CUSHMAN & WAKEFIELD

CELEBRATING 100 YEARS

the occupier edge

FIFTH EDITION | 2017

Insights and Trends

from Cushman & Wakefield's Global Real Estate Experts

Contents

Editorial

At Cushman & Wakefield, we work to push the boundaries and transform the market. As leaders, we compete and strive to win together, while always putting our clients first. We are confident that our knowledge of the industry, combined with innovative philosophies and our go-getter mentality, will help our clients differentiate themselves from their competition.

Based on your feedback, this edition has been broken up into four major themes: Employee Experience, Disruption, What Occupiers Want, and Finance. Our very own subject matter experts from across the globe came together to discuss the important issues, trends, and news that will affect your company.

Look inside to find articles featuring breakthrough topics such as driverless cars and their effect on occupiers, the retail technology revolution and how newCommerce will be a differentiator, and the use of mobile robots as security. We also go beyond the commercial real estate industry and touch upon major worldwide news such as China's Belt & Road Initiative and the impact it will have on global trade, and we take a deep dive of the TAMI (Technology, Advertising, Media, and Information) Industry.

A groundbreaking augmented reality tool – Occupier Edge 3D – is coming soon. Keep an eye out for the launch of the mobile app, which will make the pages of *The Occupier Edge* come alive. We don't just talk about innovation, but we take action – we practice what we preach.

Please feel free to contact our experts to learn more about any of the topics featured. 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 Fifth Edition of *The Occupier Edge.*

Best,

Steve Quick

STEVE QUICK
Chief Executive
Global Occupier Services
steve.quick@cushwake.com

A Culture of Belonging: Diversity & Inclusion in the Workplace

Organizations all over the world are making business cases for why diversity matters. Not only does it drive revenue, it motivates employees and fosters innovation. Chief Diversity Officers are filling space in the board room every day with the promise to drive financial return.

By promoting inclusive mindsets that inspire loyalty where every individual has the freedom to contribute authentically, different backgrounds, and point of views allows corporations to thrive. Diversity and inclusion isn't just the right thing to do, but it's also good for business. It demonstrates loyalty to your client base and delivers them better, and more comprehensive solutions. There is always more than one way to solve a problem, and a wider range of diversity in our people ensures more diverse thinking and creative outputs.

Actively working to attract, develop, and empower a deep pool of talent should be at the center of any diversity and inclusion strategy and needs to be a priority for global and local leadership. By working with people from different backgrounds, with different experiences and working styles, we learn, and get another view. Diverse views make for better decisions, more robust thinking, and thus drive a high-performance culture.

Ultimately, a sense of belonging creates a healthier and more successful employee experience. Research shows that diversity is needed for teams to be their most productive, whether it be in age, religion, racial/ethnic, disability, sexual orientations, heritage, socioeconomic, geographic, and life experiences.

BOTTOM LINE: A DIVERSE WORKPLACE IS A STRONG WORKPLACE.

According to PwC's Annual Global CEO Survey, 85% of the CEOs surveyed whose companies have a formal diversity and inclusiveness strategy said it's improved their bottom line.

JAMES PATTERSON
Chief Executive
Australia
james.patterson@cushwake.com

ANNA TOWN
Head of Strategic Marketing
Australia
anna.town@cushwake.com

VALENTINA NASTOSKA
Marketing Manager
Global Occupier Services
valentina.nastoska@cushwake.com

So, how does an organization go about creating a diverse and inclusive workplace? Here are six things you need to know to get your company headed in the right direction.

1. It starts at the top: A diverse and inclusive culture starts with leadership who are prepared to not only 'talk the talk,' but 'walk the walk.' After all, your leadership sets the tone and it's only natural for employees to emulate their behavior. If your leadership respects and acknowledges the differences of everyone within the organization, employees will adopt to the culture.

2. Provide relevant training and development: To drive home its importance, diversity training should be mandatory for all employees. And to effectively engage a wide group of employees, a variety of training methods such as role play, classroom-style, Q&A, and web-based learning are critical. Training enables employees to learn how to adopt more inclusive behaviors, create more flexible work environments, and also communicate more openly and effectively.

3. Establish employee networks: Employee networks are excellent tools for fostering inclusion in the workplace. Networks not only enhance an employee's work experience, they also foster communication and relationship building. In addition, information shared in these groups helps leaders identify and address issues, while removing barriers to an inclusive workplace. At the end of the day, these networks are ultimately a win-win for both employees and organizations.

4. Designate D&I champions throughout your organization: Creating an inclusive work environment takes a lot of work from all levels of the organization. When employees see their own peers, managers, and senior leaders actively model an inclusive work culture, employees take note. An inclusive workplace is possible for everyone.

5. Foster dialogue: If your employees don't have a voice, they don't feel included. When employees have opportunities to engage with senior leaders and share their views across levels, they feel included and part of an organization that is making greater progress by creating an inclusive work environment for all.

6. Don't forget to celebrate diversity: Allow for celebration of all cultural festivities – not just Christmas and Thanksgiving. If you truly want to transform your workplace into a more inclusive one, acknowledging cultural celebrations of all varieties and backgrounds is not only necessary, it can be fun for everyone!

LIGHT, MUSIC & IDEAS
VIVID SYDNEY

Cushman & Wakefield has long been a vanguard of the commercial real estate industry. If there is one thing we've learned, it's that our clients are more successful, and we are more successful, if our workforce reflects the world around us. We earnestly believe that a rich tapestry of cultures, backgrounds, and experiences contribute to a more enjoyable work experience where innovation can thrive.

What is the cost to society of excluding people? At Cushman & Wakefield we stand for inclusion and are delighted to be the inaugural access and inclusion partner for Vivid Sydney 2017, which is the largest light, music, and ideas festival in the world, attracting 2.3 million visitors in 2016. This video demonstrates the journey that Cushman & Wakefield is on around inclusion, with a focus on Vivid Sydney.

Cushman & Wakefield, along with Destination NSW, have a vision to make Vivid Sydney as inclusive as possible for all community groups.

Our partnership assisted in funding accessible viewing areas across the festival, dedicated drop-off and pick-up-zones, audio descriptions of Vivid Light walk and Auslan interpreters at Vivid Ideas events.

Our staff offered their time across more than 100 volunteer sessions, assisting groups from special needs schools, retirement villages, and community groups to experience the magic of Vivid Sydney.

As part of our partnership we hosted an ideation session in the Vivid Ideas program with 100 people attending. The question posed to the group was 'how do we create inclusive play experiences for all children' including those with special needs?'

Experts in special needs care, design, creative thinking, lighting, engineers, construction, as well as the real estate sector gathered to provide a unique perspective on inclusive play experiences. Playgrounds typically bring people together but for children with special needs and their families, playgrounds can push them further away and exclude them for community activities. Play is the universal need that all children share. Inclusion means that everyone in a community is able to connect and engage. Inclusion in the context of play is about more than just access, it means equal participation. Cushman & Wakefield along with other partners will take forward a number of the ideas on inclusive play that came out of the session and bring them to life over the next 12 months, culminating in a very special experience at Vivid Sydney 2018.

250 property industry professionals and their partners gathered for a cocktail party to witness the magic of Vivid Sydney from the iconic Museum of Contemporary Art on Sydney's Circular Quay. Our guests were treated to entertainment by RUCKUS, a Sydney-based disability-led contemporary performance ensemble, who brought the house down.

Cushman & Wakefield wants to be what's next for inclusion in our industry and we want to help identify and build what's next for inclusive play. We passionately believe that all children should have the opportunity to play, no matter what their ability, and our world will be better off when everyone can belong and everyone is included.

EMPLOYEE EXPERIENCE

A Workday Experience in 2040

THE SCENE IN 2040

It is the year 2040. Age old mindsets have been dismantled and the gig economy is in full swing. Governments have revamped regulations for the digital economy. Enhanced connectivity has made workers more mobile and economies have become more flexible and dynamic. More than 60% of the world's population now live in cities, crammed into less than 3% of the world's land area. The pressure on resources will entail a new paradigm in smart urban planning.

