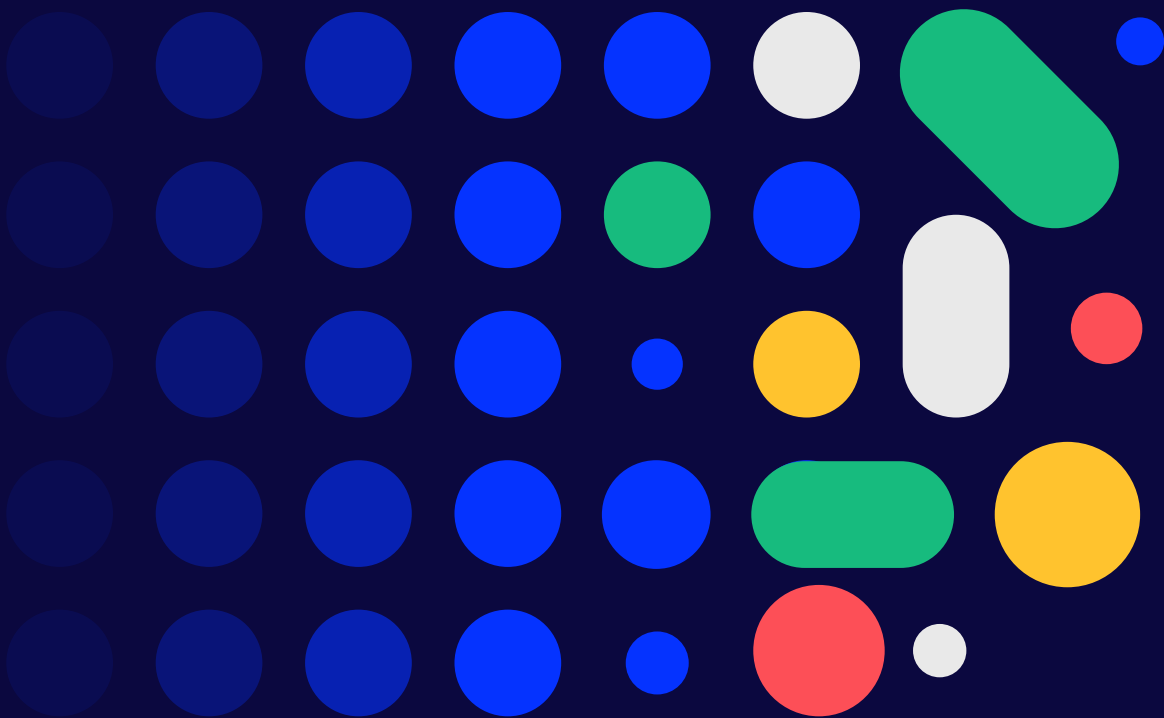


White paper

From fixed, to flex



How smart locker systems
increase flexibility and support
successful dynamic workplaces



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Industry experts in managing dynamic workplaces, innovative workplace technology and the future of work.

VECOS

The Vecos leadership team

Vecos is the world's market leader, trendsetter and innovator of smart locker systems for smart workplaces. Vecos helps people and workplaces to flex, by offering state of the art, flexible and intuitive SaaS technology. Founded in 1996, the Vecos system is active in 700,000+ lockers, in 40+ countries, and has over 1.4 million users.



Bram Kuipers, CEO

Entrepreneur and founder of today's Vecos proposition - passionate ambassador for dynamic working and expert in workplace technology.

Saskia Ordelman, CCO

Focused on successful implementation of flexible workplaces, harnessing 15 years' innovation and insight experience in leading FMCG companies.



WORKTECH ACADEMY

The WORKTECH Academy researchers

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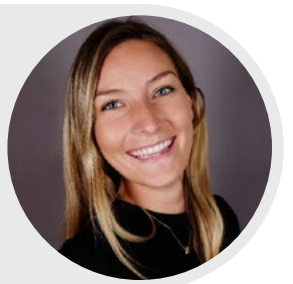


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Special thanks to the teams of EY & Qualcomm for their contribution to the case studies and insights featured in this whitepaper.

Introduction

The impact of the new dynamic workplace on personal storage

Since the outbreak of the COVID-19 pandemic, organizations have been presented with a series of challenges and opportunities which have disrupted traditional models of work in a profound way. The resulting acceleration of flexible working provides a unique opportunity for organizations to completely reimagine the workplace in the context of new ways of working and emerging employee expectations.

The evolution of work practices and processes not only highlights the impracticalities of traditional office space, but it also presents new opportunities to address them with smart solutions. One of the key areas often overlooked in office space is the changing needs for storage as workplace setups change. This report explores how the evolution of office space, and the rising expectations of employees, are forcing companies to rethink their approach to storage management and usage.

Vecos, world-leading technology company founded in 1996, has been monitoring the impact of new ways of working on the provision of storage since it invented its smart locker management system.

Bram Kuipers, CEO of Vecos, explains:

"As companies left the idea of a fixed desk in favor of unassigned seating, we recognized this was an unstoppable change in the workplace. Vecos adapted its business model to focus purely on a smart locker system for the needs of the workplace."

What to expect from this report?

This report addresses the implications of new dynamic workplaces on personal storage. It looks at how human behavior and people's rising expectations must be considered when designing the workplace and how smart locker systems can deliver a holistic solution to new storage demands. The report includes case studies and best practice in how successful companies have thought about new solutions for storage as they shift towards more dynamic and flexible office spaces.

The report answers five key questions:

- 1 How has the workplace evolved and what is the impact on storage?
- 2 What are the new employee expectations?
- 3 How can storage be managed in the dynamic workplace?
- 4 What is the business case for smart locker systems?
- 5 What is the next step?

The chapter structure of this report follows these 5 questions.

The research is based on a review of literature in the field, the latest scientific evidence on workplace experience, a series of frontrunner case studies, interviews with experts in the field of workplace performance and design, and data analysis of over 700,000 online lockers in use before and during the pandemic.



1

How has the workplace evolved and what is the impact on storage?

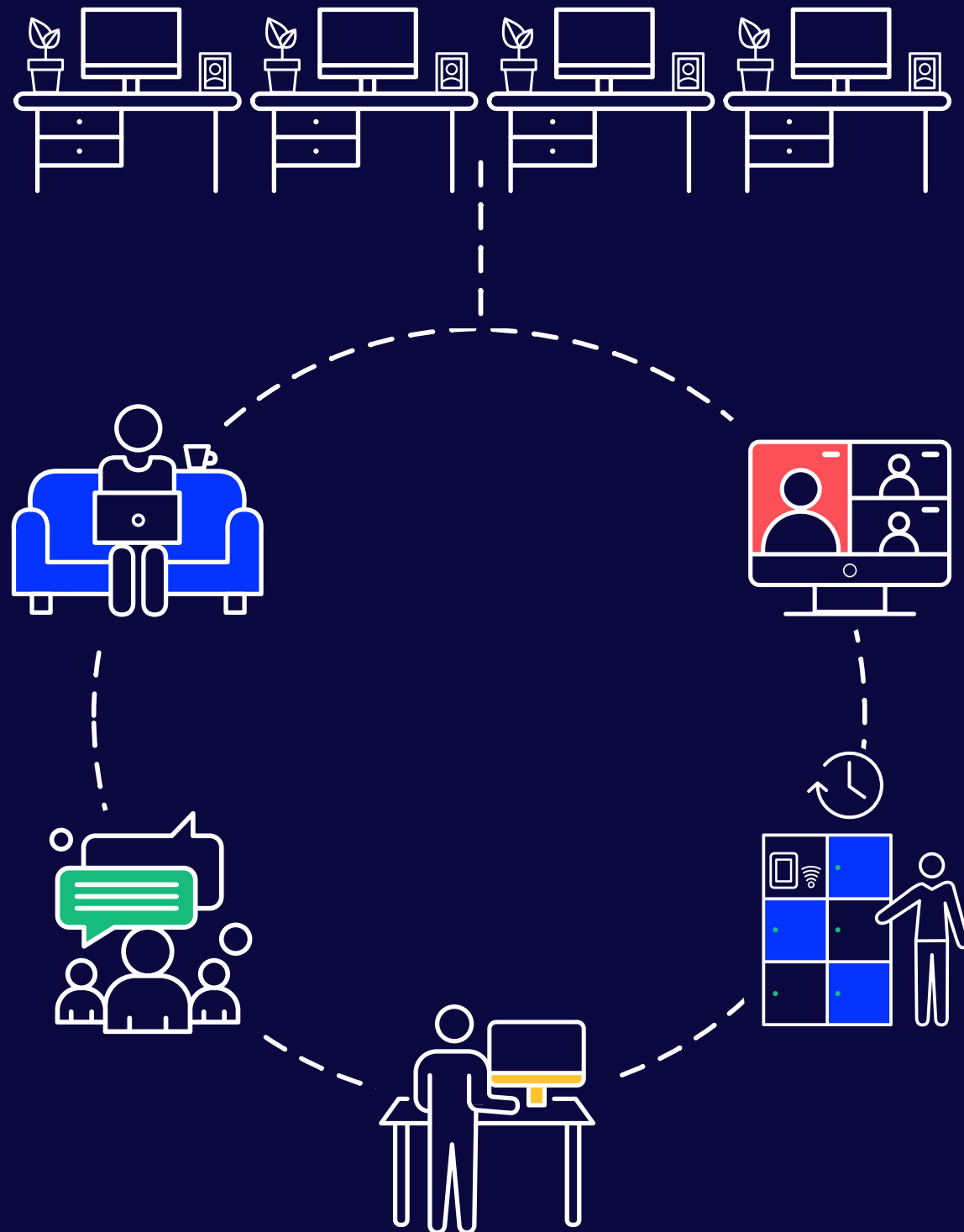
As the physical workplace becomes more flexible, the need for different and smarter personal storage solutions becomes a critical tool for facilities management teams. This section explores the evolution of the workplace and highlights how it has prompted a shift in our needs and expectations of personal storage.

Dynamic workplace popularity

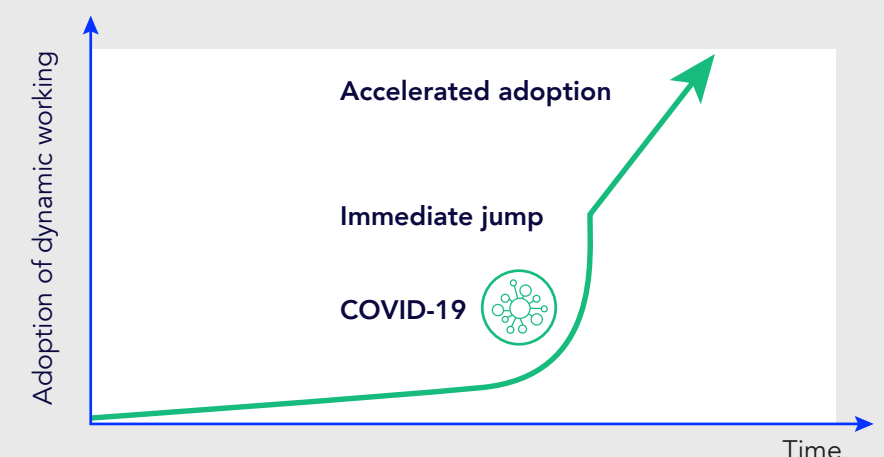
The shift towards dynamic work environments has been in motion for several decades, and before the pandemic it was picking up momentum with organizations looking to be more flexible. Frontrunner organizations across the world increasingly understood the benefits of dynamic working for the modern worker: instilling an increased sense of autonomy and freedom, creating an alluring recruitment tool for top talent, and bolstering an organization's green credentials by reducing its carbon footprint.

