



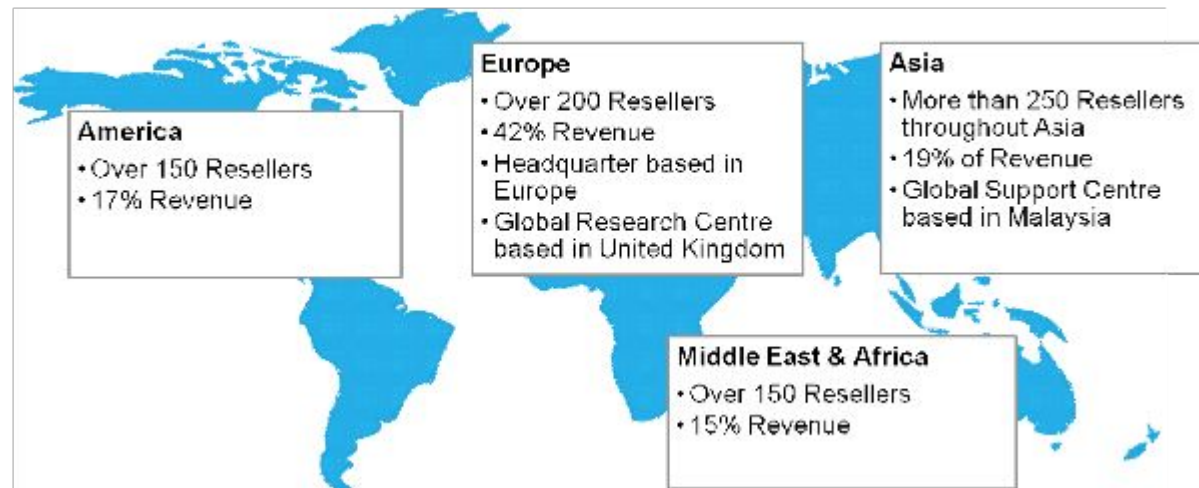
FootfallCam Retail Solution

3D People Counter for Retail Stores

About FootfallCam™

Global Leader in People Counting System

Headquartered in the **United Kingdom**, FootfallCam started with a team of experienced engineers with the vision of creating the most advanced people counting system in the market. We are the **manufacturer** of both hardware and software; all the design and development are 100% in-house made.



- Continuously reinvesting more than 24% revenue into research and development
- **In-house R&D team** dedicated to the development of both hardware and software platform
- Combined **over 100 years industry experiences** in developing people counting solution
- **Serving multiple sectors** varying from retail, fast food, restaurants, museums to smart buildings and airports.



FootfallCam Solutions

FootfallCam Products

FootfallCam provides a number of key products, specifically designed for retail stores.

FootfallCam 3D Pro2™



3D Stereo Vision + WiFi Counting [Datasheet](#)

FootfallCam Centroid™



AI Video Analytics [Datasheet](#)

Discreet Fabric Staff Tag



Staff Detection [Video link](#)

FootfallCam Analytics Manager V8™



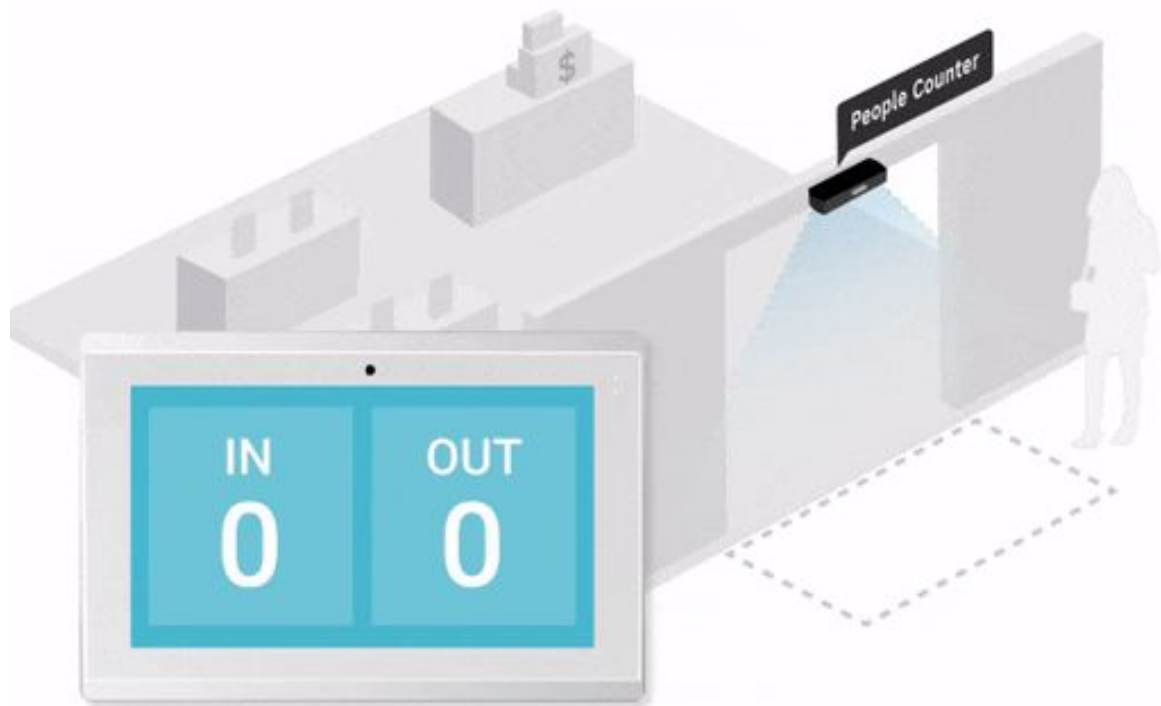
Cloud-based Analytics Platform [Datasheet](#)

Agenda

1. Use Cases
 - a. #1: People Counting at Entrances
 - b. #2: WiFi Analytics - Identify Unique Customer
 - c. #3: Heatmap - Analyse Customer Behaviour in the Store
 - d. #4: Staff and Customer Interaction Measurement
 - e. #5: Occupancy Control for Retail Stores
2. User Requirements
 - a. Data Accuracy
 - b. Dashboard and Reports
 - c. Infrastructure and Integration
 - d. Support and Maintenance
 - e. Installation and Deployment
3. Additional Features
4. Product Packages and Pricing
5. Case Studies

1a. Use Case #1: People Counting at Entrances

FootfallCam 3D Pro2™ people counters installed at the entrances can detect the number of people entering and exiting the



- Using 3D Stereoscopic Counting
- Bi-directional counting
- Suitable for wide entrances
- Highly accurate with up to 99.5% accuracy
- Proven deployment in Fred Perry, Joules & A.S. Watson, etc.



[FootfallCam 3D Pro2™](#)

1a. High Accuracy Counting

FootfallCam 3D Pro2™ can be installed at any types of retail entrances, and can achieve up to 99.5% accuracy.



Showcase

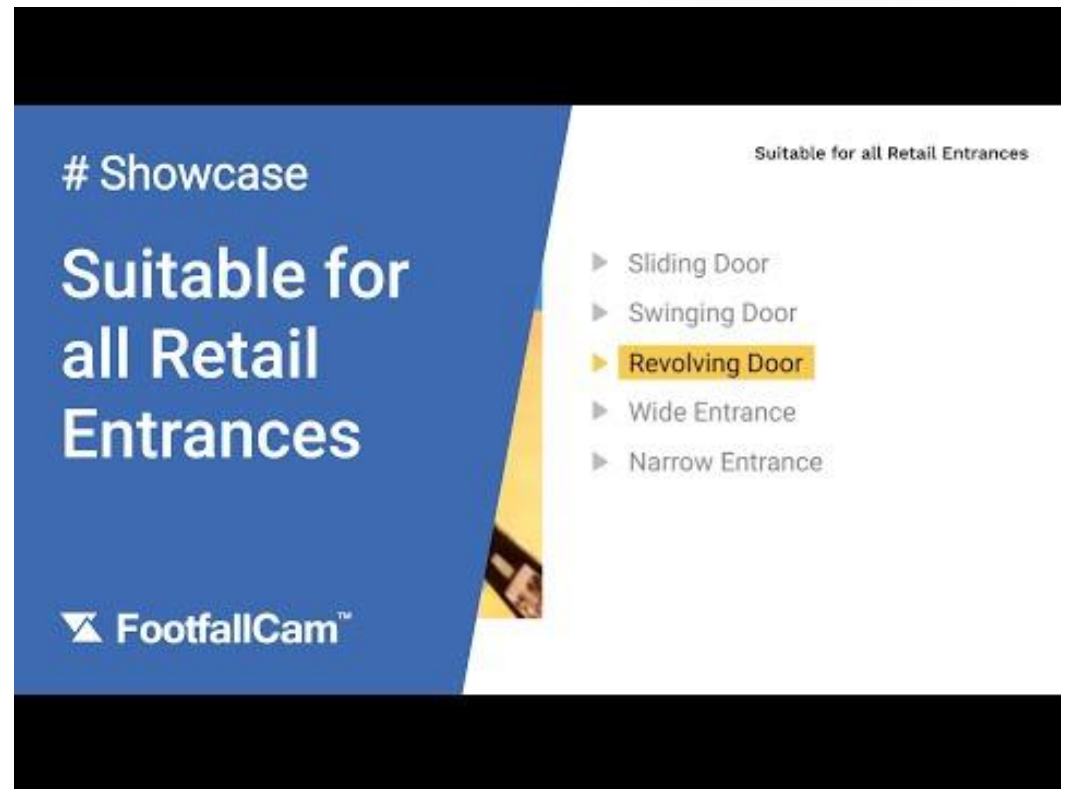
High Traffic

OUT

FootfallCam™

This image shows a retail store entrance with a yellow bounding box around the entrance area. A green line with arrows indicates the flow of traffic through the entrance. The text "# Showcase" and "High Traffic" are on the left. The word "OUT" is in a blue box at the top right. The FootfallCam logo is at the bottom left.

[High Traffic Counting](#)



Showcase

Suitable for all Retail Entrances

Suitable for all Retail Entrances

- ▶ Sliding Door
- ▶ Swinging Door
- ▶ **Revolving Door**
- ▶ Wide Entrance
- ▶ Narrow Entrance

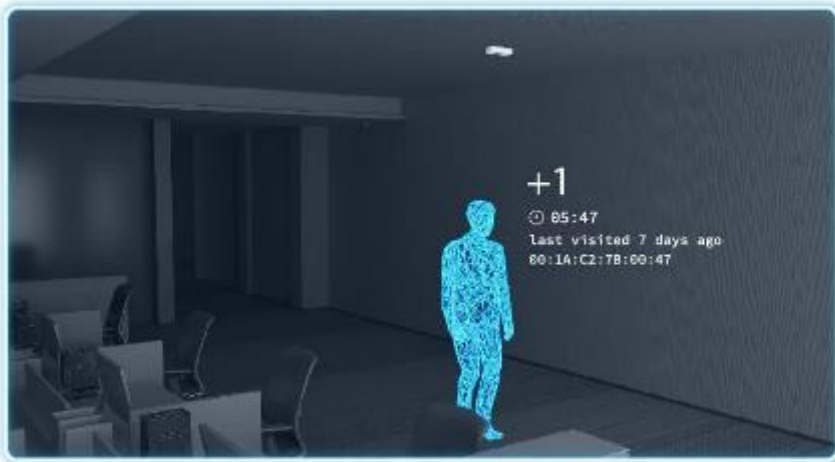
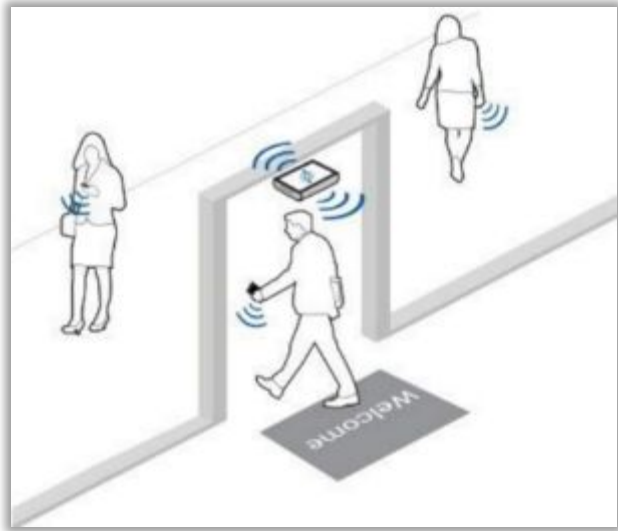
FootfallCam™

This image shows a list of retail entrance types suitable for FootfallCam. The text "# Showcase" and "Suitable for all Retail Entrances" are on the left. A list of entrance types is on the right, with "Revolving Door" highlighted in yellow. The text "Suitable for all Retail Entrances" is repeated at the top right. The FootfallCam logo is at the bottom left.

[Suitable for all Retail Entrances](#)

1b. Use Case #2: Wi-Fi Analytics

Combining the capabilities of both Wi-Fi analytics and video analytics to allow store managers to drive data action insights and make impactful changes in their operations.



User privacy protected - [Anonymised Data & GDPR Exemption](#)

Metrics Measured:

1. Outside Traffic

- How many customers have passed by your store?

2. Turn in rate

- How many unique customers are entering your store?
- What is the percentage of passersby entering your store?

3. Returning customer

- How many customers are returning to your store?

4. Visit Duration

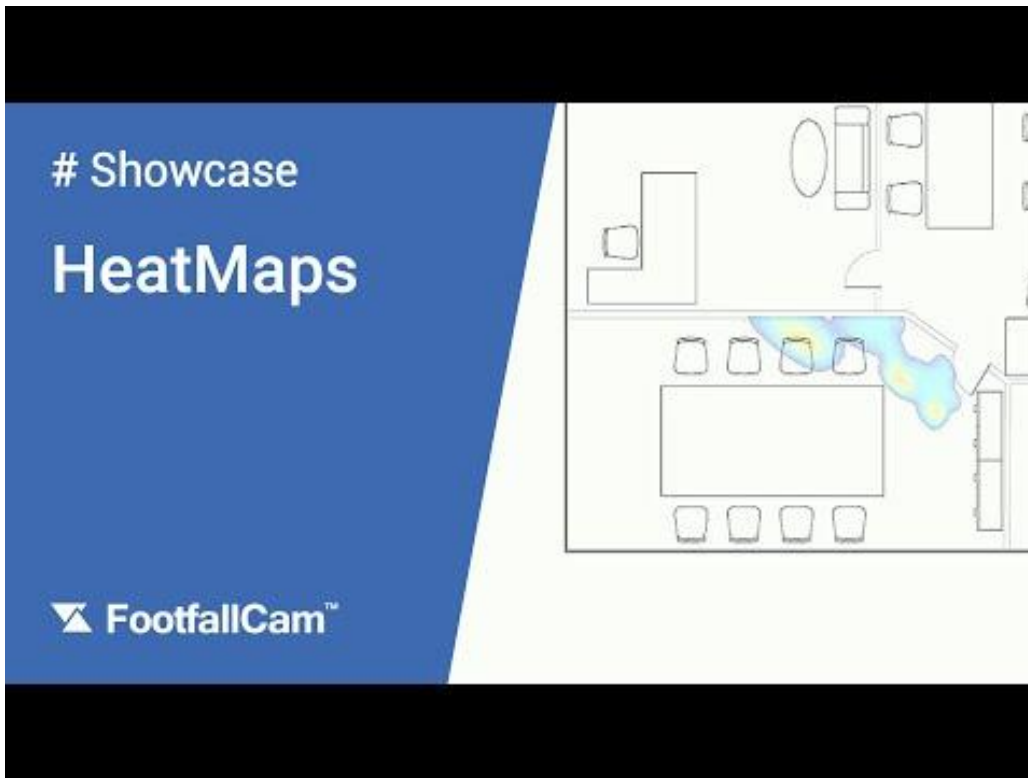
- How long does an average customer stay?

Use Cases:

1. Determine the success rate of a marketing campaign
2. Measure store performance based on data-driven KPI

1c. Use Case #3: Heatmap - Analyse customer behaviour within the store

Combining CCTV cameras with FootfallCam Centroid will produce heatmap analytics that helps retailers visualise customers' shopping journey within the store.



Watch how it works: <https://youtu.be/uqzBrUTQbOg>

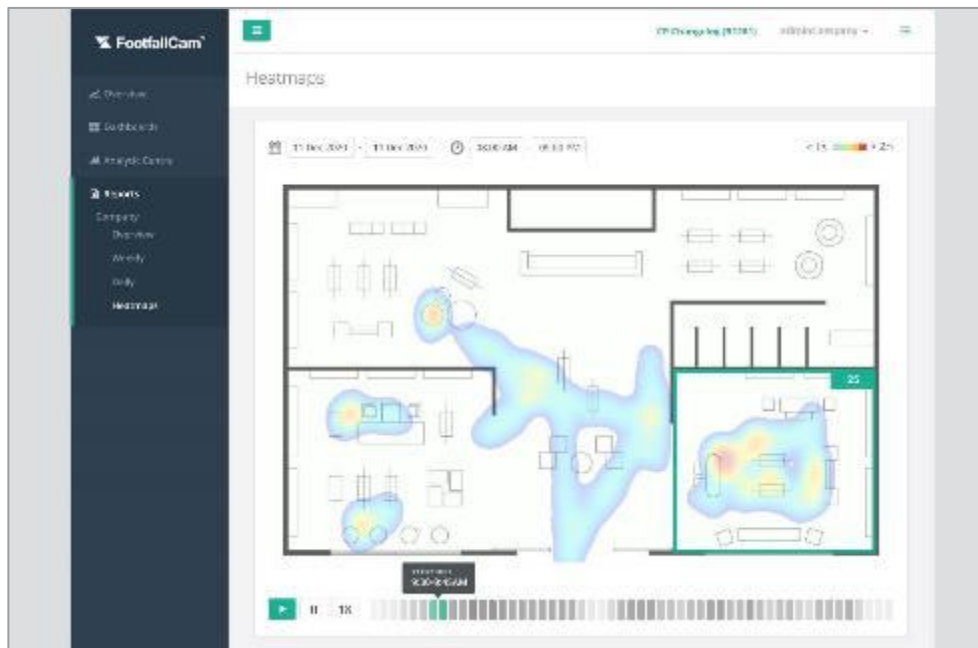
- Reuse existing CCTVs, reduce project cost
- Identify “Hot” or “Cold” zones
- Showcase Product Level Engagement
- Create more effective localised plans and marketing strategies to better align with your customer



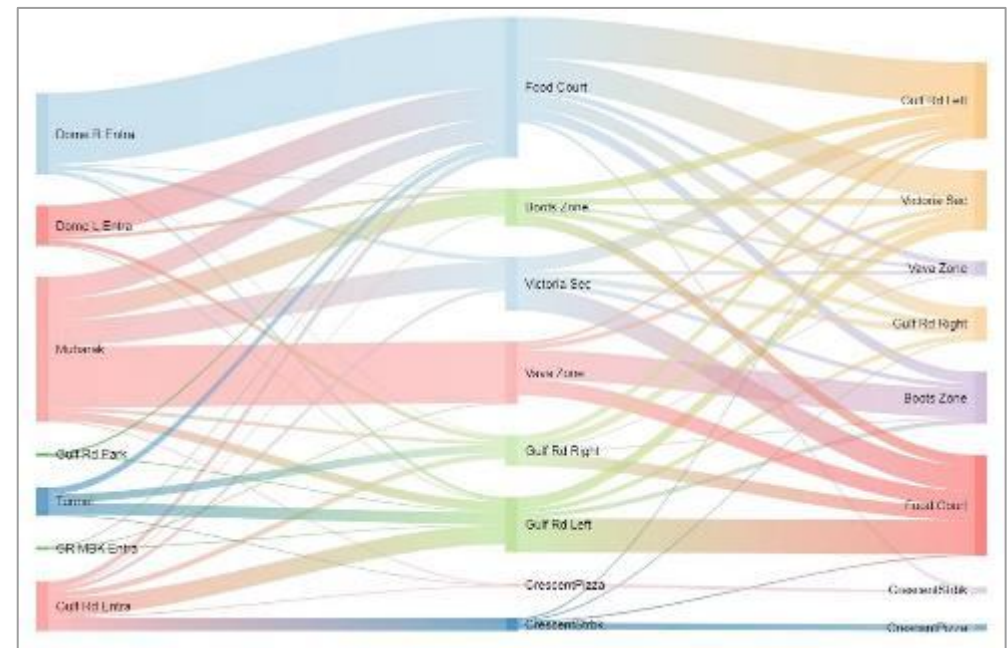
FootfallCam Centroid [Datasheet](#)

1c. Use Case #3: Heatmap to analyse customer behaviour within the store

- Draw Area polygon at [Heatmap Dashboard](#) to obtain heatmap analytics for [area of interest](#)
- [Sankey Diagram](#) - showcase [customer path](#) within the store.
 - Which section of the store would they visit after passing the entrance?
 - How do they move between different sections of the store?



[Heatmap Dashboard](#)



[Sankey Diagram](#)

1d. Use Case #4: Staff & Client Interaction Measurement

By combining [FootfallCam 3D Pro2™](#) and [FootfallCam App™](#), store managements can track the store staff performance based on their customer engagement level.



- How does it work?
 - Counter **detects a customer staying** in key shopping areas for more than a fixed period of time
 - **Automatically sends alert** to all FootfallCam App™
 - Staff picks up the job
 - Staff clears the alert once they have served the customer

1d. Use Case #4: Staff & Client Interaction Measurement

Alternatively, staff and client interaction measurement can also be measured by combining [FootfallCam 3D PRO 2™](#) and [FootfallCam Staff Exclusion Tag™](#).

Showcase

Staff and Customer Interaction Measurement

FootfallCam™

Dashboard

% of customer-served: 0%
Average serving time: 00:00

Action Log

ID	Browsing Time	Served Time
000123	01:50	00:00
000124	00:45	00:00
Staff	-	-

The screenshot displays a software interface for monitoring staff and customer interactions. It features a blue sidebar with the text '# Showcase Staff and Customer Interaction Measurement' and the FootfallCam logo. The main content area is divided into two sections: 'Dashboard' and 'Action Log'. The 'Dashboard' section shows two key metrics: '% of customer-served' at 0% and 'Average serving time' at 00:00. The 'Action Log' section contains a table with columns for 'ID', 'Browsing Time', and 'Served Time'. The table lists two customer IDs (000123 and 000124) with their respective browsing times (01:50 and 00:45) and served times (both 00:00). A row labeled 'Staff' is highlighted in red, indicating that staff are currently being tracked but not yet served.

Watch how it works:

<https://youtu.be/22yJZuHfPBs>

- How does it work?
 - Counter able to differentiate between staff and customers through the wearing of FootfallCam Staff Exclusion Tag
 - When Staff is in close proximity with customer, customer is considered being served.
 - Analytics:
 - Total Serving Time for any staff
 - Average Serving Time per customer

1e. Use Case #5: Occupancy Control for Retail Stores

Automated system to Inform your customer whether they can enter, or they should wait via visual display at the entrance.



Automated Traffic Control

- [Live occupancy dashboard display](#)
- Configurable threshold and trigger alerts
- [Automatic door control](#)
- Instant notification when occupancy is breached via:
 - App Notification
 - Telegram
 - Email



Staff Dashboard and Notification

The image shows an occupancy report dashboard with various metrics and a table of data.

Location Name	Live Occupancy	Capacity	Percentage
2015	20	20	100%
2016	15	20	75%

[Occupancy Report](#)



Data Accuracy

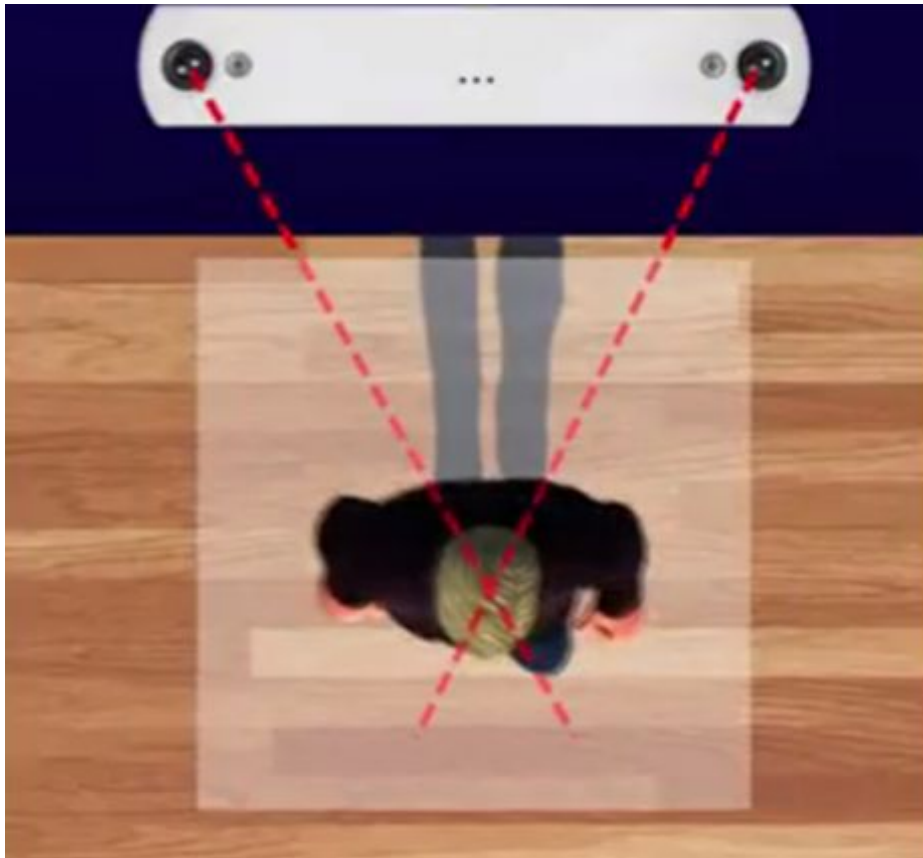
User Requirements - Data Accuracy:

1. Achieving High Accuracy
 - a. 3D Counting Technology
 - b. Highly Accurate for all kinds of retail environments
 - c. Accuracy Audit with video proof
 - d. Exclude objects/personnel (staff, kids, etc) from counting
 - e. Group counting - more realistic sales conversion against purchasing group

2. Maintaining High Accuracy
 - a. Automated Health Check & Alerts
 - b. Maintaining Data Integrity
 - c. Proactive Support & Data Monitoring

1a. 3D Counting Technology

FootfallCam 3D Pro2™ utilises 3D stereoscopic vision that mimics human eyes to accurately capture the positioning and placement of visitors. FootfallCam™ is able to recreate the field of depth and ensure the integrity of its counting data.



Depth Reconstruction

- Information capture from the **two lens** will be combined and interpreted into **depth data**

Data Integrity

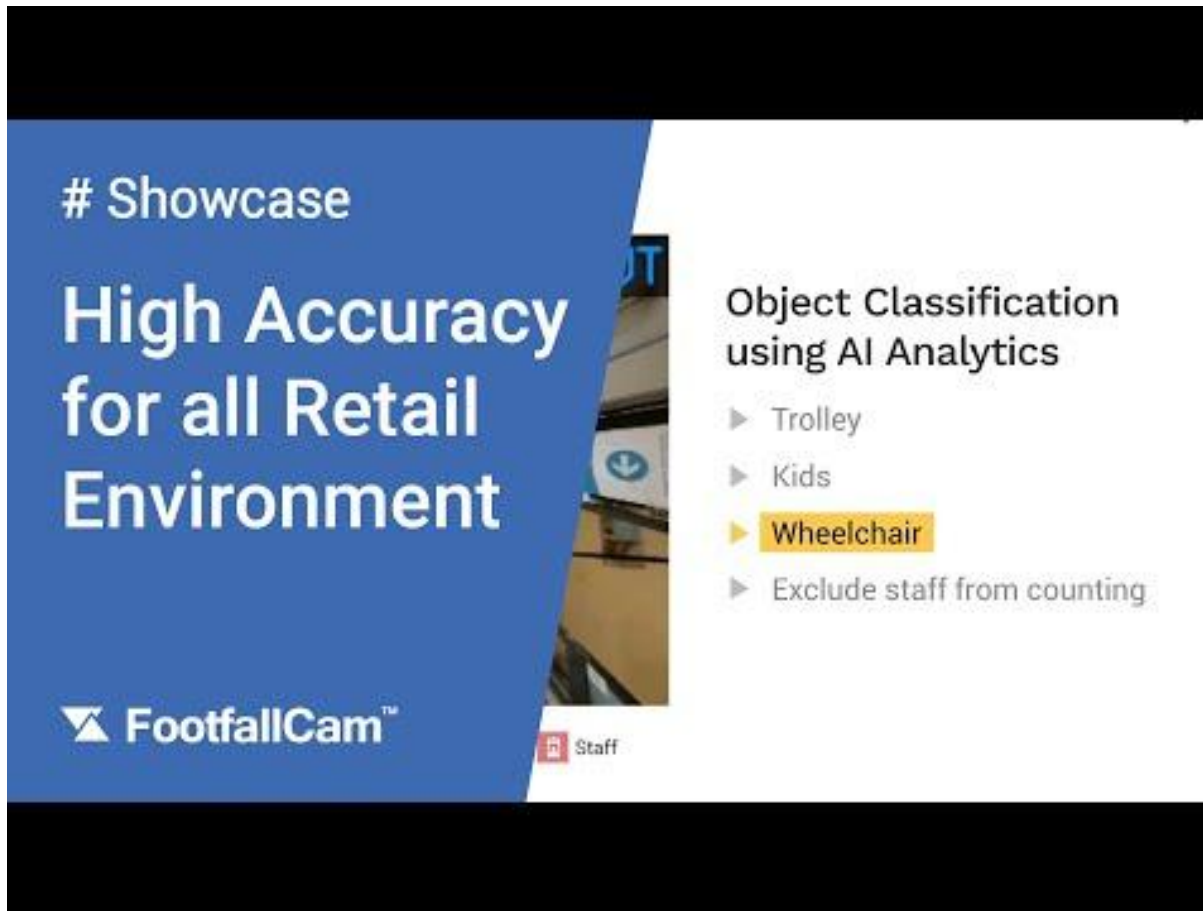
- Video image processing algorithm with 1.2GHz processing power
- Up to **99.5% accuracy** in the integrity of our counting data.