A new wave of computerization and digitalization has revolutionized the service sector, eliminating 47% of jobs in the last two decades and changing organizations from within. The core of the organization has shrunk as most manpower requirements are outsourced. In this new era, the focus will be on human interaction and the need for workers with high emotional intelligence. Work will increasingly take place in the third place; social surroundings with community life, cafes, and co-working spaces.

As such, things are changing quickly for the typical workday, worknight, and workhour. How will we want to work in an era where we can be in the driver's seat? How can we build workplaces in perspective of the user in a world where work, shop, and play is blurred? How will we navigate the space daily in future? And what does this mean for Corporate Real Estate? To build a better future, we must first imagine it.

Wake-up Lisa, it's 7 a.m.

Lisa you have to get up now, you have exactly one hour to have breakfast and get ready. Due to the rainy weather forecasts I have ordered a car for you 30 minutes earlier, it will arrive at 8 a.m.

SMART HOMES

Lisa turns around and looks outside. Big rain drops are splashing against the window, she activates the glass and looks up her schedule for the day. She has her first meeting at 10 a.m.

You need to get dressed in 10 minutes to pick up the fruit and the breakfast box I have ordered for you today.

It's SAL again. Lisa can't live without her. No, SAL is not her partner, SAL is Lisa's smart home.

Devices in our smart homes, cars, buildings, and cities will interact with each other to make life easier and quicker for us, which makes us even more flexible.

THE DAILY COMMUTE

During Lisa's ride to the city, she catches up on some work. Humans are banned from driving in cities, all cars are self-driving and there is no need for parking spaces.

She can't even imagine that early in the century, the average commute in London was 74 minutes a day and you had to drive by yourself.

The car drops Lisa off in front of her office and continues to the next commute-request. She enjoys the view of the vertical gardens on the office buildings. There are still some ugly outdated tall buildings, made of glass and twisted steel from a bygone era. Nowadays, it's not allowed and buildings are made from living eco-friendly and sustainable materials.

She gets a notification that SAL has booked an Elevates trip for her 4 p.m. meeting today. It has a stop at the rooftop of the building of one of her clients. On-demand aviation makes a journey that would normally occupy two hours of stop-and-go commute in only 15 minutes.

SMART BUILDINGS

Lisa enters the building and immediately is greeted by a friendly robot concierge who informs her that her meeting is on the second level, that her manager has already arrived and that she needs to drink more water.

The smart building knows and learns how the people inside interact with each other and informs you when potential collaborators are passing through the building.

The smart building observes and understands stress-points and recommends changes and creates strategies that will improve either the physical workplace or human behavior. It can happen that an employee gets fired or hired by the 'decision-making software.'

Don't be fooled though. Security is tight, but discreet, with routine facial recognition scans; visitors have critical parameters that are monitored regularly.

Indeed, the security check also scans your overall health. It doesn't let you carry a virus; it will call a car to bring an employee home, to a nearby doctor, or hospital when necessary.

OFFICE 2040

'Good morning Lisa! How have you been?' She enters the meeting room and greets her manager.

This is her 15th assignment in the last three years. Lisa and her manager have a meeting with two graduates, beamed in from Asia; she gives them a hand through her AR headset.

Recruitment is global, and workforces are very diverse. In 2040, employees can work 24/7 on projects, it's just a matter of getting the right people from the right time zone areas. Emotional intelligence is what everyone is looking for - people skills have become valuable in a world full of technology.

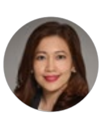
When Lisa walks around, she doesn't see any cables in the office: wireless charging and working via the cloud is standard practice. Open plan offices are obsolete and so is paper. These days work is arranged around projects. Neighborhoods are created for the project teams. If Lisa wants to work on individual tasks, she stays home or goes to a café. She only goes to the office to interact and collaborate with people. What she needs are soundproof rooms, and the people Lisa wants to work with online or in the room. All walls are flexible, and the work environment can be reshaped every night based on the workplace needs of the coming day.

A BRAVE NEW WORLD

There will be no loyalty to new office supply. Buildings must be flexible to adapt to changes, meet the lifestyle needs of its permanent and transient occupants, and successfully meld physical and digital spaces. There will be a greater variety of options as organizations will require diverse, activity-based workspaces that are needed to attract and keep the right people.

Workplace monitoring continuously assesses how people work and what they need from the space now, physically and emotionally. Spaces will have to become more fluid and dynamically configurable; 3D printing will emerge to be the perfect answer to revolutionize office fit-outs, highly customizable and easily recycled. Leases will encompass both the use of fixed and temporary spaces, with co-working concepts evolving to be a staple. With the demand for space turning more fluid, occupiers will want the smallest amount of space with commitments not exceeding the hour.

While any attempt to foretell the future will almost always fall short, the changes envisioned have already been set in motion. Rapid advances in smart building and digital technologies will invariably compress the life cycle of office buildings, posing a challenge to landlords to maintain performance as their assets age. The emergence of co-working concepts – the single biggest disruptor in the office real estate industry – shows how demand for office space can be shaped in the future. In all probability, that future is now.



SIGRID G. ZIALCITA
Managing Director
Research and Investment
Strategy, Asia Pacific
sigrid.zialcita@ap.cushwake.com

WYAI KAY LAI
Associate Director
Research, Asia Pacific
wyaikay.lai@ap.cushwake.com

TICA HESSING
Human Geographer & Urban
Planner, The Netherlands
tica.hessing@ap.cushwake.com

KEY POINTERS FOR (RE)DEVELOPING WORKSPACE WITH AN EYE TOWARDS THE FUTURE

Parking space requirements are significantly reduced in a driverless city.

Negotiating floor areas based on on-time demand for space or desks/rooms.

Digital Security Concierge checks via face recognition to secure the building when people walk in and out all day long.

Measure how assets perform in use. Not only from a financial return on investment but from a societal, cultural and human perspective.

Fluid Spaces to enable human interaction. Do we still need open plan offices when people work on project basis? Moveable walls and wireless technology should become standard to be able to change the workplace settings at any time.

In-house Tech Expert. Stay on top of the latest tech innovations, implement and stay attractive to your users. Use business intelligence in ways people use workplace and design spaces.

Facilities should address the lifestyle needs of the global diverse workforce. 24/7 cafe and gym facilities, prayer rooms and wellness spaces. All facilities should be available 24/7 as we want to be able to work, chill and eat at any hour of the day and night.

Build trust with your tenants. Listen to their needs. Don't make promises you can't keep. And keep them up to date. Your reputation will speak for you, and negative gossip spreads even quicker in a world where everything is connected.

Leading the Way: UBS CRE Strategy

UBS Group Corporate Services (GCS) continues to transform their real estate portfolio and service delivery model providing a foundation for the bank's strategic growth initiatives. We sat down with UBS's **Charles Nobs**, head of GCS Americas, **Terry Goulard**, head of Portfolio Strategy & Management and **George Conomos**, head of Home Office Real Estate Americas, to discuss how the group drives effectiveness, efficiency, and innovation to meet business and client needs.

How did your relationship with Cushman & Wakefield begin and evolve?

Charles Nobs: We believe in long-term partnerships with partners and people that share in our three core behaviors: integrity, collaboration and challenge to produce a winning combination for our employees, our clients, and partners. This has supported the UBS relationship with Cushman & Wakefield for more than 20 years which has been consistently strong under John Santora's leadership. Cushman & Wakefield now provides a full service solution to UBS Americas across Integrated Facilities Management, Project & Development Services, Transaction Management, and Portfolio Administration. When UBS acquired Paine Webber in 2000, we were able to leverage and mobilize our partner's resources to produce value for the bank by reducing excess space and a high volume of subleases. Given a UBS Americas portfolio that is constantly evolving and has experienced peaks of around 10 million SF and 400 locations, it is critical that we have partners who can help us manage the change. Ours is a business requiring perfect alignment between insourced and outsourced resources across the Americas.

