

INDOOR TRACKING

EBOOK



PURPOSE OF THIS EBOOK

This eBook is created to **show how Indoor Tracking Software adds real value** to your operations. It explains how the software helps track people and assets inside large buildings like hospitals, airports, warehouses, and more.

It also aims to **help system integrators** understand how they can add this feature to their client solutions. You'll find easy-to-follow examples and simple details that make it easier to explain and use this software.



The eBook shares **real-world use cases** to show how different industries are already using indoor tracking to solve common problems — like delays, crowding, and lost equipment.

You'll also see **data-backed results** that prove how this tool improves performance, safety, and productivity.

Finally, it's made to support **easy integration** — helping you offer this as a new service, add more value for your clients, and grow your business.

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INTRODUCTION

“ Many businesses today struggle to track people and equipment once they enter a building. GPS doesn't work indoors, and manual tracking takes too much time.

Indoor tracking software solves this problem. It uses technologies like BLE and Wi-Fi to show where things and people are in real-time on a map. Whether it's a lost trolley, a staff member in a large hospital, or tools in a warehouse, this solution gives you full visibility inside your space

”

With indoor tracking, businesses can:

- Avoid delays
- Save time
- Improve safety
- Manage everything better





CHALLENGES IN INDOOR TRACKING





1

No GPS signal indoors

GPS doesn't work inside buildings, so you can't track people or assets using regular outdoor methods.

2

Assets get lost or misplaced

Trolleys, tools, and machines are often left in the wrong place, causing delays and confusion.

3

Manual searches waste time

Staff spend a lot of time walking around looking for equipment or people, slowing down operations.

4

No visibility across multiple floors or zones

It's hard to monitor where assets or staff are in large or multi-floor buildings without a tracking system.

5

Crowded areas go unnoticed

Without live data, you can't tell when a space is getting too crowded or blocked.

6

Unauthorized movement or access

People or equipment may enter restricted zones without alerting anyone, risking safety and compliance.



SOLUTION THROUGH FEATURE



To improve visibility, safety, and efficiency inside buildings, our indoor tracking software offers a smart way to monitor people and assets in real time. With advanced features like live location, smart alerts, indoor navigation, and heatmaps, businesses can easily manage operations across multiple floors and zones.

Whether it's helping someone find their way in a hospital or tracking tool usage inside a warehouse, our software is built to meet real-world needs with speed and simplicity.

This section explores each powerful feature in detail, showing how our solution makes indoor operations more accurate, safe, and efficient.



