

ALEF 360° IoT

Real-Time Visibility and Control Across
Your Connected Assets

ALEF 360° IoT



Asset Management

Monitor and manage assets across diverse environments.



Dashboard Builder

Create custom dashboards to track live sensor data and KPIs.



Device Management

Onboard, monitor, and track IoT devices from a central interface.



Communication Agnostic

Supports any protocol—wired, wireless, or LPWAN.



Built-in LoRaWAN® Network Server

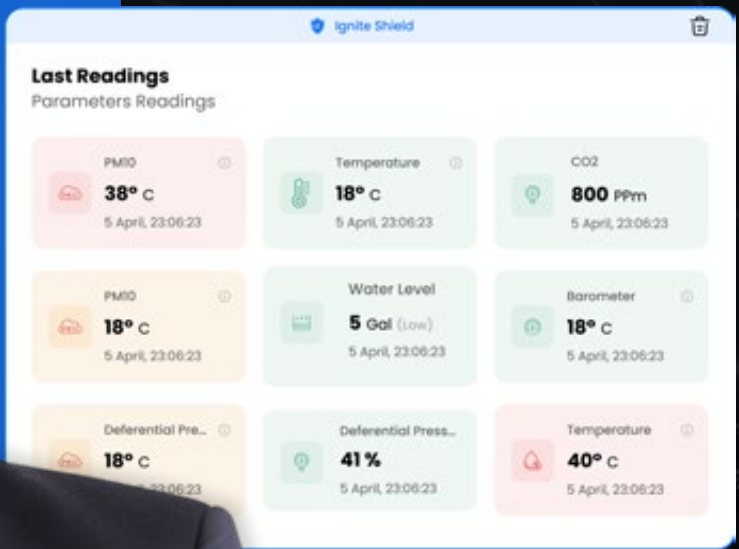
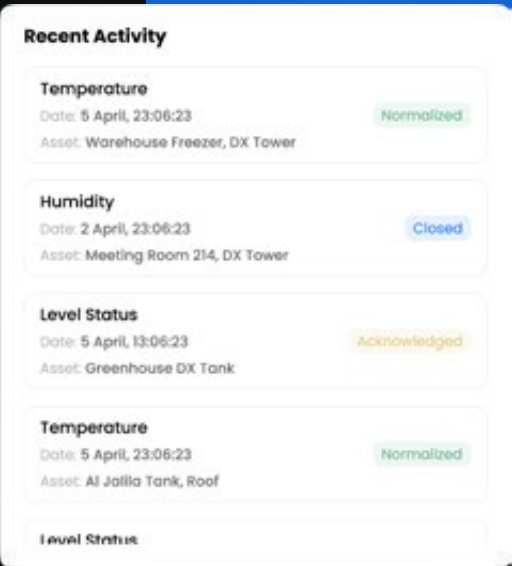
Native LoRaWAN® support—no external server needed.



Scalable Architecture

Easily manage thousands of devices with high availability.

“
**End-to-End
IoT Visibility
Across Buildings,
Assets, & Utilities**
”



Asset Management

Unified dashboard for real-time asset tracking, linking, and lifecycle oversight.

❖ Wide Asset Focus

Manage diverse assets such as spaces, machinery, vehicles, and resources.

❖ Pre-Defined & Custom Categories

Use ready categories out-of-the-box and extend to future asset types as operations grow.

❖ Centralized Control

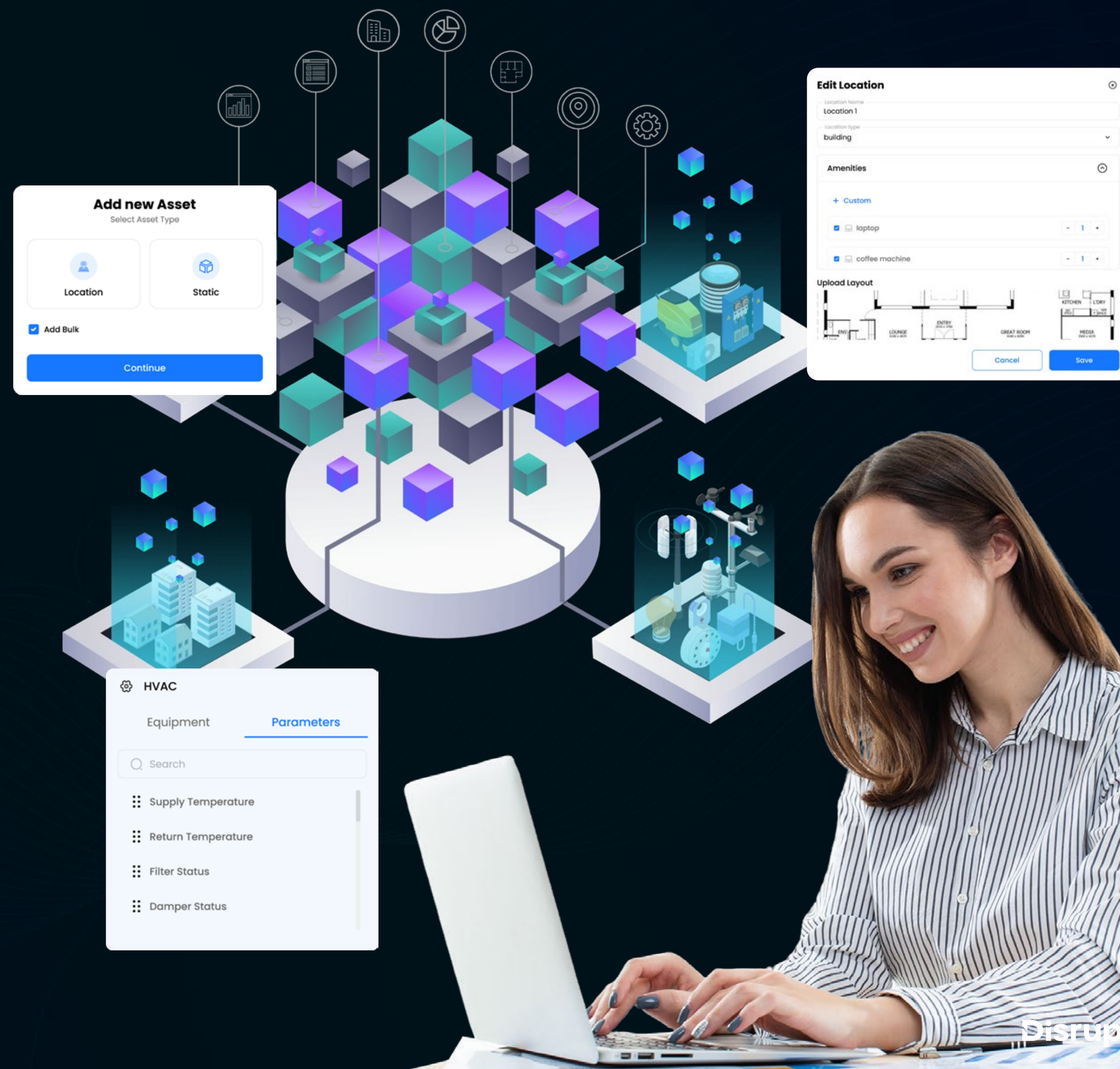
A single interface to manage, monitor, and link assets with IoT devices and applications.

❖ Smart Asset Linking

Connect assets with their devices for accurate, context-based monitoring and reporting.

❖ Cross-Module Sync

Sync assets seamlessly across ALEF 360° modules like CAFM & iBMS for unified operations.



Device Management

Unified dashboard for real-time device monitoring and control.

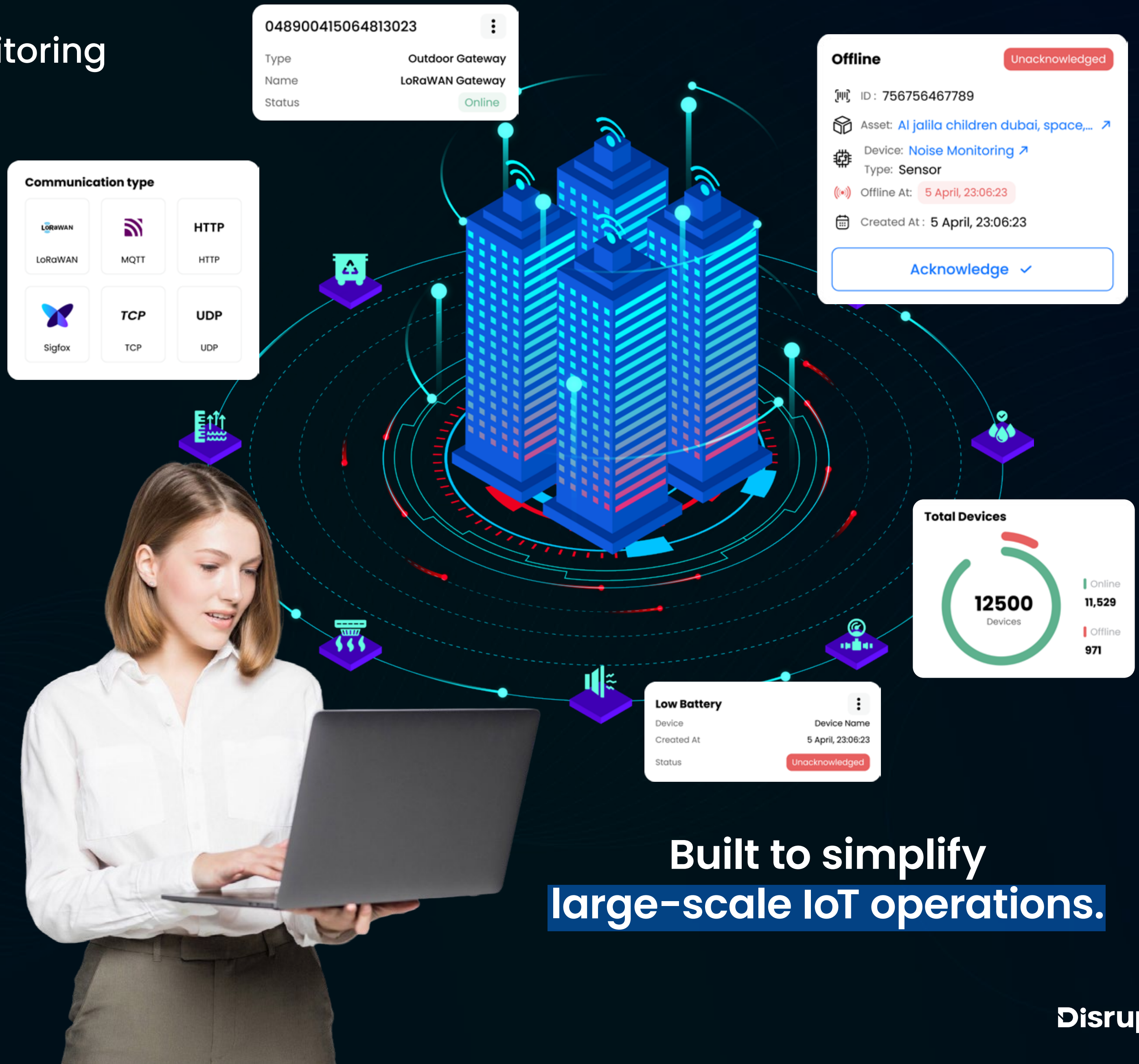
❖ **Pre-Integrated Device Models**
Connect 100+ of ready-to-use OEM devices instantly.

❖ **Hardware Agnostic**
Supports any IoT hardware—no lock-in or vendor limits.

❖ **Effortless Device Linking**
Assign devices to assets for precise data tracking.

❖ **Quick Setup**
Deploy devices fast with no custom integration.

❖ **Scalability**
Easily scale from single sites to large portfolios.

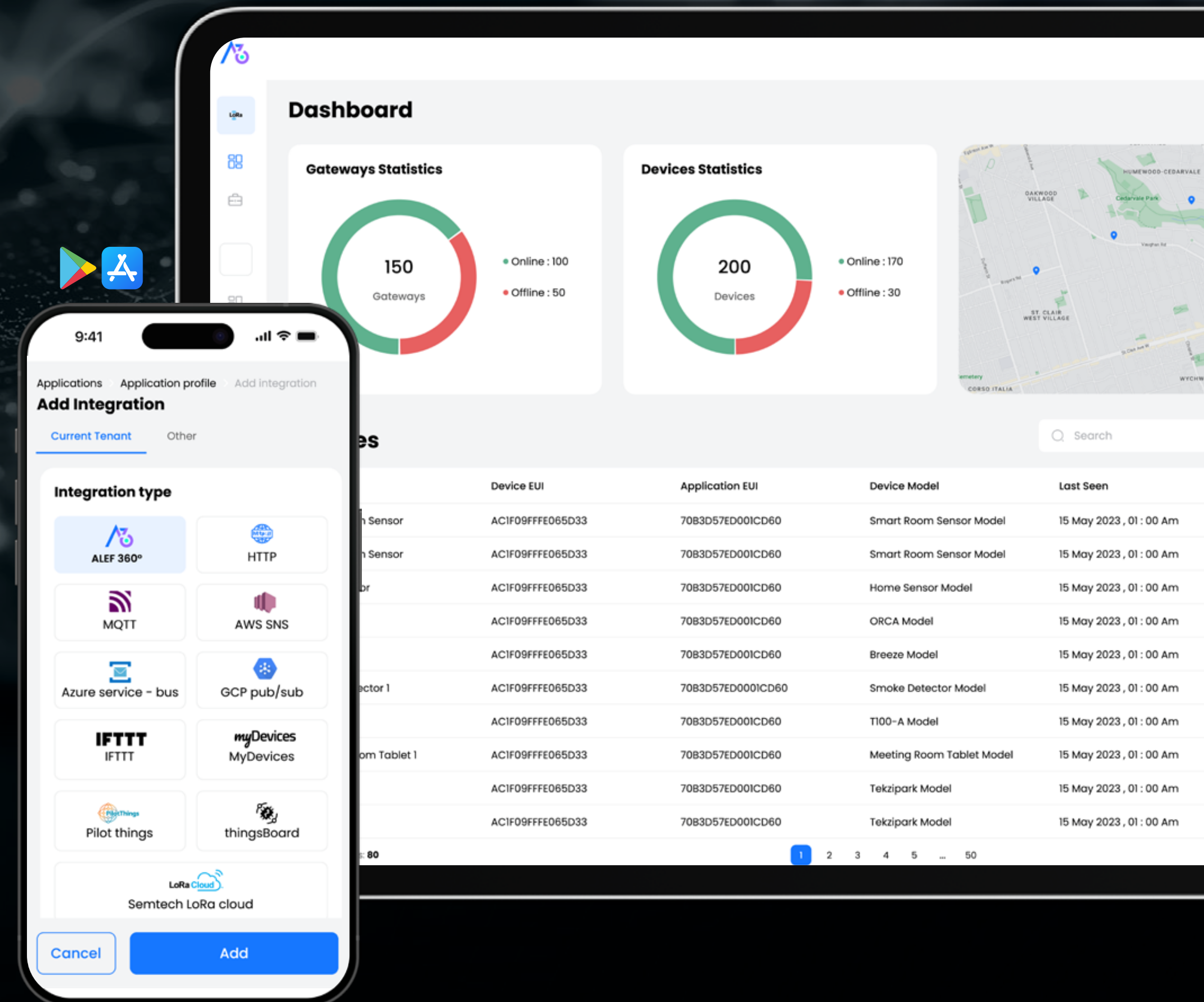


Built to simplify
large-scale IoT operations.

Built-In LoRaWAN[®] Network Server

- ❖ Native to the ALEF 360° ecosystem
- ❖ Fast setup with minimal configuration
- ❖ Ideal for internal deployments and managed devices
- ❖ Supports multi-vendor LoRaWAN devices
- ❖ Scales with your project size and complexity

**Seamlessly Embedded
Within ALEF 360° Platform**



Custom Dashboards & Reports

Comprehensive insights at your fingertips

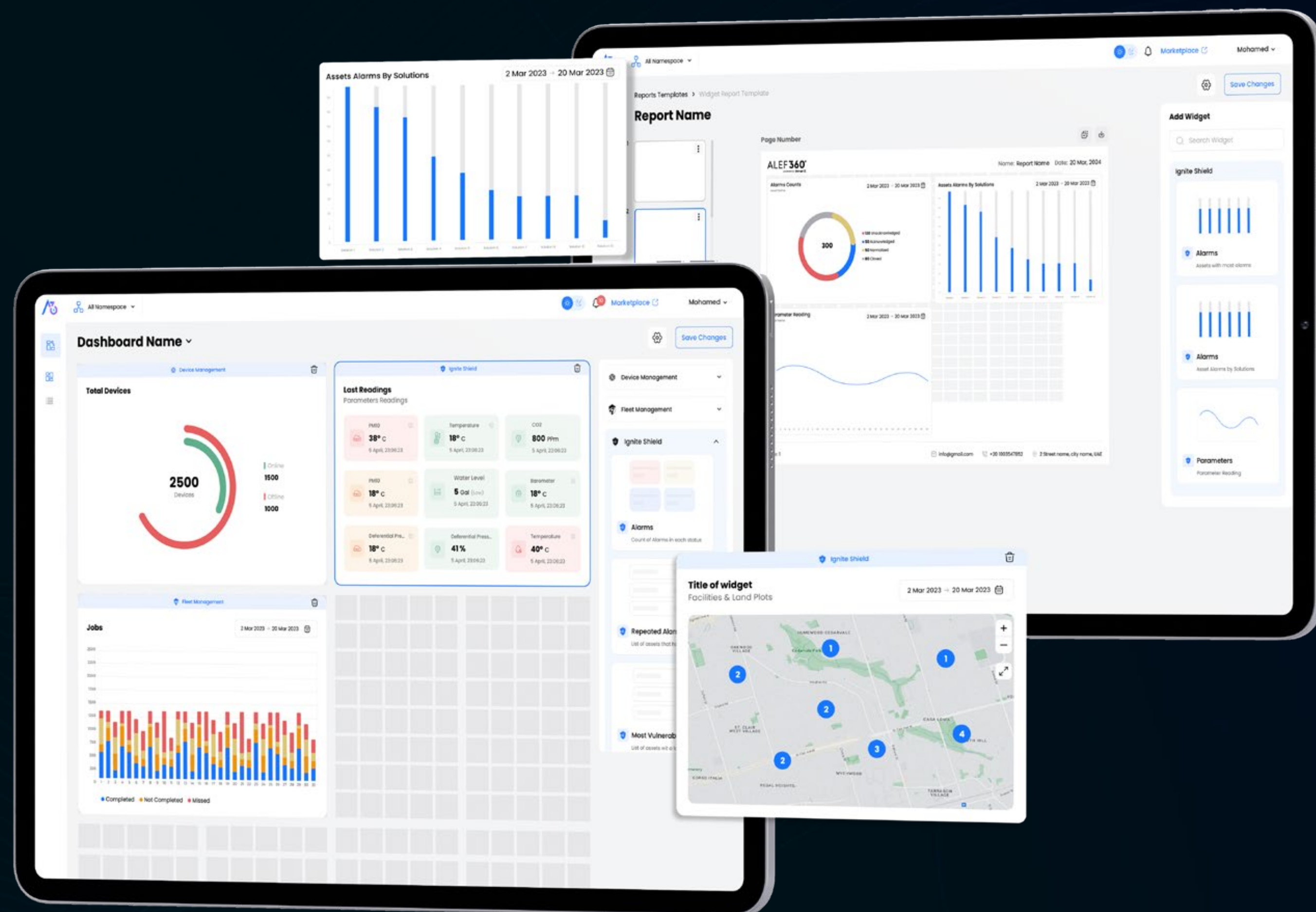
❖ **Build with Drag-and-Drop**
Assemble dashboards and reports in minutes using a visual editor.

❖ **Widget Library**
Add alarms, maps, gauges, charts, asset lists, and sensor graphs.

❖ **Multi-Data in One View**
Combine different data types—e.g., IAQ, chiller performance, energy—in a single view.

❖ **Custom Filters**
Slice by namespace, building, asset class, or time range.

❖ **Save, Share & Schedule**
Save layouts, share with teams, and auto-send daily/weekly/monthly reports.



Intelligent Alarm Management

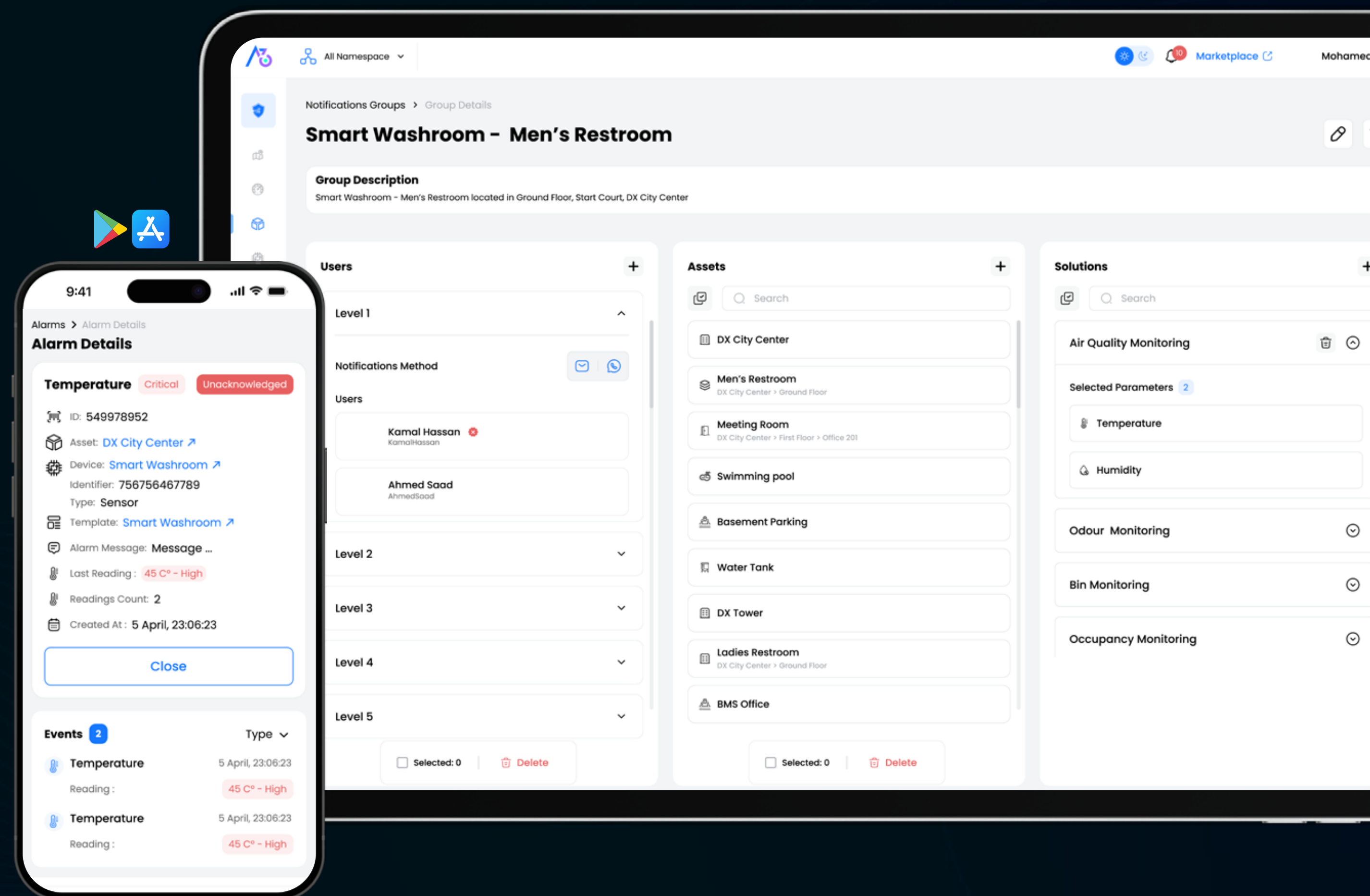
Ensure immediate response while avoiding alert fatigue with ALEF 360° IoT's advanced alarm capabilities:

❖ **Multi-Level Escalation Engine**
Configure tiered notifications to escalate unresolved issues to supervisors and management based on time thresholds.

❖ **Multi-Channel Notifications**
Instantly alert stakeholders through SMS, WhatsApp, email, or in-app notifications.

❖ **Automated Work Order Generation**
Alarms trigger automated work orders in ALEF 360 CAFM, enabling faster dispatch and resolution.

❖ **Intelligence by Design**
Reduces false alarms with customizable suppression windows during expected downtimes.
(e.g., off-hours HVAC inactivity, cold storage defrost cycles).



Flexible Hosting Options

Choose the right deployment model for security, control, and scalability.

- ❖ **Cloud**
Scale easily from anywhere with secure, cost-efficient access.
- ❖ **On-Premise**
Keep data local for low-latency access and customize for compliance needs.
- ❖ **Hybrid**
Combine cloud scalability with on-site data control.
- ❖ **Data Residency**
Ensure data complies with local and national storage regulations.
- ❖ **Multi-Tenant**
Enables multiple users to share one instance while maintaining secure, independent data & configurations.



ALEF 360° IoT WHITE LABEL

COMPREHENSIVE BRANDING

MOBILE EXCLUSIVE

IN-COUNTRY DATA

CLOUD AGNOSTIC

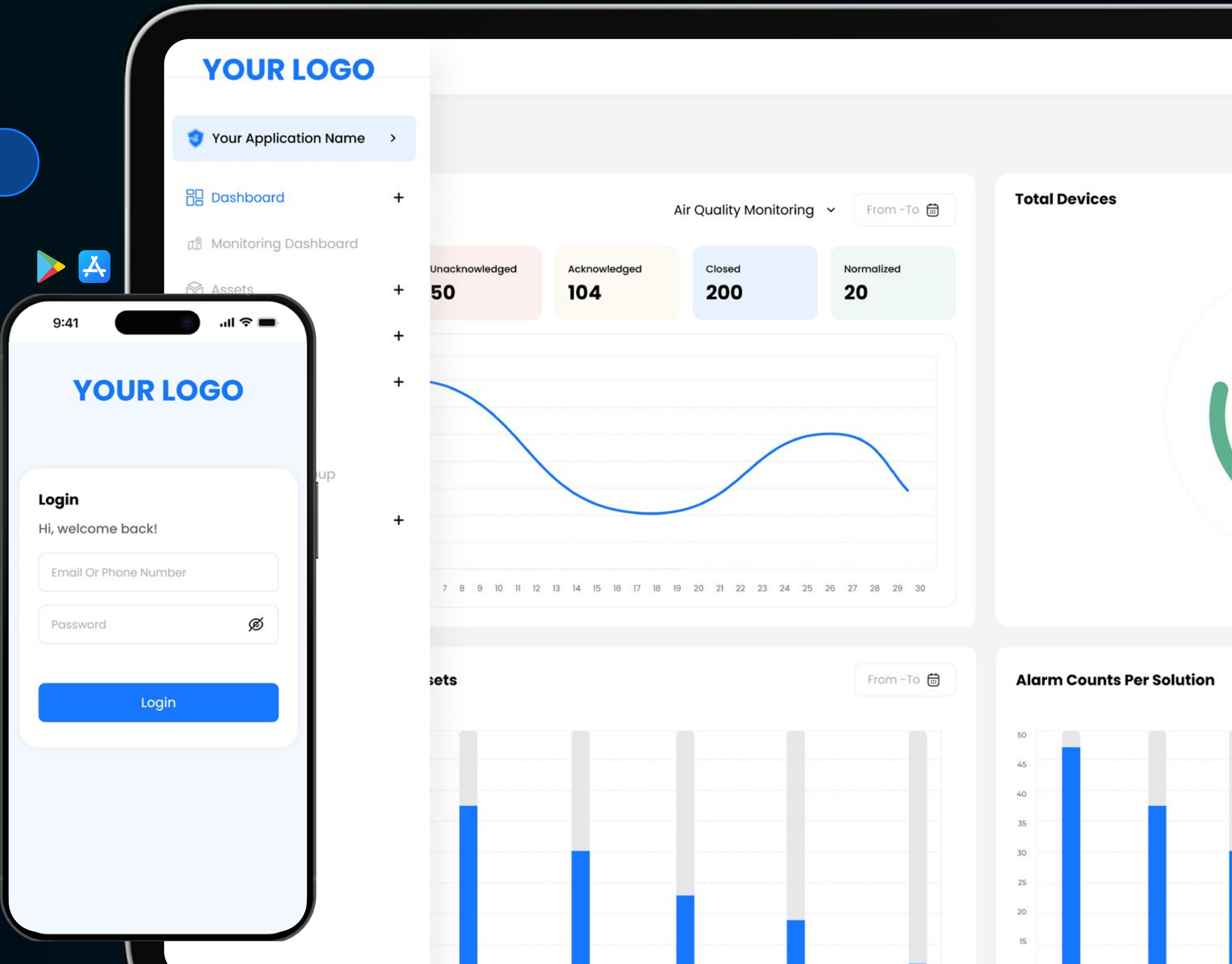


Microsoft
Azure



Google Cloud

On-Premise



Early Warning Urban Flood Monitoring

Combat Water Damage Before It Happens



45%

Facility damage claims are related to water leaks or flooding

\$2.5B
Annually

Commercial property losses.

