# RE

# imagining the office

A TRANSFORMATION
TOWARDS A PURPOSEFUL
EXPERIENCE SPACE,
ENHANCING INNOVATION,
FLEXIBILITY AND
SUSTAINABILITY

# Contents

# Introduction

The office has broken its physical boundaries. It is time to reimagine it as an experience and innovation platform and make the user experience customized and seamless with smart building solutions and ecosystems.

The history of the office has always been one of evolution, successfully adapting to changes caused by technological, knowledge-based, or material advances. Today, fueled by the COVID-19 pandemic, the traditional office needs to be reinvented. Remote work has become an accepted option for many people and organizations, prompting them to re-examine their office-first work model. Some companies have even made the shift towards permanent remote working.

It is unlikely that the majority of employees will not return to the office at all after the pandemic. They will, however, challenge the traditional office experience, from physical layout and surroundings to the content of work, interactions, and movement of people. Offices will still be in demand, but they will need to transform from a mere location for work to an employee-centric environment providing superior collaboration experiences that are flexible and personalized.

To empower this transformation, **KONE**, **Accenture**, and **Amazon Web Services** have come together to engage the broader industry in a conversation about how and where work will be conducted in the future. The product of a vision process – including a series of in-depth interviews and workshops with key stakeholder groups and subject matter experts – **Reimagining the Office** envisions how the office can be transformed into a place that offers new opportunities for employees, employers (tenants), building owners, and managers. It is not founded on passing trends, but on the lasting shifts that are expected to prevail in the post-pandemic world.

We invite the industry to reimagine the office of the future with us, and contribute to both the vision and its implementation.

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## What do different stakeholders need?

Our dialogue has shown us that all stakeholders in the office environment share a common goal: each strives to convert recent learnings into long-lasting benefits through the transformation of the office ecosystem. The office experience was strained even before the COVID-19 crisis. For instance, many employees were unhappy with the impersonal nature of the office experience. While open offices were designed to bring about greater collaboration and space savings, it seems they have had the opposite effect. A study by IPSOS[1] covering over 10,000 workers in Europe, North America, and Asia revealed that more than 85% of office workers were dissatisfied with their office environment. Key reasons were constant distractions and lack of private space to concentrate. The same study showed that the current office structure was causing productivity inefficiencies of up to USD550 billion in American companies and up to GBP70 billion a year in the UK.

COVID-19 changed the game in a short period of time by sending most office workers to work remotely. This change is expected to have a long-lasting impact beyond the pandemic. In a recent study, nearly three-quarters of employees say they expect to continue working remotely at least part-time in the future.[2] Companies have executed the shift to remote work at lightning speed, but over time, new implications will become visible. For example, thanks to location flexibility, attracting talent has become easier. But integrating new employees and maintaining a strong team culture has become more difficult. In addition, creativity and collaboration seem to be negatively impacted by all-digital work environments.

Despite the evolution of office needs, at the end of 2017, the average U.S. commercial building was about 50 years old.[3] In the EU, 80% of the building stock was constructed before 1990.[4] In the context of changing post-pandemic requirements, the pressure will increase to rethink these office environments and start incorporating new, sustainable solutions into the existing infrastructure.

While these actions represent an opportunity to drive sustainability and create more productive and collaborative work environments, a comprehensive approach among key stakeholders will be required.

[1] BDC Network, "85% of employees dissatisfied with their office environment", November 2014, bdcnetwork.com

[2] JLL, "Global workforce expectations are shifting due to COVID-19", November 2020, jll.com

[3] Stuart Feldstein, Research Commentary, SMR Research, December 2020, commbuildings.com

[4] EU Science Hub, "iRESIST +- innovative seismic and energy retrofitting of the existing building stock", 2019, ec.europa.eu

EMPLOYEES will need to be delighted with new office experiences. The office will need to be inviting and offer clearly superior experiences for employees to consider going to a physical office instead of working remotely. They will think of the office as a place to fulfill a purpose, be it to engage in social interactions or access resources and amenities. Moreover, the office will serve as a platform for collaboration and innovation.

