

Claiming Ground

Rethinking belonging and sustainability in the flexible workplace

A WORKTECH Academy report, produced in partnership with Ojmar

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Executive summary

Over the past decade, organisations have rebuilt the office around flexibility. Unassigned desks, hybrid attendance and higher desk-sharing ratios have largely delivered on cost and utilisation, but they have also carried two costs that are rarely counted together. The first is human: as the assigned desk disappears, so does the one part of the office that was recognisably an employee's own, and with it some of their sense of belonging. The second is environmental: the cabling, power supplies, batteries and smart hardware installed to make flexibility work carry a footprint that sustainability reporting is only now starting to capture.

This report argues that both costs meet at a single, easily overlooked decision around where people put their things. It draws on a review of research in environmental psychology, organisational behaviour and corporate real estate; and expert interviews.

Chapter 1 sets out the evidence on belonging, exploring why personal territory matters to identity, commitment and wellbeing. Chapter 2 examines the hidden footprint of the smart infrastructure that flexible workplaces depend on. Chapter 3 introduces the Home Ground framework, which maps workplace storage strategies against flexibility and personalisation, and identifies the new category of infrastructure that makes its most desirable quadrant reachable: the human-powered smart locker. And, the conclusion sets out five next steps for decision makers.



CLAIMING GROUND

KEY FINDINGS

01 **Flexibility can erode belonging.** Research links the loss of personal territory to weaker team identification, trust and psychological ownership, while employees with a strong sense of belonging perform better and are less likely to leave.

02 **Both trade-offs are a result of existing infrastructure.** Fixed storage limits flexibility; wired and battery-powered smart storage adds cost, maintenance and carbon.

03 **A new category removes the tether.** Human Powered smart storage keeps dynamic allocation, credentials and data while removing the wiring and power infrastructure conventional smart systems require. It also eliminates disposable batteries. At 1 Broadgate, JLL provisioned lockers for around 60% of headcount, and utilisation now runs at 75% or more.

04 **Infrastructure is an enabler.** On its own, an on-demand locker is a modest belonging signal. It becomes powerful when it carries identity, sits within team territory and belongs to a workplace that visibly signals it cares.

Throughout the research, the question shifts from whether employees should still have a desk of their own to whether a flexible workplace can still give them ground to claim.

INTRODUCTION

Where belonging and sustainability meet

For many employees without a desk of their own, a locker is now the last part of the office that is recognisably theirs. That small detail sits where two pressures on the workplace meet, and they are usually managed by different parts of the organisation.

Over the past decade, workplace design has pivoted decisively towards flexibility. Assigned desks have given way to unassigned seating, and desk-sharing ratios have risen as hybrid attendance made a desk for every employee hard to justify. What employees have lost in personal space, organisations have tried to give back through better amenities, a wider choice of meeting spaces and dedicated areas for wellness.

The shift to unassigned and open plan workplace design has largely delivered what it promised on cost and utilisation, but it has carried a trade-off that is only now coming into focus. As employees let go of their personal desks, they also lose their personal territory, and with it some of their sense of belonging. Environmental psychology research has found that removing personal territory can threaten workplace identity, with consequences that reach engagement, commitment and retention.

The second pressure is environmental. Sustainability reporting is moving beyond the energy a building consumes to the carbon and waste embedded in what is installed in it. For the large enterprises that remain in scope of the EU's Corporate Sustainability Reporting Directive – since the 2026 Omnibus amendments, those with more than 1,000 employees and over €450 million in turnover[1] – fit-out and facilities decisions around the cabling, power supplies, batteries and smart hardware that make a flexible workplace function are increasingly part of what must be measured and disclosed. The infrastructure installed to make flexibility work now has a footprint that needs to be accounted for.

These two pressures are rarely discussed together. Flexible work sits with workplace strategy, belonging sits with HR, carbon sits with sustainability and FM, and smart infrastructure sits with IT. This report argues that they meet at a single, easily overlooked decision around where people put their things. It asks whether a loss of belonging is really the price of flexibility, and whether a growing hardware footprint is really the price of smart infrastructure – or whether both trade-offs are artefacts of the infrastructure organisations have been choosing between.

1 European Union, 2022. Directive (EU) 2022/2464 (Corporate Sustainability Reporting Directive), as amended by Directive (EU) 2026/470 (Omnibus I), in force 18 March 2026; European Sustainability Reporting Standards ESRS E1 (Climate change) and E5 (Resource use and circular economy).



Reclaiming ownership through infrastructure

If the desk is no longer owned by an individual, employees start looking for ownership in other ways, and the next natural place to rebuild territory is storage. That makes lockers more important infrastructure for belonging. But the options organisations have had so far each carry a cost. Traditional assigned lockers still take up expensive real estate and are difficult to manage at scale. Smart lockers arrived as the answer, allocating space dynamically according to demand. For years, the industry has assumed that smart storage must be powered and physically connected to the building.[2] That assumption has tethered lockers to fixed infrastructure, adding cabling, installation complexity, maintenance and hardware that must eventually be replaced or disposed of.