~48hrs

Mold growing after water exposure from leak or flood.



Basements



Rooftops



Loading Docks



Pump Rooms



Parking Lot

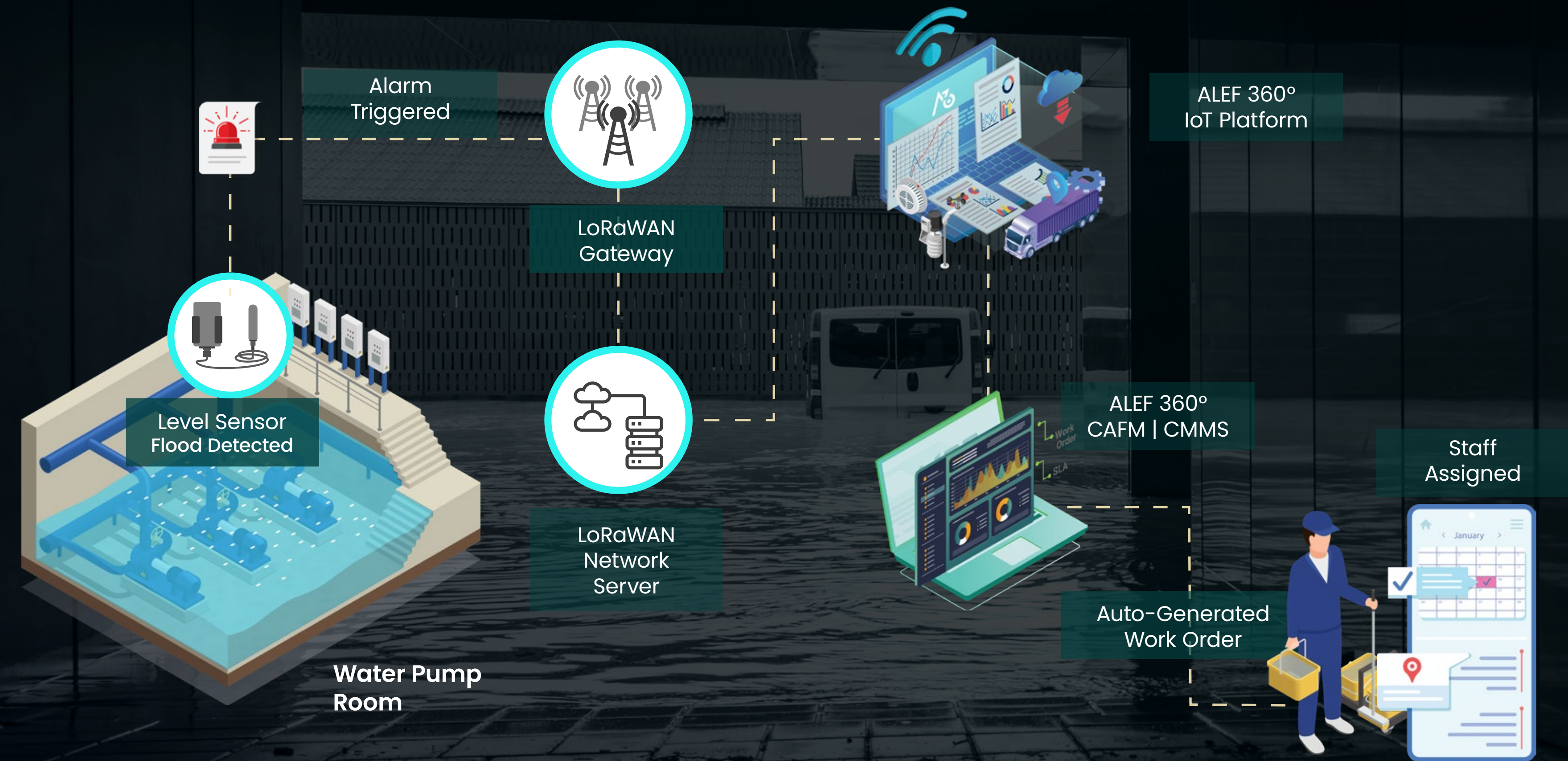


Manhole / Sewerage



Scalable Across Citywide FM Operations

Prevent. Detect. **Act** – in Real Time.



Key Platform Features:

Flood Level Monitoring

Automated Work Order Creation via Integrated CAFM | CMMS

Instant notifications via SMS, Email, Call, or Platform.

Historical Maintenance Data Access

IoT Sensors

Radar Distance / Level Monitoring

Product Code: RDL-LORX-030

LoRaWAN

- Long Detection Distance – 12m
- Up to 7 years

Level Monitoring Ultrasonic

Product Code: LMU-LORX-030

LoRaWAN

- Distance / Level Measurement
- Up to 10 years

Level Monitoring Submersible

Product Code: LMS-LORX-030

LoRaWAN

- Liquid Level
- Up to 10 years

Level & Distance Monitoring Sensor

Product Code: MNH-LORX-037

sigfox **LoRaWAN** **NB-IoT**

- Corrosion Resistance
- Up to 10 years

Sewer & Manhole Monitoring

Track Underground Issues Before They Escalate

CHALLENGES

- ❖ **Unauthorized Manhole Access**
Manhole covers can be tampered with or stolen, creating safety hazards and liabilities.
- ❖ **Undetected Blockage / Overflows**
Undetected overflow causes damage to nearby assets and resulting in downtime.
- ❖ **No Real-Time Visibility**
FM teams can't monitor what's happening underground
- ❖ **High Inspection Costs**
Regular manual checks are time-consuming, labor-intensive, and not always accurate.
- ❖ **Inability to Prioritize Sites**
Without condition data, FM teams can't focus on the highest-risk manholes first.



Sewer Manholes



Utility / Service Manholes



Roadway / Pavements



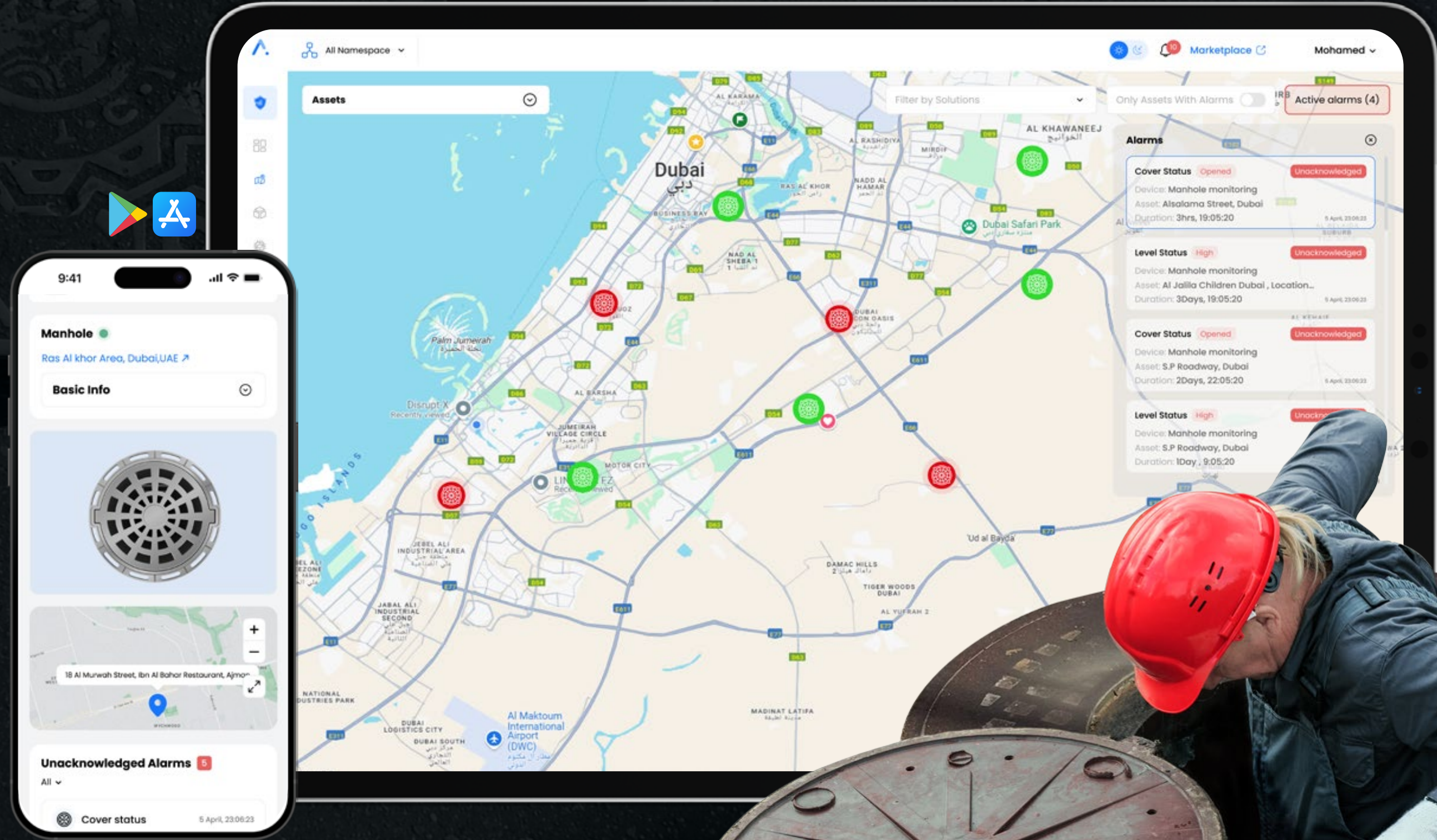
Stormwater / Drainage



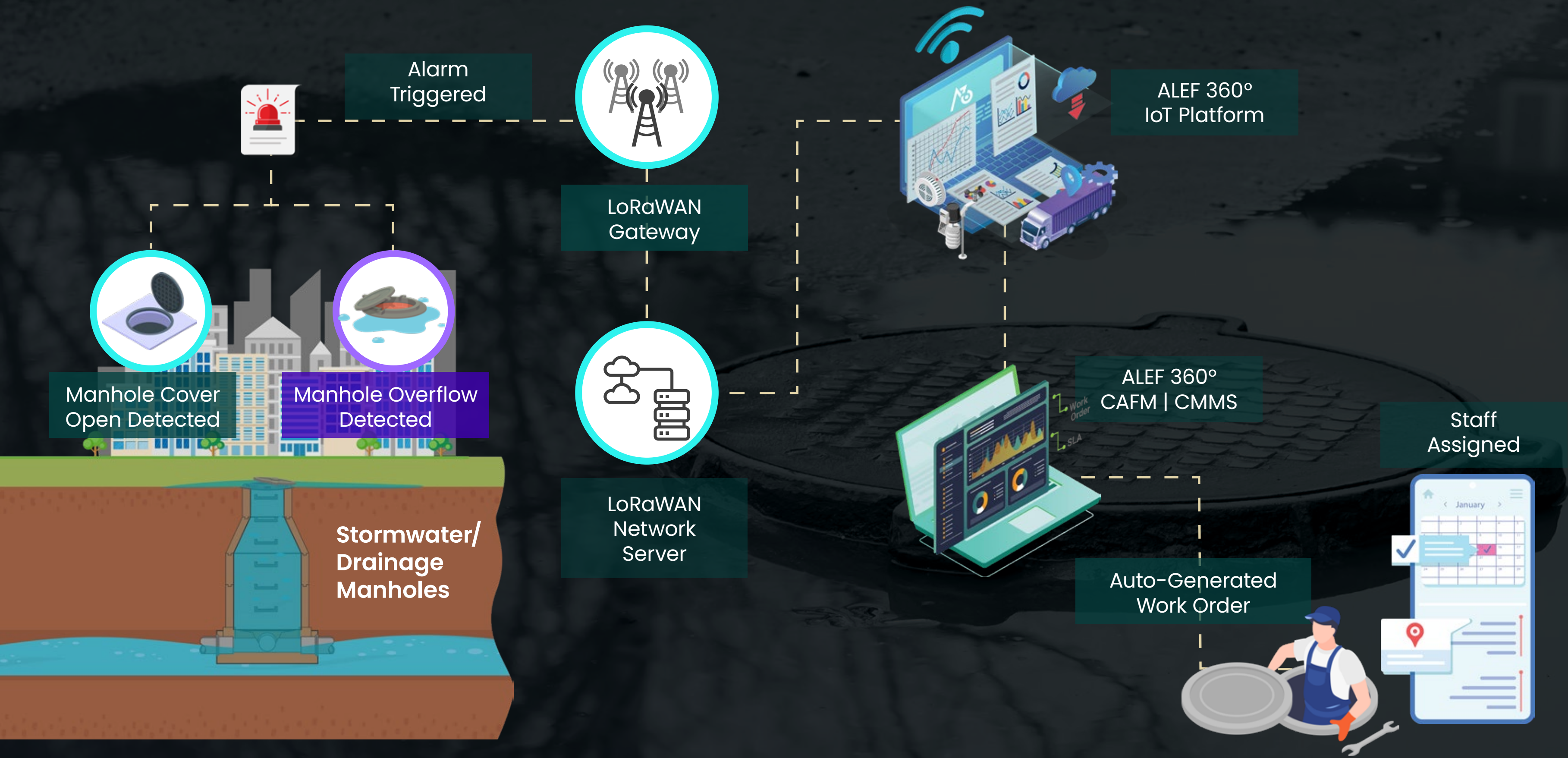
Grease Trap Manholes



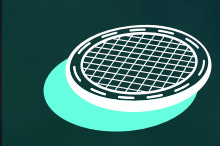
Telecom Chamber



Keep Manholes Secure, Operational, and Overflow-Free.



Key Platform Features:

**Lid Tamper Detection
(Open / Closed)**

**Threshold-Based
Overflow Alerts**

**Instant notifications
via SMS, Email, Call,
or Platform.**

**Automated Work Order
Creation via Integrated
CAFM | CMMS**

IoT Sensors

Level & Distance Monitoring Sensor
Product Code: MNH-LORX-037



-  Corrosion Resistance
-  Up to 10 years

Level Monitoring Ultrasonic
Product Code: LMU-LORX-030



-  Distance / Level Measurement
-  Up to 10 years

Level Monitoring Submersible
Product Code: LMS-LORX-030



-  Liquid Level
-  Up to 10 years

Radar Distance / Level Monitoring
Product Code: RDL-LORX-030



-  Long Detection Distance - 12m
-  Up to 7 years

Noise Pollution Monitoring

Track Excessive Noise Before It Impacts Operations or Compliance

CHALLENGES

❖ **Unmonitored Equipment Noise**
Loud HVACs, generators, or fans exceed limits unnoticed.

❖ **Disputes Without Proof**
Lack of logged data makes it hard to verify noise complaints

❖ **Invisible Regulation Breaches**
Missed alerts lead to unnoticed legal noise violations.

❖ **No Pattern Tracking**
No trend logs to detect recurring or peak noise events.



Commercial Zones



Construction Sites



Hospitals / Clinics



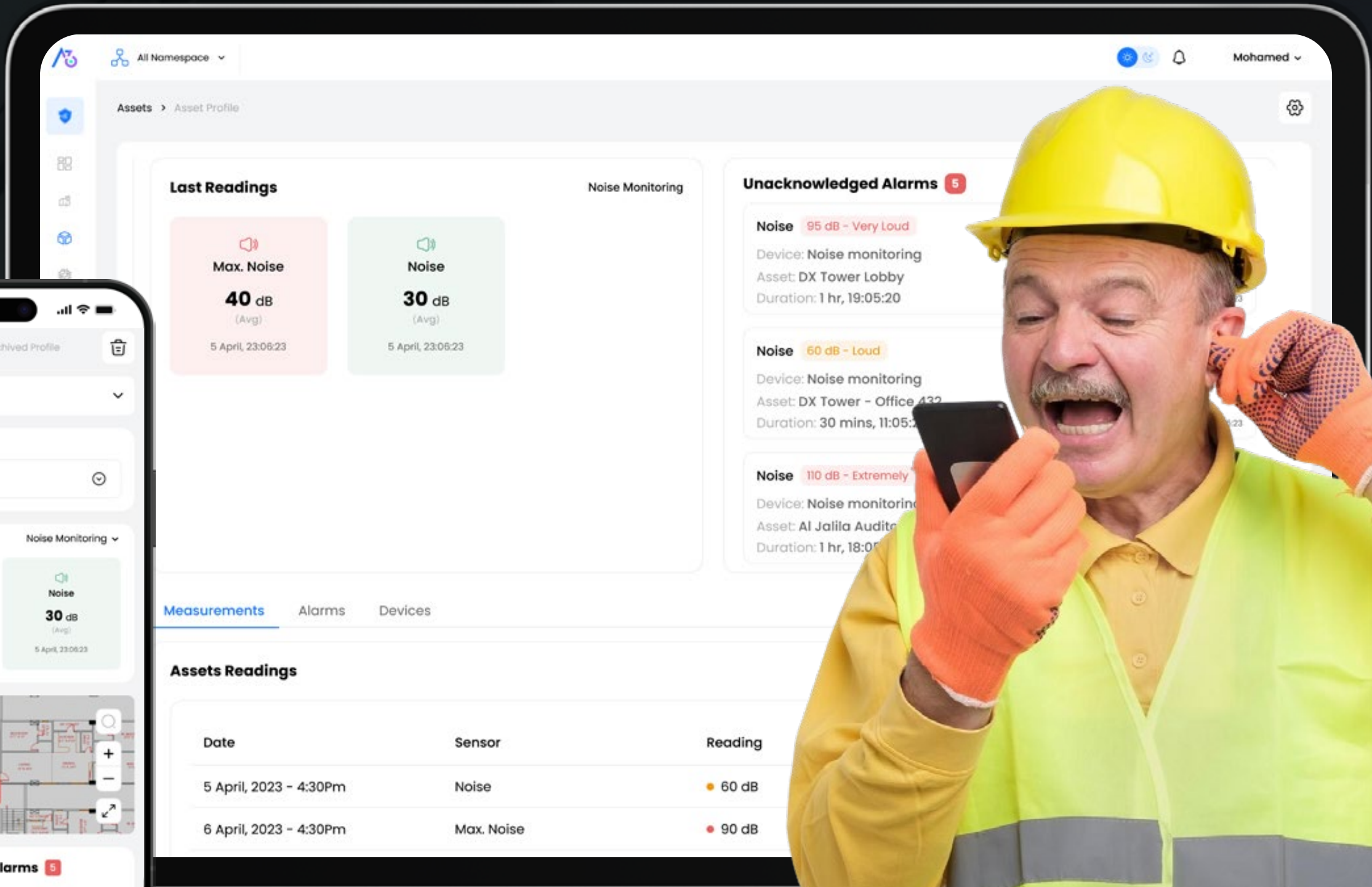
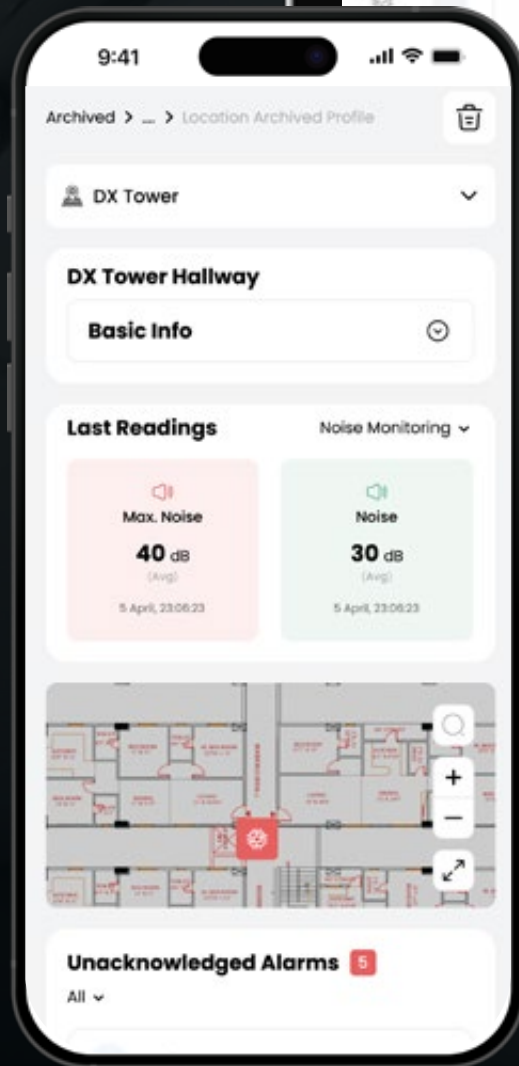
Residential Buildings



Educational Campuses



Hotels & Resorts

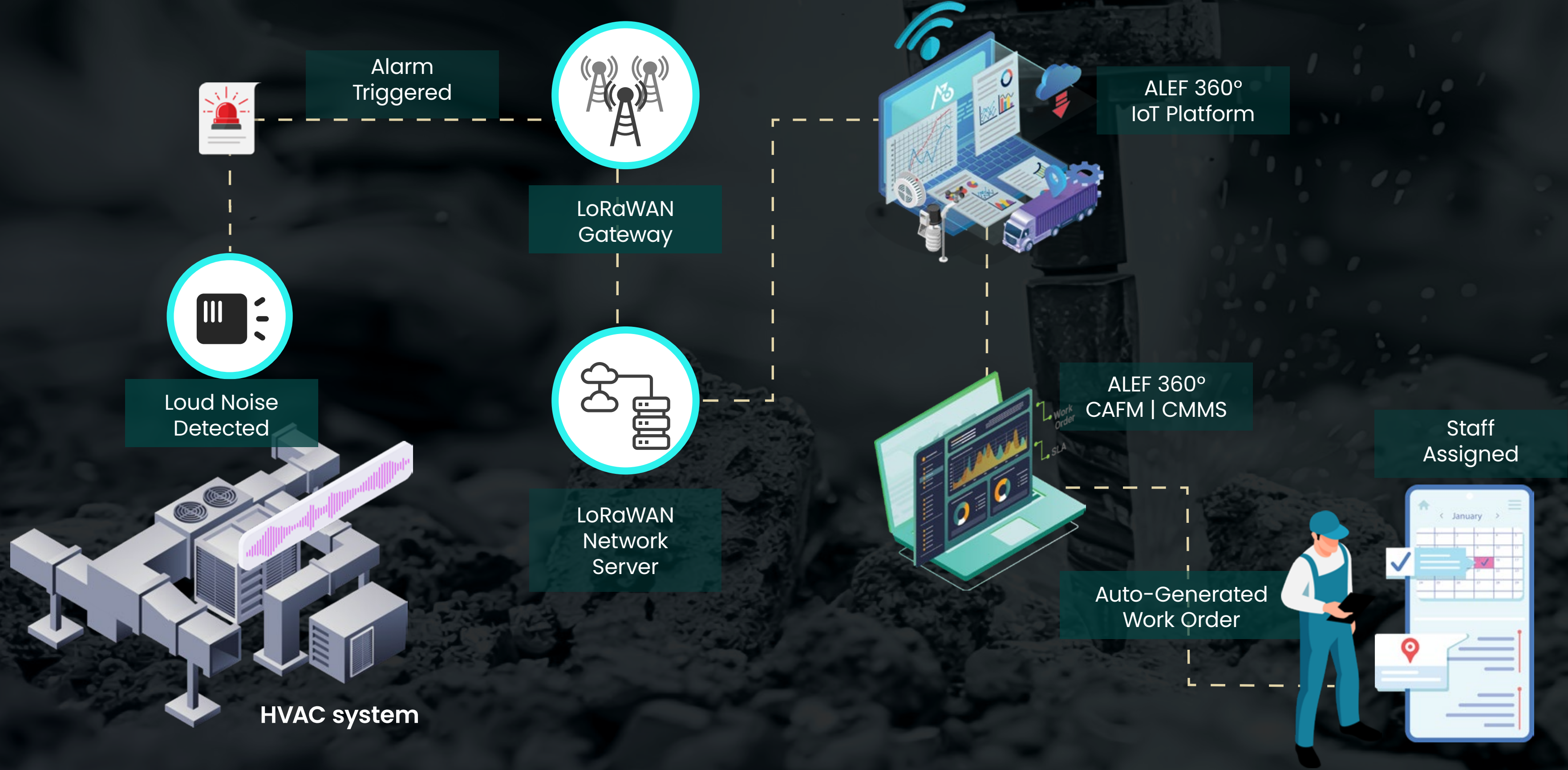


Connectivity



💡 **70dB+** for long durations can impact your hearing.

Monitor, Log, and Act on Noise Pollution Instantly.



IoT Sensors

Noise Level Monitoring

Product Code: NOM-LORX-030



LoRaWAN®

- Noise Detection
- Up to 1 – 4 years

Key Platform Features:

- 

Monitor Noise / Sound Levels
- 

Automated Work Order Creation via Integrated CAFM | CMMS
- 

Real-time Notifications on Abnormalities
- 

Export alarm logs, audit trails, and performance trends



Cold Storage Monitoring

Prevent Spoilage, Ensure Compliance, and Save Costs

CHALLENGES

- ❖ **Unnoticed Temperature Fluctuations**
Without alerts, minor changes lead to major spoilage and inventory loss.
- ❖ **Manual Checks Are Inconsistent**
Manual checks are delayed and often inaccurate.
- ❖ **Delayed Response to Malfunctions**
Undetected faults like compressor or sensor failure lead to rapid temperature rise, product spoilage, & costly downtime.
- ❖ **Prolonged Door Open Events**
Frequent or unnoticed door openings cause temperature spikes, energy waste, and increased spoilage risk.
- ❖ **No Historical Tracking**
FM teams can't detect recurring cold chain issues or patterns without data logs.