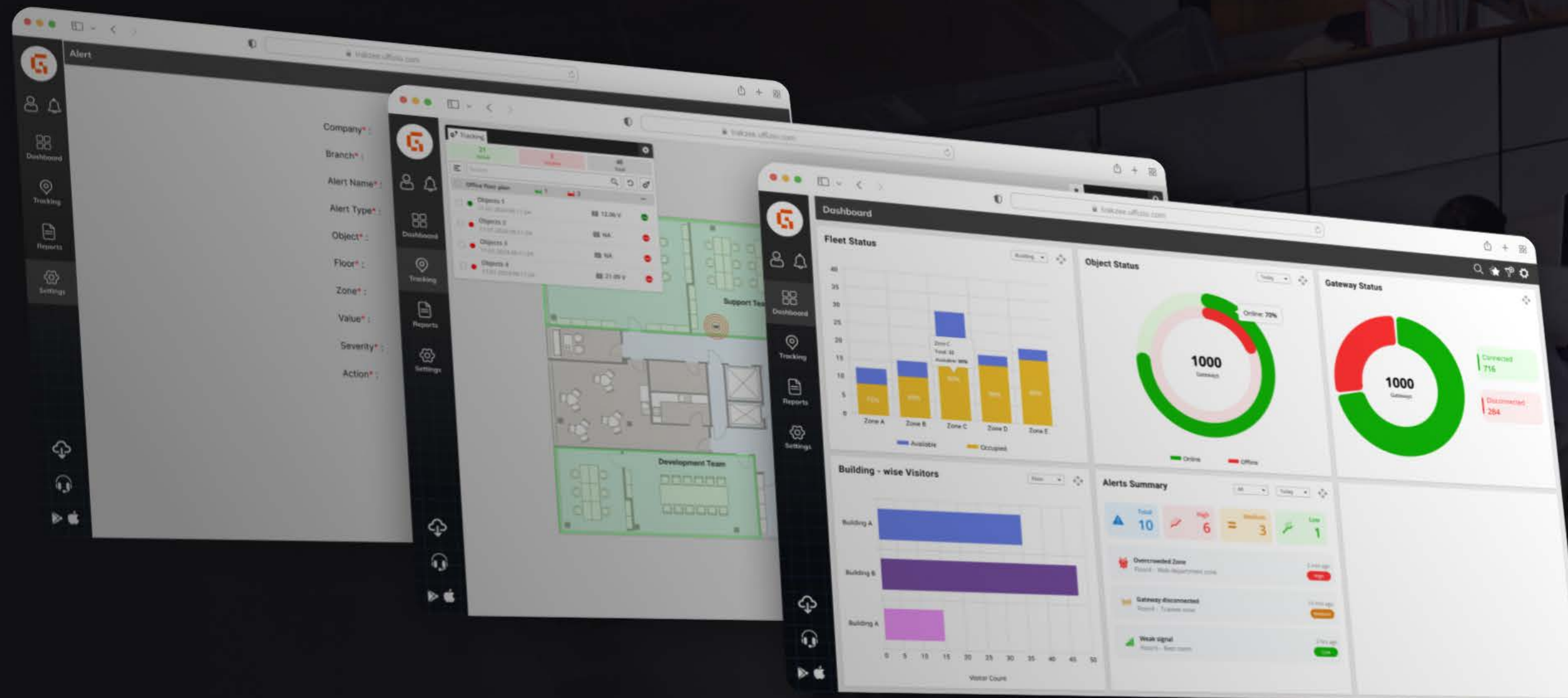
Live location



Geofencing & Alerts

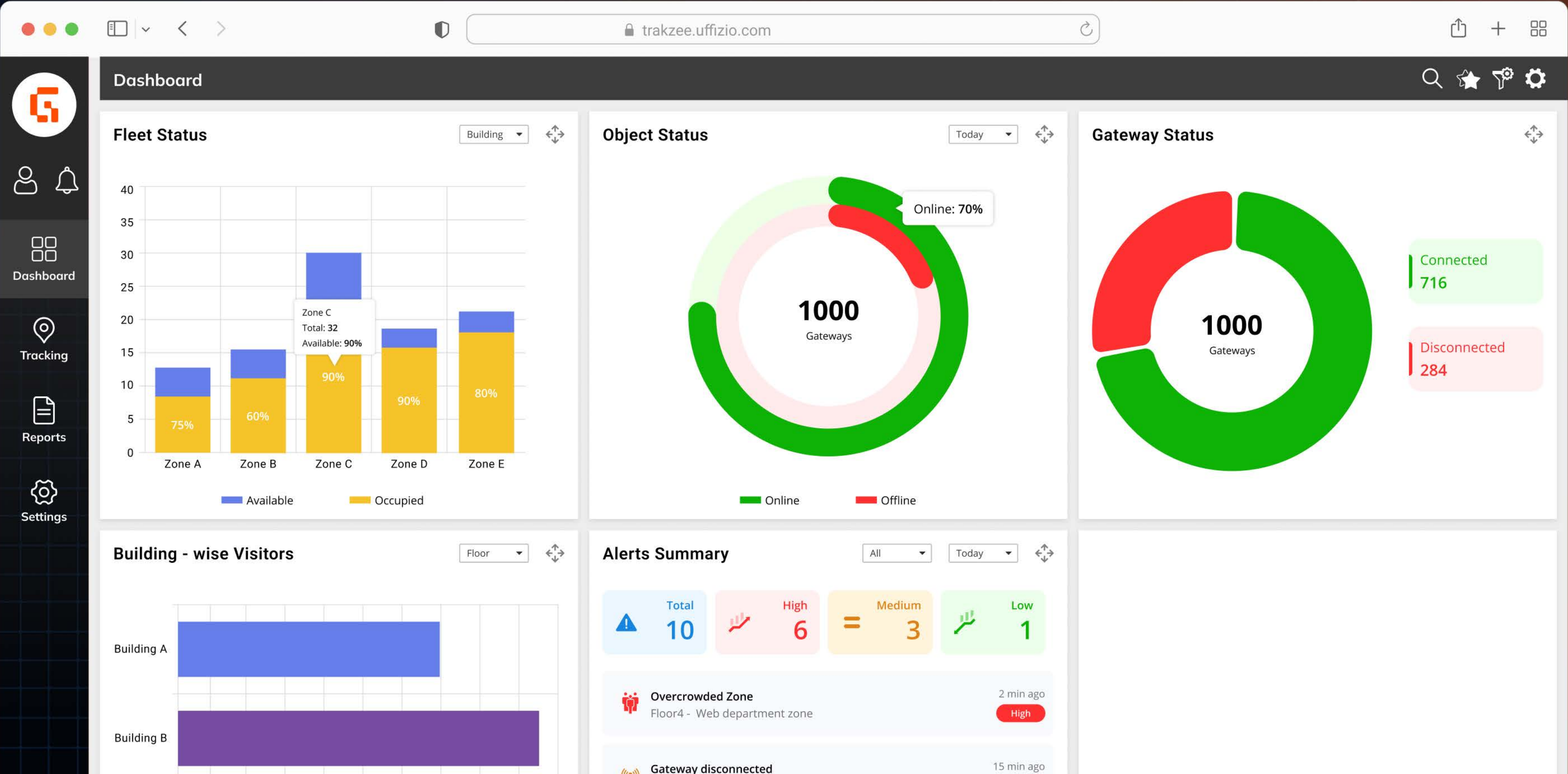


Heatmaps



DASHBOARD

Stay in control with real-time insights from a single screen. The dashboard provides a quick overview of everything happening across your facility. This helps managers take fast, informed decisions without digging through multiple reports.



KEY INSIGHTS

1

Zone-wise availability

See which areas are occupied vs. available in real time, helping manage floor traffic better.

2

Object status summary

Monitor all tracked items — online, offline, or in warning state — at a glance.

3

Gateway connectivity

Keep track of total gateways and check how many are currently connected or disconnected.

4

Visitor count by building

Know how many people are in each building or floor at any given moment.