TENANTS will continue to broadly see the office in terms of productivity and operating costs. However, for them, it is also a networking platform, a place to build and nurture company culture, attract talent, and develop their employer brand.

BUILDING OWNERS AND MANAGERS are primarily concerned with maximizing their return on investment. With potentially lower numbers of people in a building at any given time, they will be looking for new opportunities to maintain or increase their revenue streams either via new services or business models, including outcome-based offerings and sustainability-driven tools and capabilities.

THESE FOUR DRIVERS
OF CHANGE WILL BE
AT THE CORE OF NEW
SCHOOLS OF THOUGHT
THAT SHAPE HOW
FUTURE OFFICES WILL
BE DESIGNED, BUILT,
AND OPERATED.

# The key drivers of change

We expect four key behavioral shifts shaping the office context to last beyond the pandemic. They frame the context of stakeholder expectations towards a Reimagined Office in a post-pandemic world.

**1** ## Transition from a fixed office location to multiple workplaces

Work-from-anywhere has become mainstream, but the fundamentally human need for face-to-face interactions will remain, albeit at the discretion of employees. Flexible work arrangements that balance employee and business objectives and optimize both will have to become the norm if an office space is to acquire an employee-friendly reputation.

**2** ## Prioritization of employee well-being, safety, and security

The COVID-19 pandemic has brought home the importance of ensuring physical, mental and emotional health and well-being of employees in the office. Companies will focus not just on productivity, but also on enabling office spaces that are even healthier, safer, more inclusive, and more secure than before.

**3** ## Increasing utilization of solutions that promote sustainability

With the effects of climate change becoming ever more visible, eco-aware tenants and end-users – especially the younger generations – are demanding more sustainable solutions, processes, and spaces. Offices that do not prioritize sustainability may risk becoming irrelevant as users choose spaces with a lower carbon footprint or cleaner air that help them take actions to reduce their personal carbon footprints even further.

**4** ## Increasing adoption of digital tools and ways of working

Pervasive digitization is transforming many aspects of human life. Companies will have to accelerate the digitization of work even further, invest in new tools, and enable new ways of collaboration as the level of digitization becomes a key factor in attracting and retaining talent in the future office.

# A sneak peek into the future office

Responding to the drivers of change requires a vision for the future that uses technology to predict needs even before they are recognized – and then finding ways to meet them. Thus, the future office will not just contain one, but dozens of solutions that all need to be aligned and integrated.

"There will be a lot of flexibility and intelligence built into the office space so you can move things around. There will be a lot of digital solutions, lots of walls moving. It will be less about desks and more about collaboration," says **Carsten Beck**, Futurist and Director of Research, Copenhagen Institute for Futures Studies.

Far from being a static asset, the office will have to become an active resource, a place that helps users to achieve their goals, be they to foster collaboration, encourage innovation, or inspire co-creation. The office must transform into something uniquely capable of enabling highly personalized experiences, and boosting collaboration, innovation and productivity.

Technology will be a key enabler for these experiences. These flexible design structures will also be able to accommodate the need for physical distancing, according to **Steffen Lehmann**, CEO, Future Cities Leadership Lab and Professor, University of Nevada, Las Vegas. "We will see less packed interiors

with better workplace models that deliver on these new expectations of higher quality and safety. Technology will be invisible, integrated, and servicing the office user in the background," Lehmann says.

Going to the office should also be an irresistible, but highly efficient and sustainable experience to justify the need to commute. For the employers (aka tenants), the office will be a space designed to activate branding, encourage innovation and co-creation, and help company culture come to life while providing flexibility to scale as their business develops. Building owners and managers will see new business opportunities that will increase overall sustainability and help them to tap into new and lucrative revenue streams beyond the concept of selling space. All this requires a completely new operational model and mindset shift.

The reimagined office will have to solve these challenges. User-centric design enabled by technology will play a key role. For this to happen, the future office will be driven by human behavior and experience more than before, with an eye on understanding the role human experience plays in business success. We expect companies to continue rethinking their real estate requirements and choices as the trends from 2020 solidify and concrete takeaways present themselves.

Our vision explores four ways in which the reimagined office will be brought to life. Are you ready to discover the office of the future?