Connectivity





Pharmaceutical Warehouses



Supermarkets & Hypermarkets



Hospitals / Clinics



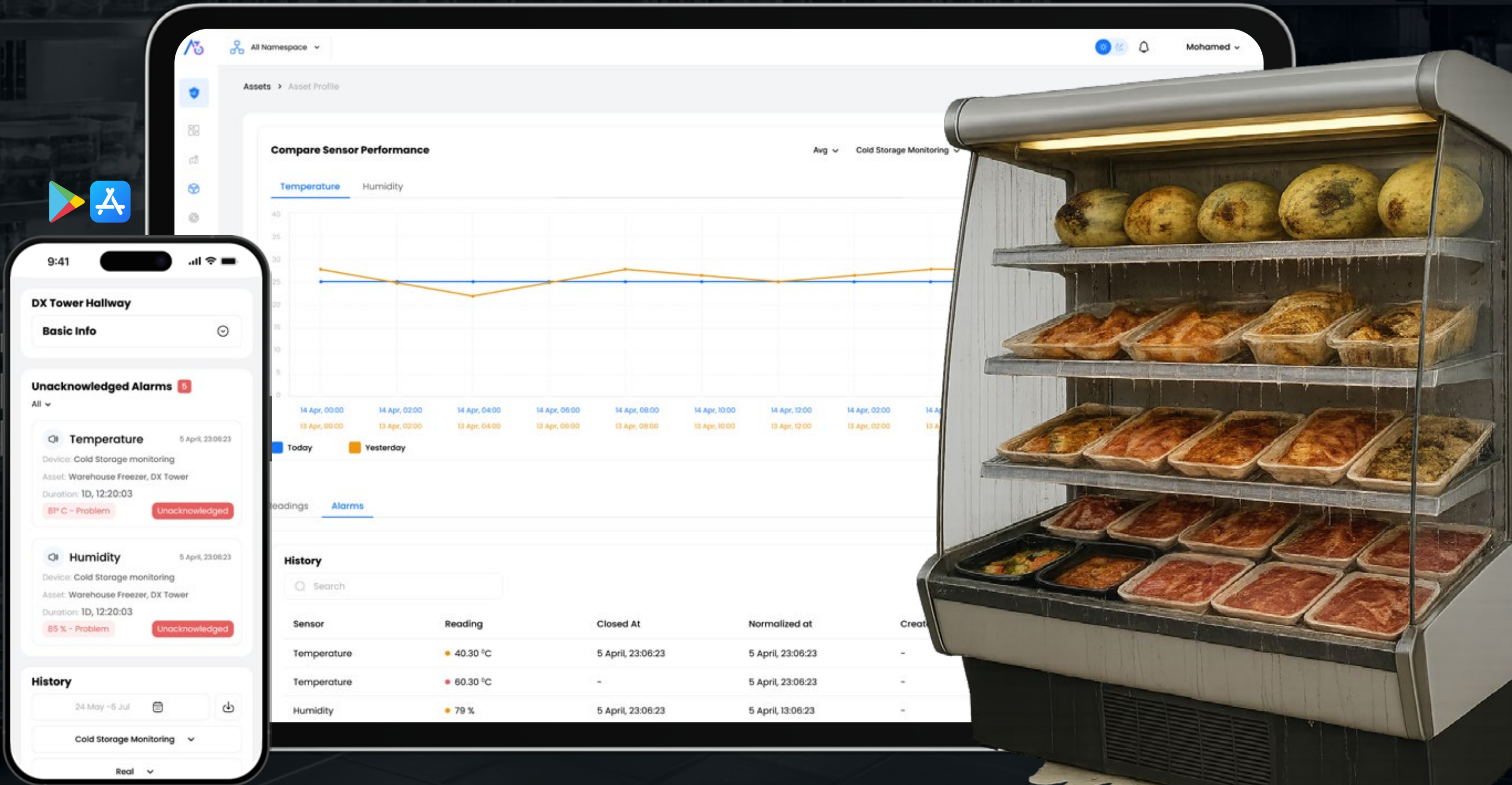
Food Distribution Centers



Agricultural Farms

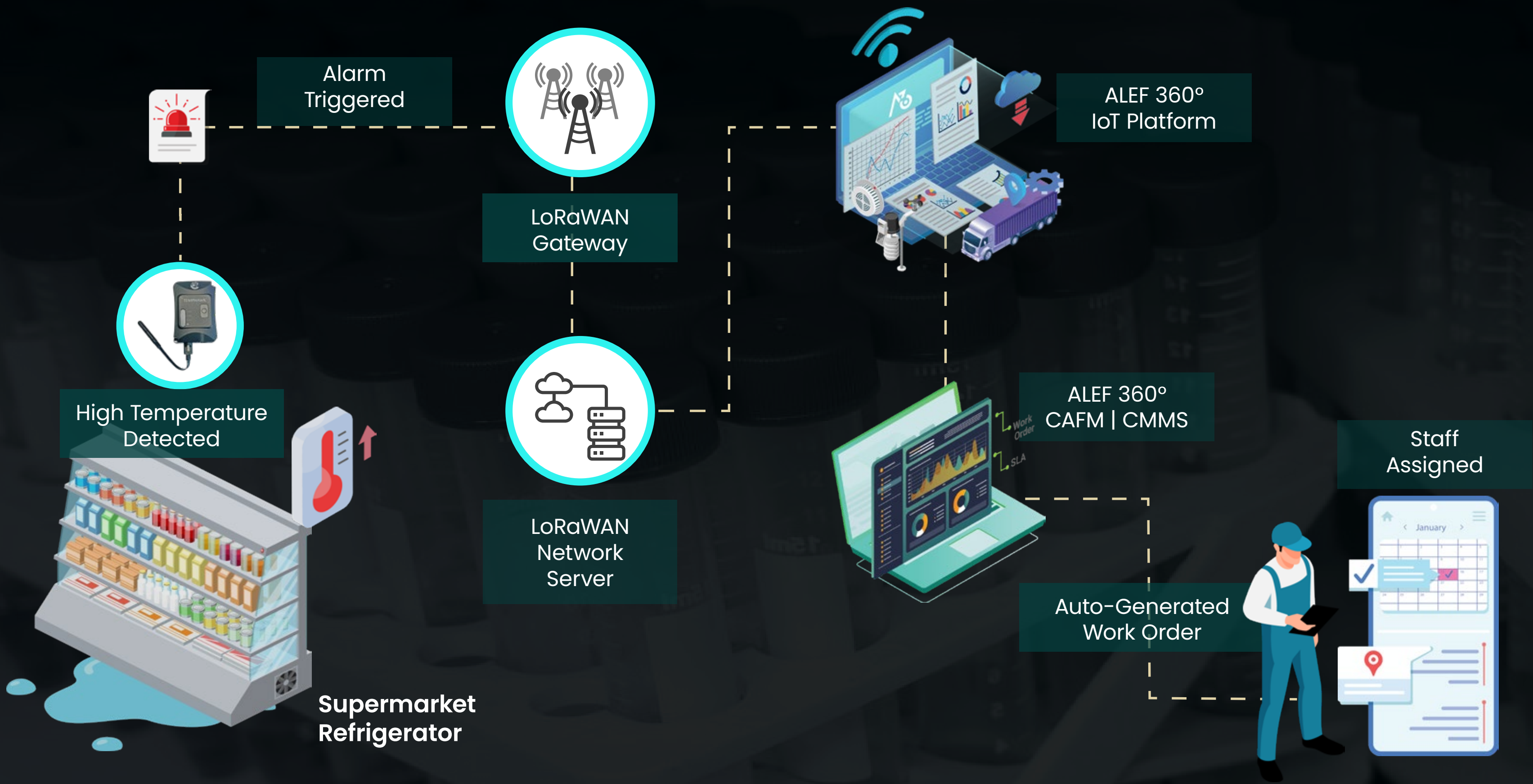


Restaurants / Central Kitchens



Preserve Stock. Reduce Losses.

Improve Response Times.



Key Platform Features:



Monitor Temperature & Humidity



View Analytics Based on Sensor Readings



Instant notifications via SMS, Email, Call, or Platform.



Automated Work Order Creation via Integrated CAFM | CMMS

Cold Storage Monitoring Sensors

Product Code: CSM-SIGX-005



Temperature



Humidity

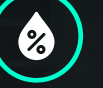


Up to 6 months (Rechargeable)

Product Code: M30-LORX-030



Temperature



Humidity



Up to 5 years

Product Code: M32-LORX-030



Temperature



Humidity



FDA Approved



Up to 5 years

Genset Monitoring

Monitor generator health, runtime, fuel, and faults in real time.

CHALLENGES

- No Visibility Into Generator Health**
Failures often go unnoticed until outages happen.
- Fuel or Battery Issues Untracked**
Low fuel or battery discharge leads to surprise failures.
- Manual Logs Are Unreliable**
Generator tests are logged inconsistently or missed altogether.
- Missed Maintenance Cycles**
Runtime-based servicing is rarely monitored accurately.
- Delayed Response to Faults**
Alarms are unnoticed until someone physically inspects the unit.



Residential Buildings



Commercial Complexes



Data Centers



Remote Locations



Airports & Transit



Hospital / Clinics

9:41

Assets > Generator Profile

Unacknowledged Alarms 5

- Leak Detected in Tank** 5 April, 23:06:23
Duration: 3 Days, 19:05:20
1 Failed Unacknowledged
- Low Fuel Level** 5 April, 23:06:23
Duration: 3 Days, 19:05:20
1 Failed Unacknowledged
- Low Engine Oil Pressure** 5 April, 23:06:23
Duration: 3 Days, 19:05:20
1 Failed Unacknowledged
- Generator Shutdown** 5 April, 23:06:23
Duration: 3 Days, 19:05:20
1 Failed Unacknowledged

Labels

Readings Alarms

Last Readings Avg

All Namespace

Assets > Generator Profile

Generator 12113 under maintenance
Ras Al Khair Area, Dubai, UAE | DX Tower >> Basement 1
Warranty: Active 60 days left

Basic Info

- WT-001** Reference Number
- 22:02:53** Engine Run Time
- Genset Device** Linked Device
- Online** Status

Emergency Fuel Level - 30 Acknowledged Alarms 1

18 Al Murwakh Street, Ras Al Khair Area, Dubai, UAE

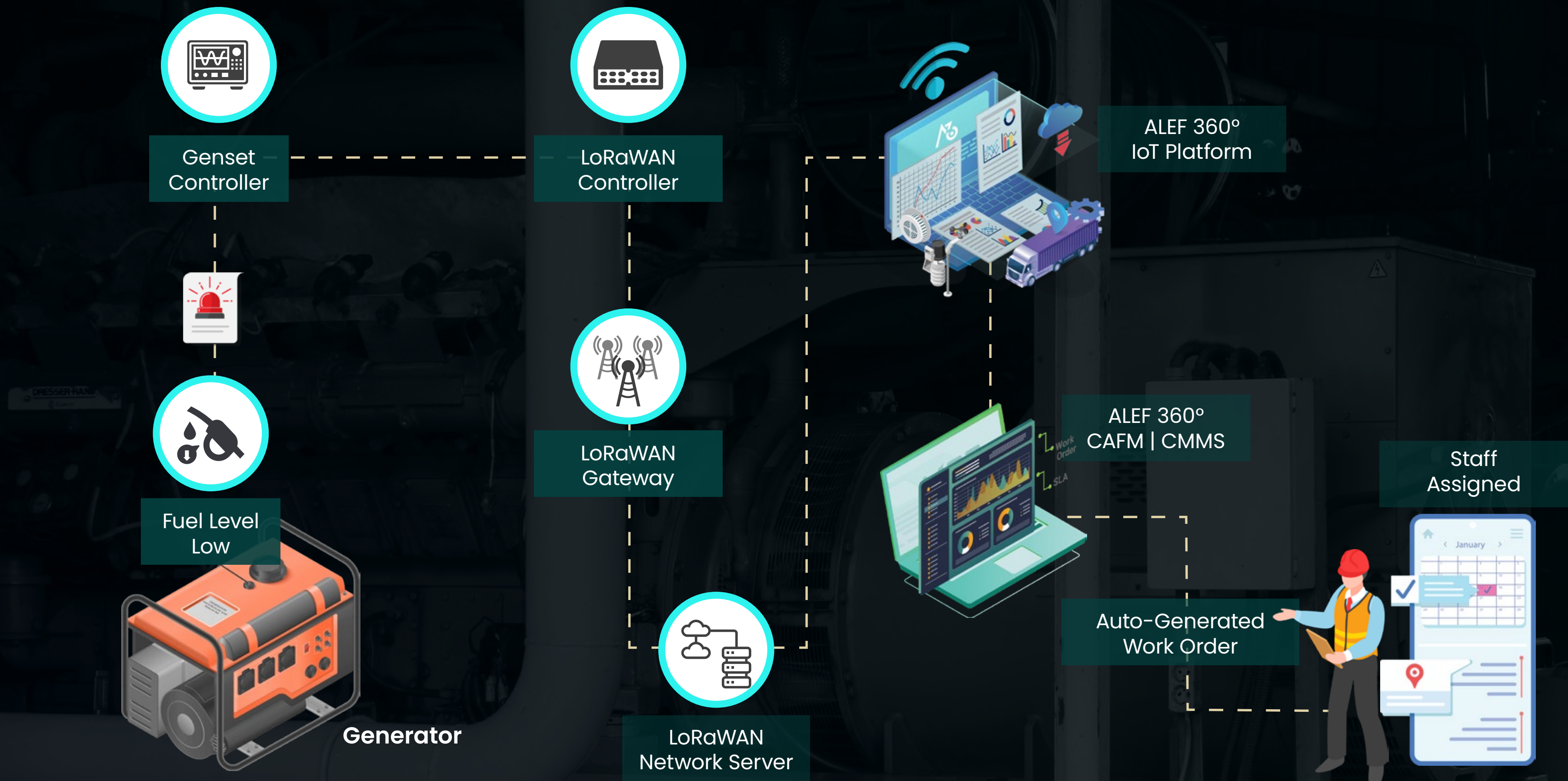
Labels

Readings Alarms

Last Readings

- Fuel Tank Low Level** Problem 5 April, 23:06:23
- Fuel Tank High Level** Normal 5 April, 23:06:23
- Fuel Level Transmitter** 800 PPM 5 April, 23:06:23
- Leak Detected in** Problem 5 April, 23:06:23

Ensure Emergency Power Is Always Ready



- Temperature
- Humidity
- Fuel Level
- Water Leakage
- Load Sensor
- Runtime Meter
- Operational Status
- Smoke Detector

Key Platform Features:

- Real-Time Genset Monitoring
- View Analytics Based on Sensor Readings
- Instant notifications via SMS, Email, Call, or Platform.
- Automated Work Order Creation via Integrated CAFM | CMMS

IoT Sensors

Controller

Product Code: FMT-F13-016

4G NB-IoT BLE

Rechargeable Battery

IoT controller - Modbus to LoRaWAN Converter

Product Code: ITC-LORX-030

LoRaWAN 4G

Multiple Triggering Conditions

Connects up to 32 Modbus Devices

Fuel Level Sensor

Product Code: FLS-BLE-061

BLE

Fuel Level

People Counting

Monitors foot traffic in real time to optimize resources, safety, and compliance.

CHALLENGES

- No Accurate Occupancy Data**
Decisions on staffing, cleaning, or space use are based on assumptions, not facts.
- Inefficient Space Utilization**
Underused or overcrowded areas go unnoticed, impacting comfort and productivity.
- Capacity Compliance Risks**
Difficult to prove adherence to safety or crowd control regulations without logs.
- Energy Wastage**
HVAC and lighting run in unused spaces, increasing operational costs.

Connectivity

LoRaWAN®



Office Spaces



Museums & Event Spaces



Hotels & Resorts



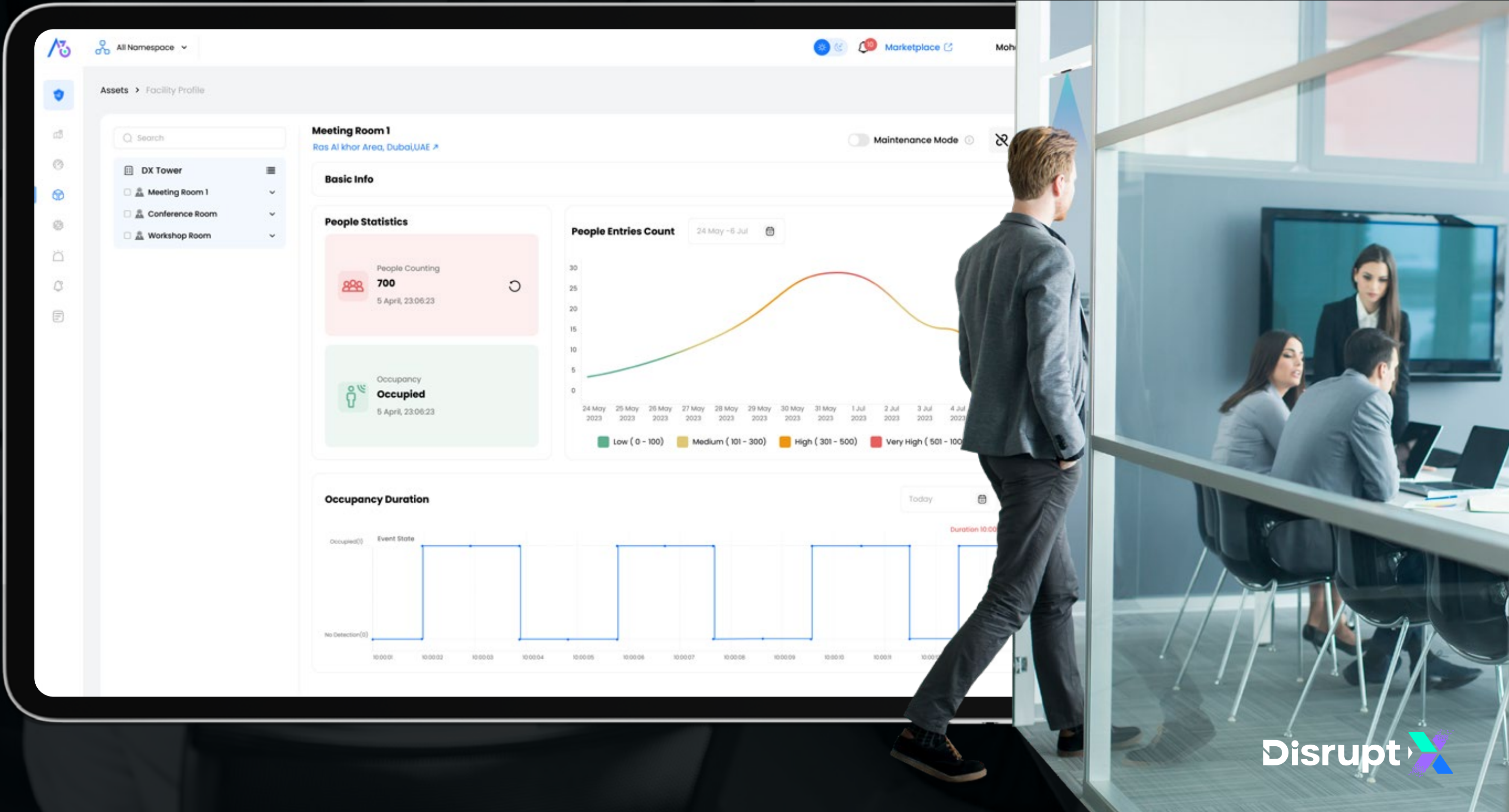
Public Washrooms



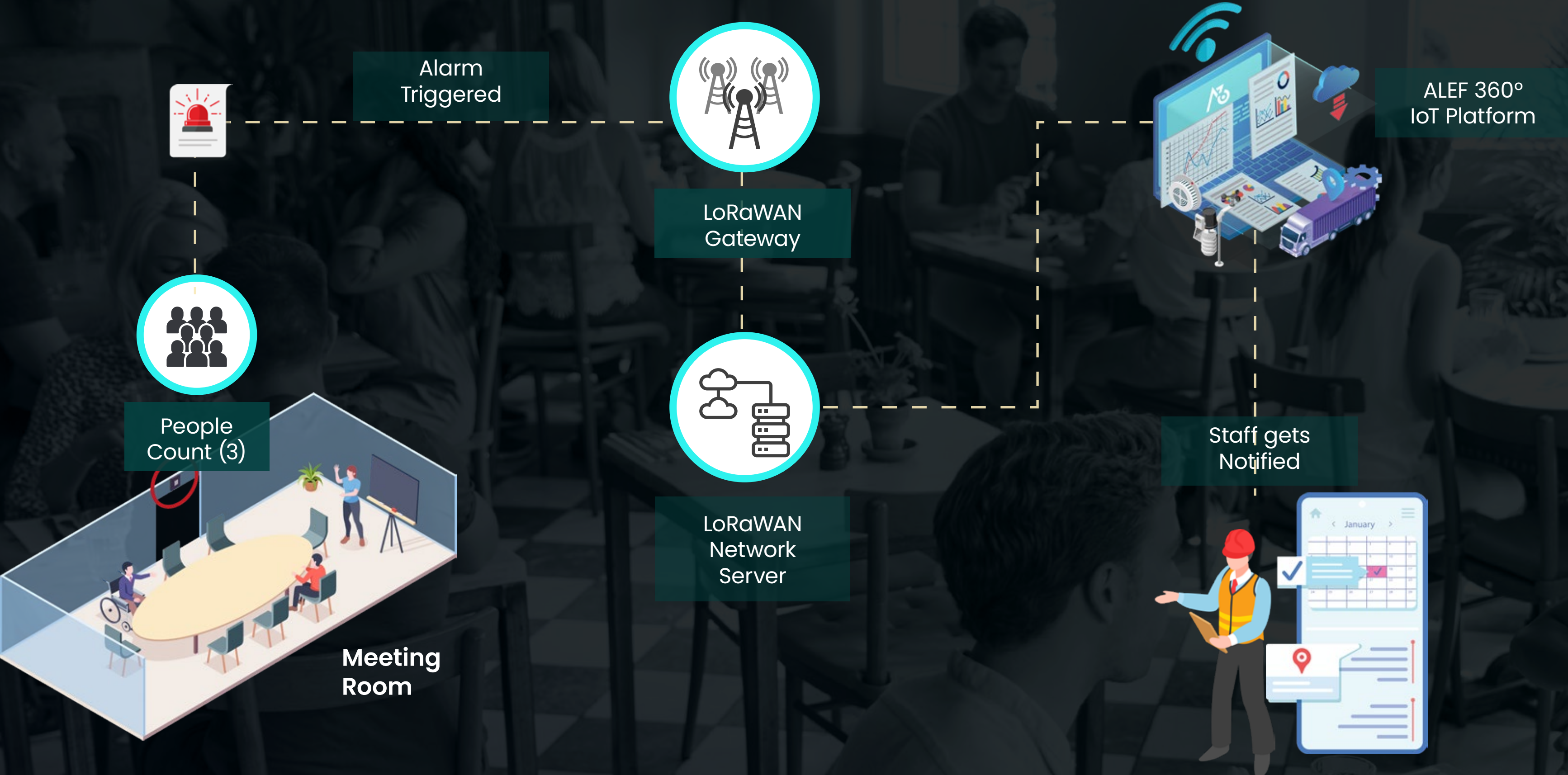
Airports & Transit



Educational Campuses



Optimize Resources with Footfall Data



People Counting Sensor
Product Code: PPC-LORX-030

ToF Technology
(0.5 to 3.5 m)

Key Platform Features:

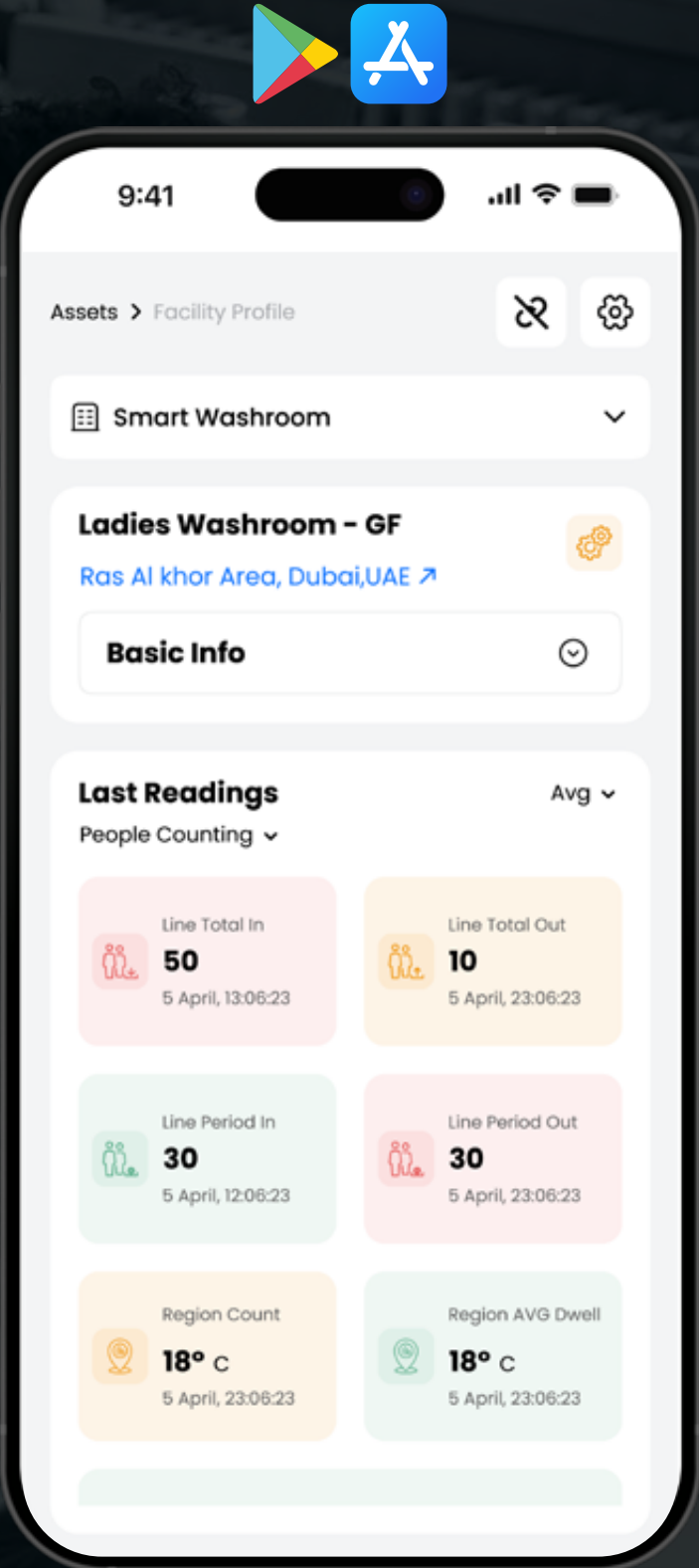
- 

Real-time Occupancy Levels per Zone or Building
- 

View Historical Footfall Trend Reports
- 

Automated Alerts When Occupancy Exceeds Set Thresholds.
- 

Automated Work Order Creation via Integrated CAFM | CMMS



Smart Washroom Monitoring

Ensure Hygiene, Efficiency, and Real-Time Maintenance Insights.

CHALLENGES

- No Washroom Condition Insight**
FM teams lack real-time data on cleanliness, occupancy, or supplies.
- Missed Refill Schedules**
Supplies like soap or tissue run out before staff notices.
- Reactive Cleaning Response**
Cleaners are dispatched only after user complaints are made.
- Inefficient Staff Deployment**
Staff are sent on fixed schedules, not based on actual usage or need.
- Unverified Cleaning Activity**
Hard to validate if cleaners visited or how long they stayed.



Commercial Zones



Airports & Metro Stations



Hospitals / Clinics



Malls & Retail Centers



Stadiums & Event Venues



Hotels & Resorts



Washroom Profile

Ras Al Khair Area, Dubai, UAE

Floor 3

Female Washroom

Soap Level

People Counting

Line 1 Total In 6,000 Person

Line 1 Total In 55,000 Person

Last Readings

Soap Dispenser 2

Soap Dispenser 4

Occupied - 7

Vacant - 5

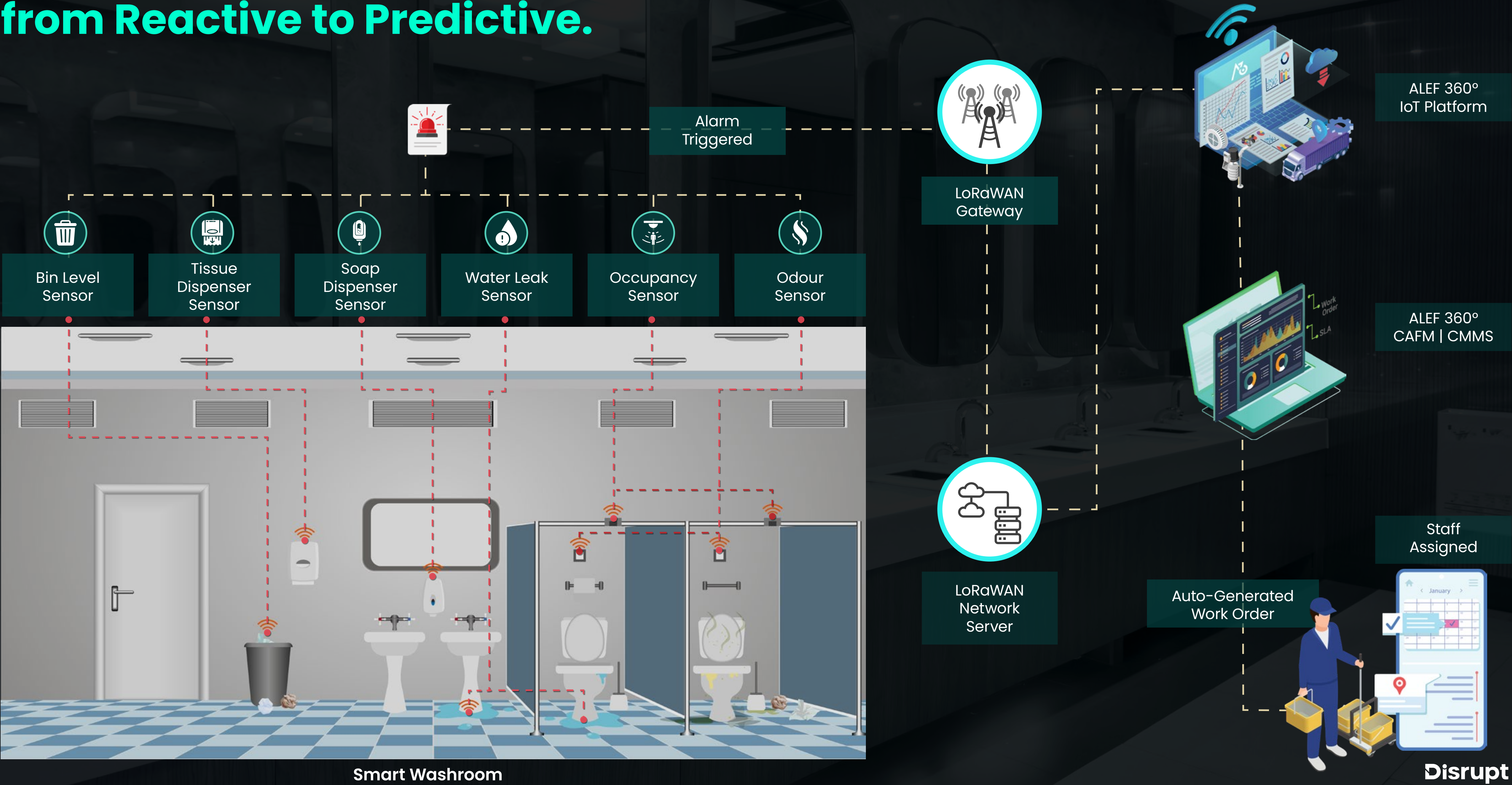
Bin Level Statuses

Tissue Level Statuses

Connectivity



Transform Washroom Maintenance from Reactive to Predictive.