5

Live alerts panel

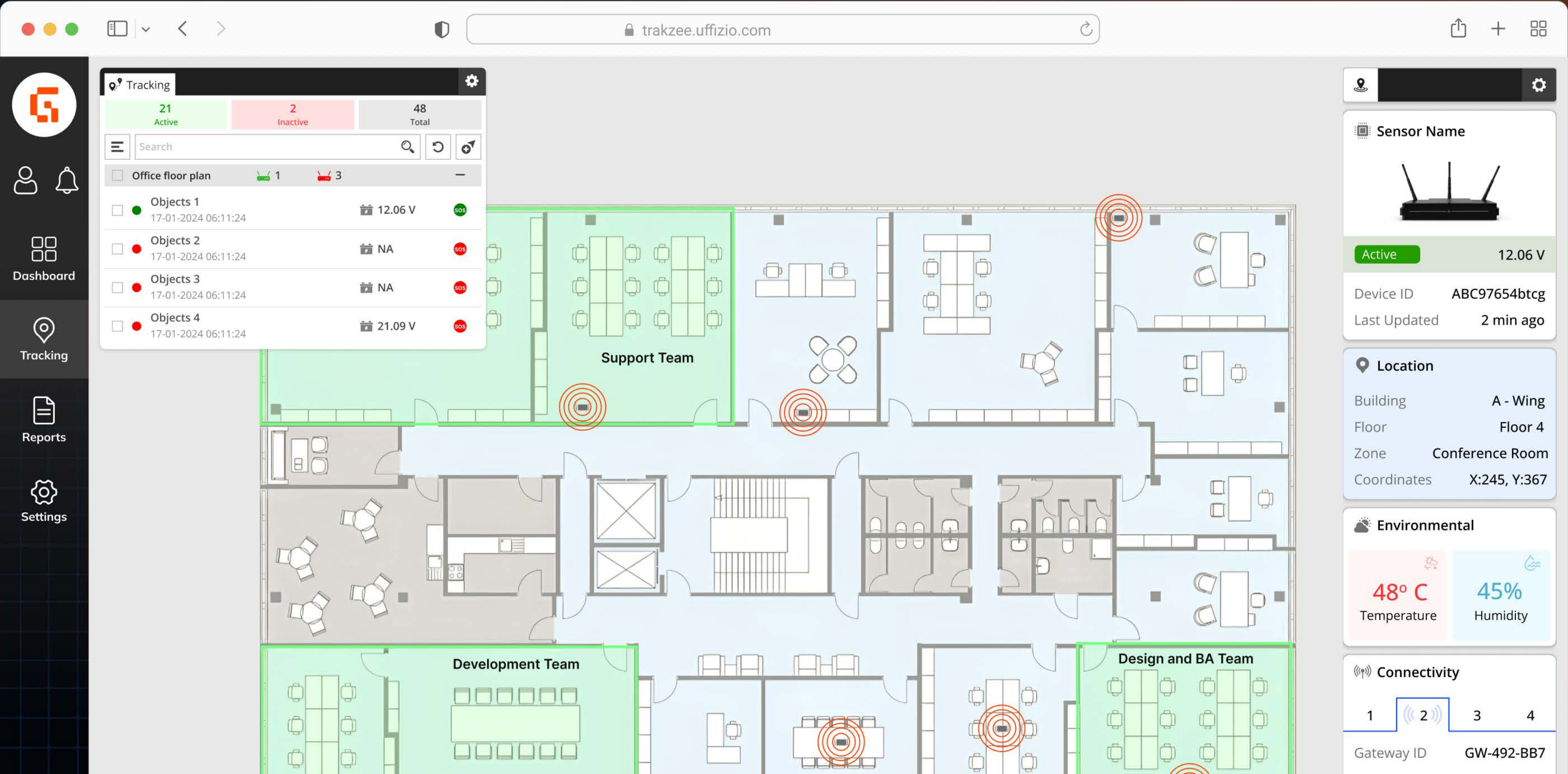
View alerts by severity (high, medium, low) for issues like overcrowding, disconnection, or weak signal.

BENEFIT

Gain complete operational visibility from a single screen — making it easier to monitor, respond, and scale

LIVE TRACKING

The Live Location Tracking feature gives you a clear, real-time view of everyone and everything moving inside your facility. From staff members to assets and devices, everything is tracked on a digital floor plan with pinpoints and live coordinates.



KEY INSIGHTS

1

Customizable pin colors

Managers can set pin colors based on their own criteria, making it easy to identify people or assets at a glance.

2

Live status panel

Lists all tracked objects with their location, status (active/inactive), and last updated time

3

Interactive floor plan

Lets you view team zones, restricted areas, and exact positions

4

Sensor details

All sensor details like battery, signal, temperature, humidity are shown for each tracked object

