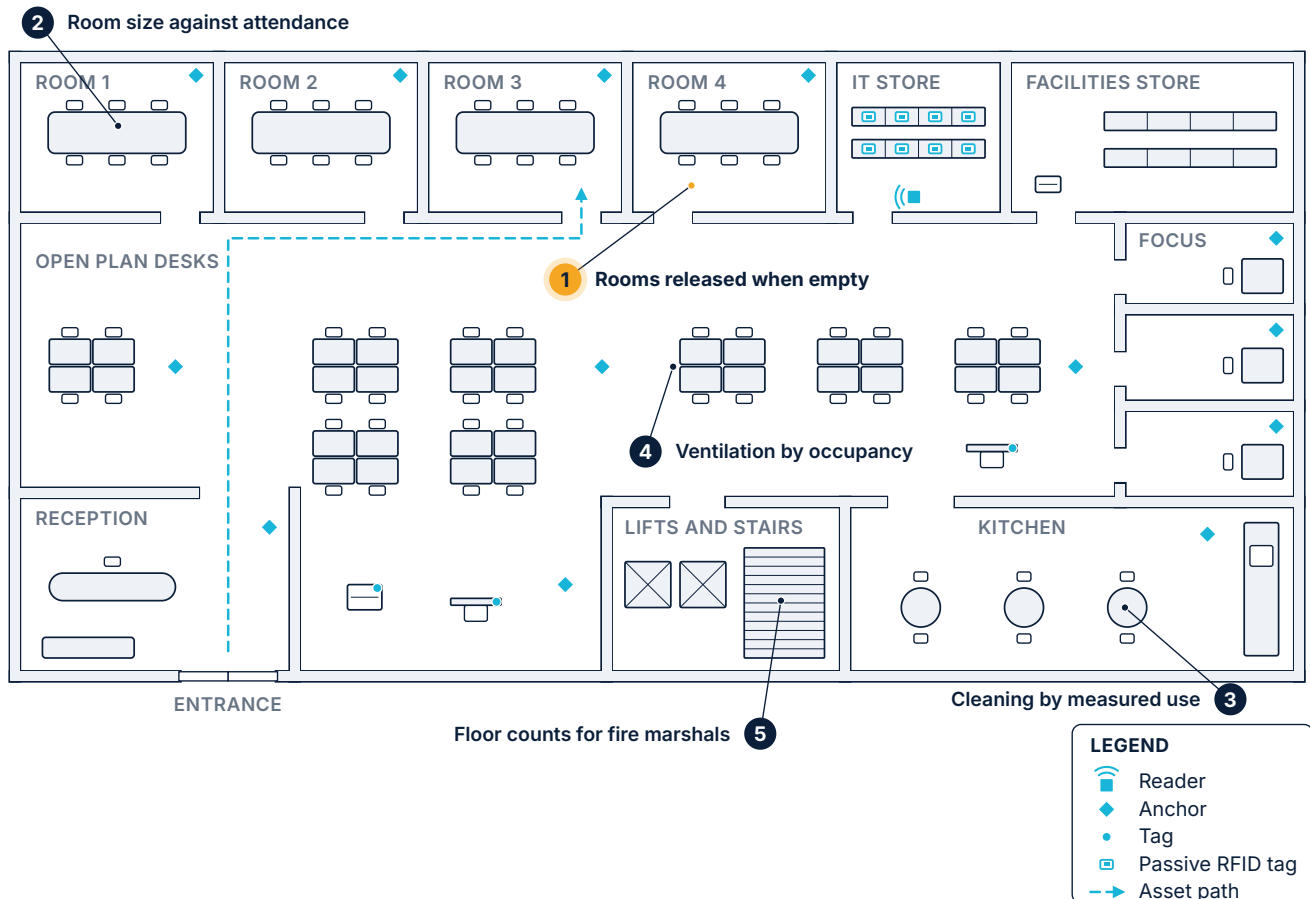


SMART BUILDINGS · OFFICES, CAMPUSES AND MIXED-USE BUILDINGS

The room is booked all morning. Nobody has turned up.

A plain guide for workplace, facilities and real estate teams on occupancy data: empty booked rooms, room size, cleaning by use, ventilation by occupancy and floor counts for fire marshals. Privacy first: anonymous counts wherever they answer the question, with staff and their representatives consulted before any pilot.