How have you reshaped your real estate strategy?

Terry Goulard: Our UBS Principles of Client Focus, Excellence and Sustainable Performance help guide our real estate strategy, with a clear understanding that our people are our greatest asset.

Combining this approach with a mission and mandate for all real estate (owned and leased) allows us to drive efficient, innovative, and high-quality modern work environments. Technology has been a principal focus, enabling us to deliver an enhanced client experience with less space. We have transformed our branch model providing more client facing space and team suites where groups of six to eight come together in a collaborative environment. This strategy has contributed to enhanced employee and client engagement, with a more efficient footprint and reduced number of leases.

Flexibility between Cushman & Wakefield and UBS was particularly important in response to the 2008 financial crisis and fundamental changes to the banking industry. And these attributes were especially important when dealing with extraordinary events like Superstorm Sandy that now appears every five years or so.

A few years ago UBS repositioned its Stamford Investment Bank resources, home of the world's largest trading floor, from Stamford, Conn., to New York City. Tell us more.

TG: UBS led the market with our original decision to build an investment bank complex in Connecticut in the mid-1990s. As the environment changed and it was the best decision for the business to relocate back to New York City, our real estate and technology teams created the opportunity to consolidate our investment bank from multiple locations into 1285 Avenue of the Americas in Manhattan with the other U.S. business units. This was a landmark project that created significant synergies across all UBS business units. Our UBS branding on the 1285 AoA building and a lease extension until the year 2032 at below-market rates made this a great outcome for our clients, employees, and shareholders.

Can you speak to the complexities of the HQ move to NYC?

George Conomos: It starts and ends with our people and is enabled through support from senior management. Notwithstanding the construction within a live environment in a 50-year-old NYC building, we had to execute 6,000 moves in a span of 18 months with many multiple moves of the same staff two and three times. We have a great rapport with our internal clients built on years of solid execution and trust, all of which were necessary to achieve success with this transition. We delivered and in the process reduced our investment bank's real estate footprint by 50% and our overall vacancy by 60%.

How has all of this impacted your operational efficiencies?

GC: Creating efficiencies is critical to our ongoing success. We learned that the more we could bring together our employees into our NYC buildings – the more we could leverage efficiencies of scale and talent. Now with the entire investment bank under one roof, we're able to staff smarter and align our operational strengths with those of our other business areas, internal partners and clients. And we spend a lot less time on MetroNorth or the NY Waterway commuting between our buildings.

TG: Moving from a single occupancy Stamford campus to a multi-tenant building helped us not only achieve significant efficiencies, but also eliminated the cost of running amenities in Stamford such as the cafeteria, mailroom, printing center, and security.

Have there been any other key initiatives that have necessitated UBS to readjust its real estate strategy?

TG: In 2013, we selected Nashville, at the time an emerging city, as the U.S. location for our state of the art Business Solutions Center. We leveraged our existing service center and expanded it from 200 seats to over 1500 seats. This involved a fit-out of more than 200,000 SF of agile workspace. With its rapid growth, skilled employment base, and business-friendly environment, Nashville has continued to be more attractive as a business hub every year.

George Conomos, Arpiné Aroyan, and Terry Goulard at UBS Americas Headquarters in NYC.

All of your Americas spaces are LEED certified. Tell us more about your certified environmental program.

GC: We are very proud to be the first bank globally to be certified for our effective worldwide environmental management system - ISO 14001. We're audited annually and go through a rigorous recertification process every three years. In partnering with our Cushman & Wakefield team, we have learned a lot about managing smart buildings and adhering to this program. We're firing on all cylinders.

You went through a technology assessment with the Cushman & Wakefield technology team. Discuss the solution and outcome.

GC: State of the art technology platforms and capabilities are very important to UBS and we seek to automate processes wherever it's smart and practical. We went through a full technology assessment with the Cushman & Wakefield team in 2016 and they identified various solutions that would aid in the management of our portfolio with the end goal of fewer tools providing centralized reporting and data analytics. We're currently piloting some of Cushman & Wakefield's recommended technology solutions and the entire on-site team comprised of UBS and Cushman & Wakefield staff, who are really energized about the improvements that many of these tools will yield. For example, we've begun using a cloud-based solution to manage all of our maintenance activities and spare parts inventory. We've always been proud of the way we managed this process but now we're doing it smarter with greater real-time reporting rather than with disparate spreadsheets and databases.

UBS is a multi-service account, can you discuss synergies and how you stay aligned?

TG: The thing I like best about Cushman & Wakefield is that they made their model fit UBS. We didn't have to conform to a cookie cutter solution, instead they realigned their model to fit our needs. Also, having complete portfolio oversight by one account manager, Arpiné Aroyan, has proven to be instrumental in our success. The team feels that Cushman & Wakefield is a part of UBS and that synergy creates a strong partnership.

GC: The benefit of having Cushman & Wakefield provide the full suite of services is that we're receiving in depth real estate knowledge and staying in tune with industry trends. We stay aligned through a streamlined approach to communication and reporting from our interaction with Cushman & Wakefield senior management to Lunch and Learns with their subject matter experts. This makes us more nimble and able to respond to our internal clients' needs much faster.

How does Cushman & Wakefield positively impact your global portfolio?

TG: At UBS, Group Corporate Services is a global function with strong regional teams and subject matter expertise shared across time zones. Collectively, we value Cushman & Wakefield's global market intelligence and resources.

How do you work cohesively as one team in order to achieve success?

TG: We foster a collaborative and transparent work environment by meeting regularly with Cushman & Wakefield. We jointly resolve problems and collaborate on solutions. I find this to be a very effective in keeping us aligned and facilitating an open dialogue. It helps me with our portfolio objectives and direction on how best to move forward.

What else is important to keeping UBS running smoothly and efficiently?

CN: We strive for excellence in everything that we do. Nothing is more important to UBS than business continuity. We take great pride in our Mission Critical Facilities group, led globally by Richard Schroeder. His team consists of subject matter experts who provide oversight to all critical power and cooling operations, maintenance, projects and incident management. They are supported by operating engineers who provide 24/7 onsite building coverage in our largest locations. UBS businesses must have the ability to operate in all conditions, as demonstrated during Superstorm Sandy.

To service our America's regional locations, we recently completed a command center based in New Jersey, where we're able to leverage our 24/7 engineering staff to monitor critical equipment at regional locations and react quickly to any interruption of service.

What future initiatives are on the horizon? Any forward thinking programs or strategies underway?

CN: We've done a good job in rebalancing urban to suburban occupancy and bringing down our vacancy to 15%. We're getting better at maximizing space for new fit-outs. For example, our density in the Nashville office is below 90 SF per desk. Even though we could have achieved an even lower density, working with our business partners and our counterparts across the globe, we felt that 90 SF per desk was the sweet spot between high employee productivity and real estate efficiency.

Collaborating with HR on progressive work-from-home policies and partnering with IT on new mobility initiatives are the new ways forward. Monitoring desk use in real time mode is critical to accomplish desk sharing.

We're conducting pilots throughout all of our locations, utilizing smart technologies to identify vacancies with real time data and helping our staff with the challenges of managing a diverse workforce in multiple locations and time zones.

In the global war for talent, time and place will be decided by where the talent wants to be, and we in Group Corporate Services must be there first.

Well. Work. Place.

MAKING SPACES HUMAN AGAIN

WELL-BEING AND THE WORLD

The future workplace will look radically different as employers respond to a growing requirement for a work-health balance. The well-being industry is a worldwide phenomenon, but corporations are only beginning to understand and interpret implications for the built environment.