5

Heatmap

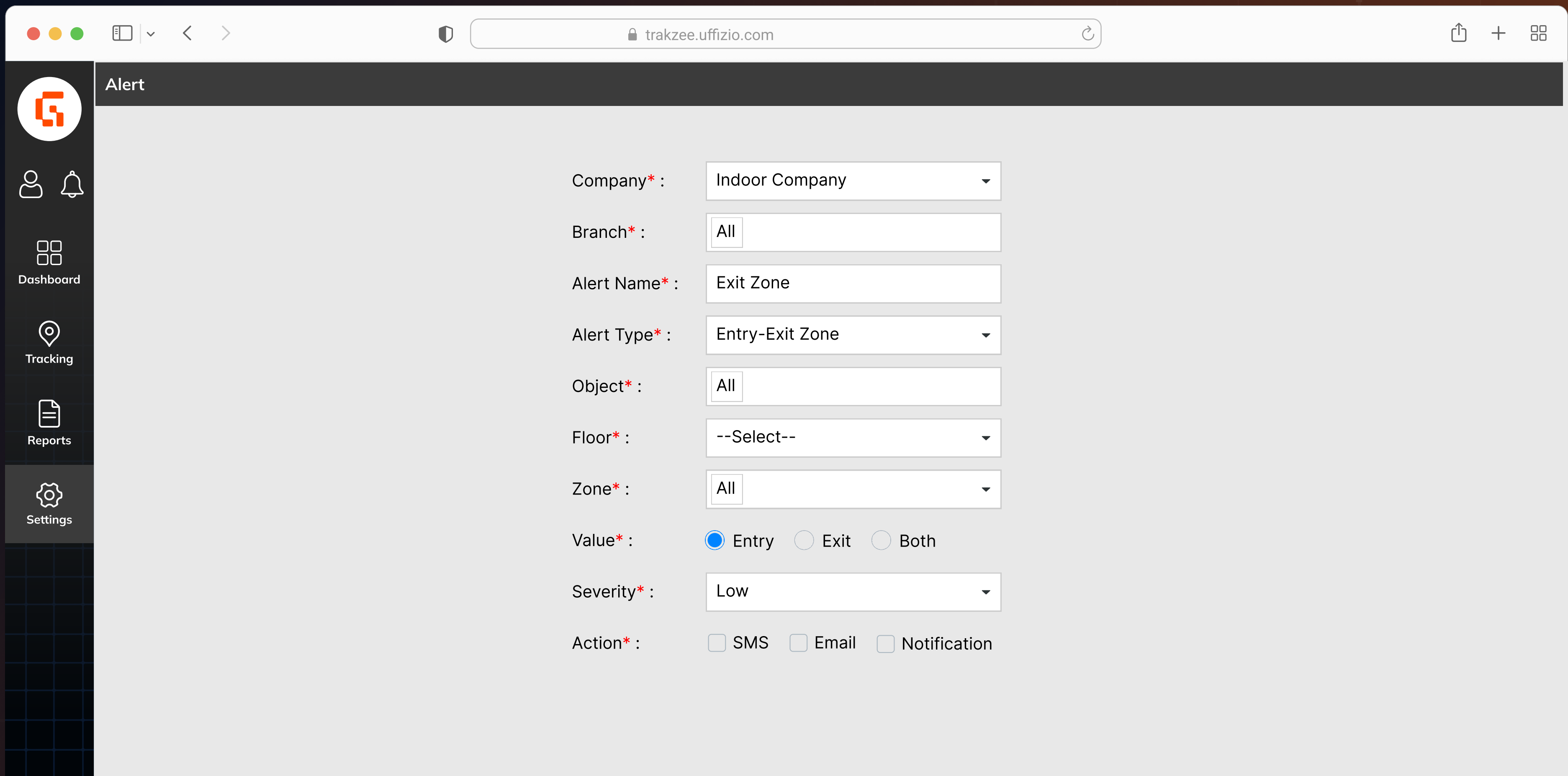
Visualize areas with the highest activity levels for both people and objects. This helps optimize space usage or asset management efficiently

BENEFIT

Gain instant visibility into staff and asset locations for better coordination and faster on-ground actions.

CRITICAL ALERT NOTIFICATIONS

The system sends instant alerts to help and respond faster, avoid risks, and improve operational control. Whether it's a movement, a signal drop, or a critical device issue, you're always in the know.



The screenshot displays the 'Alert' configuration page in the Trakzee Uffizio web application. The browser's address bar shows the URL 'trakzee.uffizio.com'. The left sidebar contains navigation icons for Dashboard, Tracking, Reports, and Settings, with the Settings icon currently selected. The main content area is titled 'Alert' and contains the following configuration fields:

- Company***: Indoor Company (dropdown menu)
- Branch***: All (text input)
- Alert Name***: Exit Zone (text input)
- Alert Type***: Entry-Exit Zone (dropdown menu)
- Object***: All (text input)
- Floor***: --Select-- (dropdown menu)
- Zone***: All (dropdown menu)
- Value***: ☒ Entry ☐ Exit ☐ Both (radio buttons)
- Severity***: Low (dropdown menu)
- Action***: ☐ SMS ☐ Email ☐ Notification (checkboxes)

KEY INSIGHTS

1

Zone in / Zone out alert

Get notified when a person or asset enters or exits a defined zone.

2

Gateway active / Inactive alert

Know immediately if a gateway goes offline or comes back online.

3

Overcrowded zone alert

Be alerted when a specific area exceeds safe or predefined capacity limits.

4

Low battery alert

Get early warnings when a tracking device's battery runs low.

5

Weak signal alert

Identify devices with poor connectivity for quick troubleshooting.