♡ REDEFINING USER EXPERIENCE

▣ REDESIGNING SPACES

❋ REINVENTING OFFICE AS A SERVICE

◊ RETHINKING SUSTAINABILITY

USER-CENTRIC DESIGN ENABLED BY TECHNOLOGY WILL PLAY A KEY ROLE.

# REdefining user experience

TRANSFORMING WORK INTO PERSONALIZED EXPERIENCES.

**WHAT IF** the office could learn from your behavior and provide specific solutions and experiences that are unique to you?

**IMAGINE** an office that provides its users with unparalleled convenience and a purposeful, frictionless, personalized work experience. Enabling a sense of flow, it guides employees to focus on what matters. Your movement in the office is completely intuitive and effortless – and simultaneously ensures your wellbeing.

Seamless interaction with your colleagues, both in-person and virtually, is of the essence when everyone is working flexibly. When you come to the office, you can highlight whether you are available to be approached, or if you are concentrating on work and not available. If you choose to be available, the office identifies your location (for example, which building, floor, and desk you are using), so that colleagues can find you. The office of the future is focused on promoting community and opening possibilities for inspiration and ideation. With the aid of modular offices and digital connectivity, this level of integration is a defining feature of the future office, making it easier for employees to collaborate and have meaningful interactions, including spaces for serendipitous meetings.

The user-centric office of the future recognizes your needs and actively captures your behaviors to create a highly personalized experience. Say you regularly commute to the office by car on Mondays to meet your team. As the office "learns" this, it reserves you a parking spot, a conveniently assigned desk close to your team, and automatically books the necessary meeting rooms on the same floor.

The elevator is ready when you enter the lobby from the parking lot. You do not need to use a badge or touch door handles – facial recognition lets you in automatically. Your favorite lunch is ready without having to wait in line. You can start your day by commuting to the office, all obstacles removed, and end it with peace of mind, knowing that a virtual assistant will take care of all practical arrangements for the following day with smart integration between systems. And if one Monday you decide not to come to the office, this experience will be canceled and made available for others.

Solutions such as automatic and contactless entry and exit systems and air quality displays are examples of ways the future office can help support end users' health and increase confidence in the environment. Similarly, water faucets could help employees stay healthy by signaling with a light the right amount of time they should spend on washing their hands, and information about when the area was last used or sanitized. People flow solutions could be incorporated to maintain physical distancing requirements and to avoid crowding.

User experience will be at the center of the future office, with all spaces and solutions focused on helping users to focus to what matters. Not only will the office be an environment facilitating collaboration and productivity, but it will also remove the obstacles users face and actively promote their wellbeing. With this holistic experience, people feel a new level of personalization, comfort, and convenience in their work. The office will be a space where employees, clients, and visitors enjoy their stay and are supported every minute of their day.

TRANSFORMING WORK INTO PERSONALIZED EXPERIENCES.

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By actively recognizing and anticipating user behaviors, the future office will create a highly personalized work experience tailored to individual needs.

Modular spaces and digital connectivity will aid in the promotion of community and opening up possibilities for inspiration and ideation.

Solutions such as automatic and contactless entry and exit systems and air quality displays can help support end users' health and increase confidence in the environment.

The office environment will remove the obstacles users face and actively encourage their wellbeing, facilitating collaboration and productivity.

# **RE**designing spaces

**WHAT IF** instead of walking into a generic one-size-fits-all office space, the office you enter each morning was organized to inspire you and help you achieve your goals? Up until now, the building infrastructure has been largely fixed – but does it need to be?

**IMAGINE** a continuously evolving space that adapts to both daily needs and long-term trends, ensuring users have the right options to succeed in their goals and interact with each other through a smart collaboration space. This flexibility is crucial when employees decide where they want to work – in the office or somewhere else.

