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the occupier edge

FOURTH EDITION | 2017

Insights and Trends

from Cushman & Wakefield's Global Real Estate Experts

Contents

2017
KILLER CONTENT
AWARDS WINNER
Research-Based Content

CUSHMAN & WAKEFIELD

Editorial

At Cushman & Wakefield, we believe our experts inspire, engage and create memorable experiences. Utilising creativity, combined with extreme intelligence, we push ourselves every day to think bigger, better and different. We aspire to influence.

For this edition of *The Occupier Edge*, we brought together the brightest minds to collaborate and execute content that is both exciting and fresh. We're not just recycling old ideas, we're inventing new ones. Our goal is for you to be comfortable in your surroundings and to equip you with the knowledge and tools necessary to succeed. You are our first priority.

This edition features articles addressing influential trends impacting the commercial real estate industry and beyond. A few key topics include gamification and how it will transform the way we work; automated lawyering and how artificial intelligence is no longer a concept, but rather a reality; the gig economy, which has created a new kind of diversity, with full-time permanent employees working side-by-side with freelancers; and much more.

Look inside this award-winning publication and feel free to contact any of our subject matter experts to learn more. We welcome the opportunity to work with you on strategic solutions to help make your business more efficient, successful and profitable.

Please enjoy reading Cushman & Wakefield's Fourth Edition of *The Occupier Edge.*

Best,

Steve Quick

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THE GIG IS UP

SAYING HELLO TO YOUR DREAM WORKPLACE

Ever dream of having the flexibility to work wherever you want? Working less, but getting paid more? Setting your own hours? Ultimately being your own boss?

Who doesn't like the sound of that?

Thanks to free communication channels and globalised networks, this dream has become an achievable reality for the fast growing 'Gig Economy,' which is comprised of 20-30% of the working population or 162m people worldwide.

These 'gig' workers – often referred to as consultants, contractors, freelancers or temp workers – are ultimately changing the corporate landscape and how we work. Now, companies can much more easily hire non-permanent employees on an as needed basis, while gig workers are enjoying the freedom, flexibility and work life balance they crave. Everyone wins.

80%
of people are dissatisfied with their jobs

JAMES MADDOCK
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Well, maybe not everyone. Gig workers do lack healthcare benefits and job security, and a small percentage would prefer a traditional job, but haven't found the right role. However, even with these drawbacks, 40% of the workforce will be freelancers, independent contractors and 'solopreneurs' by 2020. This statistic alone speaks volumes about the impact the gig economy is sure to have on the workplace of the future.

The gig economy is here to stay

Globalisation of work, global trade and technology shifts, like the rise of smartphones, are huge contributors to the gig economy – and these trends aren't going away anytime soon. In fact, by 2020, 80% of the world's population will own a smartphone according to The Economist. And with more data being created in the past three years than in the entire previous history of the human race, it's pretty clear the gig economy is here to stay.

70%
of millennials might reject traditional employment/business and choose to work independently

IT'S NO SURPRISE THIS ECONOMY IS GROWING SO QUICKLY. BELOW ARE JUST A FEW OF THE REASONS WORKERS ARE CHOOSING TO WORK INDEPENDENTLY AND COMPANIES ARE CHOOSING TO HIRE MORE OF THEM.

LIVING THE DREAM

FREEDOM to choose type of work

VERSATILITY Working simultaneously for different clients on different projects

Ability to **WORK LESS** and **EARN MORE**, depending on the field

FLEXIBILITY to work when and where you want

Ability to **TURN DOWN** projects when not interested

BENEFITS FOR COMPANIES

Lower **SPACE COSTS**

SCALABILITY Can expand workforce in periods of peak demand

EXPANSION when company is in growth mode

Ability to bring in certain expertise on an as **NEEDED BASIS**

Reduced cost of **HEALTHCARE** and other benefits

Saying goodbye to the traditional workplace

The gig is up. Since we are working differently now, corporate workplaces must be prepared to support these changes.

To this end, firms are increasingly redesigning their offices to provide fewer private offices and cubicles, and more open and collaborative space to address the fact that 30-50% of their workforce are not actual employees. The goals are twofold: first, to provide workplaces that facilitate discussion and collaboration. Second, to decrease the firm's overall rent bill by providing less physical space per worker.

Contracting and collaborative workplaces are key factors in why office vacancies remain elevated even with our economy at full employment, and why so little new office space is being built. Continued economic and job growth won't change that. We just don't need as much office space.

More and more gig workers are utilizing co-working or collaborative spaces such as Regus, the industry leader in shared work space, which has 3,000 locations in 900 cities across the globe or WeWork, which claims 50,000 members who work in its spaces.

Together, they and other providers of co-working space, have leased several million square feet of space in the past few years and that trend is sure to continue with the growth of this economy.

The gig economy also impacts traditional corporate culture and employee engagement. With so many contractors in the mix, it's more important than ever to demonstrate a commitment to all workers – whether full time or temporary. When all workers are engaged, they are more likely to be committed to company goals. Plus, you never know where a contractor may end up. They could return as a full time employee or even work for one of your clients one day.

65%
of today's school students will be doing jobs that don't exist yet

How CRE executives can plan for the future

Now more than ever, CRE needs to secure a seat at the table with other business unit leaders when discussing the company's strategy and forward-looking plans. There needs to be a good understanding of not only who will be using the space, but how and when they will be using it. Different groups should be considered and consulted with when planning. For instance, according to Deloitte, 70% of millennials might reject traditional employment/business and choose to work independently in the future. Given this reality, this group's work styles should definitely be addressed. In addition, artificial intelligence and robotics will be more prevalent in the near future and their presence should be factored into the planning as well. Armed with this type of information, companies can design and continually redesign a workplace that works for their organisation going forward.

At the end of the day, businesses that will be successful in the future will be those who break down the barriers between people, workplaces and technologies and empower their employees to be productive and creative ***no matter where*** they are.

Location. Location. Location.

Five Ways to Maximise Office Relocation Opportunities

Globally, office markets are diversifying. The rise of new fringe markets, suburban markets and bespoke business parks have provided fierce competition to established central business district (CBD) locations. Along with decisions surrounding country and city locations, occupiers now have to assess a range of potential locations within a city as well. While this presents a range of opportunities, each of the markets and sub-markets offer their own set of advantages and disadvantages.

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Location intelligence (n.):
Location intelligence (LI), or spatial intelligence, is the process of deriving meaningful insight from geospatial data relationships to solve a particular problem.

Here are five key factors outlining a systematic approach to analyse office market attributes as part of an overarching office location strategy. All can be readily combined into a composite index with variables assigned different weightings based upon their level of importance.

1. Define Market Catchment

While it is readily presumed a smaller market will draw workers from a smaller area, this in itself is inherently fuzzy and does not provide any formal delimitation. In the absence of reliable data, using an arbitrary buffer radius offers the simplest approach. However, a detailed analysis of journey to work patterns provides a far more comprehensive view that directly reflects commuter flows and highlights from where the largest volumes of workers are sourced.

2. Identify Demographic Characteristics

Demographic characteristics of the catchment population are critically important. With today's "war on talent," access to a high-quality workforce, that reflects the needs of the company, is imperative. Whether it is relocating a head office, development of a new call centre or consolidating back office functions – the need for quality staff is constant. The educational, occupational and demographic requirements of the staff, though, will vary.

In determining the target demographics of a workforce and their subsequent position, consideration should be given to factors such as the location of university campuses, areas with young families where parents may desire more flexible working conditions and concentrations of workers with tertiary education. Such information is readily available from government data. An understanding of your target employees is essential; with that each catchment can be assessed on whether it offers what is required.

3. Analyse Accessibility to Top Talent

A location must be accessible to attract workers, and this is often a key difference between CBD, fringe and suburban office markets. Central business districts are at the confluence of several public and private transport routes, making them readily accessible across a range of transport modes. In contrast, suburban office markets, especially those that are newly developed, may be lacking high quality public transport access and rely on private transport, raising correlated issues around levels of parking provision. Analysis of journey-to-work experience as well as qualitative and quantitative assessments of station locations and transport route gives the data in CBD, fringe and suburban markets.

While accessibility is an important consideration in any location strategy, it is especially important when relocating offices. It is obvious that relocations impact existing employees, but the level of impact needs to be quantified. All other factors being equal, moving closer to the geographical centre of where employees reside will likely yield beneficial outcomes. Analysis of this type can also help identify which business units are most impacted by a potential move and allow for "what-if" scenario planning.

Another point to keep in mind is the quality of infrastructure projects, which can transform a location and should be included in a forward looking view of the market.

Finally, are there any "game-changers"? Quality infrastructure projects can transform a location and should be included in a forward looking view of the market.

4. Locate Local Amenities

Local amenities build worker satisfaction. Having a range of service providers in close proximity to the office allows a greater ability to manage work-and home-life demands. This can include having a range of options for food and refreshments, retail facilities, child care, medical and educational service providers. Landlords have identified this trend and are offering a greater range of concierge services in buildings.

5. Determine Commercial Considerations

When assessing any location strategy, naturally commercial considerations play a role. Having decided on which locations are most desirable from a workforce perspective, those locations must be able to meet the space requirement in a financially sensible way. For immediate requirements, this is more a reflection of current vacancy and market rent. Future requirements are likely to include a greater range of factors, such as the market's ability to accommodate a development of suitable size and quality in the desired timeframe, and what is the profile of the developer and lessor? The range of options is also important in negotiating leverage. Ultimately, commercial considerations are the final go/no-go in the decision making process – if there are no options to meet the requirement, an alternative market strategy must be adopted.

The above factors can be readily combined into a composite index, with variables assigned different weightings depending upon their level of importance. Not only does this assist in honing a city wide search down to individual sub-markets, but also provides a clear understanding of which sub-markets are preferred and why.

LOCATION OPTIMISATION MATRIX

		Location 1	Location 2	Location 3	Location 4
DEMOGRAPHY	Workforce size	5	2	4	1
	Employment centre size	5	1	3	1
	White collar	5	1	1	2
	HNWI	5	1	3	1
	SME	5	1	4	1
	Forecast population growth	4	4	2	1
DEMOGRAPHY SCORE (30)		**29**	**10**	**17**	**7**
ACCESSIBILITY	Overall	5	2	3	2
	Car	4	3	2	2
	Bus	5	2	3	2
	Train	5	3	4	1
	Future	3	1	1	1
ACCESSIBILITY SCORE (25)		**22**	**11**	**13**	**8**
AMENITY	Retail	4	4	4	4
	School	5	3	4	4
	University	5	3	2	1
	Hospital	5	1	3	2
AMENITY SCORE (20)		**19**	**11**	**13**	**11**
TOTAL SCORE (75)		**70**	**32**	**43**	**26**
COMMERCIAL	Accommodation size	5	1	3	1
	Accommodation type	5	5	5	3
	Timing	5	5	5	1
	Lessor profile	5	3	3	1
	Available options	5	1	3	1
COMMERCIAL OVERLAY		**25**	**15**	**19**	**7**

Designing the Perfect Match: Adobe Talks CRE

Cushman & Wakefield Regional Facilities Manager, **Giles Flaxton**, sat down with an esteemed client, Adobe, to have a candid discussion about their relationship. **Mark Bell**, Adobe, Regional Site Operation Manager, EMEA, touched upon triumphs and challenges and shared how this truly integrated partnership positions his company for success. Read the interview to gauge how this powerhouse team is developing best-practices and making strides to be the leader in the industry.

How has the partnership between Adobe and Cushman & Wakefield evolved?

Mark Bell: What started out as another ordinary client/vendor relationship, transformed into a trusted partnership. Not only do we all have the same goals, but on a personal level, we all work well together. We've formed strong bonds and our partnership is reflective of that.

Giles Flaxton: The relationship started in The U.S. more than 10 years ago, but we now deliver facilities support globally. The length of the relationship has allowed us to gain a deep understanding of how Adobe works and what it needs from a service partner – this is a crucial aspect of our partnership.

Tell us about a recent success?

MB: We've had the opportunity to leverage Cushman & Wakefield's size, scale and expertise. Recently, we had a market review of all things related to innovation and the "Internet of Things." We condensed weeks' worth of research into one meeting, which was extremely helpful. Cushman & Wakefield's Head of Workplace Strategy, Neil McLocklin, was able to give us a rapid overview of current technology and also link us up with a suitable supplier.

GF: Changing how Adobe's Paris office is used from a predominately allocated desk environment to a much more flexible and agile working environment. By creating team neighbourhoods rather than allocating desks we make much better use of the available space.

How have you partnered to improve operational efficiencies?

MB: Customer centric approach, with a focus on impact. Noticing what is getting in the way of our employees being productive and then conveying this to Cushman & Wakefield so they can adapt their delivery or provide a new service.

GF: We defined and clarified roles and responsibilities in order to target the team resources efficiently. It's not about creating silos, but rather break them down, to work as a team and avoid any duplication of work.

How do you successfully integrate services?

MB: It's not easy, but you have to keep working at it. One best-practice I would recommend is constantly reviewing and tweaking, which will help lead to success.

GF: By being visible, proactive and not "hiding" in a facilities office, we can better understand our client's challenges. By engaging with our client first-hand, we're better equipped to integrate services seamlessly.

What project or milestone are you most proud of?

MB: Enabling Adobe to scale in EMEA by adding new or refreshing existing offices in Berlin, Dublin, Paris, Munich and soon London. We now have more than 29 offices across 18 countries and more than 2,500 professionals. I'm proud that we think outside the box when it comes to space planning. One exciting example being the new London office which we will use much more flexibly with only around 20% of the seating being allocated and the rest being used as drop in space.

GF: Working with the Dublin leadership team to move away from private manager offices to make better use of the available space. Private offices are often empty and don't foster collaboration – it's much better to use them as meeting spaces.

In your current role, what excites you?

MB: Every day is different – it keeps me on my toes. I also enjoy traveling as part of my role. Taking in different cultures and seeing first-hand how style of working differs across the globe is interesting. My favourite place I've visited is Hamburg, we have a fantastic office next to the river. Eventually, I would like to travel to South America because I'm curious about The Inca Trail.

GF: The opportunity to travel and meet Adobe's great employees. I have been fortunate to travel frequently in Europe, but have also visited The U.S. and India. One of my favourite places to visit was San Francisco.

What are some of the issues you're facing?

MB: Growing pains within the EMEA portfolio, rapidly providing space in the right locations and refreshing our older offices to meet employee expectations.

GF: Sifting through new technology to work out which ones will be of genuine benefit to Adobe – it's a difficult process, but will have great results. Also, continuing to develop the workplace experience; quality coffee and free soft drinks are now just the base expectation for many clients.

Where do you see opportunities for growth?

MB: Adobe has ambitious growth targets and with this comes additional opportunities to develop our roles and services. How we scale our support for the business is key.

GF: Utilisation data could be used to show how often teams interact.

What do you see as the next big trend in real estate?

MB: Co-working/incubator spaces within corporate environments. Also, virtual reality is on the rise.

GF: It's hard to generalise because different occupiers have different needs, but I'm interested to see how 'Office as a Service' is adopted by Corporate Occupiers.

What are you most looking forward to in the year ahead for commercial real estate?

MB: Sustainability and Internet Of Things. It will be interesting to see the impact they have on our company. Advances in sustainability will impact us because Adobe's clients expect us to operate in an appropriate manner. Adobe is a global leader in operating sustainably, and we want to continue to lead.

GF: In the UK, I'm interested to see if the Stoddart Review starts an industry conversation about the link between workplace strategy and productivity.

Virtual Reality the New Reality for Real Estate

VR/AR COULD BECOME A $2.6B MARKET IN REAL ESTATE BY 2025

As headset technology continues to improve, a number of companies are already exploring the possibilities of VR/AR for virtual property tours and projections of scale models, and they see even greater marketing opportunities down the road.

The promises of virtual and augmented reality (VR/AR) have been described plenty of times before: Fully immersive video games, sideline-quality views of sporting events from the comfort of a living room, surgeons reviewing a patient's medical records and scans mid-procedure without leaving the operating table and many other flights of fancy.

The problem has always been the limits of the technology. Processing speeds in headsets have traditionally been too slow to keep up with the movements of human eyes and limbs, and the headsets' visual displays have lacked the high definition necessary to resemble the real world (for VR) or integrate seamlessly with real-world vision (for AR), leaving users frustrated.

That could soon change. According to a research report released last year by Goldman Sachs, VR/AR hardware and software are finally beginning to catch up with consumer expectations and are poised to disrupt a number of markets, including real estate.

The report sees VR/AR becoming a $2.6 billion market in real estate by 2025 as headsets such as the Oculus Rift and the Microsoft Hololens improve over the next few years. It's essential to begin preparing for the expansion. In addition to virtual walkthroughs of both finished and unfinished buildings and virtual models projected onto desks and tables in the real world – innovations which are already in ongoing development – companies see opportunities for more game-changing developments a little farther down the road, once mass adoption takes hold.

The technology's already here

"Real estate, architecture, and design are already working with 3-D models, and VR and AR are, in essence, just an extension of that process," says Chad Eikhoff, founder of Atlanta-based TRICK 3D, one of several companies that's already getting in on the ground floor of real estate's VR/AR transformation.

Last year, he and his team released Floorplan Revolution, a product that can create an interactive virtual 3-D model of a space from nearly any two-dimensional floorplan, not just detailed architectural drawings. Customers upload their floorplans

In the AR sphere, AR Pandora Reality is getting things off the ground with technology that allows customers to use their smartphones and tablets to examine miniature virtual models of new real estate projects as if they were positioned on a real-world desk or table in front of them, and they can also use it to project virtual finishes and furnishings into existing spaces to see how they might look. The company is already working on demo versions of its product for developing AR headsets such as the Hololens, but it's waiting for the technology to become sleeker and cheaper before it seriously rolls things out. "Software-wise, we're quite ahead of the curve," founder Alper Guler says, "and we're waiting for new toys to come out to amaze people."

More on the horizon

Once VR/AR has become a proven market with consumer interest, the real estate industry could see some truly dramatic innovations, including hyper-specific analytics, more interaction with existing properties, and even whole virtual marketplaces.