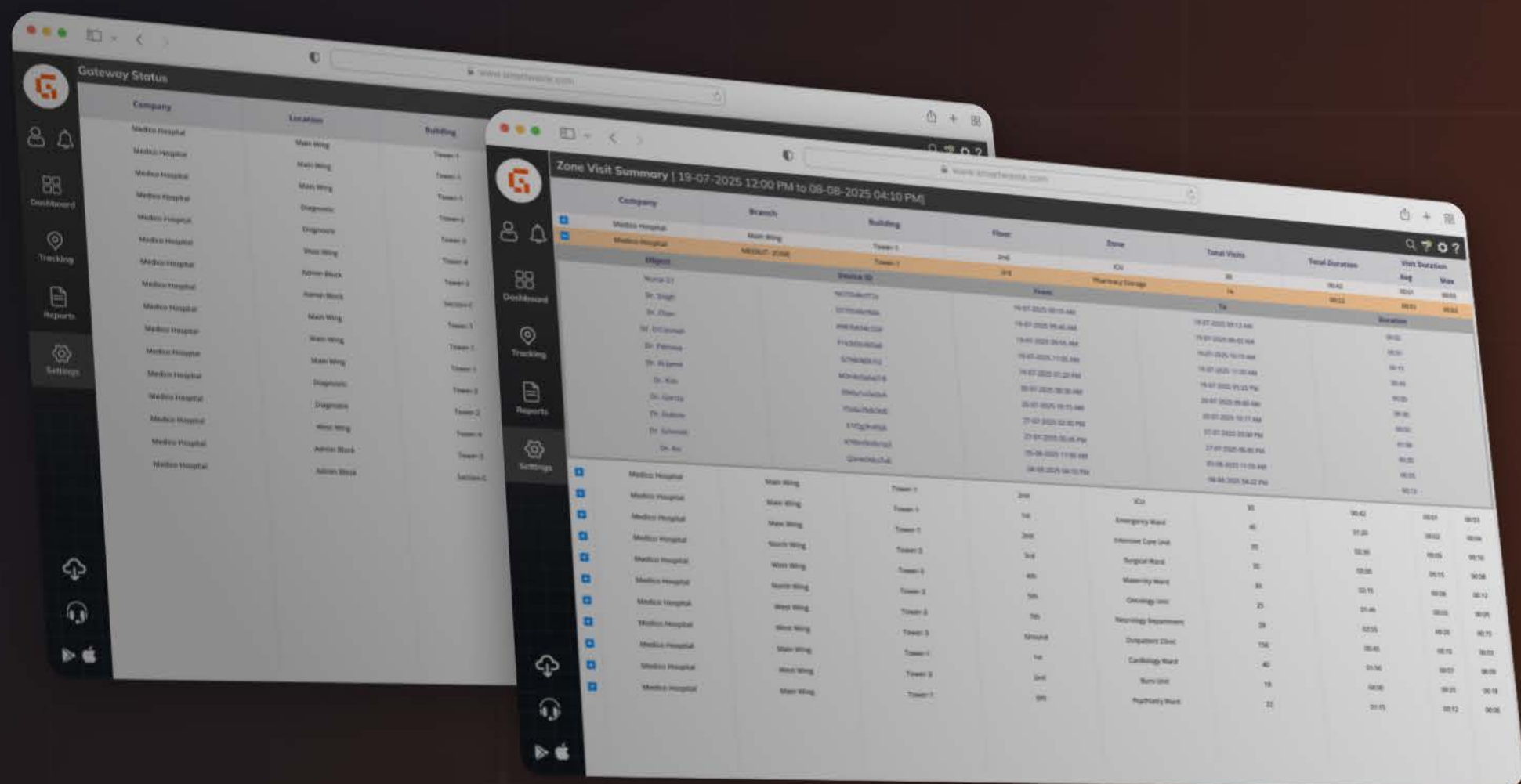
BENEFIT

Supports safety and compliance monitoring.



DETAILED REPORTS





GATEWAY STATUS REPORT

Track the connectivity and health of every gateway in your network. This report helps you monitor the status of all installed gateways across companies, buildings, floors, and zones so you always know if the system is performing as expected.

[illegible]

KEY INSIGHTS

1

Company and location

Know exactly where each gateway is deployed.

2

Building and floor mapping

See which gateways belong to which part of your facility.

3

Gateway ID reference

Unique IDs make it easy to identify or replace any specific gateway.

4

Last update time

Shows the most recent data received, helping spot outdated or inactive devices.

5

Status monitoring

Instantly see if a gateway is online, disconnected, or facing issues.

BENEFIT

Ensures uninterrupted data flow across the tracking network

ZONE VISIT SUMMARY REPORT

Track where each person or asset has been and for how long. This report gives you a summary of how many times a zone was visited, by whom, and for how long. It's helpful for analyzing movement patterns within your facility.

[illegible]

KEY INSIGHTS

1

Company and branch

Filter data based on organization or specific branch.

2

Building, floor & zone

Know exactly where the visit occurred.

3

Object movement

Identify which person or item entered and exited the zone.

4

Visit count

Number of times a zone was accessed by a specific object.

5

Visit duration

Average and maximum time spent in each zone.