For measuring success, money has long been the only thing. At national level, the specific metric that has prevailed is gross domestic product, or GDP. Based on this measurement, we're 'doing well'; human beings have made the economy more than U.S. $1 trillion each year since the 1990s.

But scratch below the surface and we see workers who are both aging at a historic rate (18% will be over 55 years old by 2030), and unhealthy (52% are overweight and preventable chronic diseases are responsible for two-thirds of deaths worldwide).

Perhaps we shouldn't be surprised that most workers are unhappy; 76% report they are struggling with well-being, and research studies estimate the costs of work-related stress from U.S. $300 billion in the U.S. to as high as U.S. $650 billion in Europe.

Most of us work in what are essentially 'unwell' offices. Workplaces that are not 'well' impair employee performance. Mounting evidence about its benefits mean workplace well-being is becoming

SOPHY MOFFAT
Associate Director
Research & Insight, EMEA
sophy.moffat@cushwake.com

WELL-BEING AND THE CORPORATE

An abundance of research demonstrates links between employee well-being and bottom line financial outcomes. Human happiness has been found to have large and positive causal effects on productivity. Positive emotions appear to motivate, while negative emotions have the opposite effect.

A study by PwC found cost-benefit ratios ranging from 2:3 to 1:10 – meaning for every U.S. $1 spent on well-being initiatives, an organization can expect to receive U.S. $10 in value back. Tim Munden, chief learning officer at Unilever, reinforces this. He estimates that Unilever recoups an estimated €6 for every €1 invested in well-being programs across its European businesses.

Gallup breaks the potential benefits of 'well-being' down further. Their global meta-analysis suggests businesses with highly satisfied, engaged employees are rewarded with 37% lower absenteeism, 21% higher productivity, and 10% higher customer satisfaction.

$1,500 billion

THE COST OF PRESENTEEISM TO BUSINESSES PER YEAR, TEN TIMES HIGHER THAN THE COST OF ABSENTEEISM

WELL-BEING AND THE WORKPLACE

Low levels of staff well-being and engagement can be remedied by the workplace itself. There are proven links between well-being, performance, and the office.

- There is a 10% reduction in performance if offices are too hot or too cold.
- Levels of cortisol, a stress indicator, decrease significantly after 20 minutes in a more natural setting.
- Seeing the color green for just a few seconds boosts creativity levels.
- Background noise in offices can lead to performance drops of 66%.
- Cognitive functioning doubles when workers are in well-ventilated offices.

The message to the real estate and built environment sector is clear: prioritize well-being - and in turn staff performance - by making spaces human again.

WELL-BEING AS STANDARD

A number of international standards focus on buildings' direct contribution to occupant well-being, these include:

The International WELL Building Standard™. This is the first certification to focus exclusively on well-being. Its compliance requirements fall into seven areas: air, water, nourishment, light, fitness, comfort and mind. Each category is scored out of 10 and – depending on the total achieved – silver, gold, or platinum certification is awarded.

The World Green Building Council's (GBC) "Better Places for People." The World GBC has developed a three pillar framework to help assess and quantify the health, well-being and productivity of people in buildings. Firstly, there is a focus on environment. Secondly, comes experience; this means surveying occupant perceptions of the workplace. Thirdly, economic factors are taken into consideration. Metrics are tracked over time as improvements are made to the office environment.

WELL-BEING AND THE INVESTOR

Google already measures the impact of office design on their staff. The 'well' movement is inspiring other occupiers to do the same. Technology and the delivery of smart buildings will drive this forward. Beacons, chips, and sensors will interact with both the office and its users; the relationship between 'where we are' and 'how we are' will be laid bare. This will redefine how we determine the value of real estate.

Investors and developers who successfully adapt their offering will see a tangible premium – three separate studies by the Canadian Green Building Council, McGraw Hill Construction, and the Urban Land Institute found buildings that demonstrate positive impacts on well-being are likely to have a higher market value.

WELL-BEING RISKS

There are three major risks when it comes to the implementation of well-being. If left unchallenged, they have the potential to compound one another and slow progress.

Disregard. Many business leaders express cynicism when it comes to the relationship between well-being and business performance, leaving it lower on the agenda than other priorities.

Metrics. Only a strong set of metrics will compel occupiers to demand 'well' buildings and developers to create them. But the impact of the physical environment on well-being is under-recorded. It is also difficult to link occupant well-being to the workplace in isolation from other contributing factors.

Space and cost. According to World Bank research, small and medium enterprises form 95% of businesses globally and employ approximately 60% of private-sector workers. If we do not focus on well-being-enhancing improvements that can be made incrementally over time, or with modest investments and as retrofit, we risk stifling the well-being movement through millions of square feet of office space. Keeping the movement simple and accessible is imperative.

From a risk management perspective, buildings that are not 'well' are at risk of heightened vacancy levels, prolonged void periods, and loss of income potential.

PREDICTIONS

1. The impact of the office on well-being and bottom line performance will be exposed by new smart technologies, the impact of the built environment on human beings, and on business performance will totally visible. This will redefine the way we select and determine the value of real estate.

2. We have already seen a disproportionate amount of WELL certification among knowledge sector companies. These companies will be at the fore, competing fiercely for talent globally. As workers come to expect the same things from an employer brand as they do from a consumer brand, 'well' workplaces will be a big draw. Expect premium tenants to seek only 'well' offices.

3. For multi-let buildings, it will no longer be the case that a building manager maintains the fabric and common parts and each occupier looks after their own demise. This arrangement makes it impossible for buildings to be smart, to really 'know' their occupiers and to enhance workers' well-being and performance. The office as 'one-space-for-one-organization' will be replaced by permeable workplaces with multiple, overlapping communities and a shared level of trust. Wellness departments, or community managers will be tasked with continually enhancing these spaces.

CONCLUSION

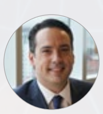
Well-being in the workplace has emerged as a critical issue because it is simply too fundamental to be ignored. And the call to action for the real estate industry – and broader built environment – is loud and clear. We must now encourage the concept of a broader perspective focused on the total value of investment, where a workplace culture of work-health balance is the norm.

Time to Harness the Power of Startups

WE LIVE IN AN AGE OF DISRUPTIVE INNOVATION - MORE THAN 50% OF TODAY'S S&P 500 COMPANIES FACE REPLACEMENT WITHIN 10 YEARS. ESTABLISHED INDUSTRIES AND INCUMBENT CORPORATIONS ACROSS THE WORLD HAVE SEEN AGILE, TECHNOLOGY-ENABLED STARTUPS REVOLUTIONIZE THEIR MARKETS. HOW CAN TODAY'S INDUSTRY LEADERS FIGHT TO STAY AHEAD AGAINST SMALL, FAST, AND SMART COMPETITORS?

ROB PARKER, MRICS
Senior Portfolio Manager
Global Occupier Services
rob.parker@cushwake.com

FRANCESCO DEMARCO
Account Manager
Global Occupier Services
francesco.demarco@cushwake.com



ALEX M. DIAZ
Executive Vice President
Enterprise Solutions
Global Occupier Services
alex.diaz@cushwake.com

DISRUPT OR BE DISRUPTED

American business guru Clayton M. Christensen coined the term disruptive innovation during the late 1990s. Since then, there has been a demise of industry incumbents who have been outmanoeuvred by new technology and business models. Corporations are focused on avoiding the mistakes that killed giants such as Kodak and Blockbuster to ensure they are not pushed out by innovators like Uber and Airbnb.

Christensen also identified the 'Innovator's Dilemma,' a problem that many large and established companies face. When making healthy profits today, the incentives are stacked against adopting new technologies or business models that could disrupt the established business. The result is that scale and embedded risk aversion can prevent agility to changing markets and competitors. Whilst investment in research and development can achieve incremental change, it is essential to have an awareness of disruptive threats and the right organizational structure in place to respond to fundamental innovations in the market.