The interaction itself generates the energy required to identify the user and operate the lock. Because power is created at the point of use, smart storage no longer needs to be wired into the furniture or the building, and no disposable battery is required. This report uses 'human-powered smart locker' for the category throughout, this refers to a locker with smart functionality without the wiring or batteries that fix conventional systems to the building.

With this kind of infrastructure, flexibility is not the price of belonging, and smart functionality is not the price of a larger footprint. This report argues that the two can coexist, creating spaces that are dynamic and flexible enough to meet the needs of new ways of working, without compromising the sense of belonging employees require when they come into an office.

'We're not talking about a better lock. We are talking about a new category: Human Powered Smart storage.'

– AITOR ELORZA, OJMAR

2 Interview with Aitor Elorza, Ojmar, 3 November 2026.

CHAPTER 01

The cost of belonging at work

The workplace has always been more than a place to complete tasks. For many, the office provides a social and symbolic environment through which professional identities are developed, relationships are established and a wider sense of belonging to an organisation is reinforced. Everyday interactions, formal or incidental, can contribute to employees' understanding of their position within a community; in this context the workplace isn't simply a location in which work takes place, but a setting in which identity and attachment are experienced.

As hybrid working makes attendance less frequent and desks less personal, this setting can weaken. The effect is not confined to employee experience; it reaches into how individuals construct their professional identity and perceive their relationship with their employer. Hybrid working offers employees greater flexibility and control, but it can also dismantle the everyday mechanisms through which identity, belonging and loyalty have been built.

Territory as identity

The clearest account of what is lost comes from a study out of University of California which follows a technology company that moved its staff into non-territorial offices. Employees experienced the loss of an assigned desk not as an inconvenience but as a threat to their workplace identity. They described losing the everyday cues through which they signalled who they were and where they stood in the organisation. Many responded by improvising and claiming the same seat each day.[3]

Personalisation – the ways in which individuals shape and modify their physical environment – is more than a matter of preference; it provides an outlet for self-expression and externalisation of identity. Objects, photographs, artefacts and other personal cues that individuals choose to surround themselves with can establish a sense of familiarity, ownership and continuity within an otherwise shared or traditionally impersonal environment.

Research on workplace identity often treats personalisation as a marker of belonging. People who can personalise a space, however small, are more likely to feel part of the organisation rather than simply present within it. Crucially, the need does not disappear when the desk does. A Dutch study of non-territorial offices found that employees still sought ways to personalise space, turning to temporary and team-level forms of display instead.[4]

Research from the University of Queensland found that the sense of possession which allows individuals to satisfy their needs for efficacy and self-identity is key to work-related attitudes such as one's commitment or satisfaction, as well as related behaviours such as performance and organisational citizenship.[5]

3 Elsbach, K.D., 2003. Relating physical environment to self-categorizations: identity threat and affirmation in a non-territorial office space. Administrative Science Quarterly, 48(4), pp. 622–654. DOI: 10.2307/3556639

4 Brunia, S. and Hartjes-Gosselink, A., 2009. Personalization in non-territorial offices: a study of a human need. Journal of Corporate Real Estate, 11(3), pp. 169–182. DOI: 10.1108/14630010910985922

5 Tann, K. and Ayoko, O.B., 2020. A social semiotic approach to the physical work environment. In: Ayoko, O.B. and Ashkanasy, N.M. (eds.) Organizational Behaviour and the Physical Environment. New York: Routledge, pp. 214–231. DOI: 10.4324/9781315167237-12

The benefits are measurable for organisations. One research study found that personalising an office was associated with greater satisfaction with the physical work environment, which in turn was linked to job satisfaction and wellbeing,[6] while another study found that personalisation helped protect employees against the emotional exhaustion associated with a lack of privacy.[7]

Belonging is a fundamentally psychological experience, and it reflects an individual's perception of acceptance, value and connection. Within the workplace, this can shape how employees grasp their relationship with colleagues and the organisation itself. When people see themselves as part of a collective, they tend to contribute more, and the reverse also holds. Wohlers and Hertel's longitudinal study of a move to activity-based offices found the same at team level: reduced territoriality was associated with weaker team identification, information sharing and trust.[8]

That attachment is often to something very specific. Inalhan and Finch found that employees form genuine bonds with their own workspace and that these bonds are a source of belonging, which is why disrupting them without acknowledgement can surface as resistance to workplace change.[9]

Another study tracked a move to activity-based working over time, and found that removing assigned workstations reduced both privacy and psychological ownership.[10]

Understanding workplace belonging therefore requires attention not only to where employees work, but to their ability to mark spaces of their own and the wider psychological processes through which a sense of connection is developed and sustained.

The cost of sharing

Hybrid working has made the problem more acute. With more unpredictable attendance patterns, maintaining a dedicated workstation for every employee has become difficult to justify, and shared desks and hot-desking have become commonplace.

This move towards shared and non-territorial workplaces has constrained employees' ability to personalise working environments. Where desks are shared or allocated on a temporary basis, there's less opportunity to leave personal belongings, display photographs or establish any visible markers of individual identity. Personalisation becomes impractical when employees must clear their workspace for the next user every day.