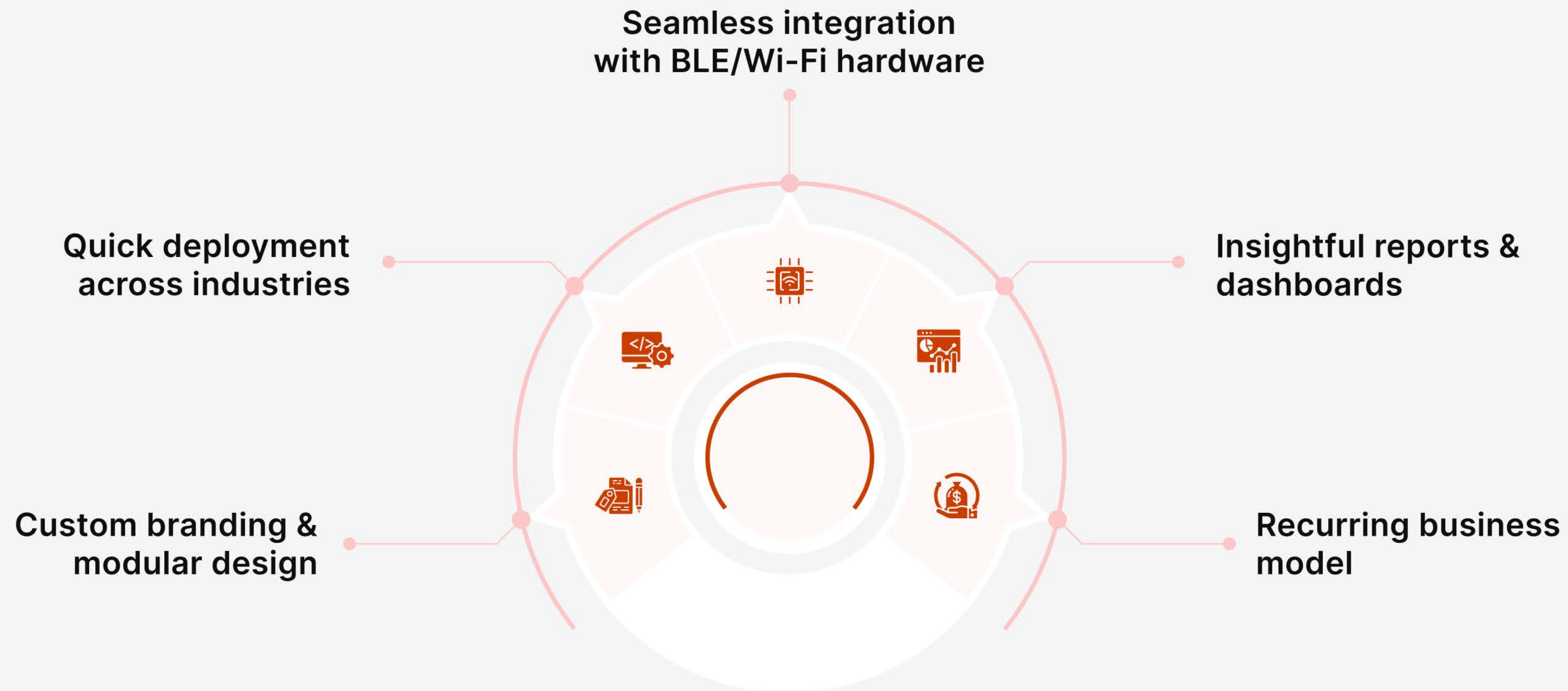
BENEFIT

Useful for security audits and zone-level access tracking

KEY REASONS TO INVEST

WHY SYSTEM INTEGRATORS TRUST OUR INDOOR TRACKING SOFTWARE

System integrators choose our platform because it's scalable, hardware-agnostic, and ready for real-world deployment across industries. Here's what sets it apart:



USECASES ACROSS INDUSTRIES

A white, hand-drawn style underline consisting of two parallel, slightly wavy lines.



Airport operations



Health care facilities



Manufacturing plants



Warehouse operations



Mall operations



AIRPORT OPERATIONS



CHALLENGES

→ **Baggage gets delayed or lost**

Causes frustration for passengers and increases airport costs.

→ **Staff waste time finding tools or vehicles**

This slows down work and creates flight delays.

→ **Important equipment gets misplaced**

Leads to buying extra items that aren't needed.

→ **Long queues and crowding**

Passengers face delays and bad experiences at security and boarding gates.



SOLUTIONS

→ Track baggage in real time

Helps airport staff know exactly where each bag is and prevents it from getting lost.

→ Give directions to staff inside the airport

Makes it easier for them to find tools, gates, and other team members faster.

→ Monitor equipment and vehicles live

Keeps track of high-value tools so they don't go missing or sit idle.

→ Use heatmaps to see crowded areas

Shows which places are too busy so staff can be moved to help manage the crowd.

→ Set safety zones with alerts

Sends notifications if someone or something enters a restricted area.



RESULT



1

Faster baggage handling

Approx 87% fewer issues with lost or delayed bags.

2

Better staff performance

Work gets done faster, and fewer delays happen.

3

Shorter queues and happier passengers

Crowds are handled better, and boarding is smoother.

5



HEALTH CARE FACILITIES

CHALLENGES

→ **Lost or misplaced equipment**

High-value items like syringe pumps or ECG machines go missing, delaying treatment and increasing costs.

→ **Security risks in infant care**

Babies can be moved out of protected zones without alerts, creating serious safety and legal risks.

→ **Time wasted by staff**

Nurses and doctors spend too much time searching for equipment or rooms instead of focusing on patients.

→ **Missed cleanings in critical zones**

ICU and patient rooms may be skipped or delayed, affecting hygiene and compliance.

→ **Patients can't raise emergency alerts independently**

Without a direct panic button or alert option, patients must wait for staff to check on them, delaying response in critical moments.



Where is the
ECG Machine?

SOLUTIONS

→ Live tracking of staff and assets

Shows real-time location of doctors and equipment during emergencies, improving response time.

→ Asset tracking with alerts

Helps locate syringe pumps, ECGs, and other machines instantly; sends alerts if they are moved without permission.