Today's static workspace relationship will become increasingly dynamic. The smart office of the future offers users a variety of spaces designed to their particular needs. These spaces are always adapting and evolving to match changing needs. From day to day, this could mean that the number of available desks, meeting rooms, phone booths, collaboration spaces, and even amenities are flexible to scale up and down as needed. Modular and connected walls and furniture automatically cater to the visitors of the day, while recognizing that the number of visitors along with their requirements are constantly changing. As a result, the office users always work in fit-for-purpose spaces, tailored to their needs. For example, a floor typically populated by numerous meeting rooms could be effortlessly – or even automatically – converted into a large space for

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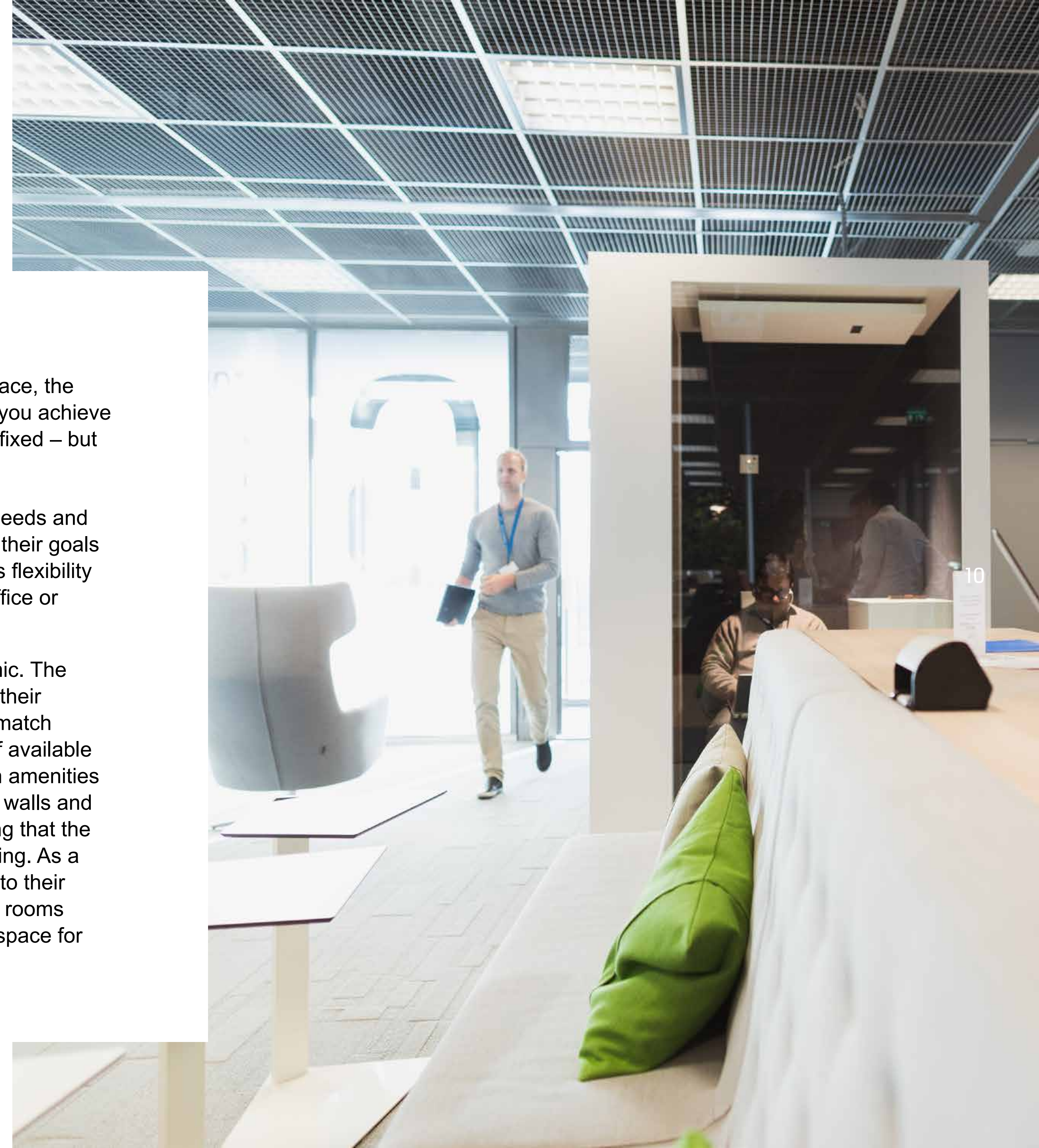
event purposes. Modular offices would also mean that the building owner could offer spaces to multiple tenants at the same time in a flexible manner, thus optimizing the building's utilization.