People who can personalise a space, however small, are more likely to feel part of the organisation rather than simply present within it.

6 Wells, M.M., 2000. Office clutter or meaningful personal displays: the role of office personalization in employee and organizational well-being. Journal of Environmental Psychology, 20(3), pp. 239–255. DOI: 10.1006/jevp.1999.0166

7 Laurence, G.A., Fried, Y. and Slowik, L.H., 2013. "My space": a moderated mediation model of the effect of architectural and experienced privacy and workspace personalization on emotional exhaustion at work. Journal of Environmental Psychology, 36, pp. 144–152. DOI: 10.1016/j.jenvp.2013.07.011

8 Wohlers, C. and Hertel, G., 2018. Longitudinal effects of activity-based flexible office design on teamwork. Frontiers in Psychology, 9, 2016. DOI: 10.3389/fpsyg.2018.02016

9 Inalhan, G. and Finch, E., 2004. Place attachment and sense of belonging. Facilities, 22(5/6), pp. 120–128. DOI: 10.1108/02632770410540333

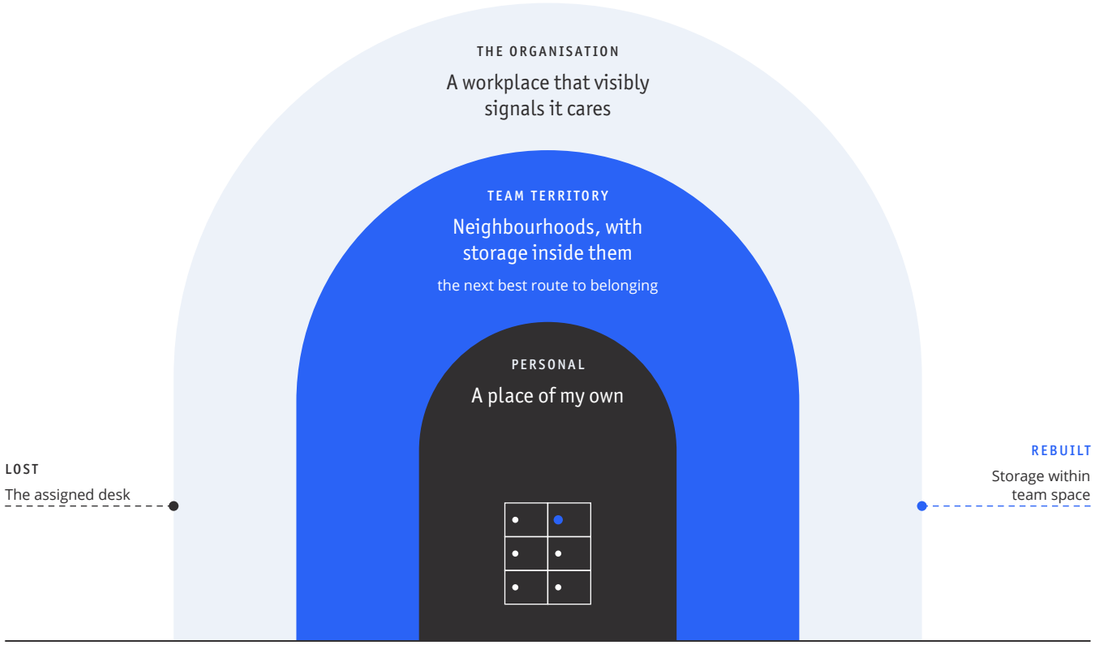
10 Halldórsson, F., Kristinsson, K., Gudmundsdottir, S. and Hardardottir, L., 2021. Implementing an activity-based work environment: a longitudinal view of the effects on privacy and psychological ownership. Journal of Environmental Psychology, 78, 101707. DOI: 10.1016/j.jenvp.2021.101707

The costs are not only a matter of comfort. An analysis of post-occupancy data from Australian offices found that employees without an assigned desk reported no gain in workplace satisfaction or perceived productivity over those with one, and rated several aspects of their environment less favourably.[11]

Connaughton et al. (2026) note that the office is a site of 'ongoing adaptation', but one where workers can successfully exercise agency.[12] So while shared desks are an obstacle to personal territory, there is still opportunity to allow employees to shape their environment. Although shared workstations limit the ability to personalise individual desks, a designated area in which employees can store personal belongings and create a degree of ownership may provide a physical anchor for the individual, maintaining a level of continuity despite the transient nature of the space itself.

Research has found that shared-desk offices can weaken employees' sense of territoriality and attachment to a specific workstation, because workers lose the ability to personalise and establish ownership over their immediate environment. However, employees adapt by developing new forms of place attachment and territorial behaviour at a wider spatial and social level, suggesting that flexible offices should provide alternative opportunities for personalisation, belonging and control.[13]

Dr Sally Augustin, an environmental psychologist and principal at Design With Science, explains that if you can't have an individual territory, team space is the next best route to build a sense of belonging at work. Left to choose, people tend to sit near the same colleagues each day, creating team areas. Storage placed within those areas, rather than in a separate back-of-house bank, becomes part of a recognisable team territory.