Getting ahead of the curve

While many organizations were already on their journey to adopt dynamic working, the impact of the pandemic pushed the rest of the world into the same sphere overnight. The dramatic shift to remote working meant that organizations were forced to adopt more flexible policies whether they were ready or not. In this context, organizations that championed dynamic working before the pandemic will have a head start as the rest of the knowledge-based workforce plays catch up.



How COVID-19 accelerated the adoption of dynamic working



Employee desire sparks invention

According to Microsoft's 2021 Work Trend Index – based on a survey of more than 30,000 full-time employees in 31 different countries – there is a desire by the majority of workers for more dynamic work environments¹. In response, 66 percent of business decision-makers are considering redesigning physical workspace to better accommodate hybrid work styles – this means creating spaces which are highly flexible and dynamic.

66% of business decision-makers are considering redesigning physical workspace to better accommodate hybrid work environments.

Microsoft's 2021 Work Trend Index.

Design and work styles go hand-in-hand

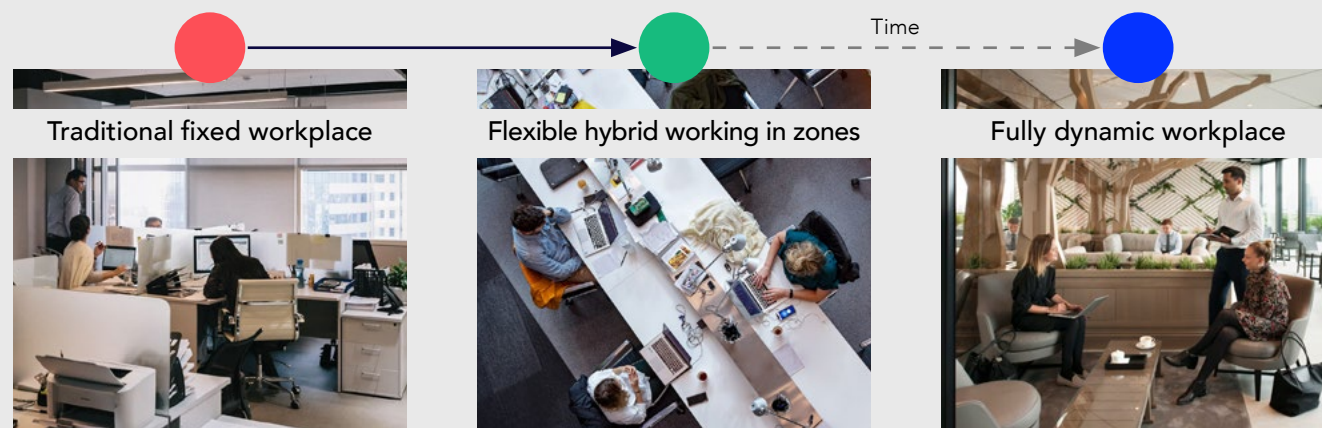
The evolution of office design has always transitioned in tandem with new ways of working. In traditional offices, employees are expected to work five days a week, from nine to five, at the same assigned desk every day, next to the same colleagues. In turn this resulted in offices designed for every employee to have their own personal space within the office.

"The biggest challenge for organizations is the uncertainty – no one knows what the future holds. The true activity-based working frontrunners will find it much easier to adapt to future disruption..."

Bram Kuipers, CEO of Vecos



The workplace and work styles are changing



Drivers for change

Way of living, Technology, Real estate cost, COVID-19

The shift to a flexible office

New drivers of change such as part-time and flexible working, emerging technology innovations, and rising real estate costs propelled a shift towards a more flexible office. This next phase of office design focuses on neighborhood working, where the office is split into zones which are organized around teams. This movement signals a shift away from the personal desk towards shared desks with the wider team in a fixed location or zone in a certain part of the building.

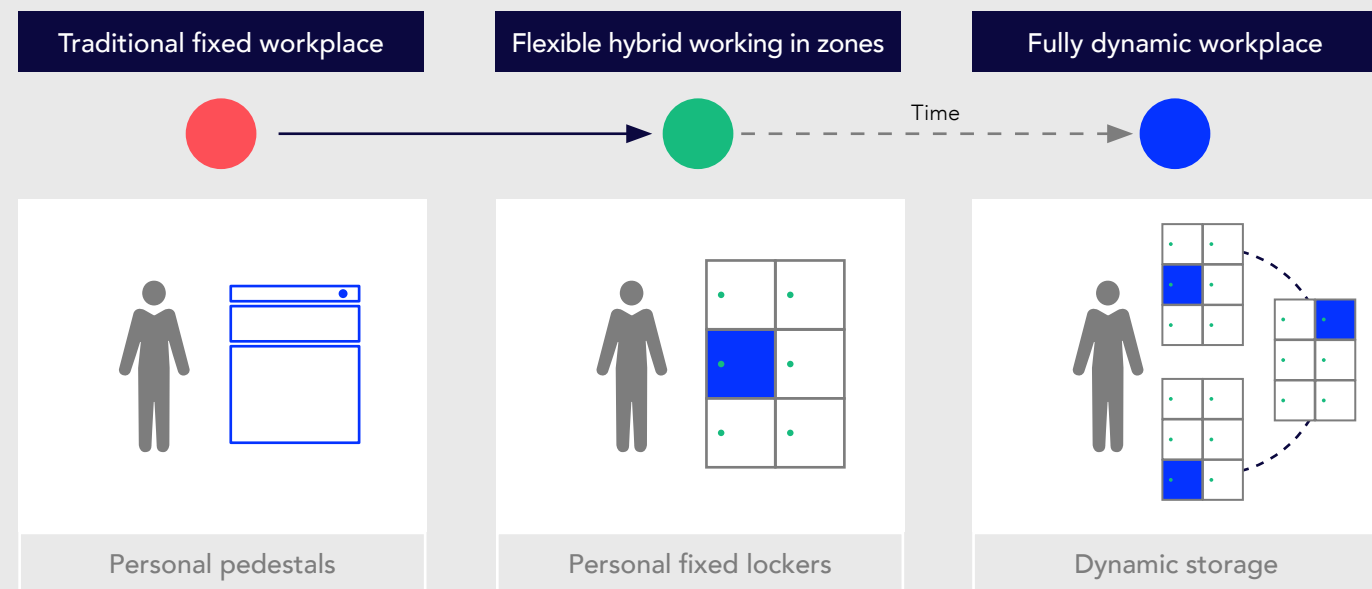
The most recent driver of change is the COVID-19 pandemic. The pandemic has accelerated the shift towards hyper-flexibility, where the workplace now accommodates for hybrid working and fully dynamic design. Employees are no longer expected to attend the office every day, and they can move around the office completely flexibly

depending on their agenda and needs for that day. Organizations are now tasked with creating spaces which are optimized for an unpredictable workplace flow – a task which is impossible to successfully complete without a dynamic work model.

Seamless, frictionless experiences

While flexible working extends individual choice across a range of settings outside the office as part of a work-from-anywhere model, fully dynamic working focuses on providing a seamless transition between a range of different types of space within the office building. Dynamic working offers employees maximum flexibility and minimum constraints on how, when and where they work in and around the building – be it at a desk, or in a breakout lounge, meeting room, phone booth or outdoor area.

The evolution of personal space and storage



The evolution of office space has had significant consequences on the way employees behave, feel and work in the space. One area that has continuously evolved alongside workplace design, is the provision of personal storage.

In traditional offices employees were offered their own desk with their own personal fixed storage units; typically, in the form of a pedestal situated under or close to their desk. When traditional office design gave way to dynamic neighborhood design, personal desks were replaced by shared 'agile' seating. However, many organizations still offered employees their own individual locker within the neighborhood, to compensate for the lack of personal desk.

With the advent of hybrid and fully dynamic working, people are expected to move through the office effortlessly and seamlessly. Dynamic office design accommodates different spaces for different work activities. Employees are expected to move across zones, floors and types

of workspace according to the type of work they need to do. This movement requires personal storage to be available on demand across all areas of the office.

If locker storage is managed correctly, it can quickly become an enabler for the dynamic workplace. However, if storage does not keep up with the pace of change of workplace design it can cause significant barriers for productivity and flow.

Dynamic storage – the key enabler of the dynamic workplace

According to insights from over 700,000 online lockers and 1.4 million users of the Vecos smart locker system, when people are not enabled to work from anywhere because their personal storage is in a fixed location, they will limit their movements and not move beyond that location. This becomes a barrier to dynamic working and people quickly return to old behaviors and routines. This can make even the most well-designed dynamic spaces work inefficiently.



2

What are the new employee expectations?

Changing employee expectations are not only about the setup, but also about the execution. Organizations will be expected to develop their flexible work policies alongside their smart technology infrastructure to meet the new demands of employees.

An unprecedented global shift in expectations

Employees returning to the office will have uncompromising expectations. These expectations will include more flexible work policies, dynamic environments, and seamless technology to enable new work practices.

44% of global business leaders agree adapting to changing employee expectations is a challenge facing businesses in the next five years

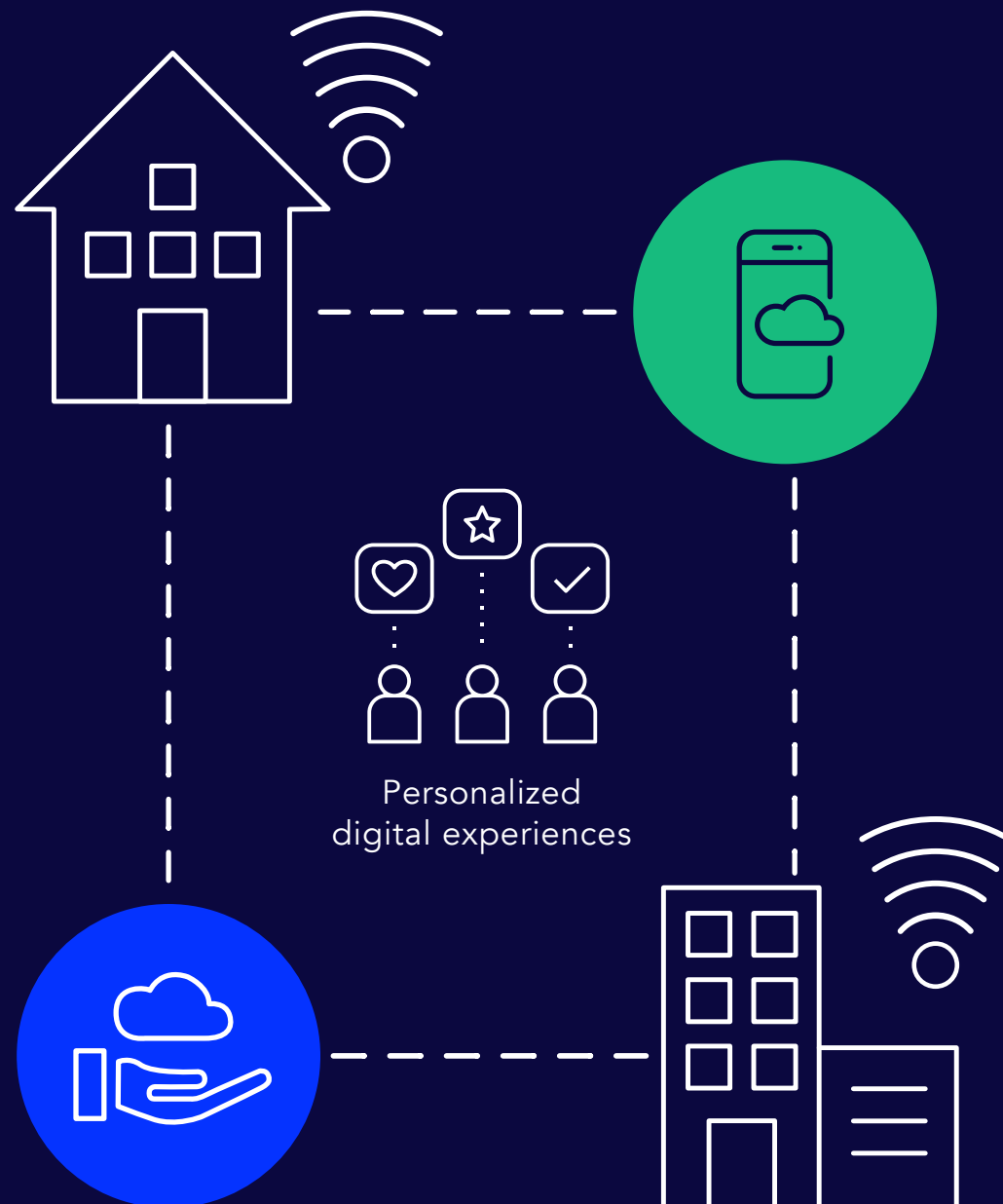
Condeco, 2019.²

Part of this shift can be attributed to the new work practices imposed by the pandemic, but for the most part this shift was already emerging before COVID-19.

