

INTRODUCING BLYOTT

# Navigating the Future of Healthcare Efficiency

COMPANY PRESENTATION - Q4/2024



# Introduction to Blyott

## Revolutionising Asset Tracking

- **Founded in 2019:** Innovating and growing in healthcare asset tracking.
- **Focus Areas:** Hospitals, elderly care, pharma, and medical devices.
- **Location-Based Services:** Pioneering solutions to enhance operational efficiency in healthcare.
- **Bluetooth Innovators:** Launched the world's smallest and thinnest active BLE tags.
- **Sustainability & Cost:** Advancing eco-friendly practices and cost-effective technology.





# From internal challenges ...



## Searching for assets

The constant struggle of not knowing where assets are, leading to delays, inefficiencies, and increased operational costs.



## Loss and theft

With no asset data at hand, organisations don't know what's missing—even stolen, leading to waste and shorter asset lifespans.



## Utilisation of assets

Inadequate insights into asset conditions and usage, making it challenging to ensure optimal asset utilisation and longevity.



## Workflow optimisation

Overburdened staff, unclear workflows, and lack of immediate insights, all contributing to decreased productivity and well-being.



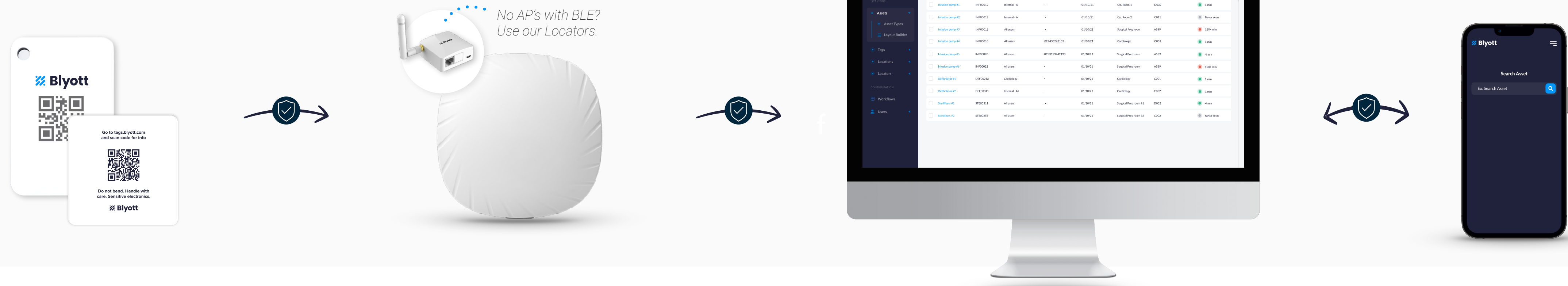
# ... to global concerns

- **Aging Population:**
  - Rising costs and aging populations are putting additional stress on healthcare systems that need to adapt to the growing demand for medical services.
- **Staffing Shortages:**
  - With a projected shortfall of 18 million healthcare workers by 2030, there is a critical challenge in maintaining an adequate workforce to deliver healthcare services.
- **Waste Management:**
  - An astonishing \$33 billion worth of hospital inventory is discarded worldwide each year due to product expiry. This highlights inefficiencies in inventory management.
- **Environmental Impact:**
  - The healthcare sector has a significant climate footprint, equivalent to 4.4% of global net emissions. This suggests a need for to adopt more sustainable practices and reduce its carbon footprint.





# The Blyott solution: four components



## 1 Bluetooth Sensors

Fixed on assets. Location, temperature, movement. Many types, long battery life.

## 2 Wi-Fi AP's with Bluetooth

Receive Bluetooth sensor information. Wi-Fi AP's, fixed & mobile (4G) locators.

## 3 Remote Insights Platform

Serverless & scalable architecture. Insightful Big Data analytics and AI.