IF YOU CAN'T BEAT THEM, JOIN THEM

Outside the corporate environment, we are seeing the entrepreneurialism of startup ecosystems producing the fastest pace of innovation. A growing number of major corporations are looking to harness that potential by creating corporate incubator programs and innovation spaces. These spaces can be used to identify and develop new opportunities outside an organization's existing operational structures. In such, an 'ambidextrous organization,' find successful ideas from experimentation.

For incumbent organizations, the incubator should focus on the organization's area of business – i.e. banking group DBS running a FinTech accelerator. The corporate incubator can then leverage the resources of the organization and harness the agility, technology, and creativity of startups in order to future proof the business strategy by gaining access to new competitive advantages.

There is a compelling proposition for startups too.

By working with a large corporation, the startup gains access to domain expertise, networks, distribution channels, customers, mentoring from employees, physical workspace, and possibly also investment and capital.

Unsurprisingly then, the range of industries where corporations have initiated their own incubator scheme is hugely diverse. It ranges from the traditional technology company, IBM; to the aircraft manufacturer, Airbus; to the healthcare provider, BUPA; as well as the telecommunications operator Telefónica – to name just a few.

A SPACE FOR INNOVATION

Every organization has different goals for their corporate incubator program and these will feed into the approach that is adopted for delivering the program.

For smaller incubator programs, the sponsor may either bring the startup teams into their offices directly – perhaps designating an area for those on the program – or provide rented space within a co-working facility with embedded corporate employees there as mentors.

Where a larger or permanent incubator program is planned, corporations have invested in creating designated incubator spaces, often within major offices or HQs. Partnering with a delivery operator is common, utilizing their expertise to run the space and provide events and networks. The incubators often utilize a co-working style, with open-plan as well as private rooms having proven popular to foster collaboration. As corporate incubators focus on a particular market segment, the benefits of sector agglomeration in a single space is key for driving innovation based on the 'random collision' theory.

However leaders in this field recommend avoiding 'innovation theatre,' shunning the decorations associated with some startup work spaces (bean bags, indoor slides, and football tables) for a practical workplace to nurture collaboration. The corporate incubator space needs to be flexible to different configurations and agile methodologies, whilst having high quality amenities and excellent connectivity.

A NEW CHALLENGE FOR CORPORATE REAL ESTATE

The appetite for corporate incubators seems to show no sign of slowing. When a corporate incubator is proposed, corporate real estate leaders need to be highly engaged with the business in order to enable the right space and management to be implemented.

BY PROVIDING THE RIGHT WORKSPACE TO AID COLLABORATION BETWEEN THE CORPORATION AND STARTUPS, CORPORATE REAL ESTATE CAN ADDRESS DISRUPTIVE INNOVATION AND HARNESS IT TO POWER FUTURE GROWTH.

Re-configurations of existing offices may be necessary, or the acquisition of new space – ideally in proximity to current office hubs. Partnerships are likely to be required with the operator and refitting of existing offices is usually needed to create a suitable workplace. Access to and from the incubator will need controls - without preventing the intended permeability of staff into the space - and IT should balance easy-of-use with data security by maintaining corporate network access for employees but providing a separate network for incubator companies.

CASE STUDY

Unilever - LEVEL3 Singapore

Barbara Guerpillon, Head of Unilever Foundry SEAA,
in conversation with Rob Parker of Cushman & Wakefield

Why is Unilever seeking to work with startups? Ever since our business was founded in the 1880s, we have been pioneering. Today, startups are very much pioneering the future of our lives.

How does Unilever Foundry support the core business? The Unilever Foundry is our platform for startups and innovators to engage, collaborate and explore business ideas with Unilever and our 400+ brands. The Foundry sits across the organization to understand the challenges faced by the business and identify new technology and innovations that can help us. Through scouting for startups, we work to understand how they are going to change the world and change how we do business.

How does the partnership with startups bring value to both sides? Unilever has the size, scale, and leading brands, while startups have new technology, agility, and new ways of working. Unilever Foundry is the bridge between the startup community and the corporate community. The best way to accelerate a startup and support their success is to become a customer and work with them to help drive their business. That is what we do through the Unilever Foundry.

How does Unilever Foundry engage with startups? Unilever Foundry enables our global brands and functions to experiment with and pilot new technologies more efficiently, effectively, and speedily. It provides entrepreneurs the opportunity to develop and work on global projects, access mentoring from marketing professionals, and tap into a new source of funding through Unilever Ventures.

Since its inception three years ago, we have piloted 109 projects across various real business challenges. Of those piloted, 45 have been scaled up – meaning that they are working with us in 10 or more countries.

How do Unilever and startups work together in a physical space? In February 2017, we launched our own co-working space – LEVEL3 – to bring the startup community into the heart of Unilever's regional headquarters in Singapore. We redesigned an entire 22,000 SF floor of our existing office, creating an opportunity to work directly with the Unilever teams in the building. As part of the LEVEL3 community, startups can interact and collaborate with Unilever to solve business challenges ranging from marketing to functions including finance, logistics, supply chain, and customer development.

For Unilever though, LEVEL3 is not about selling a desk. It is offering an ecosystem for startups to grow by leveraging the people that are also in that physical space.

How does Unilever develop a strong community around the workspace? We have partnered with Padang & Co., to run the space so that LEVEL3 provides many opportunities for startups and brands to meet during networking events, workshops, training, and mentoring sessions.

The startups we work with are chosen for their specialization within Unilever Foundry's key focus areas and LEVEL3 then provides access to Unilever employees, VCs, thought-leaders, industry experts, service providers, and consultants. It's a very social and energetic space. Everyone meets over a cup of coffee to discuss exciting opportunities for their brands or talk directly with the startups about potential briefs and pilots.

LEVEL3 is a unique space because we are connecting people to create business opportunities and help startups understand how large companies like Unilever work.

Has the LEVEL3 space be successful so far? After five months, LEVEL3 has 45 startups with 110 people based there. It is still the beginning of the journey and we are experimenting every day. Unilever Foundry praises experimentation and collaboration, and at LEVEL3 we are creating an opportunity for both startups and corporate communities to innovate side-by-side. It's a very exciting time.

Everyone agrees that collaboration is great and necessary, but the secret sauce is in making the shift from simply saying "collaboration" and "strategic supplier" to truly creating a real win-win outsourcing partnership with your supplier of choice.

- KATE VITASEK, PAGE 52

A Perfect Match: Robots & Real Estate

Mobile security robots are showing up in commercial properties around the world. So far, the total number of robots patrolling buildings is small – probably less than 100 worldwide – but with additional manufacturers rolling out products this year, the stage is set for this trend to take off.

The appeal of security robots stems from a number of factors: they typically cost less to operate than human guards; they never complain, strike or need days off; and they offer special skills that humans don't possess. Knightscope, a U.S.-based firm that makes security robots for shopping malls, hospitals, and corporate campuses, equip their robots with regular and infrared cameras. These robots can tell the difference between workers and intruders, and can scan up to 300 license plates per minute. Otsaw Digital, a Singapore-based firm, offers an outdoor model that uses LIDAR and ultrasonic sensors and can recognize unattended bags. Cobalt Robotics, another brand, provides a two-way intercom so security personnel can talk with people remotely.

What does this mean to commercial real estate owners and managers? At a minimum, property and facility managers should understand the value and risks of security bots, so they can provide owners with expert advice. And real estate decision-makers should be aware that robots, like any cutting-edge technology, may still have bugs to work out, which could result in negative attention for the building. It's easy to imagine someone tweeting about a guard "sleeping on the job" if a bot's battery power were to run out in a crowded lobby.

All eyes (but no hands) on you

What security bots don't have is weapons, or any way to detain suspects. They're useful for identifying and recording suspicious activity, but if a situation calls for an aggressive action, robots can only call on their human counterparts to respond. For this reason, Knightsbridge refers to its robots as "autonomous data machines" rather than security guards.