Advanced technology normalized at home, and in retail

The spectrum of choice people are afforded from their personal technology and from the retail experience is increasingly influencing how they view the workplace. The expectations of the modern consumer are incredibly high, fed by superior experiences already offered by leading brands. Personalization and immediacy are amongst key drivers to anticipate on in reaching the new expectations of the modern consumer - and these same values are now driving two new expectations of the workplace:

- **Expectation One** - Personal choice
- **Expectation Two** - Seamless digital experiences



Expectation One

Personal choice

Now that employers and employees have accepted the viability of working from home, offices of the future are increasingly expected to support personal choice. In both the short and long term, these choices are driven by personal experiences and preferences. The expectation now is that the workplace can cater for every need of each individual employee – this requires an adaptable and dynamic environment.

The number of businesses planning to offer flexible work has doubled from 38% in 2020 to 87% in 2021.

Data from Steelcase, 2021.

KPMG's 2021 CEO Outlook Survey³ found that CEOs are focused on providing their employees with flexibility. More than half said they are looking into shared office spaces and 37 percent are implementing a hybrid work model for their staff.

This hybrid model will most likely mean employees will work remotely for two or three days a week. Organizations are now viewing the need to provide greater flexibility and adaptability in office environments as an absolute priority in delivering the best workplace experience.

Expectation Two

Seamless digital experiences

Not only do people expect more personal choice within their workplace, but they also expect to be able to choose from a spectrum of technologies and tools to enable their personal and professional lives. As the boundaries between work and life continue to fade as a consequence of hybrid working, employees' expectations of workplace technology are mirroring that of consumer behavior. Consumers have become so dependent on mobile devices to the point where they have become the dashboard of our lives. This is now transferring over to the employee experience and expectation.

The service philosophy doesn't run through the workplace in many organizations. We now need to think about the workplace in the new spirit of consumer experience.

Tim Greenhalgh, CCO, Landor & Fitch.

The expectation of smart technology has become critical in building infrastructure and in the workplace experience. It is the backbone of the smart workplace experience. The growth of the Internet of Things (IoT) has sparked a further push to allow systems to talk to each other through common protocols and open standards, creating a digital ecosystem. Employees expect this system to be in place so they can interact with these smart environments.

In a recent survey by Harvard Business Review, 86 percent of business leaders agreed that the digital workplace must integrate and coexist with the physical workplace for the foreseeable future⁴.

This integrated approach is critical to create one seamless experience for work. Integrated and 'invisible' technology has become the foundation of a great workplace experience for employees – employees are empowered to work seamlessly and dynamically throughout a workplace while technology makes intelligent suggestions based on those movements.

As dynamic work environments grow in popularity, so does the interest in smart locker systems. Smart locker systems are designed to integrate with a buildings digital ecosystem which means they are often suitable partners in modern smart buildings – an increasingly popular movement championed by Corporate Real Estate leaders.

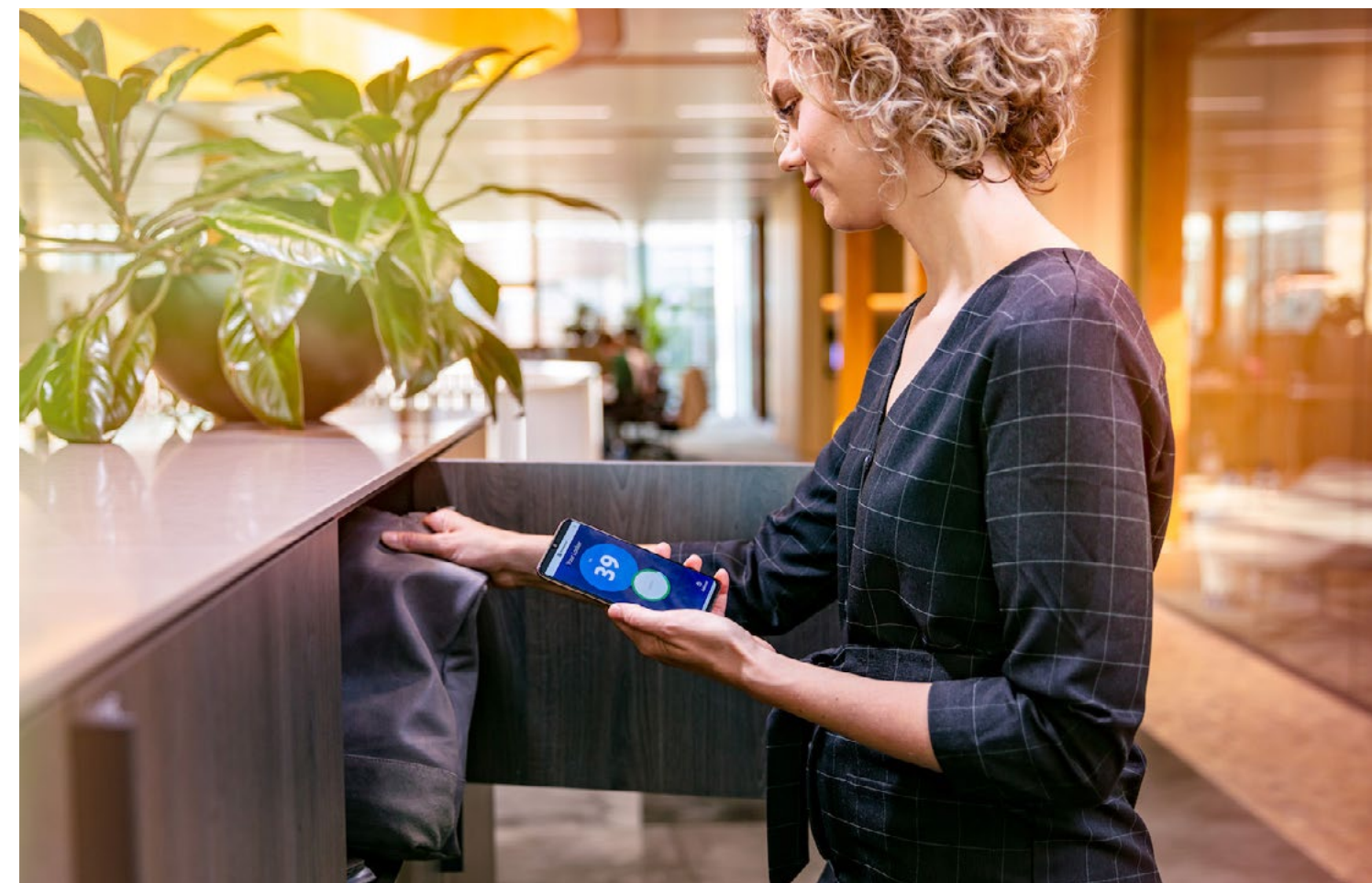
Business leaders geared for change

50%+
CEOs focused on providing more workplace flexibility

37%
CEOs implementing new hybrid work model

86%
business leaders agree the digital and physical workplace must integrate and coexist

KPMG, 2021. Harvard Business Review, 2020.





Ernst & Young, Manhattan, USA

Ernst & Young LLP (EY US) has become a frontrunner in dynamic work environments in light of the pandemic. In recognizing that flexibility is no longer a culture-driven perk, but an essential factor in employee retention, EY US re-evaluated the workplace configuration and design of its headquarters at Five Times Square in New York, NY.

The space had served EY US well for more than 20 years, but the lease was expiring, and its layout was designed for the way people worked prior to the pandemic - with a large number of cubicles and little in the way of collaborative space. EY US research during the pandemic found that companies need to create a workplace that meets the demands and expectations of the post-pandemic worker.

Functionality is key

To meet the evolving needs of both clients and EY employees, a new functional space was needed that supports flexibility and design creativity. Led by a team with representation from the business, real estate and operations, the new EY US home at One Manhattan West was structured based on the idea that when employees visit the

office, they will do so with a specific purpose in mind. It could be a meeting with team members, a client or a supervisor. Instead of a sea of cubicles, there is collaborative space that supports a more adaptable approach to how work gets done. As part of its new workplace strategy, EY US worked closely with Vecos to implement its smart locker management system. Despite the move away from fixed and allocated seating, employees still need a secure place, preferably close to where they are working, to store belongings and important materials when they are at the office. Through this system, employees can use their EY access badge at an integrated walk-up kiosk and their smartphone to control the locker they are using through integration with the EY 'My Day' workplace experience mobile application.

Previously, the ability of employees to get a locker close to where they would be working for the day was often a challenge. Lockers were typically assigned and would always be in one spot, regardless of work location. The Vecos smart locker system solves this problem, enabling people to get a locker wherever their workspace is for that day.

