceability and computer supported resource allocation and planning will help the MoD save 7.5% of its cost of asset, munition, vehicle and equipment procurement maintenance.



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# MILITARY INTEGRATED OPEN LOGISTICS INFORMATION SYSTEM

Client: Ministry of Defense (MoD) Sierra Leone. Duration: Dec 2014-May 2015

## COST ANALYSIS

All figures are in USD

200,000

Procurement & Software

100,000

Customization & Deployment

20,000

Training & Knowledge  
Transfer

200,000

Rollout & Pilot Support

60,000

1 year post implementation support



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