Uncompromised Accuracy

- Once counter has been verified by our specialists, the **accuracy will not decrease** over time, unless there is a change in store environment.

1b. High Accuracy for all Retail Environment

FootfallCam uses advanced people counting technology that is proven to be accurate in different site environment.



Showcase

High Accuracy for all Retail Environment

Object Classification using AI Analytics

- ▶ Trolley
- ▶ Kids
- ▶ Wheelchair
- ▶ Exclude staff from counting

FootfallCam™

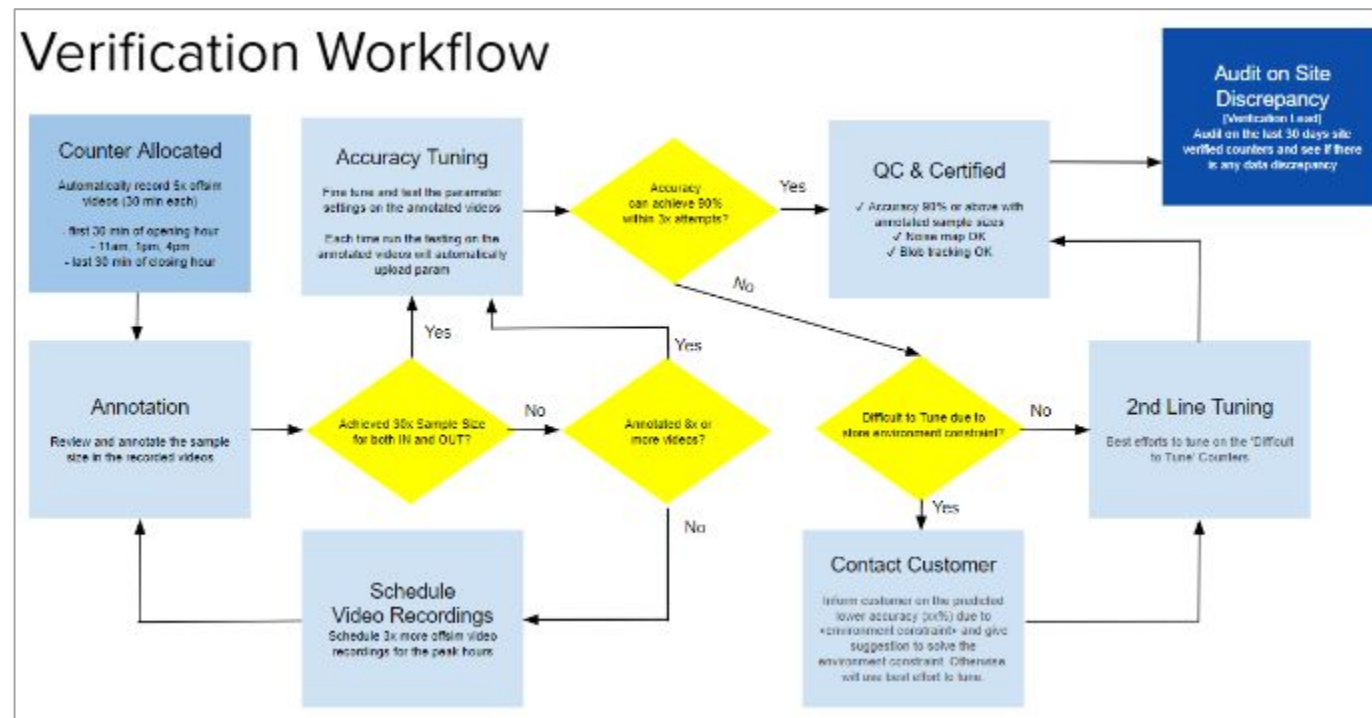
Staff

- Object Classification using AI Analytics
- Suitable for all environment
 - High Ceiling
 - Low Ceiling
 - Narrow Entrance
 - Strong Shadow
 - Swinging Door
- U-turn not counted
- Distinguish as 2 persons when walking close to each other

Watch how it works: <https://youtu.be/nG2XXkMdyTA>

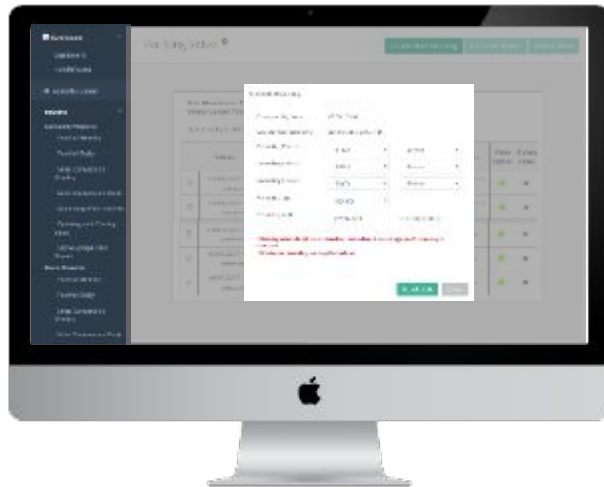
1c. Counter Tuning based on Site Environment

- Our remote **installation support team** will ensure that **counters' positioning** is the most ideal based on store's environment
- **Counting zone** and **counting lines** will be drawn by our specialists according to store's environment.
- **Fine tune** by choosing the most appropriate counting algorithm for that environment.
- **Upload** this counting algorithm parameters to the counters.



1c. Accuracy Audit

How do we audit accuracy to ensure up to 99.5% counting accuracy?



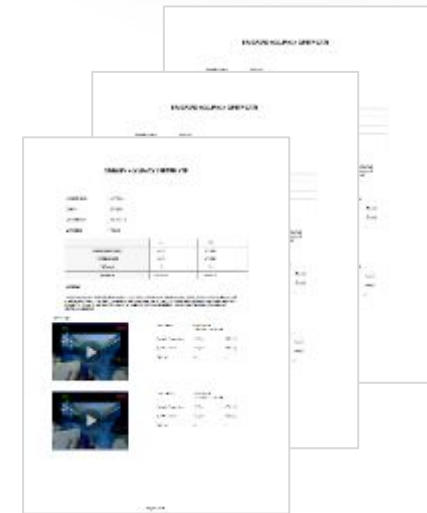
1 Schedule video recordings

Schedule video recordings of peak hours to ensure there is sufficient sample size (20 and above) for to audit the accuracy of the counter.



2 Compare system count and manual count

Compare the system count generated by the FootfallCam device against manual observations to determine the accuracy of the FootfallCam.

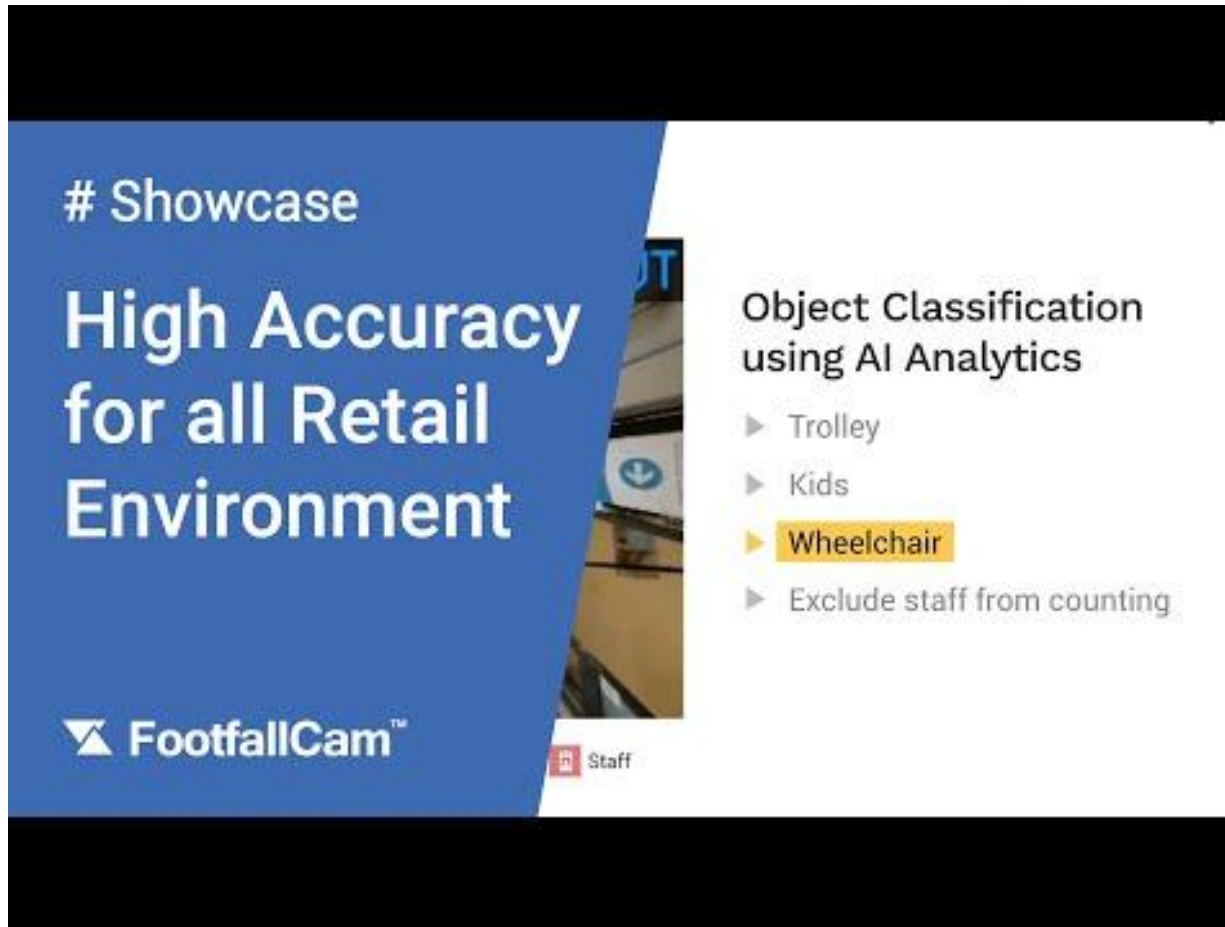


3 Generate verification report

Once there is sufficient sample size and the accuracy is satisfactory, a verification report with the video proof used in manual observation will be generated.

Verification report:
[Sample 1](#) & [Sample 2](#)

1d. Identify Different Objects/Personnel



Showcase

High Accuracy for all Retail Environment

Object Classification using AI Analytics

- ▶ Trolley
- ▶ Kids
- ▶ **Wheelchair**
- ▶ Exclude staff from counting

Staff

FootfallCam™

The screenshot shows a software interface for FootfallCam. On the left, there is a blue banner with the text '# Showcase' and 'High Accuracy for all Retail Environment'. Below this is the FootfallCam logo. On the right, there is a white panel titled 'Object Classification using AI Analytics'. It contains a list of classification options: 'Trolley', 'Kids', 'Wheelchair' (which is highlighted with a yellow background), and 'Exclude staff from counting'. Below the list, there is a small red icon and the word 'Staff'.

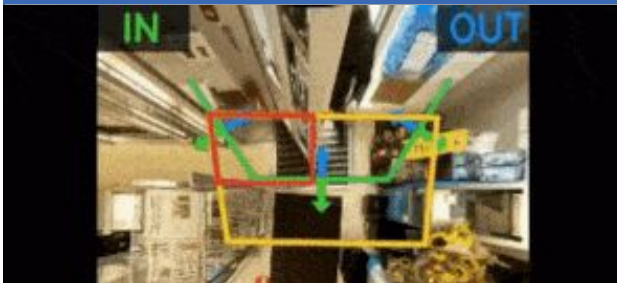
- Identify Different Objects/Personnel via **AI analytics**
 - Trolley
 - Wheelchair
 - Kids
 - Staff
- **Exclude Objects** and Store Personnels
 - No purchasing power
 - Better reflection of visitor count

Watch how it works: <https://youtu.be/nG2XXkMdyTA>

1d. Staff Exclusion Methods

FootfallCam offers 5x different methods to identify different types of staffs tailored to their use cases.

Counting Exclusion Zone



Wide Entrance, No Accessories Needed
[Video link](#)

Staff Exclusion Button



Contract Workers (e.g: Delivery Man)
[Datasheet](#)

Discreet Fabric Staff Tag



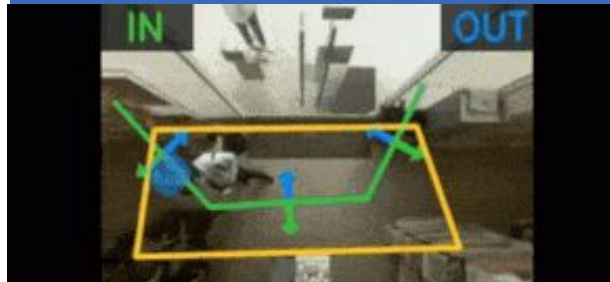
Any Store Staffs
[Video link](#)

AI Staff Exclusion



Any Store Staffs
[Datasheet](#)

Dwell Time Exclusion



Hovering around Entrance (e.g:
Security Guard) [Video link](#)

Sample Video:



FootfallCam Staff Exclusion
[Video](#)

1e. Group Counting



Watch how it works: https://youtu.be/VZ4ck9_dVhc

FootfallCam 3D Pro2™ is able to provide Group Counting metric in addition to individual people counting.

- Counting customers in groups may give a better reflection of sales conversion. (One sale per family, couple, etc.)
- More realistic sales conversion based on purchasing group rather than individuals with no purchasing power
- Data can be broken down into different sizes of buying groups

2a. FootfallCam Health Check

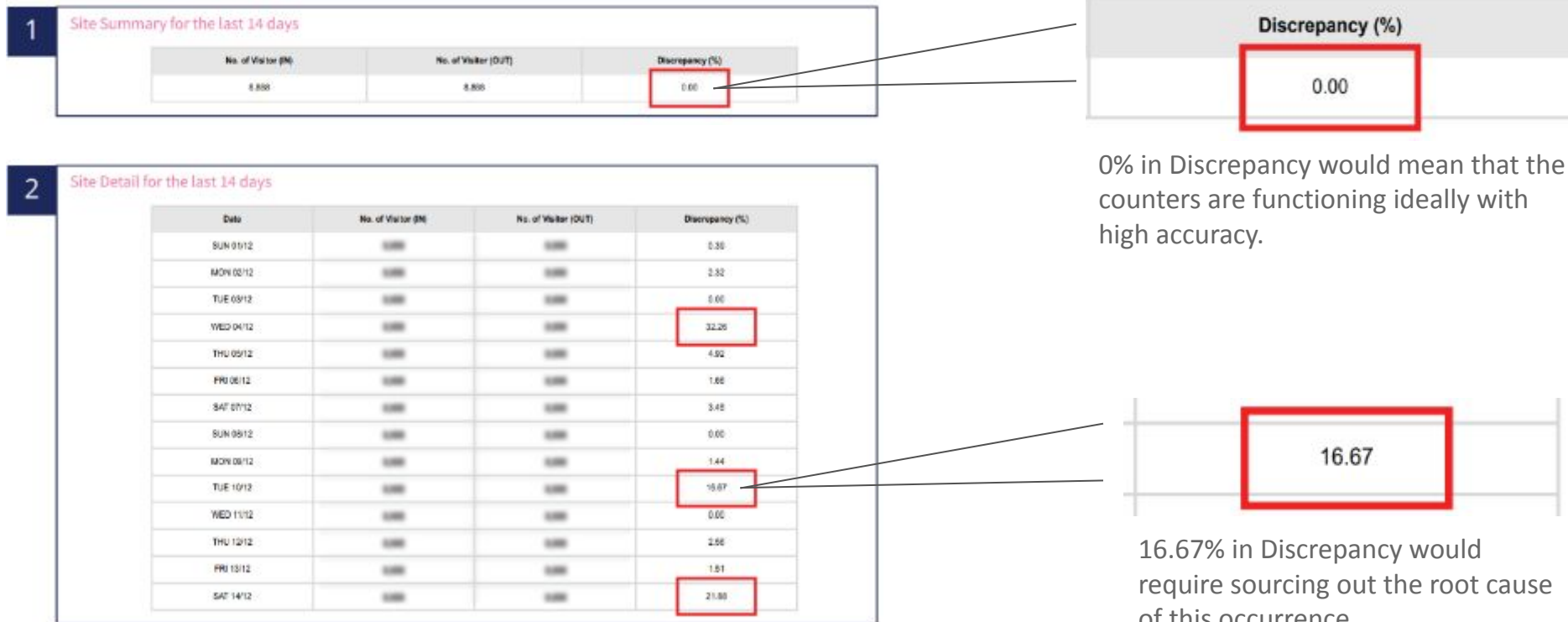
The screenshot displays the 'Device Management & Health Check' interface. The sidebar on the left includes navigation options: My Dashboard, Custom Report, Analytics, Company Reports, Site Reports, Maintenance (selected), Setting, Resources Center, and Marketing Tracker. The main content area shows a 'Device List' table with a '+ New Device' button. The table contains the following data:

Device	Serial	Type	Site	Accuracy Audit	Device Health Check	Device Profile	Pending Issue
MainEntranceL	00000015fd651 15F010552566	Counter	Bath	#2 Second Line Tuning		Lack of Trading Area Swinging Door	Live view changed
MainEntranceR	00000015fg58g65 15F010552654	Counter	Bath	#4 Completed			
Exit	00000015fhr556 15F010552559	Counter	Bath	#4 Completed	Low Storage: 53		
CentroidRetail	1422419047798008089fe 19J01010101003	Centroid	Bath				
ComputerRetail	100000018a0b681 20R010000001	Mini Computer	Bath				

- Monitor if all sensors are connected and counting.
- Scheduled daily checks at a predefined time. Display counters that are offline for more than 30 mins
- Send automated email alert to person-in-charge detailing any faults found
- Proactive yet manageable approach. Low maintenance solution for customers.
- Detects issues such as:
 - Network issue or failures
 - Abnormal data alert
 - Counting data and Wi-Fi data upload checking
- Action plans to ensure issues are rectified within 1 working day

2b. Maintaining Data Integrity

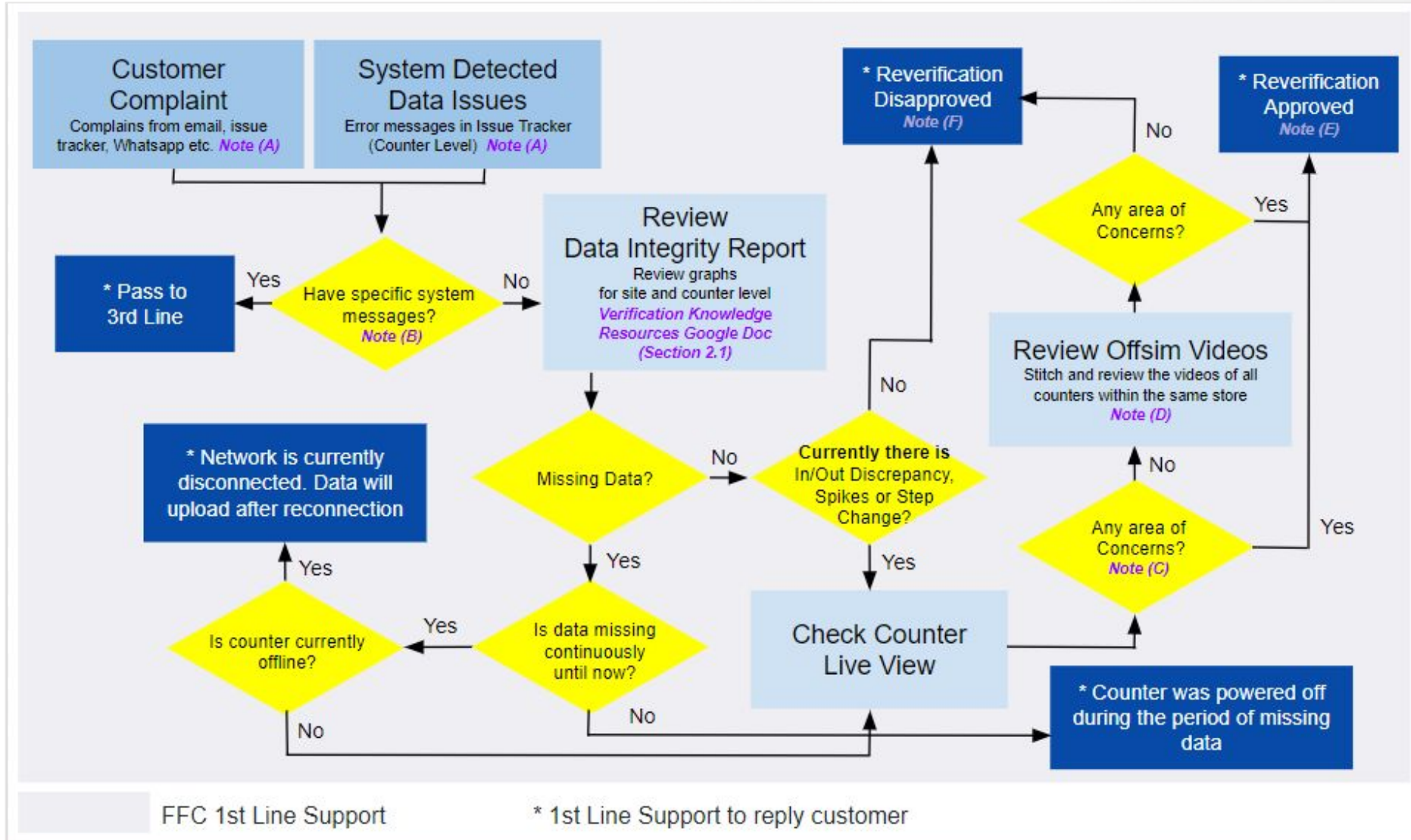
The [Data Integrity Report](#) allows users to monitor data discrepancies and site changes. For example:



- To recover the missing data, FootfallCam server will re-aggregate the raw data stored in counter level and store the re-aggregated data in the server
- Hence, users can retrieve back the missing daily or hourly data so that macro trends will not be affected

2c. Reactive & Proactive Support Workflow

This section outlines the parameters of all supporting services by FootfallCam.



Flow chart of the support flow and diagnostics when issues are raised to FootfallCam.



Dashboard and Reports

User Requirements - Dashboard/Reports:

1. Ready-made standard dashboard/report templates
 - a. Reports for Targeted Functions
 - b. Dashboards for Operation Review
 - c. Reports for Management KPI
2. Custom Report Builder for your own business requirements

FootfallCam Analytic Manager V8™

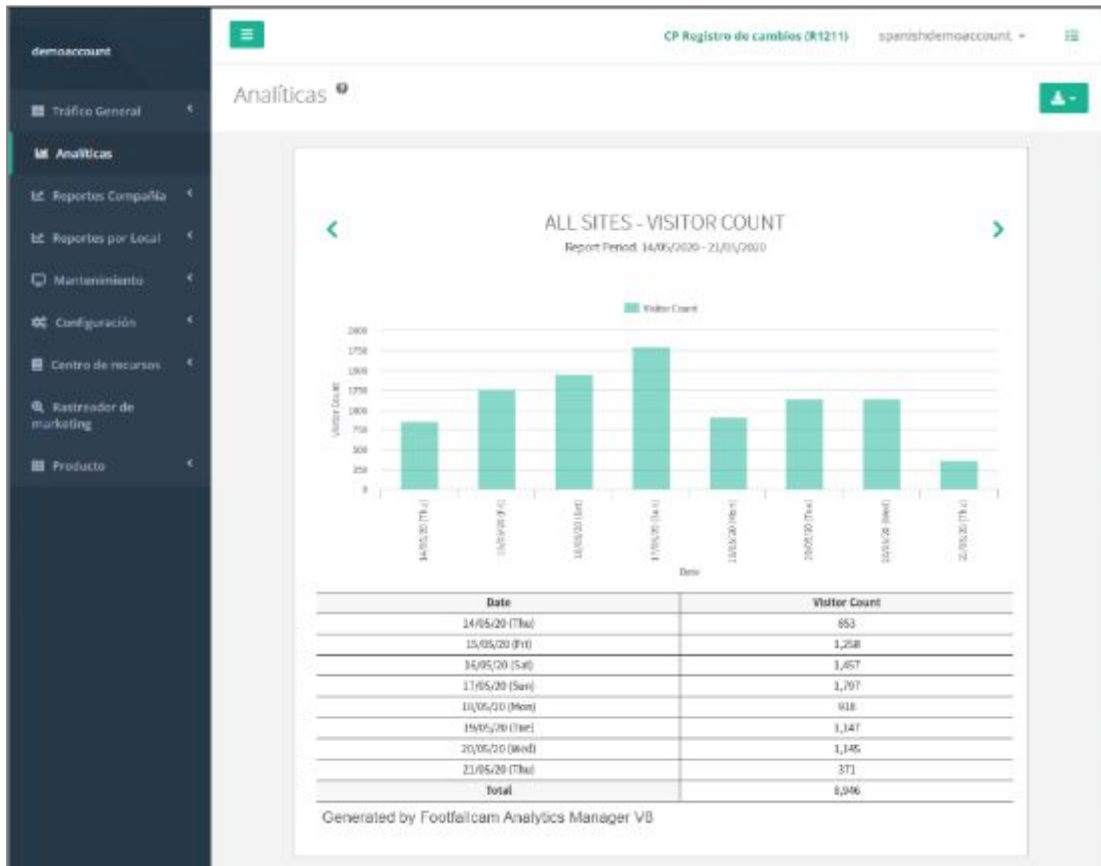


Functions:

- Staff alert if capacity limit is breached
- Centralized Management Analytics Software
- API Available for Data Integration
- Pre-defined Report Set
- Health Check Report
- User Account Management
- Automated Email Scheduler

Software Specifications	
Interface	Http; Https
Compatible Browser	IE7 or Later Mozilla Firefox or Later Chrome Version 4.0 or Later Safari
User Levels	2 levels: Administrator, Standard User
Ethernet	10/100 Mb Ethernet
Time	NTP, Adjustable time zone, automatic day light saving adjustments
Data Delivery	TCP/IP
Database Type	SQLite
Report format	csv, .xml, .txt
Data Storage	5 Years storage with auto sync
Data Backup	Yes
Backup Frequency	Daily Full Backup of Data and Configuration Weekly Backup to Sub Server for Contingency Purpose
Software Version Upgrade	Auto Upgrade

Enterprise Class Software



Multi-language Interface

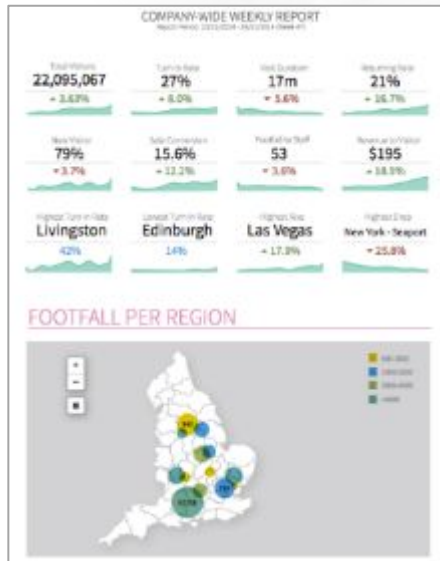
Different languages available such as:

- English
- Dutch
- Spanish
- French
- Italian
- German
- Arabic
- Japanese
- Chinese

Customise dashboard design

- FootfallCam will customize the language and images in the dashboard
- Provide us with the translated text and graphics, then we will help you handle the configuration

1a. Analytic Reports for Targeted Functions



View report [here](#).

#1 Company Weekly Report

Overview of key metrics for all stores within the company

Key Questions:

- How was the traffic profile in every store and different metrics like dwell time, visit frequency, *etc.*?
- Which region achieved higher ranking in term of turn in rate and retained customer loyalty?
- Which are the top performance and worst performance store?



View report [here](#).

#2 Sales Conversion Report

Measuring sales performance for all stores by comparing with footfall data

Key Questions:

- Store A has the highest visitor but lowest sales conversion, what would be the reason?
- Store B has lowest visitor but higher sales conversion. So in actual fact store B is performing better than A even though store A has the higher footfall.

1a. Analytic Reports for Targeted Functions



View report [here](#).

