Innovative smart metering system for water

Hangzhou Laison Technology Co., Ltd.

Online Billing & Management
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Problems faced
by Water Company
Have you encountered such difficulties?

**LONG Collection Period**
- Door-to-door Meter Reading
- Manual Meter Data Input
- Manual Invoice/Receipt issuing
- On-site Revenue Collection

**LOW Collection Ratio**
- Reject to pay without any penalty
- Illegal Deal with Meter Reader
- Errors during Manual Meter Data Input

**HIGH Non Revenue Water**
- Water Leakage/Tube Burst
- Unauthorized/Illegal Connection
- Failure of Water Revenue Collection
**Nigeria**
Federal Capital Territory Water Board

Collection ratio 35-60%

Collection Period 200-450 days

**Kenya**
Gusii Water And Sanitation Company

Collection ratio 60-82%

**Nigeria**
Federal Capital Territory Water Board

NRW 28-36%

**Kenya**
Gusii Water And Sanitation Company

NRW 44-48%

Data cited from IB-NET
In the past four months (from February to May 2020), WASAC estimated a USD 3 million loss in revenue compared to the previous year. According to WASAC, revenue reduction is attributed to the non-payment of large customers, such as business offices, and restraints.

Data cited from "JICA's Intervention and Response to Water, Sanitation and Hygiene in the COVID-19 Crisis"
Smart Water Meter in NWSC - Zambia

COMPARATIVE PERFORMANCE - BEFORE AND AFTER PRE-PAID METERS INSTALLATION

Ave. increase in coll. approx. 65%
02 Smart Metering Solutions
IoT Prepaid Smart Meter Types Optional

Prepaid
- Mobile Vending
- Multiple Comm. Methods
- Remote Recharge

Automatic Data Upload
- 10 year´s Data Record Storage
- Anti-tamper Alarm

Reverse Flow Detection
- Water Leakage Detection
- Remote Valve Control
Basic Working Process of IoT Smart Water Meter

Integrated application
Meter Reading Management

Meter Data Management

Billing Management

Report Management

Network transmission
LAISON Meter Data Management System

3G/4G/WIFI

Data Query at End-user

GPRS/NB-IoT/LoRaWAN Network

Data acquisition

Laison Smart Water Meters

GPRS

NB-IoT

LoRaWAN
Smart App

Water Utilities
- Mobile Vending
- Aggregated/Detailed Sales Report
- Token Generation Record
- Frozen Data
- Remote Meter Data Collection

End-Users
- Remaining Water Credit
- Total Consumption
- Historical Purchase Records
- Meter Running Status

Aqua Mall Pro
Aqua Trans Pro
Aqua Radius
Aqua Link
Aqua Stream
• Non Revenue Rate reports for each District
• 24 * 7 Online Metering Monitoring Data, Daily Water Loss Report for each Village
• Top 10 District Ranks basing on NRW rate or volume lost for maintenance team
## Benefits of Prepaid IoT Water Meter & MDM System Solution

<table>
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<tr>
<th>Compatibility</th>
<th>No Historical Debt</th>
<th>Improve Cash Flow</th>
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<tbody>
<tr>
<td>Automatic Data Collection</td>
<td>Customer Persona</td>
<td>Improve Efficiency</td>
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03 Concerns of Project Execution
Key Factors During Project Implementation

- Meter Type Selection
- IP Level
- Meter Lifespan
- Battery Lifespan
- Valve Stability
- MDM System Establishment
- Project Budget
- Project Funding
- Construction
- After Sales Service

Creating Values by Continuous Innovations
Financial Solutions for Water Company

01 Roll out efficiently with Limited Budget

02 Proceed effectively phase by phase
Onsite Training & Meter Installation

Zambia  Malawi  Mozambique  Angola

Egypt  Nigeria  Ethiopia  Kenya
LAISON, Most Widely Used Smart Water Meter Brand in Africa

THANKS