→ Infant safety tags with zone monitoring

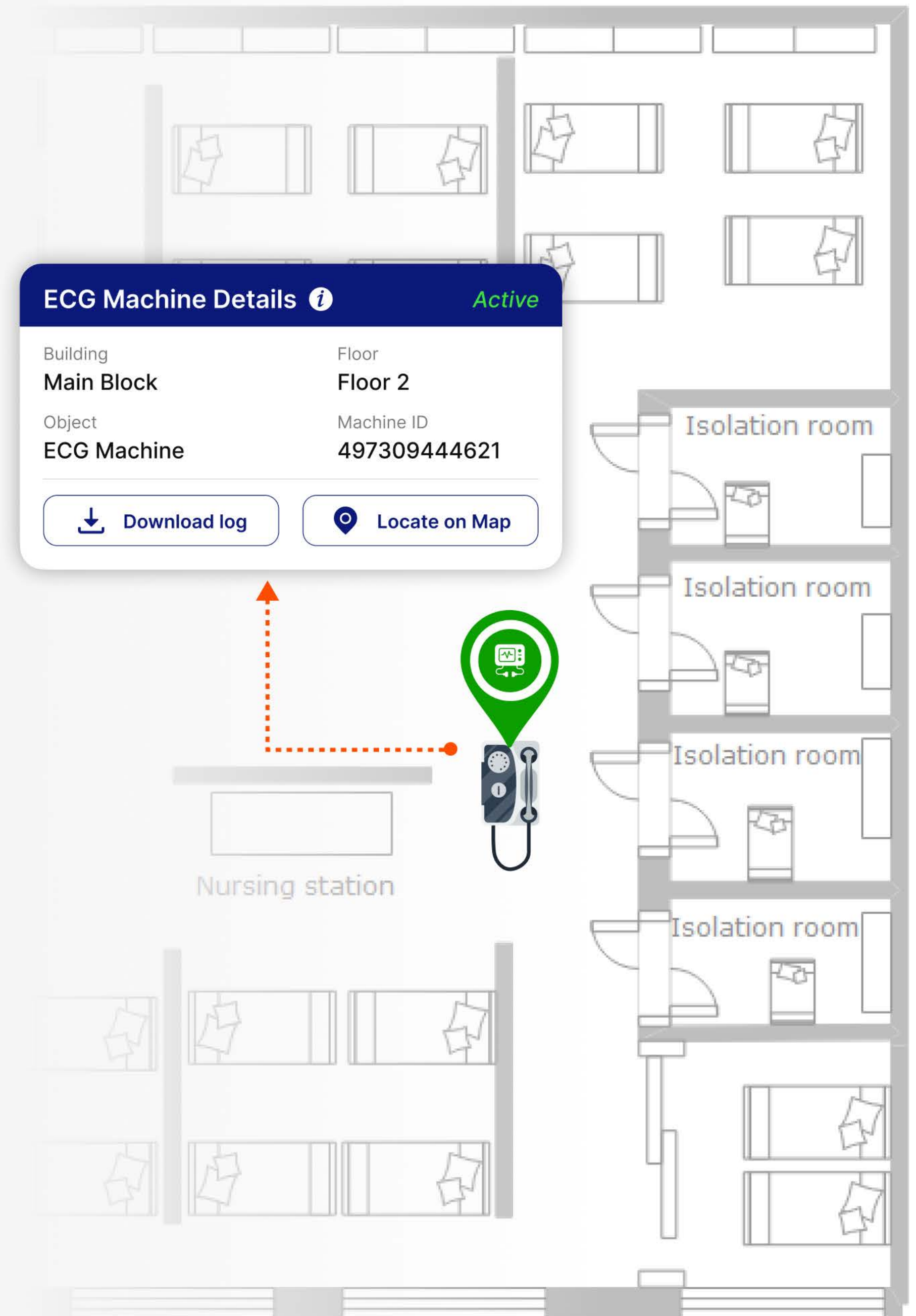
Notifies staff if a baby is taken outside the protected area, preventing unauthorized movement.

→ BLE-based check-ins for cleaning staff

Ensures cleaning is done on time in ICUs and rooms, supporting audit readiness.

→ SOS feature for emergency alerts

Patients can press the SOS button on their device to send an instant alert. The system logs the exact zone and floor from where the SOS was raised, enabling rapid medical response.



RESULT

1

Approx. ₹7 Lakhs/year saved

By avoiding duplicate purchases due to missing assets.

2

Better infant safety

Prevents unauthorized movement and builds parental trust.

3

ROI of 120–250%

Most hospitals break even in less than a year, with pure profit from year two onward.

4

Improved emergency response

SOS alerts help staff act immediately, minimizing critical delays in patient care.



MANUFACTURING PLANTS



CHALLENGES

→ **No visibility during emergencies**

In fire or gas leaks, it's hard to know who is still inside, delaying rescue.

→ **Workers entering unsafe zones**

Leads to injuries, legal risk, and heavy compliance penalties.

→ **Delays in material movement**

Misrouted WIP or raw material causes production delays and rework.

→ **Tools and equipment get misplaced**

Shared items go missing, increasing cost and causing production stalls.

→ **Forklifts and plant vehicles operate unsafely**

Poor tracking leads to accidents and delays.



SOLUTIONS

→ Support emergency evacuation dashboards

Track last known location of each person for faster rescue during emergencies.

→ Set up safety zone alerts for workers

Prevent access to hazardous or restricted zones with real-time alerts.

→ Track raw materials and inventory in real time

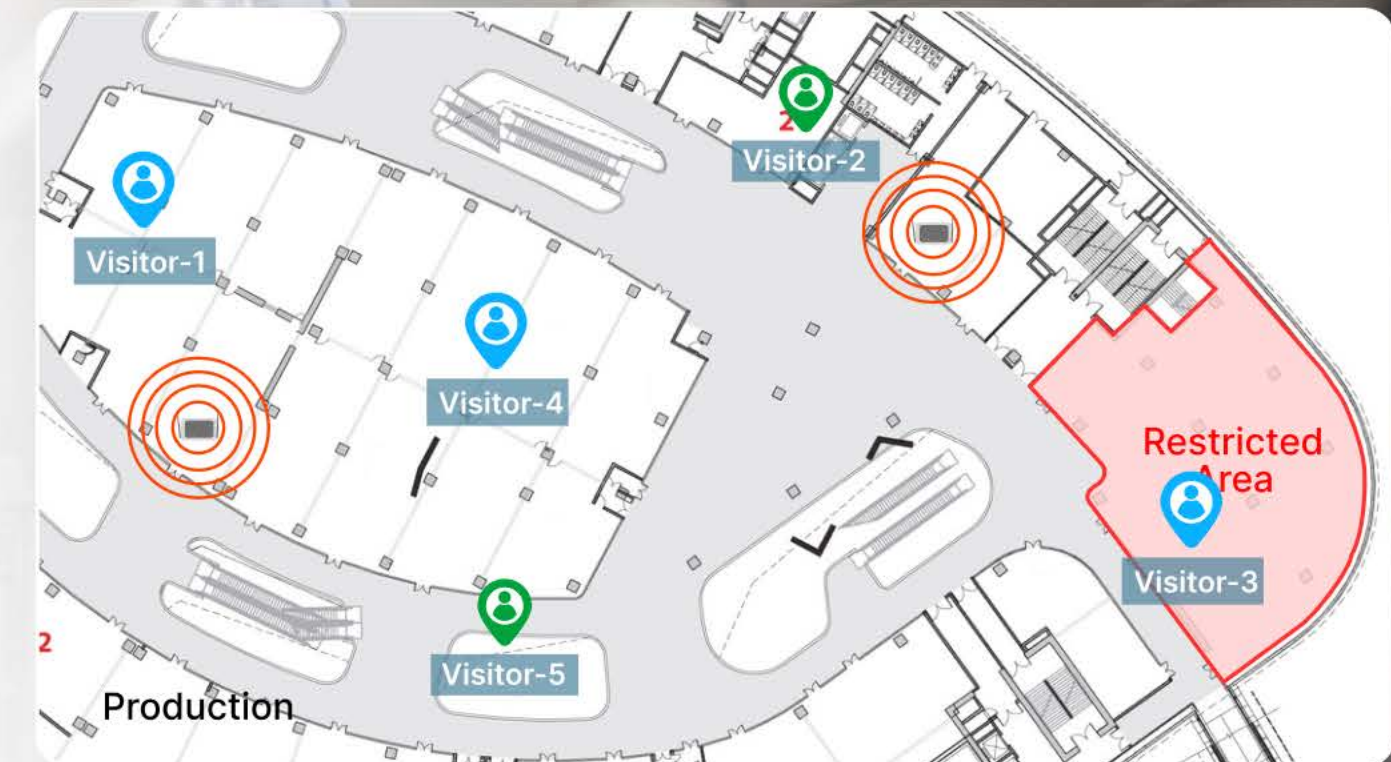
Prevent delays by knowing exactly where semi-finished goods are.