#3 Marketing Effectiveness Report

Gauging the performance of your marketing campaign

Key Questions:

- Does your marketing campaign help in increase the brand awareness by higher shopper traffic during and even after the campaign?
- Does the campaign help to grab more attention and attract more people to visit the store?



View report [here](#).

#4 Heatmap Daily Report

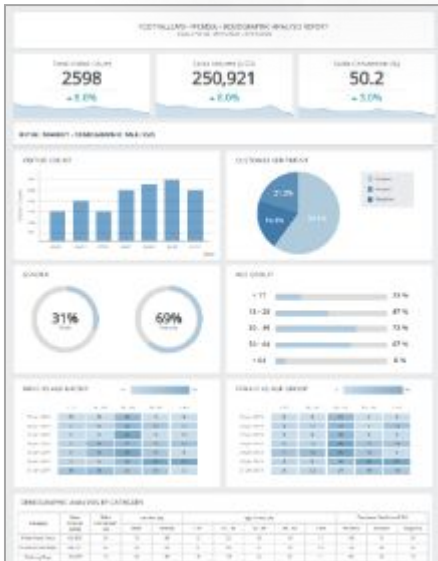
Visualising product-level customer engagement rate

Key Questions:

- Is your product well received by the market?
- Does product relocation affect the customer engagement, hence making a difference on product sales conversion?

View more on our [Reports Catalogue](#).

1a. Analytic Reports for Targeted Functions



View report [here](#).

#5 Demographic Analysis Report

Analysing the demographic of your customer base

Key Questions:

- How many percentage of your customers are male/female?
- What are the age groups for each gender?
- Did my customers have a positive/negative experience in your store?



View report [here](#).

#6 Data Benchmarking Report

Comparing your store performance with the industry standards

Key Questions:

- How is your store performing against the industry standard?
- Which aspect of your store performance are you better/worse at?
- Which KPI should you spend your resources to improve on?

View more on our [Reports Catalogue](#).

1a. Store Traffic Trend

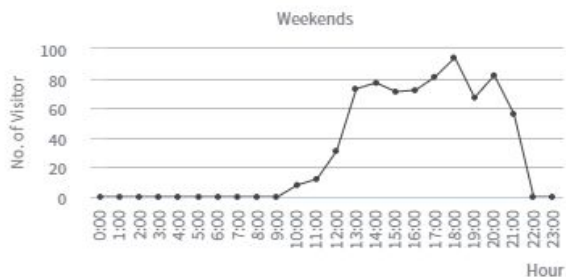


View report [here](#).

Daily Trend Analysis - Visitor Count

Notes:

- Number of visitors will be slightly higher during weekends and holidays compared to weekdays.
- Facilitates decision making for staff planning during weekends and holidays; promotion event planning on weekdays.
- E.g., Store may plan a weekly promotion event on the day which is having lowest visitor count such as Happy Tuesday.

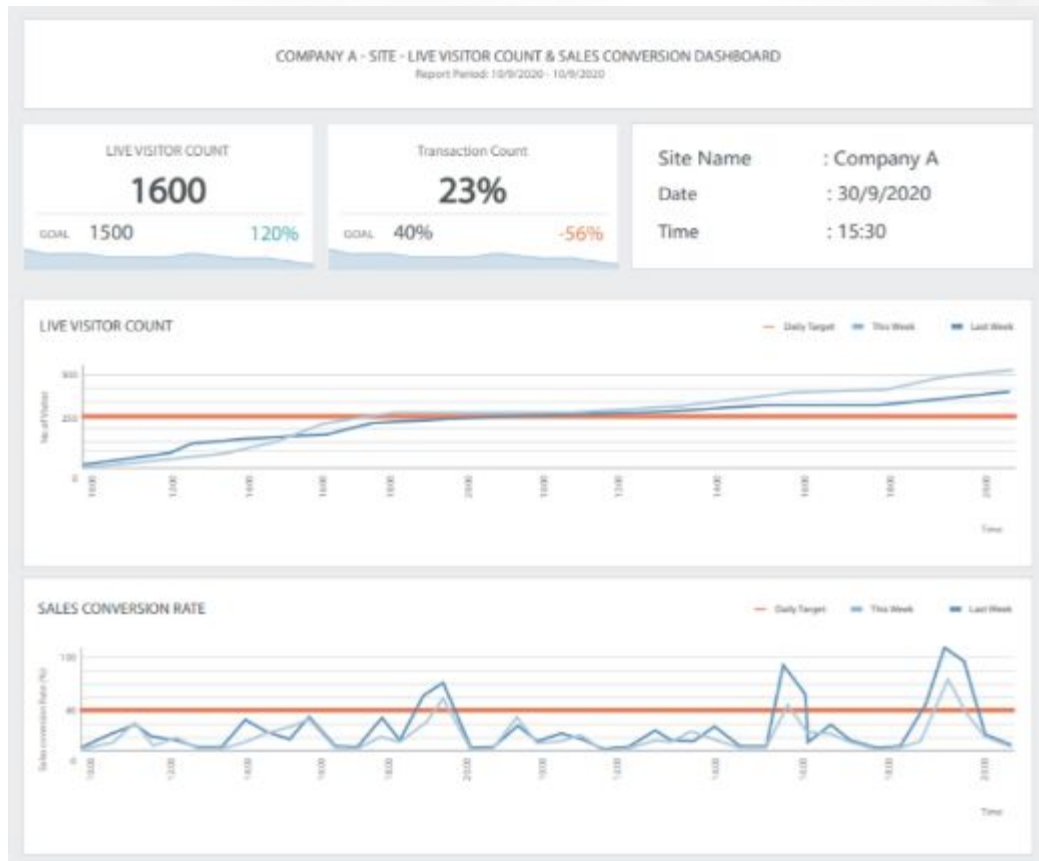


Hourly Trend Analysis - Average Visitor Count

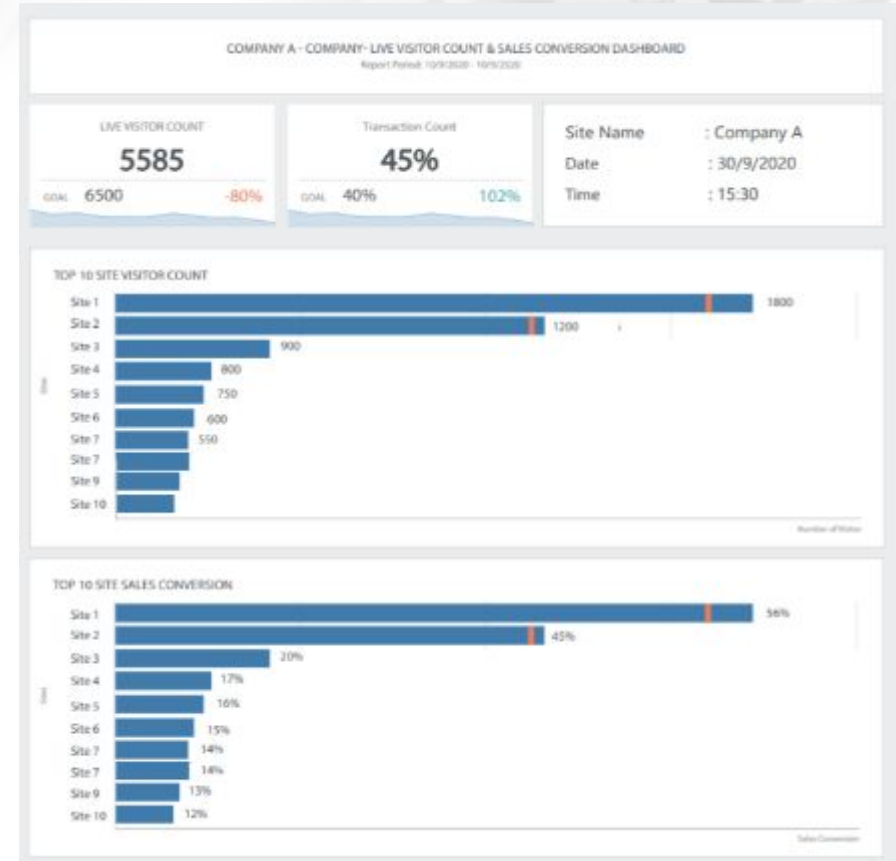
Notes:

- The avg. visitor count of Weekends is higher than Weekdays.
- Managers can review their store arrangements to cater for peak hours and increase staff to customer ratio to improve on customer experience.
- E.g., staff will avoid taking breaks during peak periods or more shifts would be allocated during peak hours.

1b. Sales Management Dashboard



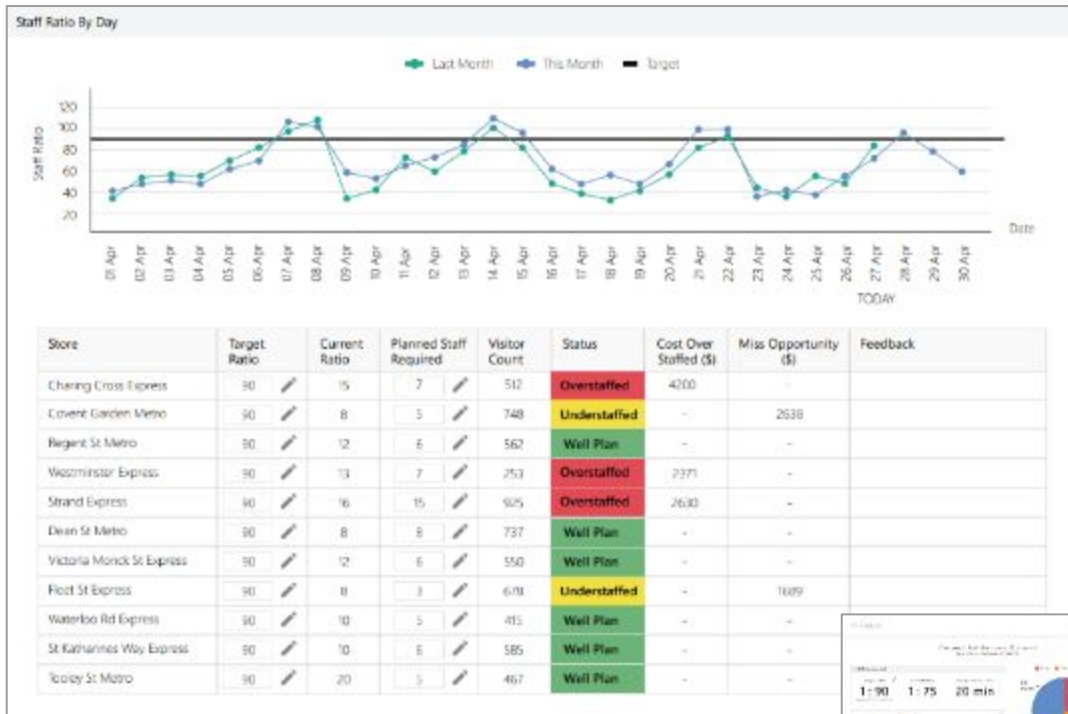
Sample Dashboard for [Site-Level Sales Management](#)



Sample Dashboard for [Company-Level Sales Management](#)

- Monitor the sales performance for each store in real time
 - Site-level and company-level
 - Compare the live visitor count and the sales conversion rate against target
- Make on-the-spot business decisions
 - Assign store staff to the right tasks based on the live visitor count and the transaction count
 - Drive each store to reach the daily target

1b. Staff Allocation Workspace



Audit staff allocation

- Crosscheck the number of staff in-store based on actual customer level
- Assess if staff level is sufficient during peak hours
- Can be displayed on smartphone/tablet/external monitor

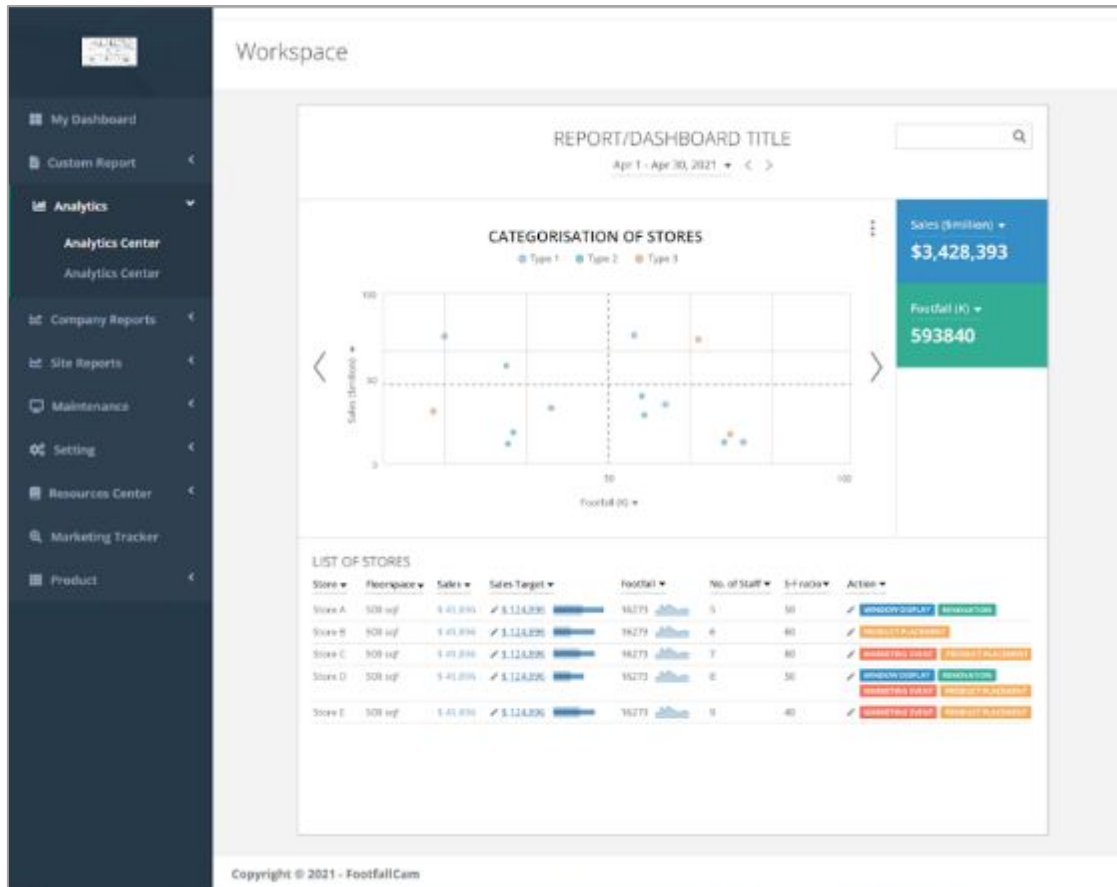
Set target for staff-to-customer ratio

- Customise the target staff ratio based on each store's visitor count
- Set the number of staff required for the upcoming shifts

More info here:
[Company-Level Staff Ratio Tracker](#)
[Site-Level Staff Ratio Tracker](#)



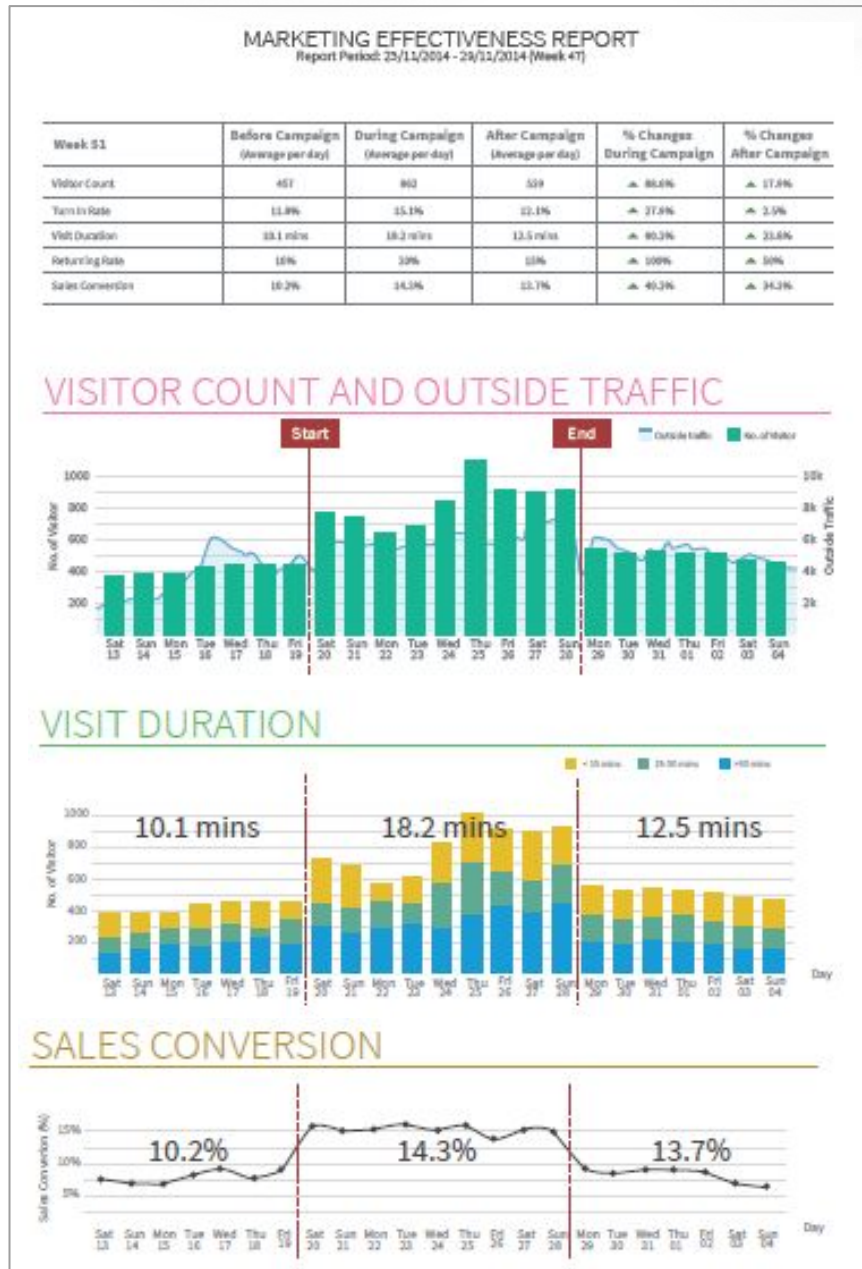
1b. Sales Conversion Workspace for Manager



[Sample League Table](#)

- Overview of Sales Performance
 - Compare footfall with sales
 - Categorisation of stores
 - Customise strategies based on store profiling, for example:
 - Opening / Closing of stores
 - Staff training
- Set Sales Target
 - Configure sales target for each individual store
 - Track sales progress
- League Table for Competition
 - Drive store staff by comparable achievement with other stores with same attributes, for example:
 - Similar store size
 - Similar region

1b. Marketing Campaign Workspace



Categorise campaign

- Categorise campaign based on store's profile, type of campaign and budget etc.

Measure campaign's impact and ROI

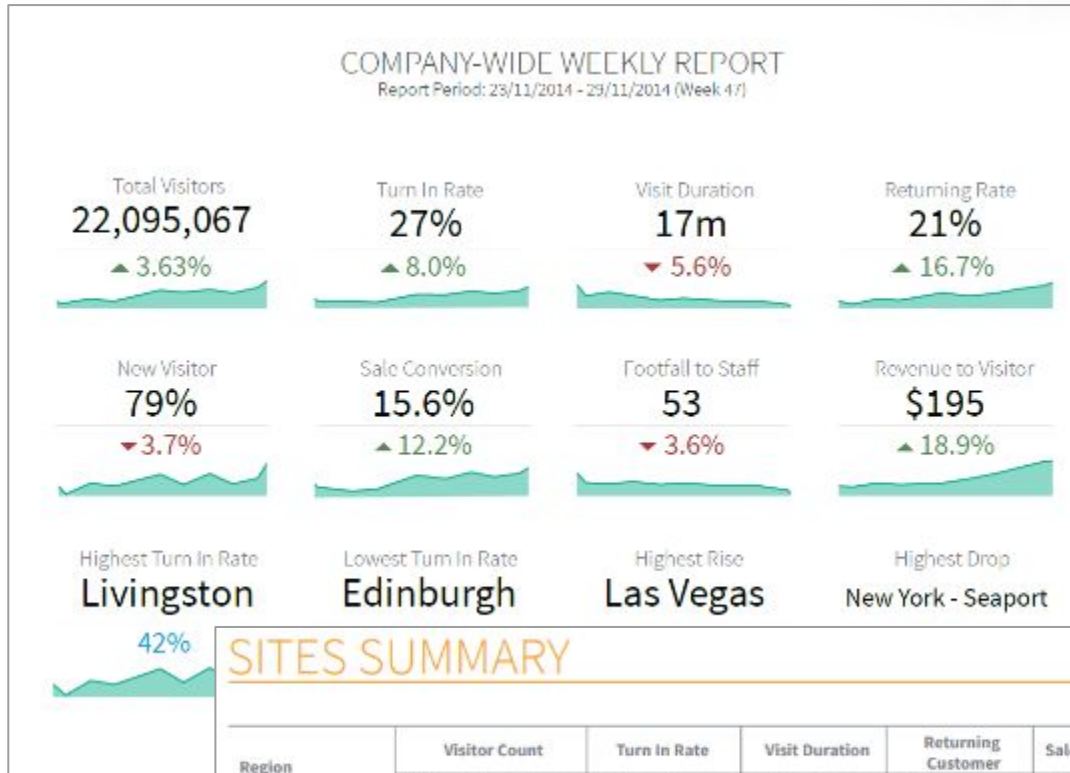
- Analyse the metrics before and after campaign (eg. footfall, dwell time and sales conversion)

Compare campaign effectiveness

- Use A/B testing to identify desire practice
- Top and worst performing campaign
- Able to customize and decide next action

1c. KPI Report for Management Review

Company-Wide Overview at a Glance



Region	Visitor Count			Turn In Rate		Visit Duration		Returning Customer		Sales Conversion	
	Rank	This Week	Changes (%)	This Week	Changes (%)	This Week	Changes (%)	This Week	Changes (%)	This Week	Changes (%)
Beijing Shin Kong Men	1105	199 800	▲ 11.2	22.4	▲ 2.1	6	▲ 14	14.5	▲ 19.1	34	▲ 32.3
Beijing China World	1126	201 306	▲ 12.9	19.5	▲ 3.2	11	▲ 13.5	7.3	▲ 20.9	14	▲ 35.5
Beijing Peninsula	1102	186 352	▲ 12.5	13.6	▲ 4.9	14	▼ 2.1	4.8	▲ 4.4	29	▲ 17.7
Bordeaux	1210	169 083	▼ 8.4	14.9	▲ 0.9	12	▼ 1.3	3.3	▲ 1.7	23	▲ 19.2
Cannes	1073	210 101	▲ 2.1	14.6	▲ 0.4	13	▲ 3.2	13.2	▲ 3.9	18	▲ 24.2
Courchevel	104	232 892	▲ 21.2	32.9	▲ 3.6	14	▲ 17.2	17.3	▲ 21.2	21	▲ 34.2
Courchevel Pop Up	189	201 157	▲ 27.9	16.5	▲ 3.4	17	▲ 12.5	21.3	▲ 19.5	22	▲ 25.6
Cologne	743	233 913	▲ 1.1	2.5	▲ 0.6	22	▲ 8.3	20.2	▼ 9.7	26	▲ 13.4
Chengde Yanlord	819	231 224	▼ 3.5	7.3	▲ 0.3	14	▲ 7.8	7.3	▼ 3.6	34	▼ 28.7
Dalian	866	227 001	▼ 0.9	11.9	▼ 2.8	15	▼ 2.4	0.9	▼ 3.1	28	▲ 13.3
Deauville	421	212 174	▲ 12	18.4	▲ 2.2	12	▲ 14.9	21.7	▲ 19.1	18	▲ 32.3
Florence	1693	190 060	▲ 14.7	20.3	▲ 5.7	19	▲ 14.1	19.3	▲ 21.9	15	▲ 35.8
Forte Dei Marmi	1107	188 004	▲ 17.2	14.7	▼ 3.1	19	▼ 2.4	1.9	▲ 5.4	14	▲ 16.8

- Data Visualisation and Breakdown
 - Identify Trends and Outliers
 - Data from Multiple Timeframes
- Drill up/down for more in-depth data
 - Company-wide → Regional → Store-by-Store breakdowns
 - Make Data-Driven Decisions

League Tables

- Use Key Metrics to compare and evaluate stores
- Identify Top-performers and underperformers

1c. KPI Report for Management Review

Store Profiling

STORE PROFILING				
Category A				
Store	Sales(\$ million)	Footfall	Conversion(%)	No. of Staff
Colchester	▲ 480.5	▲ 98.8K	20%	5
Connswater	▼ 380.1	▲ 75.8K	18%	6
Cork	▲ 400.2	▲ 80.4K	17%	5
Craigavon	▲ 470.8	▼ 95.0K	16%	5
Crawley	▲ 300.9	▲ 67.9K	15%	4
Category B				
Store	Sales(\$ million)	Footfall	Conversion(%)	No. of Staff
CribbsCauseway	▲ 500.2	▲ 35.3K	18%	5
Croydon	▼ 460.8	▲ 31.1K	17%	6
CrystalPeaks	▼ 330.2	▲ 19.9K	15%	5
Category C				
Store	Sales(\$ million)	Footfall	Conversion(%)	No. of Staff
Cumbernauld	▼ 240.9	▲ 91.0K	20%	5
Cwmbran	▼ 240.1	▲ 83.8K	18%	6
Dalston	▲ 190.5	▲ 79.0K	17%	5
Darlington	▲ 180.5	▼ 76.0K	16%	5
Derby	▲ 130.9	▲ 74.5K	15%	4
Derby2	▲ 120.3	▲ 65.5K	13%	3
Doncaster	▼ 150.7	▲ 74.6K	12%	4
Category D				
Store	Sales(\$ million)	Footfall	Conversion(%)	No. of Staff
Drogheda	▲ 150.9	▼ 49.9K	15%	5
Dundee	▲ 100.4	▼ 10.5K	14%	7
Dundee2	▲ 120.6	▲ 44.5K	13%	4
Dundrum	▼ 60.9	▲ 65.0K	12%	5

- Realistic Targets by Store Category
 - Performance-based Targets
- Identify Store-Customer Trends and Patterns
 - Peak Hours
 - Group Size
 - Returning Customers
 - Visit Duration



1c. KPI Report for Management Review

Historical Trends and Data

VISITOR COUNTS

Monthly Trend

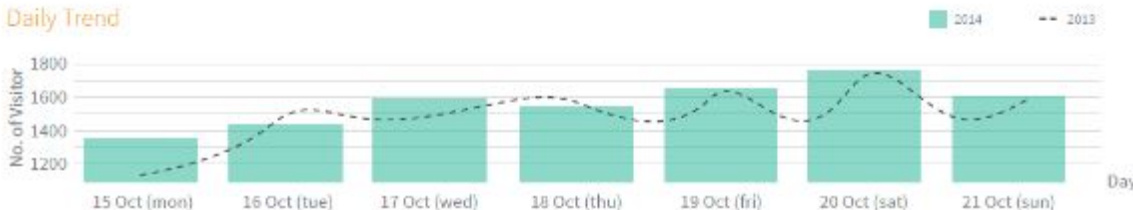


Week 47	This Year	Last Year	Changes
Monday	14 420	11 220	▲ 28.5%
Tuesday	14 680	11 190	▲ 31.2%
Wednesday	19 320	18 300	▲ 5.6%
Thursday	17 210	14 890	▲ 15.6%
Friday	16 340	12 640	▲ 29.3%
Saturday	27 490	16 280	▲ 68.9%
Sunday	24 630	19 110	▲ 28.9%
Total	452 110	252 010	▲ 79%

Weekly Trend



Daily Trend



Week 51	Before Campaign (Average per day)	During Campaign (Average per day)	After Campaign (Average per day)	% Changes During Campaign	% Changes After Campaign
Visitor Count	457	862	539	▲ 88.6%	▲ 17.9%
Turn In Rate	11.8%	15.1%	12.1%	▲ 27.9%	▲ 2.5%
Visit Duration	10.1 mins	18.2 mins	12.5 mins	▲ 80.7%	▲ 23.8%
Returning Rate	10%	20%	15%	▲ 100%	▲ 50%
Sales Conversion	10.2%	14.3%	13.7%	▲ 40.2%	▲ 34.3%

- Compare Live vs Historical Data
 - Seasonal Data and Trends
 - Multiple Timeframes
- Compare Store Performance with External Factors
 - Weather
 - Public Holidays and Events
 - Industry News
- Identify Campaign Effectiveness
 - Track Campaign ROI
 - Measure Change in KPI due to Campaign

1c. Reporting Suite



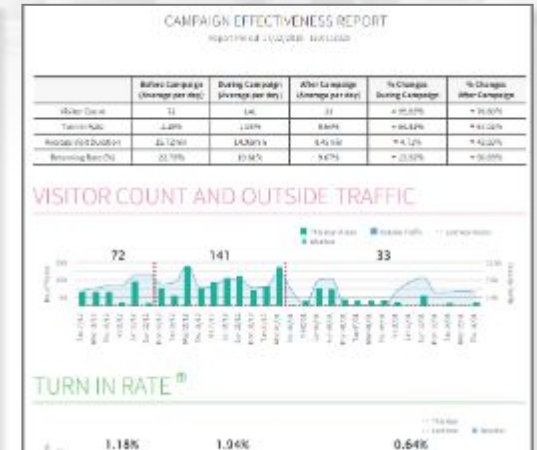
[Analytics Center](#)