11 Kim, J., Candido, C., Thomas, L. and de Dear, R., 2016. Desk ownership in the workplace: the effect of non-territorial working on employee workplace satisfaction, perceived productivity and health. Building and Environment, 103, pp. 203–214. DOI: 10.1016/j.buildenv.2016.04.015

12 Connaughton, J., Kaaria, M.K. and Maftei, L., 2026. How office workers adapt their workplace as part of their everyday work? A social practice perspective. Journal of Corporate Real Estate. DOI: 10.1108/JCRE-01-2025-0002

Building a business case for belonging

Belonging also has a measurable business case. In a study of 1,789 full-time employees, BetterUp found that a strong sense of belonging, compared with a weak one, was associated with a 56% increase in job performance, a 50% reduction in turnover risk and a 75% reduction in sick days.[14] When belonging is missing, the cost shows up in lost discretionary effort and in the price of replacing people who leave. Personalisation is therefore more than aesthetics; it is one of the bridges between the physical environment and the commercial outcomes organisations care about.

Control matters too. Augustin notes that a sense of control has a statistically significant effect on wellbeing and performance – workplace studies have linked personal control over the workspace to higher job satisfaction and group cohesiveness[15] – and that space is read as a signal of how much an organisation values its people. 'When people feel that you care about them as an organisation,' she says, 'they will go above and beyond.'

The challenge lies in recognising the tension between organisational efficiency and human identity. The same infrastructure that allows organisations to reduce unused space and accommodate flexible working is, at the same time, creating an environment that is more impersonal.

In turn, there is a paradox emerging whereby organisations are designing spaces for flexibility, while employees continue to have a psychological need for identity and affiliation. The answer is not to abandon flexibility, but to design belonging back into it and give people a space of their own even when they no longer have a desk.

56%
increase in job performance

50%
reduction in turnover risk

75%
reduction in sick days

> 'When people feel that you care about them as an organisation, they will go above and beyond.'
>
> – DR SALLY AUGUSTIN, DESIGN WITH SCIENCE

13 Dúll, A., Erdélyi, A. and Frankó, L., 2022. Transformation of the office: territorial behaviour and place attachment in shared desk design. Journal of Corporate Real Estate. DOI: 10.1108/JCRE-12-2021-0043

14 Carr, E.W., Reece, A., Kellerman, G.R. and Robichaux, A., 2019. The Value of Belonging at Work: The Business Case for Investing in Workplace Inclusion. San Francisco: BetterUp. Summarised in Harvard Business Review, December 2019.

15 Lee, S.Y. and Brand, J.L., 2005. Effects of control over office workspace on perceptions of the work environment and work outcomes. Journal of Environmental Psychology, 25(3), pp. 323–333. DOI: 10.1016/j.jenvp.2005.08.001

CHAPTER 02

The hidden footprint of smart infrastructure

If the first cost of the flexible workplace is human, the second is the infrastructure burden created to make it smart: wiring, power supplies, batteries, installation and maintenance. Its environmental impact is one consequence of that burden. As organisations move towards shared, technology-enabled workplaces, they install more of the hardware that makes flexibility work, including access control, sensors, cabling, power supplies and batteries. Each carries embodied carbon from the manufacture, materials, installation and eventual disposal of equipment. These emissions do not appear on a building's energy bill, and they have historically sat outside most carbon accounts too.

But that is changing. In the UK, the Chartered Institution of Building Services developed a new methodology to capture some of the carbon emissions that have previously been omitted from the calculation such as the mechanical, electrical and technology systems integrated into a building[16].

Building interiors are typically replaced several times over a building's life, so the carbon embedded in their cabling and hardware is incurred again with each refurbishment. And as reporting standards bring Scope 3 emissions and resource use into scope, these once-invisible decisions are coming to the surface.

Electronic and battery-powered lockers illustrate this hidden footprint particularly clearly. They depend on components that not only require ongoing maintenance but carry a recurring environmental burden beyond the initial manufacture and installation. Batteries must be monitored, replaced and disposed of as hazardous waste, and the electronics around them contribute to the 62 million tonnes of e-waste generated globally in 2022, of which only 22.3% was documented as formally collected and recycled.[17] Their technological complexity can also reduce adaptability as changes to access systems or workplace layouts may render hardware or cabling obsolete, requiring further investment in infrastructure reconfiguration.

The scale adds up quickly. For every 1,000 lockers, Ojmar estimates that its Human Powered system avoids around 3,000 metres of wiring and the associated installation work. Compared with a battery-powered alternative, 23kg of hazardous waste and approximately 140kg of CO_2e, plus hundreds of hours of installation and maintenance time. Against a battery-powered equivalent, Aitor Elorza, CCO at Ojmar, estimates the same installation avoids around 4,000 batteries. 'If we talk about batteries, the pain point is maintenance,' says Elorza. 'If we talk about wiring, it's capex, hours of installation, and complexity.'