Optimize Manpower. Elevate Services.

Minimize Waste.

Bin Level Monitoring

Product Code: LDS-LORX-030



LoRaWAN®

NB-IoT



Ultrasonic Distance Detection



Up to 10 years

Tissue Dispenser Level Monitoring

Product Code: TDS-LORX-030



LoRaWAN®



Fill Level Monitoring with ToF Technology (1 - 55cm)



Up to 2 years

Soap Dispenser Level Monitoring

Product Code: SOP-LORX-030



LoRaWAN®



Non-Contact Capacitive Sensing



Up to 10 years

Bathroom Occupancy Monitoring

Product Code: BRO-LORX-030



LoRaWAN®



Passive Infrared (PIR) Sensor



Time of Flight (ToF) Sensor

Smart Panic Button

Product Code: SPB-LORX-030



LoRaWAN®



Multi-Press Actions



Up to 5 years

Bathroom Odour Monitoring

Product Code: ODM-LORX-030



LoRaWAN®



Ammonia



Temperature



Hydrogen Sulfide



Humidity

Spot Leak Detection

Product Code: SLD-LORX-030



LoRaWAN®



Conductive Liquids Leak Detection



Up to 10 years

Survey Button

Product Code: SBK-LOR1-032



LoRaWAN®

sigfox



On-Spot Feedback Collection



Up to 6 years

Key Platform Features:



Tracks All Key Washroom Metrics



View Analytics Based on Sensor Readings



Instant notifications via SMS, Email, Call, or Platform.



Automated Work Order Creation via Integrated CAFM | CMMS



60%

of consumers believe a bad restroom indicates poor management



Smart Panic Button

Instant alerts from any facility zone.

CHALLENGES

- Delayed Emergency Response**
Relying on emails, calls, or verbal alerts leads to slow response times.
- Unstructured Communication**
Requests aren't logged properly, making tracking and resolution difficult.
- No Incident Location Visibility**
Occupants don't always report minor faults, resulting in poor service standards.
- Lack of Escalation Triggers**
No automated workflow to escalate unresolved requests based on SLAs.
- Limited Coverage in Large Facilities**
Hard to scale emergency reporting across vast or complex buildings.



Elevators



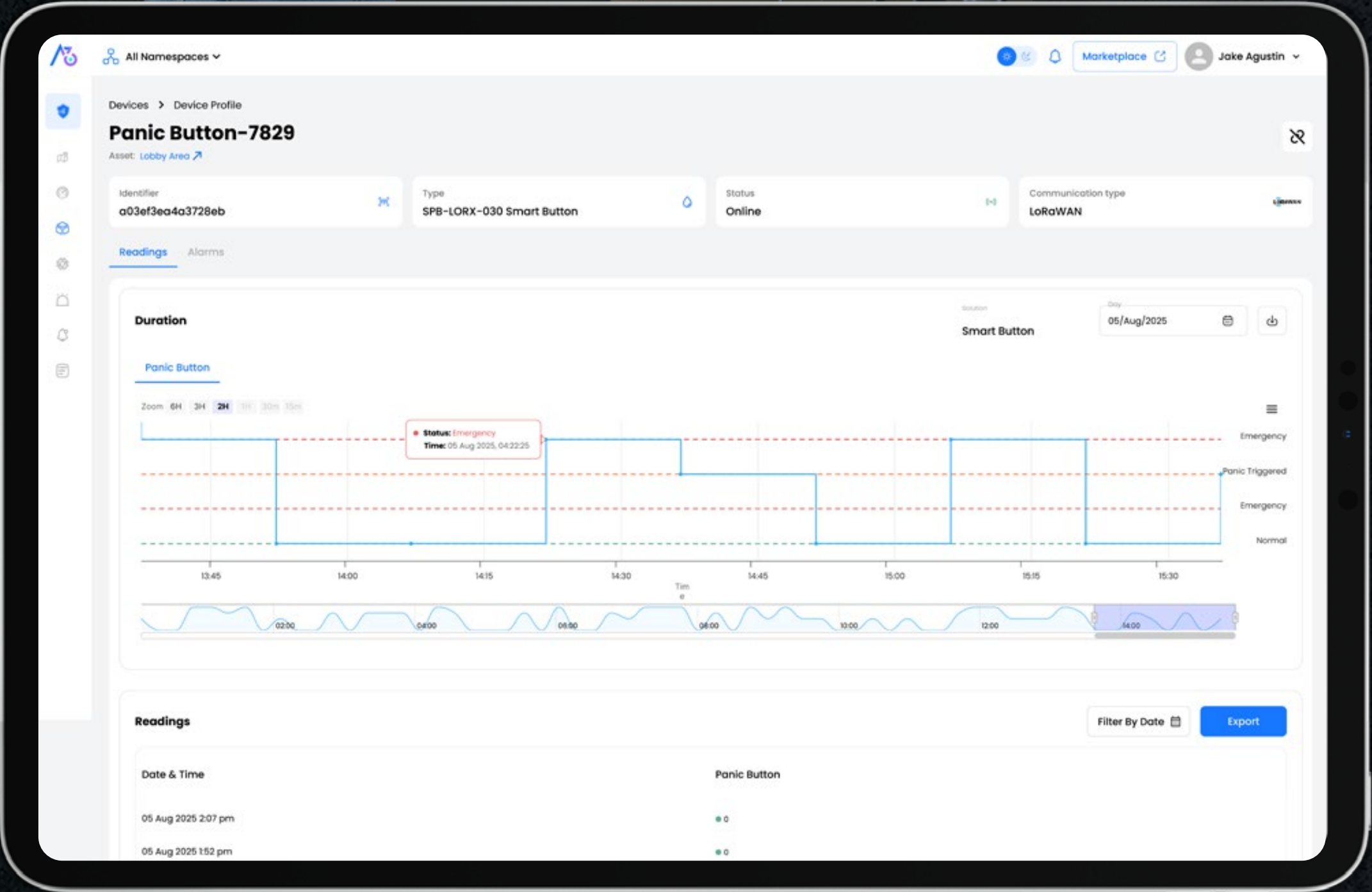
Restrooms



Senior Living Facilities

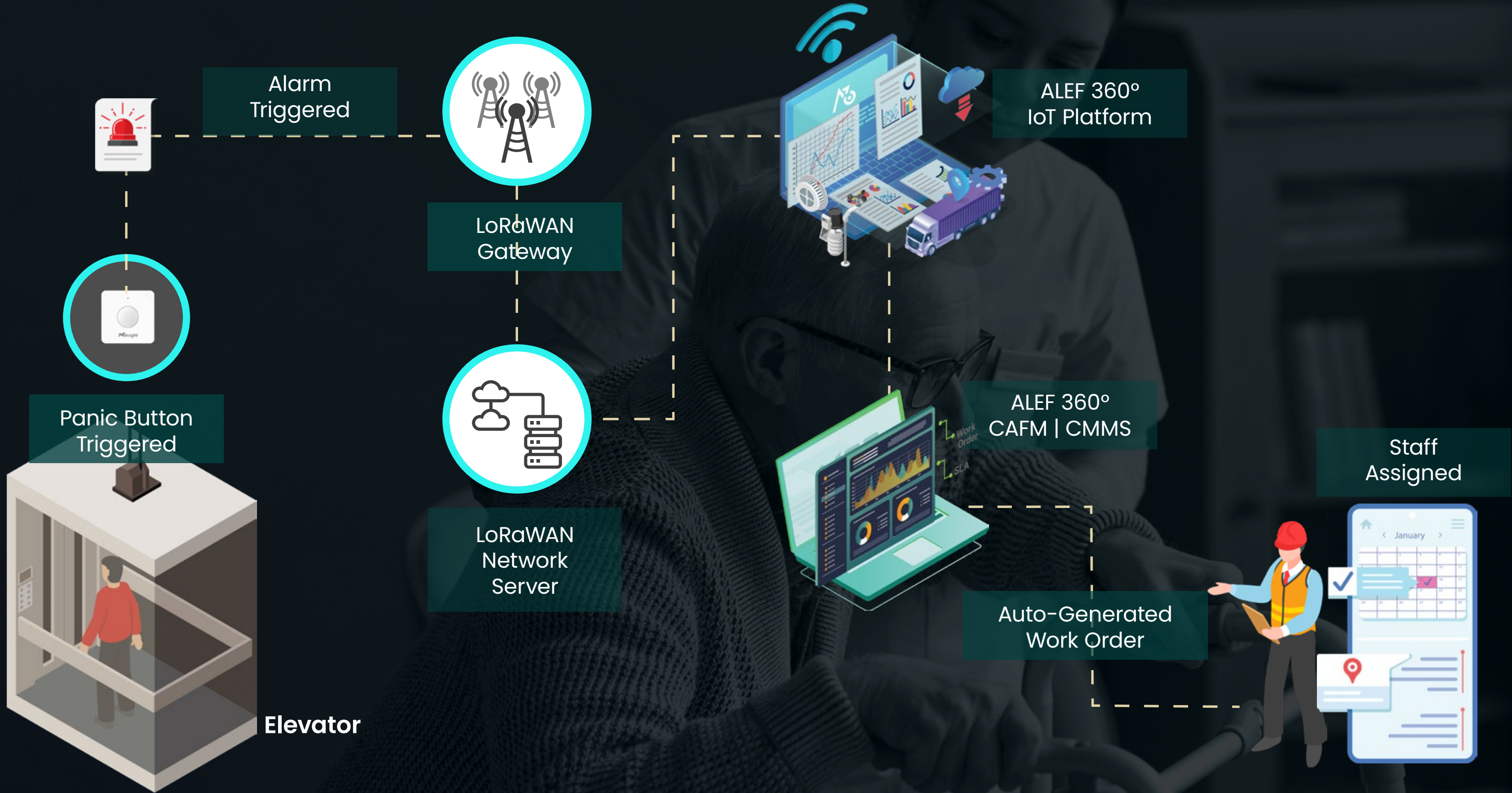


Hospitals & Clinics



Connectivity

Instant Emergency Notifications



Smart Panic Button

Product Code: SPB-LORX-030



LoRaWAN

- Multi-Press Actions
- Up to 5 years

Key Platform Features:

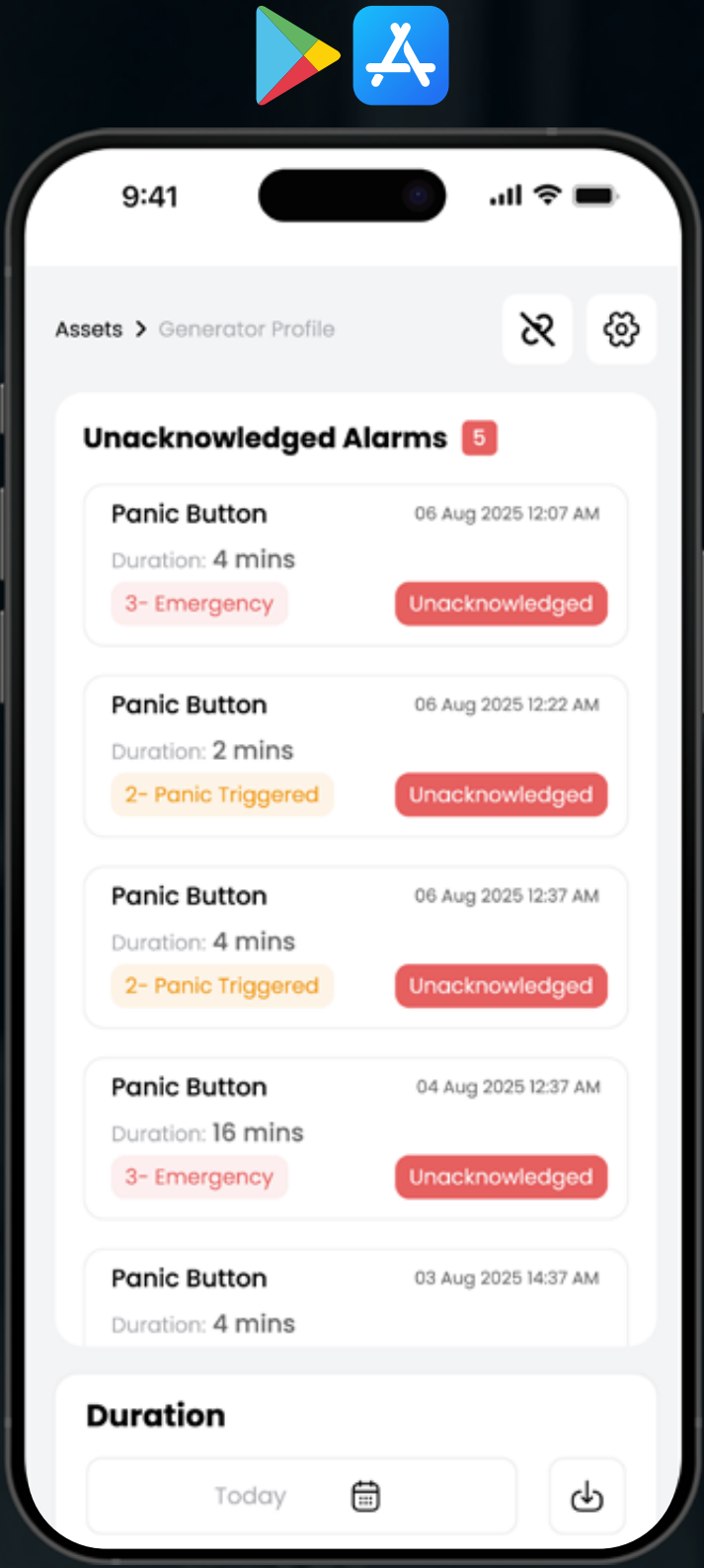
- 

Receive Instant Alert when Panic Button is Triggered
- 

View Analytics Based on Sensor Readings
- 

Multi Channel Notifications via SMS, Email, Call, or Platform.
- 

Automated Work Order Creation via Integrated CAFM | CMMS



Indoor Air Quality Monitoring

Track pollutants to improve comfort and health.

CHALLENGES

- Invisible Air Hazards**
No way to detect harmful levels of CO², VOCs, or PM2.5 in real time.
- No Audit Trail for Compliance**
Difficult to validate air quality standards during inspections.
- Inconsistent Room Conditions**
Some zones may be poorly ventilated without centralized data.
- Tenant Health Complaints**
Tenant well-being suffers from unmanaged air conditions.
- Missed ESG & Wellness Certification Goals**
Poor monitoring limits eligibility to comply with building certification standards.



Commercial Zones



Residential Buildings



Hospitals / Clinics



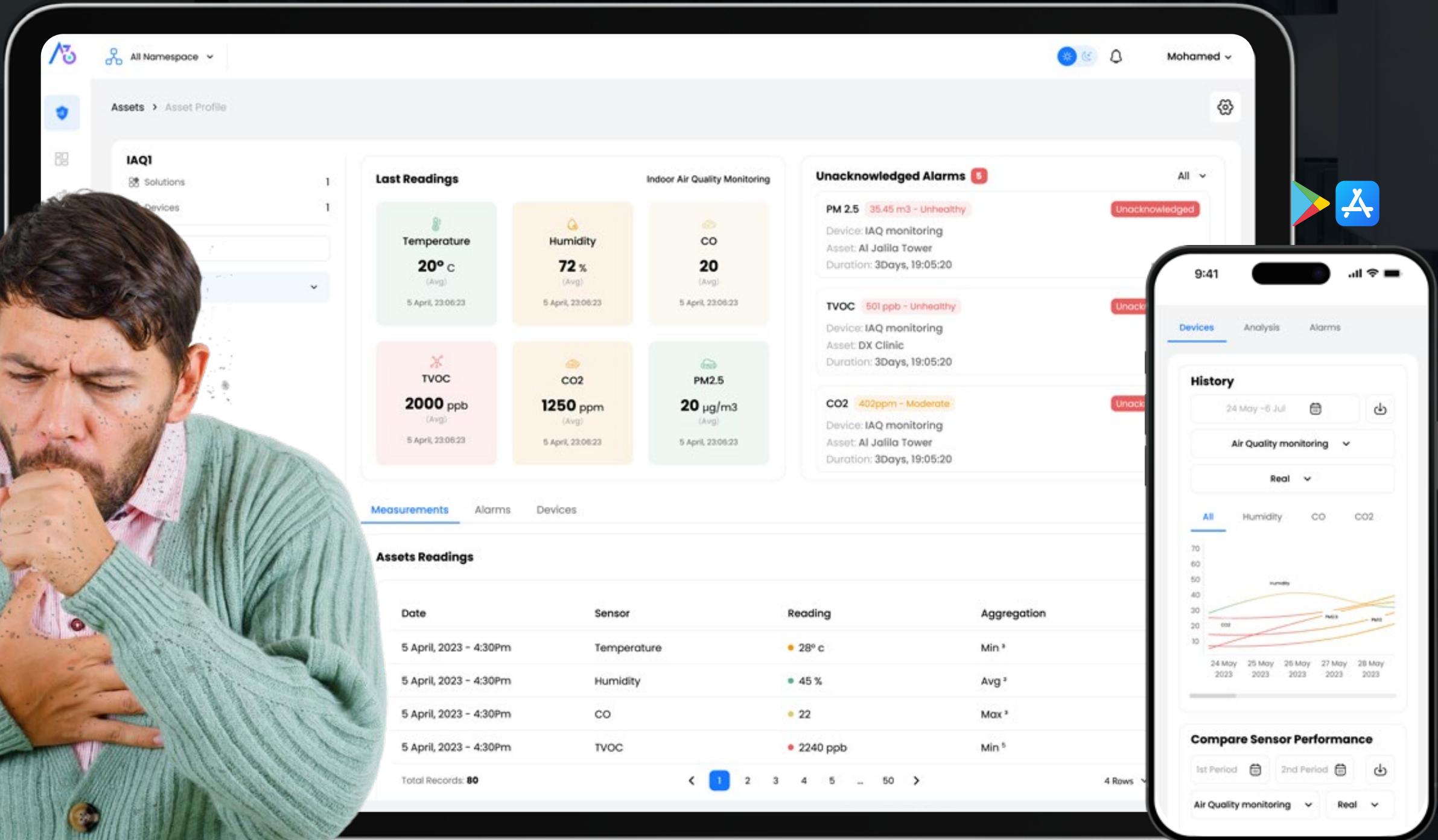
Malls & Retail Centers



Hotels & Resorts

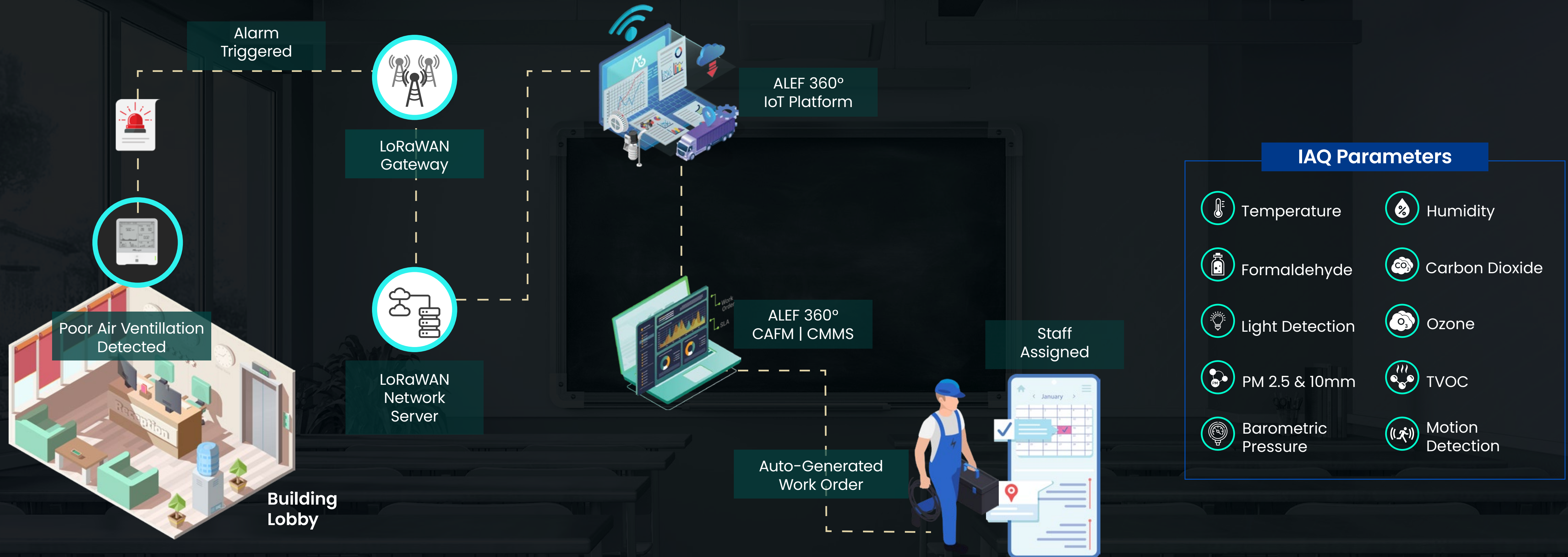


Educational Campuses



Connectivity

Healthy Spaces, Tracked in Real-Time



Key Platform Features:



Indoor Air Quality
Parameter Monitoring



View Analytics
Based on Sensor
Readings



Instant notifications
via SMS, Email, Call,
or Platform.



Automated Work Order
Creation via Integrated
CAFM | CMMS



3.2M

Source: World Health Organization (WHO)
people die every year from
exposure to household air
pollution.

Breathe Better, Operate Smarter.

Indoor Air Quality – CO₂

Product Code: IC2-SIGX-001



Temperature

Humidity

Carbon Dioxide

Indoor Air Quality – TVOC

Product Code: ITV-SIGX-001



Temperature

Humidity

TVOC

Indoor Air Quality – PM2.5 / PM10

Product Code: IPM-SIGX-001



Temperature

Humidity

PM 2.5 & PM 10

Indoor Air Quality – CO₂

Product Code: IC2-LORX-034



Temperature

Humidity

Carbon Dioxide

Indoor Air Quality – VOC

Product Code: VOC-LORX-034



Temperature

Humidity

VOC

Indoor Air Quality – Compact

Product Code: IAC-LORX-030



Temperature

Humidity

Ozone

Carbon Dioxide

Light Detection

PM 2.5 & 10mm

Motion Detection

TVOC

Barometric Pressure

Indoor Air Quality – Compact HCHO

Product Code: IAH-LORX-030



Temperature

Humidity

Formaldehyde

Carbon Dioxide

Light Detection

PM 2.5 & 10mm

Motion Detection

TVOC

Barometric Pressure

Indoor Air Quality – CO₂ & TVOC

Product Code: ICT-LORX-030



Temperature

Humidity

Carbon Dioxide

TVOC

Light Detection

Motion Detection

Barometric Pressure

What's Polluting Your Indoor Air?

Poor Ventilation

Leads to **CO₂** buildup and high **pressure differentials**—often caused by clogged filters or weak airflow.

Mold & Moisture Damage

Humidity buildup triggers mold growth, harming health and damaging assets.

Toxic Building Materials

Materials like asbestos and **fine dust particles (PM)** release harmful pollutants that affect air quality and health.

Occupant Activities

Cooking, cleaning, or smoking generates **VOCs** and **PM**, contributing to poor air and equipment damage.

Outdoor Air Infiltration

Pollutants like **PM**, **CO₂**, and **ozone** enter through openings and cracks, making indoor exposure a major health risk.

Outdoor Air Quality Monitoring

Monitor environmental pollutants across your property.

CHALLENGES

- Invisible Environmental Risks**
Outdoor pollutants like can't be seen or smelled, making risks easy to overlook.
- No Trigger for FM Response**
Pollution events go unaddressed without data to prompt action.
- Community Health Concerns**
Poor air outside impacts vulnerable groups like children, elderly, and patients.
- Resident Complaints Escalate**
Lack of proof makes it difficult to validate or address outdoor air complaints.
- No Real-Time Pollution Data**
FM teams often lack instant visibility into changing air quality around the site.



Commercial Zones



Residential Communities



Hospitals Compounds



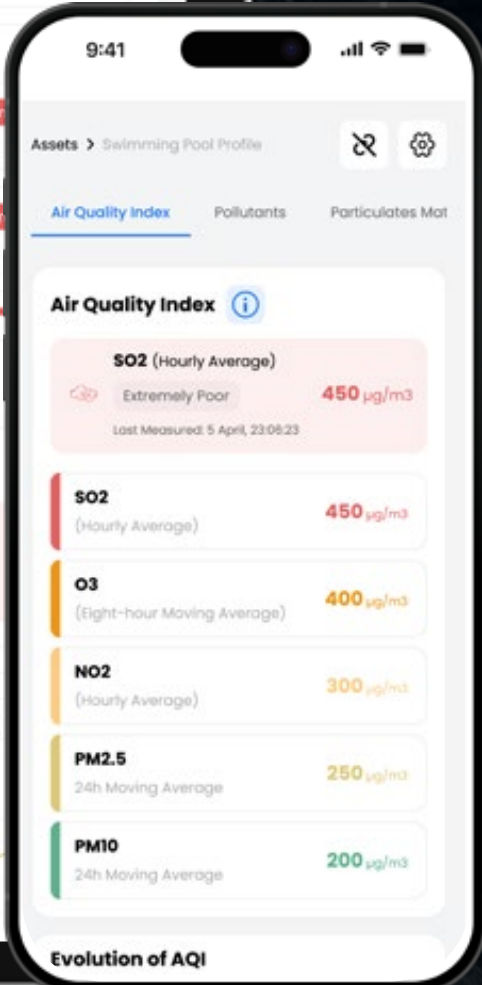
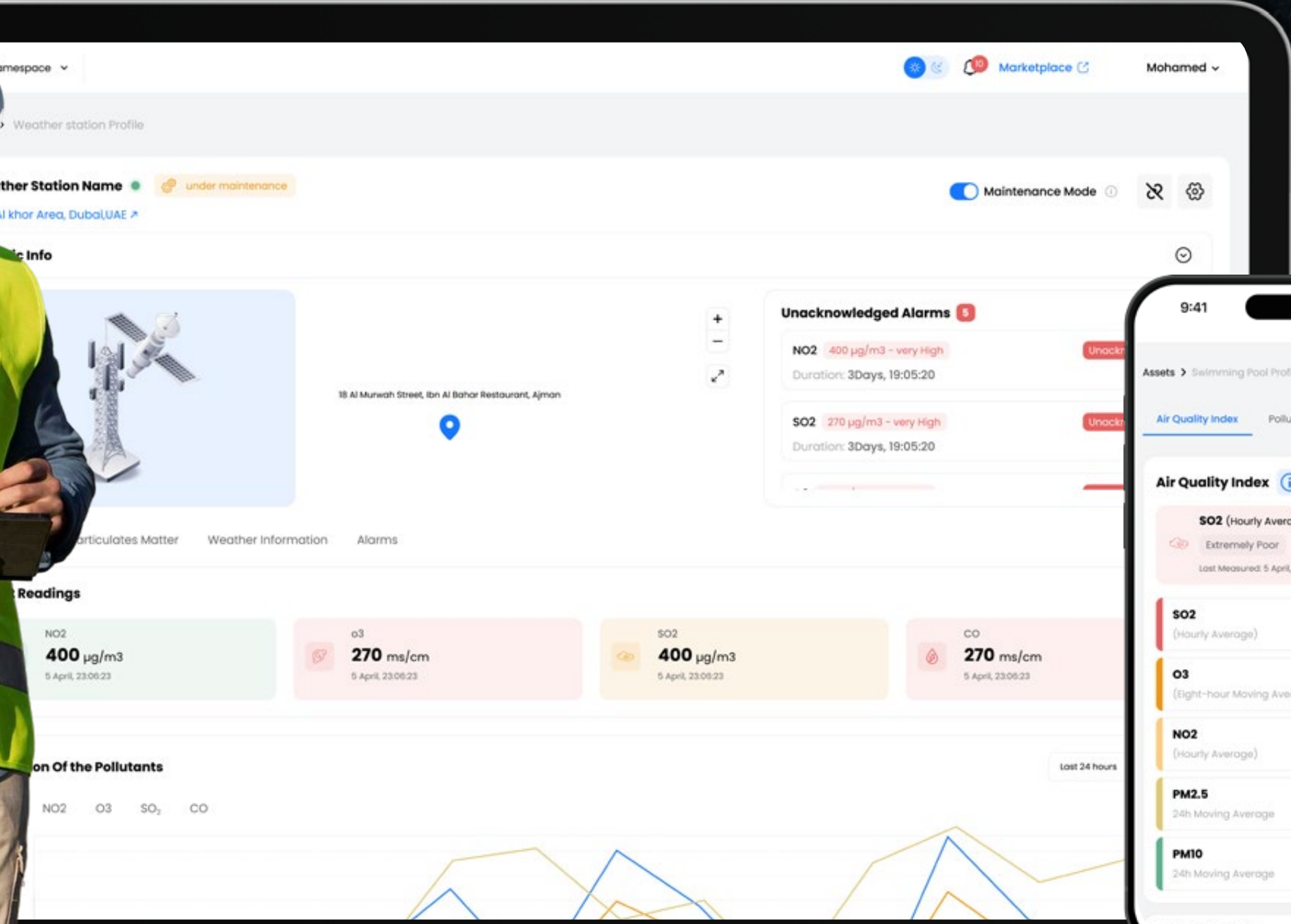
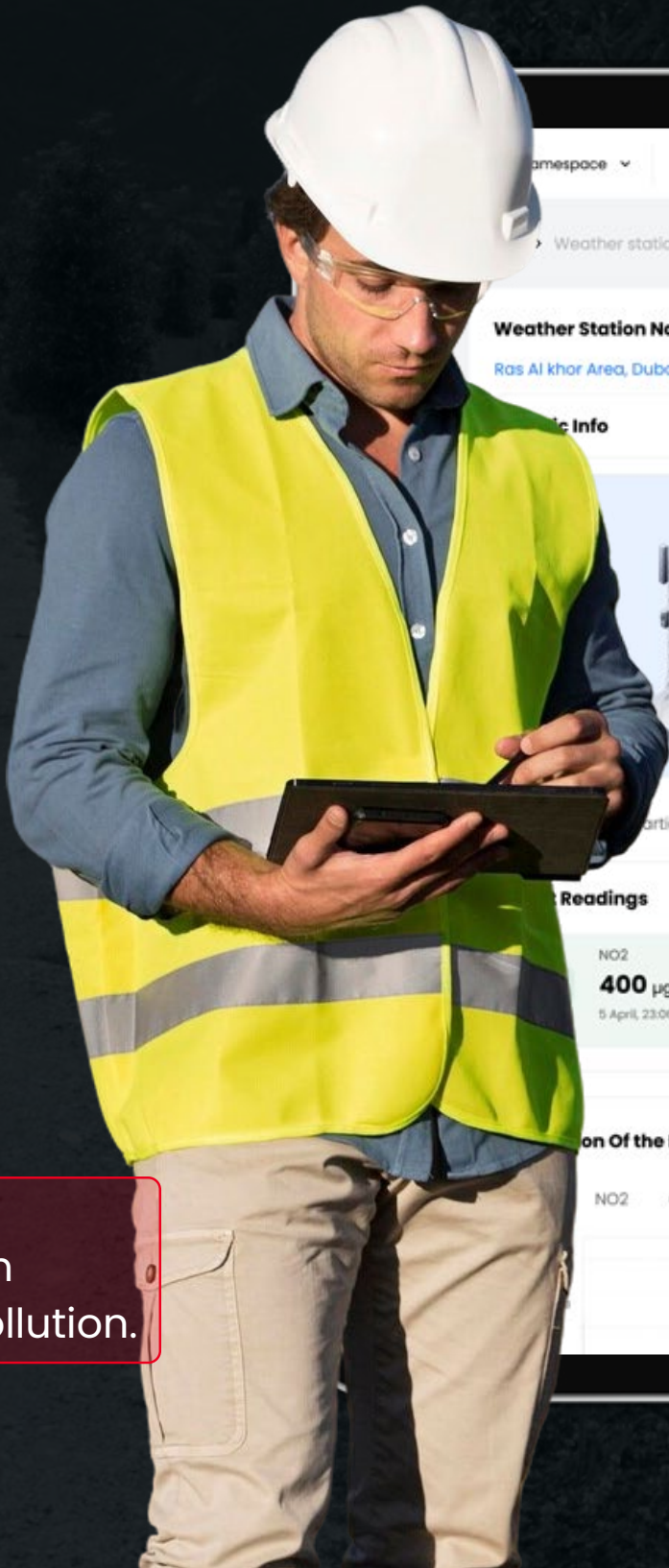
Smart Cities