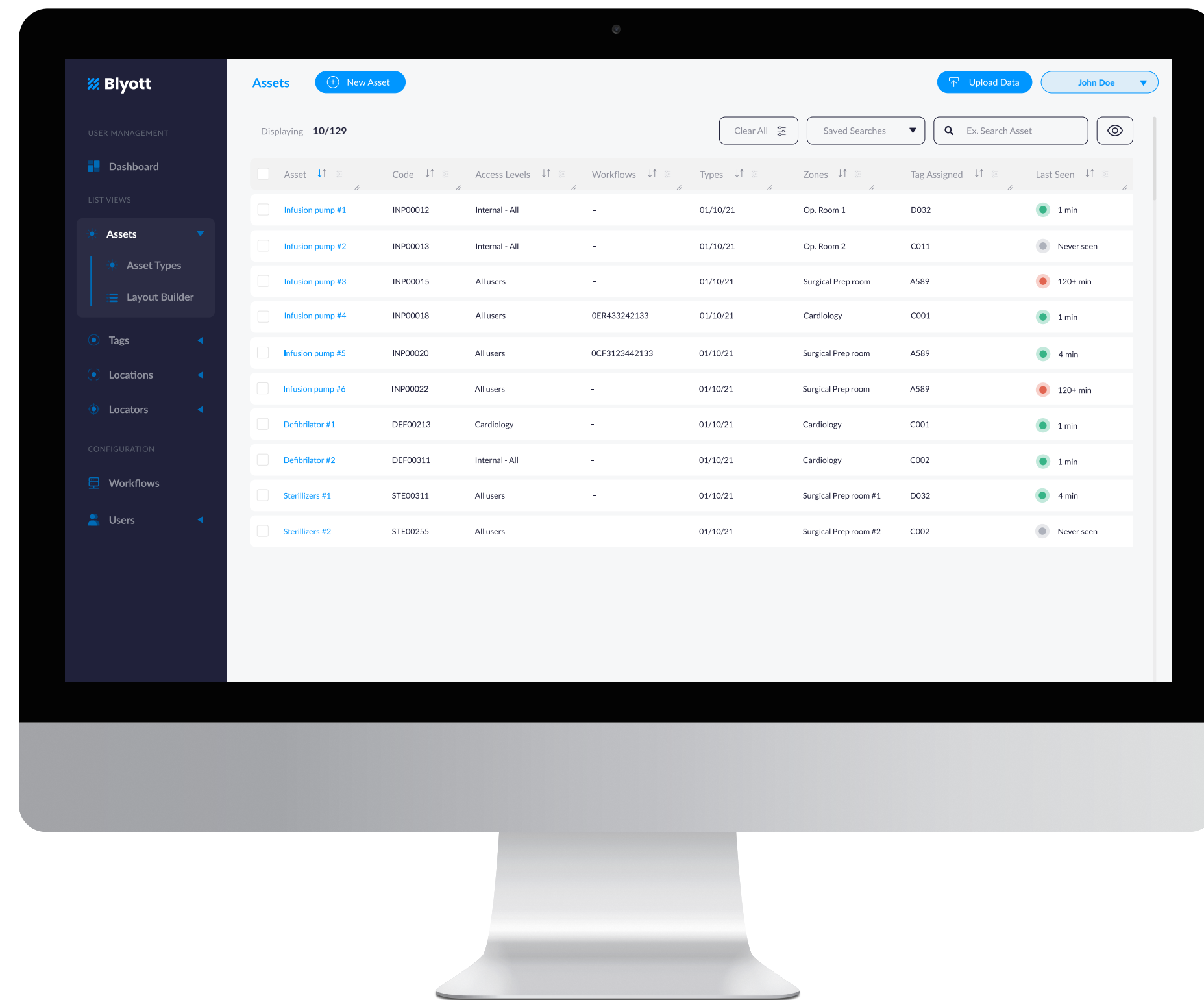
## 4 Customer Applications

Blyott web and mobile app. Support for 3rd party apps using Rest API's and webhooks.





# Remote Insights Platform



- ✓ Real-time and historical asset tracking, with comprehensive monitoring and alert capabilities.
- ✓ REST APIs, webhooks and MQTT for seamless integration with other applications and services.
- ✓ Scalable SaaS solution, accessible via both web platforms and mobile apps on Android & iOS.



