WILAS TITAN SUITE

Driving Operational Intelligence through Real-Time IoT & AI Integration

Organisations across industries are facing growing challenges in managing operational efficiency, asset utilisation, and workplace safety. Manual processes and siloed systems limit real-time visibility, increase risks, and create inefficiencies.

WILAS TITAN Suite is the operational intelligence core of the WILAS ecosystem. It integrates wireless IoT, AI-driven analytics, and open APIs to provide real-time tracking, intelligent automation, and actionable insights across facilities.

Through Wi-Fi, BLE, and Zigbee & LoRaWAN infrastructures, TITAN equips enterprises in smart buildings, malls, healthcare, logistics, manufacturing, and hospitality with the tools to streamline efficiency, automate workflows, and achieve heightened situational awareness.

CHALENGES IN FACILITY OPERATIONS

Limited Visibility: Difficulty in tracking the location and condition of assets, equipment, and people.

High Operational Costs: Excessive reliance on manual monitoring and inefficient workflows.

Safety Risks: Lack of proactive alerts and geofencing for restricted zones or emergency response.

Fragmented Systems: Multiple siloed technologies without centralised data intelligence.

Scalability Issues: Traditional solutions struggle with multi-site or enterprise-wide deployment.

TITAN OVERVIEW

TITAN (Track, Intelligent Analytics, Notification) is a modular platform designed to:
Track: Real-time and historical monitoring of assets, staff, and visitors.
Analyse: AI-powered data analytics for utilisation, movement, and condition.
Notify: Automated alerts, geofencing, and workflow triggers.

TITAN Asset Monitoring

- Real-time & historical location tracking (Wi-Fi/ BLE)
- Geo-fencing and alerts
- Condition monitoring (tampered, battery, utilisation)
- Embedded messaging for staff

TITAN Video AI

- Intelligent video analytics for occupancy, safety, and compliance
- Crowd density & behaviour detection
- Integration with existing or new CCTV systems

TITAN IoT Aggregator

- Unified management of IoT sensors and devices
- Rule-based automation (e.g., AC, lighting, washroom sensors)
- Open APIs for third-party integration

INDUSTRY APPLICATIONS

Office Buildings

Retail & Hospitality

Healthcare

Public Venues

ROI & BUSINESS VALUE

Implementing the WILAS TITAN Suite translates directly into measurable financial and operational benefits. The platform is not a cost center but a value generator, delivering a strong and rapid return on investment.

- **Operational Efficiency**
  Automate manual tasks and optimise workflows to reduce manual monitoring costs by up to 30%.
- **Asset Utilisation**
  Gain deep insights into asset usage to right-sie inventory and improve usage efficiency by 20–40%.
- **Energy Savings**
  Implement automated AC and lighting controls based on real-time occupancy to reduce energy consumption by 10–30%.
- **Scalable Growth**
  Confidently expand operations with a platform designed for seamless multi-site deployment with centralised control.

USE CASES

1. IoT Management

THE IOT AGREEGATOR

IoT agreegator enable quick adoption of different IoT products without integration complexity.

Encapsulate the diversified & complexity of IoT protocols with simple unified RESTFul APIs.

Automate decisions and analytics from IoT data.

The solution reduces manpower resources needed to monitor different aspects of the environment (e.g. temperature, lighting etc) and can be integrated with relevant control systems to automate operations.

Supports different brands and types of sensors (e.g. WiFi, Zigbee, LoRaWAN) and can be integrated with control systems to automate routine checks, reducing reliance on manpower.

Smart Office

- Operational efficiency (energy savings, automated processes).

- Cost reduction (optimised space usage, lower utility bills).

- Employee productivity (better collaboration, fewer distractions).

- Workplace safety (real-time monitoring, emergency alerts).

Smart Washroom

- Operational Efficiency (cleaning staff deployed based on real demand.)

- Cost Savings (reduced waste of water, electricity, and cleaning supplies.)

- Better Hygiene & User Experience (consistently clean and well-stocked facilities.)

- Data-Driven Decisions (optimise resource usage and identify peak usage times.)