One of the first possibilities Tepper sees coming is the ability to collect and mine the data from virtual walkthroughs for more targeted marketing. "If somebody has a VR model and it's viewed twenty times," he says, "we'll have the capability at some point or the technology to say, 'OK, 90% of the time was spent on the office or the conference room. So, what can we do with that data? Could we maybe serve up that data first?'"

and outfit them with a variety of virtual finishes and furnishings, then Floorplan Revolution generates a model in just a matter of days. The company can also make the model viewable on a Samsung Gear VR or HTC Vive headset for an additional fee.

"What Floorplan Revolution does is really aim to lower the cost … in order to allow developers and marketers to do virtual tours for every floorplan," Eikhoff says, adding that he's working to allow customers to rotate more retail products through the layouts to create different looks.

For existing spaces, there's Matterport, a San Francisco company that has created a specialised camera to capture 360-degree 3-D scans of rooms, which can then be pieced together into a unified, tourable layout and hosted on Matterport's website. The cameras are fairly costly, at $4,500 each, but the company's working to open its models up to VR as much as possible as it improves the efficiency and cost of its signature product. It decided in October of last year to make every one of its models VR-capable and viewable on devices ranging from the Gear VR to the $15 Google Cardboard, and recently it supported Google's adoption of WebVR, which enables the viewing of VR spaces directly in Chrome browsers, without the need to download an app. "We had more than 300,000 models that we turned live with VR," says Mark Tepper, Matterport's vice president of sales and business development. "We're continuing to do that, and we've said we'll do that free until June to give us an idea as to how people are using it."

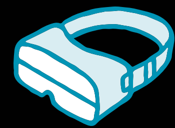
Mass adoption coming soon

Goldman Sachs's report predicted that VR hardware and software makers would start addressing challenges such as "haptics (use of hands), visual display (pixel density, quality), audio (compute power), and tracking (mapping)" last year, and the company expects "to see continuous product improvement over the next three to five years." Real estate experts already in the field agree and say that the enhancements and resulting cost reductions will likely lead to wider adoption of VR in the industry within the next two years or so, with AR not much further behind now that products such as the HoloLens and the Meta 2 are entering the market.

"The year 2017 will be the year of adoption of VR," Tepper says. "If you look at the amount of advertising that's going on – TV ads, Super Bowl ads, online ads – it's everywhere." He notes also that he's already seeing larger real estate brokers sending out branded Google Cardboard viewers for the marketing of larger projects, and he believes that process will soon spread. "Within two years, this will be a commonplace occurrence, where you have somebody who's looking for a property, and you say, 'OK, before we go out on tour, here's 15-20 that you should look at via VR,'" he says.

Size-wise, AR headsets are "quite bulky today, but in two, three years' time, those glasses will shrink into our daily life," Guler says. "Apple is working on it, Microsoft, Google, Magic Leap, Meta 2 – all these companies are investing in these technologies."

In the real world, people could someday be able to get information on properties simply by glancing at them using AR technology. Guler says The Glimpse Group is using the LocateAR assets it acquired in January to make it happen. "As you're walking on the street, … you'll be able to identify the buildings all around you," he says. "You'll be able to understand there's a rental [unit] in the building just by looking at it, you'll be able to see the pictures, you'll be able to contact the real estate person just by using your glasses."



And, until those glasses come along, there could still soon be opportunities to engage with properties on your phone. "If you're standing next to an empty lot where a building's going to be built, you could project a digital version of the building on it," Eikhoff says. "Anybody with their phone could aim it at the lot and see the building there and get virtual tours and information."

Perhaps most ambitiously, Guler says consumers could someday have the option, thanks to incoming applications such as Google Earth VR, to tour whole cities and regions to look at properties virtually, and he describes it like something straight out of a sci-fi movie. "Think like you're Godzilla-sized, and you're basically walking in this mock-up virtual world of Manhattan," he says. "As you walk, you can see all the listings all around you. Think about the upcoming real estate marketing opportunities in that virtual world."

It's another flight of fancy, perhaps, but as VR/AR technology continues to be refined, such notions could pass from the realm of fantasy into the familiar.

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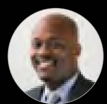

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Think Smart: How Law Firms Harness Technology to Survive

Historically, the legal sector has been one of the least aggressive adopters of technology. But in a world where clients are increasingly clamouring for lower costs, fixed prices and efficient service, smart law firms know they have no choice but to harness technology if they want to thrive – and even survive – in today's competitive landscape.

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More and more smart law firms are partnering with technology companies to provide automation and artificial intelligence (AI). They do this to streamline processes and increase efficiencies, saving their clients time and money, while freeing attorneys up to focus on much higher level, value-add work (see page 15). Due diligence automation, legal research, and more efficient matter management are just a few examples of technological solutions that help smart law firms differentiate themselves.

These examples are only the start of what's being made possible through technology. In many ways, artificial intelligence – the act of computers completing tasks traditionally done by humans – is changing the way lawyers are practicing law. Not only does artificial intelligence help lawyers perform long tedious tasks like document review and legal research more efficiently, but in recent years artificial intelligence has advanced to the point that computers and software are now predicting the outcomes of court cases and providing counsel for people who might not be able to afford to hire a lawyer.

There's no doubt about it – artificial intelligence is proving to be a real game changer for the industry.

Some examples of technology firms that smart law firms are partnering with include:

ROSS Intelligence: A legal research engine that uses artificial intelligence to automate legal processes, making them more efficient and less expensive. Leveraging IBM's Watson, ROSS uses natural language processing to search and provide legal information from citations to full briefs.

Luminance: Artificial intelligence software designed to read (and understand) hundreds of pages of complex legal documentation per minute, drawing out key findings without the need to be told what to look for.

RAVN Systems: RAVN's artificial intelligence platform powers a number of applications to read, interpret and summarise key information from documents and unstructured data. Benefits include higher margins, increased efficiencies and risk mitigation.

Apperio: A legal technology start-up that is changing the way law firms handle matter management, by allowing firms to plan, track and review matters much more seamlessly.

Doxly: A transaction management platform that brings efficiency, transparency and order to complex business transactions, shifting transaction management from a cost centre to a profit centre.

NextLaw Labs: A business accelerator focused on investing in, developing and deploying new technologies (including ROSS Intelligence, RAVN Systems, Apperio and Doxly) to transform the practice of law.

The near-term impact ...

In order to stay competitive and agile, the legal sector is being challenged to determine the right go-forward strategy towards automation and marketplace differentiation. While real estate continues to remain the #1 fixed expense within law firms other than salaries, technology is now #2, according to the most recent Cushman & Wakefield National Legal Sector Benchmark Survey Results.

> Artificial intelligence will replace 16% of American jobs by the end of the decade.
>
> - Forrester

In the meantime, lawyers don't necessarily need to look for a new career, but instead embrace and identify how to utilise the new technologies to advance their careers. A lawyer that knows the ins and outs of artificial intelligence and how to leverage it can provide significant value to both their firm and its clients.

The groups, however, that could face a threat in the near term are paralegals and junior attorneys. While document review technology is unlikely to wipe out the human element anytime soon, paralegals and junior attorneys who handle such process-driven work may need to find other value-added tasks and roles to justify their positions.

The long-term impact ...

In business, change is inevitable – especially when it comes to technology. Technology is only getting smarter, so if law firms are going to survive, they need to be willing to continually evolve by staying up on, investing in and leveraging the right technologies.

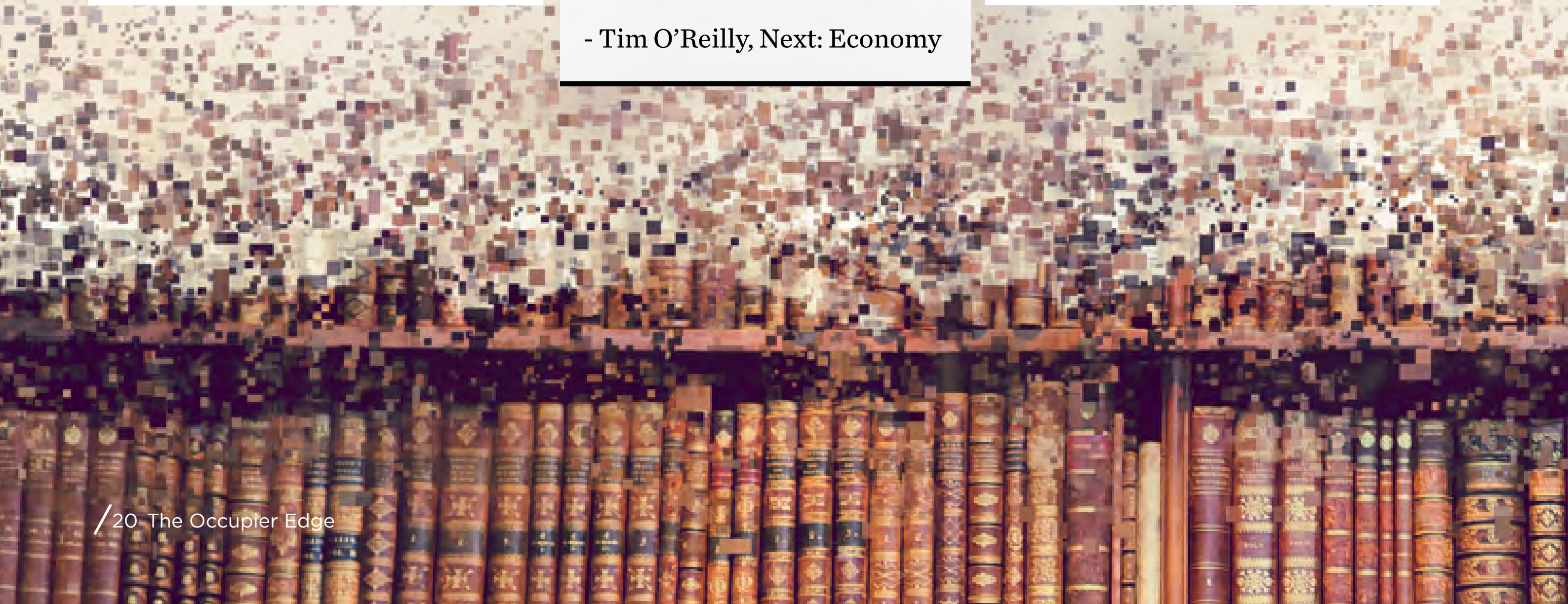
Over the long term, the law firm staffing model will inevitably shift as well to align with the new technologies. According to CoreNet Global, over the next 10 to 20 years, potentially 40 to 60% of the workforce that is now doing transactional work could be replaced and augmented by artificial intelligence, workforce automation and smart cognitive thinking machines. Companies need to plan for and address this shift from human work to robotics.

For instance, the number of secretaries hired has already dropped due to specialised legal assistant versions of 'Siri' equipped to arrange meetings and book flights. According to the National Legal Sector Benchmark Survey, attorneys continue to do more of their own administrative work, with 21% of respondents noting that attorneys within their firms did 50% or more of their own administrative work, a dramatic increase from 8% the year prior.

> What's coming at us is even bigger than the original Internet.
>
> - Tim O'Reilly, Next: Economy

In addition, the number of associates firms need to hire may also be greatly reduced since technology will have taken over most of the lower level work. Firms will struggle to overcome this gap in the usual career paths and will need to identify a way to hire and train young lawyers to become the next rainmakers. In response to this shift, law firms are beginning business development training for associates from day one, with 39% of survey respondents stating that associates were actively involved in business development efforts as soon as they join their firm.

The prospect of artificial intelligence and advanced robotics taking on tasks once reserved for humans is no longer on the distant horizon. The future is here, and according to Tim O'Reilly at Next: Economy, "What's coming at us is even bigger than the original Internet." Instead of trying to estimate the jobs that could be automated in a wholesale way, it is useful to look at this issue through the lens of activities. Recent McKinsey research finds that up to 45% of the tasks performed by US workers can be automated by currently existing technologies. About 60% of occupations could have 30% or more of their activities automated. This doesn't mean it's time to hit the panic button. Many jobs and business processes will be redefined and the ways in which technology complements work will evolve rapidly. Our institutions and policies need to be ready to help individuals acquire new skills and navigate a period of dislocation and transition.



The 'new normal'

Smart law firms understand that technology is going to play an increasingly larger role, and leveraging technologies on a day-to-day basis will become the 'new normal.'

As artificial intelligence becomes more commonplace and a 'norm' within the workplace, it will be increasingly important for lawyers to possess empathy, creativity and imagination, as well as the ability to win a client's loyalty and add value over and above any artificial intelligence system.

At the end of the day, artificial intelligence systems will never be able to replace human interaction. Humans are always going to prefer to eat lunch, go golfing and discuss deals with other humans, not robots. And although change may be inevitable when it comes to business, that's one thing that will never change.

> Over the next 10 to 20 years, potentially 40 to 60% of the workforce that is now doing transactional work could be replaced and augmented by artificial intelligence, workforce automation and smart cognitive thinking machines.
>
> - CoreNet Global

BENEFITS OF LEGAL DOCUMENT AUTOMATION

Overcome price pressures
Document automation gives lawyers the pricing flexibility to respond to clients' pricing demands without hurting profitability. This reduces write-downs and employs fixed fees or lower rates without losing money.

Reduce write-downs
Write-downs have a substantial impact on profitability and are challenging to manage. With efficiencies achieved through legal document automation, lawyers can dramatically reduce those write-downs.

Differentiate from competitors
Through legal document automation, firms can differentiate themselves from competitors, and market their expertise distinctly to their prospective clients.

Increase lawyer capacity
Legal document automation makes lawyers more productive, helping them handle matters more efficiently.

Draft documents faster
Document automation reduces the number of hours lawyers spend drafting deal documents and improves the productivity of lawyers and staff. This in turn, creates documents up to 80% faster, while spending less time on process work.

Deliver higher value work
Time spent on lower value tasks is reduced so that lawyers can focus more on the high-value work that led them to become lawyers in the first place – the work that clients value most.

Acquire more business
By extending their forms online, lawyers can attract new clients and drive more business from existing clients. By lowering costs, and making those costs more predictable, legal document automation offers firms greater pricing flexibility.

Improve accuracy
Last-minute deal changes can affect dozens of text sections, calculations, and signature blocks. Legal document automation systems make all the changes effortlessly reducing errors and saving time.

Gamification in the Workplace - It's a Win-Win

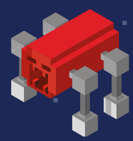
Last summer the unexpected happened, no one saw it coming, least of all her. Handbag in one hand, iPhone clutched in the other, trying to navigate the uneven cobbled streets of London in heels. She was on a mission. Yes, she was catching Pokémon. All summer long. As a kid she had little interest in Pikachu and his friends, but startlingly as an adult Pokémon Go! had gripped her. Nonetheless she was not ashamed. The game increased her daily step count, helped her to get to know the local neighbourhood and more pertinently, allowed her to connect with other players at the office. For the first time in her life, she had become a "gamer" and the thrill was real.

Gamification is not just changing the way we live and interact with our nearby surroundings, but for organisations is becoming a key driver for engaging people in the workplace. Innovative organisations are already reaping the rewards and its evident that the future of the workplace will be influenced by gamification.

Traditionally, the workplace is the last place you should play games (yes, we're looking at you solitaire players). However, forward-thinking organisations have introduced table tennis or foosball for employees to relax, get away from work and socialise with colleagues. But imagine if you had to play games to get work done? The term "work hard, play harder" would gain a whole new meaning.

WHAT IS GAMIFICATION?

Gamification is the application of game-like elements such as points, leaderboards and badges to engage and motivate people to reach a specific goal. The concept is not new – think frequent flyer programs and loyalty cards. However, gamification in the workplace is a fairly recent concept. As such, organisations are only just getting the ball rolling. The advancements of mobile, social and location based tech services have been key drivers in the rise of Gamification, yet Gartner also highlights research that shows 43% believe this is just a trend.



WE'RE CONSTANTLY REMINDED OF THE CHALLENGES ORGANISATIONS FACE WITH ENGAGING EMPLOYEES, HARNESSING COLLABORATION, AND INCREASING PRODUCTIVITY, ALL WHILE PROMOTING WELLBEING. WITH THAT BEING SAID, IT'S FAR FROM GAME-OVER FOR GAMIFICATION.

EMPLOYEE ENGAGEMENT

What is an engaged employee?
An engaged employee, is one that typically goes the extra mile for their organisation. As Forbes notes, "When employees care – when they are engaged – they use discretionary effort." Walmart uses gamification to engage employees through their training process creating competition among employees while in turn increasing engagement and as well as an emotional aspect to training. Engaged employees are seen as aspirational and "in the know."

PRODUCTIVITY

Gamification also increases an organisation's key performance metrics. T-Mobile leveraged Bunchball, a cloud-based software and gamification company to develop "T-Community," a game that encourages employees to collaborate on new products and services. Employees gamed their way by sharing knowledge and increased T-Mobile's customer satisfaction scores by 31%.

THE MILLENNIAL PERENNIAL GAMER WILL MAKE UP 75% OF THE WORKFORCE BY 2025, YET THEY ARE THE MOST DISENGAGED GROUP AT WORK.

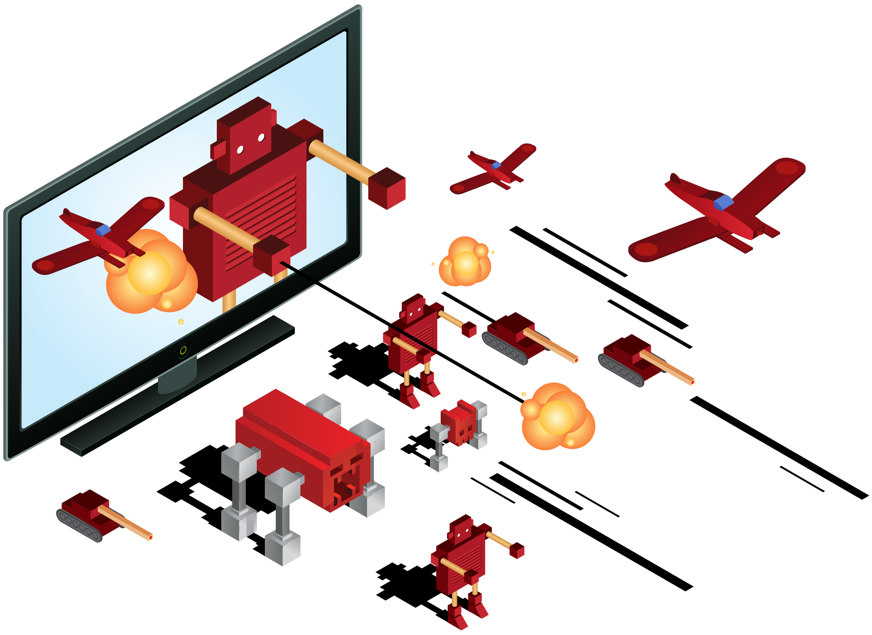
COLLABORATION

Microsoft uses gamification to improve the testing phase of their products. Through this, they developed a game which harnessed collective intelligence to identify faults and therefore, feedback. Users received badges for finding bugs and the more badges employees received, the more Microsoft donated to charity. The inherent competitive nature to win resulted in increased awareness of employees with those who participated identifying 16x the amount of bugs then non-gamers.