# Analytics module

## The real power of asset tracking is Big Location Data

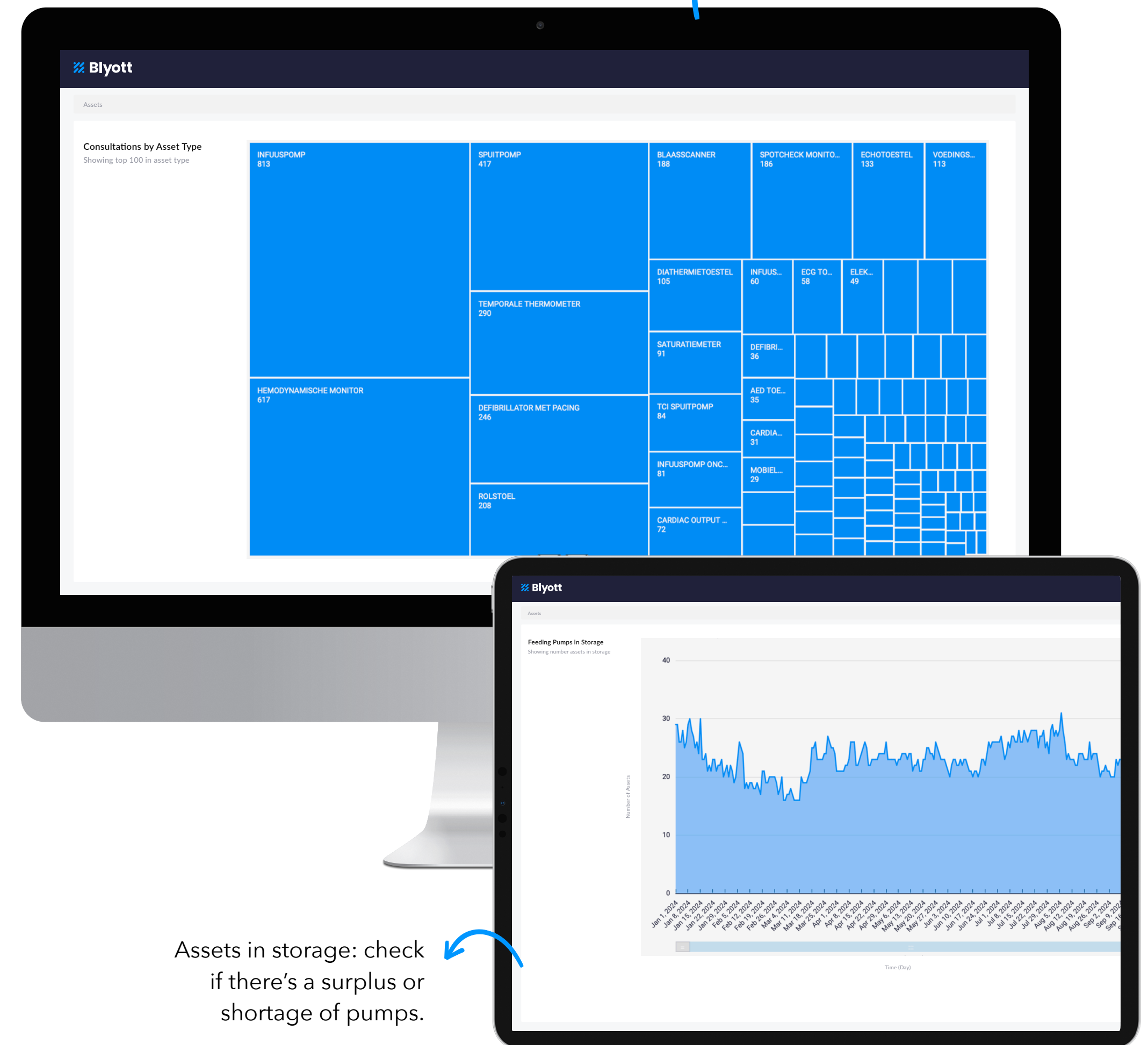
The true power of asset tracking lies in “Big Location Data”. Blyott’s Remote Insight Platform offers real-time location tracking, along with detailed insights into asset usage and operational patterns over time.