Robots are designed to complement security staff rather than replace them entirely. But their appeal is derived in part from their ability to do certain jobs cheaper and more reliably than people can. Knightsbridge notes that its machines lease for about $7 per hour, substantially less than the cost of a U.S. worker. They don't take sick days, strike, or complain about long hours (although they do have to recharge their batteries). And in places like Singapore, Hong Kong, and parts of Europe where aging populations have resulted in labor shortages, bots are seen as an easy way to fill open positions.

Security and so much more

Security isn't the only job robots are handling in commercial buildings. Aloft Hotels is using delivery bots for some room service items and Hilton is rolling out a humanoid-looking concierge that answers common questions and uses its artificial intelligence to improve its responses over time. In Singapore, robots are undertaking tasks to complement human receptionists by leading guests to meeting rooms and conveying refreshment orders in hotels and offices. And local cleaning companies such as WIS are deploying robots or autonomous cleaning machine in hotels such as the Fairmont, local universities, and polytechnics. In the healthcare industry, two Belgian hospitals recently added humanoid robots to their reception desks to not only check people in, but to accompany visitors to the departments they are looking for. Mobile robots can also help us maintain properties more efficiently. Not only are they increasingly being used to conduct industrial inspections on power plant facilities, tanks, vessels and pipes, mobile robots can also clean, polish and even paint hard to reach areas within a building. Although some of these initiatives seem to be driven by the novelty effect rather than to improve service quality or reduce cost, as the robotics field continues to advance, more and more building tasks will likely be handled by mobile machines in the future.

Will work for electricity

As bots take on more human tasks, there is rising concern that workers will increasingly face unemployment. This concern has prompted Microsoft founder Bill Gates and others to suggest that the European Union tax robots as if they were people. The suggestion was rejected as EU leaders view robotics as a net job creator rather than a source of competition.

In the emerging world of self-driving cars and smart buildings, it may be impossible to stop robots from taking over more human tasks at commercial properties. But there's bound to be some bumps along the way. In mid-July, a security bot at a Washington, D.C. mixed-use complex "drowned" when it fell into an indoor fountain. That's probably never happened to a human guard; and if it did, passers-by wouldn't have found it so amusing.

MICHAEL CASOLO
Global President
Client Solutions
michael.casolo@cushwake.com

JUN SOCHI
Managing Director
Facilities, Engineering & Projects
jun.sochi@cwservices.com

Technology Titans: What Makes a City a "Tech City?"

Throughout this and most other business cycles we hear that tech cities have outperformed other markets by virtually every relevant economic and commercial real estate (CRE) metric, including GDP, jobs, absorption, rents, and more. But what exactly is a tech city? After all, technology is everywhere. Almost all companies today use internet, cloud computing, social media, smart phones, and more advanced machinery and equipment. However, certain cities stand out.

In these markets, tech plays a larger role in the city's economic trajectory - it's also a vibe. Certain cities have the tech feel in the air, on the signage, in the conversations at the bars, in its population's habits, and preoccupations. In certain cities, tech is more deeply woven into the fabric of the city itself, and it's dramatically shaping those local real estate markets. There are key characteristics of an environment that supports, nurtures, and promotes the formation of tech cities. We call it "tech stew" and these are the metric ingredients are:

1. INSTITUTIONS OF HIGHER LEARNING: Leading universities that provide creative impetus, research, and that lead to creation of new companies.

The presence of one or more local, high-profile universities where research is being conducted is an important characteristic of tech markets. These institutions are comprised of a high concentration of talented teachers, researchers, and students, and foster critical thinking, innovation, creativity, and competitiveness. These universities offer more than just a degree – other important factors include: links to industry partners, businesses, and professional groups; the presence of incubator facilities; a variety of extracurricular activities and societies; and work experiences and internships that can prove to employers that a student has the attitude and aptitude to succeed.

2. VENTURE CAPITAL: The capital to take those ideas and turn them into companies.

Venture capital (VC) is key to the tech industry, as this funding drives not only startups but companies at various stages in their life up to any possible M&A or IPO. In 2016, VC deal value was the second strongest in the current cycle at $74.3 billion, according to PitchBook and the National Venture Capital Association. That was 9.6% below the level of 2015's $82.2 billion, far below the $91 billion and $188 billion invested that PwC Moneytree reported for 1999 and 2000, respectively. Top investments by industry in 2016 were software, pharma & biotech, health care devices & supplies, commercial services, and health care services & systems.

3. TECH WORKERS: An ample supply of workers within a market's technology industry; leaders within tech who understand the requirements of the sector.

Tech workers are those whose employers fall into numerous categories and include occupancy of office, research and development (R&D), and manufacturing space. Some of the major categories (as defined by Moody's Analytics) include: Computer systems design and related services; pharmaceutical and medicine manufacturing; computer and peripheral equipment manufacturing; software publisher; telecommunications; data processing, hosting, and related services; and medical and diagnostic laboratories. Tech workers in the U.S. have hit a record high of more than 6.92 million in 2016, surpassing the previous peak of 6.86 million in 2001.

One or two major VC transactions can greatly influence the activity by quarter – a lack of major deals in Q4 2016 resulted in a sharp decline.

4. KNOWLEDGE WORKERS: An available workforce with the skills to work in a tech-focused company. These workers are in occupations that support a tech environment, including legal, accounting, and other knowledge-driven occupations.

Knowledge workers account for approximately 31 million persons in the U.S. and 20% of the workforce. In the highest ranked cities, knowledge workers account for up to 35% of the labor force. For tech companies to thrive and grow, there needs to be a readily available workforce with the skill set needed. These knowledge workers can work at any type of company, but they have skills that make them attractive to the tech sector.

Knowledge workers are those whose occupations fall into one of the following broad categories: Computer and mathematical; architecture and engineering; life, physical, and social science; management; education; and health care.

5. EDUCATED WORKERS: A high-level of education is essential to supporting the growth of these companies.

The educational attainment of a population is a major factor in tech markets, as an educated workforce is essential for the success and growth of these companies. Educated workers are considered to be those who have earned a bachelor's degree or higher. The U.S. labor market is changing over time to demand a more skilled workforce. As workplaces and businesses become increasingly multifaceted and complex, employers need workers who are capable of adapting and excelling in these evolving environments. As a consequence of an increasing number of job openings requiring advanced education, access to top position jobs is determined largely by college degrees. According to a report from the Center on Education and the Workforce at Georgetown University, 8.4 million jobs of the 11.6 million created after the recession (from January 2010 to January 2016) went to individuals with at least a bachelor's degree.

72.7% of the jobs created from January 2010 to January 2016 went to people with a bachelor's degree or higher.

6. GROWTH ENTREPRENEURSHIP: Starting a company is one thing. Creating a growth engine is something else. Cities that have a higher concentration of growth engines are great tech locations.

There are many kinds of entrepreneurs and many kinds of startups, from the local cleaner to the emerging tech giant. From a commercial real estate perspective, the interesting companies are those with a high-growth profile that has extended over several years. These are the companies that have the potential to become important contributors to local economies and to become mainstays of the local commercial real estate environment. The Kauffman Foundation, an organization that studies entrepreneurship and its impact on the economy, refers to these kinds of companies as growth entrepreneurs and has developed an index that measures the level of growth entrepreneurship across major U.S. metropolitan areas. The Growth Entrepreneurship Index is made up of three components:

1. **Rate of startup growth.** This statistic measures how many jobs are created by startups over a five-year time period.

2. **Share of scale-ups.** Fast-growing firms contribute more to the growth of a local region. The focus of this metric is on companies creating large numbers of jobs. It measures the number of firms that started small and grew to employ 50 or more people after 10 years of operation as a percent of all employers.

3. **High-growth company density.** This statistic measures the number of businesses that have at least $2 million in revenue and have averaged 20% growth over the previous three years.