[Company Weekly Report](#)



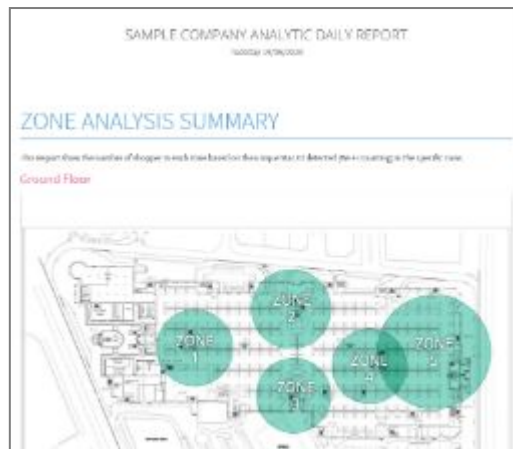
[Site Weekly Report](#)



[Marketing Effectiveness](#)



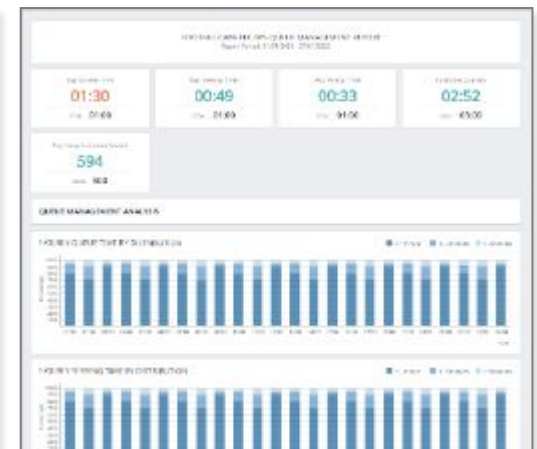
[Live Occupancy](#)



[Zone Analytics](#)



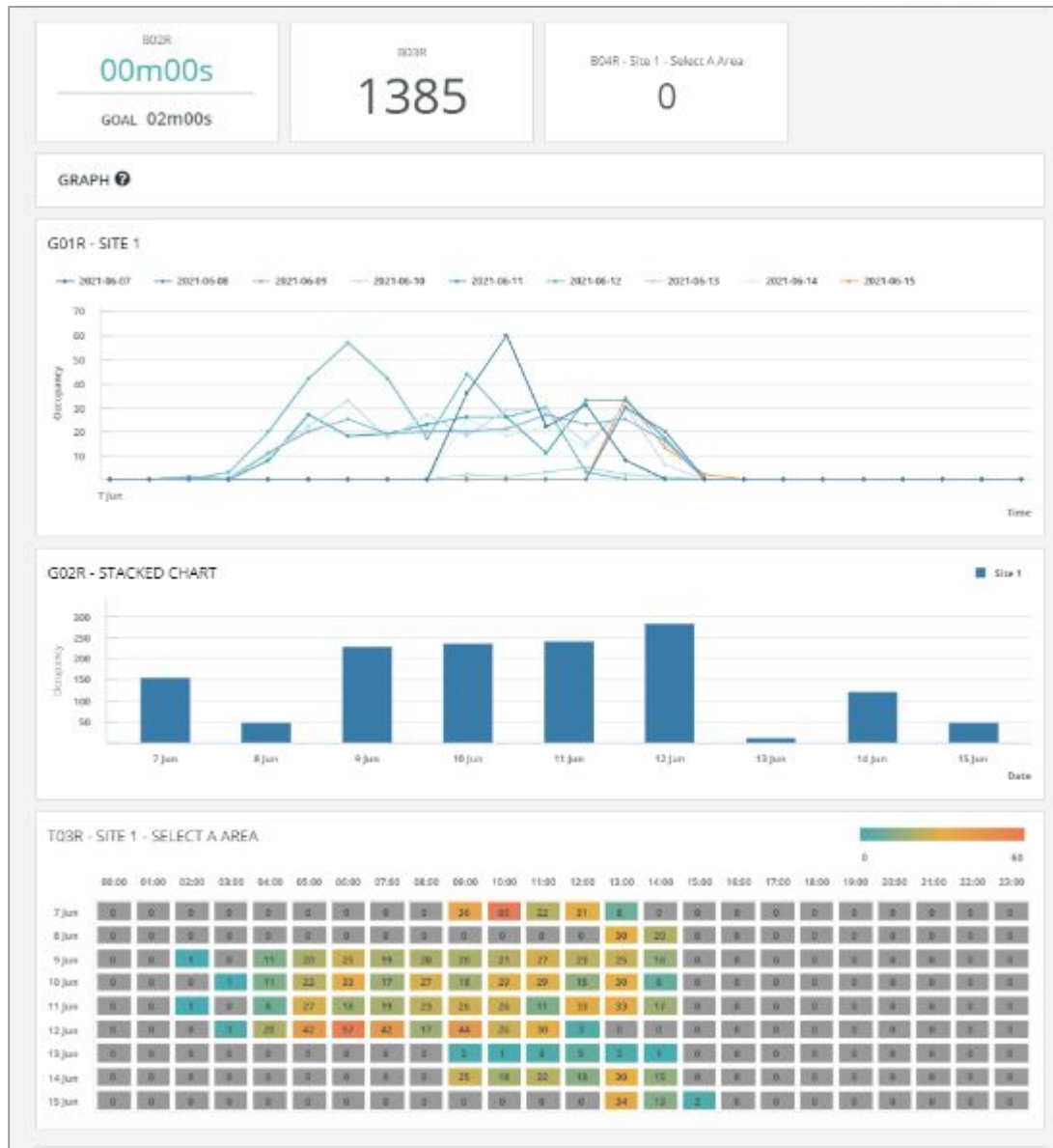
[Mecca Occupancy](#)



[Queue Counting](#)

2. Custom Report Builder

In addition to the 60+ readily available reports, FootfallCam has an array of widgets available which can be used to combine and make customised dashboards and reports to address your business requirements.



- **Build Custom Reports**
 - Over [20 types of widgets](#) to choose from
 - Over [40 metrics](#) to choose from
 - Easy to use – Drag and Drop widgets
- **Slice and Dice Dataset**
 - Drill up and down the report into different granularities and time intervals
- **Reports Management**
 - Organise Reports in [Folder Structure](#)
 - User Access Settings for Reports
 - Share & Export in PDF or Excel



Infrastructure and Integration

User Requirements for Infrastructure Setup:

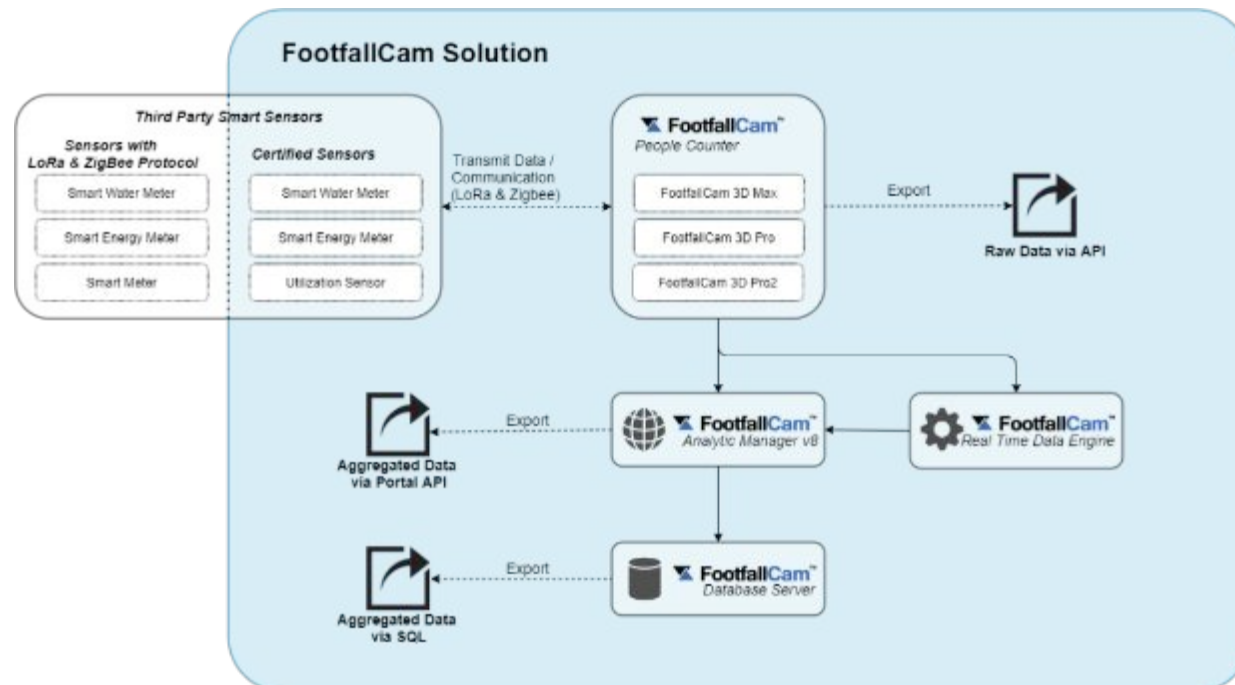
1. Server/Data Hosting
 - a. FootfallCam Cloud - Centrally Managed System
 - b. Customer own server
2. Software Platform
 - a. Open System Architecture
 - b. Able to integrate data to customer's own BI system
3. Infrastructure Security
 - a. Data Privacy & GDPR Exemption
 - b. One-way hashing
 - c. Single Sign On Integration

1a. Centrally Managed System

Server software is [hosted by FootfallCam](#). It is a free service and retailer will be able to access the data via the control panel.

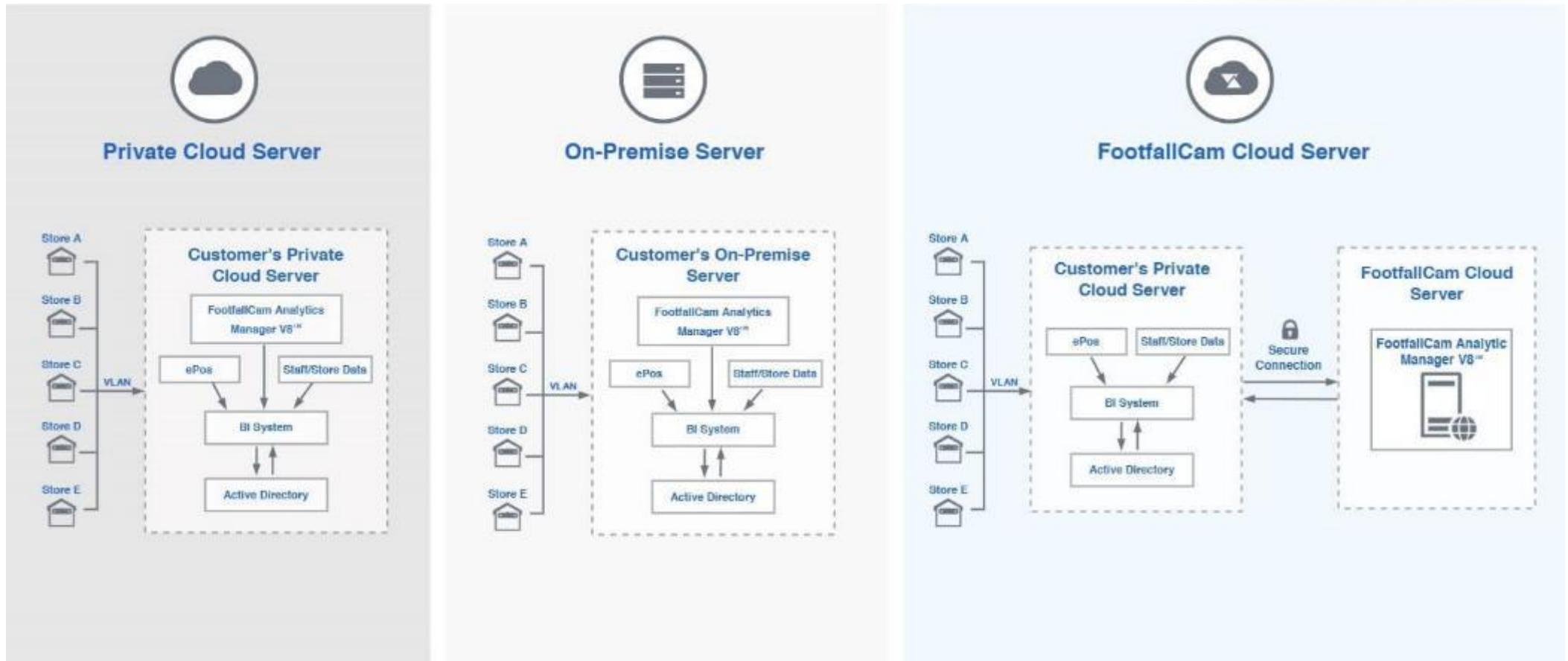
FootfallCam cloud server solution is a combination of Load-balancing, Multi-instancing, High Availability Server Architecture, designed to receive incoming data and aggregating data from counters all around the world, as well as generating reports, view live data and extracting processed data for integrations to suit our customers' needs with scalable capability.

FootfallCam is hosting the most powerful functions on behalf of the retailer, making it available even for 1 counter installation.

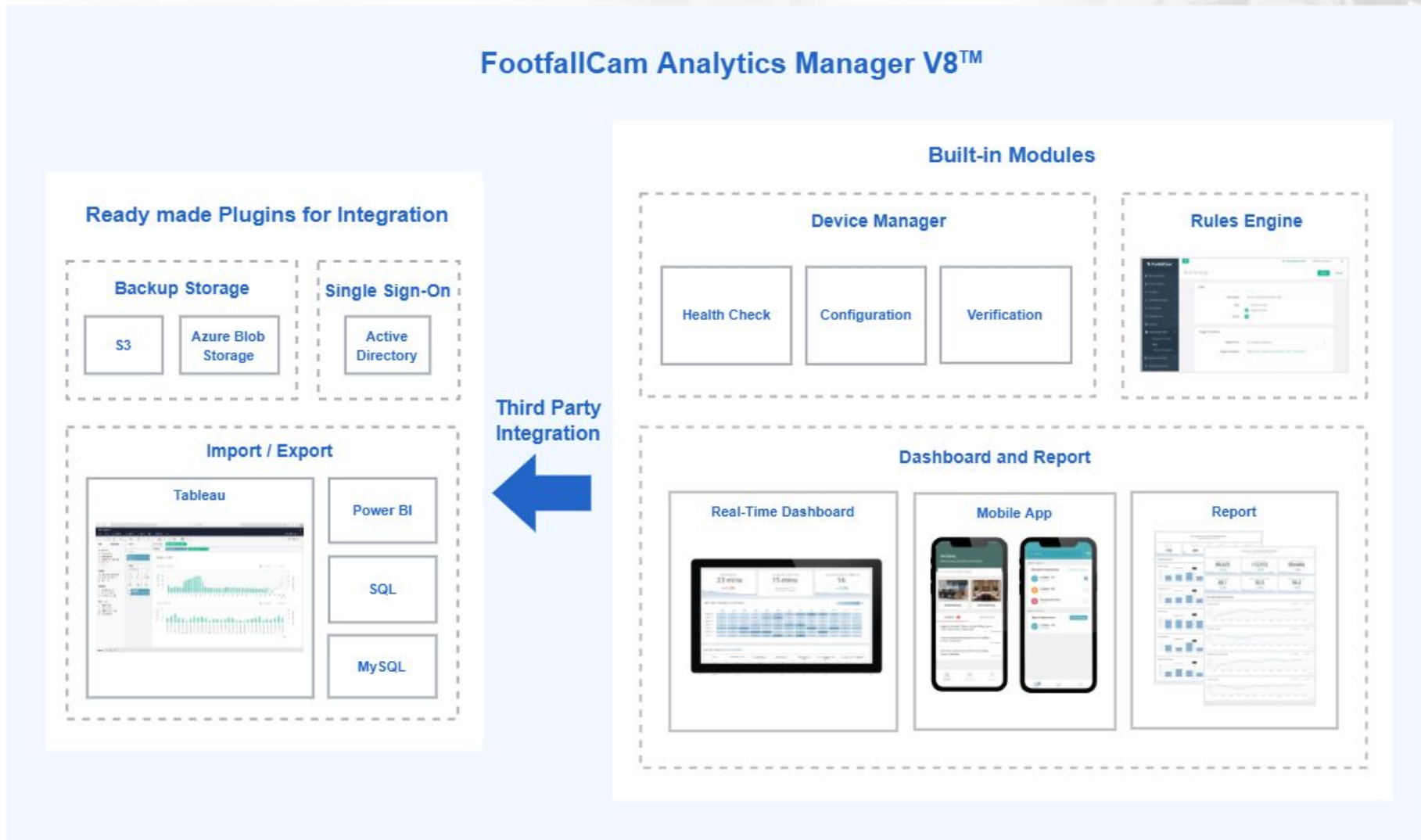


1b. FootfallCam Software Installation Options

Users may choose to view their reports and generated data by FootfallCam on the cloud-based server or their own on-premise/private cloud server.

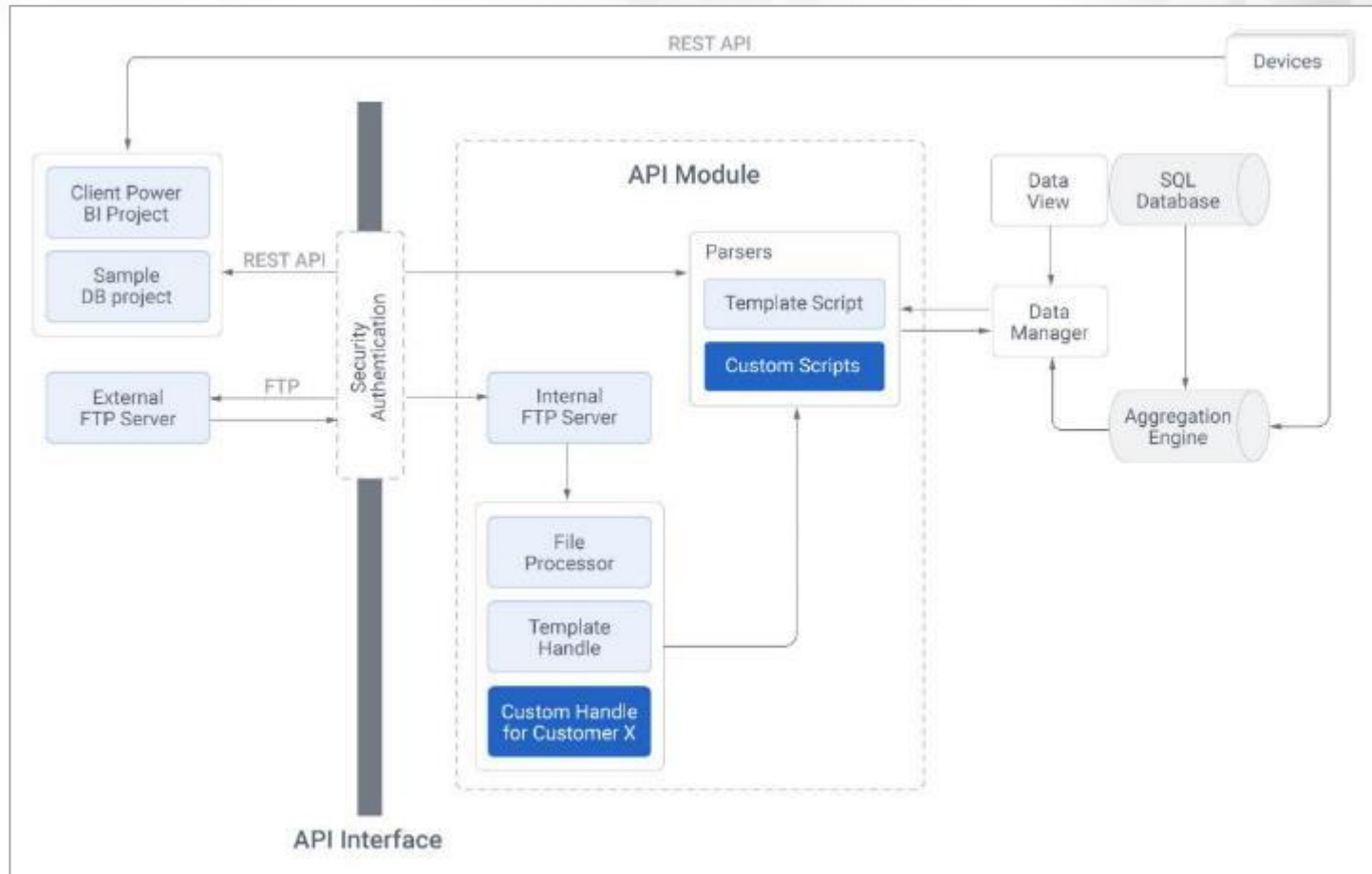


2a. FootfallCam Software Platform



- Open architecture. Customers will have **full ownership and access** to all the data
- Data can be **integrated** to your own **Business Intelligence (BI)** system and FootfallCam provides ready-made plugins to achieve that

2b. API: Integrate with your Applications

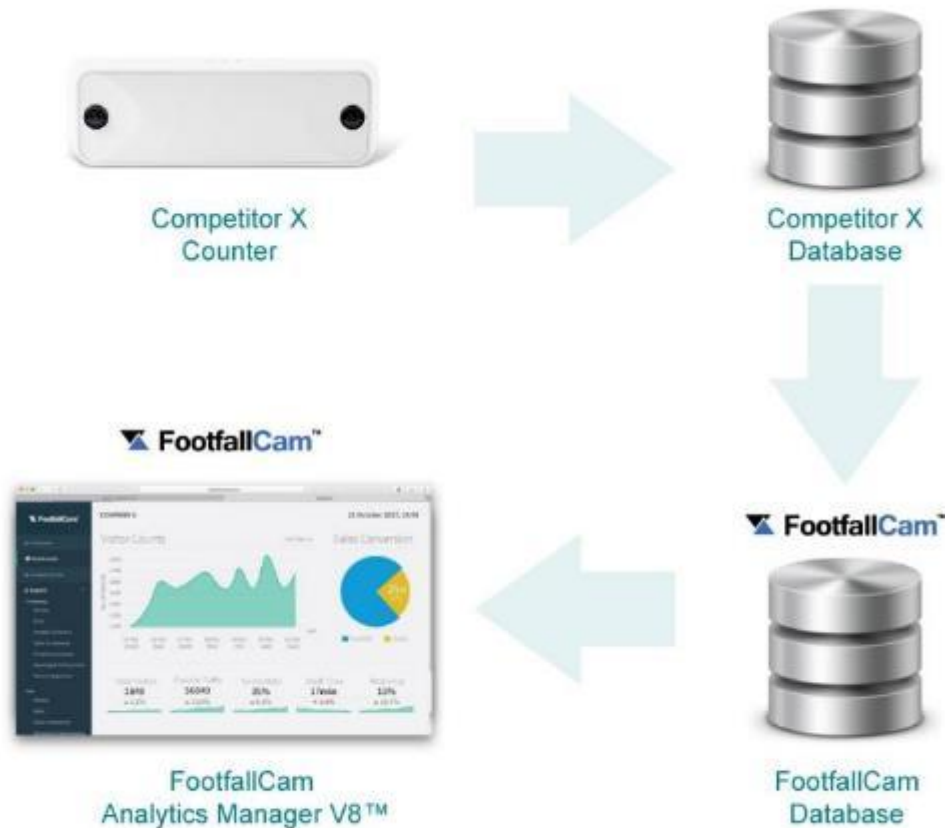


[FootfallCam API document](#)

- **Integrate** people counting data into third-party software platform or sample projects via API or FTP
- **Real-time** data retrieval
- Data in **aggregated** or **raw** format
- Allow **customised** scripts and handling for specific customer's project

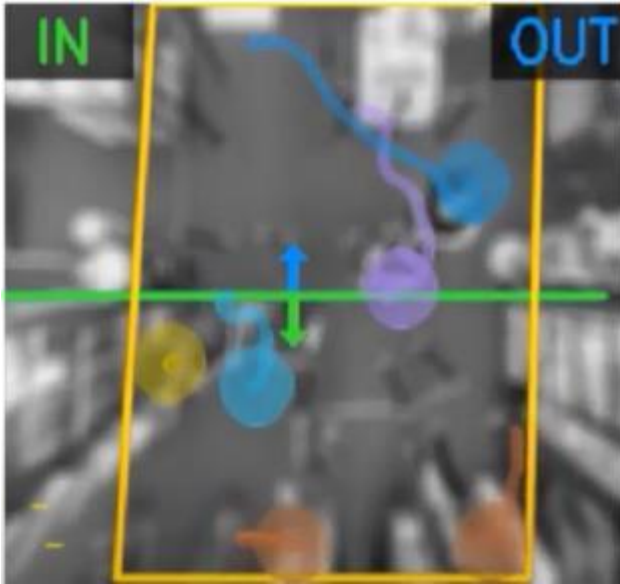
2b. Legacy Cameras

Integrating Existing People Counter

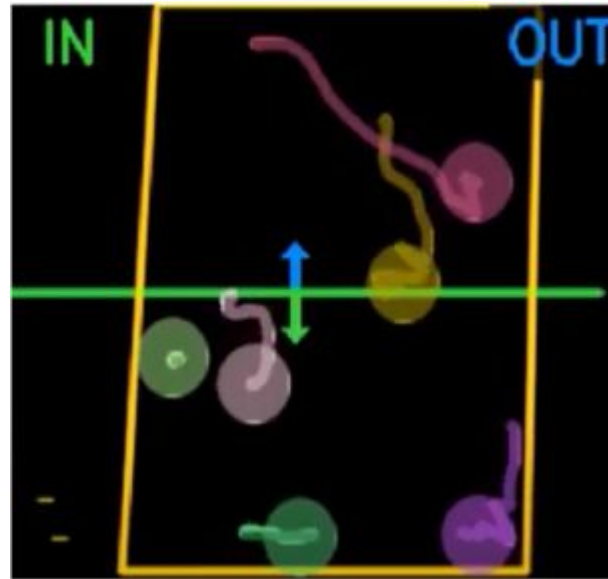


- Use legacy hardware while using having access to FootfallCam's dashboard reporting feature
- Done through an **API calling script** to pull the counting data from their existing counter into the FootfallCam Analytic Manager
- No additional requirement to do any re-engineering as FootfallCam will retrieve the API access key directly from the vendor of the incumbent counters
- FootfallCam **offers full maintenance service** for existing legacy hardware

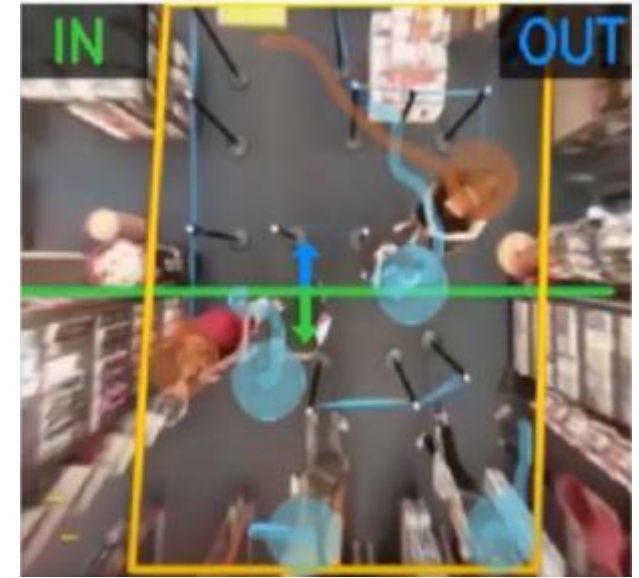
3a. Data Privacy and GDPR Exemption



Option 1: Black and white mode



Option 2: No live view mode

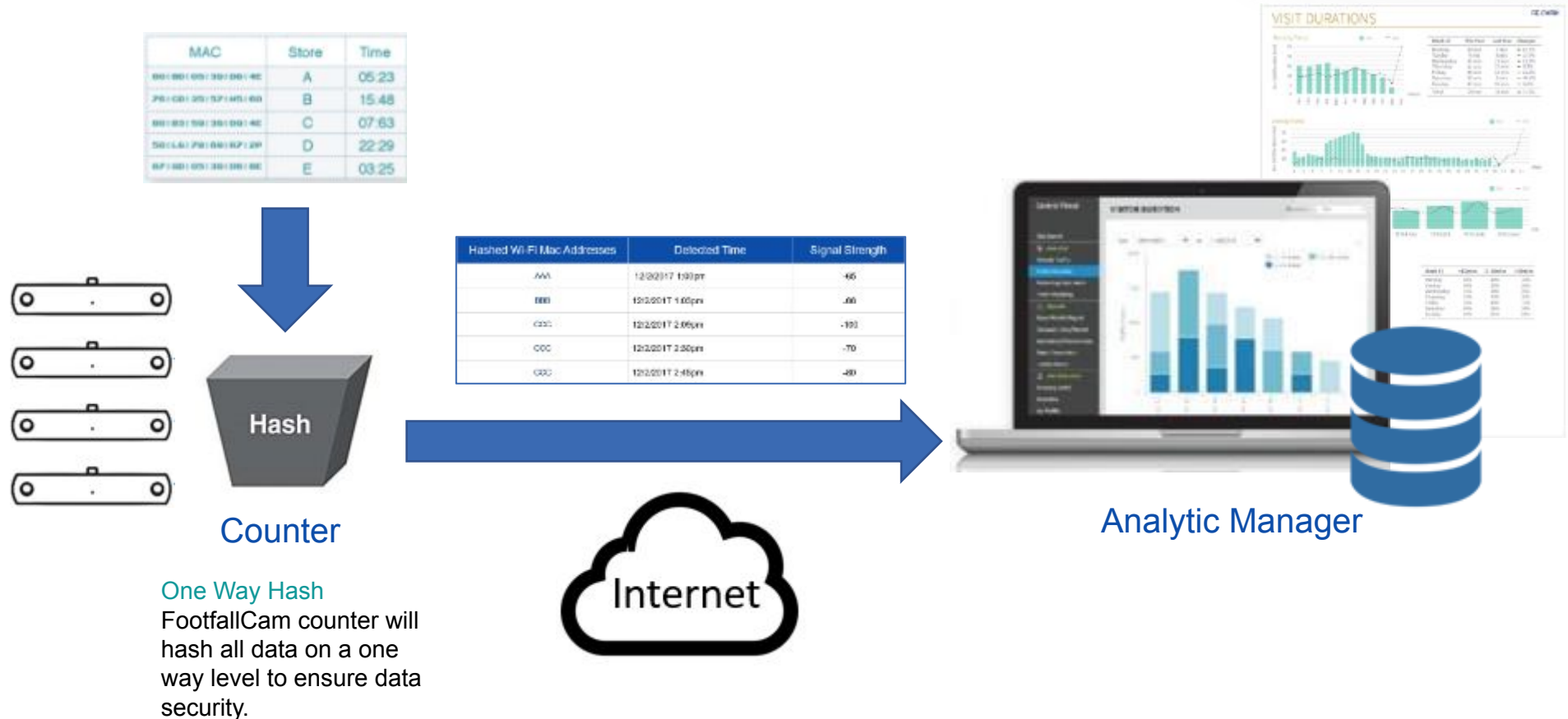


Option 3: Low resolution mode

- Counters installed downwards facing the ground – does not capture the entirety of the customer & unable to pick up facial features.
- Videos are recorded only for verification purposes and taken in low resolution. The videos will be deleted once verification is completed. View video on different privacy mode [here](#).
- FootfallCam uses 3D depth map instead of video images for counting purposes – data collected are non-visual and are will not be able to be identify with any individuals.
- FootfallCam is exempted from GDPR. More information can be found [here](#).