Users can access this data via standard or customisable dashboards, or download it for use in tools like Power BI.

### Partnership with amazon QuickSight

AWS QuickSight and Blyott’s Remote Insights Platform combine to deliver powerful, real-time insights on asset tracking and patient flow, driving smarter decisions and boosting operational efficiency.

Shows the number of times asset data has been consulted per type of asset.



Assets in storage: check if there's a surplus or shortage of pumps.



# Main advantages



1

## Fast to implement

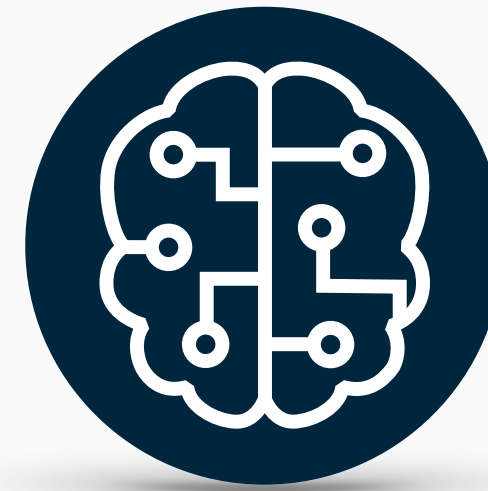
Connect directly to existing Wi-Fi access points with built-in BLE infrastructure.



2

## Open platform

Get support for 3rd party apps using REST APIs and webhooks, regardless of OS.



3

## Analytics module

Big Location Data and AI give you extremely valuable insights into e.g. asset utilisation.



4

## Attractive pricing model

Enjoy a “pay-as-you-grow” business model with limited upfront costs.



# “Big Savings, Happy Staff

“Our research showed that each of our 67 FTEs spent 15 minutes to half an hour daily looking for assets. Out of 3,800 FTEs, that may not seem like much, but the point is that our nursing staff were not carrying out their core tasks: caring for patients. This was happening in a labor market with a shortage of nursing staff, making recruiting people to make up for the lost time much more difficult. It’s essential to limit the time lost as much as possible so that our existing staff can spend their days more effectively.”

**Martin Meijerink, Director, Maatschap MMS (Maasstad Medical Specialists - healthcare reference)**



# ... and a greener planet

## How Blyott can assist in furthering ESG goals, sustainability initiatives, and circular economy practices?



### **Waste minimisation**

Optimal asset utilisation to reduce discard rates and environmental impact.



### **Supply chain excellence**

Enhance efficiency, cut transport emissions, and boost environmental performance.



### **Transparent governance**

Real-time analytics for better oversight and risk management. Report on ESG and sustainability goals.



### **Environmental monitoring**

Ensure product quality with cold chain management and conditions tracking.



### **Circular economy champion**

Analyse asset usage for effective end-of-life planning - recycle, refurbish, repurpose.



### **Smart building pioneer**

Harness sensors to create energy-efficient, sustainable spaces.



# Customer stories

*Courtesy of AZ Maria Middelaes*

## Blyott's comprehensive impact in healthcare

In just a few weeks, a major hospital integrated Blyott, leveraging its existing Wi-Fi + BLE infrastructure.



### Real-time overview of assets

Real-time insights reveal the precise location of assets, e.g. beds, pumps, and monitor temperature-critical environments like pharmacy fridges to ensure medication efficacy.



### Improve efficiencies

It's more than tracking: with indoor localisation and Big Data analytics, the hospital understands flows, solves bottlenecks, and improves its operational efficiency.



### Cost savings

Gain precise insights into asset utilisation and location, allowing for more accurate inventory planning. Reduce the need for safety margins and excess assets, leading to significant cost savings.