Industrial Facilities



Educational Campuses



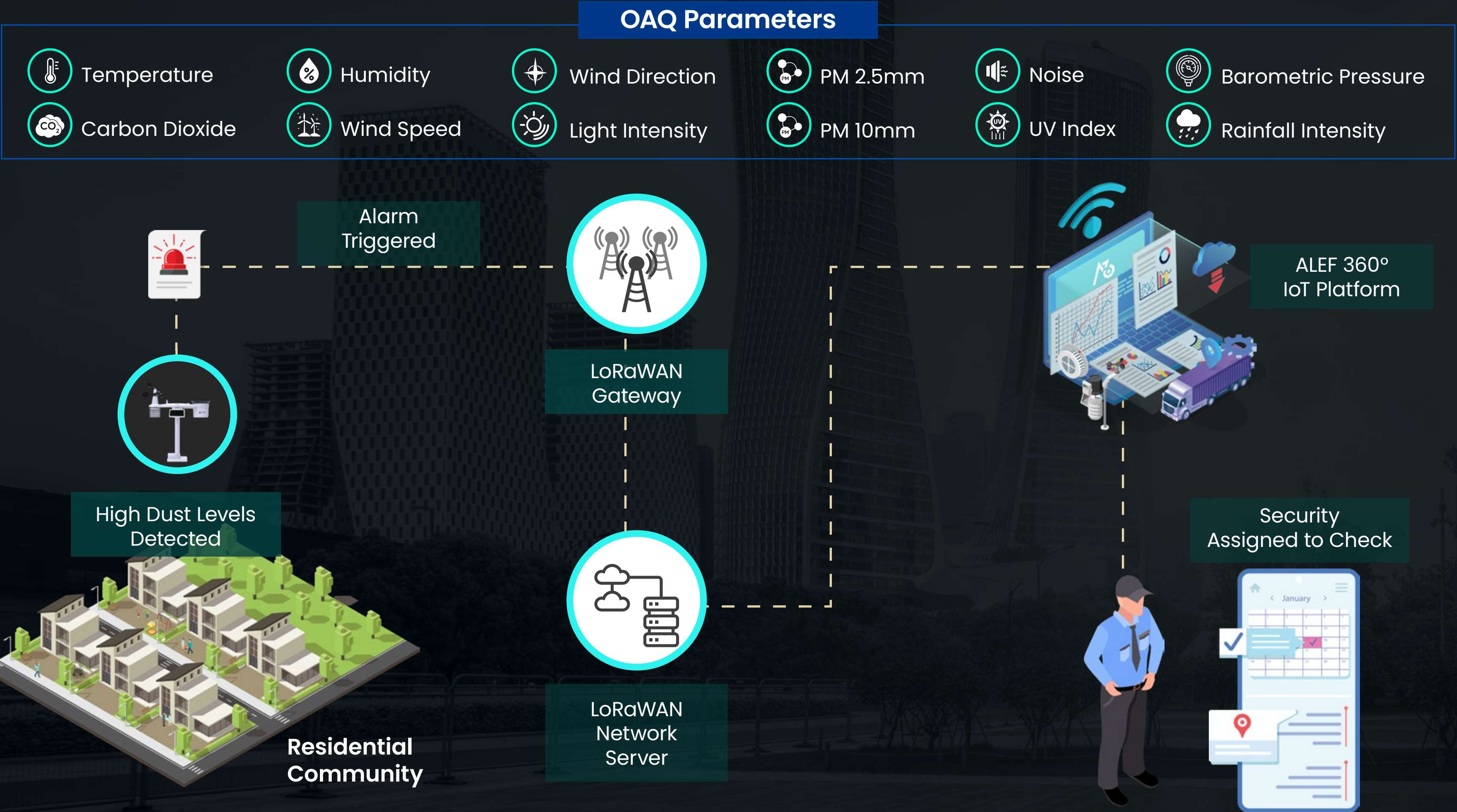
Connectivity

LoRaWAN®

💡 4.2M

Source: World Health Organization (WHO), people die every year from exposure to outdoor air pollution.

Ensure Safer Outdoor Environments



Key Platform Features:

 Outdoor Air Quality Parameter Monitoring

 View Analytics Based on Sensor Readings

 Instant notifications via SMS, Email, Call, or Platform.

 Automated Work Order Creation via Integrated CAFM | CMMS

IoT Sensors

8 in 1 Outdoor Weather Station

Product Code: OAQ-LORX-021



 Temperature

 Humidity

 UV Index

 Wind Speed

 Wind Direction

 Rainfall Intensity

 Light Intensity

 Barometric Pressure

8 in 1 Outdoor Weather Station

Product Code: OA8-LORX-021



 Temperature

 Humidity

 Noise

 Wind Speed

 Wind Direction

 PM 2.5mm

 PM 10mm

 Barometric Pressure

10 in 1 Outdoor Weather Station

Product Code: O10-LORX-021



 Temperature

 Humidity

 Carbon Dioxide

 Wind Speed

 Wind Direction

 PM 2.5mm

 Light Intensity

 Rainfall Intensity

 PM 10mm

 Barometric Pressure

Vape Detection Monitoring

Detect policy violations and protect indoor air quality.

CHALLENGES

- ❖ **Undetected Vaping Incidents**
Vape use often goes unnoticed in restrooms, stairwells, or closed rooms.
- ❖ **Air Quality Risk**
Secondhand exposure affects non-users and creates health risks.
- ❖ **Blind Spots in Monitoring**
Security can't monitor every blind spot across facilities.
- ❖ **Lack of Violation Evidence**
Lack of evidence makes enforcing no-vape policies difficult.
- ❖ **Reputation Risks for Facilities**
Recurring incidents can damage image and tenant satisfaction.



Commercial Zones



Airports & Metro Stations



Hospitals / Clinics



Malls & Retail Centers



Entertainment / Cinema Zones



Educational Campuses

The dashboard displays the following information:

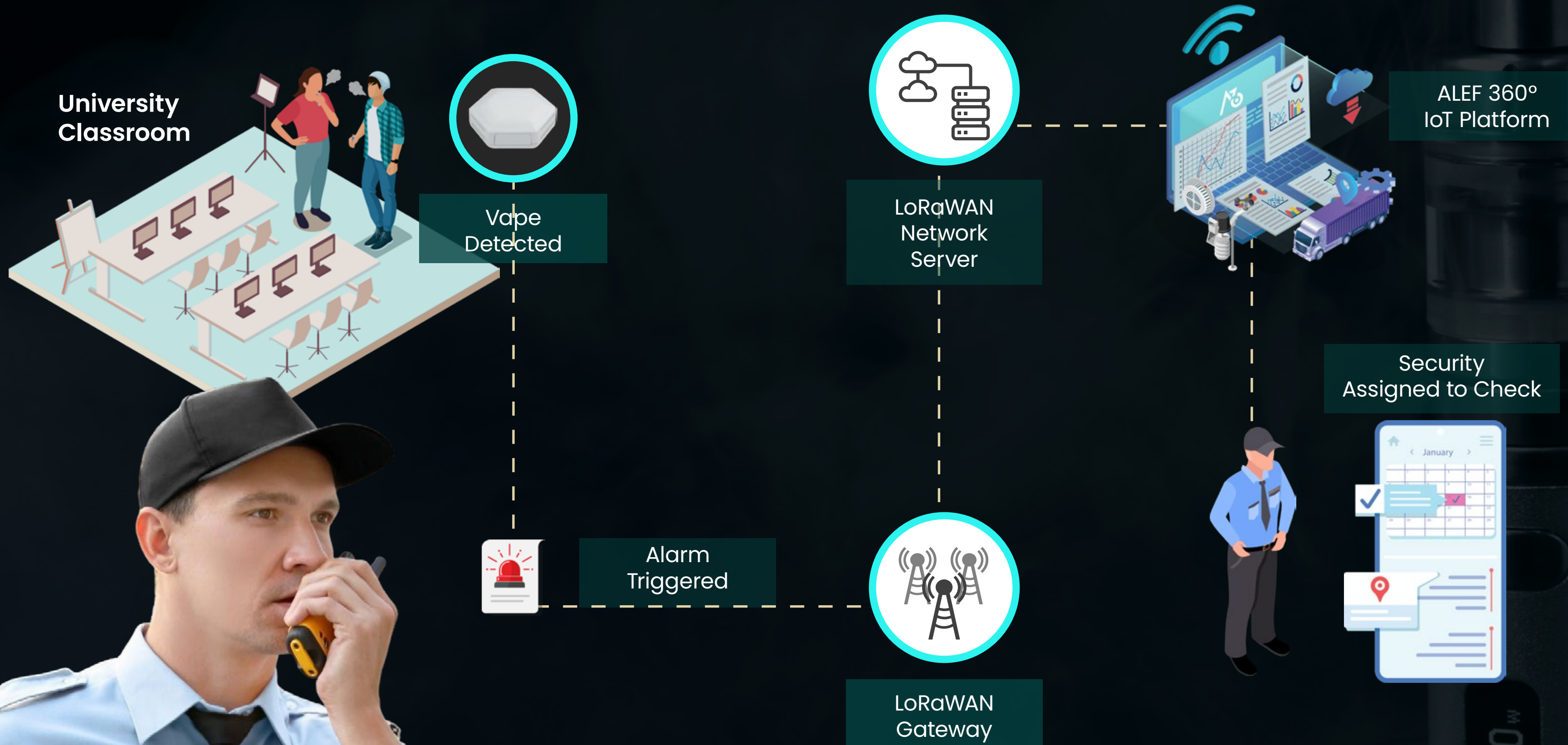
- Vape Monitoring:** Solutions (1), Devices (1), IAQ1.
- Last Readings:**
 - Temperature: 20° C (Avg) 5 April, 23:06:23
 - Humidity: 72 % (Avg) 5 April, 23:06:23
 - Vape Index: 200 (Avg) 5 April, 23:06:23
- Unacknowledged Alarms:** 8
 - Vape Index 200 - Poor (Unacknowledged)
Device: IAQ monitoring
Asset: Meeting room, I Jallia Tower
Duration: 3Days, 19:05:20
 - Vape Index 300 - Very Poor (Unacknowledged)
Device: IAQ monitoring
Asset: IT Lab, DX Office
Duration: 3Days, 19:05:20
 - Temperature 24° C - Moderately Warm (Unacknowledged)
Device: IAQ monitoring
Asset: Al Jallia Tower
Duration: 3Days, 19:05:20
- Assets Readings Table:**

Date	Sensor	Reading	Aggregation
5 April, 2023 - 4:30Pm	Temperature	28° c	Min *
5 April, 2023 - 4:30Pm	Humidity	45 %	Avg *
5 April, 2023 - 4:30Pm	Vape Index	202	Max *
5 April, 2023 - 4:30Pm	Vape Index	300	Min *

Total Records: 80

Connectivity

Identify Vape-Prone Areas Across Facilities



IoT Sensors

Vape Monitoring Sensor

Product Code: VPL-LORX-034



LoRaWAN®

- Vape Index
- Temperature
- Humidity

Vape Detection Sensor

Product Code: VPM-LORX-030



LoRaWAN®

- Weed Detection
vape + smoked
- E-Cigarette
cigarette + burnt nicotine
- Temperature
- PM 1.0, PM 2.5 & PM 10
- Vape Index
- TVOC
- Humidity

Key Platform Features:



Detect Indoor
Vaping Gas



Monitor Temperature
& Humidity



Real-time
Notifications



View Detailed
Device Readings

Water Tank Monitoring

Maintain water availability & quality across commercial, industrial, and residential properties.

CHALLENGES

-  **Unknown Tank Levels**
FM teams often rely on manual checks, causing delays in refills or overflows.
-  **Undetected Contamination Risks**
Poor visibility into water quality can lead to health hazards from bacteria, turbidity, or chemical imbalance.
-  **No Usage Trend Visibility**
Difficult to plan supply or detect abnormal spikes in usage.
-  **Multiple Tanks, No Central View**
Lack of centralized monitoring creates blind spots across properties.



Residential Buildings



Commercial Complexes



Utility Providers



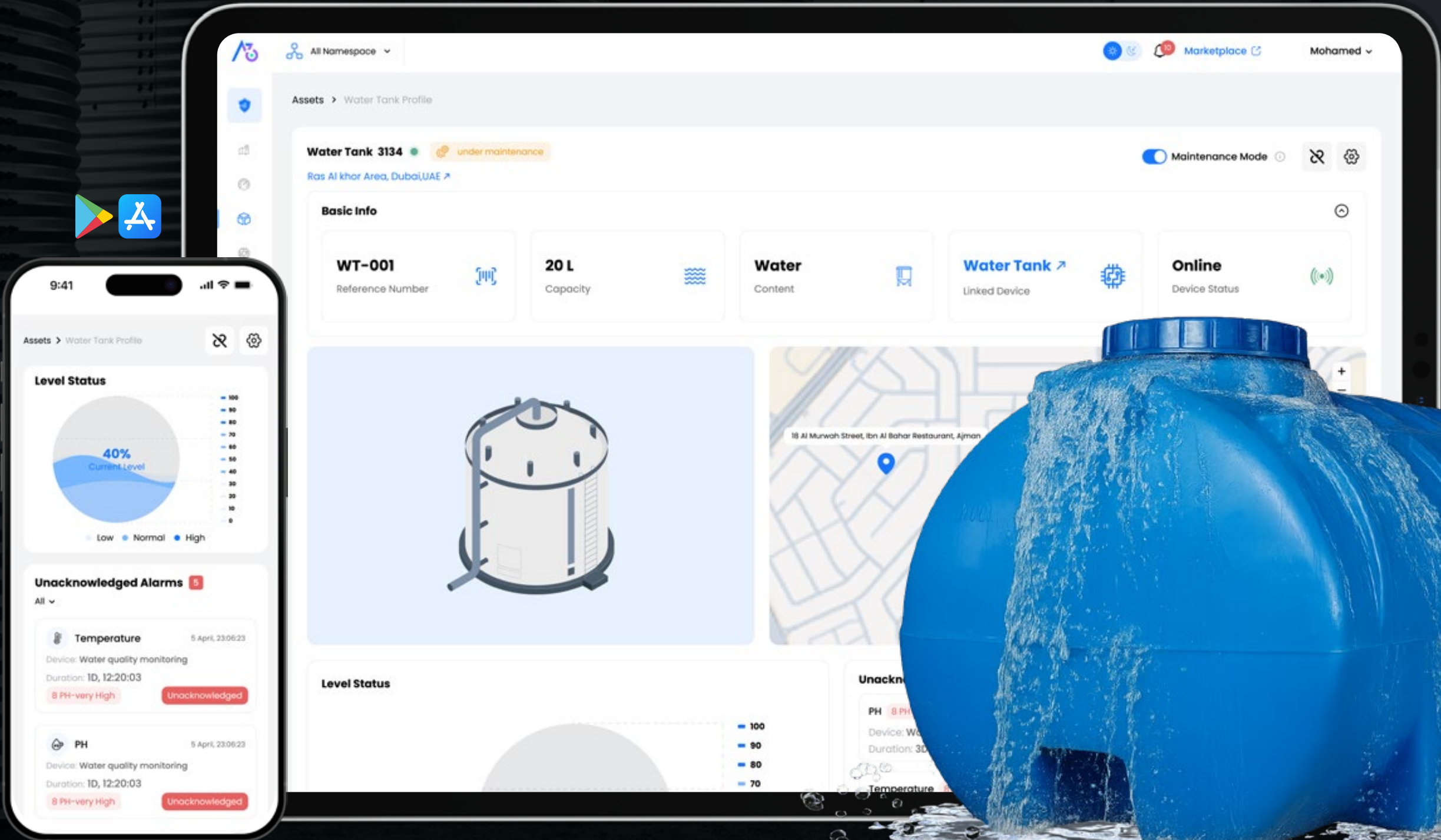
Agriculture & Farm Sites



Industrial Facilities



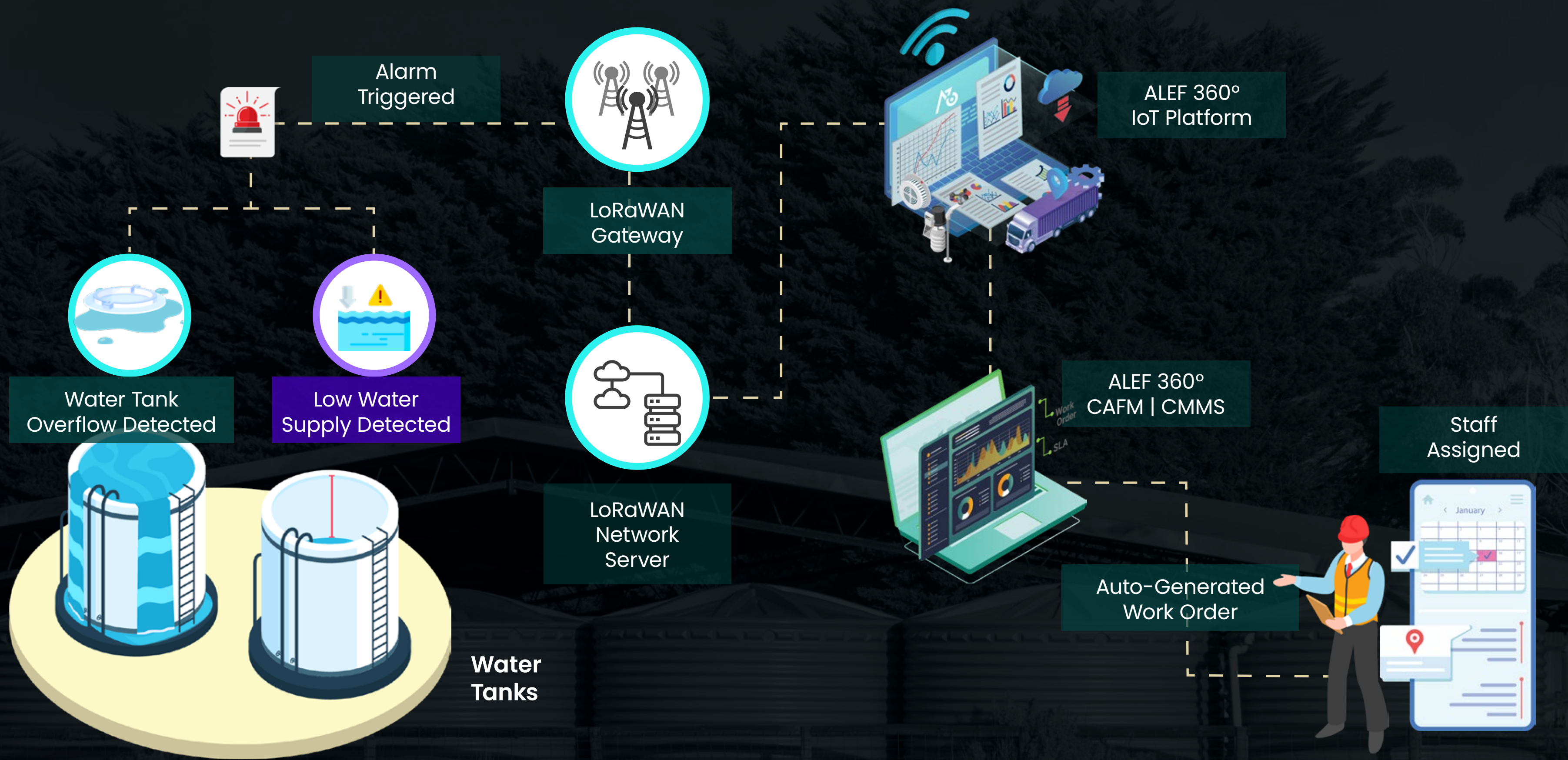
Hotels & Hospitality



Connectivity

Prevent Overflows and Shortages



Key Platform Features:



Monitor Water Quality Parameters



Water Level Monitoring



Instant notifications via SMS, Email, Call, or Platform.



Automated Work Order Creation via Integrated CAFM | CMMS

IoT Sensors

Water Quality Monitoring

Product Code: WAR-SIGX-010



 pH Level

 ORP

 TDS

 Free Chlorine (Calculated)

 Temperature

 Conductivity

 Salinity

Level Monitoring Ultrasonic

Product Code: LMU-LORX-030



 Distance / Level Measurement

 Up to 10 years

Level Monitoring Submersible

Product Code: LMS-LORX-030



 Liquid Level

 Up to 10 years

Level & Distance Monitoring Sensor

Product Code: MNH-LORX-037



 Corrosion Resistance

 Up to 10 years

Swimming Pool Monitoring

Maintain perfect water balance and meet health standards effortlessly.

CHALLENGES

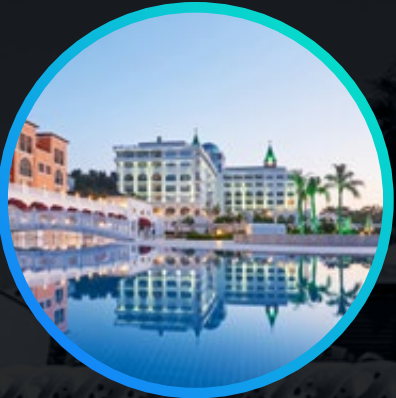
-  **Undetected Chemical Imbalances**
Chlorine or pH levels shift without visible warning signs.
-  **Manual Testing Gaps**
Quality changes between scheduled checks go unnoticed.
-  **Inaccurate or Incomplete Logs**
Paper records are prone to errors or missing data.
-  **Compliance Risk**
Inconsistent monitoring jeopardizes public health standards.