Callouts match the use cases on page 2. Legend: in this plan the **anchor** symbol marks an area sensor that counts people anonymously; a **reader** reads passive RFID (radio-frequency identification) tags, which have no battery; a **tag** is an active tag, which has a battery, on shared equipment only.

WHO SHOULD READ WHAT

KPI: key performance indicator, a measure you track. Everyone: your own row and KPI are in the table on page 4.

Workplace and real estate leads

Page 2 use cases, page 3 payback.

Facilities managers

Page 2: use cases 1 to 3 and the KPIs you would own.

Building services and energy

Page 2: use case 4.

Fire safety and security

Page 2: use case 5.

IT and OT, DPO, finance, procurement

Page 3: technology, links, privacy and payback.
DPO: data protection officer.

One next step: book a free 30-minute call to talk through your site and your use case.

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Book a free 30-minute call

What goes wrong today

Booked is not used

Rooms sit booked and empty while others queue.

Wrong size rooms

Large rooms host small meetings, all day.

Cleaning by rota

Busy areas wait while empty ones are cleaned.

Empty floors run

Ventilation and heating run the same, full or empty.

USE CASES

Numbered to match the floor plan on page 1. Each card ends with the technology that usually fits.

1 Rooms released when empty

Pain: Booked rooms sit empty while others queue.

What good looks like: If nobody arrives in an agreed time, the booking is released. Counts stay anonymous.

Fit: [room presence sensors linked to bookings](#)

2 Room size against attendance

Pain: Large rooms host small meetings.

What good looks like: Anonymous counts compare room size with attendance, so the room mix is set on use.

Fit: [anonymous people counting sensors in rooms](#)

3 Cleaning by measured use

Pain: Cleaning follows a fixed rota, used or not.

What good looks like: Areas and washrooms used most are cleaned first; quiet areas less often.

Fit: [area sensors and door counters](#)

4 Ventilation by occupancy

Pain: Empty zones are heated and ventilated as if full.

What good looks like: Zone counts reach the BMS; empty zones set back within comfort and minimum fresh air rules.

Fit: [anonymous zone counts shared with the BMS](#)

5 Floor counts for fire marshals

Pain: Marshals do not know which floors still have people on them.

What good looks like: Anonymous floor counts support marshals in an evacuation. Your sweep and roll call stay.

Fit: [people counters at floor entries and stairs, tested in drills](#)

ALSO COVERED

- [Space use](#): anonymous counts by floor, zone and room type, compared with bookings
- [Wayfinding](#): routes for staff and visitors across large buildings and campuses
- [Building assets](#): AV and IT equipment, loan pools and FM equipment found without manual audits
- [Visitor and contractor zones](#): presence in plant rooms and labs, checked against access control
- [Lone workers](#): an alarm someone can act on for security and facilities staff working alone, alongside your lone working procedure

KPIS TO TRACK

A KPI is a number you track. Measure it the same way before and during the pilot, by sample if needed.

KPI	WHO OWNS IT	HOW TO MEASURE IT
Booked rooms left empty	Workplace lead	Bookings with no one present.
Rooms used well below capacity	Real estate lead	Attendance against room size.
Cleaning hours on unused areas	Facilities manager	Cleaning logs against use.
Hours empty zones run at full settings	Building services lead	BMS logs against zone counts.
Floors confirmed clear in drills	Fire safety lead	Drill records against floor counts.

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Technology fit

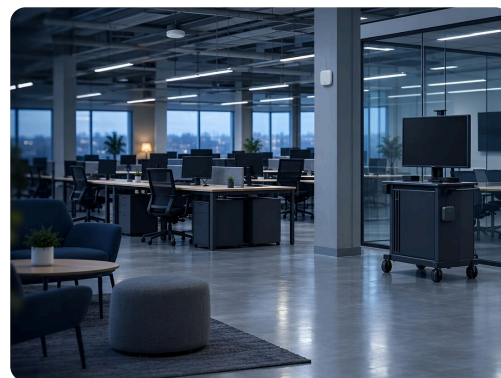
Pick the simplest option that answers the question you have

Technology	Where it fits here	Watch for
Area presence sensors	Meeting rooms and focus rooms: in use or not.	Presence only, not identity. Check mounting and battery life.
People counters	Doors, floor entries and stairs.	Counts can drift over a day. Test against manual counts.
BLE (low-energy radio tags with a battery)	Shared equipment, if you also want it found.	Needs gateways (fixed receivers). Batteries need replacing.
Wi-Fi and badge data	Floor level use from systems you already run.	Personal data. Needs a lawful basis and aggregation first.