In parallel, the connected building would drive transparency on its usage. Technology would ensure that building owners and operators are constantly on top of how an office space is used, allowing them to think ahead and continuously evolve the space to benefit the users, maximize usage, and ensure sufficient capacity at the right time. Through continuous visibility on asset utilization, the building operator could improve services before the users even notice the availability has become limited. This can be done by, for example, proactively modifying meeting room sizes or adding phone booths to match the usage pattern in the building. This transparency also helps users pace their day so they have access to the asset they need without waiting, whether it be the cafeteria, a desk, a meeting room, phone booth, elevator, or gym, among others.

Investing in smart and flexible offices will help the space continuously renew itself to suit new needs. With flexible infrastructure and transparency on how it is used, the building is continuously optimized to facilitate productivity and offer an improved user experience – and stay relevant for the long run. The user would no longer need to adapt as their needs evolve. Spaces would develop with them. Instead of a generic one-size-fits-all office, the new, purposeful office would provide users uniquely built surroundings with a clear mission to choose from, all designed to help them achieve their goals. While incorporating these innovations will mean investment, it is an investment for the future, and a way to create new opportunities.
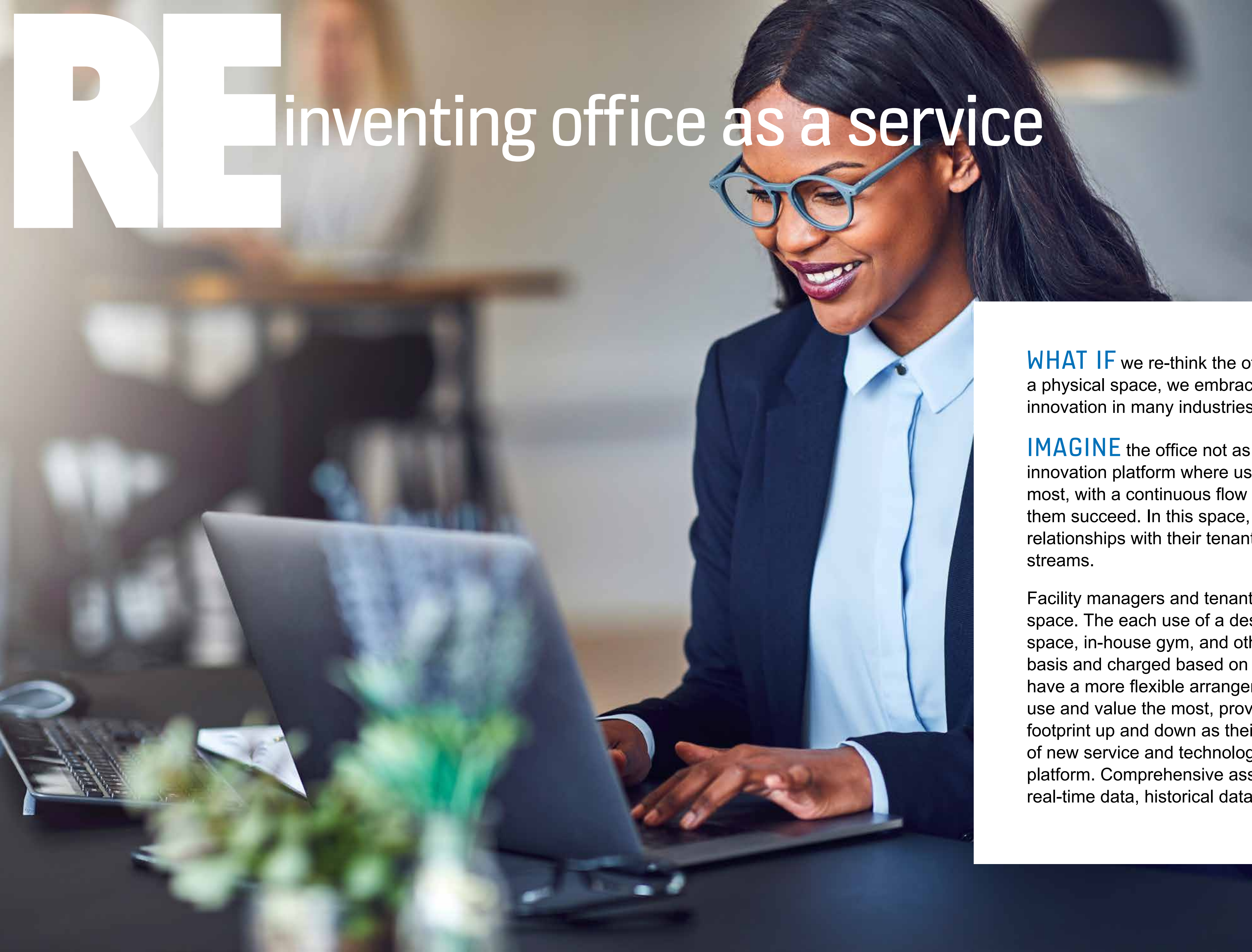
A SHIFT TOWARDS ADAPTABLE AND FIT-FOR-PURPOSE ENVIRONMENTS.