These limitations highlight the need for an alternative approach to workplace infrastructure, one that provides the functionality of modern smart lockers without the dependence on fixed electrical or battery-powered technology. Human Powered removes the infrastructure that smart storage used to require. The result is smart functionality without designing permanent power and cabling into the furniture or the building. As the user presents a card or phone and pushes the lock, that movement generates enough kinetic energy to read the credential, check permissions and lock or unlock; the smartphone provides a second source of harvested energy. The same action can send a signal via a gateway to the cloud, giving FM teams real-time visibility of use.

16 CIBSE, 2021. TM65: Embodied Carbon in Building Services – A Calculation Methodology. London: Chartered Institution of Building Services Engineers.

17 Baldé, C.P. et al., 2024. The Global E-waste Monitor 2024. Geneva/Bonn: International Telecommunication Union (ITU) and United Nations Institute for Training and Research (UNITAR).



Removing the need for permanent cabling, power supplies or disposable batteries makes the system more adaptable and lower-maintenance, while retaining the practical and psychological benefits of personal storage within a shared workplace. Because it works both online and offline, organisations can start without connectivity and add it later, and lockers can be retrofitted late in a project.

In the EU, rules that apply from 27 September 2026 prohibit generic environmental claims that cannot be backed by recognised evidence.[18] Although they are aimed at consumer marketing, they reflect what procurement teams now expect from suppliers including verified data, such as Environmental Product Declarations (EPDs).

For Katrina Norman, who led furniture strategy for JLL's move to 1 Broadgate in London, the point was consistency between infrastructure and the organisation's goals. JLL plans to power down quieter floors to save energy, so a locker system that needed power around the clock would have worked against that. 'Otherwise, we are running a locker system on our energy that's not in tune with what we're trying to do' she commented.

'We're ultimately wanting to spend less, use less carbon. So why over-design?'

– KATRINA NORMAN, BUSINESS MANAGER, FURNITURE SOLUTIONS, TÉTRIS DESIGN X BUILD, A JLL COMPANY

18 European Union, 2024. Directive (EU) 2024/825 as regards empowering consumers for the green transition through better protection against unfair practices and through better information. Applies from 27 September 2026.



The energy chain

The energy chain illustrates the argument directly, by bringing these two streams together. The journey begins when a person walks into the office. The physical act of interacting with a locker generates the small amount of energy needed to power the lock and identify who is using it. There is no power cable to route through the furniture, and no battery to monitor or replace. The infrastructure disappears because the interaction itself generates the power.

The lock recognises the person, via a built-in reader that scans a smart card or smartphone, and opens onto a space allocated to them for the day. The psychological effect is small but significant because as soon as someone arrives, they have a secure place for their things for the day, without needing to claim one by leaving a coat on a chair.

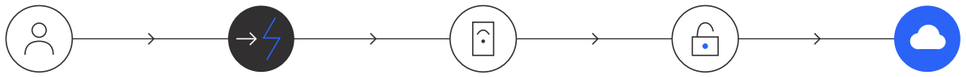
That small piece of psychological safety can change how people behave for the rest of the working day. Whether an employee contributes in a meeting, stays with an organisation when offered a role elsewhere, or puts in discretionary effort rather than the minimum required, is linked to whether they feel they belong.

However, an on-demand locker which carries no trace of its user is, on its own, a modest signal of belonging. It becomes more psychologically powerful when it can represent the person, even for a day, and when it sits within a team's territory: 'It's much more powerful psychologically if that locker can somehow represent who you are,' says Augustin.

The same is true of the sustainability signal. Augustin observes that people who know they are in a green building are more patient with minor discomfort and more committed to the organisation, because it signals that the organisation cares. Experimental research finds that simply describing an indoor environment as environmentally certified leads people to rate it more favourably than an identical conventional one.[19]

Seen this way, the trade-offs organisations have seemingly accepted between flexibility and belonging, and smart functionality and a lighter footprint become less like laws of the workplace and more like the limits of the infrastructure available to them. The next chapter sets out a framework for mapping where an organisation sits today, and what it would take to reach a 'Home Ground'.

STREAM 1 · ENERGY AND DATA



1	2	3	4	5
Arrive	**Push to power**	**Recognise**	**Lock / unlock**	**Signal (optional)**
A person walks into the office	Kinetic energy is harvested from the push	Reads card or phone, checks permissions	Opens onto a space allocated for the day	Via gateway to the cloud: real-time FM visibility

the same interaction

STREAM 2 · BELONGING

A secure place for the day	Psychological safety	Belonging, in behaviour
As soon as someone arrives, no need to claim one by leaving a coat on a chair	A small but significant effect that can change how people behave all day	Contributing in meetings · staying when offered a role elsewhere · discretionary effort

19 Holmgren, M., Kabanshi, A. and Sörqvist, P., 2017. Occupant perception of "green" buildings: distinguishing physical and psychological factors. Building and Environment, 114, pp. 140–147. DOI: 10.1016/j.buildenv.2016.12.017