→ Use tags for tools and assets

Track usage and location of high-value equipment to prevent loss or theft.

→ Optimize forklift and vehicle routes

Monitor vehicle movement and ensure safety inside plant premises.



RESULT



1

Approx. ₹25–30 Lakhs/year saved

By improving movement of WIP and raw materials between departments.

2

Higher workplace safety

Entry alerts for restricted areas improved compliance and reduced accidents.

3

Reduced equipment loss

Managers could locate tools instantly. This saved time and avoided unnecessary replacements.



WAREHOUSE OPERATIONS

CHALLENGES

→ **Poor visibility of inventory location**

Items, pallets, etc. often go missing or are stored in the wrong place.

→ **Time wasted in picking and locating items**

Staff spend too much time searching for goods across large zones.

→ **Equipment like trolleys and forklifts go untracked**

Increases downtime and creates delays in order fulfillment.

→ **Unsafe movement of workers or vehicles**

Staff or machines may enter restricted areas, causing safety risks.

→ **No tracking of worker productivity**

Difficult to know how much time is spent on picking, packing, or idle.



SOLUTIONS

→ Live tracking of inventory and pallets

Quickly find items inside the warehouse with location updates.

→ Navigation support for staff

Show shortest paths to items or zones for faster picking.

→ Real-time monitoring of forklifts and trolleys

Track their routes and status to reduce idle time.

→ Geofencing and zone alerts

Prevent entry into high-risk or restricted zones with instant notifications.

→ Worker activity tracking

Monitor time spent on different tasks to optimize shift planning.



Asset Tracking

Real-time monitoring

Active Assets	247
High-Value Items	18
Utilization Rate	87%

RESULT



1

Faster order processing

Picking speed improves, reducing time to pack and ship.

2

Reduced search time

Workers spend less time finding misplaced items.

3

Better asset usage

Trolleys and forklifts are used efficiently, with fewer delays.

Improved safety

Accidents reduce due to alerts and restricted zone monitoring.



MALL OPERATIONS



CHALLENGES

→ **Emergency response is delayed**

No visibility of crowd movement or staff during incidents.

→ **Overcrowding in certain areas**

Food courts, washrooms, and exits get packed during peak hours.

→ **Low visibility of cleaner and staff movement**

Some areas are missed or not cleaned frequently enough.

→ **Lack of footfall data for tenants**

Store owners have no idea how much traffic they receive.

→ **Inconsistent guest service**

Staff availability and direction assistance vary by location or shift.



SOLUTIONS

→ Real-time location tracking of staff and visitors

Helps security and management know what's happening across the mall.

→ Heatmaps to monitor crowd density

Identify busy areas to optimize layout and manage flow.

→ Tracking and scheduling of cleaning staff

Ensure all zones are cleaned as per routine with zone check-ins.

→ Footfall analytics for stores


Share zone-wise traffic reports with retailers for better sales planning.


→ Staff movement tracking


Improve customer service by ensuring team presence in help desks, entrances, or activity zones.

Crowd Density Alerts

All ▾ Today ▾

 **High crowd density in Electronics section** 2 min ago
Electronics High

 **Checkout queue exceeding capacity** 5 min ago
Entrance Medium

 **Food court reaching maximum occupancy** 8 min ago
Food Court Low

RESULT



1

Improved safety

Real-time tracking supports faster evacuation and emergency response.

2

Optimized layout planning

Heatmaps help in redesigning traffic-heavy or underused areas.

3

Cleaner and more maintained spaces

Staff accountability improves through movement logs.

4

More valuable data for tenants

Store owners gain real insights into customer traffic and patterns.

KEY TAKEAWAYS FROM INDOOR TRACKING SOFTWARE

Here's what you've learned about Indoor Tracking and how it transforms indoor operations:

- ✔ Enables real-time tracking of people and assets across zones, floors, and buildings to improve visibility and control.
- ✔ Sends automated alerts for zone entry/exit, device status, overcrowding, and emergencies like SOS requests
- ✔ Provides seamless location-based insights to enhance safety, monitor behavior, and reduce operational risks
- ✔ Supports industries like hospitals, warehouses, malls, and airports with flexible, scalable deployment.
- ✔ Offers rich data through visit reports, zone history, and alert logs to support audits and decision-making
- ✔ Helps system integrators expand their portfolio with a white-label-ready solution that adds measurable client value.

Notes

uffizio➤

www.uffizio.com