Unified IoT Aggregation & Visualization

- Holistic Visibility (single pane of glass for all IoT operations.)

- Operational Efficiency (No need to switch between multiple vendor-specific platforms.)

- Faster Decision Making (consolidated insights enable real-time responses.)

- Scalability – Easy to plug in new devices or systems without major redesign.

2. Facilities and Security Management

SECURITY

Set notifications alerts when a person/equipment leaves a zone.

Locate and communicate with the nearest staff (e.g., security guard/cleaner) via instant messaging for emergency activation.

AI Integration with CCTV/IoT allows automated detection of unusual activity within premises to send alerts for activation.

BUILDINGS EFFICIENCY

Track and visualize the infrastructure and building systems such as light sensors, power consumption and water leakages at the specific locations to increase energy efficiency and remedy the situations immediately.

3. Video Analytics and Intelligence

VIDEO ANALYTICS

CCTV integration with Video Analytics & Facial Recognition (FR) enables extensive application possibilities such as fire detection, mask detection, theft identification, access security.

INTELLIGENCE

With AI, increases the accuracy of the data such as count of people to determine overcrowding alerts.

4. Workforce Management and Personnel Tracking

ATTENDANCE TRACKING

Locate your employees real-time once they enter the office premises and eliminate the extra steps of clocking in and out of the offices.

Location-based tracking provides seamless recording of attendance and presence at duty stations for better visibility to ensure optimal staff productivity with minimal supervision.

Attendance report provides clock in/out timing together with presence duration for better supervision of workforce. Analytics inclusion enable automation of management processing to improve management productivity.

EFFICIENT WORKFORCE

Enhance operations efficiency by reducing manual search of staff and identify bottlenecks.

Leverage on the location data to translate to better resource utilization decisions and reducing operational costs, boosting production speed and quality.

Instant messaging enables an efficient mobilization of nearest staff on the ground to act on emergencies.

WORKERS/PATIENTS HEALTH & SAFETY

Monitor social distancing by tracking high traffic areas and identify people in the workplace or hospital who has close contact risks of the sickness to help mitigate spread of illness.

Identify areas that require sanitization and alert cleaners to clean the infected area within a short period of time to improve office hygiene.

Track workers/patient movements and detect emergencies such as workers/patient fall and allow immediate activation of nearest colleague/ doctor/nurse for care.

Ensure safety and security of operations such as collision avoidance, theft prevention, rescue & evacuations, and safety zones.

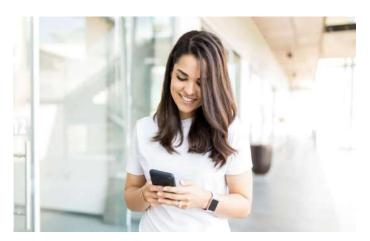# 5. Asset Tracking and Device Detection

ASSET MONITORING

Locate and monitor equipment performance for immediate activation for down period.

Asset management solution enables asset tracking and triggers an alert when equipment is missing or malfunctioning. Reports can also be generated on asset utilization rate.

The usage of real-time data helps optimize asset workflows, improve asset performance, and ensure safer operations.

ASSET POSITIONING

With the automated location tracking & notification service, operators can be notified with text messages or video footages on real-time statuses of key assets, equipment, vehicles, inventories and more to enhance investigations when a policy is activated. E.g., Equipment leaving a secured area, hazard detection, enforce no-phone zones.

CONCLUSION

The WILAS TITAN Suite is more than a technology platform; it is a strategic enabler that transforms facilities into intelligent, responsive, and data-driven environments. In an era where efficiency and safety are paramount, clinging to manual processes and fragmented systems is no longer a viable option. By unifying the power of IoT, AI, and automation, TITAN empowers organisations to break free from operational constraints and achieve a new level of performance.

With WILAS TITAN, organisations can finally attain:
- Better visibility
- Smarter decisions
- Safer operations
- Sustainable growth

We invite you to discover how the WILAS TITAN Suite can unlock the full potential of your operations.

CONTACT US