Residential Buildings



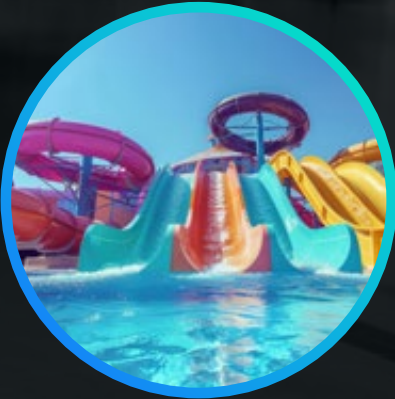
Commercial Complexes



Hotels & Resorts



Health & Wellness Centers



Recreational Facilities



Schools & Universities



9:41

Assets > Swimming Pool Profile

Readings

Assets Readings

Indoor Air Quality monitoring

Conductivity 410 Ms/cm

Conductivity 400 Ms/cm

ORP 15 MV

ORP 15 MV

10 Rows

Reading Heatmap

Swimming Pool Monitoring1

Search

Swimming Pool Monitoring

Last Readings

Temperature 27° C

PH 7.4 NA

ORP 430 mV

Conductivity 12000 µS/cm

TDS 700 ppm

Salinity 3200 ppm

Measurements

Assets Readings

Date

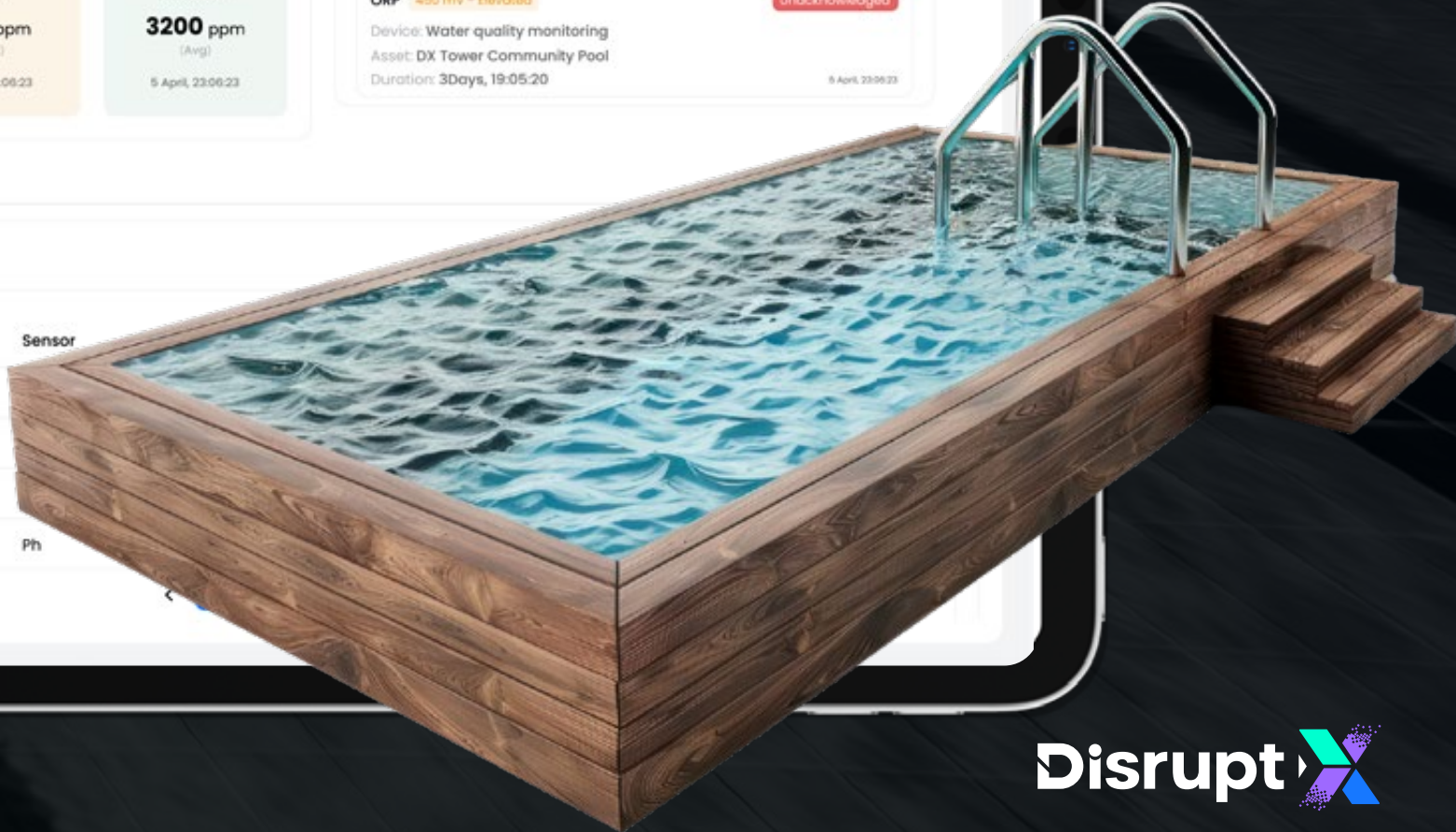
Sensor

Unacknowledged Alarms

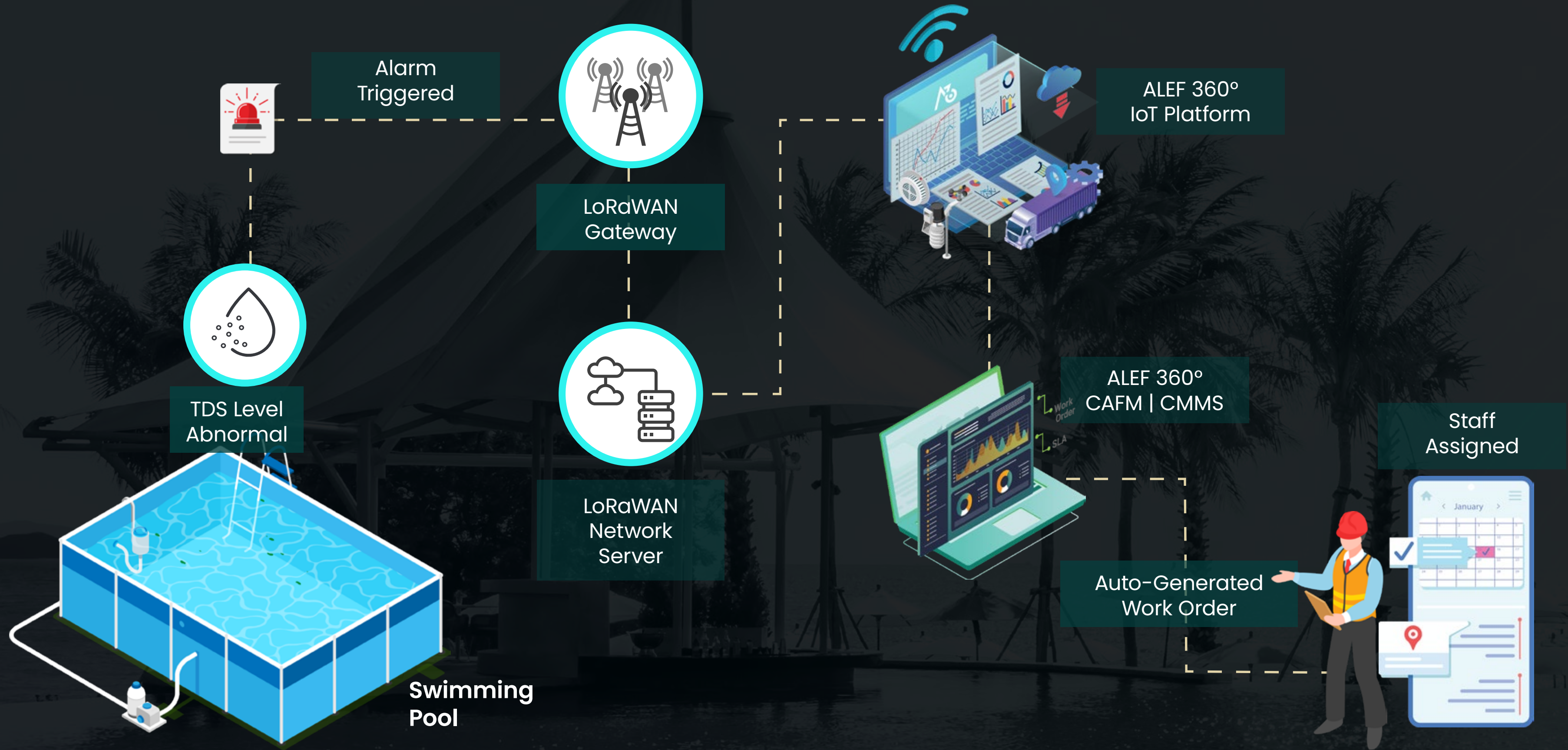
PH 8.94 - Very High

Temperature 39° C - Very Hot

ORP 450 mV - Elevated



Continuous Pool Safety & Quality



IoT Sensor

Water Quality Monitoring
Product Code: WAR-SIGX-010



-  pH Level
-  ORP
-  TDS
-  Free Chlorine (Calculated)
-  Temperature
-  Conductivity
-  Salinity

Key Platform Features:

-  Monitor Water Quality Parameters
-  View Analytics Based on Sensor Readings
-  Instant notifications via SMS, Email, Call, or Platform.
-  Automated Work Order Creation via Integrated CAFM | CMMS

 **3.4M**

Source: World Health Organization (WHO),

people, mostly children, die annually from water-related diseases.

Animal & Wildlife Tracking

Gain real-time visibility into animal movement, health, and safety.

CHALLENGES

- 

No Real-Time Visibility
Caretakers lack visibility on location data, especially in large open areas.
- 

Lost or Escaped Animals Go Undetected
Delayed detection of movement outside designated areas can lead to injury, loss, or liability.
- 

Unauthorized Zone Entry
Animals may wander into restricted or dangerous zones without alerting staff.
- 

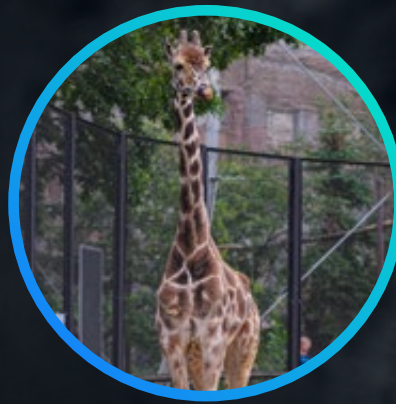
Delayed Threat Response
Delayed detection of poaching or human-wildlife conflict hinders timely response and protection efforts.



Livestock & Farm



Camel Racing Facilities



Zoos & Sanctuaries



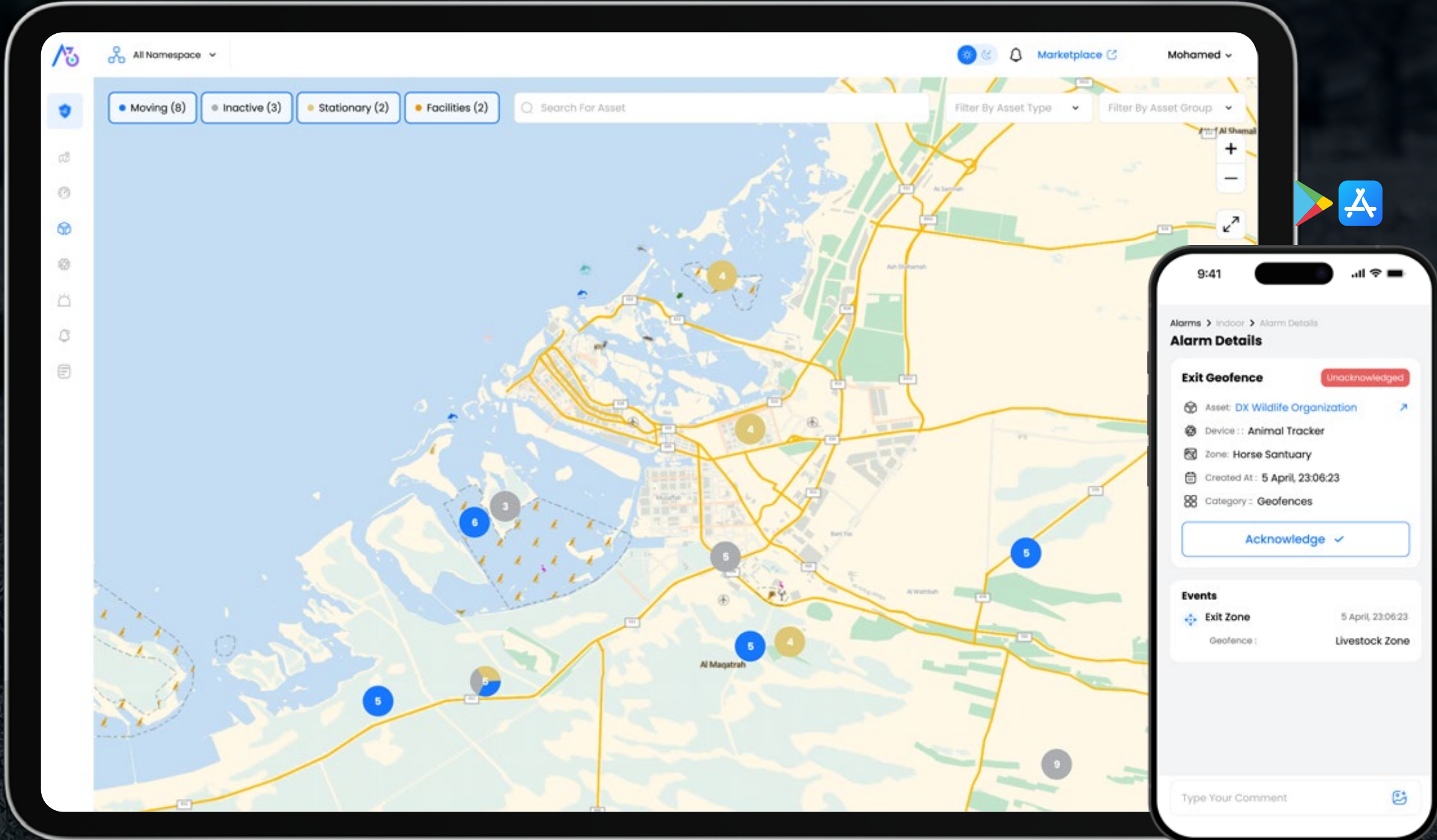
Wildlife Breeding Grounds



Open-Range Wildlife Reserves



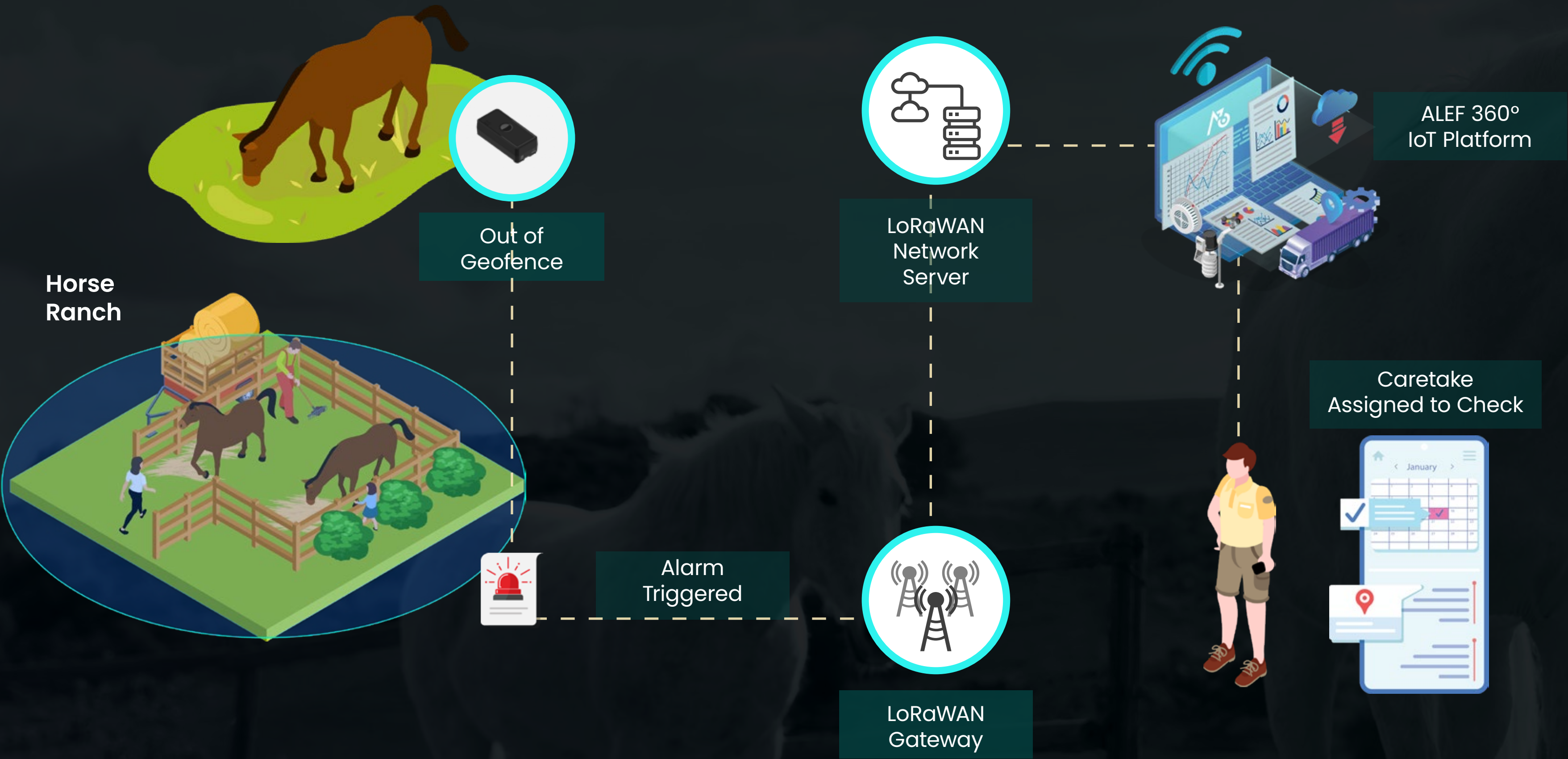
Equestrian Centers & Ranches



Connectivity



Track Movement. Ensure Safety.



IoT Sensors

Smart Personal Tracker with Panic Button
Product Code: PTB-4G-017



-  Motion Detection
-  Panic Button
-  Rechargeable Battery

Key Platform Features:

- 

Real-time Animal Tracking
- 

View Analytics Based on Sensor Readings
- 

Alerts & Notifications on Emergencies
- 

Set Geographical Boundaries

Workforce Tracking

Track workforce location in real time across your facility for better visibility and control.

CHALLENGES

- ❖ **Hard to Locate in Real Time**
Difficulty locating people and assets in real time.
- ❖ **Unauthorized Movement**
Unauthorized movement of assets or personnel.
- ❖ **Emergency Blind Spots**
Safety risks during emergencies without quick alerts
- ❖ **No Accountability Trail**
Lack of accountability and movement audit trails
- ❖ **Resource Inefficiency**
Inefficient utilization of resources and assets

Connectivity

LoRaWAN

NB-IoT

4G

Security Patrols

Utility & Field Technicians

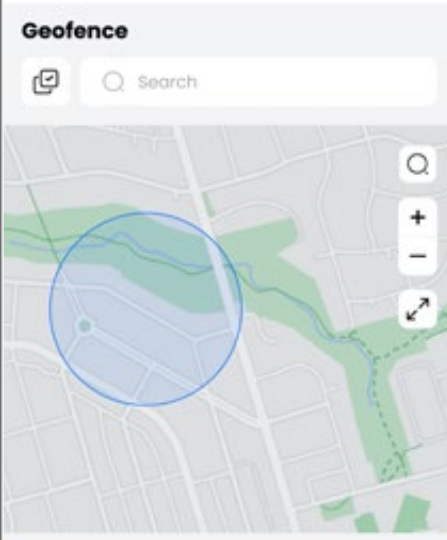
Firefighters in Hazard Zones

High-Risk Areas

Mining & Oilfield Workers

Field Responders

Geofence



Ajman

Fujairah

Dubai

Abu Dhabi

Mobile Technician

Group Description

Assets (16)

Cleaner Mini Van

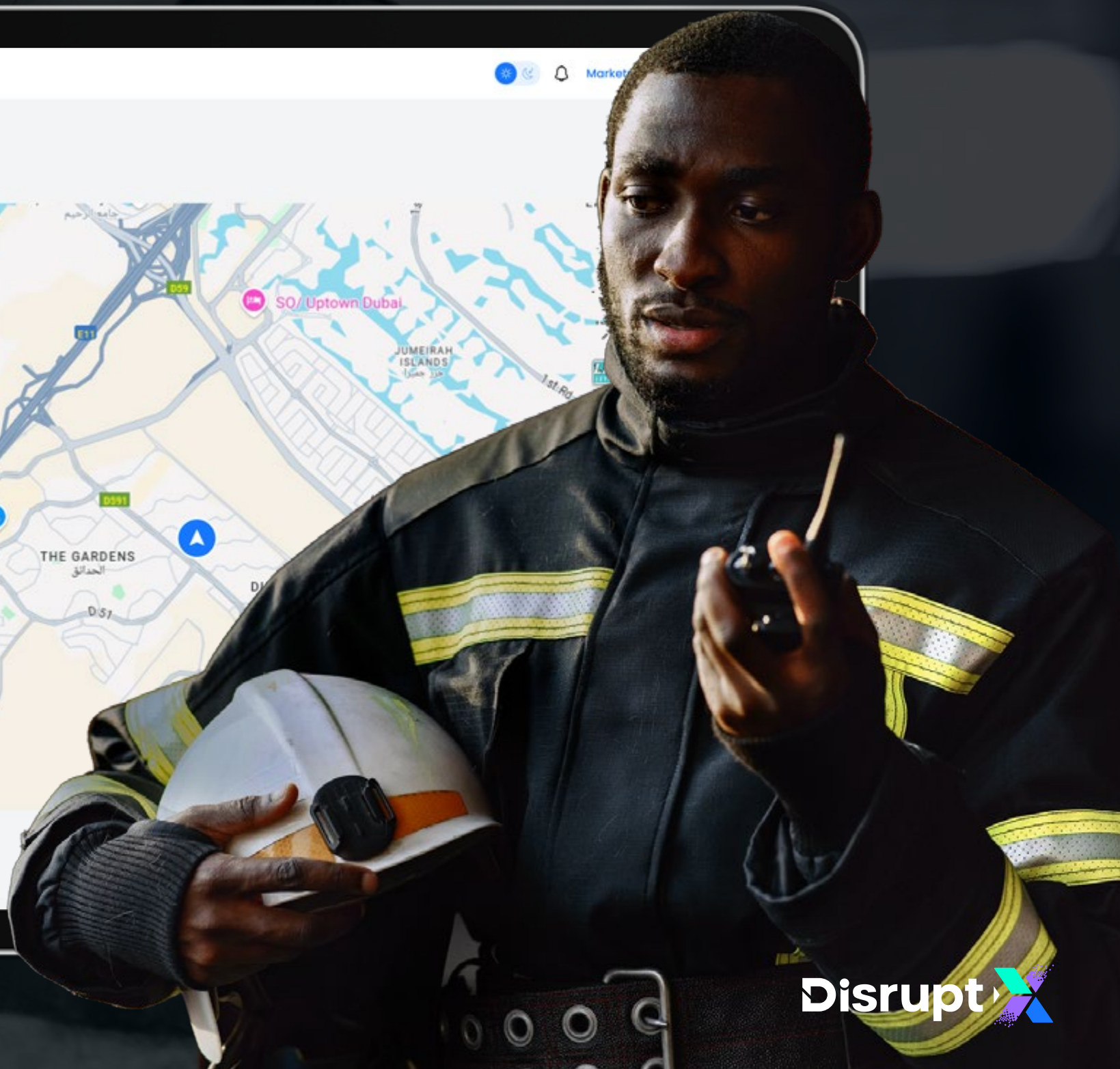
Floor Polishing

Technician Mini Van

Security Patrol Car

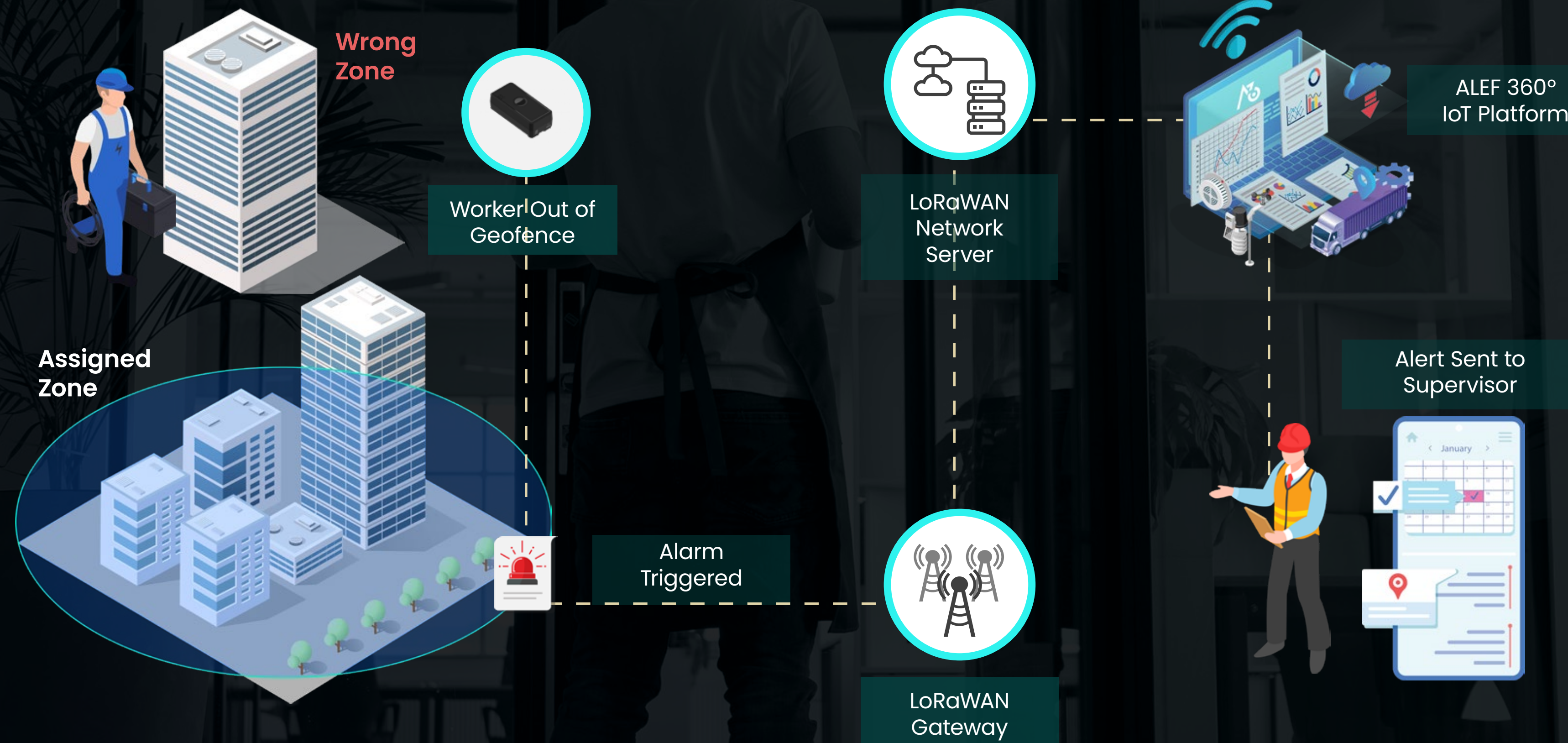
Containers





Disrupt

Know Who's Onsite, In Real Time



IoT Sensors

Smart Personal Tracker with Panic Button

Product Code: PTB-4G-017

LoRaWAN®

- Motion Detection
- Panic Button
- Rechargeable Battery

Outdoor & Indoor Personal Tracker

Product Code: OIA-LORX-021

LoRaWAN®

- Panic Button
- Rechargeable Battery

Key Platform Features:



Real-time
Workforce Tracking



View Analytics Based
on Sensor Readings



Alerts & Notifications
on Emergencies



Set Geographical
Boundaries

Fleet Management

An IoT-powered System for real-time oversight of vehicles, equipment, and logistics operations.

CHALLENGES

- No Real-Time Fleet Visibility**
Hard to know where vehicles are, their status, or if they're used properly.
- Fuel Theft & Inefficient Usage**
Consumption leaks or misuse go unnoticed without monitoring.
- Unplanned Breakdowns**
Reactive maintenance leads to downtime and higher repair costs.
- Poor Driver Accountability**
Lack of insight into driver habits (speeding, harsh braking, idling).
- Inefficient Dispatch & Delays**
Without smart scheduling, trips are longer and less productive.