GAMIFICATION PROVIDES A KEY SOURCE OF MOTIVATION WHERE FINANCIAL REWARD CANNOT REACH.

WELLBEING

The WELL building certification has cemented the fact that wellbeing is neither a fad nor a trend. Pfizer partnered with Keas, a wellness gamification company, which tracks participants' wellness tasks and ranks them publicly on a leader board. It groups employees into teams to drive competition and motivation and the results are fascinating - 82% of participants said it improved wellness with 77% of participants saying it increased collaboration.



GAME ON. WHY IS GAMIFICATION IMPORTANT?

Today's kids are no stranger to the world of gaming. The education sector is rapidly adopting gamification to make learning more engaging and relevant to the young generations. As a result, this is influencing the way people want and expect to work within the workplace now and in the years to come. Therefore, employers would be prudent to adopt these methods to ensure a smooth transition from education to the workplace. Gallup highlights that the millennial perennial gamer will make up 75% of the workforce by 2025, yet they are the most disengaged group at work. However it is not only millennials who are disengaged – in total, only 35.5% of people are engaged with their work.

KNOWLEDGE IS POWER, AND GAMIFICATION IS URGING PLATFORMS TO NOT ONLY SPEED UP THE LEARNING PROCESS BUT ENGAGE MORE PEOPLE TOWARD COMPLETING THEIR TRAINING.

Research shows that when people are carrying out a task, particularly one that is interesting or enjoyable, they are less motivated by financial reward.

This means that a virtual star – as counterintuitive as this sounds – could be a stronger incentive than a cash bonus.

Without going into the scientific details of dopamine, we know that winning makes us feel good. In fact, sometimes intrinsic rewards are more effective in motivating and engaging people. Intrinsic motivators might be individual achievement or aspirations, self-esteem, social respect and admiration, working towards common goals or simply having fun. Thus gamification provides a key source of motivation where financial reward (an extrinsic motivator) cannot reach.

WHAT DOES THE CRYSTAL BALL TELL US ABOUT THE FUTURE OF GAMIFICATION?

It's undeniable that technology will continue to play a significant role in the workplace. The advent of natural language, emotion detection software and hardware and augmented reality are becoming far more accessible. Augmented reality may allow us to create games where we are rewarded for completing mundane tasks efficiently and effectively. Soon, getting those invoices processed will be child's play.

Staff wellness is already on the agenda for many organisations, but gamification could continue to drive its prominence. As an organisation, you are no longer simply offering staff the choice to take part in wellness initiatives, but games actively encourage people to put their health and wellness first. Headspace, the increasingly popular meditation App, already offers team services to work towards wellbeing and incorporate a reward scheme.

The moderately slow speed of the adoption of gamification in business world has to do with the difficulty of creating an enjoyable game. You cannot just assign points for tasks, create a leader board and expect everyone will suddenly become extra-charged and motivated. It is critical to identify the challenges you wish to solve as well as the intrinsic motivators for your employees. The implementation is not easy, but results can be extraordinary.

One thing is sure, the corporate use of gamification will only increase, and it will make our jobs more satisfying and fun. Perhaps it is time to update the modern adage: don't hate the player and certainly don't hate the game.

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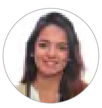

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Blockchain

THE BUILDING BLOCKS FOR A NEW WAY OF CONDUCTING BUSINESS

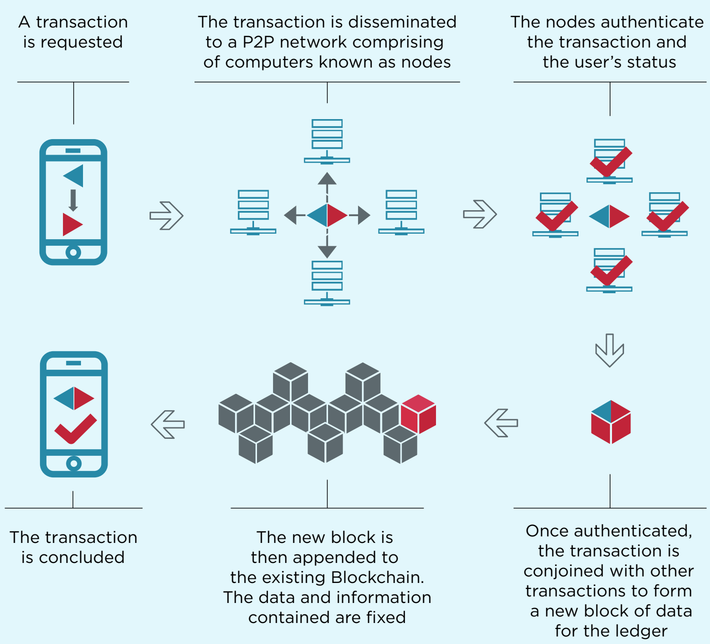
BY NOW, MOST OF YOU ARE FAMILIAR WITH THE TERM BLOCKCHAIN. YOU PROBABLY HEARD ABOUT IT IN REFERENCE TO THE DIGITAL CURRENCY BITCOIN, WHICH WAS ITS FIRST APPLICATION. BUT, DID YOU KNOW THAT BITCOIN IS ONLY ONE OF ABOUT 700 HUNDRED APPLICATIONS THAT USE THE BLOCKCHAIN OPERATING SYSTEM TODAY?

In fact, some of the world's largest banks, central banks, governments, universities and technology companies are working with blockchain as a future technology – and a whole host of possibilities are on the horizon for commercial real estate.

What is blockchain? How does it work?

A blockchain is a type of distributed ledger or decentralised database that supports and provides a constantly expanding inventory of records, termed blocks, which are fortified against alteration and adjustment. Each block possesses a timestamp and a link to a previously created block.

As it operates, a blockchain effectively serves as a public ledger for all transactions. Every user is able to link up to the network, post new transactions and authenticate transactions.



WHEN ADOPTED BY THE CRE INDUSTRY, BLOCKCHAIN TECHNOLOGY WILL MAKE LEASING, BUYING AND SELLING OF PROPERTY MUCH MORE INFORMED, FLUID AND EFFICIENT.

Picture a spreadsheet that is duplicated thousands of times across a network of computers. Then imagine that this network is designed to regularly update this spreadsheet and you have a basic understanding of the blockchain. Information held on a blockchain exists as a shared – and continually reconciled – database.

A dollar bill provides a good analogy for how blockchain technology works. If handed a dollar bill, you have no idea where that dollar bill has been or what it has purchased in the past. Blockchain can provide a history of where that dollar bill has been, what transactions it has been used in, and where and what it's been traded for to better identify its worth and value.

The Future of the CRE Industry

If adopted by commercial real estate, the potential impact of blockchain on industry processes and practices could be enormous. Just like that dollar bill, the blockchain could provide information regarding all buyers, sellers, title work, reporting, lease comps and vendor work on any individual commercial property. Having this information at your fingertips could cut out paperwork, enhance market transparency and shorten the speed to transact from days/weeks/months to minutes or seconds.

With the digitisation of smart real estate contracts, which have been designed to replace leases, blockchain could:

- Enable a commercial property to have a digital signature containing details, such as building, performance (including rental and occupancy rates) and legal information. This information could be accessed online by authorised parties in seconds.
- Allow for commercial real estate deals to transact in seconds rather than days, weeks or months.
- Better facilitate the commercial property sales and/or leasing payment process, once a deal has been concluded.

Not only will real estate transactions begin to resemble the buying and selling of stocks/commodities with blockchain, but properties in bustling areas could change hands many times a year, many times a month, or even many times a week, depending on the strategy.

In addition, as publicly-accessible ledgers, blockchains can make all kinds of record-keeping more efficient. Property titles are a case in point. They tend to be susceptible to fraud, as well as costly and labour intensive to administer.

To this end, a number of countries are undertaking blockchain-based land registry projects. For example, in Sweden, the government land registry is already testing all land titles and transfers on blockchain. It aims to make property purchases quicker, cheaper and more secure by holding all title information digitally and enabling virtual transactions.

TAKING ACTION

Let's take a look at how a smart commercial office leasing contract can be established and executed between a commercial office property owner and a commercial office occupier using blockchain.

1. Smart contract is established: The commercial office property owner commences the smart contract process by including all relevant leasing conditions, such as details on the commercial office property and the lease, including the rental charge, property management fee, payment frequency and reinstatement particulars. Once completed, the occupier is informed and reviews the lease's conditions.

2. Agreement of terms: Once satisfied, the occupier agrees to the conditions by digitally signing the smart contract using a digital key that denotes his or her identity. The property owner also digitally signs the contract, which then turns into a legally binding digital smart contract disseminated on the blockchain.

3. Execution of contract: If a jurisdiction does not have a public body that operates and manages these types of accounts, then for the smart contract to be triggered, the occupier will be required to place a stated amount of money into a secure promissory account.

4. Withdrawal of funds: At every stated payment period, the smart contract then digitally withdraws funds from the promissory account. At that time, the money is immediately deposited into the property owner's account.

5. Termination of contract: When the smart contract expires, any residual money in the promissory account is distributed digitally to the occupier's account as well as the owner's account. The distributed money is governed by what was agreed upon by both parties in the smart contract in relation to the leasing terms surrounding lease termination.

Structuring this transaction as a smart contract ensures that the transfer occurs as soon as funds are received, and results in a publicly available, verifiable record of the transfer. Because the contract automatically performs based upon the predetermined rules agreed to by the parties to the contract, there is little risk of fraud, and virtually no need for external measures or 'middlemen' to enforce performance of the agreement.

These truly are the building blocks for a whole new way of conducting commercial real estate business.

Blocking the Blockchain: Challenges to Overcome

As with any new technology, there are often challenges that come with it. As it relates specifically to the commercial real estate industry, there are three main obstacles to implementing blockchain:

Application issues – Weak application can arise from: a lack of understanding of the technology; a rushed rollout where the system hasn't been fully tested; and lack of full buy-in by the commercial property sector.

Legal matters – There may be some legal obstacles to smart real estate contract acceptance. For these contracts to work from a legal standpoint, legal authorities need to regard them in the same manner as they regard conventional real estate contracts.

Industry conservatism – The commercial real estate industry tends to be more conservative in nature – especially when it comes to the implementation of new technology. As a result, the adoption of blockchain may take longer than desired.

The Future is Now: Time to Prepare

There's no doubt about it – blockchain is altering the world as we know it. When adopted by the CRE industry, the technology will make the leasing, buying and selling of property much more informed, fluid and efficient. Not only will data from a target property be quickly gathered, but it will also be easily combined with other macro-economic data in real time to enable swift and informed leasing or investment sales decisions.

Additionally, given the right circumstances, ownership of certain commercial properties could become much more transient with blockchain, allowing for multiple transactions of a property to occur within a year, effectively making the property a much more liquid asset.

Blockchain may not happen overnight within the commercial real estate industry, but it's an inevitable reality and we need to prepare for it. The more informed we all are, the sooner we will be able to realise the cost savings, efficiencies and conveniences this innovative technology can offer.

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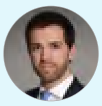

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Checkmate. The Amenities Game: Occupiers vs. Landlords

Globally, occupiers and landlords are responding to game changing developments in technology, economics and demographics. You can think of the relationship as a game of chess; going back and forth, each decision tied to the next. Let's take a look at how it plays out and where tactics can be improved.

First of all, what are the player's goals for the game? Landlords want occupants that bring value to their rent roll. In terms of occupiers, they recognise the value of their people and attracting and retaining talent as key to achieving business success.

Landlords parry with amenities to differentiate their offering and lure the most valuable occupiers, the biggest, the most credit-worthy, the magnets and influencers who draw the attention of others and in turn help increase the value of their buildings. Occupiers are drawn by an appealing work environment as a positive influencer for their current and future workforce.

It sounds like providing amenities is a winning strategy for both players, but recent research of Cushman & Wakefield finds conflict between what occupiers want and what landlords think occupiers want.[1]

We found that most tenants identified cost as the most important factor, followed by location. Amenity factors, such as natural light and end of trip facilities were rated highly by occupiers along with large floor plates that can accommodate flexible fitouts. Despite this evident preference, landlords believed that customer perception of the building and services were more important.

What do you consider are important to tenants?

	Occupiers	Landlords
Cost	✓	✓
Proximity to public transport	✓	✓
Flexible fitout	✓	✓
Floor plate size	✓	✓
Customer perception	✗	✓
Interconnecting stairs	✓	✗
Flexibility	✓	✗
Concierge services	✗	✗
Car parking	✗	✗
Sustainability	✗	✗

[1] Cushman & Wakefield (2017), OFFICE LEASING, Trends and Outlook

LANDLORD STRATEGIES: ‘WELCOME TO THE CONCOURSE LEVEL’

Landlords are making the most of new developments which have the luxury of a clean slate and premium pricing.

- They’re incorporating interesting amenities: expansive roof decks and gardens, open air atria, clubs on elevator transfer floors, secure elevators and lobbies for anchor tenants, parking privileges and accommodations for drivers and cyclists.
- Amenities provide for the types of tenants they seek to attract: collaboration spaces and fitness centres for tech companies, chauffeur lounges and private fine dining experiences for hedge funds.
- Buildings now incorporate sustainable design principles and separate metering to help offset operating costs for each tenant.

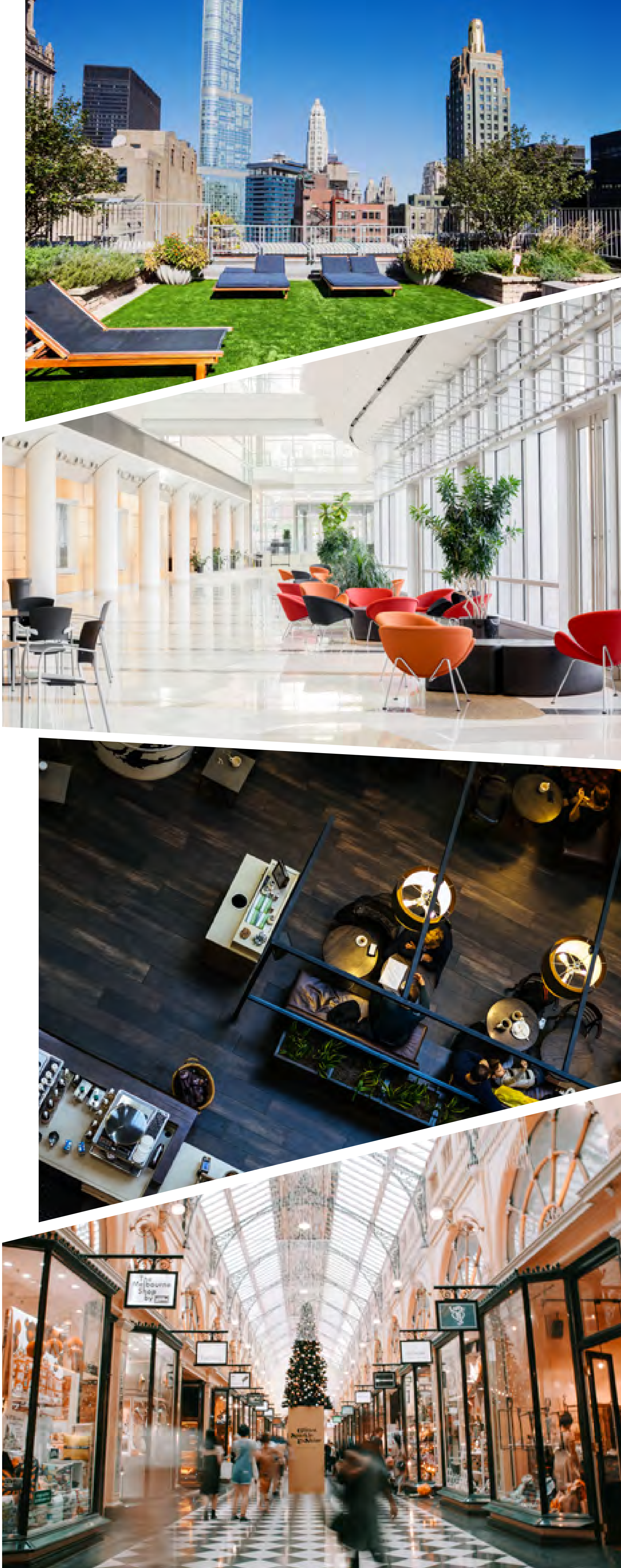
All this comes with some of the highest rents ever. Across the world, this trend is strengthening with significant amenities provided in new high rise towers everywhere.

As an occupier, however, it is still possible to benefit from access to these experience-rich environments without paying the premiums to be in a new building.

Globally, landlords are re-positioning older assets with large capital improvement programs, adding amenities to attract tenants and become more competitive. They realise they can fulfil the need for higher quality work environments that tenants are demanding.

By renovating existing buildings and unused spaces such as transfer floors, interior retail spaces and narrow floorplates, landlords can turn their Achilles heel into market leading tenant amenities. To that point, there is a rise of tenant-lounges with artisanal coffee baristas, boutique hotel-style lounge seating, co-working, meeting and collaboration spaces. You say basement, landlords say, "Welcome to the Concourse Level."

A good example in London is the redevelopment of Battersea Power Station, a decommissioned coal-fired power station, into a multifunctional mixed-use work/live space.



THE OCCUPIER VIEW POINT

Occupiers focus on curating the experience of their employees, which includes where they work. Those companies focused on cost are looking for ways to provide a great work environment without having to pay for it entirely themselves.

Previously, just being downtown, proximate to public transit was sufficient, but now that employers are expected to offer so much more, the stakes are rising. Occupiers are interested in food quality and variety; wellness, and access to the outdoors and exercise options; and collaboration created through community spaces where people intersect.