MORE ABOUT BLYOTT

# Additional information



# Blyott works with Location IDs

## Why Blyott uses Location IDs instead of Maps

Finding crucial pieces of equipment should be easy. Blyott's platform is all about that: no complicated maps, no getting lost in details. Just the location ID. Straight to the point. Optionally, integration with 3rd party mapping software is possible through REST APIs, webhooks, and MQTT.



### Always up to date

No need to update any maps of your premises. Room numbers stay consistent.

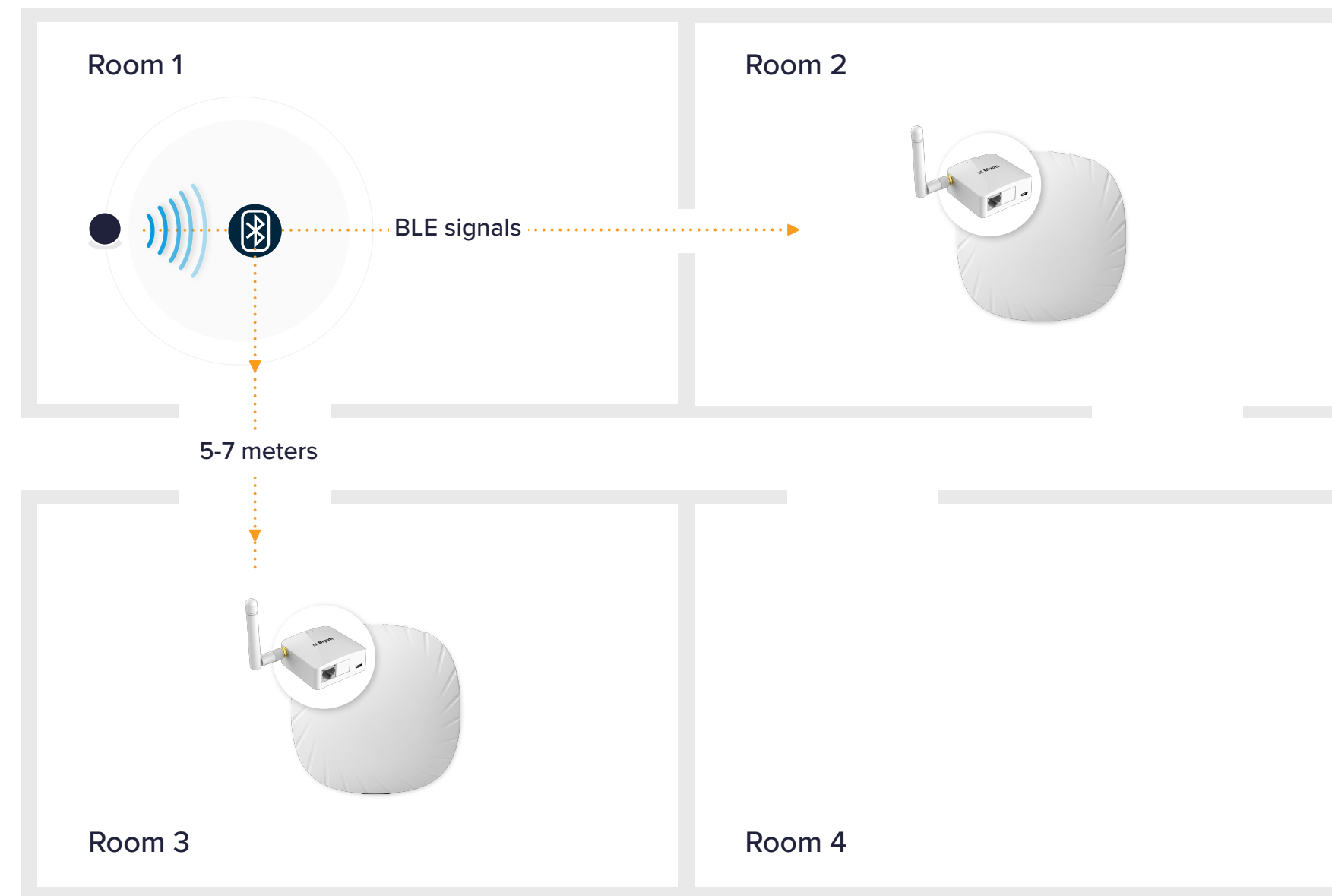


### Direct information

Just a room number, no map-reading skills required, making it super simple to locate assets.