CHAPTER 03

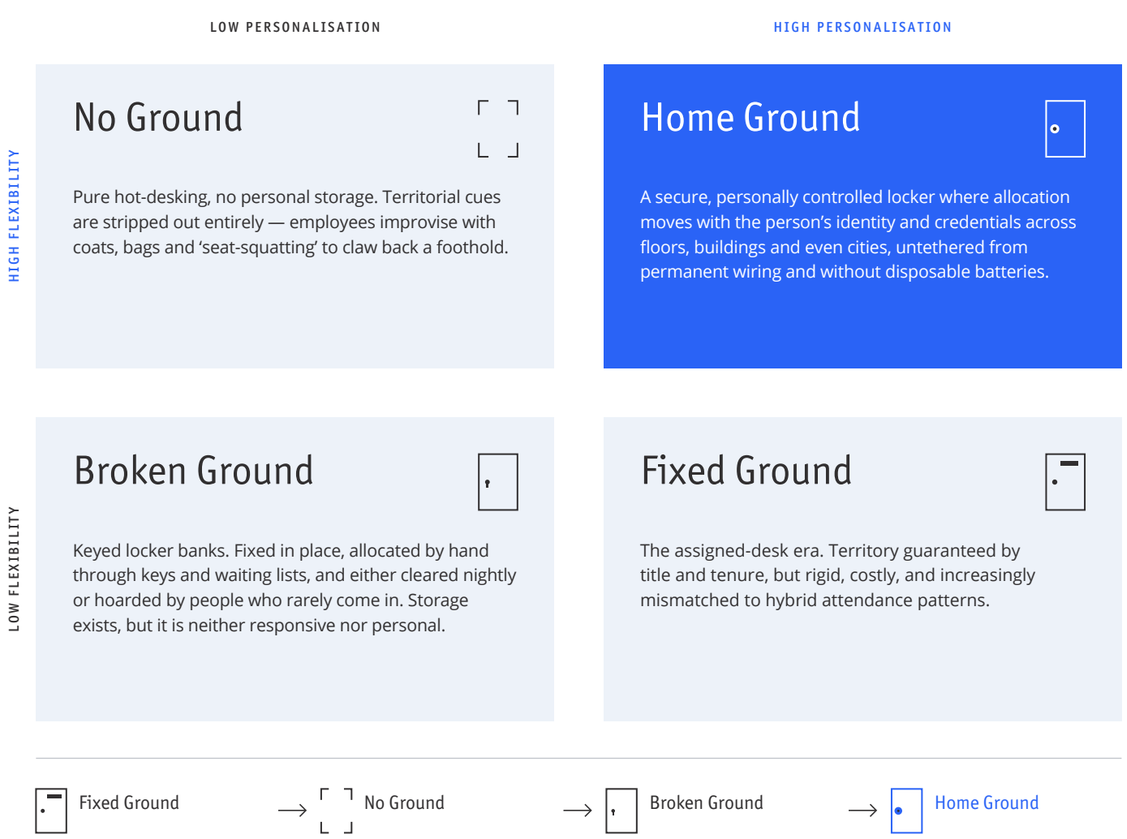
Finding Home Ground

The research highlights that people need a place of their own in the office, and the infrastructure organisations have used to provide one carries costs of its own. To show how these pressures play out in practice, this chapter maps how workplace storage strategies can address these tensions.

This framework follows two axes. The first dimension, flexibility, considers the extent to which a storage solution can adapt to changing patterns of occupancy, workplace configuration and employee need, ranging from low to high flexibility. The second dimension, personalisation, considers the extent to which the storage solution enables employees to establish ownership, identity and a sense of personal space, ranging from low to high personalisation.

Plotting one against the other produces four states, each a different balance between what the organisation needs from its space and what people need from it.

The four resulting plots can be characterised as: **No Ground**, **Broken Ground**, **Fixed Ground** and **Home Ground**.



No Ground represents pure hot-desking, with no personal storage at all. It is highly flexible, but lacks personalisation. Territorial identities are stripped out of the workplace environment entirely, so employees improvise with the storage of coats and bags daily. Little opportunity arises for individual ownership, and 'seat-squatting' becomes a way to claw back a foothold.

Broken Ground is where many organisations land when they try to repair 'No Ground'. They adopt traditional keyed locker banks. Lockers are fixed in place, often in a back-of-house room away from where people work, and allocated by hand through key cabinets and waiting lists. The result is the worst of both worlds. Day-use lockers are cleared every evening, so nothing is truly anyone's. Assigned lockers are hoarded by people who rarely come in, while regular attendees go without; it's the locker equivalent of seat-squatting. Storage exists, but it neither adapts to how the office is used nor gives people a place of their own.

Fixed Ground represents the era of assigned desking. This plot accounts for high personalisation, but low flexibility. Lockers and territory are guaranteed through title and tenure, attached to specific workstations and employees. However, this strategy is increasingly mismatched to hybrid-attendance patterns and the flexibility of the modern workplace; while remaining rigid and costly to replace, remove or relocate.