KEN MCCARTHY
Principal Economist, Research
ken.mccarthy@cushwake.com

ROBERT SAMMONS
Director, Research
robert.sammons@cushwake.com

Changing the World, One Entrepreneur at a Time

It all started with an 'entrepreneurial' vision...

On May 2, 2012, 1871 was born and the Chicago technology entrepreneurial community has never looked back – and never looked better.

Led by CEO and visionary Howard Tullman, the Chicago Entrepreneurial Center (CEC) opened 1871's doors after only five months of construction in a raw space on the 12th floor of The Merchandise Mart. Welcoming 60 member companies and 145 entrepreneurs. The original 1871 space was the seed that would grow into the massive collaborative co-working enterprise that it is today. Now companies of all sizes are flocking to 1871 just to be part of the 'entrepreneurial' digital scene in Chicago.

1871 is a place where entrepreneurs can share ideas, make mistakes, work hard, build their business and, with a little luck, change the world.

Providing something for everyone

1871's environment is all about innovation, collaboration, evolution, and growth. As one of the largest technology incubators in the world, it caters to all different types of co-working space to accommodate the increasing needs of its enterprising member companies:

> Traditional space where one can rent out a desk or table

> New classrooms and individual private office spaces

> 41,000 additional square feet of new printing and consulting labs, virtual reality spaces, conference rooms, podcast studios, and more.

When a company works at 1871, they get ongoing access to events, workshops, mentors, universities, venture funds, shared experiences, and so much more. Some notable speakers who have visited 1871 include former Secretary of State, Madeleine Albright; AOL Co-Founder, Steve Case; U.S. Chief Technology Officer, Megan Smith; Founder and CEO of Khan Academy, Sal Kahn; and former Senior Advisor to President Obama, David Axelrod, to name a few.

Countless networking opportunities abound within the 1871 ecosystem as well. With two floors of continuous and contiguous space, happy accidents happen all the time, enabling people to really interact with and learn from one another. Aside from entrepreneurial companies working side-by-side and leveraging each other's expertise on any given day, the more than 500 mentors who come to work with tenants love learning about the new innovations and technologies. Major corporations including Ford Motor Company, Bosch, and State Farm Insurance come to 1871 because they want to be exposed to new entrepreneurial ideas and opportunities they can't find within their own organizations. On the flip side, young entrepreneurial companies love to work with these mentors and organizations because they represent not only clients, but investors as well.

Key to the success of this collaborative co-working environment is the quality and integrity of 1871's member companies. To be considered as a member, companies must be B2B and they must possess the five "P"s: passion, preparation, perspiration, perseverance, and principles. Startups don't get built overnight. Rather, 1871 companies embody a similar work ethic and culture. According to Howard Tullman, "companies at 1871 don't get what they wish for, they get what they work for." They work hard, remain focused, are intellectually curious, and possess the genuine desire to make a difference in today's world. And if anyone should know what a successful startup looks like, it's Howard. He's been personally involved with several profitable ones that have also made their start at 1871, including ConceptDrop, Thyng, Indiegogo, and HighTower Advisors.

From leveraging ideas to attending workshops to meeting with mentors, startup companies that would otherwise be 'flying solo' benefit across the board. At the end of the day, 1871 does whatever it takes to ensure its member companies are provided with the resources and tools necessary to be successful in this quickly changing world.

Pursuing dreams together can be contagious

Once a company has matured enough, they can, in essence, 'graduate' from 1871. Companies that have graduated to date include SpotHero, Caremerge, Rocketmiles, ThinkCERCA, and Pangea, to name a few. From the shared learnings to the electric energy to the overall culture, companies say they love everything about this space. After all, being in an entrepreneurial environment where everyone is pursuing their dreams can be contagious.

Options Away

When Heidi Brown launched her business Options Away, she knew she didn't want to work out of her home or Starbucks. She was looking for co-working space, but she wanted much more than just a physical workspace. She wanted to work with other like-minded entrepreneurs within a collaborative environment. Fortunately for Heidi, 1871 was just launching and was the perfect fit for her needs. Whether she had a question about marketing, legal, or her taxes, information and resources were all around her. Another benefit includes recruiting within the space. When young engineers show up for an interview, they immediately feel the energy and excitement emanating from the entrepreneurial space. By the time they get to Heidi's office, they're already sold and want to be a part of the magical environment that's 1871.

ThinkCERCA

For Abby Ross and Eileen Murphy, co-founders of ThinkCERCA, they loved the 1871 environment so much, they decided to model their new office space after it once they moved out of the Merchandise Mart. They designed the new space to have open workspaces and whiteboards that promoted a collaborative environment, as well as huddle rooms where you could take a quick call or have a private conversation. Just like 1871, their new space fosters the spirit of collaboration, innovation, and creativity. When competing for the best talent, Abby and Eileen know how important it is to have a space similar to 1871 – a space with a really fun and cool vibe where everyone feels extra special.

Photos by: Greg Rothstein

Caremerge

According to Asif Kahn, founder and CEO of Caremerge, his company has benefited from 1871 from every angle. Whether his staff is providing engineering expertise to other companies or receiving advice from content marketing or business development firms, being plugged into the entrepreneurial community has proved invaluable to Caremerge. In addition, Caremerge has successfully leveraged 1871 to attract, impress and sign on new clients who have visited the space for brainstorming sessions. Although the company has moved out of the 1871 space, it has remained very involved with the community, providing mentors to companies just starting out and attending workshops and events whenever possible.

EX3 Labs

When EX3 Labs was launching, Founder Adam Wisniewski knew 1871 would be the perfect launchpad for the company. As a startup, the company received mentorship on everything from sales to marketing to business development – really everything they needed to know to get the company off the ground. In addition, 1871's energy was contagious – just being able to walk into a space every day with such an incredible amount of energy was vital to EX3 Labs' business. But above all else, the networking opportunities proved to be invaluable as the company was able to showcase its innovative technologies – and ultimately form partnerships – with other member companies, including several large enterprises that are always looking to learn from smaller, more agile companies like EX3 Labs.

SpotHero

As one of the very first companies at 1871, Co-founder and CEO of SpotHero Mark Lawrence is all too familiar with the tremendous benefits of this shared ecosystem. According to Mark, "It's hard to describe the magic that happens when everyone involved in startups is all in one place. With so many companies working on different issues, it's nice not having to reinvent the wheel on everything. We can and we really do leverage each other." What he's especially loved about 1871 is that the space has legitimized startups in Chicago. For the first time, starting a company is acceptable and even 'cool.'

1871 today

In only five years, 1871 has expanded from 50,000 to 150,000 square feet of space, created more than 7,000 jobs, fostered the growth of 150 alumni companies, continues to support 500 companies and thousands of entrepreneurs and helped transform The Merchandise Mart by adding thousands of tech jobs in the historic building.

1871 is currently the largest tech incubator in the world. No other location has been able to bring this many entrepreneurs and companies, major universities and schools, venture funds, and different countries together like this in one place – to not only develop and grow, but thrive. 1871 offers thousands of events and workshops throughout the year, as well as more than 500 mentors who work with the individual companies on a daily basis.

And 1871 does not anticipate slowing down anytime soon. With a steady stream of events and activities taking place and more and more companies signing on as members every day, 1871 will continue to be a haven for hard working companies that want to share ideas, work hard, build their business and ultimately change the world – one entrepreneur at a time.


HOWARD TULLMAN
Chief Executive Officer
Chicago Entrepreneurial Center


ADAM STANLEY
Global Chief Information Officer
adam.stanley@cushwake.com

The Here and Now of IoT in your Workplace

The Internet of Things refers to a vast array of computing devices that, when embedded in everyday objects and connected to the internet, allow those objects to communicate autonomously with each other and with us. Examples include smart phones, fitness trackers, smart appliances, and equipment sensors.