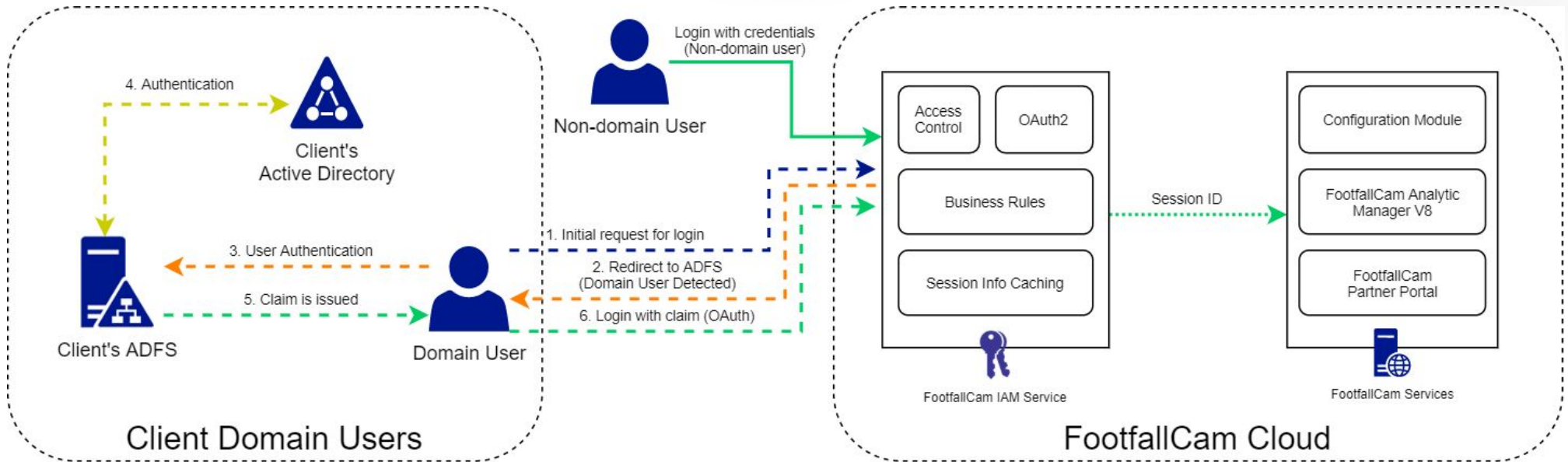
3b. Data Security and Privacy Policy

All raw data are hashed on a one-way level, rendering it difficult for anyone with access to the raw data to reverse the hashing algorithm.



View [FootfallCam Data Privacy Policy](#)

3c. Single Sign-On Integration



- Customer will be able to [integrate the Active Directory Domain Users](#) into FootfallCam™ Analytic Manager V8 and Partner Portal through Active Directory Federation Service (ADFS) with OAuth2.
- To setup [Single Sign-On](#) feature, customer will need to provide On-Premise Authority (URL of the ADFS metadata document), and should do provisioning into customer's ADFS.
- In FootfallCam™, customer must have a local administrative company account, connect to customer's ADFS, and instantiate each individual user account within the company account



Software and Support

User Requirements - Software & Support:

1. Software Functions

- a. Device Management - **Manage all devices** in one platform
- b. Account Management - **User Access Control**
- c. Rule Engine - **Highly Customisable** Application

2. Support/Maintenance

- a. FootfallCam Support Portal
- b. Service Level Agreement
- c. Engineer Call Out
- d. Return Merchandise Authorisation (RMA)

1a. FootfallCam Device Management

The screenshot displays the FootfallCam Device Management interface. The top navigation bar includes the FootfallCam logo, a menu icon, and user information: 'CP Changelog (R1201) adminCompany'. The main content area is titled 'Device' and features a 'Save' button, 'Cancel', and 'Delete Device' options. The interface is divided into several sections:

- Device Info:** A table listing device details:

Device Name:	Branch EPID Nullification Alert
Serial:	15F010156805 000000F5e4021
MAC Address:	b827eb360a40c
Mounting Height (Lens):	3.5m (11'00")
Firmware:	3.4.0 (Upgrade)
Last Allocation Date:	2019-Dec-27 15:12
Warranty:	Within Warranty Expires on 2020-Aug-20
- Health Check:** A section for monitoring device health, including 'Network Status' (Offline since 2020-Jan-21 16:55), 'Device Health Check' (with a 'Refresh' button), 'Device Profile' (with a 'Switch Profile' button), 'Pending Issue', 'Pending Action', and 'Notes for customer'.
- Accuracy Audit:** A section for device calibration and performance, including 'Settings & T. Details', 'Accuracy Audit', 'Floor Plan', 'Related Ticket(s)', and 'Internal Workspace'. It shows details for a specific audit:

Stage:	#2 First Live Tuning
SLA:	2 Day(s)
Tuned:	2019-Dec-20 12:55 (View Report)
Notes for Customer:	
Reverification Approval:	2019-Oct-12 11:08
Approval Reason:	Store Layout Changed

A 'Schedule Video' button is located at the bottom of this section.

- Designed to manage large number of counters
- Collects data from all counters and centralizes them in a single place
- Fully manage FootfallCam sensors
- Easily **add and remove** counters from your account
- Edit configurations remotely without going on-site
 - Branch ID
 - Counter ID
 - Number of sensors per branch,
 - Operating hours
 - Etc.

More details can be found [here](#)

1b. Account Management

Individual user accounts can be setup for team members and assign access rights accordingly.

Account Type	Description	Example
Admin	Can create more accounts and remove unwanted accounts.	CEOs are able to restrict the store managers' access to certain data metrics.
User	Limited access in account creation and removal.	Store managers are only allowed access to their own store's data.

User Accounts ⁹
Add User

Users	Account Type	Email	Last Login	Delete User
Joules	admin	marcin.klosok@joules.com	4/16/2020 5:44:14 AM	
Marcin Klosok	admin	Marcin.Klosok@joules.com	4/2/2020 10:38:30 AM	✕
Jeannette Copeland	user	jeannette.Copeland@joules.com	6/21/2017 8:15:58 AM	✕
Ben Warren	admin	Ben.Warren@joules.com	2/20/2020 11:22:57 AM	✕
Marc Donch	user	Marc.Donch@joules.com	9/7/2017 8:49:57 AM	✕
Lindsay	user	Lindsay.Rowley@joules.com	1/29/2018 3:26:43 PM	✕
JamesH	admin	james.hollingsworth@joules.com	8/9/2019 10:22:21 AM	✕
Jody Boye	user	jody.boy@joules.com	10/5/2018 4:46:27 PM	✕
Lauren	user	Lauren.Peace@joules.com	10/2/2019 12:25:47 PM	✕
Jess Welsh	user	Jess.Welsh@joules.com	1/1/1970 12:00:00 AM	✕
Kelly Perkins	user	Kelly.Perkins@joules.com	10/8/2018 5:09:33 PM	✕
James O'Neill	admin	James.oneill@joules.com	1/30/2019 10:17:04 AM	✕
Alex Kirk	admin	Alex.Kirk@joules.com	11/13/2018 3:02:23 PM	✕
Chris Sutton	admin	chris.sutton@joules.com	4/14/2020 4:06:28 PM	✕
Tajal Chandarana	admin	Tajal.Chandarana@joules.com	3/11/2019 10:59:12 AM	✕
Nick Weare	admin	Nick.Weare@joules.com	4/14/2020 4:05:56 PM	✕
Danie Earl	admin	Danie.Earl@joules.com	2/17/2020 2:26:20 PM	✕
Richard Sortwell	admin	Richard.Sortwell@joules.com	1/1/1970 12:00:00 AM	✕

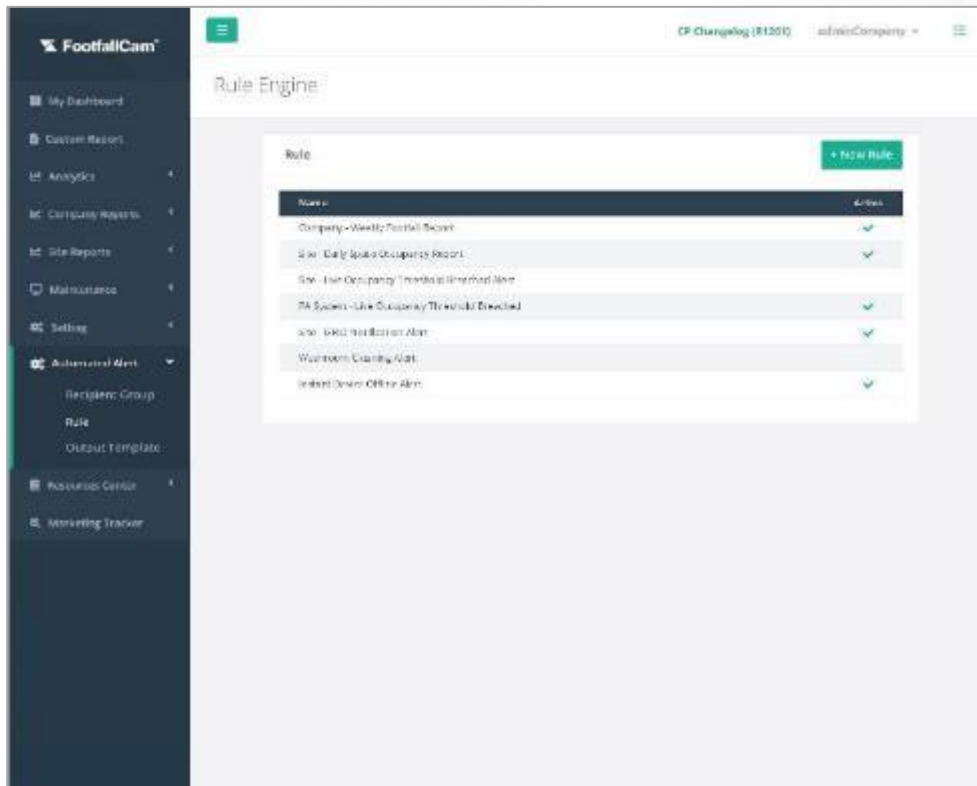
Add New Account

Account Type: User

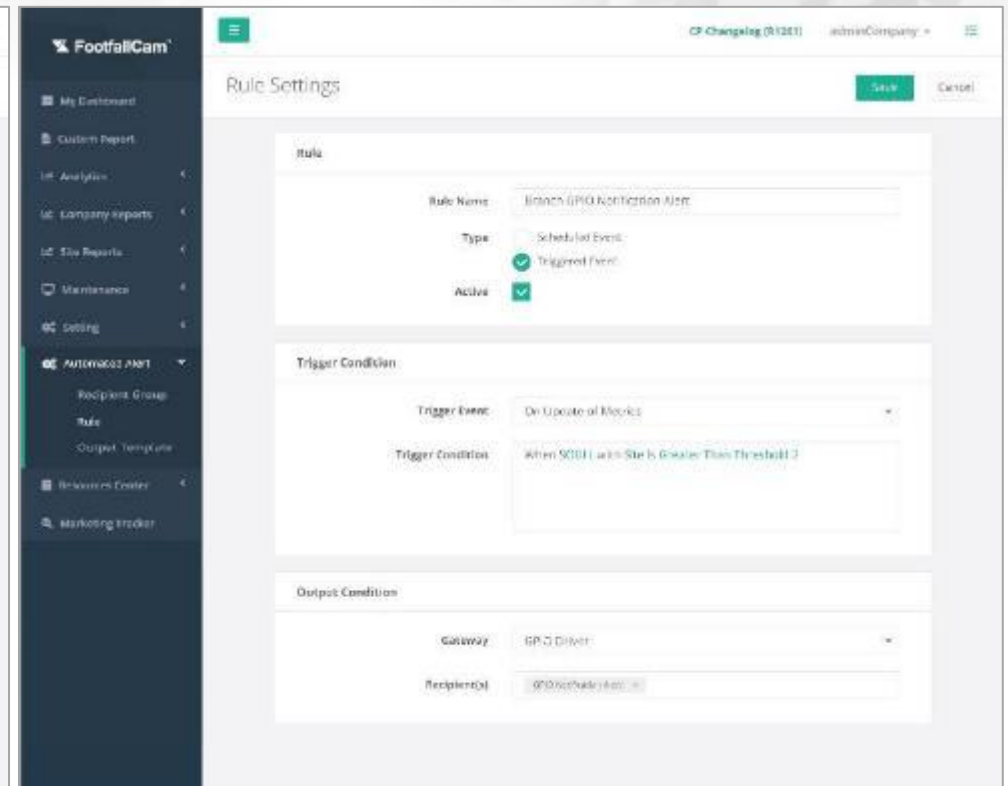
Site: Available Accessible by this account

Page Access: Available Accessible by this account

1c. FootfallCam Rule Engine



[FootfallCam Rule Engine - List View](#)



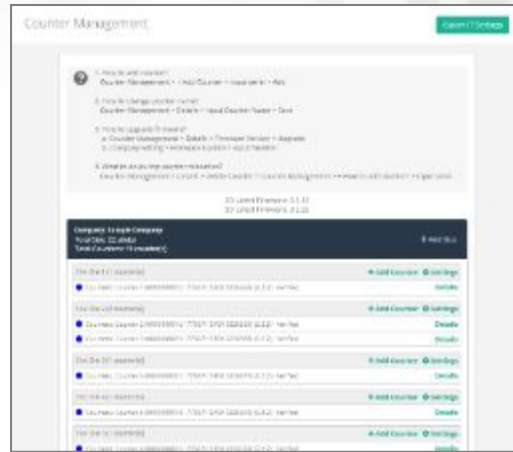
[FootfallCam Rule Engine - Settings](#)

- 500+ different rule templates
- Customised rules using Python, interface with:
 - FootfallCam raw data, or
 - Aggregated metrics
- Automatic notification via SMS, Emails, FootfallCam Watch, Android and iOS Apps

Management Control



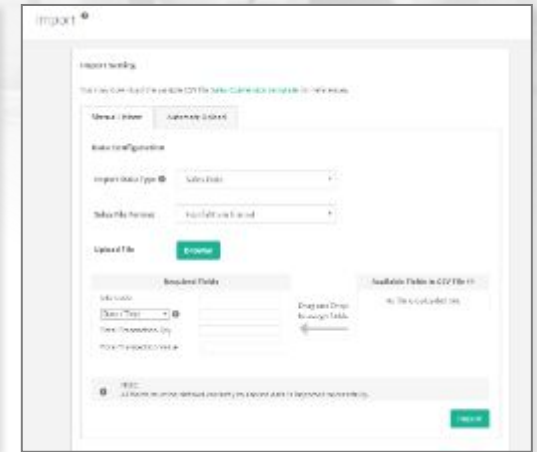
User Control



Branch Control

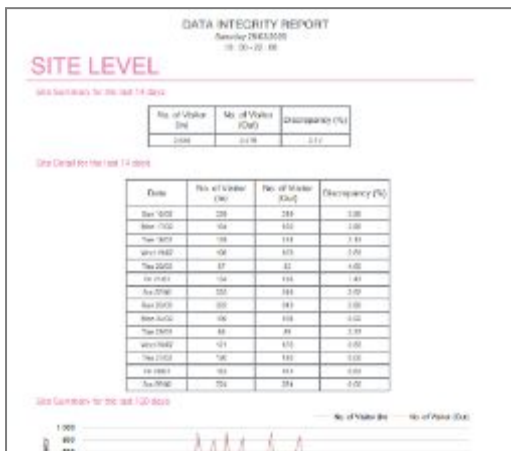


Email Scheduler

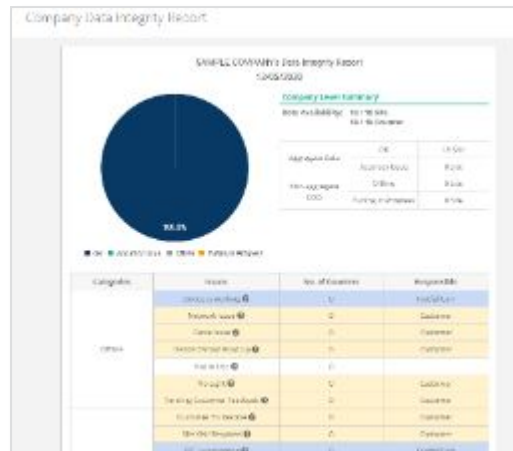


Import/Export

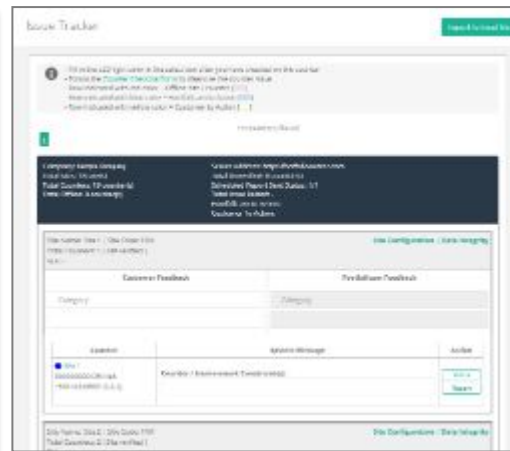
Health Check and Maintenance Tools



Data Integrity



Company Data Integrity



Issue Tracker



Support Portal

2a. Built-in maintenance support portal

The one-stop support center for all FootfallCam Analytics Software users.

Any technical issues can be raised via the Support Portal and this will be assigned to a technical personnel accordingly.

The screenshot displays the 'Raise a Trouble Ticket' form. The form includes the following fields and options:

- Reported Device(s):** Radio buttons for 'Company level' (selected) and 'Device level'.
- Ticket Subject:** A text input field with the placeholder 'Please input ticket subject.'
- Category:** A dropdown menu currently set to 'Data Not Accurate'.
- When does it happen?:** Two date input fields separated by a 'to' label.
- Comment:** A large text area for providing details.
- Attachment:** A link labeled 'Attach File'.
- CC:** A text input field for additional email addresses.
- Buttons:** 'Cancel' and 'Submit' buttons at the bottom right.

The background shows a 'Trouble Tickets' section with a table of tickets and a 'General Search' bar.

Ticket #	Ticket Subject	Category
2002-32977	Counter is Not Ready (FFC)	Other
1911-32286	Unable to contact SQL server	Other
1911-32221	Serial Number	None
1908-1328	Blue indicator for Northcote Rd	None
1906-0988	Trigger area	None
1906-0964	Data Not Accurate	None
1905-0597	Data Not Accurate	None
1905-0575	Missing Data	None

Status	Requester
Closed	Nick123<Nick.Weare@joules.com>
Closed	BenW<Ben.Warren@joules.com>
Closed	Marcin123<Marcin.Klosok@joules.com>
Closed	JamesH<James.hull@joules.com>
Closed	Nick123<Nick.Weare@joules.com>
Closed	Chris5<chris.sutton@joules.com>
Closed	Chris5<chris.sutton@joules.com>
Closed	Chris5<chris.sutton@joules.com>

More information can be found [here](#).

2b. Service Level Agreement

FootfallCam has categorised the support service into three tiers based on its priority levels:

- Priority Level 1: Business critical
- Priority Level 2: Urgent support needed
- Priority Level 3: General issue with no major business impact



- Service Level Agreement ([view full document](#))
- Includes:
 - Daily counter health check
 - Accuracy audit
 - First-line, second-line, and onsite support
 - Software and firmware upgrade
 - And more
- Applicable for FootfallCam products including FootfallCam Centroid and third-party CCTV camera

2c. FootfallCam Engineer Call Out

FootfallCam provides 2 options for engineer callouts - **Itemised cost** (upon request) or **Package pricing** (on Subscription basis)

Engineer Callout				
Section 1: Itemised Price List				
Categories	In-Hour Callout Unit Cost (GBP)	Out-of-Hours Callout Unit Cost (GBP)	SLA	
P1 Immediate	700	910	Within 2 working days	
P2 Express	450	390	Within 4 working days	
P3 Standard	250	234	5-14 working days	
Terms and Conditions:				
1. If multiple callouts (for multiple stores) required are in the same street, the first store will be chargeable at the original cost, the second store will be added for 30% off, and the third stores onwards will be 40% off.				
2. If there is no package subscription in place, by default all engineer callout requests will be chargeable based on the itemised price list above.				
Section 2: Risk Assessment (for Potential Engineer Callout)				
Categories	No. of Stores	% of Potential Callout	No. of Stores Requiring Callout	
P1 Immediate	547	0.10%	1	
P2 Express	547	3.00%	16	
P3 Standard	547	5.00%	27	
Terms and Conditions:				
1. The potential callout rate is the anticipated number of callouts that is required for all the stores in a year.				
Section 3: Proposed Annual Packages				
Package A Package Discount: 10%				
Categories	No. of Callout per Year (Credits)	Package Price per Year (GBP)	Average Monthly Fees per Store (GBP)	
P1 Immediate	1	13,185.00	2.01	
P2 Express	16			
P3 Standard	27			
Package B Package Discount: 10%				
Categories	No. of Callout per Year (Credits)	Package Price per Year (GBP)	Average Monthly Fees per Store (GBP)	
P1 Immediate	3	17,302.00	2.64	
P2 Express	20			
P3 Standard	40			
Package C Package Discount: 40%				
Categories	No. of Callout per Year (Credits)	Package Price per Year (GBP)	Average Monthly Fees per Store (GBP)	
P1 Immediate	10	25,650.00	3.91	
P2 Express	50			
P3 Standard	35			
Terms and Conditions:				
1. The proposed package is customised for each customer. If customer choose to opt for annual package, Package A is the minimum package, customer may opt to subscribe to a different package or to upgrade their package before the package subscription.				
2. The cost included in the package is valid for 1 year from the point of purchase/invoice date, and the credits cannot be brought forward to the following year after the validity.				
3. If the credits have been fully utilized prior to the end of the package, ad-hoc callout charges will be applied for the additional callout requests. Please refer to Section 1 for the Itemised Price List.				
4. All engineer services will be arranged only after initial assessment is completed by our first line support team.				
5. The following scenarios are not covered under the Callout Package, itemised callout cost will be applied:				
- Physical/Water damage				
- Demanding/Relocation/Re-installation of device due to store refurbishment or renovation				
- Problems that arise due to unnecessary and unauthorised actions from store personnel (For e.g.: Counter unplugged, Counter angle adjusted physically, Counter repositioned, etc)				
- False alarm on the issue				
6. As part of the standard practice, our engineer will bring an extra device onsite in case if the existing device is faulty and a replacement is required.				
7. The packages are proposed based on In-Hour/Engineer Callout, additional charges may apply for Out-of-Hours Callout.				

Sample [Engineer Callout Package](#) (pdf)
 Sample [Engineer Callout Package](#) (Excel)

#1: Itemised Cost

	Categories	In-Hour Callout Unit Cost (GBP)	Out-of-Hour Callout Unit Cost (GBP)	SLA
P1	Immediate	700	910	Within 2 working days
P2	Express	450	390	Within 4 working days
P3	Standard	234	250	5-14 working days

#2: Sample Package Pricing

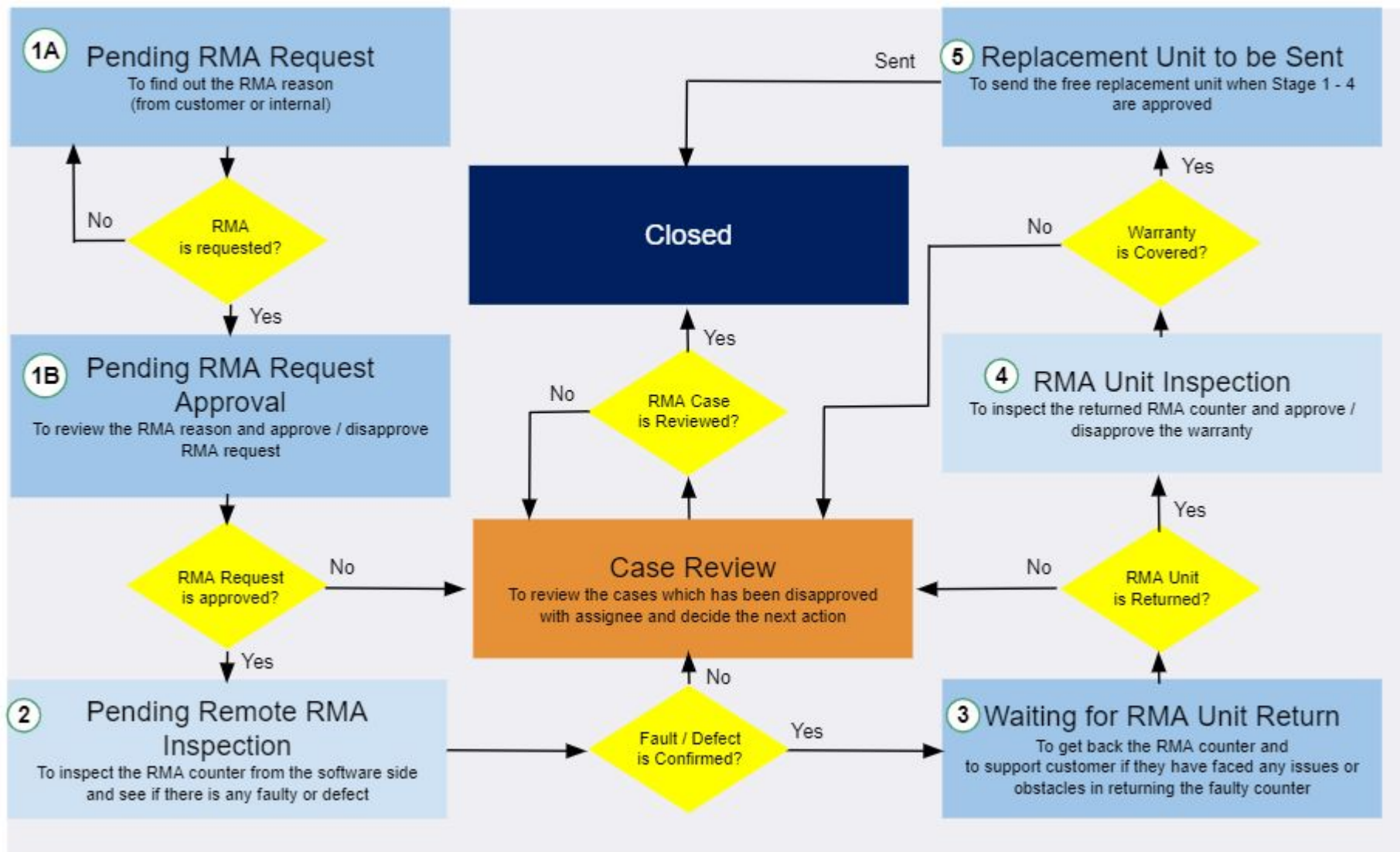
	Categories	No. of Callout per Year (Credits)	Package Pricing per Year (GBP)	Average Monthly Fees per Store (GBP)
P1	Immediate	1	13,185.00	2.01
P2	Express	16		
P3	Standard	27		

Notes:

- FootfallCam offers Annual Engineer Call Out package with discounted pricing, customisable for each customer
- A Risk Assessment will be conducted to estimate the number of potential call-outs needed

2d. Return Merchandise Authorisation (RMA) Process

Upon diagnosis by FootfallCam that a device is suspected faulty, the device will be sent back to FootfallCam to undergo further inspections through the Return Merchandise Authorization (RMA) Process.