Home Ground represents the intersection of high flexibility and high personalisation: a secure, personally controlled locker that people choose on demand, close to wherever they are working that day, and open with their own credentials across floors, buildings and even cities. It adapts as the workplace changes, while still giving employees a tangible space of their own.

Within this framework Home Ground represents the desired balance between organisational flexibility and employee personalisation. Its significance lies in addressing the central tension identified through this research: the need for workplaces to remain adaptable and efficient without trading-off the psychological benefits associated with ownership, identity and belonging. Rather than asking organisations to choose between flexibility and personalisation, it seeks to reconcile the two, creating a workplace in which employees can move freely through a shared environment while retaining a meaningful anchor within it. The typical journey runs from Fixed Ground to No Ground as assigned desks are removed, then into Broken Ground as keyed lockers are added to restore some personal space. Smart lockers have taken organisations a long way towards Home Ground: storage that is allocated dynamically and personal at the point of use. But they arrive tethered to the building through wires or dependent on batteries, which limits how easily they can move as the workplace changes and adds the hidden footprint. Home Ground without the tether is what has been missing, and it is what the energy chain makes possible. That is what makes the human-powered smart locker a new category rather than a better lock: traditional smart locks, as Elorza puts it, 'made the lock smarter'; this approach changes the infrastructure required to deliver the smart experience.

'Personal for people. Flexible for organisations. Untethered from the building.'

– AITOR ELORZA, OJMAR

CASE STUDY

JLL, 1 Broadgate

JLL's move to its new UK flagship office at 1 Broadgate shows what it takes to balance flexibility, sustainability and belonging in a real workplace. The space, designed by Perkins&Will, has achieved BREEAM Outstanding, and more than 70% of its furniture was reused.

AT A GLANCE

1 Broadgate, City of London

JLL's UK flagship office"

Designed by Perkins&Will

BREEAM Outstanding, targeting WELL Equity

More than 70% of furniture reused and over 500 tonnes of carbon saved through urban mining

Ojmar human-powered smart lockers for around 60% of headcount

Utilisation of 75% or more

Postal lockers developed with Ojmar for the project

Additional lockers on a six-week lead time



The starting point was a problem many workplace teams will recognise. At its previous office, JLL had already tried smart lockers. The system had not done what the business needed, and its subscription added to operating costs month after month.

JLL treated its locker infrastructure at 1 Broadgate as a cross-functional decision rather than an IT or FM purchase. IT, FM, global real estate, the design team and an inclusive-design lead each weighted every possible locker function, from critical to desirable. Those weights were used to score 12 suppliers down to a shortlist of three, each of which presented and provided samples. Because the criteria were agreed collectively before the decision was made, ownership of the outcome was shared across functions – and Ojmar scored highest.

There were three deciding factors that contributed to which lockers were chosen. The first was the whole-life cost: running costs modelled over three and five years showed a significant difference between the shortlisted options. The second was resilience: JLL already powers down whole floors at another site to save energy, and lockers needed to stay accessible during a shutdown; Ojmar's lockers continue to work without their network gateways, via phone or master key. And the third was simplicity: the brief favoured a dependable, easy-to-use system over one with more features, in keeping with the building's understated design.

The human-powered system offered by Ojmar was new, with a first version launched in 2024. Over an 18-month process, Ojmar took feedback from JLL's design, user-experience, IT and sustainability teams and responded with mechanical improvements, a booking mode and postal lockers designed around JLL's mail process.

JLL also challenged conventional assumptions about the number of lockers required, opting for a lower initial provision that could be expanded if and as demand changed. Because the lockers need no wiring, JLL provided them for around 60% of headcount rather than one per employee, matching capacity to hybrid attendance. More can be added on a six-week lead time. Utilisation now runs at 75% or more.

The wider design of the space also supports a sense of belonging for employees. Desks are arranged in team neighbourhoods giving lockers a natural team context.

1 Broadgate shows what becomes possible when smart storage is no longer designed as fixed infrastructure: provision can match hybrid demand, utilisation can be monitored, and capacity can be added without installing new wiring. The belonging dividend is still to be measured, and the six-month review is the moment to ask whether employees feel the locker is theirs.

70%+

Furniture reused

500+ t

Carbon saved through urban mining

60%

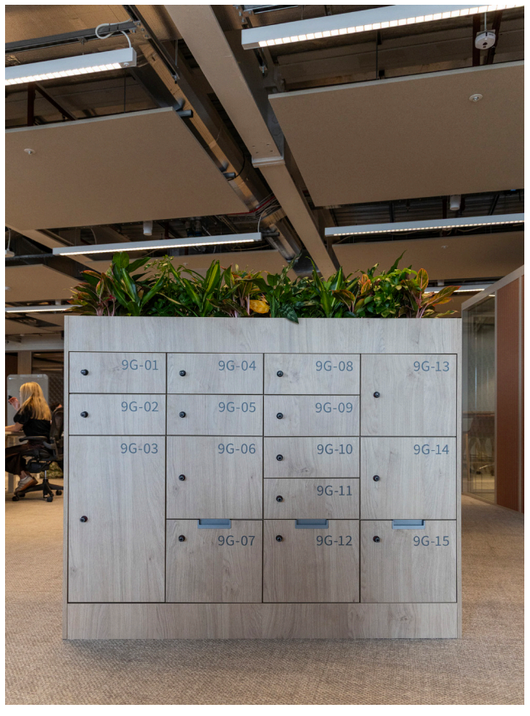
Headcount with Ojmar human-powered smart lockers

75%+

Utilisation







Conclusion: Claiming Home Ground

Flexible working has delivered on cost and utilisation, but it has eroded the personal territory that anchors belonging, and increased the carbon footprint of the hardware that makes flexibility work. This report has argued that both trade-offs are artefacts of the infrastructure organisations have been choosing between, but now there is a new category of infrastructure that bridges the two.