Enterprise Fleet



Farm Machinery



Cold Chain Trucks



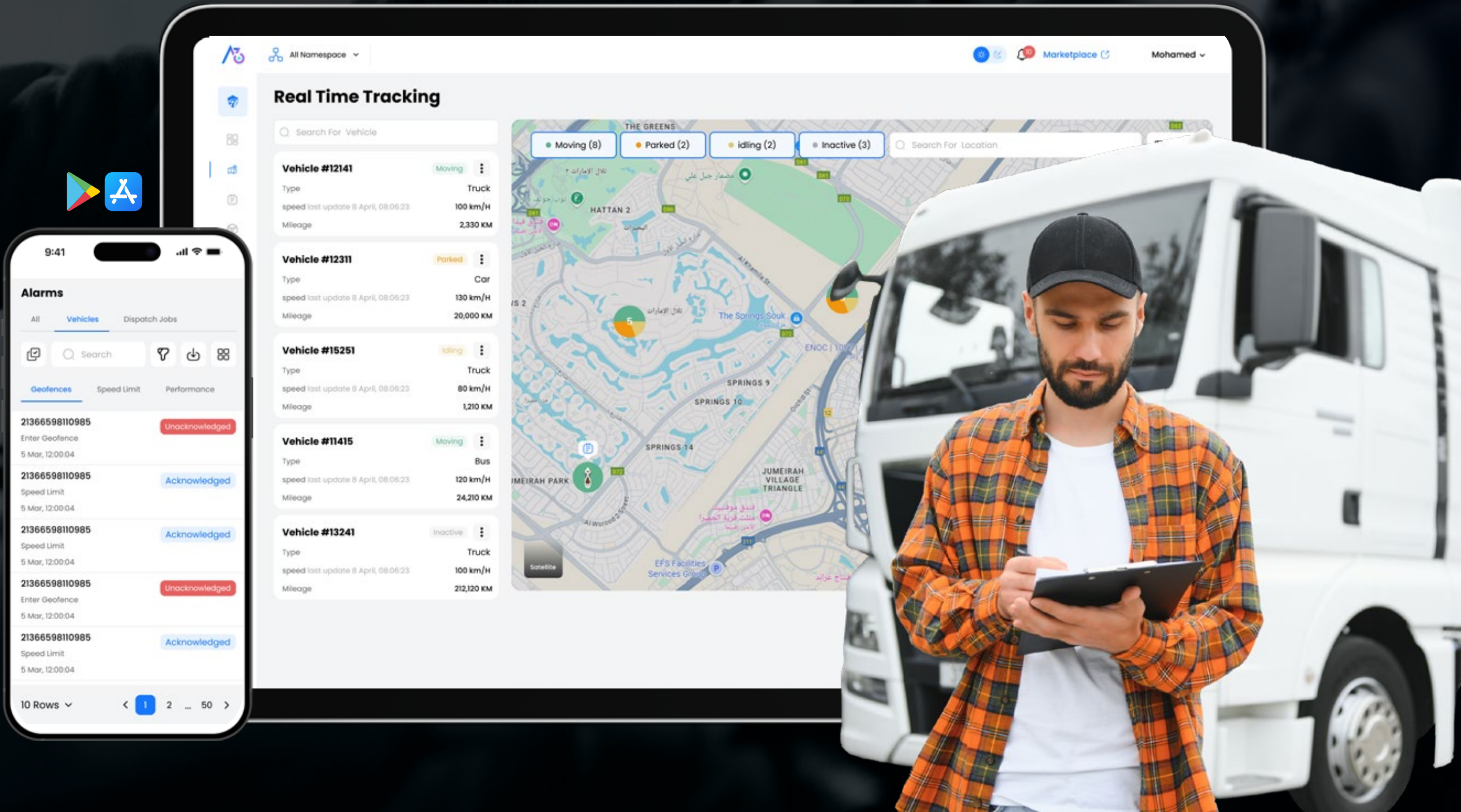
Car Rental Vehicles



Construction Machinery



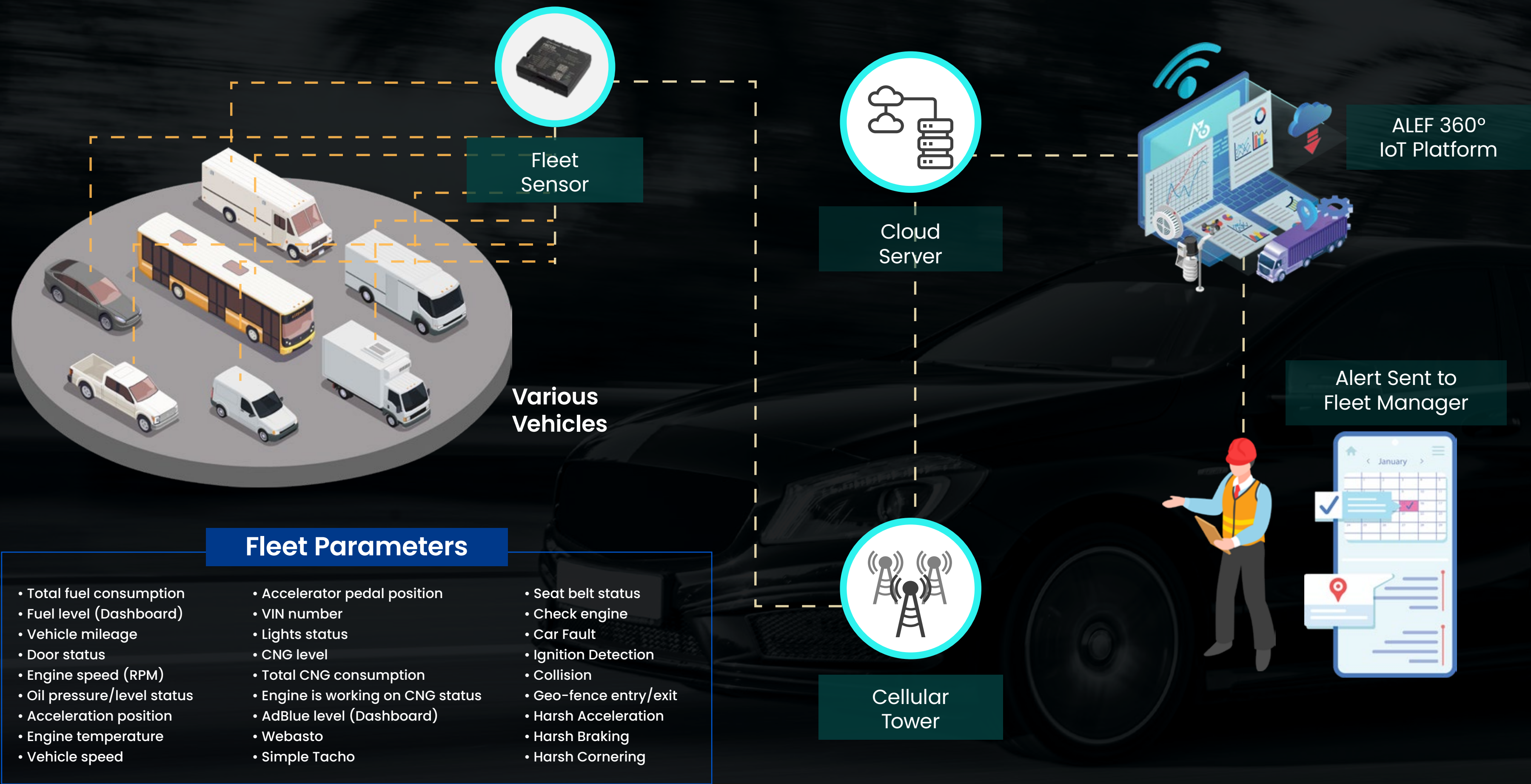
Airport Operations



Connectivity



Seamless Tracking. Smarter Decisions.



Key Platform Features:

Real-time Vehicle Tracking

Driver Behavior and Scoring

Fuel Consumption

Maintenance Management

Dispatch Management

IoT Sensors	
Fleet Tracker Product Code: FMT-F13-016	4G NB-IoT BLE
	Battery: 170 mAh Li-Ion, 3.7 V Dimension: 65 X 56.6 X 20.6 mm Weight: 55g Operating Temperature: -20°C ~ 40°C IP Rating: IP41 Sensors: Accelerometer
	Powered with Backup Battery
Light Fleet Tracker Product Code: FMT-F92-016	4G NB-IoT
	Dimension: 79 X 43 X 12 mm Weight: 54g Operating Temperature: -20°C ~ 40°C IP Rating: IP54 Sensors: Accelerometer
	Crash Detection
	Powered with Backup Battery
Truck Tracker Product Code: TMT-C40-016	4G NB-IoT
	Battery: 550 mAh Ni-Mh, 8.4 V Dimension: 104.1 x 76.8 x 31.5 mm Weight: 197g Operating Temperature: -40°C ~ 85°C IP Rating: IP41 Movement Detection: Accelerometer
	Powered with Backup Battery

Sustainable Water Metering Management

From Consumption to Cost—Gain Full Visibility

- ❖ **Transparent Sub-Metering**
Track usage per tenant or zone for accurate billing.
- ❖ **Remote Shut-Off Capability**
Control water flow instantly during faults or emergencies.
- ❖ **Portfolio-Wide Monitoring**
View water usage across all sites in one dashboard.
- ❖ **Real-Time Consumption Alerts**
Get notified of sudden spikes due to water leak to act quickly.
- ❖ **Billing & Cost Breakdown**
Understand consumption trends and water usage breakdown.

Connectivity



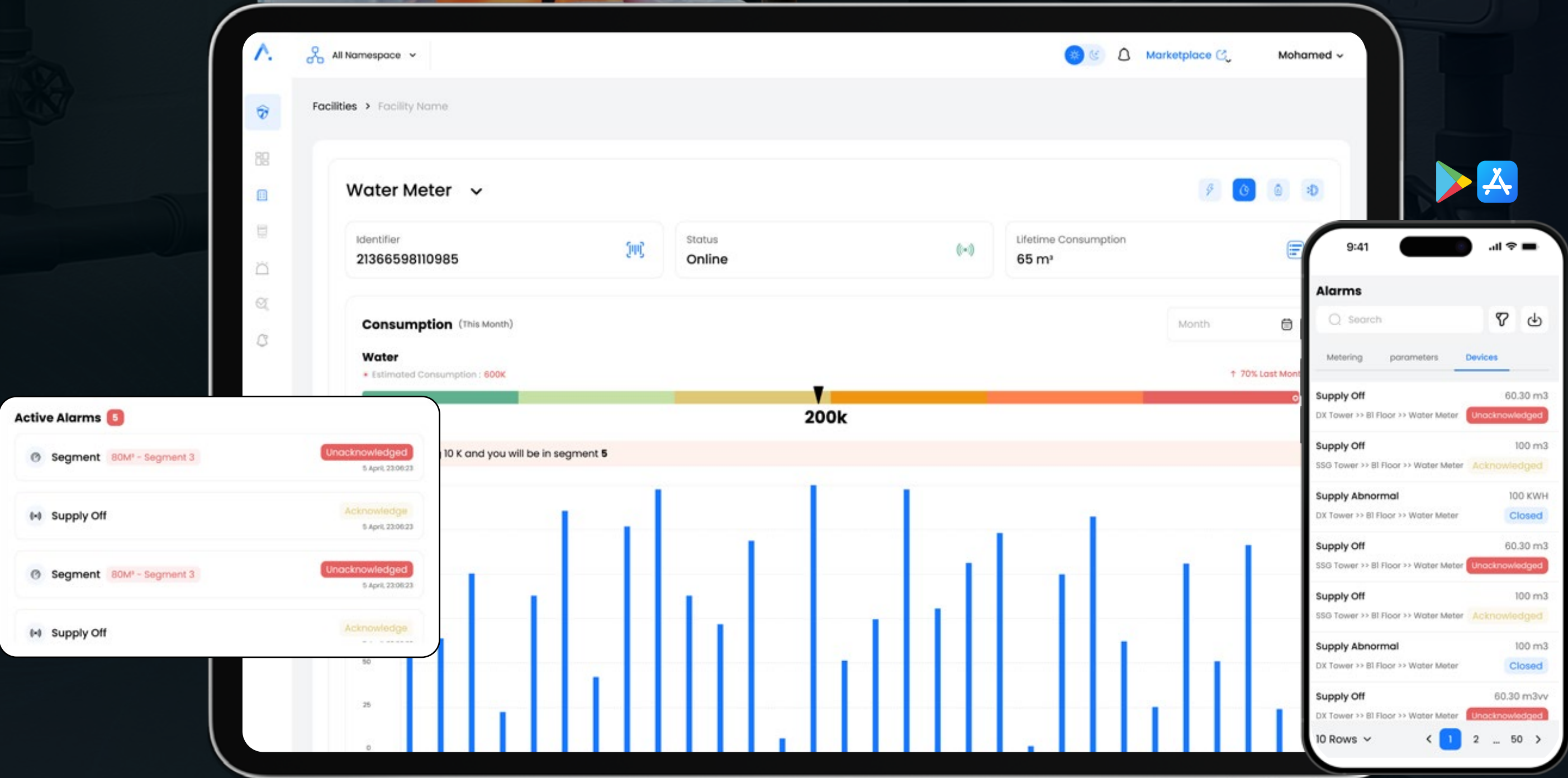

powered by DisruptX


Commercial Real Estate

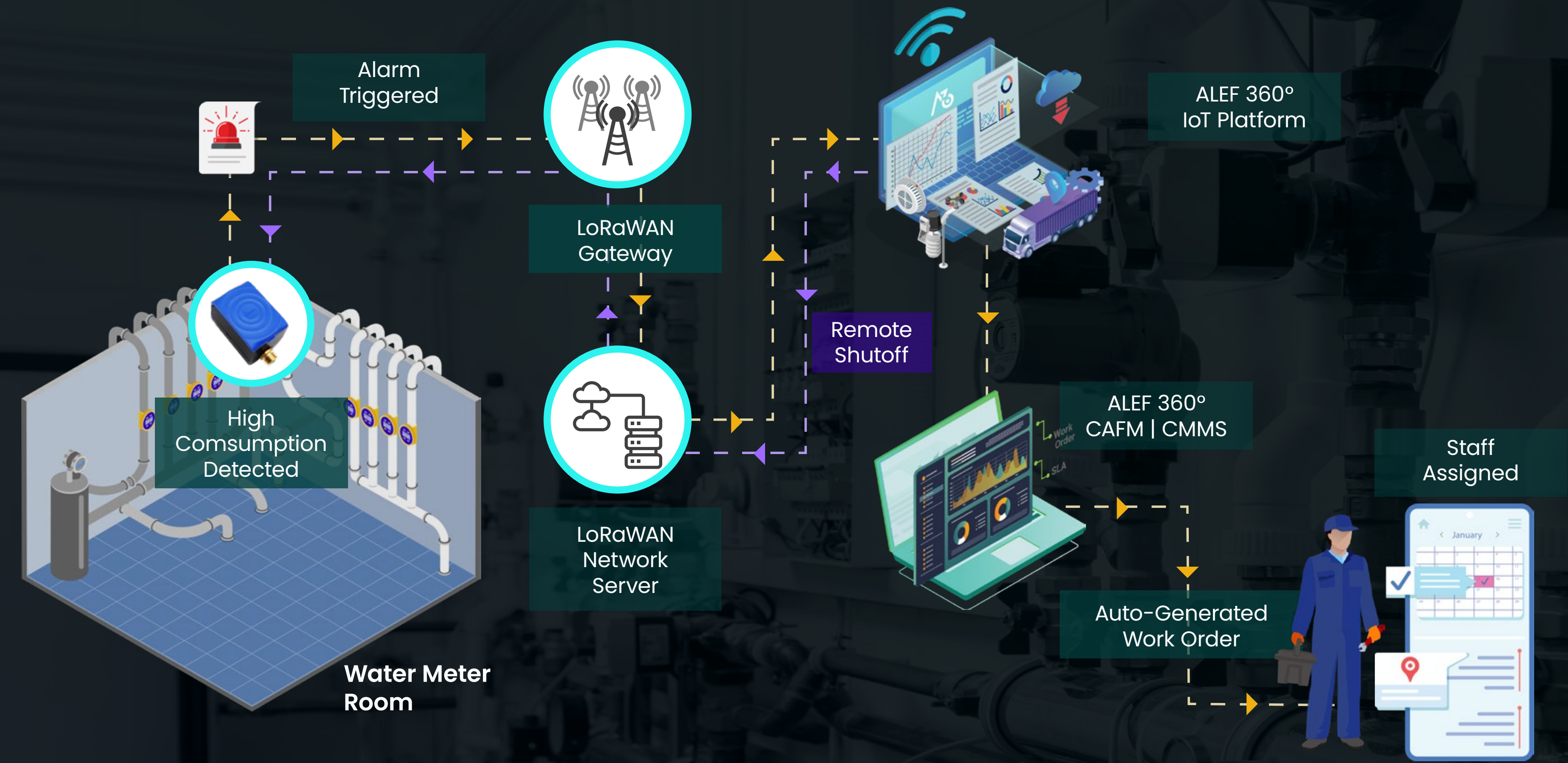

Industrial Facilities


Residential Complexes


Retail & Malls



Measure. Monitor. Control in Real Time.



IoT Sensors	
Smart Water Meter Product Code: WMT-SIGX-007	   Up to 10 years
Smart Water Meter Product Code: WDN-LORX-033	     Up to 10 years
Smart Water Meter with Valve Control Product Code: VDN-LORX-033	     Up to 10 years

Key Platform Features:

-  **Monitor Water Consumption**
-  **Automated Work Order Creation via Integrated CAFM | CMMS**
-  **Real-time Notifications on Abnormalities**
-  **Remote Water Meter Shutoff via IoT Platform**
-  **View Billing Through Consumption Analysis**

Smart Electricity Metering

Track, Analyze & Optimize Energy Use

- ❖ **Smart Sub-Meter Visibility**
Track per-zone or per-equipment electricity usage in real time.
- ❖ **Carbon Emission Insights**
Track daily, weekly, and yearly carbon trends from consumption data.
- ❖ **Instant Usage Spike Alerts**
Detect abnormal loads and act before costs surge.
- ❖ **Multi-Site Monitoring**
Monitor consumption use across buildings in a single dashboard.
- ❖ **Billing & Cost Breakdown**
Understand consumption trends and electricity charges in detail.

Connectivity

LoRaWAN®





ALEF360°
powered by DisruptX



Commercial Real Estate



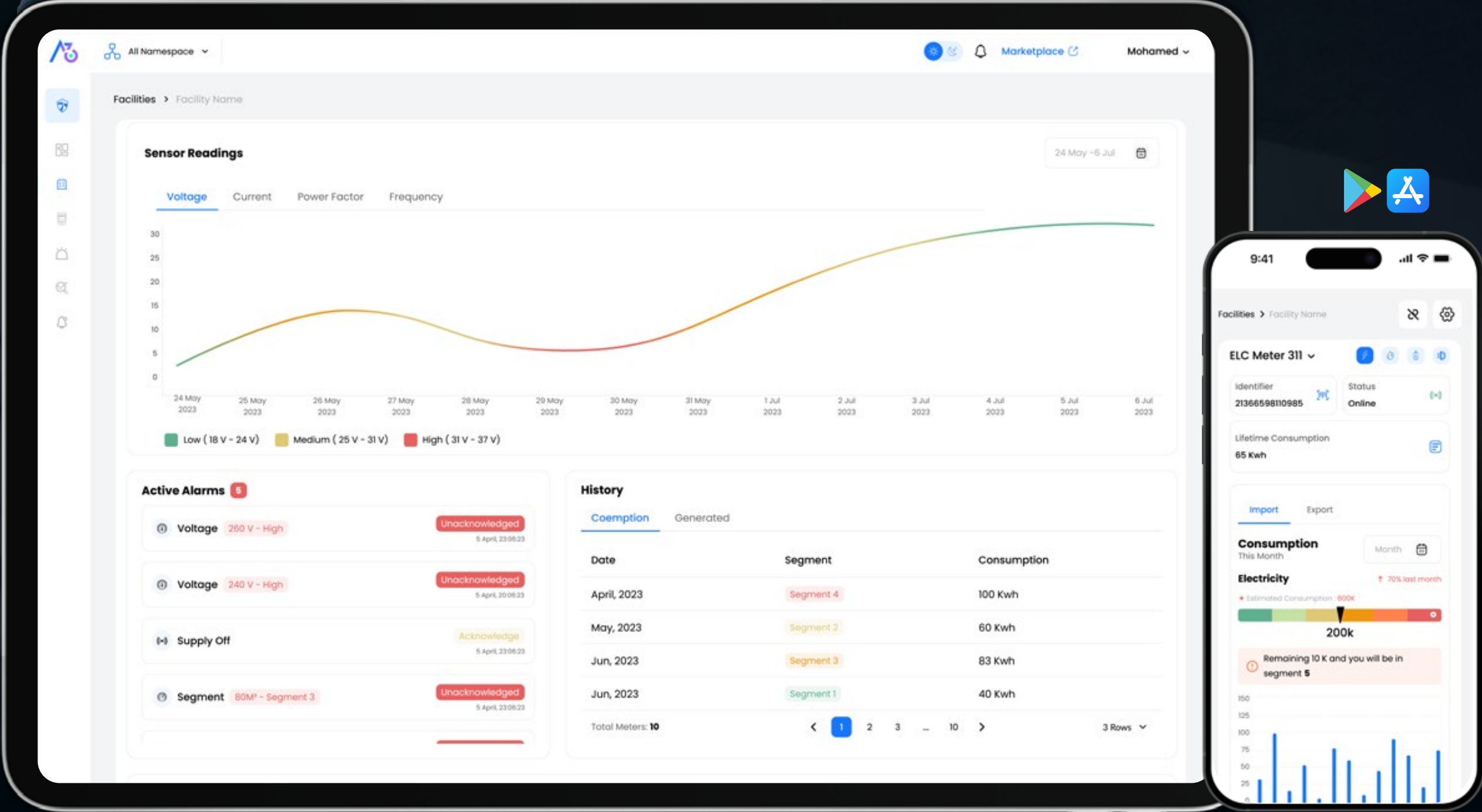
Industrial Facilities



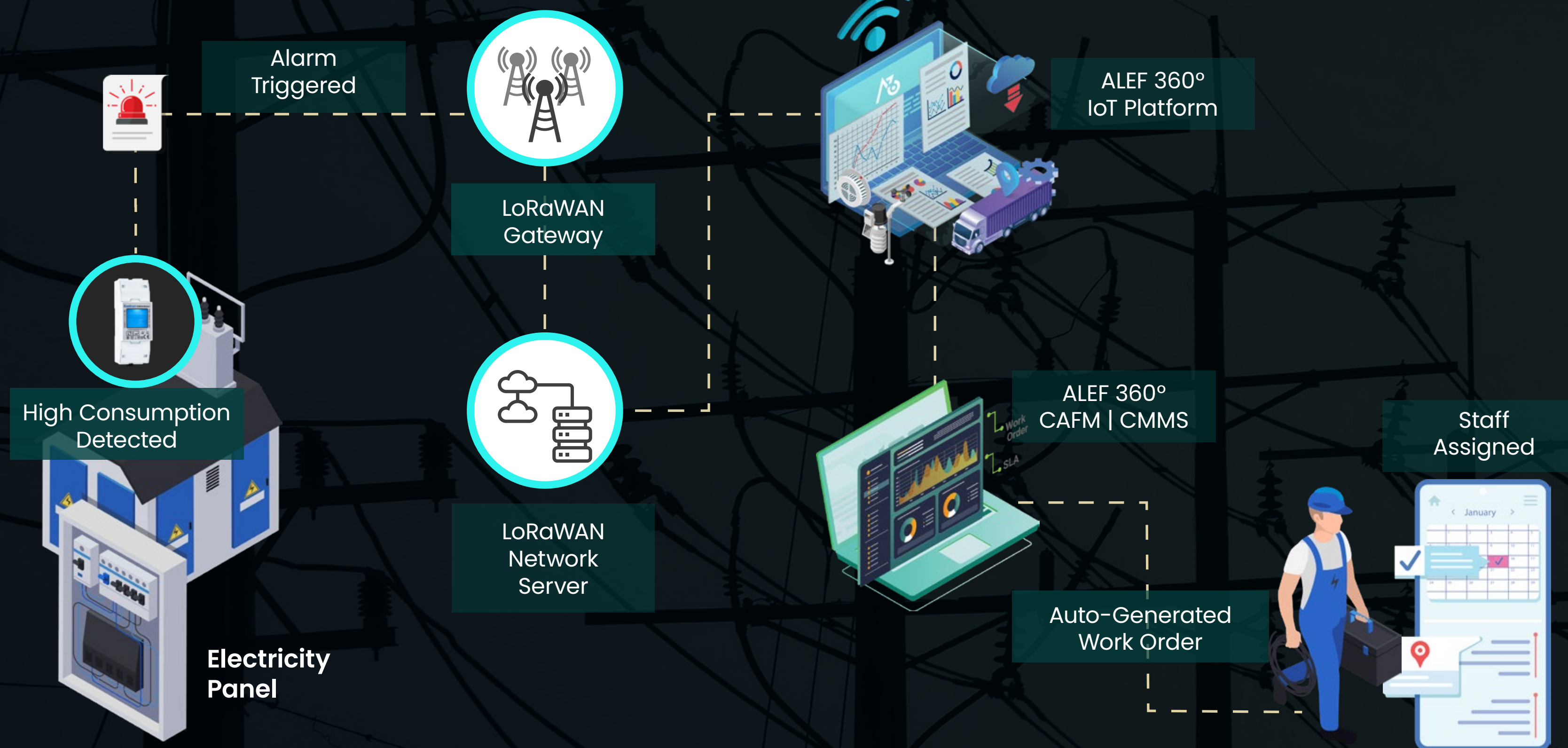
Residential Complexes



Retail & Malls



Track, Compare & Reduce Consumption



IoT Sensors

Power Meter Three Phase
Product Code: EM3-LORX-039



LoRaWAN

Three phase 1/5A current transformer operated

Power Meter Single Phase
Product Code: EM1-LORX-039



LoRaWAN

Single Phase 100A direct connection

Key Platform Features:



Monitor Electricity Consumption



Automated Work Order Creation via Integrated CAFM | CMMS



Real-time Notifications on Abnormalities



View Billing Through Consumption Analysis



Track carbon output from usage.

Smart Gas Metering

Track usage, detect anomalies, and ensure safe, efficient gas operations.

❖ **Remote Monitoring**
Stay informed on usage and performance without manual checks.

❖ **Anomaly Alerts**
Catch irregular spikes in flow or low-pressure events instantly.

❖ **Regulatory Compliance**
Track and report metrics aligned with safety and inspection standards.

❖ **Multi-Site Monitoring**
Monitor consumption use across buildings in a single dashboard.

❖ **Billing & Cost Breakdown**
Understand consumption trends and gas charges in detail.