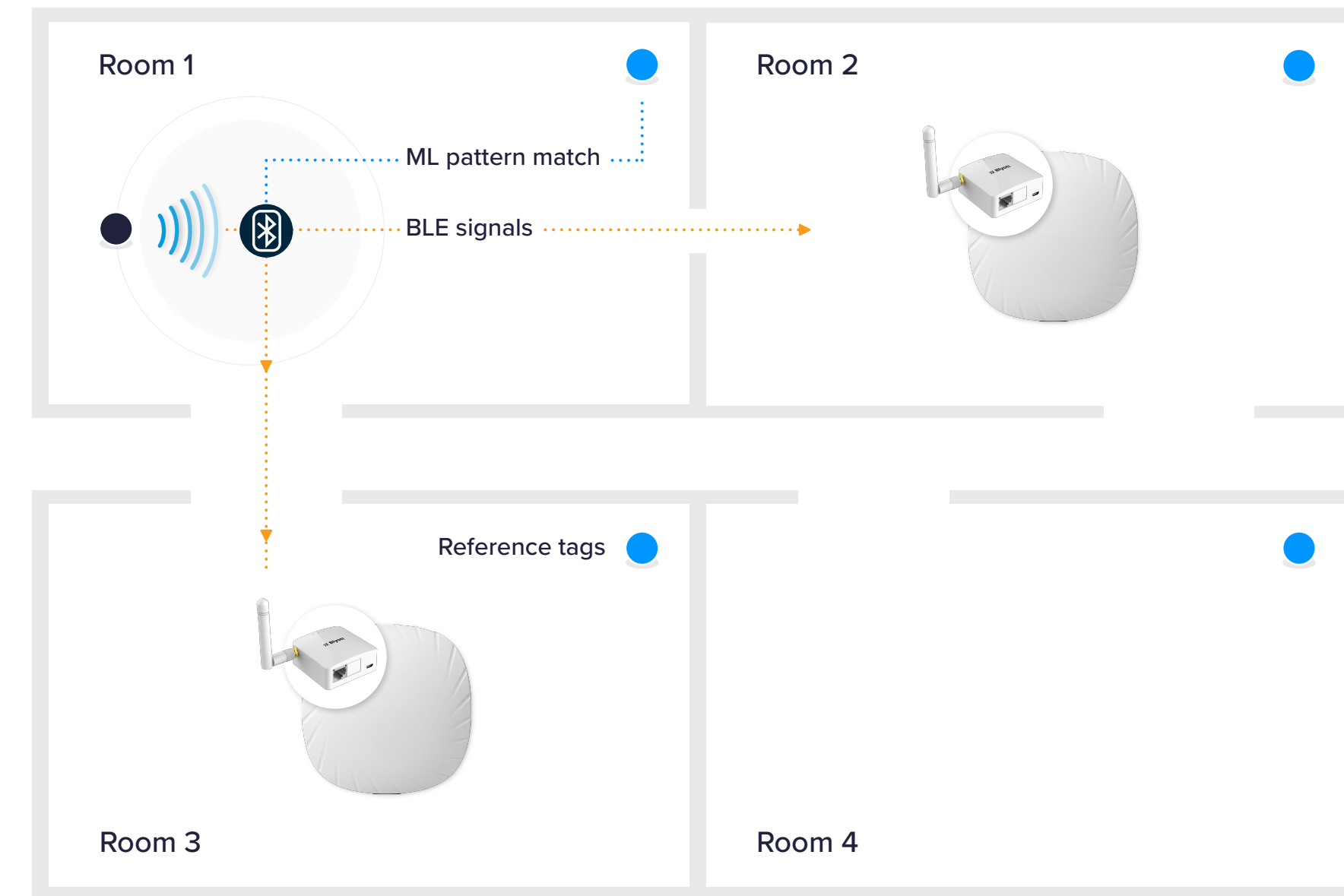
Asset	Code	Access Levels	Workflows	Types	Zones	Tag Assigned	Last Seen
Infusion pump #1	INP00012	Internal - All	-	01/10/21	Op. Room 1	D032	1 min
Infusion pump #2	INP00013	Internal - All	-	01/10/21	Op. Room 2	C011	Never seen
Infusion pump #3	INP00015	All users	-	01/10/21	Surgical Prep room	A589	120+ min
Infusion pump #4	INP00018	All users	0ER433242133	01/10/21	Cardiology	C001	1 min
Infusion pump #5	INP00020	All users	0CF3123442133	01/10/21	Surgical Prep room	A589	4 min
Infusion pump #6	INP00022	All users	-	01/10/21	Surgical Prep room	A589	120+ min
Defibrillator #1	DEF00213	Cardiology	-	01/10/21	Cardiology	C001	1 min
Defibrillator #2	DEF00311	Internal - All	-	01/10/21	Cardiology	C002	1 min
Sterilizers #1	STE00311	All users	-	01/10/21	Surgical Prep room #1	D032	4 min
Sterilizers #2	STE00255	All users	-	01/10/21	Surgical Prep room #2	C002	Never seen