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# REinventing office as a service

**WHAT IF** we re-think the office as a concept and, instead of seeing it as a physical space, we embrace the service mindset transforming and driving innovation in many industries?

**IMAGINE** the office not as a physical space, but as a service and innovation platform where users pay for what they use and value the most, with a continuous flow of new offerings and innovations to help them succeed. In this space, building owners and managers enjoy closer relationships with their tenants and grasp opportunities for new revenue streams.

Facility managers and tenants would be able to optimize the value of their space. The each use of a desk, meeting room, printer, elevator, parking space, in-house gym, and others, could be tracked on a single employee basis and charged based on use. This office-as-a-service allows tenants to have a more flexible arrangement where they pay for what their employees use and value the most, providing them the option to scale their office footprint up and down as their business develops with a continuous flow of new service and technology innovations developed on top of the office platform. Comprehensive asset utilization visibility through a combination of real-time data, historical data, and AI would help building managers make

better decisions about space usage, and allow for the development of the service offering based on real insights.

This thinking is not limited to shifting today's office experience into a service-oriented model. The office of the future would be a platform for digital services and innovation in a wider sense. The building owner could develop the value of the office over time by continuously launching new, human-centric services and technology innovations for tenants to use – and co-creating such services together with them – all while increasing interactions and developing relationships. This is a mindset change enabled by digital technologies. The sky is the limit for the new services and solutions that could be created. It is important to involve ecosystem thinking, and for participants ranging from building owners and operators to tenants and technology companies to service companies to come together to co-create these solutions. A single company cannot meet user needs comprehensively by acting alone.

Building owners and operators enjoy two main benefits with this new approach. First, the new vision of a smarter, flexible commercial building will help maximize occupancy and ensure all spaces and assets are in demand, improving the building's value. Second, looking at a building not only as a piece of real estate, but as a combination of a physical space and a digital innovation platform will help to increase tenant satisfaction and open new, more scalable, and potentially higher-value revenue opportunities beyond the typical office offering.

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# IN THE OFFICE AS A SERVICE MODEL

## BUILDING OWNERS

Can develop the value of the office over time by continuously launching new, human-centric services and technology innovations.

## FACILITY MANAGERS

Can make better decisions about space usage and allow for the development of service offerings based on real insights.

## TENANTS

Will be able to have a more flexible arrangement where they pay for what their employees use and value the most.

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# RE thinking sustainability

**MAKING SUSTAINABILITY TRANSPARENT AND ENCOURAGING USERS TO BETTER BEHAVIORS.**

**WHAT IF** your office building and office space actively contributed towards the fight against climate change through the intelligent use of space, resources, and technologies? What if information about every watt of electricity, every liter of water, and even the carbon footprint of day-to-day activities was made readily and easily available to all stakeholders in the building?

**IMAGINE** an office which, in addition to having green building certificates like BREEAM and LEED, makes sustainability visible every day, and has an active role in guiding its users – both individuals and facility managers – toward better decisions. This office shows the building's sustainability metrics in real-time and demonstrates how the building promotes sustainability.