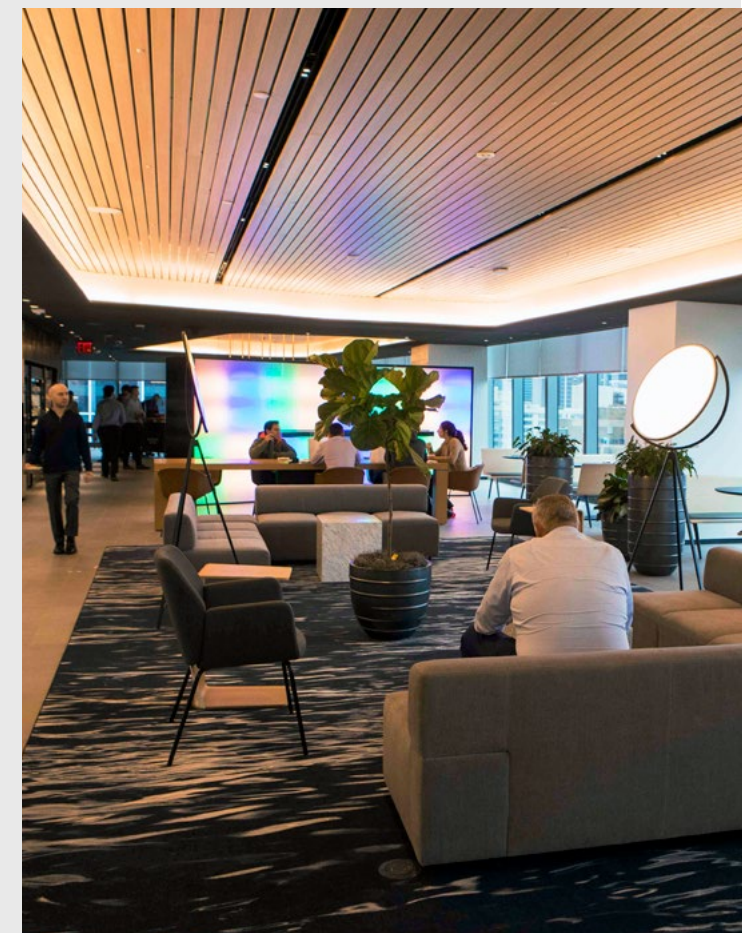
EY US views Vecos as a growing company with excellent teaming that outpaces the competition on cost and provides greater value by offering both hardware and software-as-a-service (SaaS) support. The Vecos solution is cloud-based, and its function does not require PCs or servers on premises.

EY US adheres to the standard of one locker for every two people, rather than asking more people to share space. The user experience at EY US has been positive, with individuals expressing an

interest in using lockers overnight, not just for single-use periods in the same day. This request has resulted in a policy change to a sliding 24-hour window through Saturday, if used regularly. The software-based management system dynamically adapted seamlessly to this policy change.

The decision to use only day lockers to start is based on EY US's preference that people use lockers efficiently, not as a permanent storage space for their 'stuff'. There has been little pushback to this approach. Those who do need a permanent storage option, or overnight space when events run late into the night, have been served on a case-by-case basis.

Continued overleaf...



continued...

Over time, both the software as well as the automatic integrations between EY and Vecos have only gotten better, and no significant changes have been required for One Manhattan West. Data monitoring has been extensive but limited by the pandemic and the resulting lack of people going into the office in great numbers. Still, the lockers are being used, and their presence at One Manhattan West and ease of use are appreciated by EY personnel who need the space.

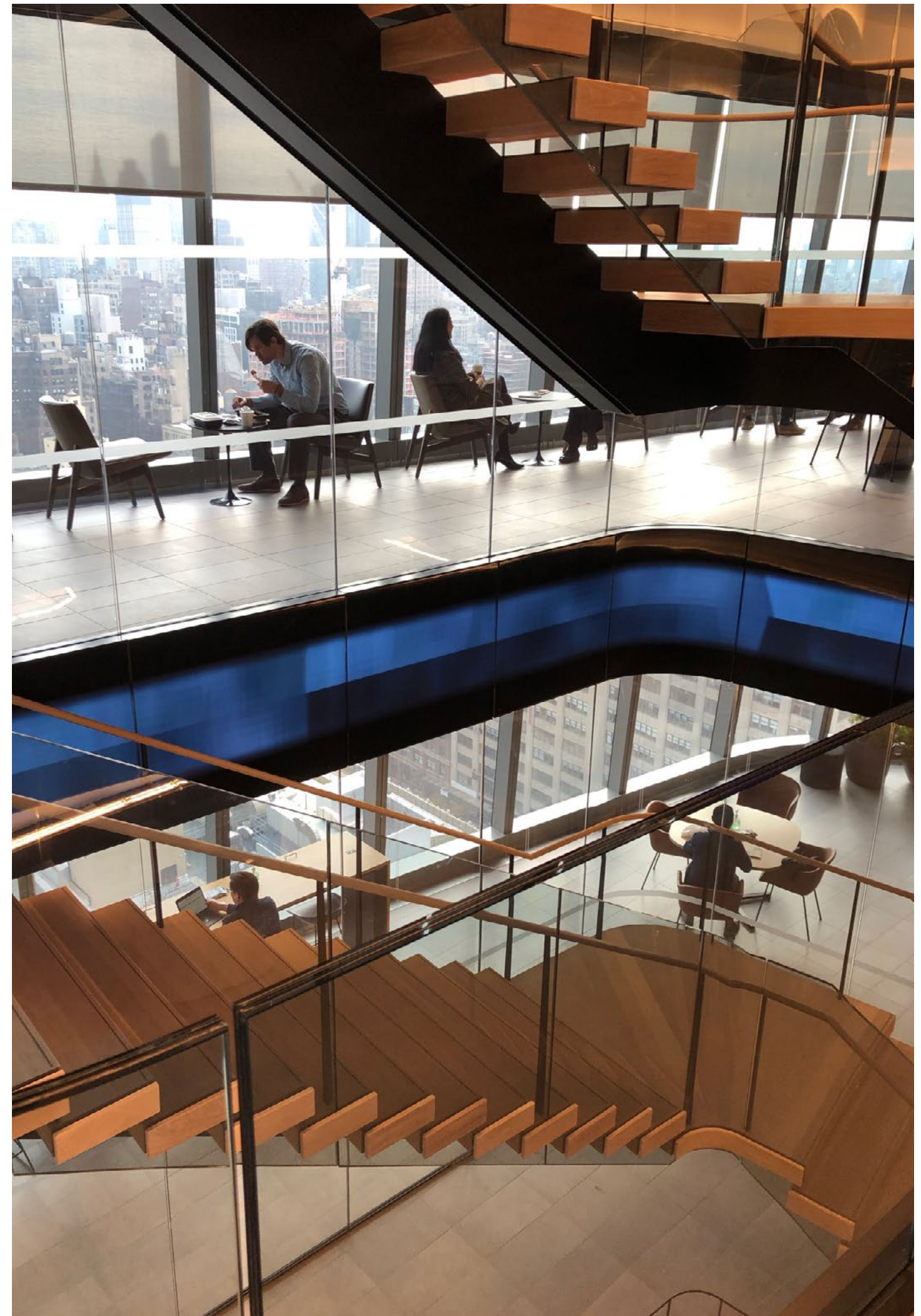
Hybrid workplace here to stay

The EY Future Workplace Index (FWI) found that 57% of business leaders have found new ways to enhance productivity under different working models. The top four factors driving this improvement, according to the FWI, are more efficient operations and processes, better employee collaboration, more effective research and development, and better management of staff.

One Manhattan West is a real-world example of EY Workplace Reimagined in action. As business leaders look to shape the office of the future, they must consider workplace strategy, sustainability, technology enablement and the employee experience.

The recent EY Work Reimagined Employee Survey 2021 found that while 79% of companies intend to make moderate to extensive hybrid work changes, only 40% have communicated their plans to their workforce. The lack of clarity has created a disconnect with employees who want flexible working arrangements. How can you drive greater efficiencies and reduce your total cost of occupancy? How can you enhance collaboration and culture in a hybrid work environment, utilizing workplace strategies and technology enablement? The EY data findings show that the hybrid workplace is here to stay. Now is the time to build a space that retains talent, promotes productivity and protects the future of business.

The views expressed by the author are not necessarily those of Ernst & Young LLP or other members of the global EY organization.



3

How can storage be managed in the dynamic workplace?

As flexible and dynamic space becomes commonplace in office design, facilities management needs to consider the impact on office utilization and changing employee behaviors. This section explores how to manage storage in a dynamic workplace by covering three areas. 1: The role of smart locker systems in keeping storage manageable. 2: Optimizing storage facilities based on actual usage data. 3: Understanding and anticipating human behavior.

1 The role of smart locker systems in keeping storage manageable

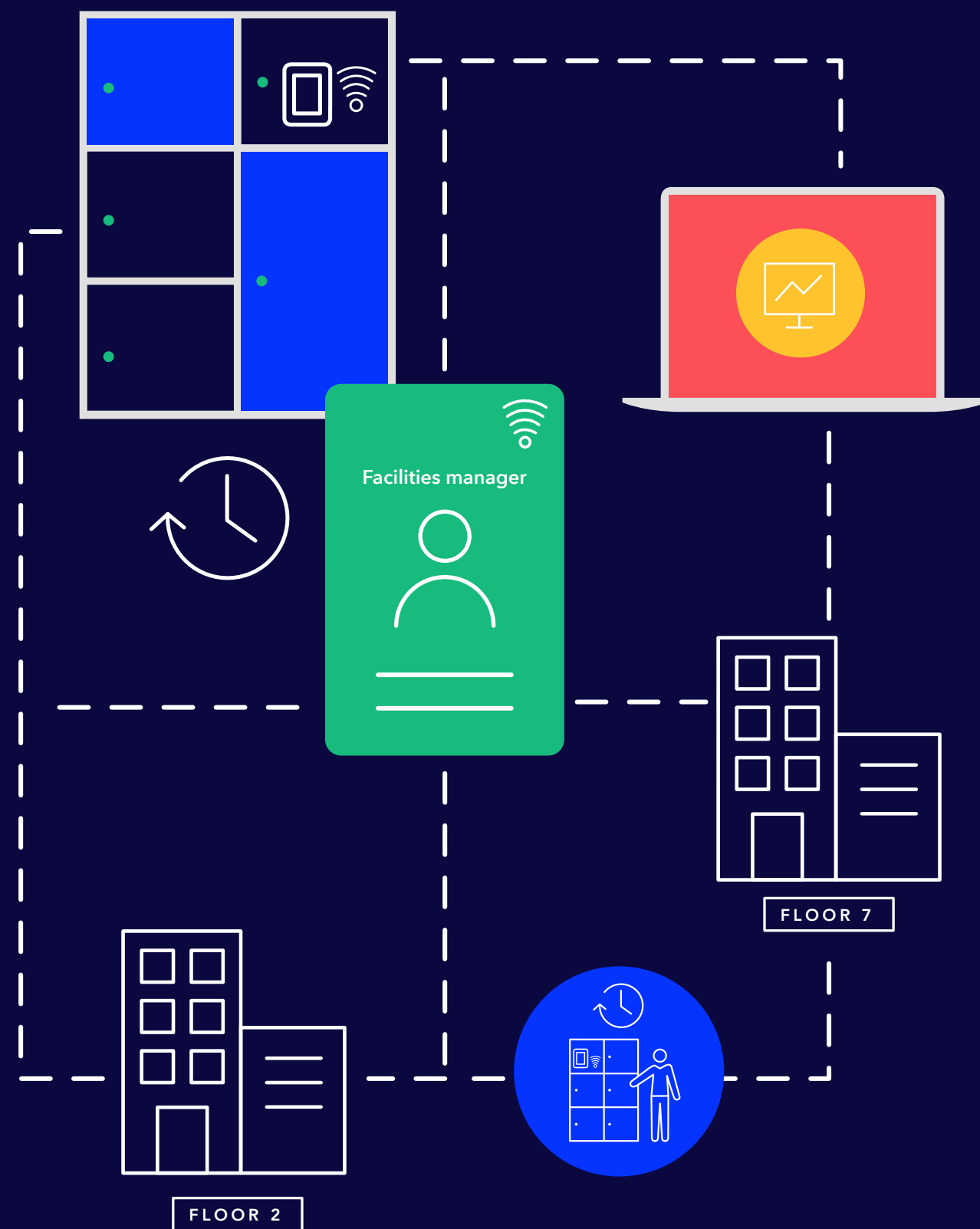
The first area for managing dynamic workplaces, is making sure facilities remain manageable. In a traditional, fixed work environment, facilities management (FM) and workplace managers build their strategies around set schedules, uniform design and consistent occupancy levels. In dynamic environments, this structure no longer works – everything from space and occupancy to schedules, becomes flexible. Dynamic working introduces variables that FM's and workplace managers did not previously have to consider. They are forced to create a workplace that considers not only form and functionality but also the individual personalities and work styles of every employee.