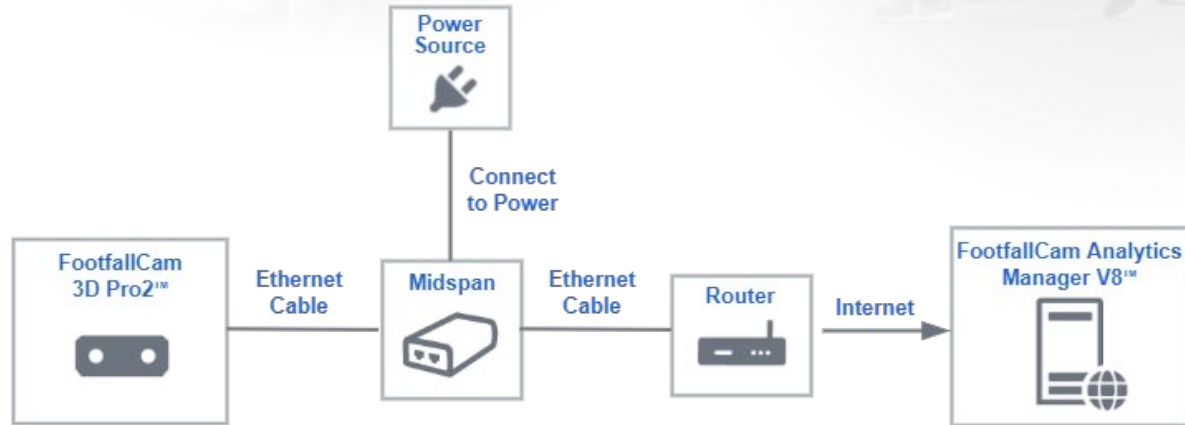


Installation and Deployment

FootfallCam Deployment Options

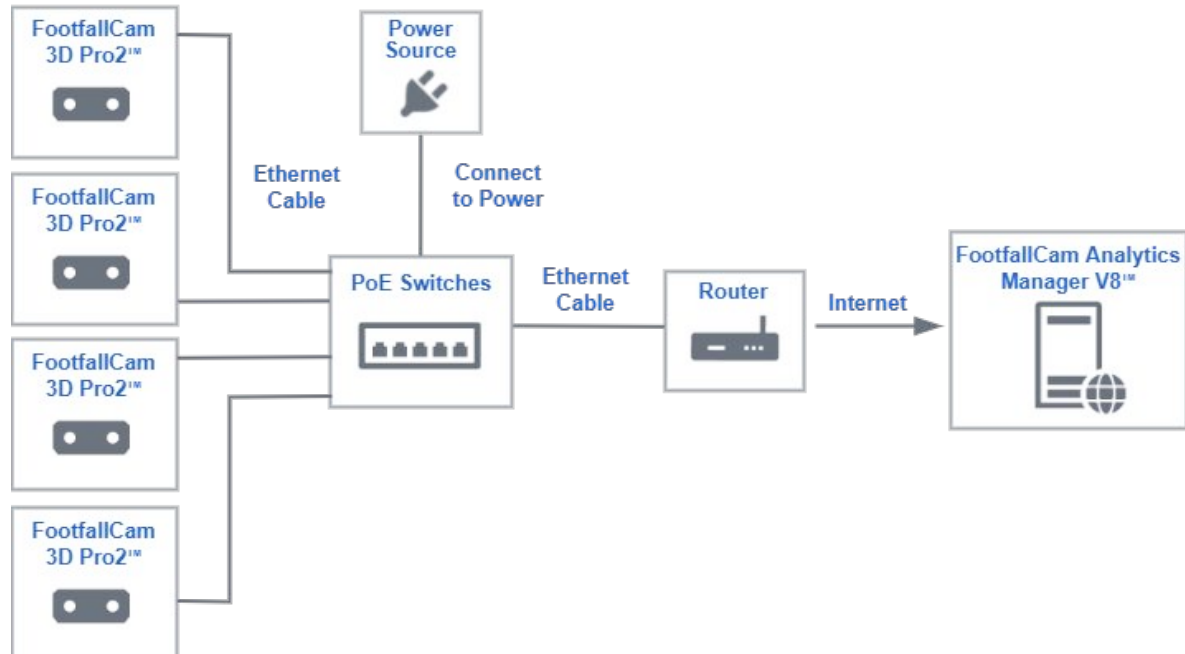
Option #1:

1x
People Counter

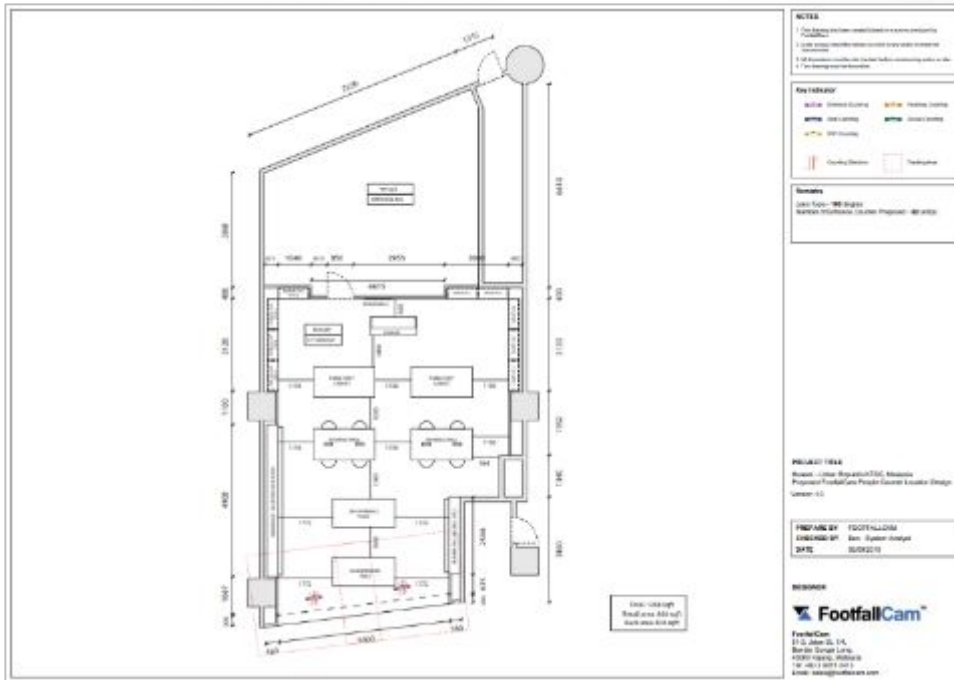


Option #2:

Multiple
People Counters

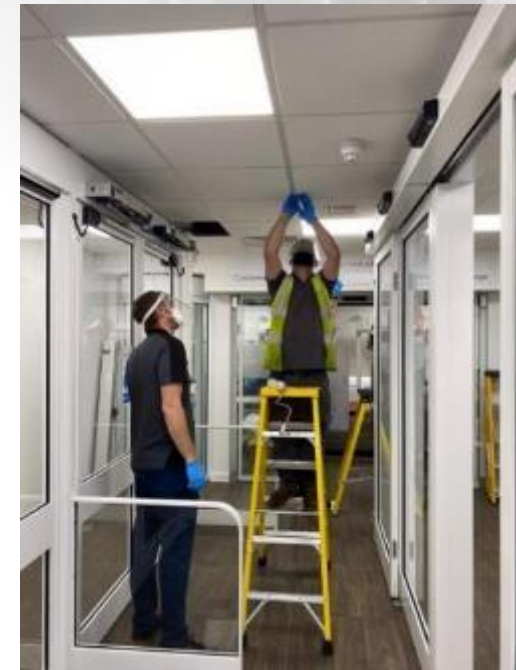
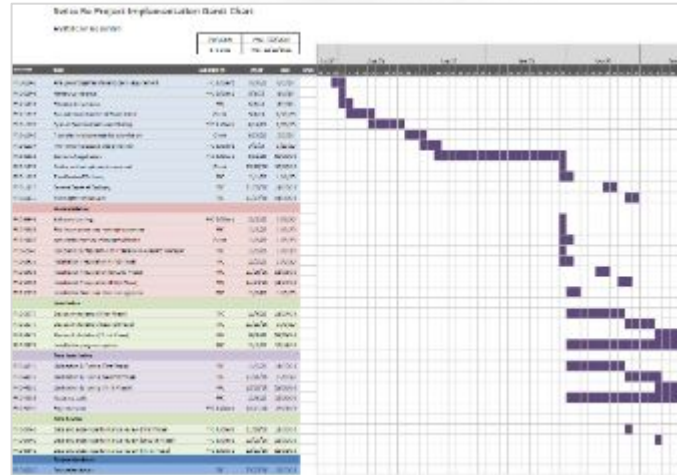
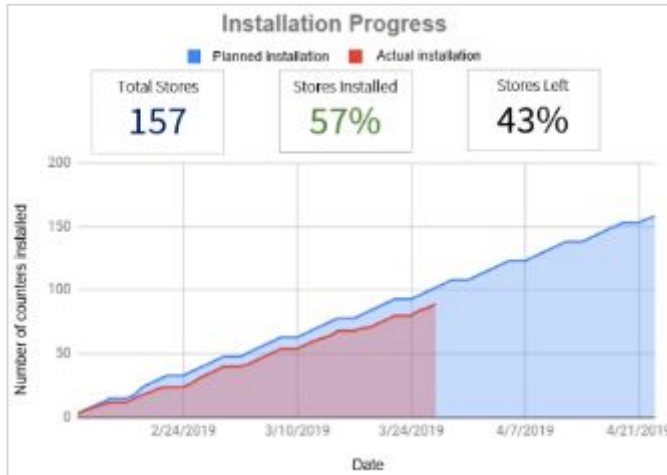


Floor Plan Design



- FootfallCam provides the service of designing customers' floor plans to facilitate the installation for the **quantity of counters** required, **cabling location** and **mounting position** of the counter before every installation.
- Determine where to position the device during each event to ensure no props are obscuring the live view of the device
- The [sample floor plan](#) serves as an example of standard floor plan plotting done by FootfallCam system analyst.

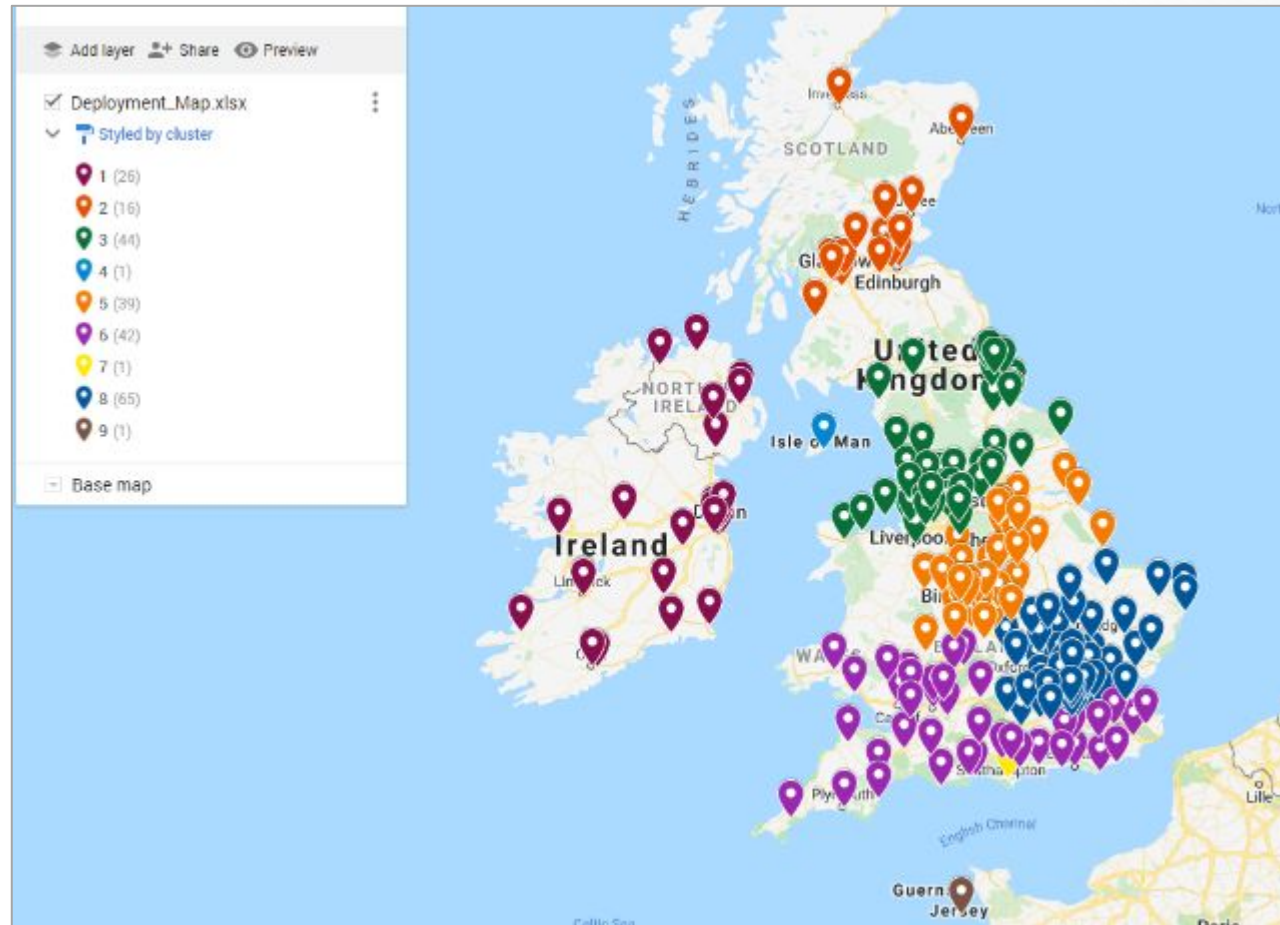
Deployment Process



- Manage installation progress using [Installation Tracker](#) with bi-weekly update
- Scope of work and timeframe included in Gantt chart
- Data validation to be done within 3 days after each installation
- Deployment executed concurrently in different countries

Cluster Planning for Installation

- Installation will be grouped into clusters based on geographical location.
- Multiple installation teams to carry out the installation concurrently.



[Sample Deployment Map](#)

Pre-Installation Preparation

- Carry out pre-installation planning using FootfallCam checklists
 - [Site survey form](#) – For store details preparation to determine the number of counters needed for each store and the store condition.
 - [Store details and IT checklist](#) – IT details preparation to prepare engineer for on-site configuration.

Store Details				Store Contact Information		Entrance 1				Entrance 2					
Store Name	Store Code	Type	Category	Store Address	Contact Name	Distance (m)	Counting Height (m)	Camera Type	Resolution	Camera Type	Resolution	Distance (m)	Counting Height (m)	Camera Type	Resolution
MARK & SPENCER	ME35	Street	Department Store			2.0	2.0	80	4	2	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE4C	Street	Supermarket			1	2	70	3	1	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE33	Street	Supermarket			2.4	2.0	80	3	2	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE36	Street	Supermarket			1.9	2.0	80	3	2	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE38	Street	Supermarket			1	2	70	3	1	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE30C	Street	Supermarket			4.3	2.0	80	3	2	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE40	Street	Supermarket			1	2	70	3	1	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE39	Street	Supermarket			1.8	2	80	3	1	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE30E	Street	Supermarket			2.7	2.0	80	3	2	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE30R	Street	Supermarket			1	2	70	3	1	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE33	Street	Supermarket			1	2	80	3	1	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE38	Street	Supermarket			1	2	70	3	1	Plaster Ceiling	2.0	2.0	80	4
ASDA	HE30E	Street	Supermarket			2.5	2.4	80	4	2	Plaster Ceiling	2.0	2.0	80	4

[Store Details and IT Checklist](#)

Appendix A: Site Survey Form

Please note that all fields marked with an asterisk (*) are required.

Site Details	
Site Name*	
Site Code*	
Site Address*	
Person In-Charge*	
Contact Number*	
Installation Date Time*	Monday to Friday (9am – 5pm) or others

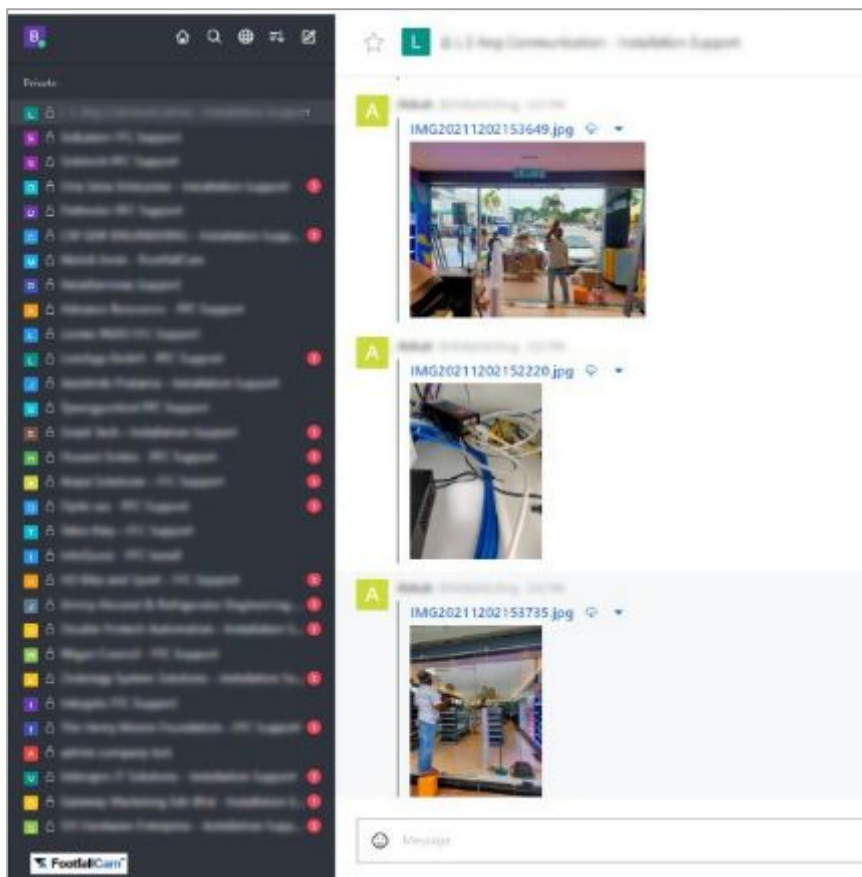
Counter Proposed Location	
Ceiling Height (metre)*	
Ceiling Composition*	Type of ceiling (plastered ceiling, glass ceiling or synthetic drop tile) and colour.
Door Width (metre)*	
Floor Slope*	
Head-end Distance (metre)*	Distance from the back-office counter cabinet with router and midspan to the counter head.
Remarks	
Sketch of Counter Position	

Counter Proposed Location (Optional)	
Ceiling Height (metre)*	
Ceiling Composition*	Type of ceiling (plastered ceiling, glass ceiling or synthetic drop tile) and colour.
Door Width (metre)*	
Floor Slope*	
Head-end Distance (metre)*	Distance from the back-office counter cabinet with router and midspan to the counter head.
Remarks	
Sketch of Counter Position	

[Site Survey Form](#)

Installation Support

- In-house 24/7 FootfallCam Support Portal to communicate with engineers using
 - [FootfallCam Installation Mobile App](#) - to allow our experts to support on-site engineer during the installation
 - [Delivery note](#) - for the store manager to confirm that they are satisfied with the installation before the engineer leaves



[Support Chat App](#)

FootfallCam Dialer | London in People Counting

Head Office Address:
FootfallCam
40 Astorwood
Surrey
GU1 1UY
United Kingdom
Company Reg: 10471937
VAT Reg: 854781852
DOR No: 5682470082000
Tel: Claudio Sisco (UK)

Delivery Note (WC3158986-5)

Installation Site Address: Astor, Twickenham, Surrey, GU10 2PH, United Kingdom
Installation Date: 12/08/2022 15:20:00
On-site Person in Charge: Leahy, 508703
IT Details: IP Address: 10.181.10.249-254, Gateway: 10.181.10.254, DMZ 1: 10.180.2.1, DMZ 2: 10.180.2.2, Proxy: 10.180.25.4, Proxy Code: 1044

Notes:

Installer Checklist

- Run cable from back office to the counter(s) located at entrance
- Plug in cable cable to the internet router
- Complete configuration for counter(s) which include the following:
 - Mounting height
 - Counter name
 - Proxy code
 - IP address & gateway
- Provide following photos in WhatsApp group:
 - Live view of counter(s)
 - Camera mounting position
 - Cabling connectivity at back office
 - Show staff to sign the Delivery Note

Customer Acknowledgment

Having agreed that the installation of FootfallCam Counter(s) has been performed as required, I understand that the information given in this form is true, complete and accurate.

Customer Signature: _____ **Installer Signature:** _____
 Name: _____ Name: _____
 Position: _____ Date: _____
 Date: _____

Phone: +44 (0) 1344 537275 | Email: sales@footfallcam.com | Website: http://www.footfallcam.com

[Delivery Note](#)

FootfallCam Dialer | London in People Counting

Head Office Address:
FootfallCam
40 Astorwood
Surrey
GU1 1UY
United Kingdom
Company Reg: 10471937
VAT Reg: 854781852
DOR No: 5682470082000

Kindly fill out below sections:

Installed counter(s)

No.	Serial Number ID	New / Reworked	Purpose ID
1	201781	New	New installation
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

False counter(s)

No.	Serial Number ID	Fill in sticker label and paste on counter(s)
1	201781	<input checked="" type="checkbox"/>
2		
3		
4		
5		
6		
7		
8		
9		

Facility counter(s)

No.	Serial Number ID	Facility Reason	Fill in sticker label and paste on counter(s)
1	201781	Case 7 power up	<input checked="" type="checkbox"/>
2			
3			
4			
5			
6			
7			
8			
9			

Add/Remove Equipment(s) Moved

No.	Equipment	Quantity	Reason
1	2 - cameras, 100 cables	1	Not brought just
2			
3			
4			
5			
6			
7			
8			
9			

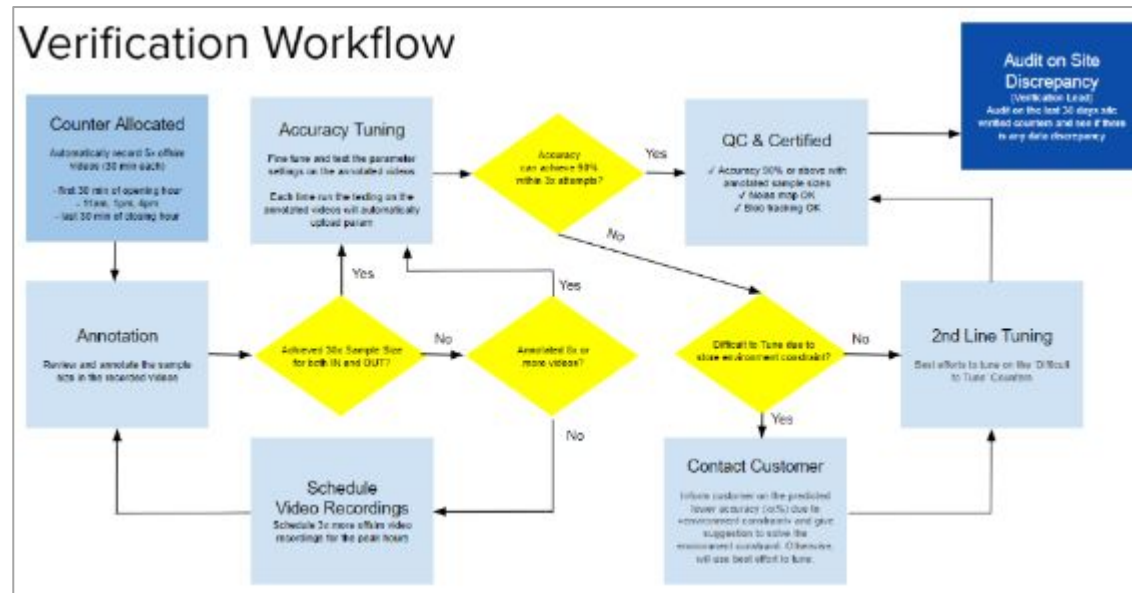
Basic Notes

- Serial number refers to the last 8 digits of 15701 0000000
- Purpose: New installation / Fault / Create/ISSN
- Make sure link(s) refer to the table until other completed store roll. Extra counter(s) shall be kept by installer and reuse in next installation upon instruction from FootfallCam.
- Please state the facility reason for counter(s) and refer to FootfallCam.

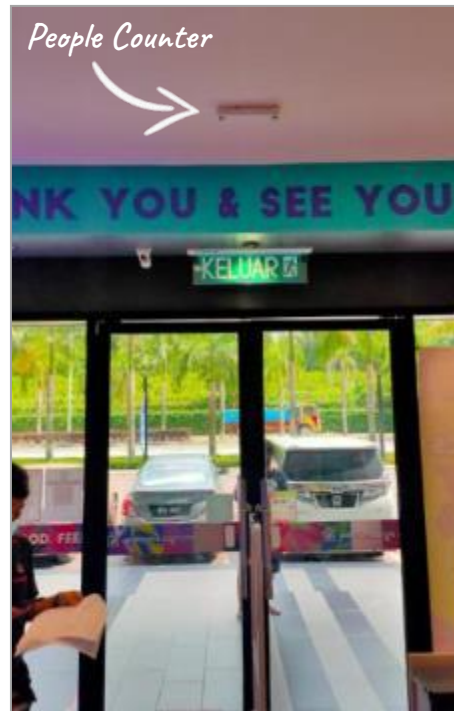
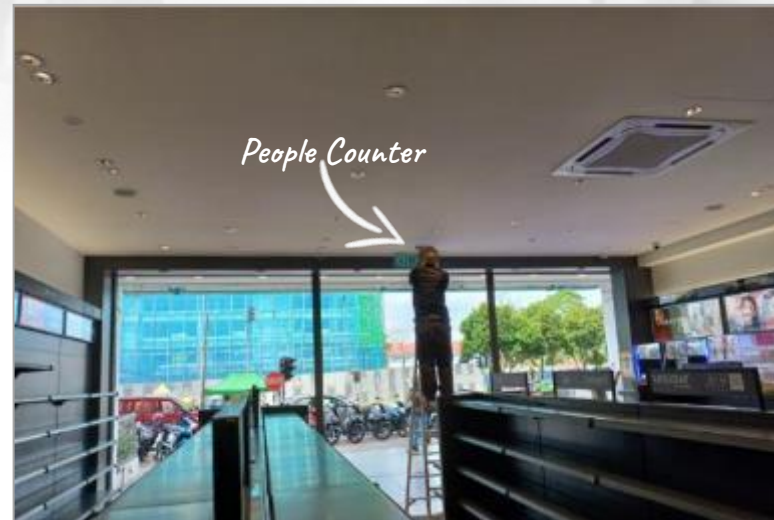
Phone: +44 (0) 1344 537275 | Email: sales@footfallcam.com | Website: http://www.footfallcam.com

Tuning and Verification

- Tuning and verification will take **2 to 3 days** after allocation of counter.
- After allocation of counters, verification team will **schedule video recordings** to get **enough sample size** for tuning.
- Verification team will start tuning after the recorded videos are **successfully uploaded** into our server.
- FootfallCam verification expert will watch those recorded videos and **manually count** on all the traffic in the videos.
- **Counting zone** and **counting lines** will be drawn according to the store's environment.
- **Fine tune** by choosing the most appropriate counting algorithm for that environment.
- **Uploading** this counting algorithm parameters to the counters.