Visible data points in key areas would show the building's sustainability metrics in real-time, reminding users of the quality of their surroundings and their own role in promoting sustainability through the choices they make. For example, recycling rooms could tell how much waste per person has been generated on any given day and give tips on how this could be reduced – or even display the information in other

metrics like cost or $CO_2$ emissions. Information screens in public spaces like the lobby or cafeteria could display sustainability news to raise awareness, and users could get personalized tips for improving their sustainable practices through an app on their phone or smart watch. At the same time, facility managers would be able to develop the building operations towards a more sustainable direction, together with help from the users.

The future office belongs to a sustainable environment that combines the needs of people with the needs of nature. In addition to incorporating elements such as rooftop gardens and natural lighting, it considers the ways in which people move between spaces to benefit both themselves and the environment. This vision of the smart office of the future is part of a broader ecosystem – of multi-experience buildings and a smart city. Simple data points like occupancy during the day would feed into services such as transportation, utilities, and waste management. It would equally help facilities such as food courts manage their inventory and purchasing cycles to minimize waste.

Values and meaning play a bigger role: sustainability is the right thing to do, and an essential requirement for buildings. Sustainability is not only about improving the environment through a more responsible use of resources and possibilities for energy savings. It also involves making life better for end users.

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THE FUTURE OFFICE BELONGS TO A SUSTAINABLE ENVIRONMENT
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# Conclusion

No matter how diverse the stakeholders in the office space ecosystem may be, they are united by an interest in benefitting from a positive impact on the office ecosystem. **Employees** are motivated to enter an office that serves their needs and acts as a platform for collaboration and innovation. The future office will be a people-centric environment where employees find their purpose and perform at their best. **Tenants** will see the future office as a flexible networking platform for nurturing their company culture, attracting and retaining talent, as well as developing their employer brand. Reimagining the purpose of the office through design and smart office solutions will give tenants the ability to choose solutions that make the most sense for both their business and end users. **Building owners and managers** will be incentivized by new modular spaces, providing them the opportunity to co-create the best solutions for the use of space and identify new revenue opportunities.

In the new urban normal, the office must deliver on the employer's promise to provide their employees with unparalleled convenience and a purposeful, frictionless work experience to justify the commute. It must also maximize value for the building owner and increase tenant satisfaction. At the same time, it must consider the best way to promote responsible use of scarce resources.

**THE FUTURE OFFICE WILL BE A PEOPLE-CENTRIC ENVIRONMENT.**

**1** Elevating user experience with a new level of personalization, comfort, and convenience, enabling a sense of flow in users and guiding focus to what matters – be it a need to socialize, innovate, or focus.

**2** Offering office space adaptability through comprehensive transparency and flexible infrastructure, making the space future proof by allowing it to continuously renew itself, add to it, and to suit new needs.

**3** Changing the mindset to innovation, new business models and an extended ecosystem, redefining the office as a service platform – allowing for a continuous flow of new services, innovations or opportunities for new revenue streams.

**4** Assisting users toward better decisions, and making sustainability visible every day by proving that the building promotes sustainability with real-time metrics.

For the future office to become a reality, it is important to consider both how to incorporate these new innovations into new constructions and how existing real estate assets can be retrofitted to take advantage of the latest solutions. Building owners will need to set a digital agenda with milestones for retrofitting existing office space towards the future office. This would entail smart and sustainable building management systems and people flow solutions, energy management, space utilization, and user experience solutions, as well as a platform integrating these respective systems.

The envisioned level of personalization and adaptability through transparency on office use can only be made possible through seamless integration across systems, with different solution providers working together. As a result, the future office would collect more data about users to deliver on its promise. For example, mapping the path of each employee through their workday will help produce exponential increases in productivity and ease-of-use. This will naturally open up concerns about data privacy and security. Careful attention needs to be paid to practices such as data privacy management, data anonymization, and an individual's right and options to manage their data. This would help maintain user trust while achieving better service levels.

Businesses, developers, architects, and engineers need to rethink and act now to bring about meaningful change and make going to the office an irresistible, but highly efficient and sustainable experience. ■