This increase in the number of variables that require management, also occurs in the management of storage. Since the advent of personal storage in the workplace, facilities management have always had a way of tracking and managing locker usage. In traditional workplaces where employees are each assigned their own desk, the management system for personal storage is

usually a manual process on a spreadsheet as each employee is assigned their own locker. But this process becomes vastly more complex in dynamic environments.

Dynamic workplaces need dynamic storage

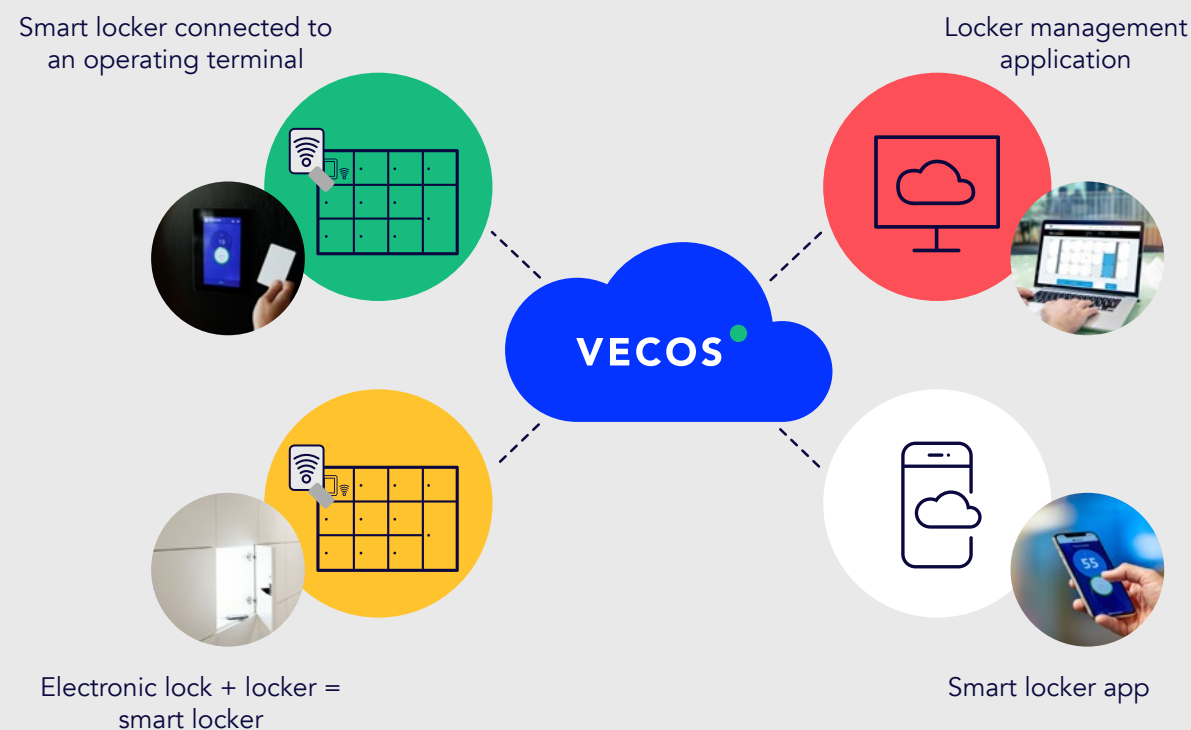
Facilities management need to understand who occupies each locker and for how long in order to effectively manage their usage. In a dynamic and hybrid environment, people switch lockers multiple times a day, shifting any form of manual management of locker usage from difficult to impossible. Therefore, rather than manually auditing the lockers - which is not only time-consuming, but also doesn't accommodate for growth or the evolution of dynamic work styles in an organization - facilities managers are increasingly turning to smart solutions and self-serve facilities to automate and streamline their processes. In dynamic environments a smart locker management system is critical to provide and manage effective and available storage in the office. The following page describes what a smart locker system is, and which benefits it brings for employees and management.



What is a smart locker system?

Smart locker systems are a combination of hardware and software, with a SaaS platform at the heart, where the locker management takes place. Organizations can use a smart locker system to manage, control and optimize their locker facilities with the goal to improve their employee experience whilst decreasing their total cost of ownership. With a smart locker system lockers work on a self-service basis which enables employees to work from anywhere in and across buildings. Any physical locker cabinet can become a managed smart locker through the integration of smart locker system hardware and software.

The components of a smart locker system



The hardware, usually in the form of an electronic lock, is connected to an operating terminal, which is then connected through the internet to a Software-as-a-Service (SaaS) platform. This software platform is the most critical component of a successful smart locker system, as this is where an

organization defines the criteria under which lockers can be used, automates employee records, and integrates with all other IoT and IT systems. Leading smart locker platforms are designed to be multi-tenant, secure by design and instantly scalable.

The platform interface enables facilities management (FM) teams to manage lockers remotely, to set configurations and rules on how lockers can be used and to get real-time usage data and insights. FMs can save time by using the self-serving system to manage different user groups and configure occupancy from one central system. The smart usage configurations of a smart locker system ensure that employees always find an available locker when and where they need it, which is a fundamental element of achieving a successful dynamic workplace.

Integrated technology – part of the wider digital ecosystem

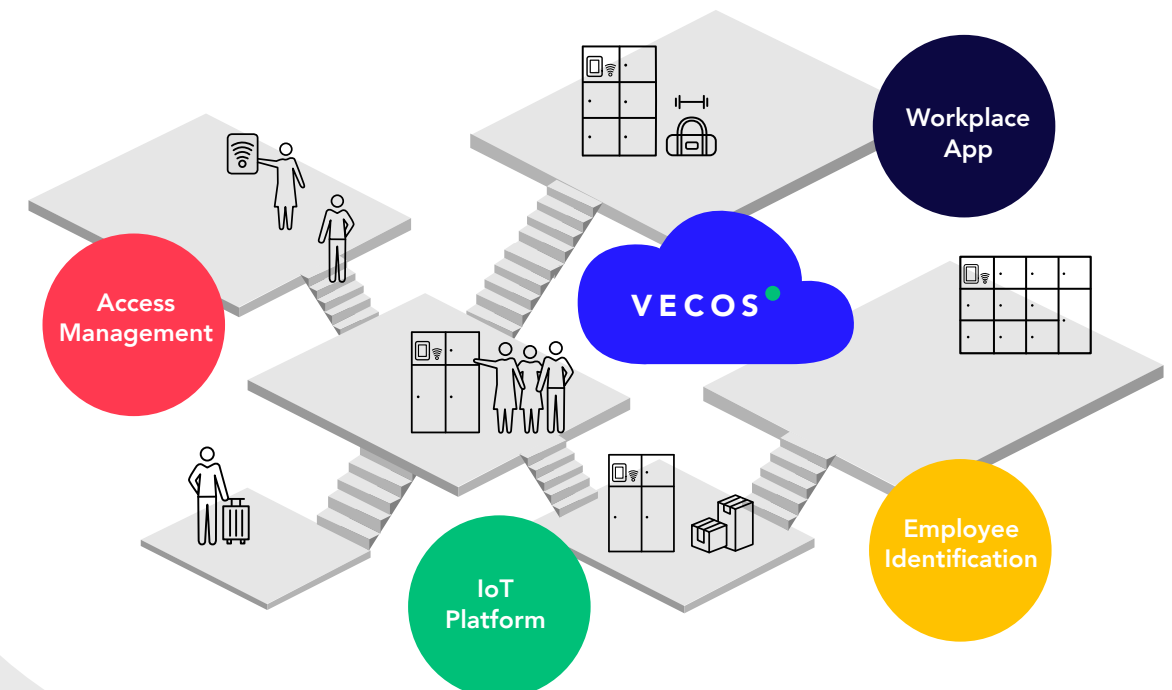
The SaaS platform is typically connected to a workplace app or any form of employee access badge, where the user can remotely book, open, release or share a locker. Smart locker systems are part of

the wider digital ecosystem of a building – they need to be able to communicate with other digital systems in the building through IT systems. From a user perspective the experience should be seamless; the technology should work in the background and be integrated with other systems to provide one user interface for functions such as storage booking and access, wayfinding, and meeting room booking.

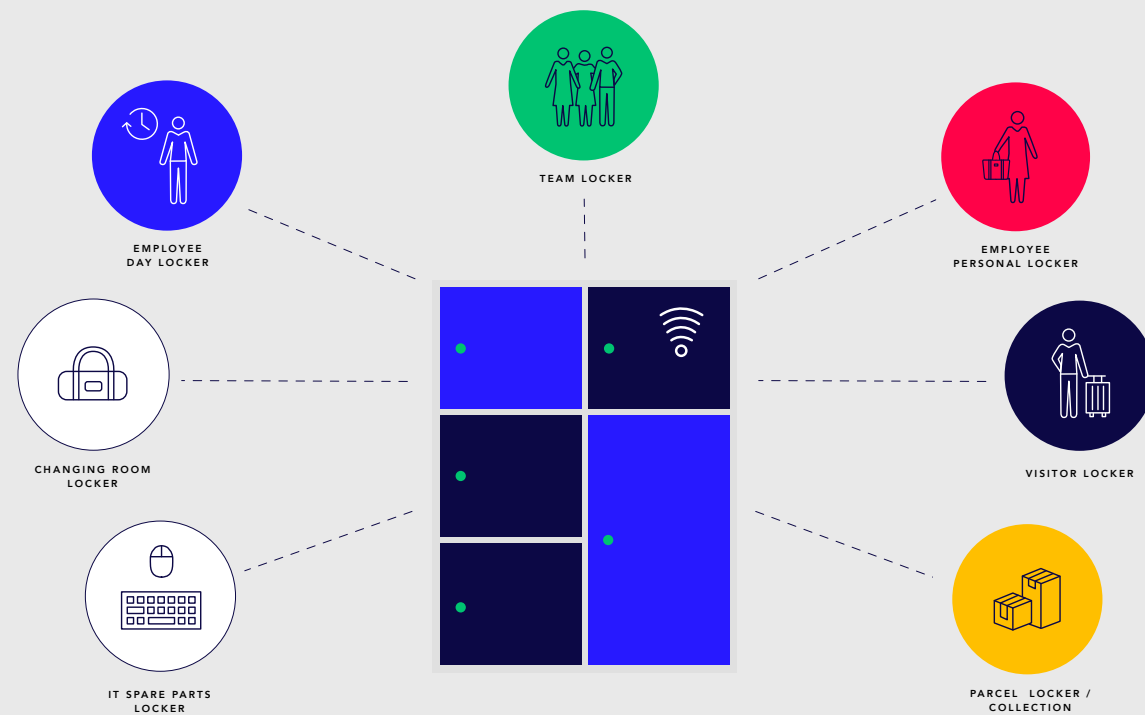
Empowers employees and facilities managers

Intelligent infrastructure such as smart locker systems not only empower employees to choose where they want to work and find and use convenient storage throughout the day, but they also provide rich insights and data to aid decision-making for facilities management and real estate teams.

An integrated IoT workplace ecosystem



One smart locker system, multiple uses



Storage does not only apply to personal lockers, in agile and dynamic environments there are multiple use cases for storage. For example, team storage units might be available in huddle spaces and collaboration areas for teams to collectively store their belongings and project materials. Smart visitor storage, changing room storage and parcel storage are also becoming increasingly more popular in the workplace.