They want places where their people will linger and remain connected to the organisation and each other in meaningful ways.

Instead of creating suburban campuses with in-house facilities, which is cost prohibitive, they can find high quality amenities in existing buildings located downtown.

The motives of occupiers and landlords create a positive tension which has driven an emerging and significant trend in the corporate office market: amenity-laden high-rise towers in the downtown core.

What we used to only see in corporate campuses, we are now seeing in large office buildings nestled together in our CBDs. This move to city centres is borne out by recent research of occupiers needs.

We're watching closely as the differing interests of landlords and tenants continue to converge.

Checkmate.

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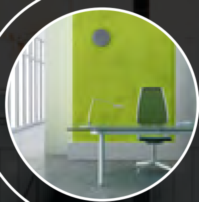
TRENDS

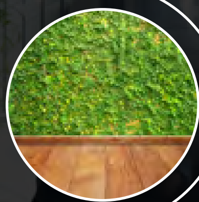
Landlord provided amenities: some provided exclusively for tenants especially when the building can support thousands of occupants and others available to both the tenants and the public, creating vital and energetic community spaces. These include:

Fine dining restaurants branded by star-chefs.

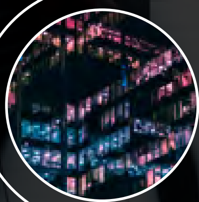
Aggregated tenant-convenience services to elevate tenant wellness such as fitness management companies, etc.



Information bars & concierges that add a residential or boutique hotel-like feel to the corporate environment.



Outdoor spaces: rooftop gardens, internal atria, green walls, podium decks converted to gardens.



Aggregation of multiple amenities into one integrated, branded ‘club.’

Destination marketing as a value-add: maintaining a heritage building onsite and converting it to a food hall, creating an outdoor concert/event forum for performance; viewing platforms and tourist attractions: all features that position the building as a destination.

The EdTech Revolution

FinTech was all the rage since it started gaining traction and recognition in early 2016. With all the hype surrounding it this past year – there's been talk that a "FinTech bubble" has been created. Is that the case? If so, is it about to burst?

Unlike the ups and downs of FinTech and the financial markets, EdTech – the use of technology in the form of products, apps and tools to enhance learning – remains constant.

> *Edtech is poised to be the biggest and possibly most profitable digitalised sector yet.*

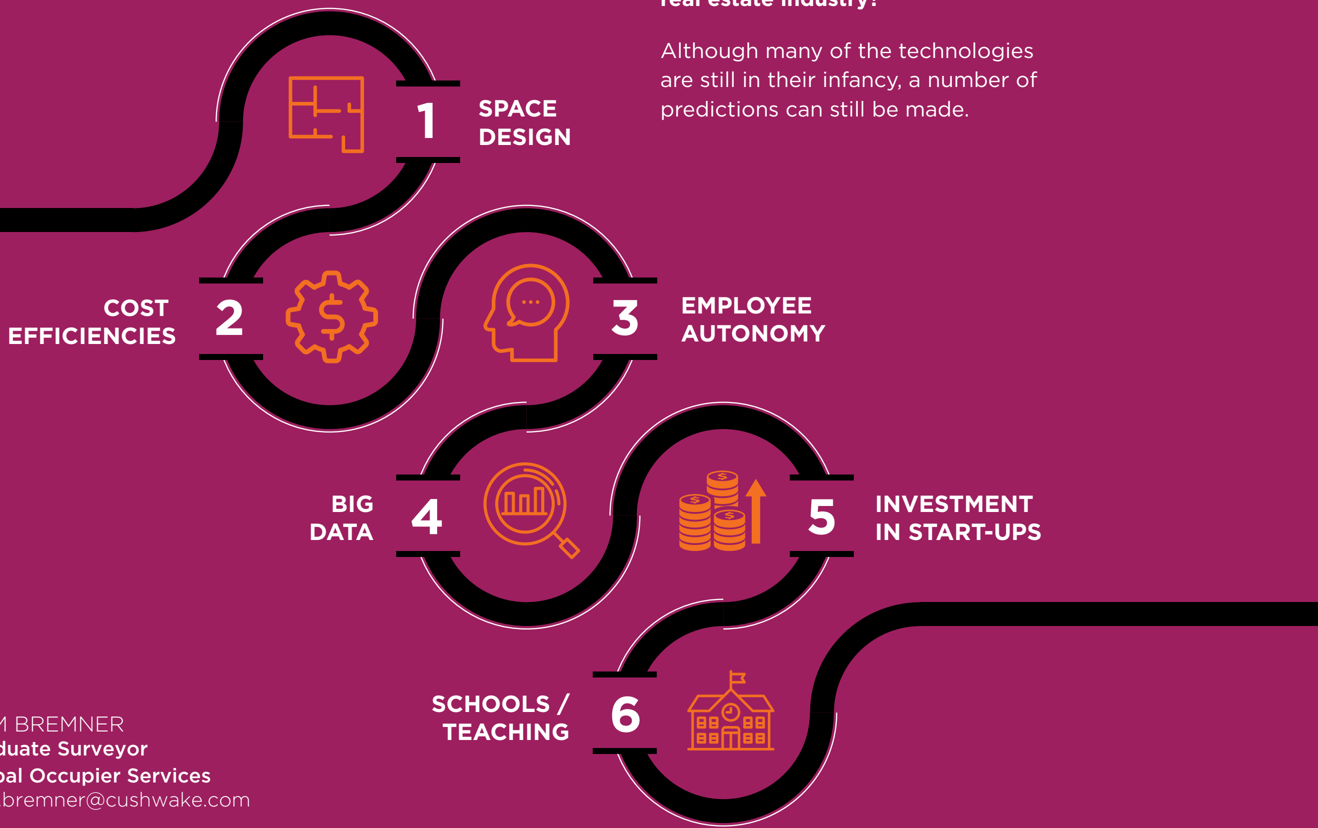
The education field is large, yet EdTech has been completely overshadowed ... until now.

EdTech, "the use of technology in the form of products, apps, and tools to enhance learning" encapsulates a wide spectrum of technologies that can be utilised in the process of education and training – from the simple use of desktop computers to the more cutting-edge use of virtual reality, artificial intelligence automation, and gamification.

The rise of this new-age education and learning world has begun receiving investments and is predicted to reach $252 billion globally by 2020. The tangible benefits associated with the utilisation of these cutting-edge technologies in the education process are causing the EdTech industry to boom, and the large investments are proof.

The million-dollar question for real estate professionals: How will the boom of EdTech impact the corporate real estate industry?

Although many of the technologies are still in their infancy, a number of predictions can still be made.



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Space design is likely to change

Since the turn of the millennium there has been an increase in both the number and type of mobile devices used by office workers within the workplace (laptops, phones, tablets, etc.). As the EdTech sector becomes more refined, workplace training is increasingly being undertaken on all of these devices, whether the employee in question is in or out of the office. This rise in asynchronous learning is likely to impact the design of the workspace, with a 'decentralised' co-working style of office layout likely to be preferred by corporate occupiers and their employees.

Corporate Real Estate occupiers will experience cost efficiencies

As virtual 'e-learning' methods (MOOCs, gamification, A.I., Virtual Reality etc.) are increasingly being adopted for workplace training, as well as being utilised on multiple mobile devices, there is no longer a requirement for bricks and mortar training rooms and in-house 'training staff.' This is likely to provide substantial cost saving opportunities for corporate occupiers in regards to both their real estate and human resource management.

Employees will experience increased autonomy over job-related training

EdTech provides employees the opportunity to personalise their workplace training. Learning/training in the workplace can now be tailored to an employee's preferred learning style in addition to their job position and rank. For example, if the employee is an interactive learner they can choose to 'gamify' their training, whilst they also have the option to choose the pace of their learning. However, most importantly the technology available to corporate firms allow their employees to choose the nature of their training in terms of content/topic, and with this power to effectively 'guide' their own training employees themselves have greater control over the future direction of their careers. The increased autonomy over workplace training will be a key factor in increasing employee satisfaction.

How will the growth of EdTech impact the Corporate Real Estate Industry?

Impact on schools/teaching

Craig Cassell, a Cushman & Wakefield specialist who works with education-sector clients, is observing the profound impact Edtech has had on schools and universities. He has seen EdTech provide the leading innovations in content, curriculum and platform delivery to students, all of which is helping students better prepare themselves for the workforce. Although the impact of EdTech on real estate belonging to educational institutions remains nominal, in as little as five years traditional lecture halls could be non-existent. Schools and universities will have to learn and adapt to successfully negotiate these changes.

Increased investment into EdTech business start-ups

EdTech start-up firms are proving to be a safe investment due to the fact that the education market, unlike the financial markets, are sheltered from many of the pressures associated with the broader economic/political landscape. As a result, we are likely to see a mirroring of the FinTech start-up phenomenon, with plenty of EdTech firms securing investment and seeking to acquire office space in the 'tech districts' of major global cities.

Opportunities to create value by interpreting big data

EdTech provides occupiers with greater access to (and more accurate analysis of) data associated with the achievements, progress and nature of their employees training. This allows them to adapt/influence the training of particular employees if knowledge gaps are identified. Companies will also be able to utilise learning data to benchmark employees against a number of criteria. In addition, EdTech could provide opportunities to engage with the Strategic Consulting teams – e.g. when undertaking locational analysis, it would be theoretically possible to identify where the best talent is based geographically based on their use of technologies in the education process.

Is it just the new buzz word or something that demands attention?

EdTech is something that demands attention – it is not replacing the educational process but rather the use of technology to enhance the delivery of this process. The concept is strongly linked with the rise in Fintech (use of technology in banking services) as like Fintech, EdTech reveals modern societies' demand for innovation and digital services – like all aspects of our life (healthcare, fashion, etc.) we want things to be made easier, more accessible and instantaneous. Nothing is left untouched by the current digital revolution.

What's Going On? Trends Shaping Our World

REAL ESTATES' WORTH IS DERIVED FROM THE NEED TO WORK, SHOP AND LIVE. POPULATION SIZE, GROWTH AND WEALTH ARE THE FUNDAMENTAL DRIVERS BEHIND GDP. WE ARE WITNESSING FUNDAMENTAL CHANGES TO THE DEMOGRAPHICS THAT DRIVE GDP GROWTH AND THE DEMAND FOR REAL ESTATE ON A GLOBAL SCALE.

THE RAPID RISE OF CITIES

In Asia and Latin America, we have seen the rapid growth of cities as people have migrated from rural areas into urban areas with more opportunities and wealth. We are seeing many super-cities with enormous populations emerging, but without the infrastructure of the more developed cities. Anybody who has witnessed the apparent chaos of some of the faster growing super cities such as Dhaka in Bangladesh, Karachi in Pakistan or Lagos in Nigeria, will surely wonder how these cities cope without the basic infrastructure that sustains developed cities.

Up until recently, we have seen a counter-urbanisation in the more developed countries of The U.S. and Europe. The increase in car ownership over the last 50 years meant that people could choose to live further away from the city centre and away from its crime and congestion. Business parks sprung up in peripheral locations to ease the commute for employees and benefit from lower cost locations. However, in the last five years, this latter trend has reversed. Younger people, in particular, have preferred to live in the city and businesses, eager to attract this talent, have followed them back to the Central Business District.

This means we are seeing cities like London, Paris, New York, Los Angles and Houston growing in population. London is forecast to growth by 2.5m between now and 2031, a phenomenal growth of 16% when it has been static for many years. This has also been driven by a recognition that cities are economically and environmentally more sustainable than mass suburban sprawls. There is a lot of research about the wellbeing and health benefits of cities where people walk and cycle compared to a car-dependent population. Many European cities such as Copenhagen are leading the way in creating truly sustainable and healthy places to work, shop and live.

	2025				
	Growth (2020 - 2025)	Population (millions)	Rank (2015)	Rank (2020)	Overall Rank
Tokyo	-0.23%	37.88	1	1	1
Delhi	2.18%	32.73	2	2	2
Shanghai	1.63%	29.44	3	3	3
Beijing	1.81%	26.49	7	4	4
Mumbai	1.97%	25.21	5	5	5
Dhaka	2.96%	24.33	11	8	6
Mexico City	0.94%	22.92	6	7	7
Sao Paulo	0.69%	22.90	4	6	8
Cairo	1.73%	22.43	9	9	9
Karachi	2.70%	22.01	12	11	10
Osaka	-0.17%	20.35	8	10	11
Lagos	4.28%	20.03	17	13	12
New York	0.55%	19.31	10	12	13
Calcutta	1.89%	17.28	14	15	14
Kinshasa	3.62%	16.92	23	19	15

Table 1: World's largest cities and growth rates over next five years

MOVING BY THE MILLIONS

Migration is arguably the most politically important topic in many of the developed countries in the world. Scenes of refugees risking their lives crossing the Mediterranean as they seek asylum in Europe from the Middle East and Africa are common features on our television news stories. Similar stories happening in Asia where The United Nations Refugee Agency estimates there are 3.5m people seeking asylum largely from Afghanistan and Myanmar. Economic migration into Europe, and within Europe, across Asia and into the United States is an even bigger factor, and driving some of the political shocks of 2016, notably Brexit and the election of Donald Trump.

The number of people living outside of their home country in 2015 due to economic migration was 243m people (3.3% of the world's population), whilst refugees accounted for less than 20m. In 2015, two-thirds (67%) of all international migrants were living in just 20 countries. The largest number of international migrants (47m) resides in The United States of America, equal to about a fifth (19%) of the world's total. Germany and the Russian Federation host the second and third largest numbers of migrants worldwide (12m each), followed by Saudi Arabia (10m) and The United Kingdom (nearly nine million).

	International migrant stock at mid-year		
	2010	2015	Change Between (2010-2015)
World	221,714,243	243,700,236	9.9%
Developed regions	132,560,325	140,481,955	6.0%
Developing regions	89,153,918	103,218,281	15.8%
Africa	16,840,014	20,649,557	22.6%
Asia	65,914,319	75,081,125	13.9%
Europe	72,374,755	76,145,954	5.2%
Latin America and the Caribbean	8,238,795	9,233,989	12.1%
Central America	1,749,940	2,040,151	16.6%
South America	5,143,123	5,826,431	13.3%
North America	51,220,996	54,488,725	6.4%
Oceania	7,125,364	8,100,886	13.7%

Table 2: International Migration

ON THE DECLINE: OUR WORLD IN DATA

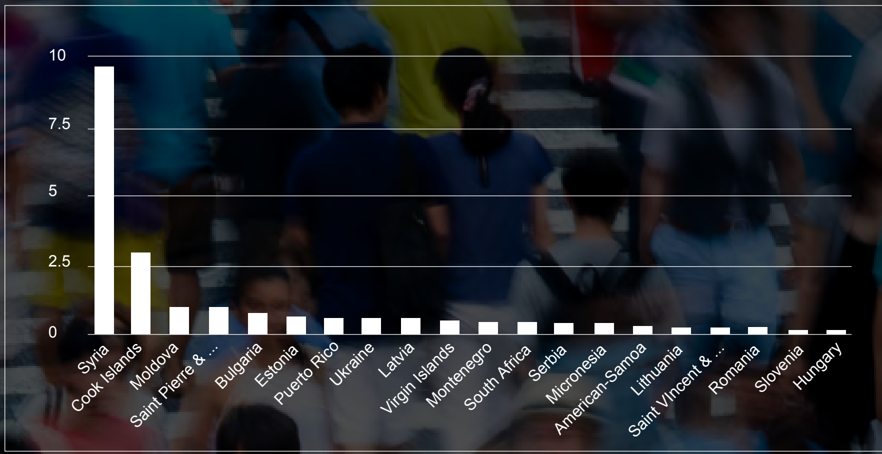
Economic migration, as well as urbanisation, are resulting in significant depopulation in rural areas in some countries, and to such an extent that some states are seeing a significant national decline in population. The causes of Syria's decline are obvious, but we are also seeing very significant population declines in many countries in Eastern Europe, the Caribbean and Pacific driven largely by migration.

However, perhaps the bigger global change and impact on economic sustainability and real estate, is the declining birth rate in many larger developed countries. The extent of this significant drop has the potential to stall long-term global economic growth and cause major issues in countries with low birth rates. To be at a sustainable level a country typically needs two children per woman. Of the G7 economies three countries are significantly below this level – Germany, Italy and Japan all at 1.4. Canada is only at 1.6 whilst the other three G7 economies do have more sustainable levels but are in gradual decline – UK (1.9), U.S. (1.9) and France (2.1).

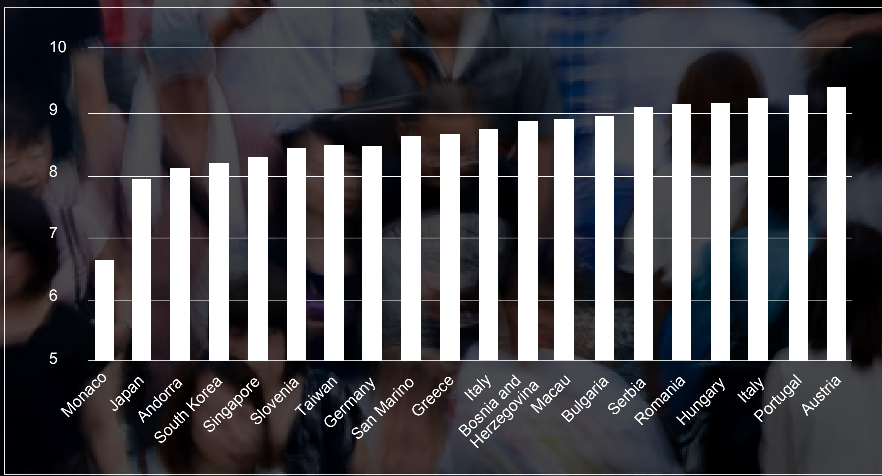
The impact on the Global economy is reinforced in table 3 which shows population growth for G7 countries. This shows that Japan, Germany and Italy are all showing declining populations. Given the strong correlation of population with economic growth this is indeed concerning.

There are various reasons why birth-rates drive population decline. These are widely debated and range from cultural, economic and social perspectives.

> The Federal Statistics Office expects that Germany will have 8 to 13 million fewer inhabitants by 2060.