On-Site Installation



Retail Store Installation

Partner Portal Overview for Project Progress Update

- Able to manage all sites at a **centralised platform**
- Ease project management by tracking:
 - Total Unverified Counters
 - Total Offline Counters, etc

FootfallCam ▾

PARTNER
PORTAL

- Project Management ▾
- Companies
- Financial Entity
- Counter List
- Issue Tracker
- Business Management <
- Support <
- Account Management <

Company List

Search: ▾

1 - 24 of 24 < >

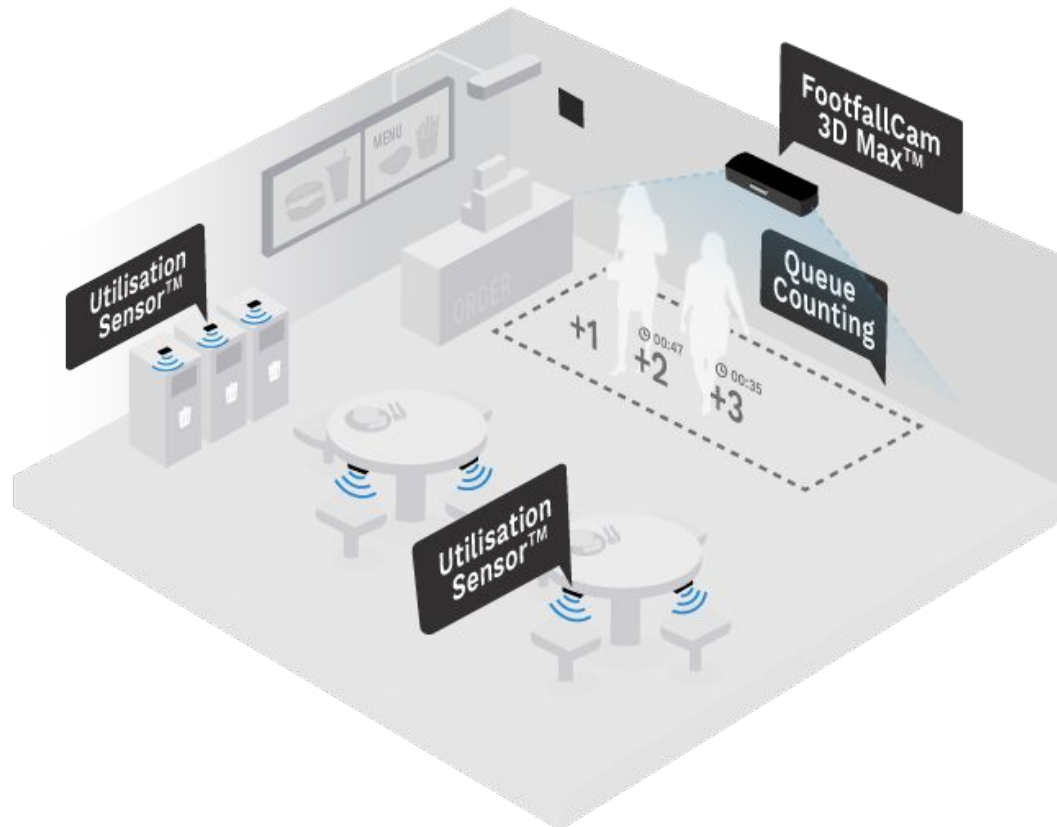
Company Name	↕	No. Financial Entities	Total Sites	Total Verified Sites	Total Data Aggregated Sites	Data Availability	Total Counters	Total Unverified Counters	Total Offline Counters	Server Name
		1	3	3	0	0%	11	0	4	FootfallCam
		1	1	0	0	0%	1	1	1	FootfallCam
		1	1	1	0	0%	1	0	0	FootfallCam
		1	3	3	0	0%	3	0	0	FootfallCam
		1	1	1	0	0%	1	0	0	FootfallCam
		1	2	2	0	0%	2	0	0	FootfallCam
		1	1	1	0	0%	1	0	0	FootfallCam
		1	2	2	0	0%	2	0	2	FootfallCam
		1	13	13	0	0%	13	0	1	FootfallCam
		1	2	2	0	0%	2	0	0	FootfallCam



Additional Features

Use Case #6: Queue Counting

With queue counting detection and blob tracking technology, the [FootfallCam 3D MAX™](#) will automatically detect any form of movement and register the queuing patterns.



[Queue Counting Solution](#)

- Using [3D Stereo Vision](#) technology and 2D video analytics
- Highly accurate with video proof
- Suitable for covering [wide areas](#)
- Field of view (FOV): [120°](#)
- Proven deployment in KFC (Kentucky Fried Chicken), Applegreen, and more



[FootfallCam 3D Pro2™](#)

Use Case #7: Demographic Analysis

Utilising **FootfallCam Centroid™**, the facial features of customers can be recognised and analysed using the video stream from your existing CCTV system.



Watch how it works: <https://youtu.be/gJbJ8bvMMtM>



Sample [Report](#) for Demographic Analysis

- Reuse your existing CCTV system
- Facial recognition with AI Video Analytics
- Visitor verification, for e.g.: VIP customers , blacklisted individuals
- Help businesses have a better profile of their customer base
- Determine if businesses are reaching out to their target audiences



[FootfallCam Centroid™](#)

Use Case #8: Multiple Line Counting

- Multiple counting lines can be drawn for one FootfallCam people counter.
- Retailers will have a better idea which **direction** do **customers usually first head towards** when they first enter the store
- Analytics can be utilised for better planning in terms of product/shelf location, contributing to the **optimisation of store layout and design**.



Watch how it works
<https://youtu.be/2YJJnxczAms>

Use Case #9: Product Engagement Analytics

Utilising **FootfallCam Centroid™**, the customers' movement can be monitored and analyzed using the video stream from the existing CCTV system.



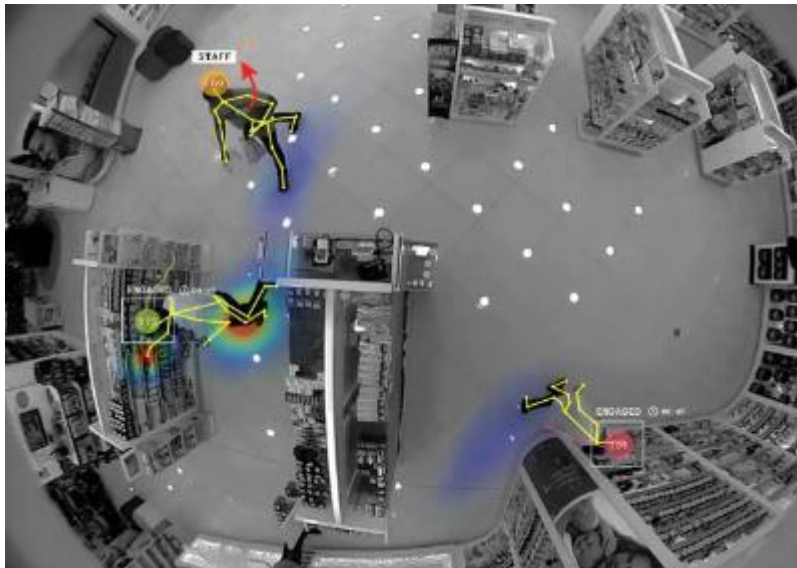
Watch how it works: <https://youtu.be/2ZQfNIHKMv8>

Product-level Engagement Analytics by Skeleton Tracking

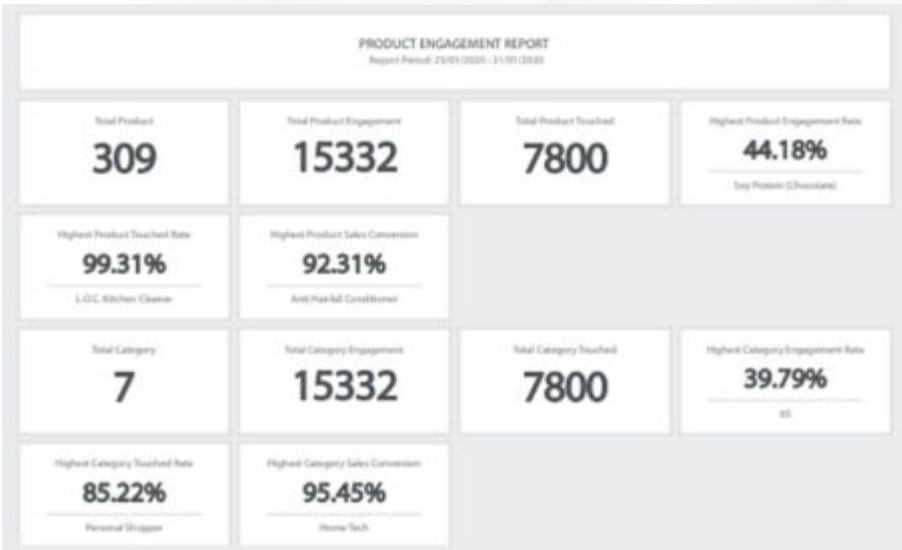
- To identify the market response to each of the product.
- To measure the sales conversion in product level.
- To determine the best-performing and worst-performing product.

Avoid Sales Opportunities with Empty Shelf/Rack Detection

- Staffs can carry out the quick replenishment of stock based on automated alert received.
- Reduce customer's frustration on frequent low stock level and avoid unnecessary compensations
- To increase customer retention and shopping frequency.
- Reallocate the staff to focus on other priority tasks instead of focusing on stock level monitoring



Product Engagement Analytics



CATEGORIES PERFORMANCE BY CATEGORY ENGAGEMENT RATE

Category	No. of Pass-By	No. of Category Engagement	No. of Category Touched	Quantity Sold	Category Engagement Rate (%)	Category Touched Rate (%)	Category Sales Conversion (%)
IS	1540	647	275	229	39.79%	82.57%	39.59%
Home Care	1940	861	675	436	29.12%	75.00%	54.81%
Antibody	1154	933	807	300	37.52%	73.43%	39.39%
Skincare	5411	834	630	525	37.59%	75.94%	63.33%
Home Tech	1520	804	600	630	39.73%	76.32%	35.49%
Personal Care	1128	110	600	360	22.96%	81.67%	31.23%
Personal Shopper	2317	891	588	389	21.23%	65.02%	60.07%

SHELF ENGAGEMENT HEATMAP



PRODUCT ENGAGEMENT ANALYSIS

TOP 20 PRODUCTS BY PRODUCT ENGAGEMENT RATE

Product	Category	No. of Product Pass-By	No. of Product Engagement	No. of Product Touched	Quantity Sold	Product Engagement Rate (%)	Product Touched Rate (%)	Product Sales Conversion (%)
Soy Protein (Chocolate)	Skincare	300	230	40	30	44.18%	25.55%	35.55%
Anti-Fold	Skincare	216	209	18	36	46.07%	22.22%	42.87%
Waxing Mask	Antibody	217	226	191	95	43.54%	82.97%	34.21%
Drinking Eye Cream	Antibody	606	306	321	135	42.86%	76.00%	35.36%
Daily (720ml)	Skincare	381	281	100	100	42.54%	52.49%	56.57%
Soy Protein (Black Berry)	Skincare	328	234	44	44	41.64%	38.21%	66.47%
Spring Tanning	Home Tech	400	281	14	45	41.81%	32.30%	47.87%
Softening Lotion	Antibody	444	311	221	100	41.19%	73.63%	43.47%
Resisting Peel	Antibody	403	278	214	100	40.82%	75.24%	71.40%
Spring Cream	Antibody	406	288	221	100	39.79%	76.20%	81.62%
First Step Foaming Spray	Personal Care	311	242	88	62	39.48%	36.30%	76.40%
City Balance	Skincare	402	202	12	25	39.40%	20.99%	40.40%
Skincare Cream	Skincare	606	211	94	66	38.30%	34.89%	76.21%
Anti-Fold	Skincare	381	281	138	45	37.86%	34.14%	49.38%
Anti-Fold	Personal Care	300	218	171	77	37.30%	80.94%	45.29%
Spring Cream	Antibody	442	241	239	88	35.51%	81.63%	44.30%
SPF Plus	Skincare	540	281	10	25	35.45%	16.67%	42.37%
Retinol Lotion (50ml)	Skincare	481	249	16	30	35.12%	28.87%	53.37%
Anti-Fold Serum	Personal Care	342	208	88	30	34.64%	24.81%	45.40%
L.O.C. Skin Cleaner	Home Care	324	147	76	45	36.21%	47.21%	56.36%

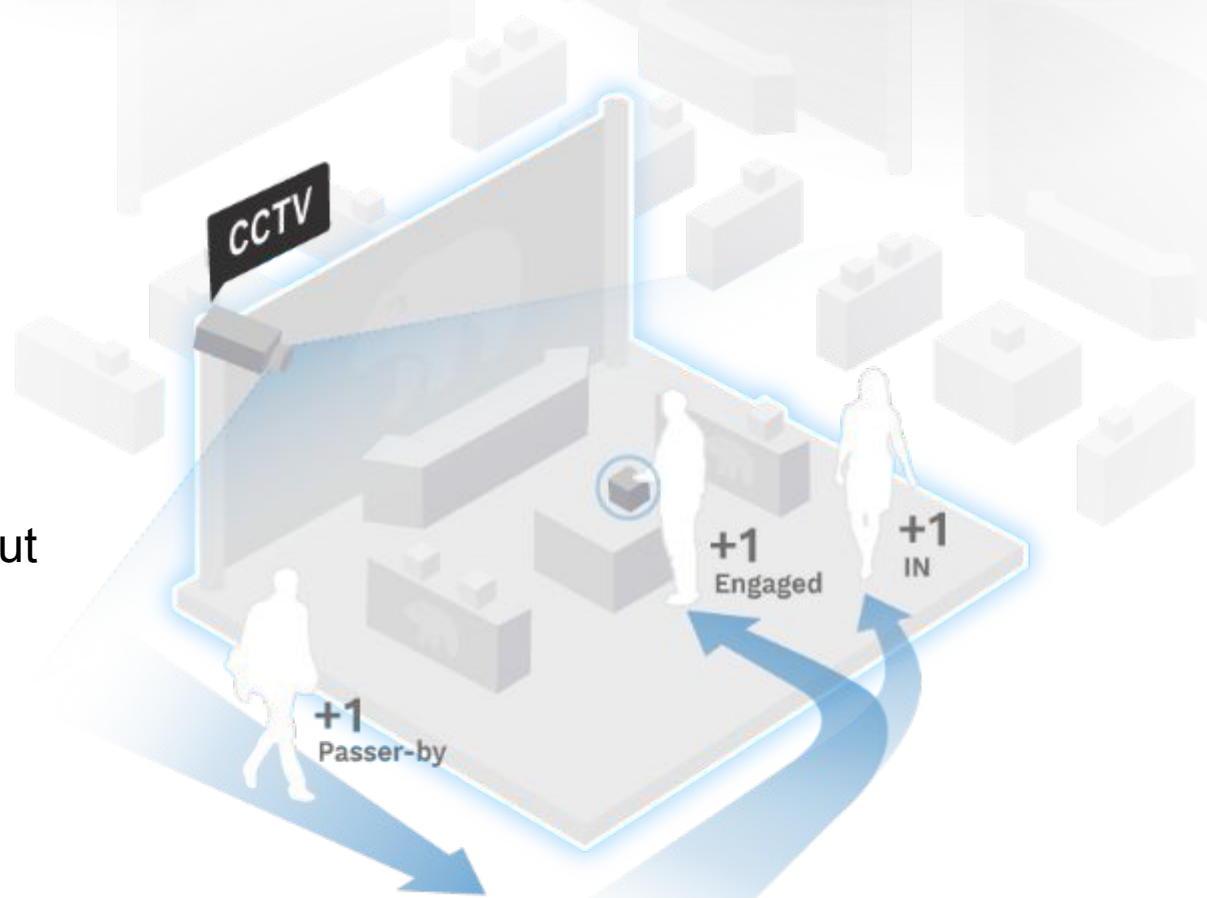
BOTTOM 20 PRODUCTS BY PRODUCT ENGAGEMENT RATE

Product	Category	No. of Product Pass-By	No. of Product Engagement	No. of Product Touched	Quantity Sold	Product Engagement Rate (%)	Product Touched Rate (%)	Product Sales Conversion (%)
Spring Cream	Home Tech	391	134	106	45	15.03%	74.02%	45.02%
Vegetal Resistant Shampoo	Personal Shopper	300	190	30	15	15.67%	20.00%	30.00%
Vegetal Crunchy Exfoliant	Personal Shopper	391	146	97	60	17.32%	65.49%	68.68%
Anti-Fold Serum	Personal Shopper	391	136	44	22	18.02%	33.80%	30.00%
Overnight Repair	Personal Care	304	129	111	46	18.00%	80.00%	41.49%
Spring Peel Serum Kit	Home Tech	304	129	111	46	18.00%	80.00%	41.49%
L.O.C. Kitchen Cleaner	Home Care	342	145	134	80	19.62%	94.81%	61.11%
L.O.C. Skin Cleaner	Home Care	324	134	95	30	21.22%	52.89%	54.99%
Home Tech Blender	Personal Shopper	391	146	75	44	21.87%	45.18%	38.67%
Home Tech Blender	Personal Shopper	481	145	89	55	23.93%	44.80%	84.62%
Spring Cream	Personal Care	440	140	80	30	24.77%	35.71%	64.63%
Resisting Cream	Personal Care	440	140	109	54	21.77%	71.49%	54.03%
Light Lotion	Antibody	210	238	106	111	24.29%	85.20%	36.63%
Home Tech Blender	Personal Shopper	315	178	80	30	24.87%	52.04%	62.23%
Skincare Plus	Skincare	346	136	62	36	25.20%	35.13%	50.00%
Anti-Fold Plus	Personal Care	380	135	109	30	27.03%	54.80%	50.00%
Soy Protein (Green Tea)	Skincare	325	202	109	60	27.79%	49.54%	35.00%
Anti-Hair-Fall Conditioner	Personal Care	481	136	138	120	28.00%	68.62%	82.51%
Anti-Hair-Fall Shampoo	Personal Care	480	136	144	80	28.37%	73.89%	38.00%
Spring Plus	Skincare	388	238	99	66	28.64%	41.00%	64.89%

Use Case #10: People Counting for Store-in-Store

FootfallCam Centroid™ can be integrated with your existing CCTV system to detect the occupancy of the store area.

- Using 2D [Video Analytics](#)
- Measuring customer behaviour:
 - Real-time store **occupancy**
 - How many customers are in the store right now?
 - No. of **passerby**
 - How many customers are walking past the store without walking in?
 - In-store **customer engagement**
 - How long does a customer stay in-store?
 - **Path tracking**
 - Where does a customer go when they enter the store?

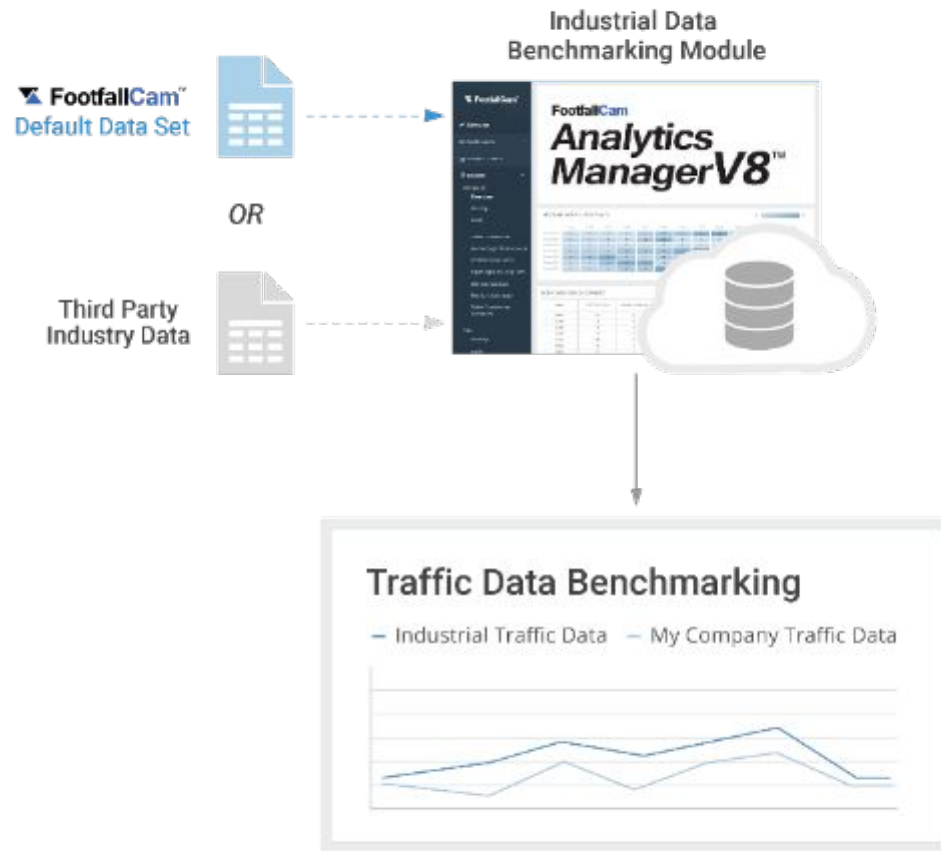


[FootfallCam Centroid™](#)

Multiple Counting Lines: <https://youtu.be/2YJJnxczAms>

Use Case #11: Big Data Benchmarking

FootfallCam Analytics Manager V8™ comes with [Industrial Data Benchmarking Module](#), in which retailers may choose to compare their traffic data with FootfallCam default data set or industry data from any third party providers, e.g.: IPSOS.



Sample [Report](#) for Big Data Benchmarking

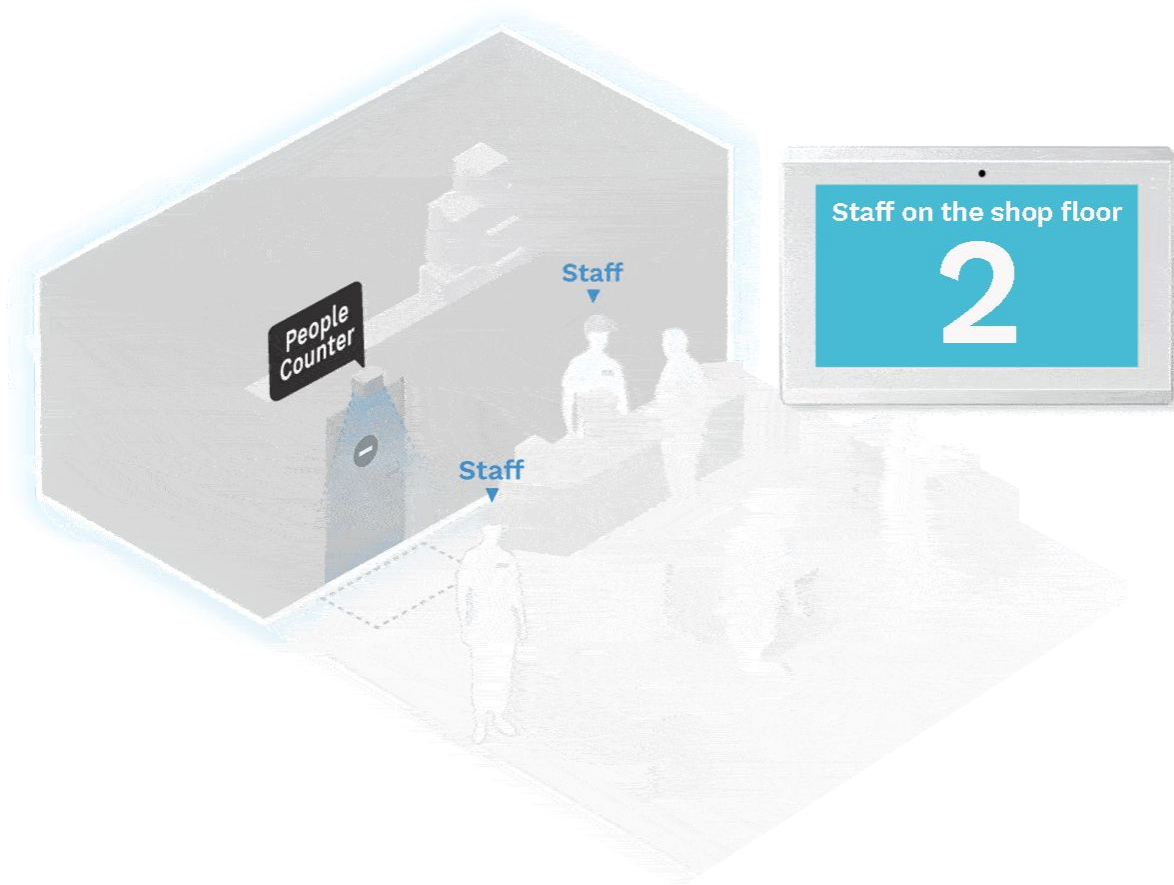
- Compare your people counting data with industrial data
- Evaluate the store performance and other KPIs against industrial standard
- Industrial Data Source:
 1. FootfallCam default data set
 2. Third party data set



[FootfallCam 3D MAX 2™](#)

Use Case #12: Occupancy in Back Room

By installing [FootfallCam 3D Mini™](#) at the entrance of the back room, the number of staffs using the room can be counted, while protecting their privacy.



- Cost effective
- **Anonymous** counting, privacy protected
- Using ST Micro ToF 16x16 Sensor
- Suitable for **single door** and **washroom entrance**
- Field of view (FOV): **57°**



[FootfallCam 3D Mini™](#)

Use Case #13: PA System Functionality

FootfallCam 3D MAX 2™ can also integrate with in-store speakers to broadcast automated sales messages.



PA System Functionality

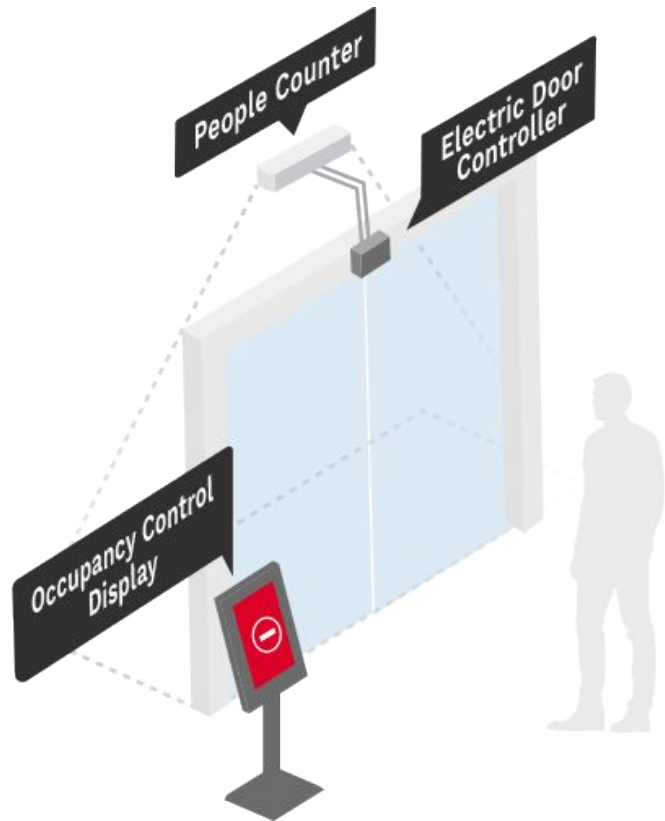
- Connect to your PA system via **audio cable**, works with any standard powered speaker
- **Automated audio announcement** based on pre-configured triggers
 - Welcome message
 - Broadcast targeted marketing message
 - Audio alerts



FootfallCam 3D MAX 2™

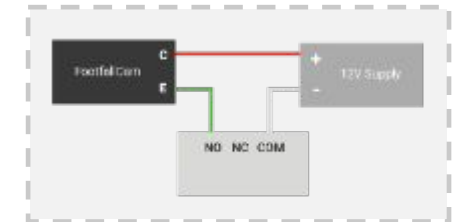
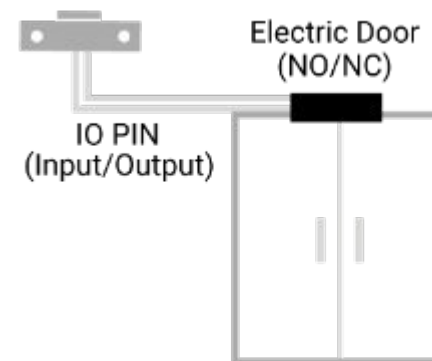
Use Case #14: Using IO Pin to Control Electric Doors

To control the number of people in the store, **FootfallCam 3D MAX 2™** can be integrated with **electric doors** via **GPIO** to automatically close the door when occupancy limit is breached.



[Watch how it works](#)

- Automated electric door control based on the pre-configured threshold
- Using IO pins to control the NO/NC port of electric doors
- Manual adjustment of occupancy data (Failsafe measure to control doors)



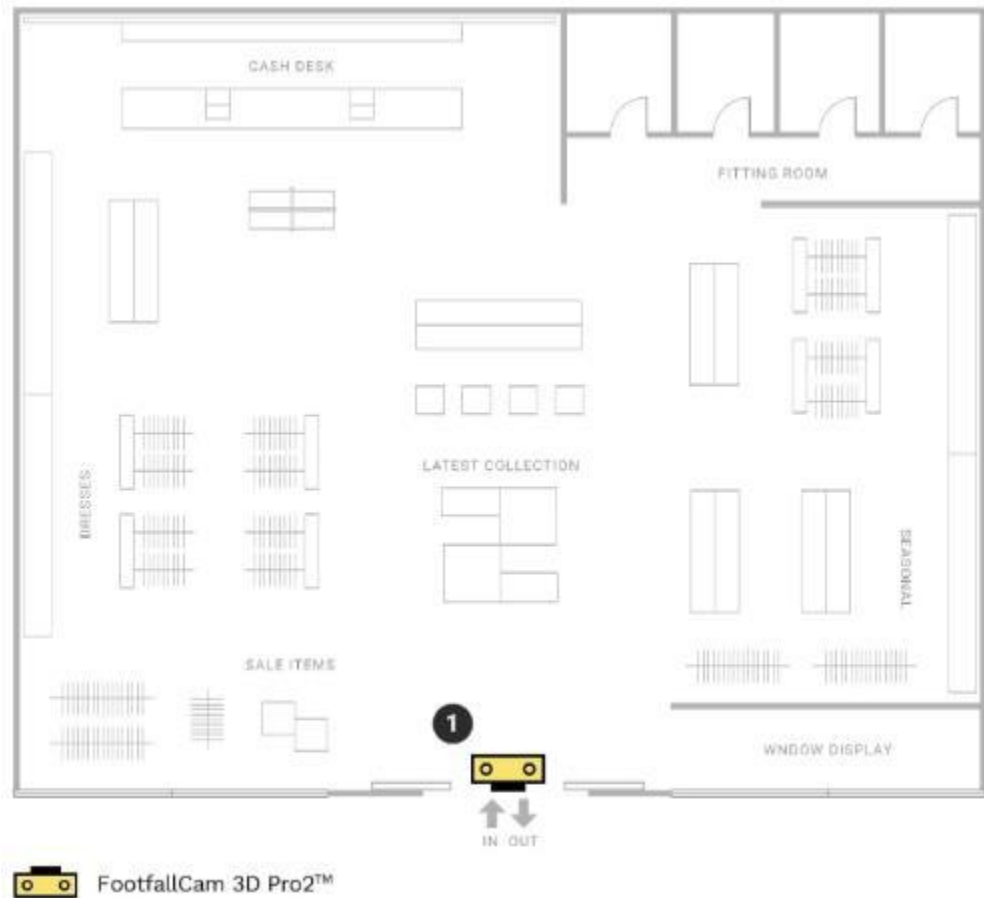
Using IO PIN to Control Electric Doors.