Parcel storage is particularly interesting in dynamic environments as smart self-serving systems can identify where an individual is working and leave the package in a nearby locker for them to collect. In this context, the more effective and tailored the storage offer becomes in a workplace, the more complex the locker management process becomes, and the more a smart system is needed.

2 Optimizing storage facilities based on actual usage data

The second area for managing dynamic workplaces, is making decisions based on actual usage data. Organizations have always relied on data to help them make big business decisions. Not only can data-informed decisions help a business to grow and adapt, but it can also ensure that storage facilities and real estate are being used efficiently.

While many organizations have the analytics capabilities to process their data into actionable insight, the data is very rarely called upon in the decision-making process. In the post-pandemic workplace, data-driven insights are more important than ever, as occupancy flows become less predictable in hybrid work environments.

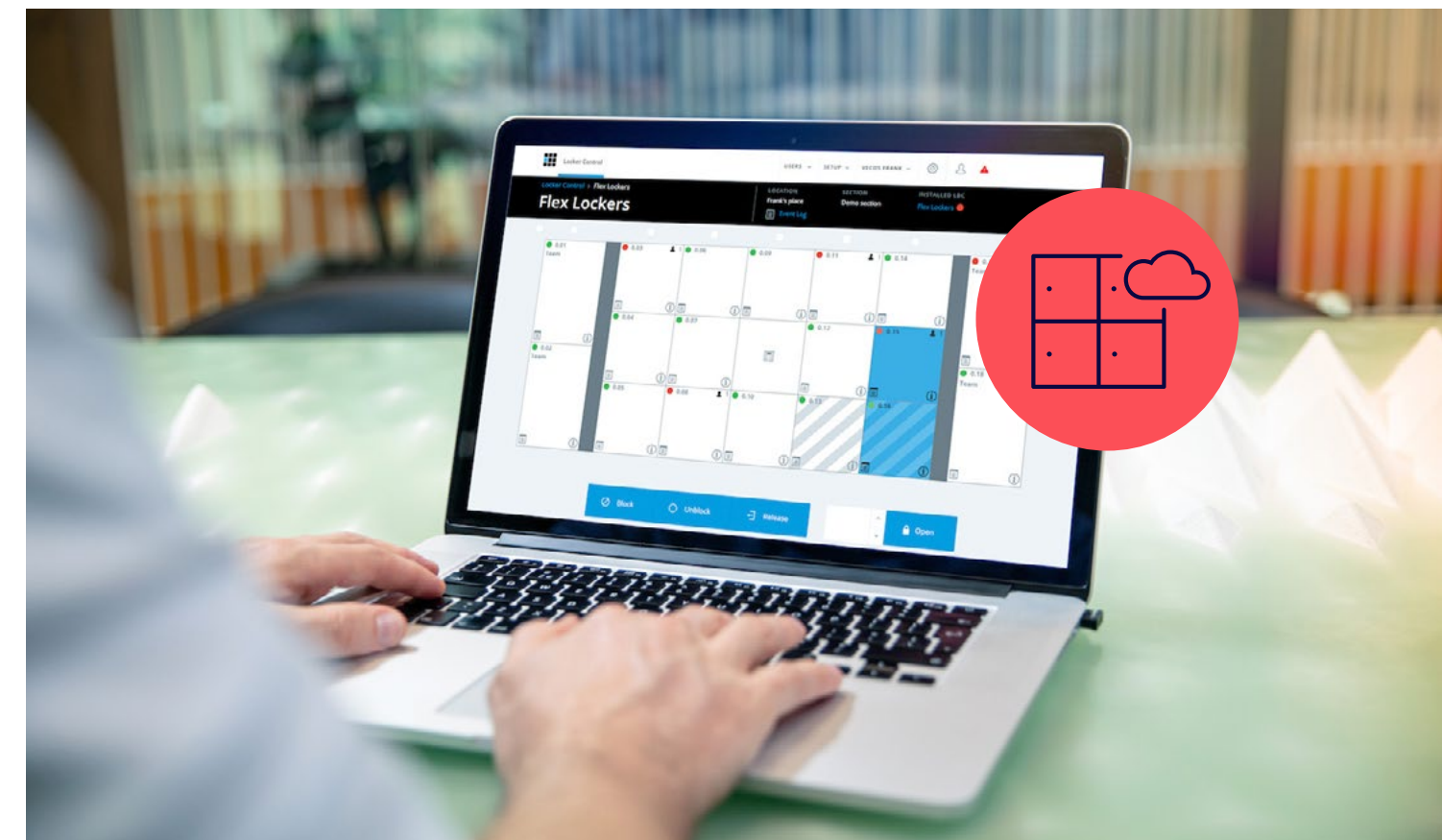
Dashboards turn insight into action

While data analytics is a powerful skill in the modern workplace, dashboards and interfaces can make the process significantly easier to understand. FMs can now remotely login to workplace dashboards and visually access the data on locker occupancy and frequency of use. They can use the locker management software platform for daily remote support as well as to switch the purpose of the locker depending on demand at the click of a button. For example, FMs can use the data to optimize the allocation of lockers between visitors, teams, parcel drop-off and personal storage.

Those who co-opted their technology capabilities first saw nearly immediate results and 64 percent of organizations surveyed shifted to more cloud-based business activities.

IBM⁵

In one use case, Microsoft (see the case study at the end of this chapter) uses its storage data to define the floorplan of its next building renovation and adapts configurations depending on actual usage behaviors. The insights yielded from locker usage can determine how people behave and work across an entire floorplan and building. In time, this data can be integrated with other data from the IoT ecosystem to make predictions on occupancy which can in turn help optimize and adapt space to be more dynamic.



3 Understanding and anticipating human behavior

The third area for managing dynamic workplaces, is supporting behavioral change. Research from Vecos into workplace behaviors has found that while people are generally happy to have unassigned desks, they still want their own personal storage space. However, when this anecdotal data is presented against actual data analytics, it shows that people's perceived behavior is in stark contrast to their actions.

After analyzing the data of thousands of employees across the world, Vecos found that only 20 percent of users open their locker daily, 25 percent open a locker on a weekly basis, and 15 percent on an occasional basis. While 40 percent of users never open their locker at all. Not only is this a significant waste in resources and prime real estate, but also a waste of facilities management time to try and manage a volume of lockers which are largely unused.

"As a workplace changes, organizations need to be mindful of the human behavior changes that require management and support."

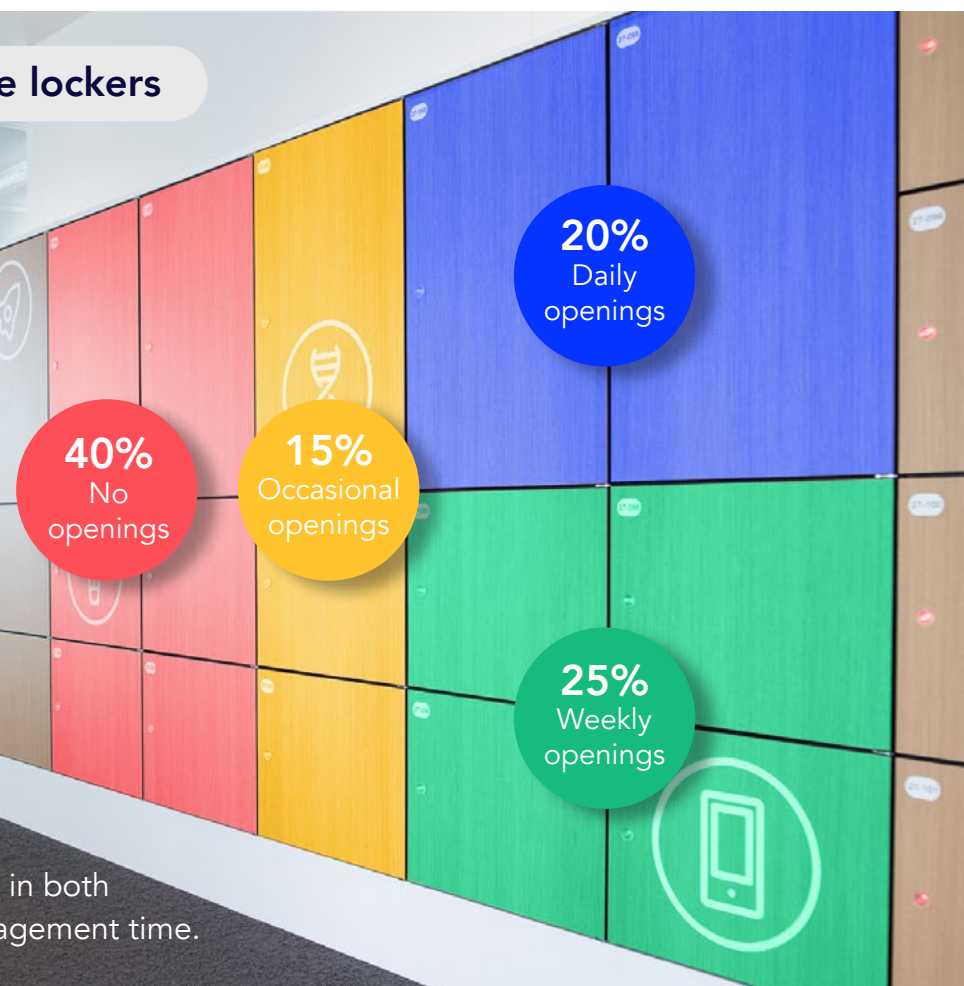
Bram Kuiper, CEO, Vecos

Support behavioral change

When people start using a dynamic workplace and move away from fixed seating or personal facilities, something interesting happens if this transition is not managed effectively. Human brains go into survival mode as people worry about potential scarcity of resources, or naturally look to preserve what are perceived to be 'the best' facilities. Change management is a critical tool to help employees settle into a new way of working, especially when their personal space no longer exists.

How people really use lockers

Vecos research into typical use of static lockers, discovered significant waste in both resources and facilities management time.



There are two key detrimental behaviors when it comes to locker occupation in a dynamic environment where change support is most needed: claiming lockers and double claiming lockers.

1. Claiming a locker. Moving to a dynamic environment means that lockers are not necessarily assigned to an individual employee. People worry that there will not be enough space for their belongings, so they 'claim' a locker, i.e. they occupy a locker for long periods of time without necessarily intending to use it. Or, they simply find one they like and 'claim' it, even during the days when they're not in the office.

2. Claiming multiple lockers. Once people realize that they're being encouraged to work 'dynamically' and move to different workspaces throughout the day, they will claim more than one locker - which is called double claiming. For example, one employee may claim up to three lockers because they are working across three different locations in the building that week. Typically, people forget that they have claimed multiple lockers which means they do not use them, and this quickly results in a lack of available locker facilities for other employees.

Make smart interventions

Ironically, it is human behavior which often becomes the barrier to dynamic working, not the ratio of facilities to employee. As a result, FM's need to make smart interventions to manage the process. Typically, they do a manual audit of the lockers and put notes on the door to ask if people are still using them - over time this becomes logistically impossible for facilities teams to manage. In this respect, a new dynamic office can quickly be ruined by a lack of storage if behavior and culture is not managed throughout the change process.