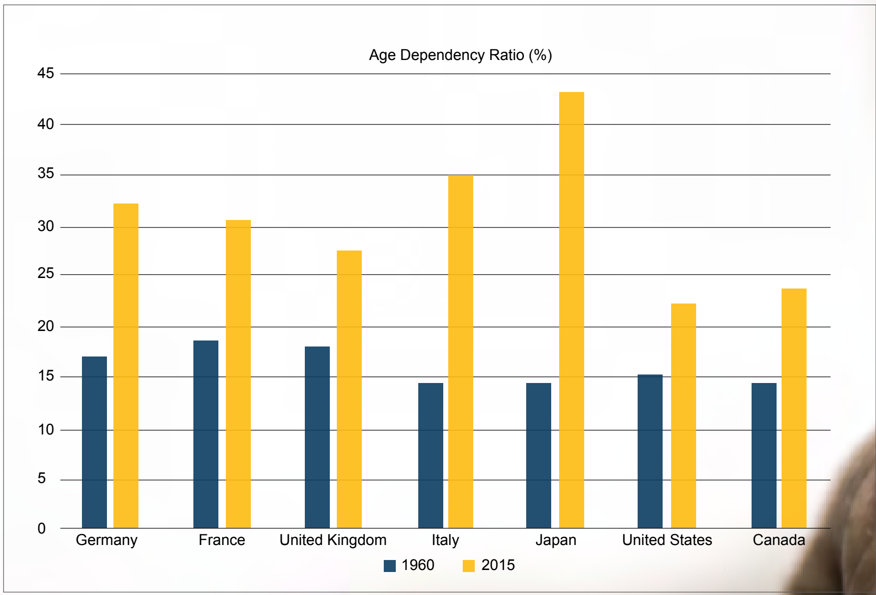
Graph 1: Annual percentage decline in population



Graph 2: Lowest birth rates per 1,000 people by country globally

	Total Population (thousands)		
	2015	2020	Change
World	7,324,782	7,716,749	5.35%
G7 Countries	399,349	400,819	0.37%
Canada	35, 871	37,612	4.85%
France	64,983	66,570	2.44%
Germany	82,562	81,881	-0.82%
Italy	61,142	61,386	0.40%
Japan	126,818	125,382	-1.13%
United Kingdom	63,844	65,600	2.75%
United States	325,128	337,983	3.95%

Table 3: Population growth 2015-20 (Source: United Nations)



Graph 3: Changes in Age Dependency 1960-2015 of G7 Economies (elderly people as % of working population)

AN AGING WORLD

All the G-7 countries are also facing increasing age dependency ratios – the number of elderly people that need to be sustained by the wealth generated by the working population. Since the 1960s, there have been very large increases in dependency. This will be made significantly worse in Japan, Germany and Italy as their low birth rates results in a reduced working population in the medium term.

International migrants tend to include a larger proportion of working-aged persons compared to the overall population. Positive net migration can contribute to reducing old-age dependency ratios as well as driving up birth rate. However, international migration cannot reverse, or halt, the long-term trend towards an aging population. Even if current migration patterns continue, all major areas are projected to have significantly higher old-age dependency ratios in 2050.

The population implosion risks for Germany, Japan and Italy, as well as many smaller developed countries, are significant. Together with increasing old-age dependency ratios in all G7 countries raises many fundamental questions, especially at a time of low growth and high debt.

- Can standards of living be sustained in societies where the labour force shrinks in the wake of an aging population? How can this be achieved at a time of unprecedented debt burdens?
- Is a debt-driven economic model sustainable in the long run in a zero-growth economy?
- Can increased immigration and/or workforce expansion alleviate the problems?
- How will industries adjust to fewer and older consumers with different needs and demands?
- Will social security funding be sustainable?
- Can a new equilibrium between working and retired people be found?

These fundamental questions will impact where and how we work, shop and live in the future, and the associated real estate needed to facilitate this.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All Eyes, Ears (and Sensors) on You

SMART BUILDINGS. YOU MAY HAVE HEARD THIS PHRASE REPEATEDLY, BUT WHAT DOES IT ACTUALLY MEAN?

Does the building think? Is it intelligent? Can it talk to us? In short, yes. It communicates to us in the only language it knows, data. With advancements in technology, particularly with the Internet of Things (IoT) and sensors, we are seeing vast amounts of data produced at a rapid pace.

A building becomes ‘smart’ when you use that data to make strategic decisions around efficiency, quality and productivity – we need to define these corporate drivers into more meaningful, relatable examples – otherwise they risk being corporate catchphrases.

Gone are the days of measuring occupancy, the new buzzword is utilisation. Based on data gathered by Cushman & Wakefield, physical spaces are the second-largest corporate cost but shockingly are less than 45% utilised. With statistics like these, it is imperative we monitor our portfolio and increase the utilisation to minimise costs, with enhanced user experience being the catalyst.

So how can sensors help? We want speed, we want live feedback, insight, learning and we want instant adaptation. Here are four ways sensors will help us achieve that.

1 Responsiveness

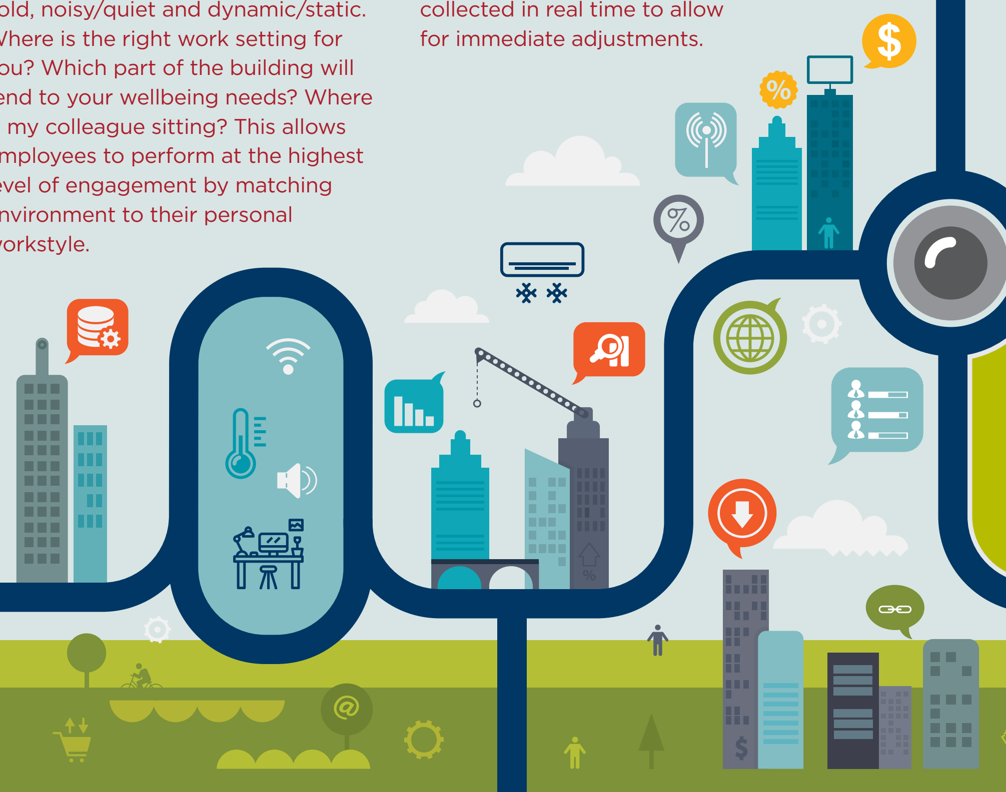
Workplace technologies, or sensors, allow space changes to happen quicker and more frequent. This allows the often static workplace to respond to people’s needs in a more flexible way. Imagine a scenario where you can physically see on an app or kiosk which part of the building is hot/cold, noisy/quiet and dynamic/static. Where is the right work setting for you? Which part of the building will tend to your wellbeing needs? Where is my colleague sitting? This allows employees to perform at the highest level of engagement by matching environment to their personal workstyle.

2 Proactive Management of Space

Coupled with predictive analytics, proactive management of space allows property teams to gain meaningful insight and make data driven decisions around their workplace – i.e. Department X will run out of space in two months, floor X is nearing peak capacity, neighbourhood X is too loud. Data is collected in real time to allow for immediate adjustments.

3 Curated Experiences

As machine learning collects these data streams and sensor data, it can begin to make predictions and recommendations, curating employee experiences. The future of implementing a digital workplace approach is that people will receive curated recommendations based on their profiles and preferences.



4 User Experience

Live workplace data can be displayed on kiosks or mobile apps to show the availability of work settings throughout the workplace. Often the greatest detractor from people's productivity can be the cost of search, or in other words, the time spent locating or confirming the availability of an appropriate work setting. Data can be used to challenge and question perceptions, understand why certain trends are appearing, while reducing the friction and adding value to the experience. Sensors and a workplace app can also be integrated with cafeteria payment system, access control and environmental settings (temperature, light, music) to create a truly unique user-experience.

SENSORS TO THE RESCUE

Working too long and losing focus? Don't worry, you will be sent a notification to have a break. Relax, take a walk, stretch. Based on a study by Draugiem Group, it is recommended that optimal work/break ratio would be 52 minutes of work and a 17-minute break.

Cannot find a large-sized conference room for your weekly team meetings because someone is having a two-person meeting in that room? Don't worry, sensors such as access control along with mobile Wi-Fi triangulation will be able to detect if the person who booked the room is in the building or not, thus releasing the space if required. Imagine instant room booking by simply just walking in. Through data we can also learn the habits of team meeting attendance, and recommend alternative spaces in order to use the space efficiently.

Germ sensors on alert? Something in the air? Don't worry, thermal imaging cameras will detect and inform people if they have a fever and advise them to go to a doctor or work from home. It reduces chances of infecting other colleagues and prevents people underestimating their symptoms.

Where has the printer moved to? Where is a stapler? Don't worry, by using Bluetooth stickers on equipment and worksettings in parallel with beacons, you can track it all on a phone app or kiosk. It will be easy to do a live inventory of assets and furniture; a simple scan of what's in the office and you will get a report with the list of computers, monitors, furniture and other equipment owned by the company.

Where is my colleague? How are the teams collaborating? Don't worry, sociometric sensors are wearables that understand posture and movement, conversation flow, speaking time, voice tone, speed of speech, cortisol level based on tone of voice, speech volume and etc. Each badge contains a microphone, infrared, accelerometer, and a Bluetooth connection. This opt-in system allows you to understand the physical interactions of workers. By recommending a few changes in how the social network of the company worked, Sociometric was able to increase sales by 11% in a business that had flat growth. Understanding individual and group performance can lead to significant returns.

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Ready. Set. Go.

TAKE THE WORKPLACE PERFORMANCE SURVEY

Employees are seeking organisations with office space that makes them want to come to work. After all, it's no secret that productive workspace influences employees wellbeing, creativity and engagement. So you must ask yourself, does the purpose of my workspace work for me? If the answer is no, keep reading.

1 ASSESS YOUR FITNESS LEVEL

Starting a workplace fitness program is an important decision. With proper planning, it's an investment that is measurable and meaningful impact on your people. Our experts created a five step fitness program that allows you to assess, set, choose and analyse your workplace fitness experience.

The workplace performance survey identifies the top seven features of the corporate workplace that enable an enterprise to attract and engage their people and outperform the market. The online survey gives you the opportunity to assess your current performance against seven key workplace fitness factors – privacy, amenity, technology, interactivity, adaptability, flexibility and identity.

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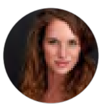

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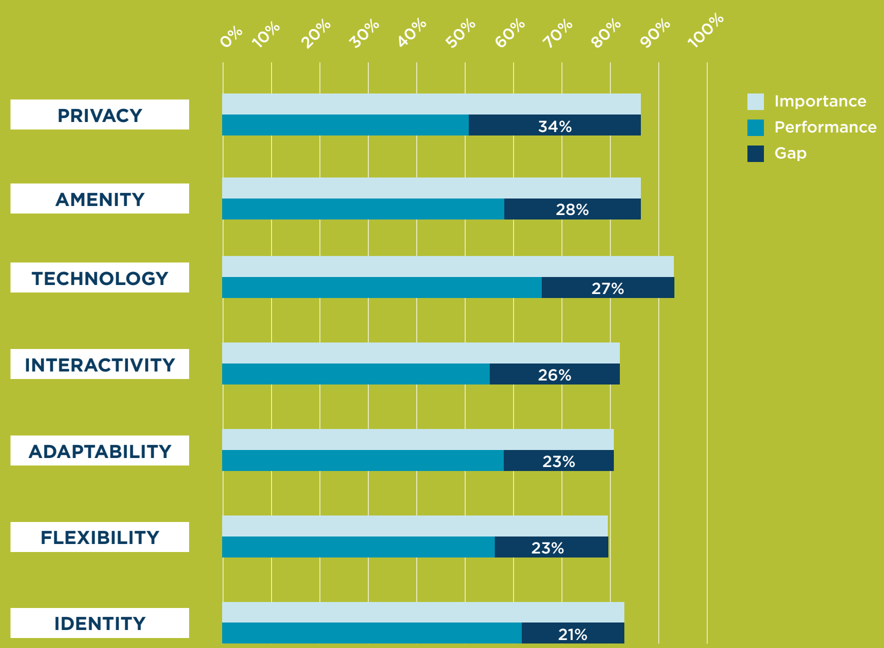
TOP SEVEN WORKPLACE PERFORMANCE FILTERS



By measuring the relative importance and performance of workplace features before each project we can list the top factors that determine the fitness of a workplace. We have analysed data gathered from more than 5,000 people working in corporate offices who have undertaken our Workplace Fitness Test survey in the past 15 years. The results for the top seven Fitness Factors are shown in the graph, ranked by the average workplace performance gaps.

2 SET YOUR FITNESS GOALS

After the baseline is assessed, set your goals next. To reduce the workplace performance gaps that matter to you, focus on the activities with the highest impact. Based on more than 15 years of experience we have determined the key activity affected by each Fitness Factor, and the impact it can have on behaviour and performance.

Fitness Factor	Activity	Impact	Importance	Performance	Gap
Privacy	Concentration	Productivity	86%	51%	34%
Amenity	Environment	Comfort, wellbeing	87%	58%	28%
Technology	Information sharing	Connectivity mobility	93%	66%	27%
Interactivity	Collaboration	Creativity, innovation	81%	56%	26%
Adaptability	Work mode choice	Variety, ergonomy	81%	58%	23%
Flexibility	Growth and change	Future-proof	79%	57%	23%
Identity	Branding	Culture, pride	83%	62%	21%

3 CHOOSE YOUR EXERCISES

YOU NEED TO CONCENTRATE ON THE ACTIVITIES AND BEHAVIOURS THAT WILL HELP YOU TO REACH YOUR GOALS.

Consultation, observation, brainstorming, utilisation and activity studies will diagnose the unique features of your enterprise, both strengths and weaknesses, that can be enhanced with the right intervention in the workplace.

Privacy is consistently rated as the largest gap in workplace performance. Concentration is the activity we need to facilitate by improving privacy, which has a direct impact on productivity. Activity studies show that the typical open plan workpoint does not provide the acoustic and physical isolation needed for highly productive focused work. Frequent disruption is observed due to the activities of other occupants, yet there is typically no alternative setting to work in. A high performance workplace has work settings that enable more focused, individual work.

Amenity is a factor of occupant comfort, with a direct impact on productivity. Research on indoor environments shows that the quality of air, light and sound has a high impact on mental and physical function and wellbeing. Unwanted noise, glare and thermal discomfort are very disruptive to productivity. This factor is the source of most complaints to building managers and so the performance gap in most buildings is high. Any improvement in the quality of this environment has a big impact on satisfaction.

Technology that supports knowledge sharing and connectivity is the most important factor in workplace performance. Most existing workplaces also perform poorly in this criteria, partly because information technology is rapidly advancing. Mobile devices and applications have enabled high mobility and continuous remote access to networks and data, raising expectations of workplace infrastructure. This rapid obsolescence can be overcome by wireless networks and policies such as "bring your own device," with evident security risks. As these tools help people to be more connected and yet mobile, occupants now expect seamless connectivity between work settings with universal docking stations, multiple screens and fully integrated AV systems in meeting and collaboration spaces.

Interactivity of workspaces encourage interaction, socialisation and collaboration. These activities often conflict with privacy in an open plan office resulting in a high performance gap.

Research has shown a clear link between high levels of social, collaborative and learning behaviours with high levels of enterprise performance. Interactive space allows people to easily and efficiently switch between a variety of work modes which helps them be more productive and creative.

Adaptability is a factor that measures the ability of occupants to choose or adapt their workspace to the task at hand. People need to move easily and efficiently between a wide variety of work settings to help them work in ways which are more innovative and creative. Other features of an adaptable workplace are ergonomic furniture that adapts to a range of body types and postures (e.g. sit to stand desks). A versatile desktop or meeting room set up allows seamless movement from one work setting to another. Many studies show that personal control of the work environment is a key factor in occupant satisfaction and productivity.

Flexible office space is one that adapts easily to changing team structures and activities. A desirable feature is the ability to accommodate growth in headcount by adapting workspace to higher density at peak periods or over time, with minimal alteration to fitout. Flexible lease terms that permit expansion or contraction with low penalties, or provide access to additional meeting rooms, project space or co-working space are other cost effective ways to future proof your workplace.

Identity of the workplace has a major impact on culture and pride. Branding and signage are essential for identity yet a leading workplace is one even without seeing a logo, people can understand who the occupants are and what they do. This feature is defined as a "synecdoche," where each part of the design helps to represent the whole. For example, if the public space within the workplace is a library, that is a powerful symbol to express how highly the enterprise values knowledge, continuously learning and creating things.

4 SWEAT YOUR SPACE

With a fitness program in place, the hard work starts. As the workplace fitness program progresses, the goals identified in the planning stage enables your employees to perform better in the new environment. However, adapting to a new environment doesn't happen overnight. Here are three things to consider when changing workspace environment.

1. **Create a pilot program.** A pilot program allows a small group of employees to experience the new physical environment over a short period of time. It also gives you the opportunity to collect positive and negative feedback, and adjust accordingly.
2. **Start slow.** Changing the physical workspace is only part of the program; you need to move hearts and minds too. A new environment requires a new mindset. Employees need time to adjust to a new environment.
3. **Listen to your corporate organism.** If employees are feeling pain, what are their pushbacks? Encourage employees to share feedback and actively listen. By including everyone in the journey from day one, all participants have an opportunity to influence the fitness goals so that the solution addresses the issues that matter to them.