Commercial
Real Estate



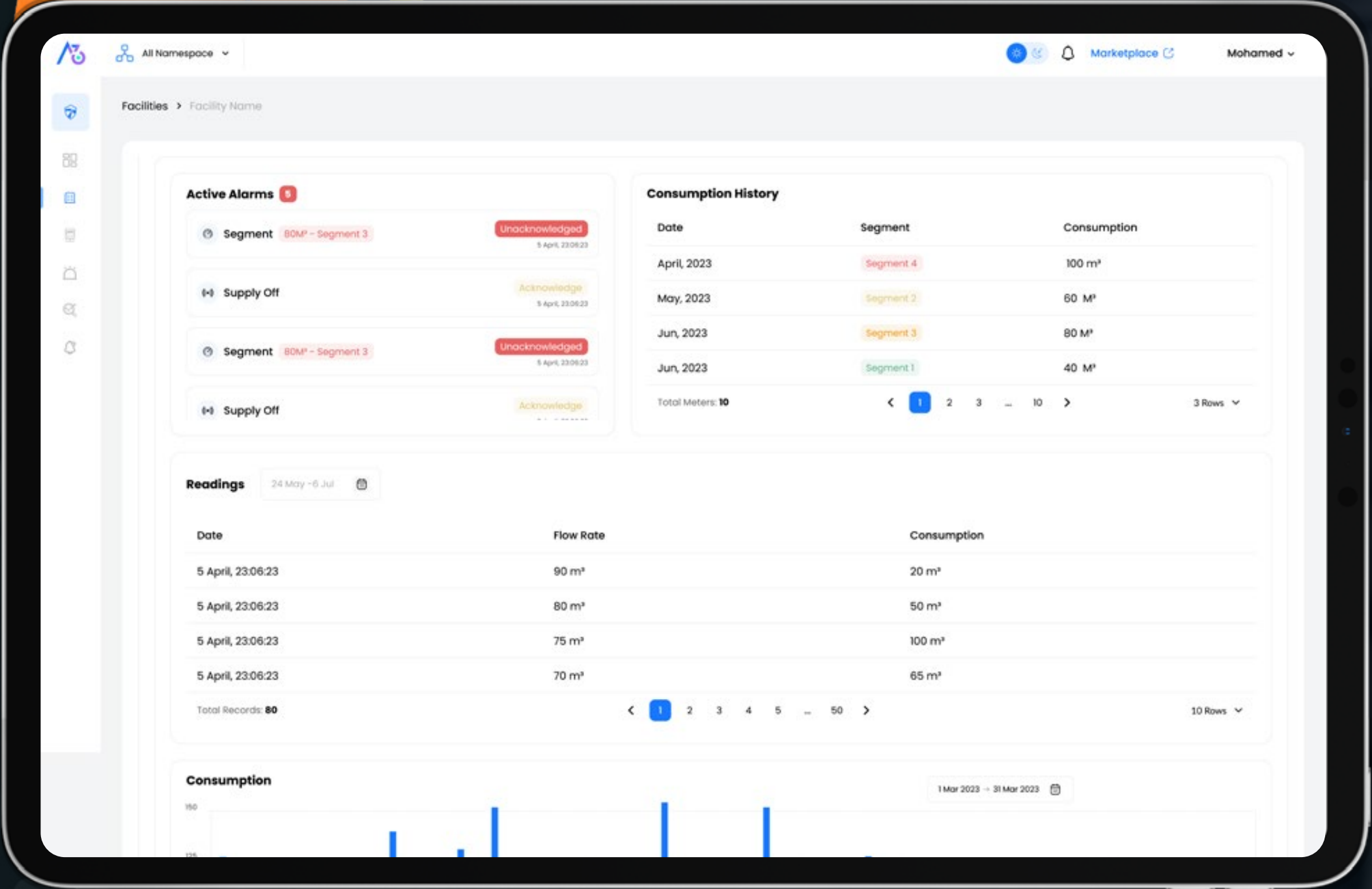
Industrial
Facilities



Residential
Complexes



Retail &
Malls



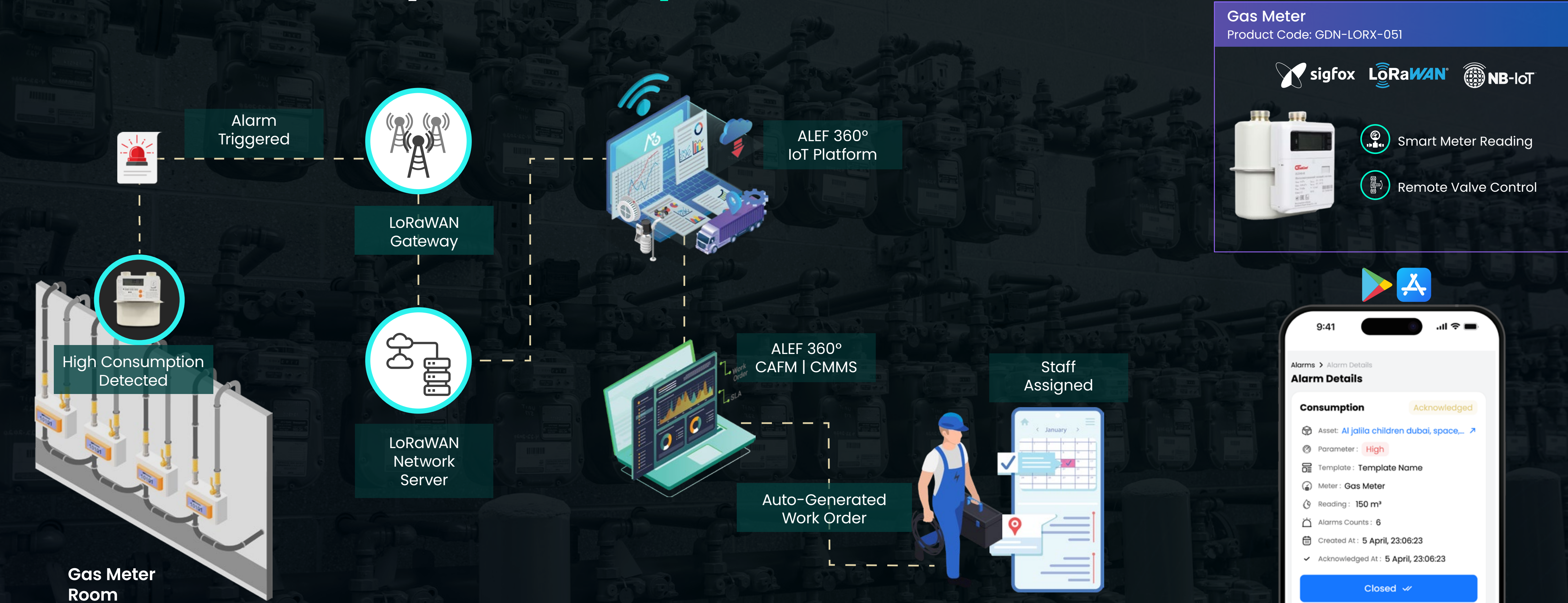
Connectivity



sigfox



Real-Time Visibility into Gas Systems



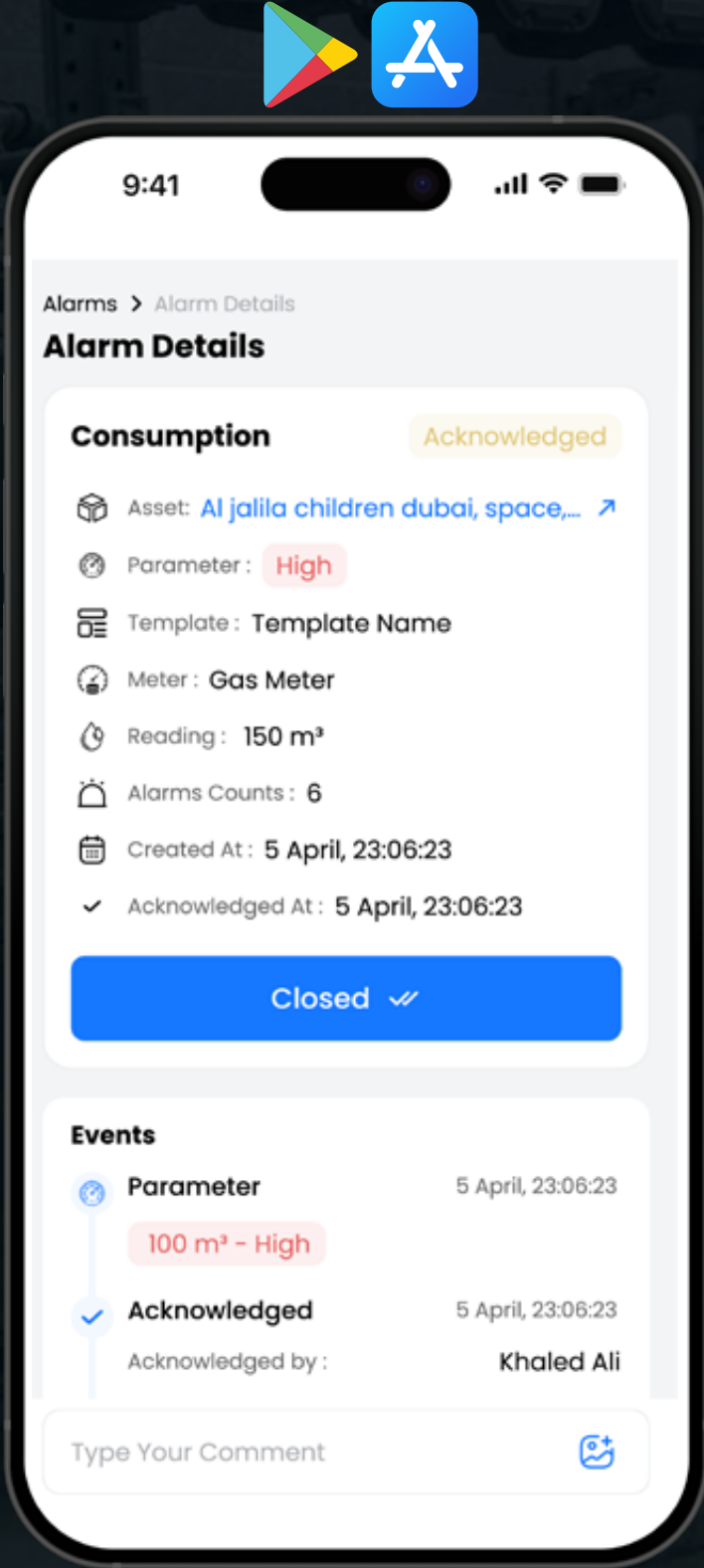
Key Platform Features:

Monitor Gas Consumption

Automated Work Order Creation via Integrated CAFM | CMMS

Real-time Notifications on Abnormalities

View Billing Through Consumption Analysis



Why API Integration with CAFM Fails at Scale?

API integration works for demos. Not for real-world operations.

❖ Not Built for Scale

APIs cannot handle thousands of devices with network-level visibility or control.

❖ No Real-Time Fault Visibility

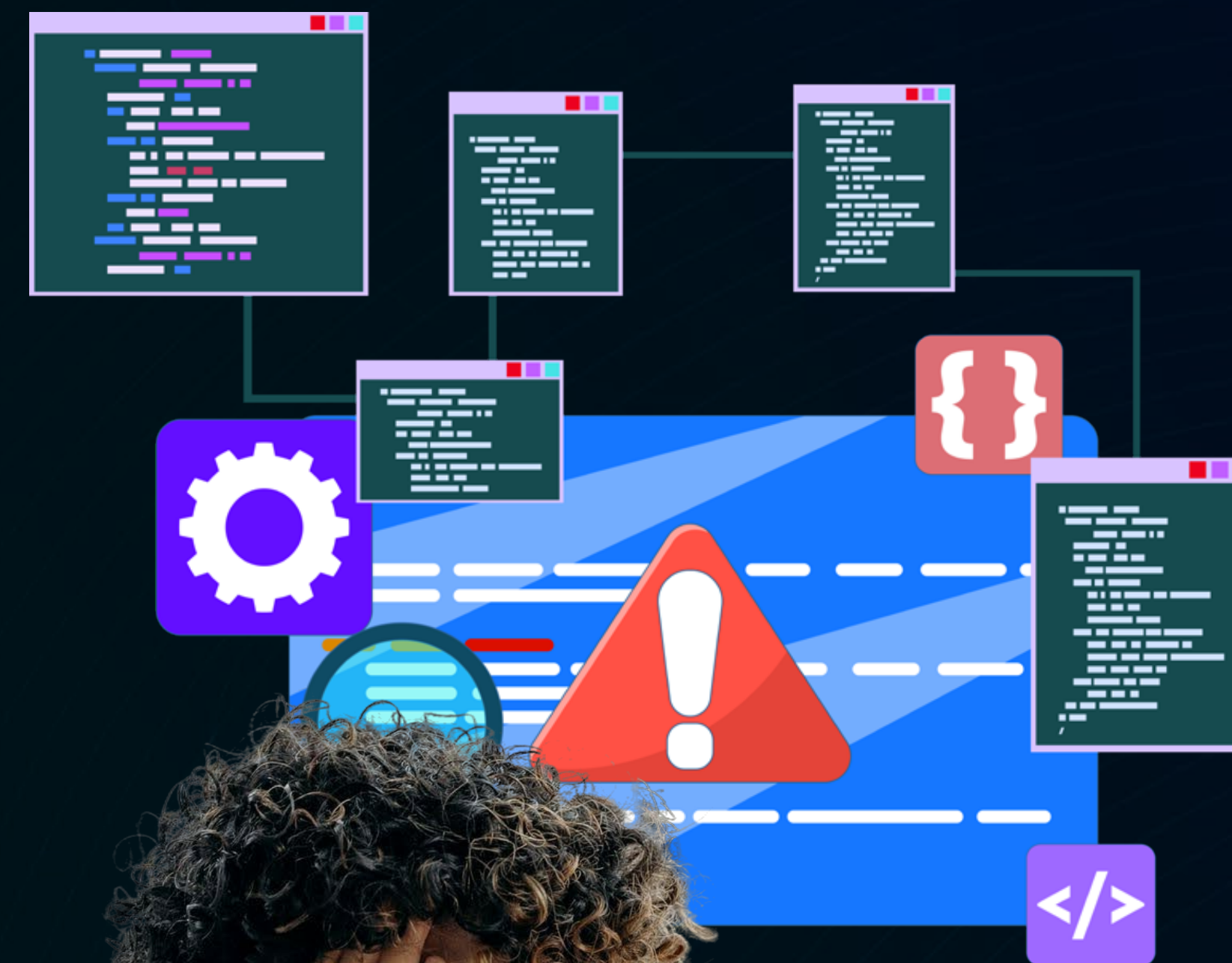
You can't see which sensor or gateway is offline from the CAFM side.

❖ Manual Asset Mapping

Linking devices to assets is manual, error-prone, and hard to maintain.

❖ No Alarm Escalation or SLA Logic

Unacknowledged alerts stay unresolved with no auto-escalation in most CAFMs.



API-based integrations are rigid, fragile, and break under real-world IoT scale.

ALEF 360° IoT + CAFM | CMMS

= Seamless Native Integration

Built together. Scales together.

❖ Seamless Synchronization

Assets in ALEF 360° IoT automatically sync with assets in CAFM—no manual mapping needed.

❖ Full Device Visibility

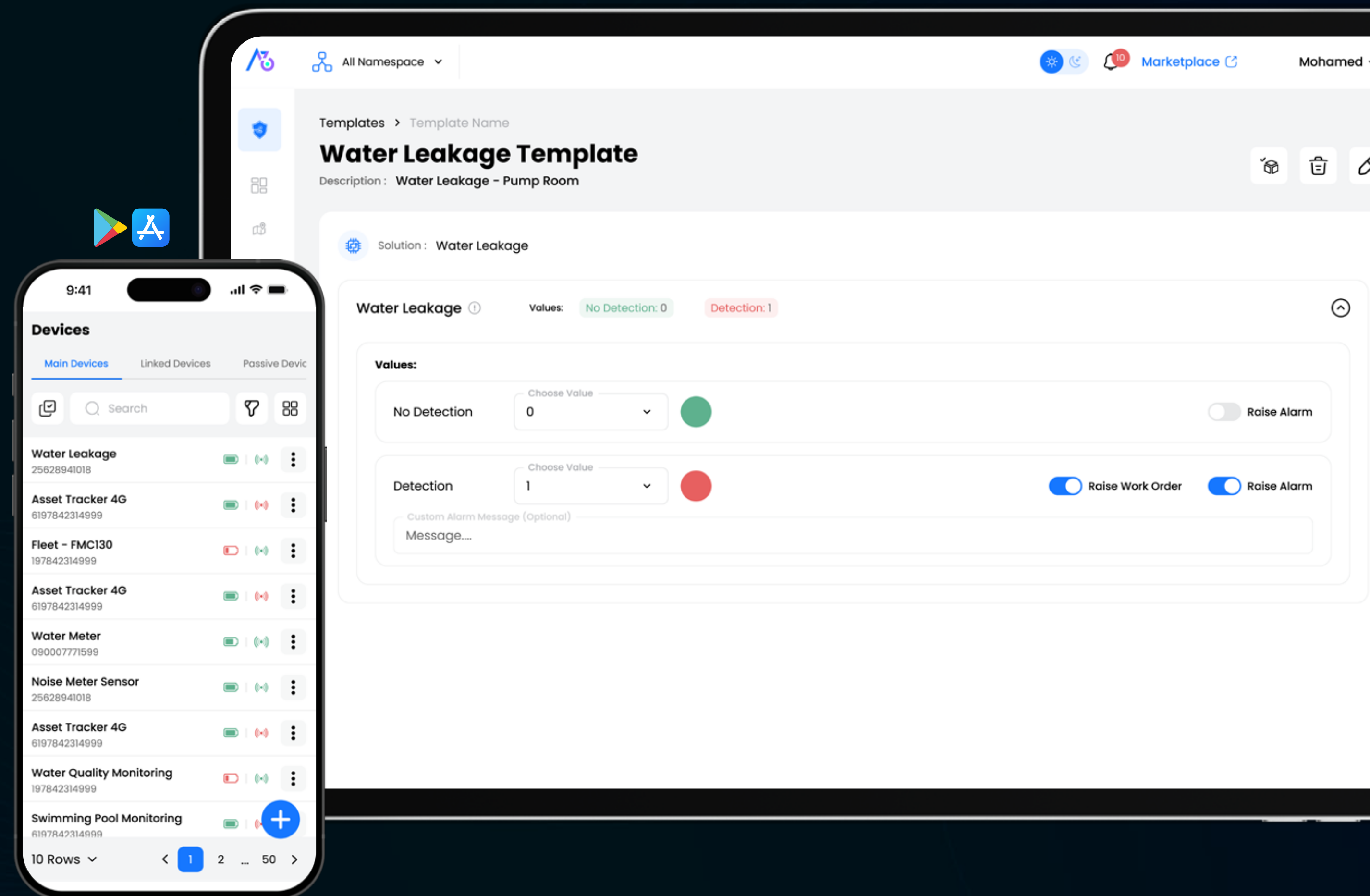
You can see real-time device status, gateway health, and connectivity.

❖ Native Alarm Escalation

IoT alerts escalate within CAFM based on SLA rules and responsibility matrix.

❖ Intelligence by Design

Sensor events trigger maintenance and compliance work-flows automatically.



The Cost of Guesswork in Asset Management Without IoT

Without IoT, decisions are based on assumptions, not real usage data.

❖ We rely on guesswork

It's hard to tell which assets are actually being used or sitting idle.

❖ Slow to mark assets "in service"

Finance waits for people to confirm start-up; books get updated late.

❖ Monthly costs are less accurate

"Wear-and-tear" expense is based on age tables, not real use.

❖ Hard to justify end-of-life decisions

Selling or retiring an asset triggers more questions and delays.

❖ Budgets are less precise

Replacement plans depend on age/vendor advice, so we may over or under-spend.



From Guesswork to Data-Driven Asset Management

Finance gains real usage data for faster, smarter, and more accurate decisions.

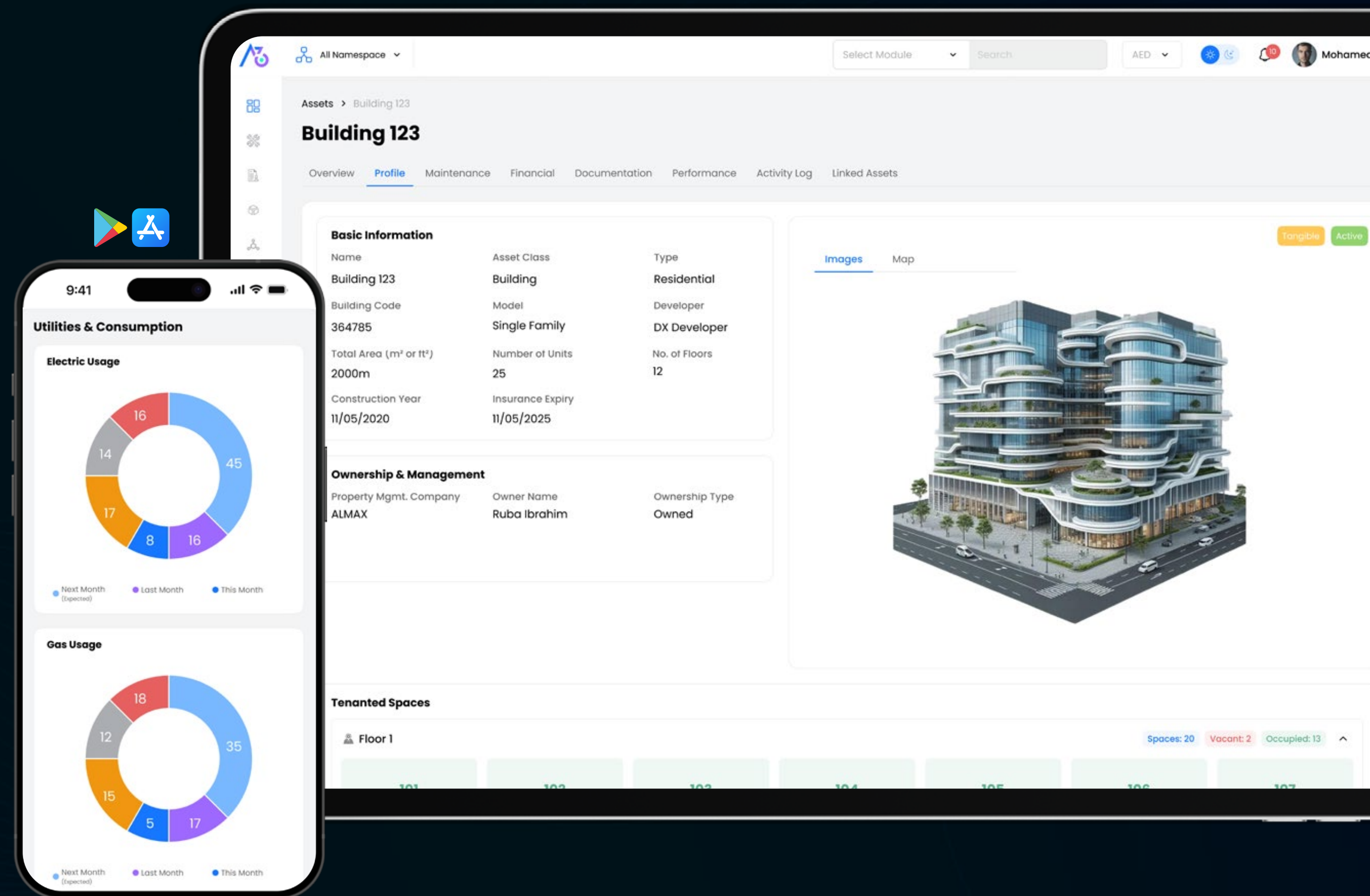
❖ **Cleaner asset list**
Live signals confirm what exists and is in use; gaps and duplicates surface early.

❖ **Faster “in service” updates**
First-run proof moves assets from “purchased” to “in use” quickly in the books.

❖ **More accurate monthly costs**
Real usage helps set fair “wear-and-tear” expense (finance still approves any change).

❖ **Smoother sell/retire decisions**
Time-stamped readings provide proof, so audits and approvals are easier.

❖ **Smarter budgets**
Replacement timing is based on real usage and energy impact, not just age.



Limitations of iBMS Without IoT

Legacy iBMS lacks the agility to support modern smart buildings.

- ❖ **Aging Infrastructure**
Legacy controllers may be partially non-functional, limiting performance and modern compatibility.
- ❖ **Multiple Software Platforms**
Different building systems often require separate software, making monitoring fragmented and inefficient.
- ❖ **Limited Visibility**
Traditional iBMS offers siloed oversight, restricting a clear, real-time view of overall building operations.
- ❖ **Scalability Challenges**
Adding new devices or adopting the latest technologies is difficult without major upgrades or integrations.
- ❖ **Operational Complexity**
Managing multiple systems increases workload, drives up maintenance costs, and slows down response times.



Smarter Building Control with IoT in iBMS

IoT-driven insights for smarter building management.

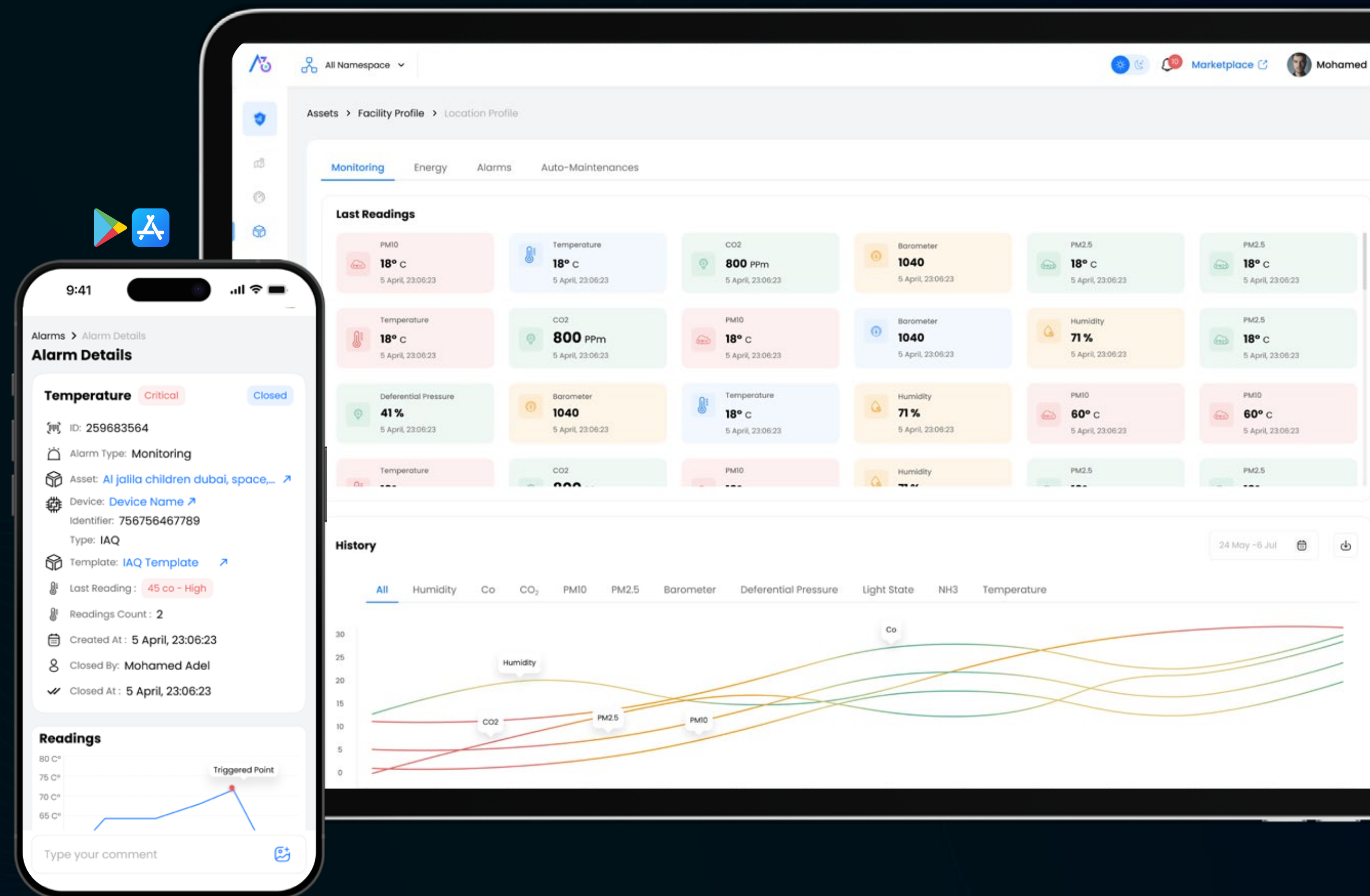
❖ **Complete Visibility**
Centralized view of all building operations with real-time transparency.

❖ **Flexible Device Portfolio**
Supports both IoT devices and traditional iBMS controllers, giving flexibility without vendor lock-in.

❖ **Single Dashboard**
Centralized interface to monitor and manage all building assets, reducing the need for multiple tools.

❖ **Combined Insights**
IoT data and iBMS information are analyzed together, creating actionable insights for smarter decision-making.

❖ **Simplified Operations**
Streamlined workflows and automation enable better efficiency, lower costs, and a future-ready platform.



Why Traditional Certifications Struggle to Enhance Portfolio Value?

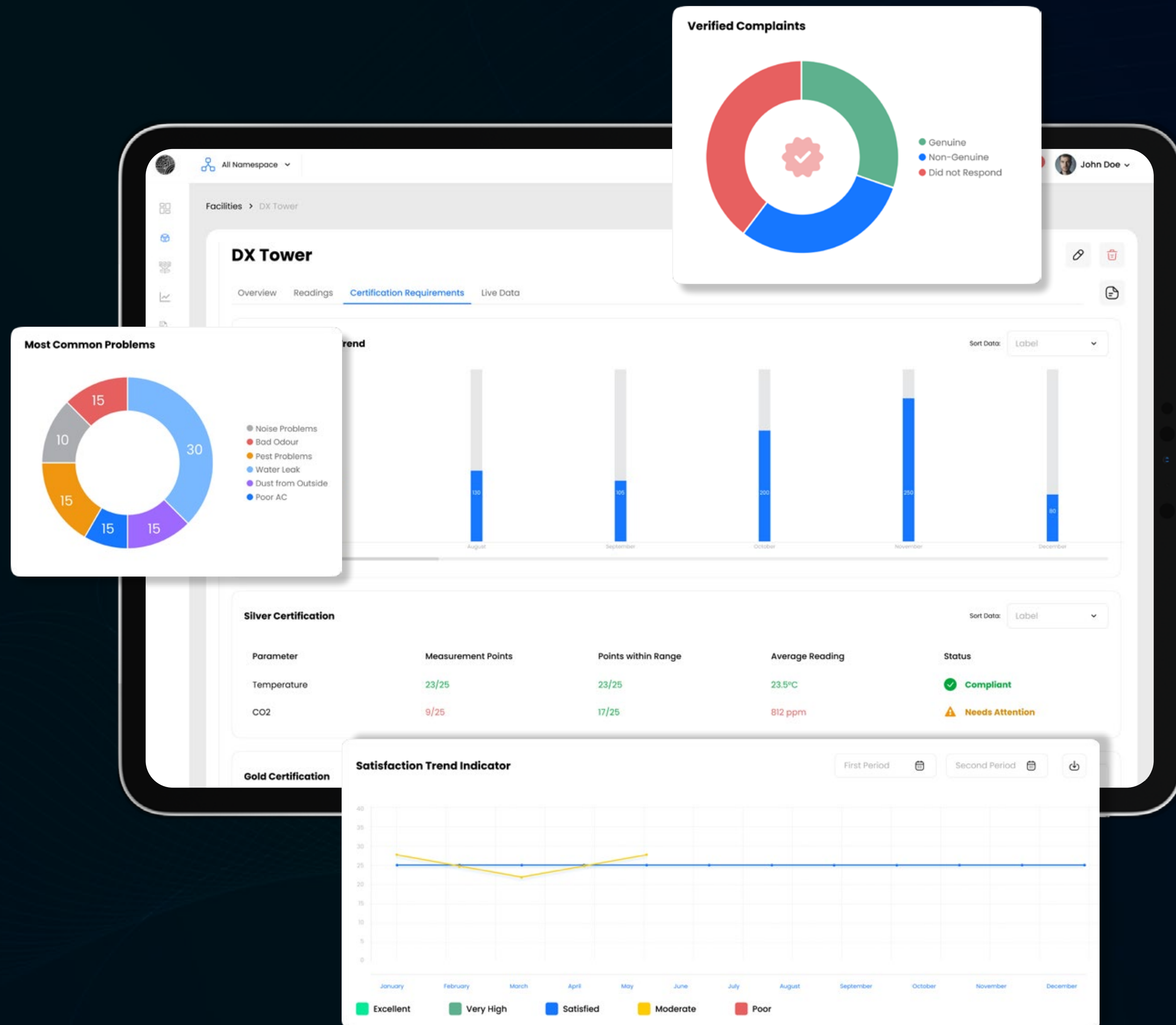
- ❖ **Adoption Barriers**
High upfront costs prevent sustainability & wellness programs from being adopted at scale across all facilities.
- ❖ **Slow Processes**
Certification cycles stretch 9–12 months, requiring dedicated project team resources.
- ❖ **Costly investments**
Heavy consultation fees & manual, time-consuming data collection drive certification costs up.
- ❖ **Tick-Box Mentality**
Owners meet requirements only during audits, treating certifications as renewal task, not ongoing standards.
- ❖ **Tenant Experience Risk**
Certified buildings raise rents, but without maintained standards and consistent monitoring, tenants see no value.



Increasing Asset Value with AI-Powered Certification

Fast, Data-Driven, and Trusted Certification

- ❖ **Continuous Auditing**
IoT-driven monitoring of IAQ, water, and energy ensures on-going compliance trusted by regulators.
- ❖ **Faster Cycles**
30-day verification replaces 9–12 month audits, reducing delays and freeing project resources.
- ❖ **Cost-Efficient**
AI automation and digital workflows cut audit & consultancy costs by up to 60%.
- ❖ **Scalable Adoption**
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- ❖ **Premium Tenant Experience**
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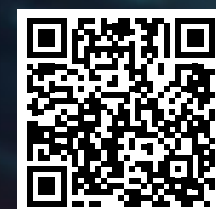
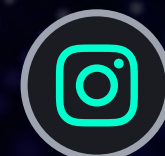
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