Territorial behavior poses significant challenges to facilities management without the aid of a smart locker system. First of all, how people are allowed to use the locker facilities matters. Policies such as one locker per person or time limitations on locker usage can be integrated into a smart locker system. Secondly, data collected by smart locker systems informs FMs of which lockers are used and when, suggesting areas to cut unused storage and save space, and optimize the use of the building. This not only saves significant amounts of time for building managers, but also creates a more sustainable, cost-effective outcome.

Case study



Microsoft, The Netherlands

Located within the complex of Europe's third busiest airport, Amsterdam Schiphol, Microsoft's Dutch headquarters, The Outlook, offers an open, tech-enabled workplace for both staff and customers that's a short walk from the departure lounge.

Since its renovation in 2018, all work settings at The Outlook are now designed to facilitate three 'rituals' of work. There are spaces for formal collaboration with suitable technology and privacy when needed; a diverse range of individual work settings for monotasking; and social hubs where serendipitous encounters are engineered but relaxation is deemed equally important.

The project team made an ambitious decision that the new office should reduce the amount of space accessible solely to Microsoft staff from 9,000m² to 2,000m², freeing up the rest to external businesses and members of the public. To incentivize staff to reimagine the way they need to work, Microsoft closed the office entirely for 10 weeks, offering staff locations for meetings but forcing them to evaluate what they need from the office.



As a result, Microsoft used technology to use its remaining space in the most effective way possible. Users can gain control over their immediate environment through the Mapiq app (a smart workplace app) and access personal storage space using Vecos smart lockers. Users can manipulate their surroundings or simply move to somewhere better suited to their own preferences, staff can access internal navigation and colleague finding through the app.

Microsoft installed more than 400 smart lockers at The Outlook for the 800 employees who use the space. The Outlook also welcomes over 9,000 visitors to the space a month, which means that this office is not only a hub for local employees but also for clients and employees across the European region.

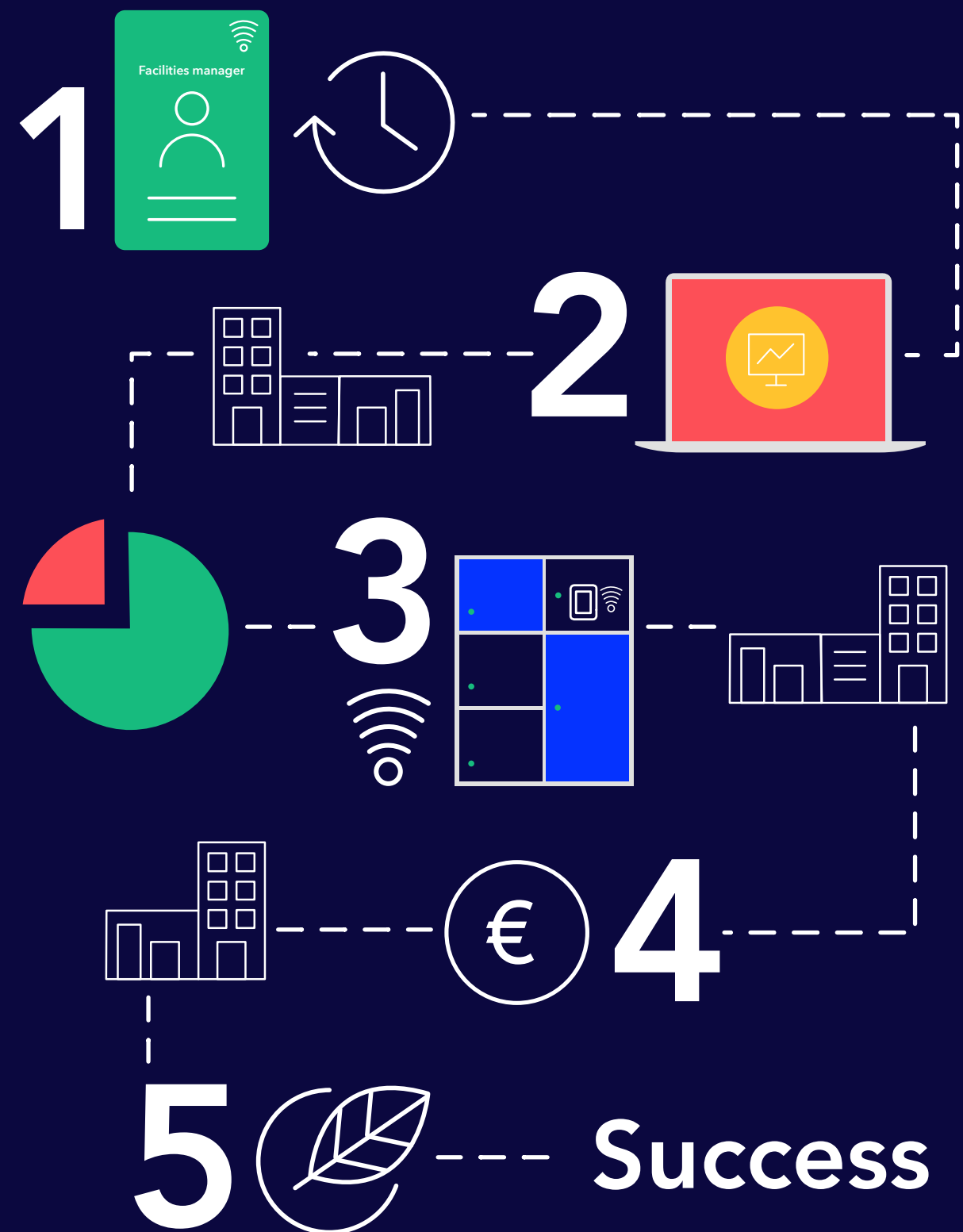
Initially, Microsoft predicted the split for locker usage would be the large majority for employees and a smaller number for visitors. After analyzing the data over a few months from the smart locker system, Microsoft adjusted this split to better reflect the usage of the lockers.



Vecos is an official Microsoft Certified Partner and supports Microsoft globally with its smart locker system.

The Amsterdam location has been designed with testing and measurement in mind. Regular staff surveys as well as the various productivity and wellness metrics are being used to quantify the benefits of the new approach and the location is set to be used as a testbed for other emerging technologies and solutions. It is a methodical and calculated approach to new workplace design that is poised to become the standard bearer for smart building deployment company wide.





4

What is the business case for smart locker systems?

The increased smart locker system sophistication requires a higher investment compared to traditional key or pincode lockers. The return on this higher investment is however realized within several months from implementation.

There are five key areas in which organizations get payback from a smart locker management system:

1. Facility Management time:

The time FM spends on locker management drops significantly.

2. Employee productivity: Employee productivity loss decreases, as employees are not spending time looking for available storage or traveling across the building to retrieve their belongings, nor is there wasted time from lost keys or pincodes.

3. Lockers: Smart locker systems require up to 40 percent fewer physical lockers.

The management process is streamlined to eradicate poor locker behavior and optimize efficiency in usage.

4. Floorspace: Less lockers means less furniture on the floorspace. FM can achieve more floorspace by optimizing their locker management system.

5. Energy costs: Smart lockers do not require batteries so FMs aren't required to individually maintain each locker. This can save significant energy costs.

Reach out to the workplace consultants at Vecos to receive a personalized business case, tailored to your organization and workplace situation at www.vecos.com

INVESTMENTS +

Smart locker technology

RETURNS + + +

Facility management time

Employee productivity loss

Lockers

Floorspace

Energy costs

Deloitte.

Deloitte, London

Deloitte has created an innovative smart building in its new London headquarters which takes a scientific approach to understanding and enhancing employee experience. The office is located within its existing campus at New Street Square.



The office makes up 263,300 sq ft of the campus' total 700,000 sq ft footprint and accommodates Deloitte's increasingly mobile workforce. Deloitte wanted to build a workspace that promotes constant serendipitous encounters to align with its new dynamic working strategy. Employees are encouraged to work from anywhere in the building – a message that is mirrored by a free-desk policy. Desks are non-bookable

to prevent habitual behaviors developing so employees are not always guaranteed the same desk to work at every day.

The same approach is taken with its smart locker management. Deloitte has implemented 4,450 smart lockers from Vecos into its 1 New Street Square office in London. This move was part of Deloitte's strategy to optimize all its facilities.

The smart locker technology is fully automated, self-service and helps the user get the most out of their time in the building.

The smart locker system gathers data which is then fed back into a data lake that is used to get detailed analysis on how to improve the workplace. Analysis on workplace behaviors has helped Deloitte reduce on-floor storage by 60 percent. This reduction was largely due to the firm's commitment to reducing dependency on paper and introducing smart lockers that have automated business rules.

In effect, Deloitte reduced five drawers of storage per person to just one simply by responding to the data insights.

Deloitte has a very diverse workforce, of which many of its staff are mobile. This has enabled Deloitte to provide only 5000 desks for 14,000 employees. Around a third (4500 people) of the office population come into the office on a regular basis, which has allowed Deloitte to better manage team identities through change management programs as well as spatial layout.



5

What's the next step?

As organizations around the globe move forward to adopt proven flexible working models, the new frontrunners are already pushing the bar up further. This chapter outlines three key rising workplace developments, forecasted to take dynamic workplace success to the next level.

Globalization of workplace strategy

Where workplace strategy until recently was a local-for-local responsibility, we see more and more global organizations appointing centralized workplace leadership. With the current global adoption of flexible and hybrid workplace models, cultural differences are fading away and historically large workplace and workstyle differences between for instance Europe and the US, are lower than ever. This brings unprecedented opportunities for organizations to deliver one global approach to their employee experience, employer branding, and workplace facilities efficiencies. Today's frontrunners already have those teams in place, hold inspiring global workplace visions and are rolling out their strategies as we speak.