5 GIVE YOURSELF A MEDAL

After three months, retake the workplace fitness survey to measure the performance gaps. If performance gaps are close to less than ten percent, you've achieved a fit workplace. A high performing workplace is sustainable if you continue to work at it. Take the test every year. There is always room for improvement. An example of the fitness scorecard, before and after a successful program, is shown below.

Fitness Factor	Before	After	Improvement	Features
Privacy	32%	12%	+20%	Multiple settings or zones for quiet work
Amenity	44%	14%	+30%	High quality of air, light and sound
Technology	20%	10%	+10%	Seamless, wireless mobile connectivity
Interactivity	26%	14%	+12%	Multiple social and learning settings
Adaptability	26%	12%	+14%	Multi mode ergonomic workpoints
Flexibility	38%	10%	+28%	Scalable space for growth
Identity	32%	12%	+20%	Design symbols of company values

Starting a workplace fitness program is an important decision. Begin with the end in mind and you can make an investment that will have a measurable impact on your people, with higher levels of engagement, wellbeing, innovation and productivity. Other performance indicators that really matter include reduced training and recruiting costs due to lower turnover, and higher revenue and profit per person.

Experience per SF™

BOLSTER BUSINESS PERFORMANCE BY IMPROVING THE WORKPLACE EXPERIENCE

Experience per SF™ offers tremendous value as it helps clients measure and score experiences, develop an experience improvement action plan and pinpoint priorities Cushman & Wakefield can execute.

Talent is the clear driver of business success and will determine who wins and loses in the global market. Creating a compelling employee experience is the future workplace contributor to improving employee engagement. How can real estate help companies improve their employee's experience? Learn more from Cushman & Wakefield's **Bryan Berthold**, Managing Director Workplace Strategy.

Why has the employee experiences moved to the forefront of many company's workplace agenda?

BB: Companies have known for years that improved employee engagement bolsters productivity which in turn leads to business success and profitability. Over the last two decades, companies have invested heavily in understanding how factors like compensation and manager quality increase employee engagement, but the fact is that U.S. employee engagement has plateaued at only 33% (Gallup 2016). As a consequence clients have begun to look at how real estate and the workplace can better engage employees. The workplace experience is a critical component of employee engagement and now at the intersection of real estate and talent strategies. Typically owned by HR, half or our Workplace Strategy clients last year came through HR. Top companies will invest in superior workplace experiences.

What are the benefits of companies focusing on the employee experience?

BB: Employees that are engaged in the workplace are highly motivated and enthusiastic about their work and contributions. They are accountable and drive productivity and innovation and help businesses progress and succeed.

EXPERIENCE PER SF™ BENEFITS

1. Target areas with greatest impacts on employee engagement leading to **Improved Employee Retention** and **Attracting Top Talent**
2. Provide supporting evidence for business cases and funding requests to **Improve Operational Efficiency**
3. Repeatable, data rich process to measure pre- and post- impacts on employees to **Improve Employee Engagement**

How can companies measure experiences and their success?

BB: At Cushman & Wakefield, we have found that employees are vastly more satisfied and productive, better work-life balance when these five key measurable outcomes are met – Focus, Team, Renew, Bond and Learn.

- **Focus.** Having the right space, technology and services to help people focus.
- **Team.** Combining better collaborative space options with easy to use collaborative technologies & support to improve productivity.
- **Renew.** Inspiring convenient, clean & safe environments with appropriate services and amenities for people's wellbeing.
- **Bond.** A culturally fit workplace to unify your people, connect with your brand and can build a sense of community.
- **Learn.** Engaging workplaces where people feel supported and can continuously learn & grow.

Cushman & Wakefield's new diagnostic tool called Experience per SF™ helps clients pinpoint priorities that lead to the following business benefits:

1. Improve Employee Retention and Attraction
2. Improve Operational Efficiency
3. Improve Employee Engagement
4. Bolster Employee Productivity
5. Improve ROI

How does Experience per SF™ work? And how does this help clients improve an employee workplace experience?

BB: Experience per SF (EPS2) is an industry differentiator borne out of the needs of the marketplace and leaders diligently searching to create, measure and monitor employee's workplace experiences. Through surveys, observations and focus groups Cushman & Wakefield can now break down an employee experience 33 attributes and 10 experience outcomes to help a client truly score a workplace experience and prioritise experience improvement initiatives. These initiatives are much broader than just real estate. Cushman & Wakefield recommendations are balanced between people, place and technology and we help clients create integrated workplace, technology and HR initiatives. Companies can now create a baseline experience score, and in true test and learn fashion, identify EPS2 actions and measure and report results. EPS2 helps clients move from costs to adding value.

How can you improve your EPS2 score?

BB: There a few things you can do. First, EPS2 measures the employee experience in terms of six basic workplace attribute categories:

1. Location
2. Workplace
3. Technology
4. Amenities
5. Services
6. Customs & Polices

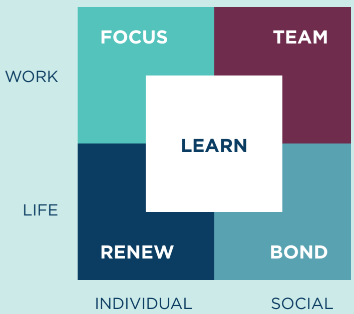
We score how important the attributes and outcomes in each category are, and how effective the company is at delivering. Our diagnostics then indicate top priority actions that would improve the employee workplace experience. Clients find they can bolster their business cases with these KPIs and follow up with true experience improvement measures to showcase success.

4 Ability to separate EPS2 scores by market, building and business unit to **Bolster Employee Productivity**

5 Identify potential over performing areas and re-distribute resources and funding to improvement areas to **Improve ROI**

A **BETTER LENS** ON THE EXPERIENCE TYPES

These categories allow us to measure work-life balance experiences; personal and social experiences; and learning. Success comes through implementing EPS2 actions and capturing improvements to the experience score.



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Operational Excellence and Innovation: Can Occupiers Have it All?

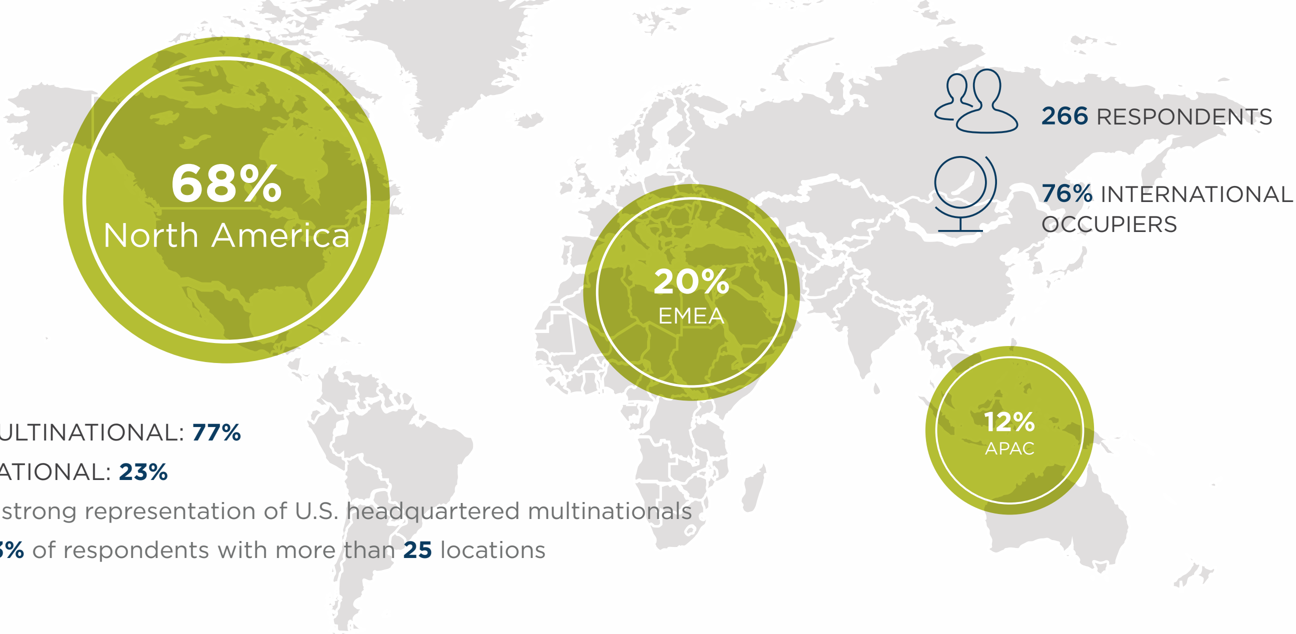
Corporate real estate leaders around the world are focused on strategies to attract and retain superior employees and help enhance their productivity. At the same time, they must continually find ways to reduce occupancy costs. The overriding challenge is to balance these two goals, which are often in opposition of one another.

This is the picture that emerged from a new global CRE survey conducted by Cushman & Wakefield in conjunction with CoreNet Global. The survey examined not only location and workplace strategy as corporate value drivers, but also CRE's alignment with business strategy alignment.

The findings also show an ongoing tension between the aspirations of CRE executives and their practical decision-making. The results suggest a reason for that misalignment: too often, CRE's attempts to advance corporate strategic goals must take a back seat to cost savings targets. The survey explores the fine balance at play between workplace costs and value with a sizable gap still evident between occupier aspirations and occupancy realities when it comes to committing to relocation and/or expansion.

Continue reading in order to become an expert on "What Occupiers Want."

"Acting as an industry health check, the survey explores the fine balance at play between workplace costs and value."



MULTINATIONAL: **77%**

NATIONAL: **23%**

A strong representation of U.S. headquartered multinationals

73% of respondents with more than **25** locations

The 266 respondents were predominantly from large global or regional organisations, more than 76% of which are international occupiers.

Survey responses came from CRE leaders in several business sectors, all of which were well represented by a sizable pool of respondents. Surveys were conducted on-line and onsite at each regional CoreNet Global Summit. Responses were analysed globally, regionally and by industry sector.

"CRE leaders balance talent attraction efforts with cost reduction mandates."

A BALANCING ACT: WHAT'S TOPPING YOUR LIST?

COST-DRIVEN DECISIONS OVER STRATEGIC PRIORITIES

Many professionals are having a difficult time transitioning from traditional cost centre models to more strategic resource models that support organisational objectives.

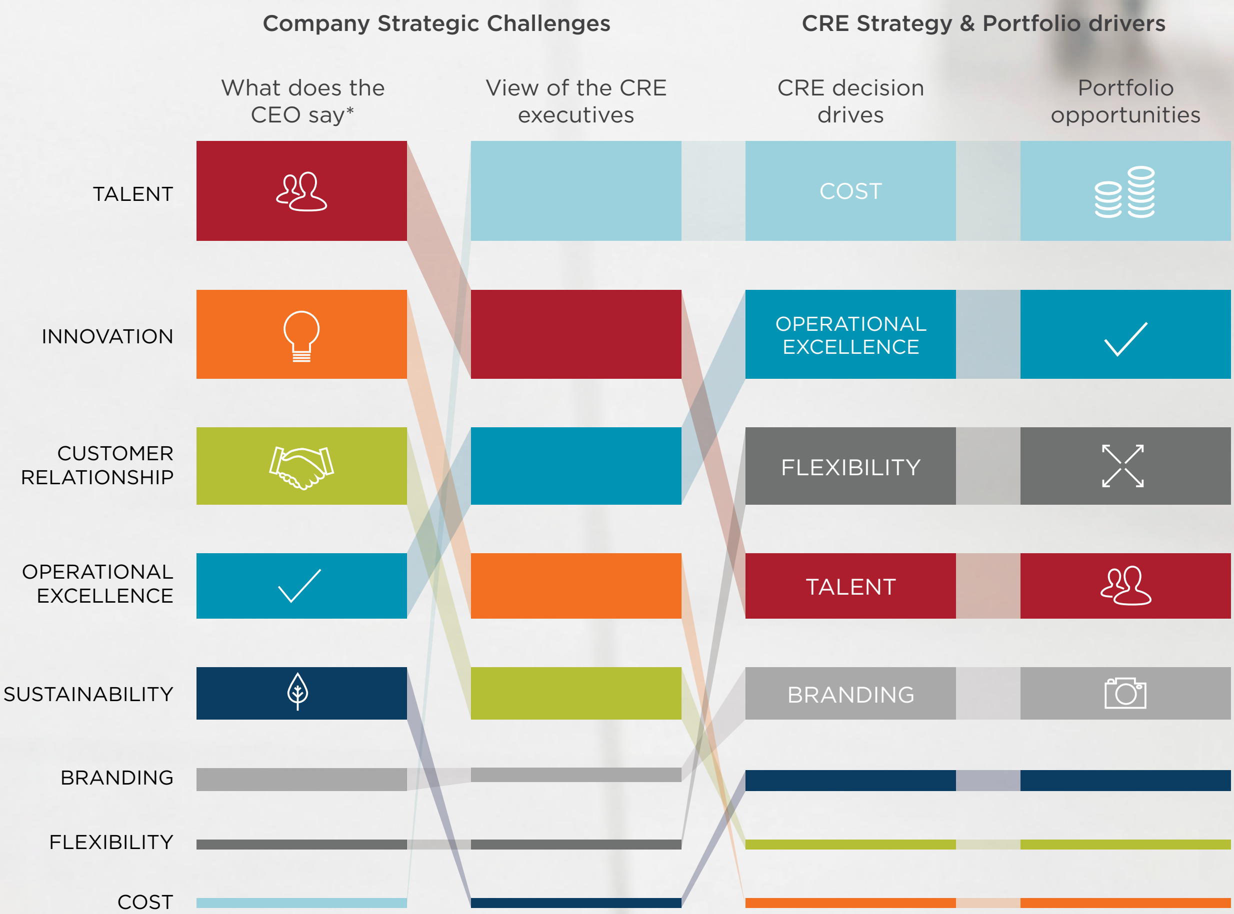
The depth of the challenge becomes evident when we compare the survey results with those of the Conference Board CEO Challenges survey. Talent management and innovation are at the top of CEOs' agenda, so it's natural to suppose that CRE strategies would be aligned with those goals. Instead, occupancy cost tops the list of CRE priorities, as cost concerns drive the potential for portfolio optimisation.

Talent management issues are second to cost when the question is about strategic challenges, but when it comes to priorities for day-to-day decision-making, talent falls to fourth place.

As for the goal of fostering innovation in the workforce, CRE executives struggle to translate these in terms of decision drivers and perceived portfolio opportunities.

The survey results clearly highlighted three potential reasons for this strong misalignment and strong cost focus:

- 58% of CRE executives report to Finance.
- Lack of visibility on CEO agenda and wider corporate challenges.
- Difficulty in translating strategic challenges in practical CRE decision making.



Despite the growing challenge for Talent availability & retention, **COST REMAINS THE MAIN CRE DRIVER**

* Conference Board survey 2015

PLANES, TRAINS AND AUTOMOBILES - WHY YOUR LOCATION IS KEY

SHIFT TO URBAN, CONNECTED SITES

Where a corporation locates within a metropolitan area region has direct impact on all of the top C-suite challenges: access to talent, ability to innovate, strong customer relationships, operational excellence and sustainability.

Cost remains the key location criteria for 28% of survey respondents, but a number of other factors are rising up the agenda. The importance of cost in making location decisions has diminished since last year, as occupiers increasingly locate where they can attract talent, gain flexibility and enhance operational efficiency.

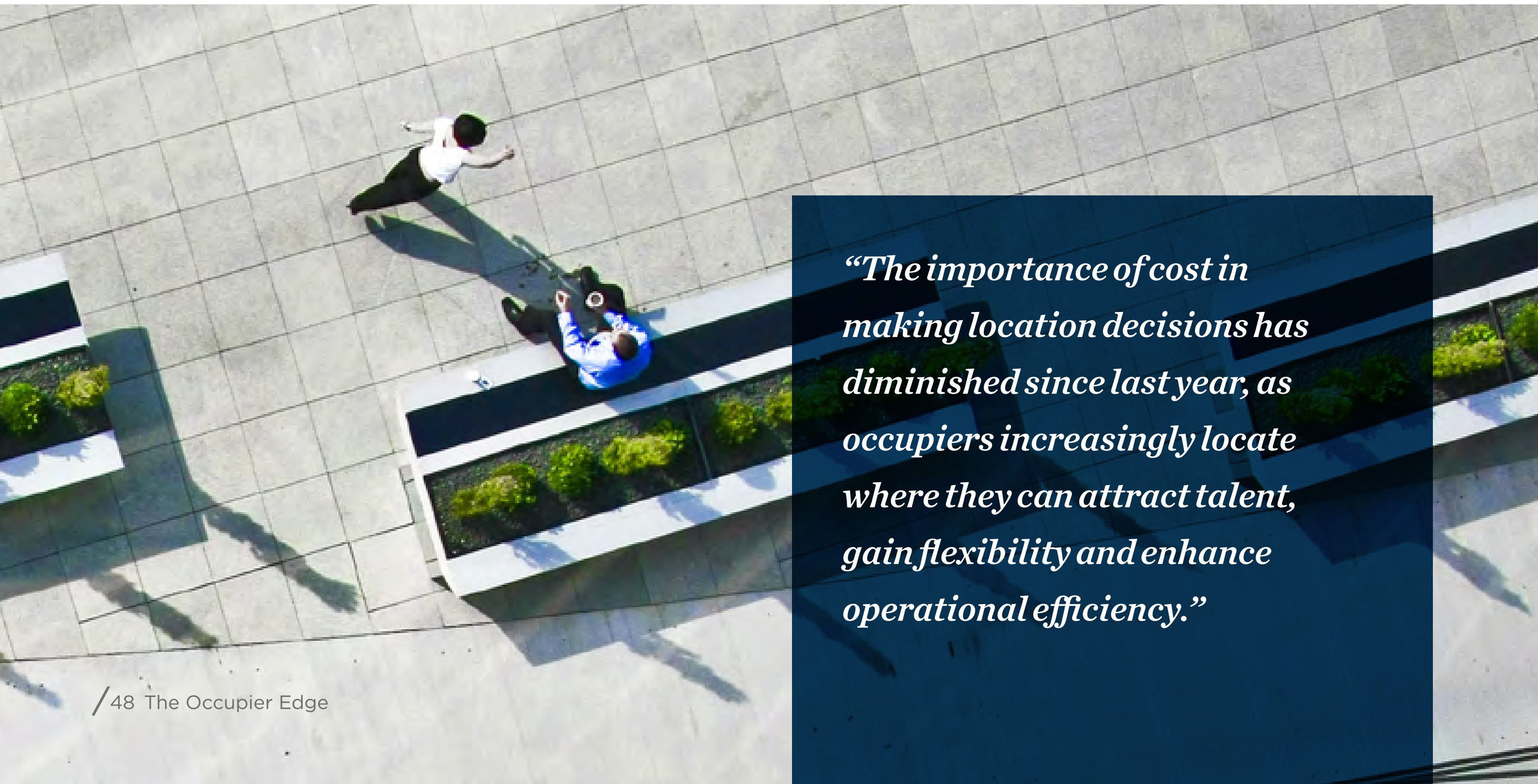
Survey responses show a growing preference for occupiers to locate in urban areas that offer strong transportation infrastructure and the opportunity to engage talent. The effectiveness of traditional models is being reassessed, especially the separation of front- and back-office operations. While central business districts (CBDs) are the most sought-after hubs for occupiers, urban areas as a whole remain attractive with 64% of respondents globally choosing either CBDs or creative urban environments for their offices.