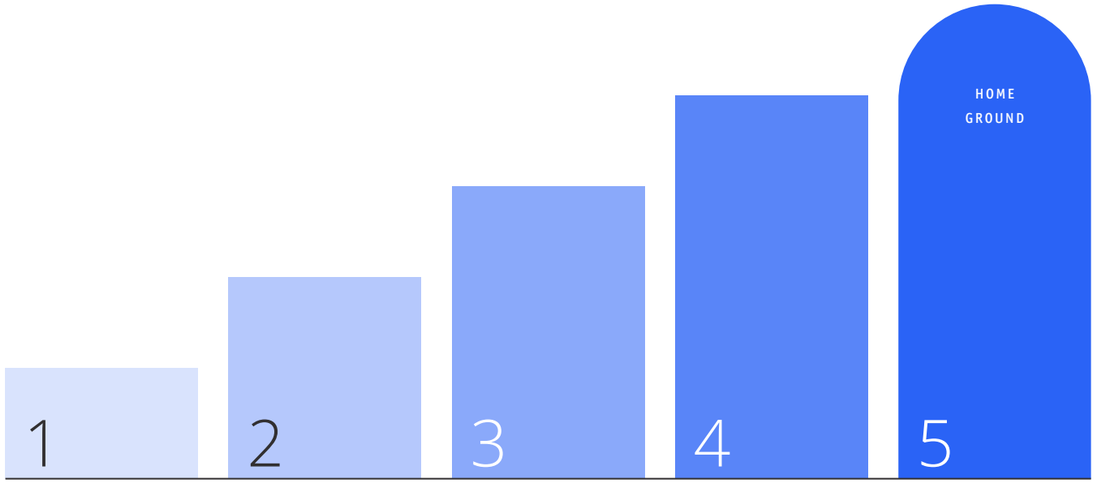
Human Powered is not simply a different way to power a smart lock. It is a different way to design smart workplace storage. It keeps dynamic allocation, credentials and data while removing the permanent wiring and power infrastructure that previously fixed smart storage to the building. In Elorza's words, it is 'personal for the employee, flexible for the organisation, with less infrastructure behind both.' 1 Broadgate shows it working today. But infrastructure is the enabler, not the destination: Home Ground is reached through how it is specified, placed and used.

'How do we get trailblazing leaders to come in and be willing to question the norm, question their standard process and actually make a change?'

– KATRINA NORMAN, BUSINESS MANAGER, FURNITURE SOLUTIONS, TÉTRIS DESIGN X BUILD, A JLL COMPANY



NEXT STEPS FOR WORKPLACE DECISION MAKERS



Map where you are. Plot current storage on the Home Ground framework and cost the status quo: space for Fixed Ground, belonging for No Ground, hoarding and admin for Broken Ground, subscriptions and maintenance for tethered smart systems.

Make it a joint decision. Bring HR, workplace, IT, FM, sustainability and inclusive design together around one weighted set of criteria, and model whole-life cost over three to five years rather than the day-one price.

Provision for flexible headcount. Start with less lockers than you think you'll need, monitor utilisation and add capacity as needed. Infrastructure that needs no wiring makes it much easier to retrofit more storage.

Design belonging back in. Place lockers within team neighbourhoods, give large, stable teams a base such as a team room kept out of the booking system.

Count and communicate the footprint. Ask suppliers for verified data such as EPDs, include fit-out hardware in carbon reporting, and tell employees what their infrastructure no longer needs.

The next decade of workplace strategy should treat belonging as part of the brief, alongside utilisation and carbon. Flexibility, belonging and sustainability are not three competing priorities but one infrastructure decision, seen from three angles. The question for decision makers is no longer whether employees have a desk of their own, but whether the workplace still gives them ground to claim.

Appendix

With thanks to contributing experts:

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About Ojmar

Founded in the Basque Country, Ojmar has more than 100 years of locking expertise and has made smart locks for more than 25 years. Headquartered in Elgoibar, Spain, with a subsidiary in Irvine, USA, and showrooms in London, Madrid, Paris, San Sebastián and Dubai, it designs, manufactures and supports locking systems for workplaces in more than 80 countries. Its OTS.40 Human Powered smart lock delivers connected, data-enabled workplace storage without permanent wiring or disposable batteries. Its environmental performance is supported by an Environmental Product Declaration, or EPD.

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