Product Packages and Pricing

Option #1: People Counting

The most popular and cost-efficient people counting option for retails which require footfall counting at the entrance



Use Cases

- Measuring the number of visitors entering the store
- Comparing sales data with footfall data/purchasing group
- Object classification - Differentiating between adults, kids, object

Metrics Measured

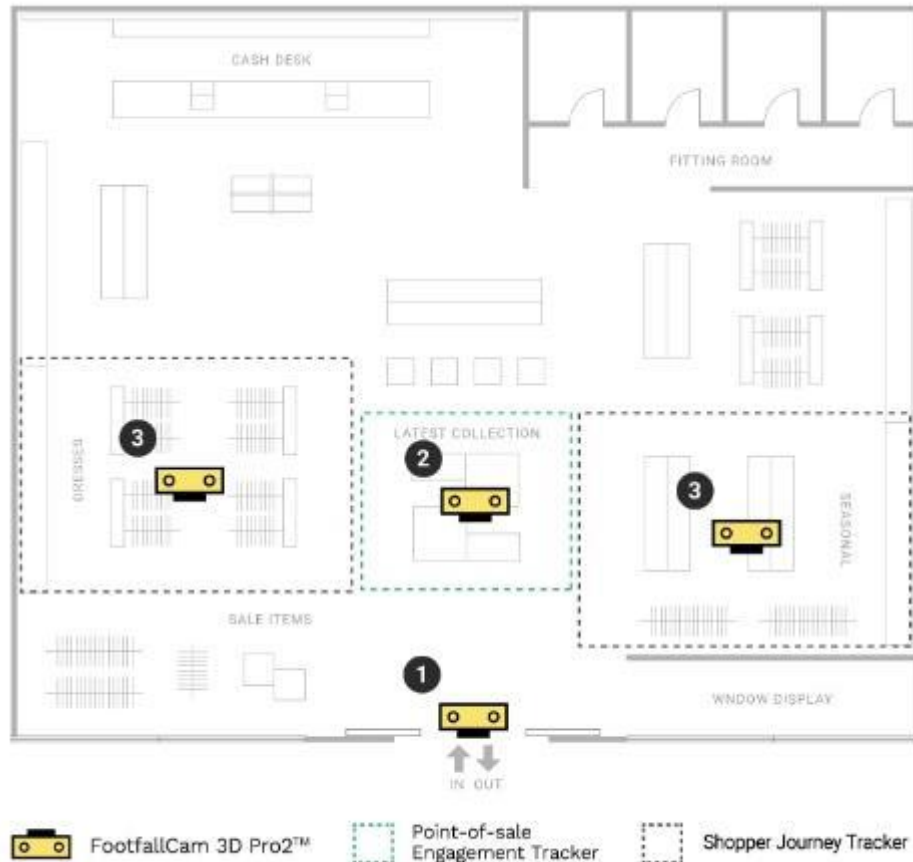
- Visitor Count (In/Out)
- Visitor Count (Kids/Adults)
- Outside Traffic
- Turn in rate
- Dwell Time
- Returning customer
- Live Occupancy Count
- Sales Conversion
- Group Count

Equipment Used

- 1x 3D Pro2 for entrance counting

Option #2: People Counting + In-store Analytics

In addition to people counting at entrance, retailers can measure customer activity and purchase behaviour at certain areas of interest



Additional Use Cases from Option 1

- Measuring customer engagement across multiple areas of interest

Additional Metrics Measured from Option 1

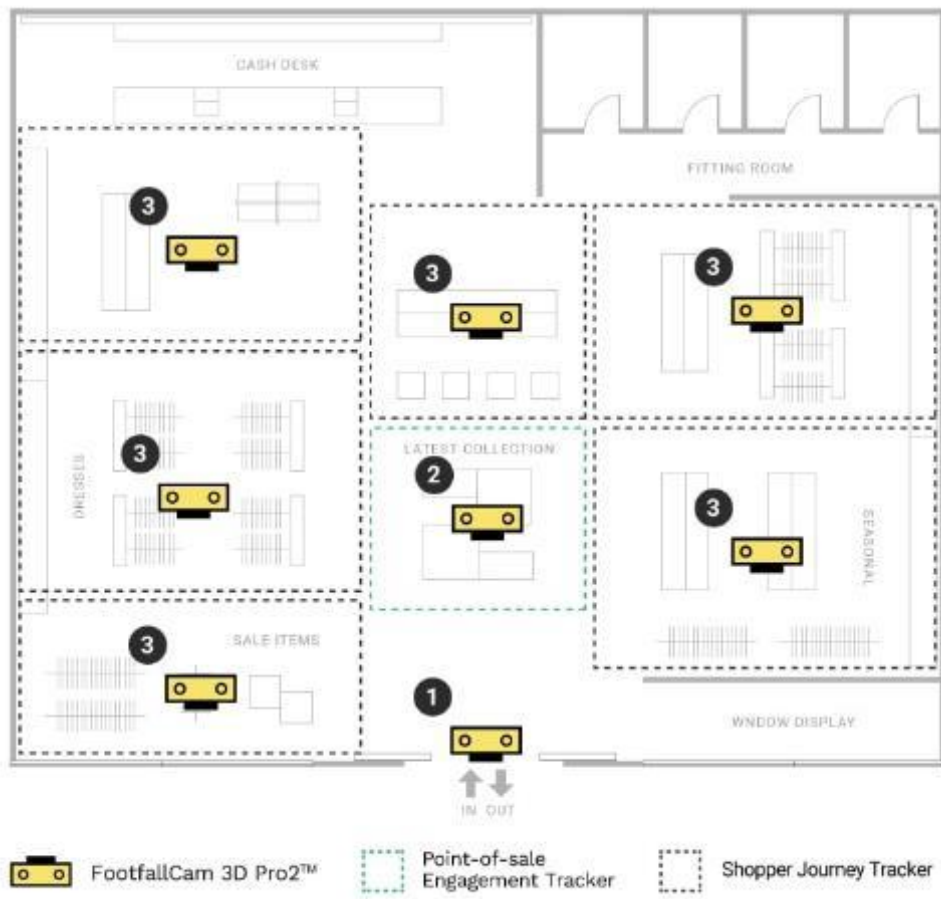
- Heatmap & Customer Engagement
- Zone Analytics

Equipment Used

- 1x 3D Pro2 for entrance counting
- 1x 3D Pro2 for point-of-sale display engagement tracker
- 2x 3D Pro2 for in-store shopper journey (depending on number of area of interest)

Option #3: People Counting + Full Coverage In-store Analytics

Provides full coverage of the entire floor space to track customers' in-store journey within the store in all areas.



Additional Use Cases from Option 1 & 2

- Measuring customer engagement across entire floorspace

Additional Metrics Measured from Option 1 & 2

- Full-store Heatmap & Customer Engagement
- Full-store Zone Analytics

Equipment Used

- 1x 3D Pro2 for entrance counting
- 1x 3D Pro2 for point-of-sale display engagement tracker
- 7x 3D Pro2 for in-store shopper journey (depending on area of the shop)

Itemised Costing

Hardware & Software

Product Code	Item	Cost per unit (USD)
FC-F3DP02	FootfallCam 3D Pro2	650
FC-FCT01	FootfallCam Centroid	1050
FC-SE01	FootfallCam Staff Exclusion Tag	10.80
FC-FAM01	FootfallCam Analytics Manager V8	Free of charge

Support Contract

Services	Products	Monthly cost per unit (USD)
<ul style="list-style-type: none">• Includes 1st Line and 2nd Line support• This level of support aims to resolve most issues and may involve rebooting equipment, diagnosis and troubleshooting• Support may require cooperation from a member of staff at the store to reboot equipment and help with preliminary diagnosis• Support will be provided over the phone and remote connect into the camera• Feedbacks in Support Portal will be resolved within the stated SLA• Comes together with Software Licensing	FootfallCam 3D Pro2	4.90
	FootfallCam Centroid	46.00



Customer References

Managing Multinational Rollout

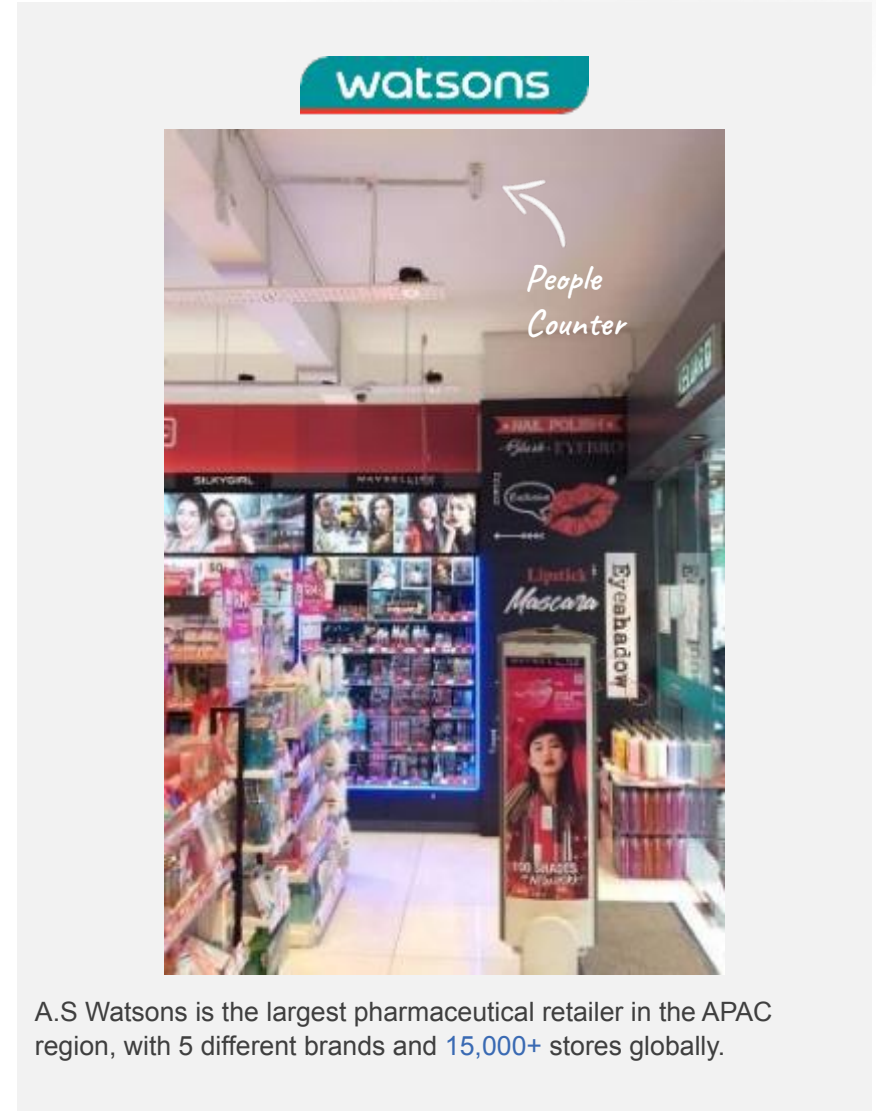
- Global rollout with multi geo-region server
 - Work with different business units to deliver centralised solution
 - Supporting all countries
- End-to-end project management
 - Work with their preferred installers or FootfallCam partners
 - Integrate with their BI system
 - Multi-language UI and supports

Similar Deployments:

PANDORA

Marionnaud

SWISS-SENSE™
MULTIPLANO D'ITALIANTEN

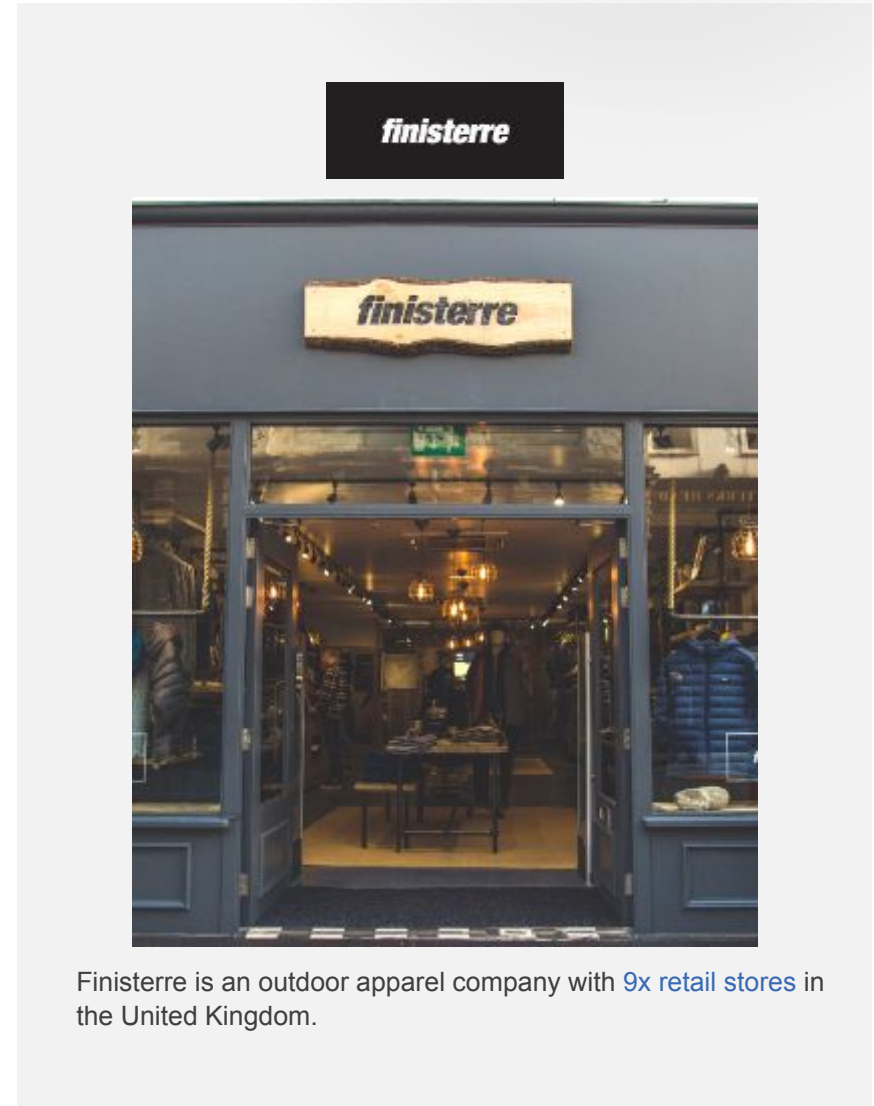


A.S Watsons is the largest pharmaceutical retailer in the APAC region, with 5 different brands and 15,000+ stores globally.

People Counting for Independent Retail Stores

- Easy to install
 - FootfallCam remote support
- Easy to use
 - Analytics platform with 60+ readily available reports
- Easy to maintain
 - Automated health check and monitoring tools
 - No software subscription fees

Similar Deployments:



Finisterre is an outdoor apparel company with [9x retail stores](#) in the United Kingdom.

Luxury Retail Store

- **Discreet and Accurate**
 - Flush Mounted Device on the ceiling
 - Aligns with the aesthetics of the store
 - Accurate under strong lighting/ reflection environment
- **Sales Conversion**
 - Lower Footfall; store services and sales conversion is crucial.
 - Staff exclusion tags to keep sales conversion accurate
 - Group counting feature to accurately count potential visitors

Similar Deployments:



Cartier has more than 200 stores world-wide and each of the deployment are carefully designed to suit the store

Case Study #4:

Managing Retail Chains

- High Accuracy Footfall Data
 - Consistently accurate in all environments with [video proof](#)
- Enterprise Grade Software
 - Integration with BI System
 - Multi-user management
 - Visibility chain-wide performance
 - Provide workspace for sales managers
- Roll-out Management
 - Managing installation schedule

Similar Deployments:

Bonmarché

dermalogica

WIND

cashconverters

L'OCCITANE
EN PROVENCE

CAMEL
ACTIVE

CHARLES CLINKARD
EST. 1988
FINE FOOTWEAR

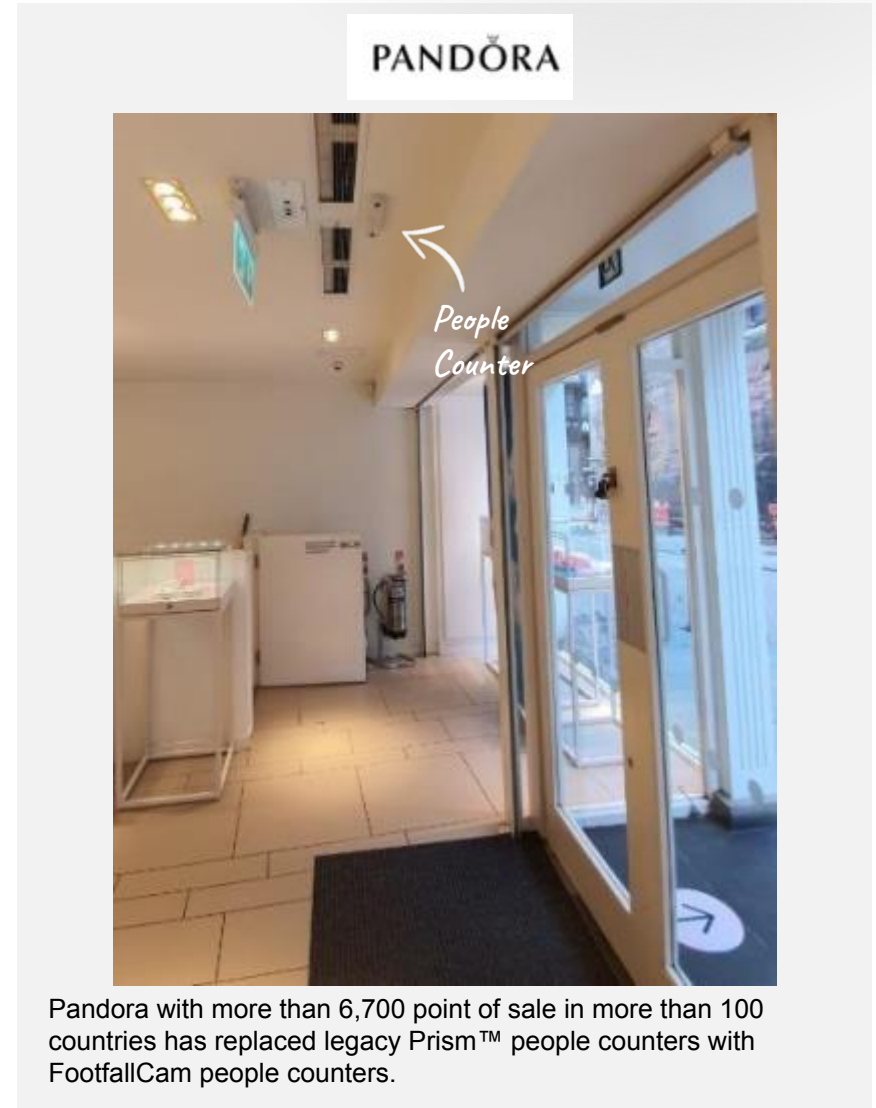


Joules is a fashion apparel store in the United Kingdom

Replacing Incumbent System

- **Complete Business Solution**
 - Hardware + Enterprise class software
 - Combining 3D counting, AI analytics and WiFi metrics
- **Lower Total Cost of Ownership**
 - Competitive pricing - **30% lower** than our competitors' price
 - Reduced number of devices
- **Host Incumbent Data**
 - Integration with existing devices

Similar Deployments:



Pandora with more than 6,700 point of sale in more than 100 countries has replaced legacy Prism™ people counters with FootfallCam people counters.

Case Study #6:

Store-In-Store/ Brand Concession

- Comprehensive Solution for Retail Chain
 - Caters even for store-in-store setup
- Metrics Collected for In-store Analytics
 - Product-level Engagement
 - Store and product-level sales conversion
 - Area Traffic Performance
 - Turn in rate (Departmental store visitors that entered concession stores)
 - Marketing Effectiveness

Similar Deployments:

THE PERFUME SHOP



ESTÉE LAUDER



15x Concession Stores in the Departmental Store

Covid-19 Occupancy Control

- **Live Occupancy Control**
 - Measures and manage occupancy limit
- **Integrated with Electronic Sliding Door**
 - Automatically controls the access
 - Replaced security guard at entrance
- **Quick Deployment and Setup**
 - Helps re-opening stores to be compliance with local government policy on the occupancy limit per store

Similar Deployments:

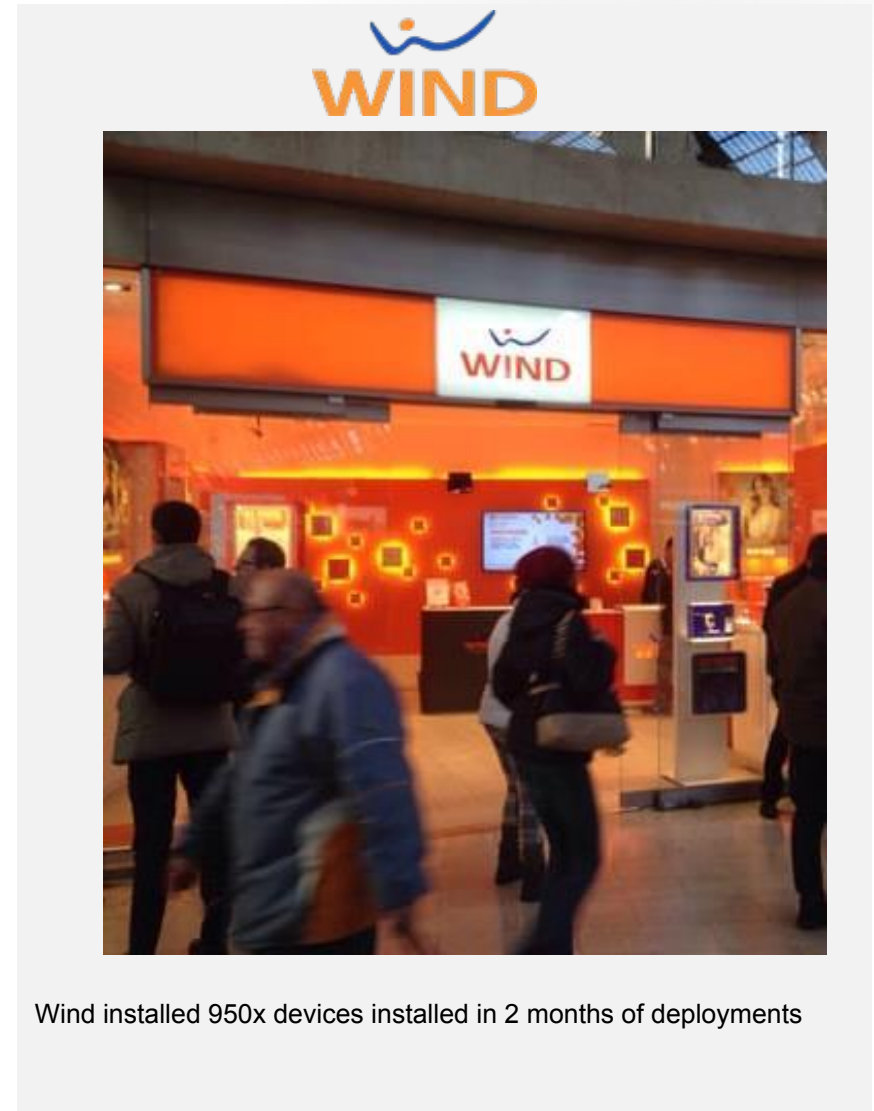


Coop integrates FootfallCam with their automated door to control the access of visitors

Telecommunication Shops

- **Product Engagement**
 - Measure the engagement of visitors with the products in terms of dwell time, heat map, touch point analysis
- **Returning Customers**
 - Gauge the effectiveness of loyalty programs on store level
- **Visitors to service subscription conversion**
 - Measure KPI of employees service level
 - Set target for employees

Similar Deployments:



Wind installed 950x devices installed in 2 months of deployments

Large Format / Departmental Store

- **Door Counting**
 - Footfall-to-staff ratio
 - Marketing effectiveness
 - Staff planning
- **Zone Analytics**
 - Reduced Number of Devices using Wi-Fi Counting
 - Flow Statistic
 - Service Desk Counting
- **Queue Counting**
 - Cashier/till opening prediction based on footfall changes

Similar Deployments:





Metrojaya has 4 department stores and 70 specialty stores that occupy over one million square feet of floor space

Showroom & Experience Centre

- Comprehensive in-store analytics
 - People Counting + WiFi Analytics
 - Queue Counting
 - Meeting Room Utilisation
- Tracking Customer Journey within Centre
 - Traffic Flow across multiple areas and floors
 - Product touch-point analytics
 - Heat Map
- Business Insights and Workspace
 - Consultation tables utilisation and its conversion
 - Product-level sales conversion
 - Visit duration of “hot” and “cold” areas

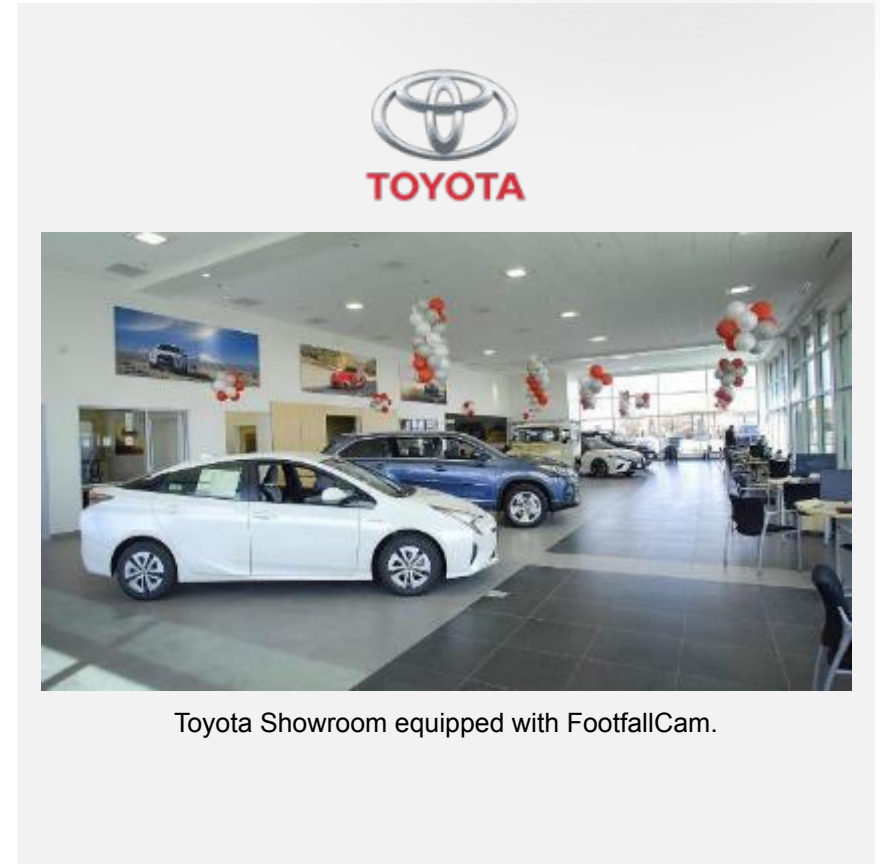
Similar Deployments:

Amway experience centre is fully equipped with FootfallCam for comprehensive in-store analytics

Car Showroom

- **Track Visitor Behaviour**
 - Real-time People Counting
 - Staff Exclusion
 - Customer Arrival Alerts
 - Group Counting
- **Measure Product Engagement**
 - Past vs New Car Model Comparison
 - Dwell Time
 - Heat Maps
 - Consultation tables utilisation and conversion rates
- **Product Engagement Workspace**
 - Overview of Store Performance
 - Set Store Targets and Measure Progress



Toyota Showroom equipped with FootfallCam.

Similar Deployments:



Contact Us

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