43%

OF RESPONDENTS SAID THEIR ORGANISATIONS PLAN TO RELOCATE SUBURBAN SITES TO MORE CENTRAL LOCATIONS

Suburban business parks continue to attract a sizable portion of occupiers especially in The U.S., with 24% opting to locate within these markets, especially for companies in the industrial and life sciences sectors. However, there remains a fine balance between proximity to production sites and working environment. If the latter is simply not attractive enough for millennials, locating within suburban areas may become a barrier to recruitment and retention of talent.

Survey results were not uniform across all regions. Public transportation options are important to more companies in EMEA and APAC regions than in North America. A CBD location is important to more than half of EMEA companies, compared to less than a third of APAC companies. Urban creative markets are preferred by more companies in North America than in other regions.



> *"The importance of cost in making location decisions has diminished since last year, as occupiers increasingly locate where they can attract talent, gain flexibility and enhance operational efficiency."*

A HOP, SKIP OR JUMP AWAY

Importance of rail station < 10 minute walk

53% NORTH AMERICA

75% EMEA

82% APAC

Preferred location

	CBD	URBAN CREATIVE	SUBURBAN PARK
North America	40%	26%	24%
EMEA	32%	19%	15%
APAC	56%	15%	22%

CBD locations are preferred across sectors (40% respondents) mainly real estate companies

Creative urban environments are popular with business services and construction and architecture sectors

Industrial TMT occupiers favor suburban business parks

28%

IDENTIFY COST AS THE PRIMARY KEY DRIVER

Variations in location preference are found in different industry sectors. In EMEA, 67% of financial services firms may move office functions back to urban environments, while 45% of TMT sector firms are considering the same strategy. In North America, the possibility of moving from suburban to urban locations has occurred to 45% of financial services firms and 50% of TMT occupiers, while 67% of life science operators continue to favour suburban areas.

Location decisions often illustrate the tensions among different drivers and objectives, as companies seek the right balance of cost reduction, talent access, visibility to customers and flexibility. Most respondents, especially in EMEA and North America, view these conflicting objectives as difficult to reconcile outside of core urban areas, which provide access to talent, offer branding opportunities, and enhance flexibility. Approximately 43% of respondents said their organisations plan to relocate suburban sites to more central locations, and this trend has increased year on year. To meet cost targets, companies relocating to urban areas increasingly adopt agile workplace strategies, making better use of more expensive space.

WORKPLACE

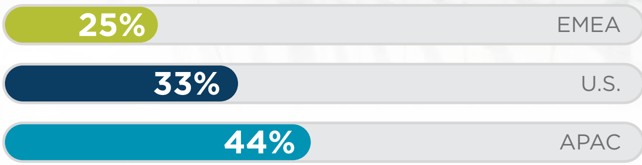
MIND THE GAP BETWEEN RECOGNITION AND ADOPTION

CRE leaders around the world recognise that the work environment is an important factor for attracting and retaining talent. Nine out of 10 global survey respondents said the physical workplace is a fundamentally important or critical factor in securing superior workers and enhancing their wellbeing.

Yet, many said their workplace practices fall short of providing a “great place to work” or an ideal environment for attracting innovative workers. 63% of respondents said their companies dedicate less than 25% of space to collaboration, although this varied by industry: 47% of financial services firms devote at least one-quarter of space to collaboration, but only 8% of industrial sector firms do.

The two most surprising facts from the workplace survey are the pace of adoption of agile workplace strategies and introduction of co-working space as part of standard portfolio strategy. 22% of respondents are already using co-working space and a stunning 69% have implemented or are testing agile workplace policies with 89% in EMEA.

WORKPLACE STANDARDS



33% *of global responses indicated that they have compulsory workplace standards, with APAC witnessing a higher proportion.*

WORKPLACE AS A CRITICAL OR VERY IMPORTANT TALENT RETENTION FACTOR

CONCLUSION

The alignment of CRE strategies with corporate priorities continues to be an elusive goal, but the survey results show progress in several areas persists a penny-wise-and-pound-foolish focus on occupancy cost reduction often driven by the lack of clear process to translate wider organisational strategies into practical CRE decision making. On the other hand, the fast-rising levels of flexibility and co-working space, and the changing location strategy to more effectively pursue talent, show that C-suite executives are starting to make the connection between leading-edge CRE strategy and corporate success.

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Cleaner Energy, Smarter Solutions

IT PAYS TO BE GREEN: WHY TO INVEST IN RENEWABLE ENERGY

Renewable energy plays a major role in decarbonising our economy, but there are other drivers for organisations to increase their investment in alternative energy.

In an age where the internet rules the expanding need for data space, organisational energy footprints are on the rise. This has led to energy security concerns for organisations and on a larger scale for countries.

“Green Investment” is taking centre stage as shareholders pressure companies to shun investment in traditional fossil fuel industries and reduce the company’s environmental impact.

High energy prices in a number of regions have resulted in shorter pay back periods for renewables. Solar prices have dropped by more than 60% since 2009 and the trend is expected to continue. In a growing number of regions, renewable energy is now considered to be more cost effective than investing in traditional coal generation. The International Energy Agency predicts that the cost of large scale solar will drop by a further 25% by 2025.

Renewable energy has a lower emissions profile than traditional energy sources and can help organisations achieve their environmental and emissions targets.

In areas where there is a large dependency on important fuels such as gas, locally produced renewable energy helps to diversify energy supply and hedge against market volatility and security of supply.

There has been a significant fall in the cost of investing in renewable technology in the past five years. The cost of solar alone has dropped by 62% since 2009.

There is additional financial support and a number of options available to companies that finance clean energy.

Corporations Trash Dirty Energy, Opt for Clean Solutions

While the national policy is traditionally the driving force behind green investment, there have been significant movements in this space in recent years. The private sector increasingly impacts energy trends and accounts for more than half of the world's energy consumption.

The RE 100 campaign is a global initiative of 84 multi-national companies that are committed to procuring 100% of their electricity from renewable sources of energy by a specified date. 84 companies are members of the RE 100 campaign, an increase from 53 companies in 2015. Some of the big world players that have made this commitment include Google, Apple, Facebook, IKEA and Nike.

Google is seen as the renewable energy trailblazer. In 2010, Google was one of the first corporations to begin investing in renewables when they signed a $40m deal to invest in two wind farms in North Dakota. By 2015, the organisation was purchasing 5.7TWh of energy from wind and solar projects. The company currently sources 44% of their energy needs from renewables but the overall goal is for 100% of its operations to be powered by renewable energy by 2017. While Google is doing their part to tackle climate change, they openly share that investing in green energy makes sense as renewable energy becomes increasingly cheaper to produce.

Some companies, such as IKEA, have invested heavily in onsite solar generation. The Swedish retailer has installed solar panels on more than 300 of its stores and distribution centres. As these stores generally have large footprints, (the Seoul stores is a colossal 59,000 sqm) it means they can install very large systems and meet the entire energy needs of the site via solar energy at some locations. The company also invests in off-site wind turbines, and to-date, they have invested more than $1.5m in wind and solar projects.

Large energy users such as Google have the finances to take an equity stake in a wind farm, but these options may not be readily available to smaller businesses. However, it is still possible to invest in renewables through other means such as onsite renewables, community energy projects and Corporate Power Purchase Agreements.

The International Energy Agency predicts that the cost of large scale solar will drop by a further 25% by 2025.

WHAT IS RENEWABLE ENERGY AND WHY IS IT SO IMPORTANT?

Renewable energy is energy that is derived from natural processes that are replenished at a higher rate than they are consumed. Renewable energy is considered sustainable as it is obtained from sources that are inexhaustible, such as sunlight and wind. Renewable energy is also considered a ‘clean’ source of energy as it has a lower environmental impact in comparison to traditional energy sources like coal generation.

Renewable energy, in partnership with energy efficiency, is essential to the delivery of a low carbon global economy as agreed United Nations’ 21st Conference of the Parties (COP21). The main goal of this agreement is to maintain the increase in the global average temperature to below 2 °C above pre-industrial levels.

Three Onsite Energy Renewables

There are a number of onsite renewables available such as solar, wind, biomass, geothermal heat pumps and fuel cells. Solar PV is by far the most popular due to the increasingly affordable installation costs, good return on investment and low maintenance requirements. However, there are some things to consider when assessing the suitability of the site. This includes:

Sites Suitability

Installing solar on the roof may seem straight forward, however, a number of factors will need to be taken into consideration such as the roof condition, structural conditions, site alignment and electrical configuration. Similarly for wind generation, consideration needs to be given to the wind conditions at the site, zoning requirements and the availability of space for installation. Engaging an experienced professional to assess the suitability of the site for renewables should be the first step in assessing whether renewables are an option for your site.

Building Ownership

If the company is the sole owner of the building or site this is pretty straight forward. However properties (mainly in the commercial space) often have complicated building ownership structures or tenancy and lease agreements such as via limited companies which may make it more difficult to sign agreements for solar. In addition to this tenants who wish to obtain the benefits of installing onsite renewables may not be in a position to do this due to their current lease arrangements with their landlords. The U.S. Department of Energy's Better Buildings Alliance program has recently published a report Promoting Solar PV on Leased Buildings Guide (Benefits, Barriers and Strategies) that provides guidance to landlords and tenants who wish to install solar on the building they own or occupy.

Financing Options

There are now a number of financing options available for RE projects. If the finance is available, it is an option to purchase the system up-front. By owning the system, it is possible to take advantage of tax incentives, grants and in some instances to offset the systems cost with Renewable Energy Credits. Where the up-front capital is not readily available to purchase the system outright other options available include.

Uniting as a Community: Contributing to the Cause

Where onsite renewables are not an option for companies, community renewable energy projects should be considered. These programs offer great alternatives to companies who are unable to install RE at their site or for where building ownership is an issue: i.e., commercial building tenants.

These projects are predominantly solar however, there are some community projects where wind farms have been established. Participants in this model commit to purchase a defined quantity of electricity or generation capacity and this is passed through as an ongoing payment similar to an electricity bill for a defined period to time.

These projects are predominantly administered by a not-for-profit community group or by an energy retailer. In addition to the benefits of obtaining clean energy, these projects help to improve customer relations between businesses and locals. Community energy models have been utilised in European markets like Denmark since the 1970s and continue to grow in popularity worldwide as organisations look to re-engage with the local community.

We would recommend that you seek advice from your sustainability advisor at Cushman & Wakefield who can help you to assess your options and develop a robust renewable energy strategy for your organisation based on your needs.

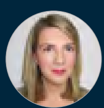
Corporate Power Purchase Agreements (PPA)

A Corporate Power Purchase Agreement (PPA) is a long-term contract where a business agrees to purchase electricity directly from an energy generator. The corporate off-taker will enter into a fixed term PPA (usually 10 to 15 years) with a renewable energy generator to consume all or part of the energy generated by the plant for a fixed price per KWh, this price is likely to be subject to indexation. In some circumstances, a third party, usually a licensed energy retailer, will be the off-taker and will then on sell the electricity and renewable energy certificates or subsidies to the corporate entity. The renewable energy generator will need to commit to generating a minimum quantity of electricity that can be passed through to the corporate off-taker. The electricity sold under a PPA can be from existing renewable energy supply or a new build project.

Larger organisations like Google use this model and up until recently, it was not always readily available to smaller users (less than 100MWH) as they do not generate enough electricity demand. However, more recently contracts of less than ten years with energy use of less than 10MWh have been offered to customers. Another model that has been utilised is a group-buying agreement where a number of organisations group their energy usage together in order to negotiate a more competitive corporate PPA agreement with a renewable energy generator.

Renewable energy investment should be an integral part of any business strategy and planning for all large energy users.

It is essential that businesses keep pace with industry developments and renewable energy has proven itself as an essential tool in meeting corporate energy security and sustainability goals.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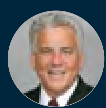
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Work, Shop, Live: SAFETY FIRST CULTURE

IN TODAY'S WORLD, EMPLOYEES INCREASINGLY HAVE A RIGHTFUL EXPECTATION TO RETURN HOME FROM WORK SAFE AND UNHARMED. AS A SOCIETY WE NOW TRAVEL MORE, WORK MORE AND HAVE MORE EXTREME LEISURE EXPERIENCES THAN EVER BEFORE. ALTHOUGH OFTEN UNNOTICED, COMMERCIAL ORGANISATIONS INVEST SIGNIFICANT RESOURCES INTO REDUCING THE RISKS THAT WE ARE EXPOSED TO AS WE LIVE OUR DAY-TO-DAY LIVES.

Health and safety, as a concept, have evolved to allow us to enjoy opportunities and experiences without being put at risk. Health and safety impacts us in a huge number of ways – without us even realising it. Our homes, cars, workspaces and leisure equipment, are all designed to enrich our lives while also keeping us safe. And yet, for some, the impact of health and safety has been seen as negative or in some ways over-burdensome, acting as 'red tape' preventing us from doing what we want to do and when we want to do it. What cannot be disputed is the positive impact that health and safety legislation has had on accident and injury rates in the workplace. Since the very first formal health and safety laws were brought into statute, accident and injury rates have improved dramatically. For example, since the introduction of the Health and Safety at Work Act 1974 in The United Kingdom fatal injuries to employees in the workforce have fallen by 85%.

The Cushman & Wakefield brand is synonymous with service excellence and the provision of inspiring and safe places to work, shop and live. Our people recognise the damage that can be done to a brand, or a client's brand, if a serious incident was to occur. HSSE (Health, Safety, Security & Environment) at Cushman & Wakefield is a key priority for our employees and is blended into every aspect of their working lives. In partnership with our employees and service partners, we strive to provide services that are protective of health, safety, security and the environment and we have developed a culture based on continuous improvement and employee involvement.

LEADERSHIP INVOLVEMENT IS KEY TO A SUCCESSFUL SAFETY STRATEGY.

Strong leadership involvement in safety programs benefits both leaders and employees by focusing attention on safety and allowing employees to feedback to their line management on areas that either inspire or concern them. A fair and honest culture allows employees to openly discuss HSSE issues with management, a process that, as well as helping to manage risk, also encourages innovation and continuous improvement in services and products. Leaders are happy to get involved as they realise the inextricable link between good governance in the area of HSSE and profitable outcomes.

Strong leadership is one part of the three key elements of Cushman & Wakefield's 360° HSSE model, which is based on three integral pillars incorporating:

1

LEADERSHIP
Accountable, proactive, informed and knowledgeable

2

SYSTEMS
Streamlined, consistent, integrated, relevant and applied

3

CULTURE
Just and fair (no blame), informed, flexible and trusting

IMPLEMENTING HSSE STRATEGIES ACROSS A GLOBALISED MARKETPLACE PRESENTS UNIQUE CHALLENGES LARGELY CENTRED AROUND EXPANSIVE GEOGRAPHIES, A DIVERSE LEGISLATIVE BACKDROP AND DISPARATE CULTURAL ATTITUDES TO HEALTH AND SAFETY.

To address these challenges digital media and technology are increasingly being used alongside traditional methods to help us manage safety across multi-national businesses. Companies that are serious about managing HSSE issues effectively across borders must remain at the forefront of technological advancements and the benefits that these can bring to effective risk management. The unstoppable march of handheld application-based technology represents a huge opportunity for intelligent safety programs that target HSSE initiatives directly to the point of need to the right person at the right time. These technologies are evolving all the time and Cushman & Wakefield is already exploiting these technologies for the benefit of our employees, occupiers and clients.

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Choreographed Construction: The Evolution of Architectural Design

TWENTIETH-CENTURY ARCHITECTURE HAS BEEN DOMINATED BY THE USE OF NEW TECHNOLOGIES, BUILDING TECHNIQUES AND CONSTRUCTION MATERIALS. WHAT COMES NEXT?

Pencil and paper have long been replaced by technology. First came one of the great inventions of the 1980s, AutoCAD, which transformed the design industry. This software opened great possibilities for design creation and interpretation – it also set the standard for what to expect from architects and designers as professionals. Computer Aided Design & Drafting (CADD) was a generational shift as far as engineering documentation is concerned which immensely improved the overall quality of drawings that were made available to the site staff for eventual construction.

But CADD, with all its proven advantages, still has many limitations including its inability to go beyond the geometry or support collaboration that was utterly missing. As the demands of the industry grew, designs became intricate. Rapid developments in construction technologies also resulted in a huge performance gap, a vast disconnect between expectations and capabilities or between demands and deliverables. Design professionals found it increasingly difficult to keep pace with the expectations, not just in terms of speed but quality and efficiency of the services as well. With original project costs becoming less realistic, the whole exercise of building hence became eternally unpredictable.

Then, a wonder-tool was discovered in the 1990s – Building Information Modeling (BIM). BIM is the process of creating and managing a dynamic, three-dimensional, computer-generated model for the design, construction and operation of a building or project. When BIM first emerged, there was a collective thought that the technology would revolutionise the industry.

BIM is an advanced version of Auto CADD, in which a building is designed, visualised and tested in a multi-dimensional and multi-disciplinary environment and where the 2-dimensional documentation – drawings & Bill of Quantities (BOQs) – is just a byproduct.