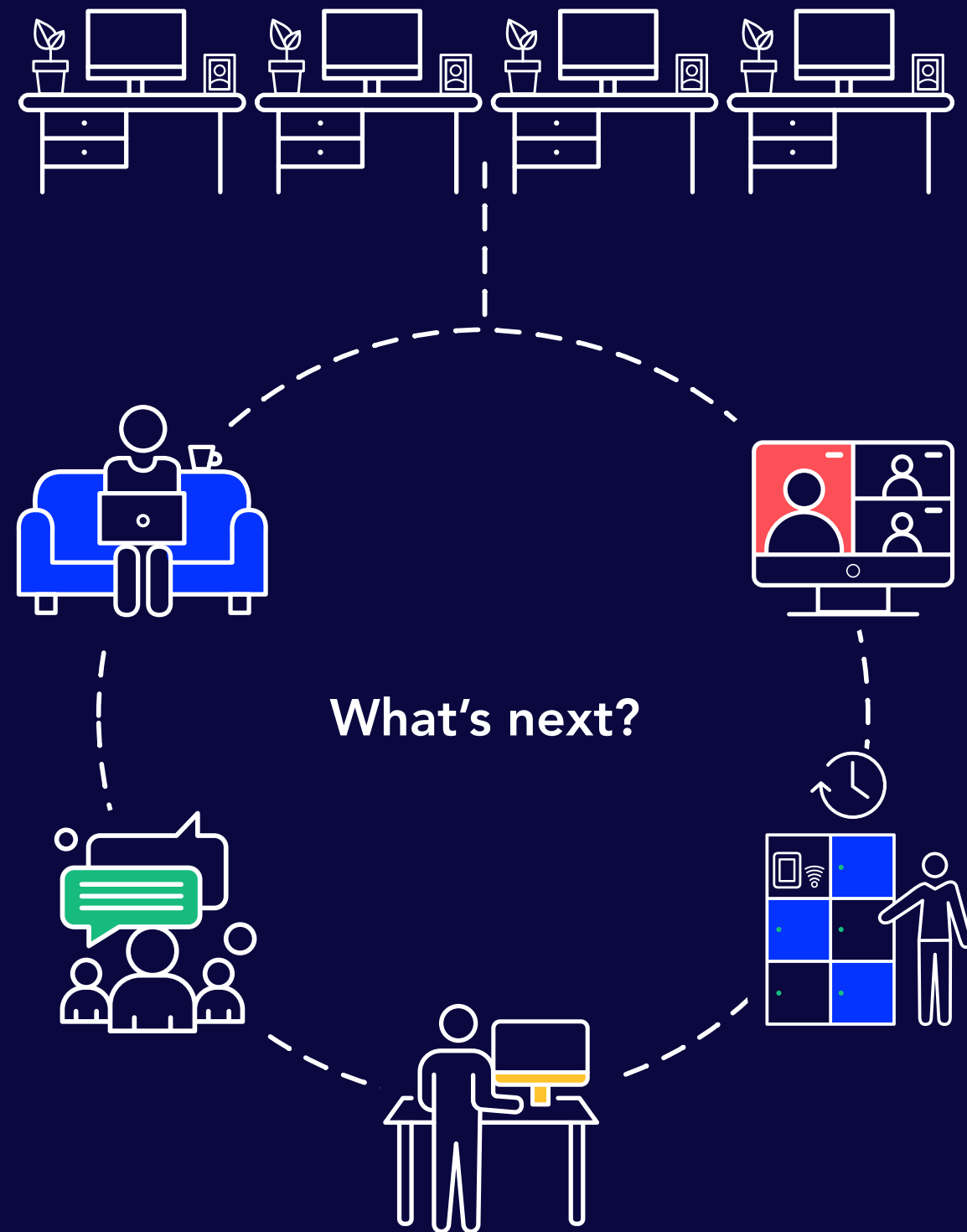
in the workplace is ongoing and most likely the 'new normal'. This ongoing optimization delivers unending employee experience enhancements and Total Cost of Ownership optimizations. But equally important is its contribution in meeting the organizations sustainability targets. As organizations target a carbon-neutral footprint, the office is recognized as an important contributor to this goal. To achieve these ongoing optimizations and track progress, the adoption of technology is critical and expected to continue its already steep adoption curve.

Integrated workplace technology

Technology advances every day. And in its essential aim to make lives easier and better, we expect workplace technology to quickly catch up with personal electronics in supporting daily lives in intuitive, seamless and surprising ways. Nowadays tech-enabled workplaces are omnipresent, but the real next step sits in the area of integrated workplace experiences, where all facilities work in a unified way. Advanced workplace technology needs to work as one, to enable a more and more automated experience, which works smoothly in the background, as you make the most of your day in the office.

Experience optimizations, TCO and carbon footprint

Where organizations used to change their workplace typically once every 10 years, on the rise now is a continued optimization of workplace design and facilities based on real-time data. Most organizations now take advantage of the new hybrid working models to optimize floorspace and facilities, but the frontrunners acknowledge that change



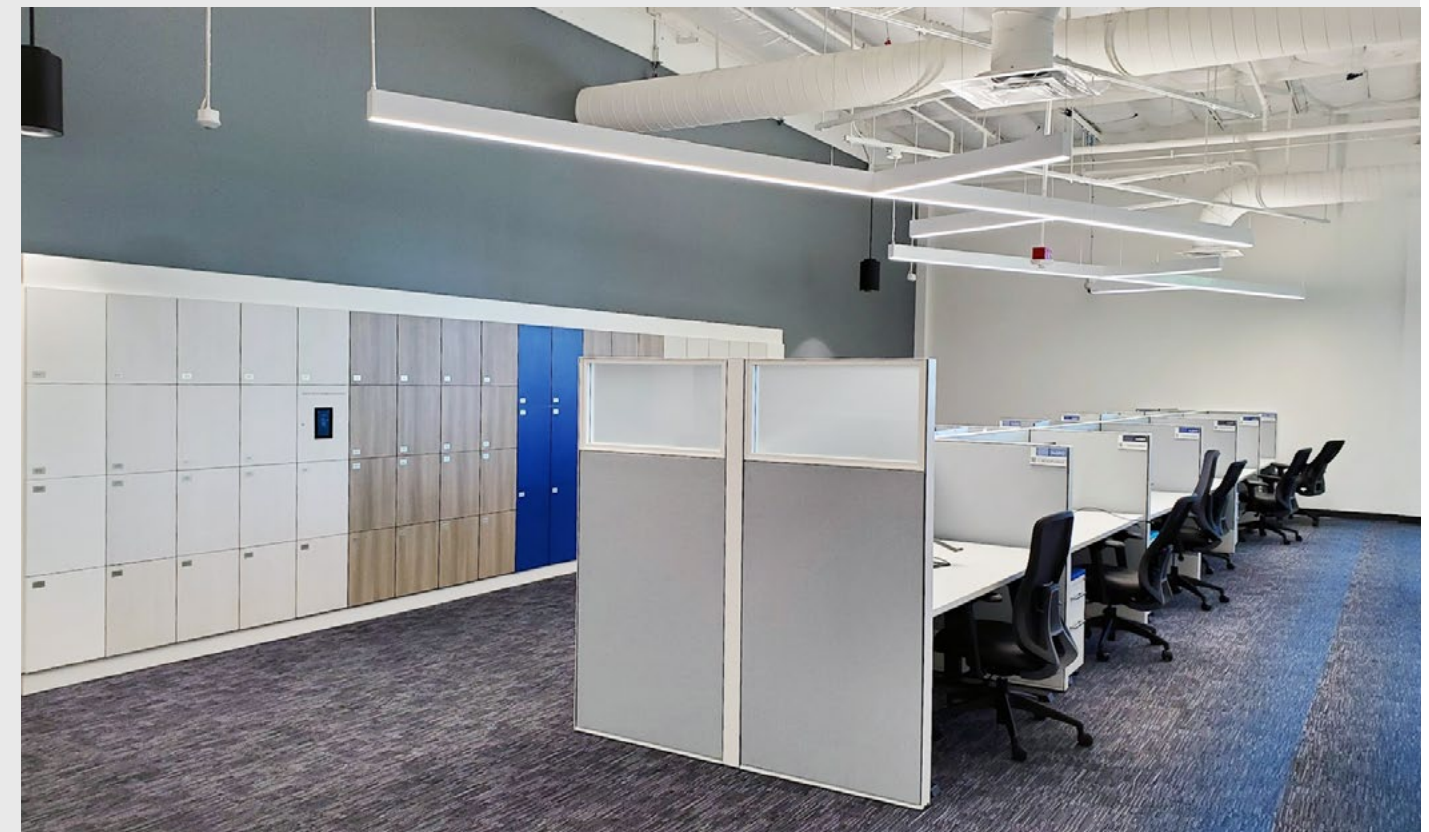


Qualcomm, USA

Qualcomm is an American multinational innovative technology company headquartered in San Diego, California. Qualcomm has 41,000 employees across 170 offices in more than 30 countries. Many of the employees are engineers and scientists and before the pandemic they were largely office and lab-based.

During the pandemic, Qualcomm was forced to re-evaluate its real estate portfolio and flexible work policy. The business strategy team worked closely with the real estate teams to launch dedicated spaces called 'Mobile Work Environments' in which certain employees are offered increased flexibility to work either in the office or at home.

The Mobile Work Environments initiative was piloted in Qualcomm's headquarter building in San Diego. Three of the building's 10 floors were dedicated to Mobile Work Environments and over 300 employees were asked by HR teams to use this space on a flexible basis.



In order to enable flexible working, Qualcomm recognised it needed flexible solutions, including day use lockers for employees. The company selected the Vecos smart locker system which accommodated for a flexible approach. Instead of provisioning for one locker for every employee, Qualcomm decided that a 60 percent ratio would best fit their Mobile Work Environment.

Employees use the iOffice app to reserve space, desks and equipment and they use their employee badge to reserve a smart locker. The iOffice app and data from the smart lockers allows the building managers to see how space, technology and lockers are being used in these areas. Vecos lockers can be assigned to a specific department or team that frequently share items so everyone in that group has access to it. If an individual locker is used every day the employee can retain it for as long as it is used. However if

the locker is not used for 12 consecutive days, the employee who has reserved it will get an automatic notification to nudge their use or release of the locker, and on the 14th day the employee will be blocked from that locker.

Qualcomm has decided to roll out the Mobile Work Environments program globally - based on initial signs of success - using Vecos as their vendor for all locations. For the most part employees in the US are very receptive to the concept of shared desks and lockers, supporting the more mobile work style. In the APAC region, the change is being handled differently, with employees still being allocated their own personal lockers. Qualcomm is still in the early stages of rolling out its Mobile Work Environments and it will continue to collect data on the performance of these spaces, via its smart technology ecosystem, when employees start returning to the office across all locations.

Conclusion

Growing demand for dynamic storage

As organizations start their journey towards creating dynamic work environments, many are looking to adopt new tools and develop clear strategies for the future. There is a unique opportunity to fundamentally rethink an organizations real estate and workforce needs, and to redesign the workplace experience to build in more flexibility. In turn, the demand for smart services such as dynamic storage solutions is set to exponentially rise.

Smart locker systems present new opportunities for facilities management to move away from inefficient manual processes. Not only can FM save time by reviewing occupancy and managing smart locker allocation remotely, they can also save costs by optimizing space, resources and better using their own time.

Data from lockers can be synchronized with other employee data collected throughout the building, making the entire data process automated. FM now need to focus on their data analytics skills and less on time-intensive manual labor tasks. Smart locker systems can enable smarter choices in dynamic environments and facilitate a future in which choice, agility and flexibility become the priorities for workplace strategy.

As we look to the future, it is clear that the pandemic has acted as a catalyst for many existing and emerging employee expectations – from flexible working to seamless digital experiences. On a global scale, smart locker systems are a critical part of the technology stack, that will enable high-performance dynamic workplaces to thrive.



The quick-start checklist for smart locker system decision making

This checklist is a starting point on what to take into consideration when procuring a smart locker system. For a fully complete list and more details, contact a workplace consultant at Vecos.



User experience

1. Self-service and self-registration possible for employees
2. Easy to book, open, release and share a locker completely independent of facilities management
3. Locker access through both mobile/workplace app and standard company access technology (eg. RFID, NFC, BLE, QR code, biometric)



Management experience

1. Web-based management portal, easy to use on all devices (desktop, laptop, mobile)
2. Enable static/personal lockers, dynamic lockers, day lockers, team lockers, visitor lockers, changing room lockers and parcel lockers in the standard configurations
3. Have automatic push notifications (via mail and/or mobile phone) to communicate ways of working and nudge employee behavior
4. Data, reporting and insights dashboards
5. Helpdesk available 24/7



Technology

1. Demonstrated always on (>99.5% uptime) software
2. Multi-tenant SaaS software: most secure, instantly scalable, easily integrated into full office ecosystem through APIs
3. System compatibility with employee database and automatic synchronization
4. Data security: encrypted data storage and data traffic, two-factor administrator authentication, recent penetration test results, ISO27001 certification
5. Lock specifications: LED light inside the locker, USB charger, push-to-open, multi-color status indicator outside of the locker
6. Must have been proven in practice. Consider at least 5 references
7. Ensure the smart locker system is a commercial off-the-shelf solution (no custom built software or hardware)

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