Integration

Counts reach your booking system and BMS, under your change control

- **Booking system:** room presence releases bookings, once a link is agreed.
- **BMS:** zone counts feed your building management system (BMS) settings.
- **Privacy:** a DPIA (data protection impact assessment), purpose and retention rules agreed before any pilot.
- **People:** Check local privacy and employee-consultation rules, such as works councils or unions, before tracking people, or tools and equipment linked to people.



ROI AND PAYBACK

ROI (return on investment) compares what you gain with what you spend. Payback is the time until the savings cover the cost. The method below works out payback from your own pilot data, not technology provider averages.

Payback (months) = $\frac{\text{one-off cost}}{\text{annual benefit} - \text{annual running cost}} \times 12$

Annual benefit = (cleaning hours saved × loaded hourly rate) + (energy saved in empty zones × energy price) + (space released or not added × cost per desk or room per year)

The annual benefit is an estimate: count only savings you can really make, and count each one once. If it is not bigger than the running cost, there is no payback. Loaded hourly rate means pay plus on-costs such as tax, pension and overheads.

Inputs to gather

- **One-off cost:** sensors, counters, gateways, survey, installation, integration, training.
- **Running cost per year:** licences, support, batteries, staff time.
- **Cleaning hours today** and how they are planned, from your baseline.
- **Energy use** in the zones covered, from your BMS or meters.
- **Cost per desk or room** per year, for space decisions.

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What it means for you: find your role and your KPI

YOUR ROLE	WHAT IT MEANS FOR YOU	YOUR KPI
Workplace lead	Booked rooms released for others.	Booked rooms left empty
Real estate lead	Room mix set on measured use.	Rooms used well below capacity
Facilities manager	Cleaning planned on use.	Cleaning hours on unused areas
Building services lead	Empty zones set back.	Hours empty zones run at full settings
Fire safety lead	Floor counts that support the sweep.	Floors confirmed clear in drills
IT, OT and DPO	A DPIA and data links agreed before the pilot.	DPIA signed off
Finance, procurement and leadership	Payback from one floor, then a go or no-go.	Payback months, go or no-go

DPIA signed off: agreed before any pilot equipment arrives.

How a TRACIO project works: five stages

1 Discovery

Your pain points, site, process and KPIs.

2 Assess and shortlist

Site survey, then the options that fit compared.

3 Pilot with KPI baseline

KPIs measured first. Pass marks agreed in writing before set-up.

4 Integrate

If useful, one agreed link into your booking system or BMS, under your change control.

5 Multi-site roll-out

After a go decision, one floor or building at a time.

How a pilot runs: set-up, then live weeks in normal use, then a short written report with a go or no-go. Timings are agreed per site.

Questions we hear

"We already have a system."

We give a free second opinion and check how it performs against your KPIs, using your live data and a site visit.

"How do we know it will work here?"

Judge us on method: a pilot, KPIs measured before and during it, and a written go or no-go.

"Can you bid with us, or for us?"

Yes. We team with integrators, or act as the buyer's independent adviser, but never both on the same bid.

"Do you sell or resell hardware?"

Yes, if you choose. Advice comes first; we can then supply, lease and integrate the equipment you pick. We also rent pilot equipment and offer survey and installation support.

Free second opinion

Send us your technology provider's quote or spec for a free second opinion. What to send: the quote or spec, a floor plan or site photos, item counts and your current process. Bring it to the call or send it via tracio.com/contact.

TRACIO consultancy fees

- **UK:** £3k to £30k per project, £1,200 a day
 - **Europe:** €3.5k to €35k per project, €1,400 a day
 - **US and Canada:** \$4k to \$40k per project, \$1,600 a day
 - **Middle East and Australia:** \$4k to \$40k per project, \$1,600 a day
 - **Rest of the world:** \$3.5k to \$35k per project, \$1,400 a day
- Scoped per project, no packages. Fees cover our work only; hardware, software licences and other supplier costs are separate. \$ = US dollars. Travel extra.

Why TRACIO: we work for you, not for the technology providers. We compare the options across the market that fit your site, provide site surveys and installation support, and work worldwide under your change control.

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