# Our ML<sup>(\*)</sup> prediction engine improves accuracy



## Standard location accuracy

The system displays Room 3 as the tag location because it has a higher signal strength (RSSI) due to the BLE locator in Room 3. Location accuracy is dependant on the m2 per BLE locator; e.g. 1 BLE locator per 100m2 translates into an accuracy of 5m-7m.



## Location accuracy with Machine Learning

Next to the two BLE locators in Room 2 and Room 3, each room has also been equipped with a reference tag. The system will now display Room 1 as the tag location because the ML pattern of the mobile tag corresponds with the reference tag in Room 1.



# Meet all the Blyott Sensors

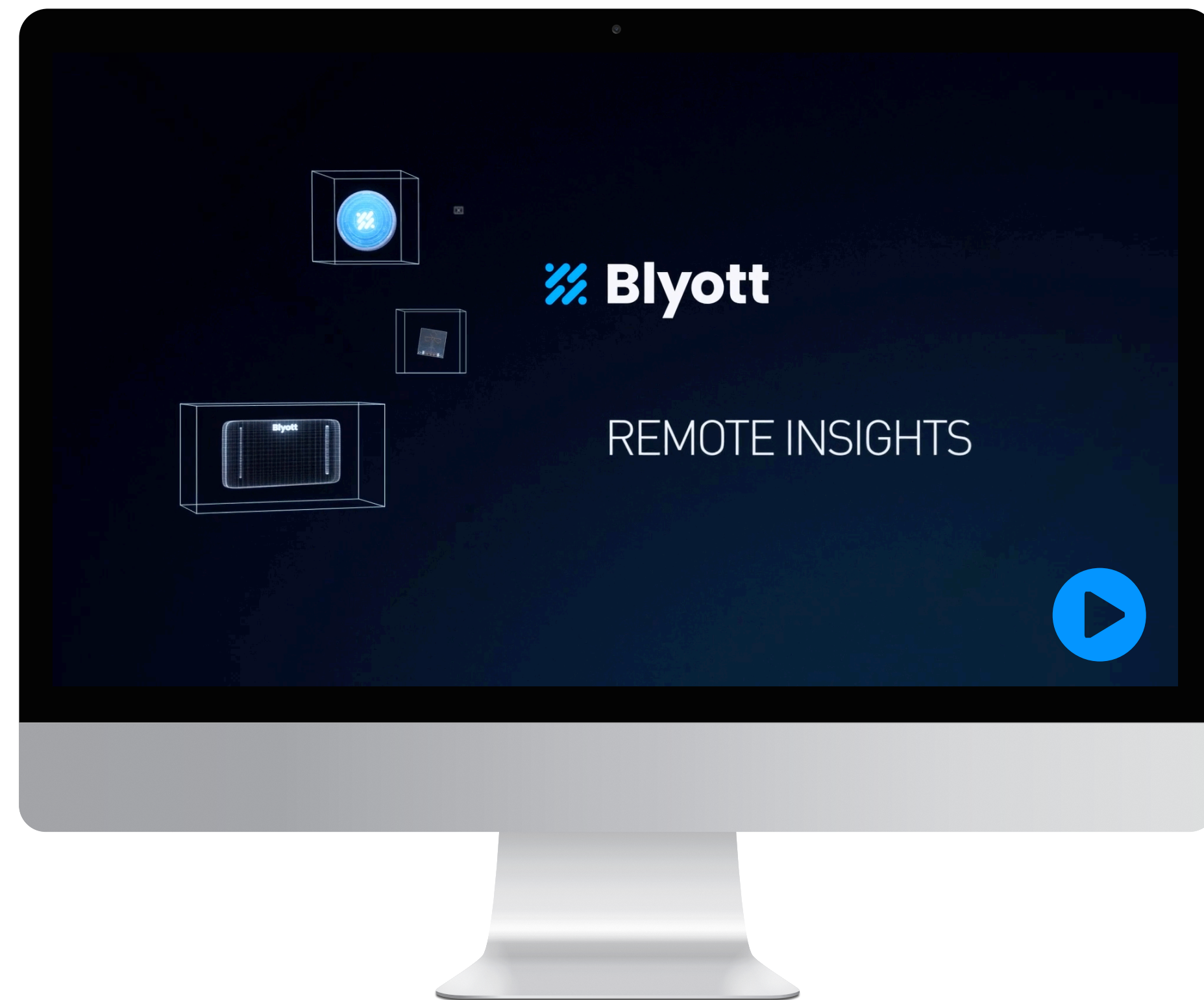
Tag	Name	Code	Battery lifetime	Dimensions	Operating temperature
	Standard Sensor	BT-T2	Up to 5 years	38 mm (D) x 5 mm (H)	-10°C to +60°C
	Tiny Sensor	BT-TT	Up to 3 years	16 mm (W) x 26 mm (L) x 2.2 mm (H)	-10°C to +60°C
	Sticker Sensor	BT-BS	Up to 5 years	60 mm (W) x 60 mm (L) x <1 mm (H)	0°C to +60°C /
	Sticker Sensor Mini	BT-BSM	Up to 2 years	51 mm (W) x 42 mm (L) x <1 mm (H)	0°C to +60°C /
	Heat Sensor	BT-R2	Up to 5 years	40 mm (W) x 80 mm (L) x 7 mm (H)	-20°C to +150°C
	Badge	BD-BD	Up to 3 years	55 mm (W) x 89 mm (L) x 3 mm (H)	-10°C to +60°C
	Patient Sensor	BT-B1	Up to 5 years	29.3 mm (D) x 7.7 mm (H)	-10°C to +60°C

# Active versus passive tags (Bluetooth vs RFID)

Aspect	Active tags (Bluetooth)	Passive tags (RFID)
Range	Up to 100 meters or more	Few meters
Energy	Low energy; long battery life	No battery required; “energised” by the readers
Tags	Moderately priced; decreasing over time	Very cheap; Active: More expensive
Infrastructure	Inexpensive and compatible with many Wi-Fi AP’s	Requires -expensive- dedicated readers
Data & functionality	Can transmit more data; sensor integration	Primarily for identification
Applications	Versatile: tracking, monitoring, etc.	Specific: mainly inventory & ID tracking



# Explore more about Blyott



**Dive deeper into the world of Blyott. Visit our Content Library for a collection of resources:**

- Technical data sheets detailing our product specifications.
- Informative brochures offering a glimpse into our solutions.
- Insightful case studies showcasing real-world applications.
- Detailed manuals to guide you through our offerings.
- Engaging videos that bring our technology to life.

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# Big Savings Happy Staff

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