BIM enables builders construct buildings, and the interiors digitally. It also lets them simulate the performance of its various engineering systems over their entire lifecycle - saving, time, effort, cost and anxiety.

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BIM technology understands the geometry of a design – as is in the case of traditional CADD – but also comprehends a real building with its numerous and distinct components. BIM is far more realistic and utilitarian platform for the construction community.

With information and intelligence nested in each of the objects, the software enables them to be grouped, addressed, attributed, scheduled and quantified. This seemingly simple three-dimensional model has turned out to be a data-rich, inherently smart, functional representation of the building.

The initial efforts were focused on enhancing the efficiency of design and quality of documentation, but in order to reap their real benefits, BIM technologies developed capabilities to improve design deliverables onto construction practices we well. Transferring the true coordinates from the model to the site, is effectively achieved with specialised applications such as Architectural Navigation (for indoor locations) and Robotic Total Station (for outdoor locations) that help map the exact model coordinates physically on the ground. While mega activities such as earthworks, excavation, lifting and shifting of materials or equipment are coordinated through something known as Field-CNC and onboard GPS machine control.

Emerging technologies such as the computerised material delivery systems that work in coordination with a BIM model, help move Radio-frequency Identification (RFID)-tagged building components from the yard to their precise destinations in pre-sequenced multi-directional tracks, all on their own.

Other add-on BIM applications are able to kick in to automate major construction tasks such as building walls, plastering surfaces, fixing roofs, laying floors and pavements to machine-perfection, taking productivity levels of many labourious construction tasks to newer heights.

Not far from now, a fully coordinated federal model will be automating procurement, fabrication and delivery processes of various off-site components. The technology will have the ability to simulate the installation and commissioning sequences of key engineering systems and check the operational efficiencies under different test conditions, far ahead of the actual construction phase.

> The next level of BIM-led applications will enable a new generation of construction robotics, digital field devices and personal wearables that work in tandem with the BIM model.

They will work together to achieve a system efficiency and team productivity like never before. As a result, everything onsite will fall in place just as predicted – the design as intended, quality and performance as benchmarked, timelines as scheduled and costs as estimated.

For those wondering if this is ever going to happen, you should know that most of these technologies are actually available in the world today, while some others are still evolving or being piloted. But, the developments have brought precision, speed and predictability to construction activities and have successfully broken the vicious cycle of errors, surprises and blame games.

If appropriately harnessed and exploited, this brilliant tool, in combination with a perfectly coordinated design, predictable construction program, synchronised modern field robotics and onboard machine control applications, will make the complex construction tasks run smooth, swift and seamless, just like a perfectly choreographed construction spectacle.

QBRs Done Right: The Importance of Quarterly Business Reviews

QUARTERLY BUSINESS REVIEWS (QBRs) CAN HELP YOU GROW YOUR MOST IMPORTANT CLIENT RELATIONSHIPS – IF THEY ARE DONE RIGHT.

Client service is your first priority and this relationship benefits greatly from a regular review to set goals and evaluate performance. These reviews are typically called quarterly business reviews (QBRs), executive business reviews or business reviews.

A meaningful QBR should include an internal and external perspective, therefore including an executive from your company and an executive from the client company. Ideally these executives are not both involved in the day to day operations of the relationship, thereby allowing the group to step back and elevate the discussion to a more strategic standpoint.

“QBRs offer a regular health check on the status of relationship and contract under an agreed governance and format. In an industry which can be fast paced and volatile, the opportunity for regular sights, trends and innovations is invaluable.”

- Caroline Court, Head of Real Estate
East Asia & Oceania, GFCF

“Feedback is so important for all professionals, but it can be a sensitive matter so planning for the discussion is critical. The important thing is to focus on behaviours and outcomes rather than making things too personal. That said, if someone has gone above and beyond the call of duty, please say thank you – being appreciated and feeling valued is very motivational to anyone.”

- Diane Christensen, Cushman & Wakefield
Head of HR, Asia Pacific

Once both executives agreed to participate, it’s important to utilise their time wisely. The review should focus on the long-term strategic initiatives and goals of the client, and how the relationship is a building block towards this. Short-term tactical problems should be omitted.

The topics discussed should concern the fundamental value that your company provides to the client and their goals:

> How does this work fit in to the broader goals?

> What value do you provide and how could that expand?

> What are the results or obstacles from the last 90 days of performance?

> What is the next phase in your work?

> What activity or deals have happened within the client sector that you can share? Context is valuable.

The review should help you form a strategic plan that outlines goals and services.

A QBR should help you cement your relationship with your clients. If you have an annual or bi-annual contract that needs to be renewed, regular reviews have the ability to remove any uncertainty. The process of the review will clarify the goals of your relationship and will demonstrate the value that you provide.

WHO NEEDS A QBR?

Not every client relationship needs a review every three months.

Quarterly reviews are generally timed to follow quarterly business results. Other milestones may be more important. Evaluate what regular events in your relationship with your clients justify a full review of the relationship and schedule your reviews around those events. Also, pay attention to the willingness of your executives to engage, as you decide whether every three months or every six months is the right schedule.

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A GOOD QUARTERLY BUSINESS REVIEW WILL:

Cement your relationship with key clients

Identify opportunities to expand your relationship

Clarify goals and provide clear metrics of success

Provide an opportunity for perspective within the context of the relationship and industry sector activity

Afford a forum to bring new ideas to your clients

Lease Accounting Changes: Time to Mobilise

THE LEASE ACCOUNTING CHANGES WILL HAVE IMPLICATIONS ON AND REQUIRE CHANGES TO DATA MANAGEMENT, TECHNOLOGY, LEASING POLICY, GOVERNANCE AND FINANCIAL REPORTING PROCESSES. TIME TO ACT IS NOW.

What has happened

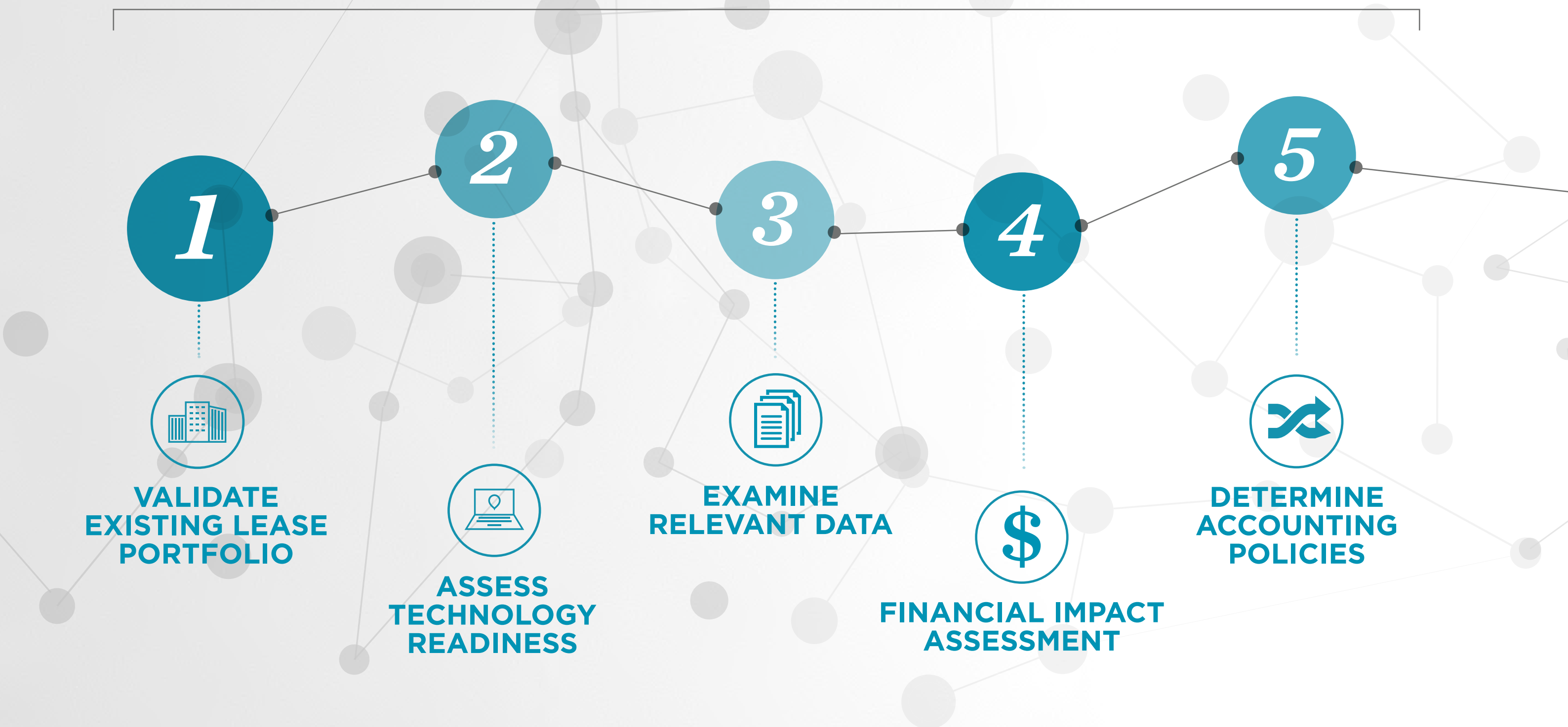
Since the release of the new US GAAP and IFRS lease accounting standards in early 2016, most corporations have primarily focused on learning about new reporting requirements and key implications for real estate (and equipment) leasing.

As we progress through 2017, corporations are drastically shifting focus from education to mobilisation asking the question, what steps need to be taken in order to comply with the new requirements by the first reporting period of 2019?

What you need to know

- New lease accounting standards (US GAAP ASC 842 and IFRS 16) were released in early 2016.
- The rules go into effect in 2019 for public companies and 2020 for private organisations.
- These new rules apply only to companies that issue financial statements in accordance with US GAAP and/or IFRS (all public companies and certain private businesses.)
- The major provision of the new rules is that all leases (12 month or greater) will now be reported on the balance sheet. This is a significant shift from the current rules that allow most leases to remain off balance sheet.

2017 Actions



US GAAP vs. IFRS – What's the Concern?

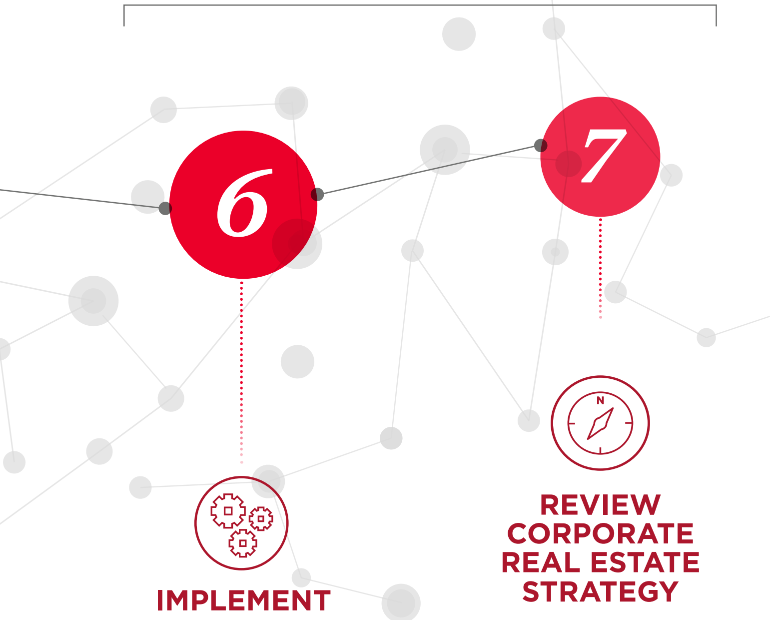
Under the new lease accounting rules, all leases for tangible property are going on the balance sheet. While all companies will be affected by the impact on the balance sheet, the income statement treatment will vary depending whether the entity reports under US GAAP or IFRS.

Under US GAAP, the measuring of expenses (income statement impact) will utilise the dual reporting structure of operating leases and finance leases – the measurement of the P&L impact will be largely unchanged from the current rules. The expenses for operating leases will maintain a straight-line pattern, while expenses for finance leases (formerly known as capital leases) will maintain the interest-amortisation declining pattern.

Under IFRS, all leases will impact earnings utilising the interest-amortisation declining pattern. This will have the effect of front-loading expenses for leases that were formerly treated as operating leases. Thus, the new rules will have a negative impact on earnings when first implemented for IFRS reporting entities.

What will the new lease accounting standards mean to corporate real estate executives? They need to realise that the accounting treatment of leases is changing and, consequently, leasing activities will be more closely monitored by the finance and accounting departments. Communication and coordination between these two functions will take on new importance.

2018 Actions



TOP 10 WAYS THIS WILL MAKE AN IMPACT ON YOUR CLIENTS

1. **Transition Team:** Corporate real estate managers will play a very large part in, or lead, preparedness efforts. This may require the formation of a transition team and the creation of schedules and milestones.

2. **New Internal Governance:** Internal governance structure may have to be adapted – corporate real estate managers will need to work closely with Legal, Treasury, Accounting and Finance departments.

3. **Centralised Lease Database:** Transitioning will require a significant implementation effort. Lease data will need to be airtight and more centrally controlled.

4. **Lease Administration Software:** Technology will be more important than ever! Lease administration systems, for example, will be vital to lease accounting compliance and on-going reporting.

5. **Equipment Leases:** Corporate real estate managers may be asked to manage equipment leases. This could require a significant undertaking to locate and abstract equipment leases.

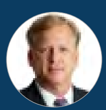
6. **Lease Strategy:** Portfolio planning and real estate decisions (e.g., Lease vs. Own) will be more complex. Lease strategy may require more lead-time; and greater scrutiny.

7. **Streamlined CRE Processes:** Real estate processes, procedures and technologies will have to be updated to capture relevant data, calculate financial statement balances, and to ensure that management has adequate control over the financial reporting process.

8. **Playbook Updates:** Real estate managers may have to amend playbooks to incorporate revised workflow, as well as new leasing policies, standard lease terms, covenants, and other key clauses.

9. **Key Financial Ratios:** Finance/Accounting may coordinate with real estate managers to evaluate the impact the new lease standards will have on key financial ratios and debt covenants to ensure that minimum threshold requirements are maintained.

10. **Transition Budget:** Budgeting for transition resources and software is critical to avoid any unforeseen expenses.



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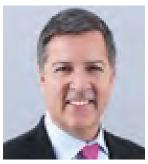

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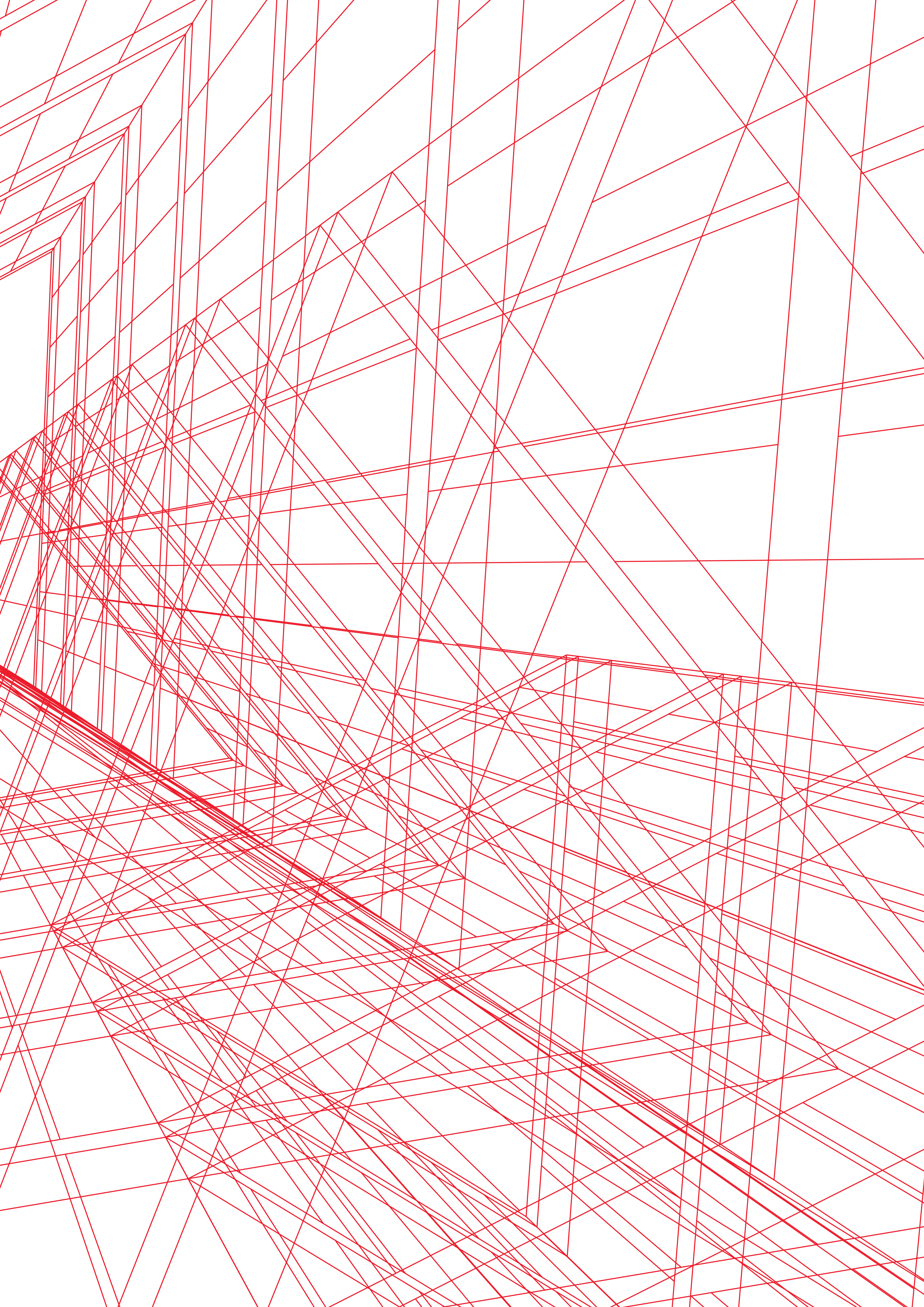

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