SHERIDAN WARE
Chief Information Officer
Asia Pacific and Greater China, Global Technology Solutions
sheridan.ware@cushwake.com

SALUMEH COMPANIEH
Chief Information Officer
C&W Services
salumeh.companieh@cwservices.com

There should be no doubt that the IoT is an increasingly pervasive part of both life and work. Such explosive growth has IoT firmly on the corporate agenda with IDC indicating that 55% of companies see IoT as a strategic imperative. Of those companies surveyed, 34% are already working with the technology and 43% plan to have an IoT program in place this year.

Cisco predicted the number of enabled devices would reach close to 23 billion last year – a 160% increase on the previous four years – and will grow to over 50 billion devices by 2020.

The possible applications of IoT are broad and varied and real estate is leading the charge.

"Envision a scenario in which data from work calendars, security systems, and room sensors is made available for analysis, and that machine learning has determined I work from 8:30 a.m. to 5:00 p.m.," said Neil Ross, business architect and strategist business strategist, Microsoft Digital. "Once the system has determined patterns associated with how I use the space, operators can start thinking about adapting the space accordingly, with lighting activated and temperature set to my preference when I enter the space. During other periods, both systems lie dormant."

B2B research firm MarketsandMarkets concurs. The firm estimates a 34% CAGR growth for smart buildings, with the market growing from $5.73 billion to $24.73 billion from 2016 to 2021.

Looking to further narrow the perspective to the intersection of IoT and corporate real estate, Cushman & Wakefield took the pulse of attendees at CoreNet's annual signature event in Hong Kong late last year. We presented IoT to a "shark tank" of experts and audience members alongside other emerging technologies to gauge the desire to invest. Participants voted via a mobile poll, considering technologies including virtual reality, drones, and building information modeling (BIM). IoT took out the popular vote with more than 90% of participants voting to invest.

Some of the potential uses of IoT shared during the session included:

Predictive maintenance – Performance tracking of facility assets like HVAC, lighting units, and elevators allows maintenance work orders to be triggered automatically. With 30% of planned maintenance activities being carried out too frequently and 40% of assets having a limited impact on facility uptime, there are real opportunities to drive out cost savings through a more targeted approach.

Smarter capital asset planning – Combining the same performance data with asset condition/criticality ratings and degradation models can also help ensure capital investment is directed to the equipment with the greatest impact on facility uptime and/or the greatest risk of failure. This approach maximizes capital budgets and reduces the risk of unexpected budget variance.

Sensing environment – Sensors are already widely used to switch off devices that don't need to be in use, such as lights and air conditioning in vacant rooms. Increasingly, they are also allowing people to set light and temperature settings according to their personal preferences via their smart phones, with clear positive impacts on cost, sustainability, and user experience.

Real-Time utilization – Sensors allow us to monitor how space is being used so we can provide more of the spaces people want and less of those that they don't, thereby reducing costs and enhancing user experience.

Digital doors – We see IoT being used to control access to buildings or offices by individuals using smart phones, biometric devices, or retina scans rather than security badges. Such devices can not only enhance security, but also provide a more seamless user experience.

Smart wayfinding – Sensors can help people to find what they need within a space, a meeting room, amenity, or another type of facility. This is increasingly important as companies adopt more free-desking options in the design of work space.

Real-time well-being – As companies look to the power of technology to provide a more productive and engaging workplace experience and to retain key staff, IoT can be leveraged to track people's activity and heart rates as a means to reduce stress and provide for increased health and well-being.

Set the strategy for your business

While these new technologies could be a boon for workplace efficiency and experience, how do you decide what is right for your business and when to invest?

To implement an effective IoT strategy, it's important to first understand the outcome you are trying to drive and how you will measure success. Different outcomes will require different technologies, data, analytics, and end-user behaviors. Without a clear starting point, you'll waste time and money.

For example, a recent pilot in predictive maintenance for a global pharmaceutical firm sought to first prove the reliability and efficacy of sensors and the ability to manage their resulting data without overwhelming the engineering staff (you can read more in our sidebar). Conversely, when we implemented a new technology project for 14,000 hourly employees in dispersed locations, the data outputs and their uses were already well documented. The biggest challenge was considering the human factors of engaging employees with diverse technical skills, languages, and work habits to consistently use the new system.

Once the outcome and measures of success are clear, you should assess existing infrastructure, systems, processes, and data to determine what is needed in terms of technology, architecture, analytics, and capabilities. IoT is a rapidly evolving but still highly fragmented landscape and it's likely that you'll need to combine different technologies or platforms to get to the end goal. While an IoT strategy has a high element of technology deployment, the business and cultural shifts needed to consume an increasing flow of data, drive meaningful insight, and ultimately change behaviors are key ingredients for successful implementation. Involve subject matter experts early and regularly throughout implementation.

Finally, as is the same with any innovation, consider approaching IoT as an iterative process. Leveraging pilots will allow you to pivot quickly, try different solutions, leverage the latest technologies, minimize risk, and build the case for full-scale execution.

TIPS FOR INVESTING

[To implement an effective IoT strategy]

UNDERSTAND THE OUTCOME

MEASURE SUCCESS

Assess existing infrastructure, systems, processes, and data to determine what is needed in terms of:

- TECHNOLOGY
- ARCHITECTURE
- ANALYTICS
- CAPABILITIES

APPROACH IoT AS AN ITERATIVE PROCESS

- → Try different solutions
- → Leverage the latest technologies
- → Minimize risk
- → Full-scale execution

NAVIGATING A SEA OF PREDICTIVE MAINTENANCE DATA

Pilot validates engineer-in-a-box solution

At a large research and technology site with several large pieces of rotational equipment, C&W Services is responsible for engineering and maintenance. Until recently, monitoring for bearing wear, balance issues, and other vibration related anomalies was accomplished through monthly readings from wired transducers. The waveforms were sent to a third party for analysis. The process was time consuming, and there was no guarantee that even regularly scheduled readings would coincide with the problems they were designed to uncover.

Understanding the potential of rapidly evolving capabilities in wireless monitoring and data collection, C&W Services worked with our client to design a pilot program to determine the efficacy and ROI of a more technologically enabled monitoring system. We viewed the pilot as an opportunity to develop a more complete and long-term solution beyond transducer technology.

We found a solution with the potential to investigate and test new analytical ability, such as advanced machine learning capability, predictive and condition based monitoring, and remote diagnostic ability were central to the pilot. The pilot product's machine learning uses multiple samples to assign various pattern behaviors. Additionally, machine based learning looks at multiple waveform variations of "good" and "bad" to identify when an anomaly warrants further investigation or an alarm condition.

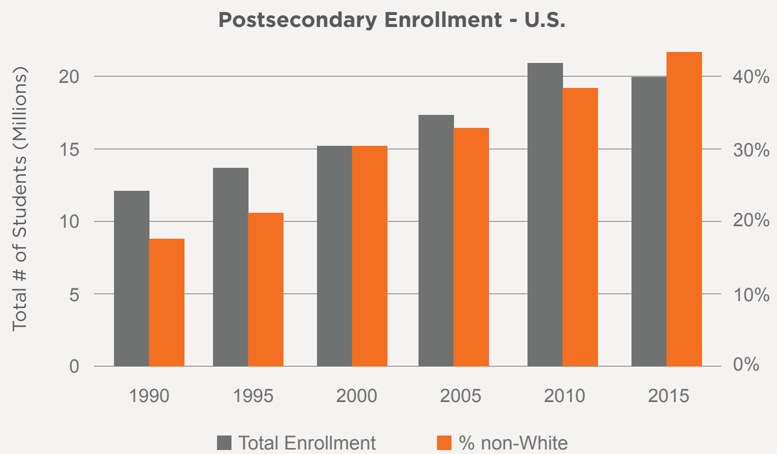
The pilot confirmed several positive outcomes, including the efficacy of wire sensors in data collection, and the benefits of identifying potential problems within minutes of a vibration anomaly.

The New Age of Education

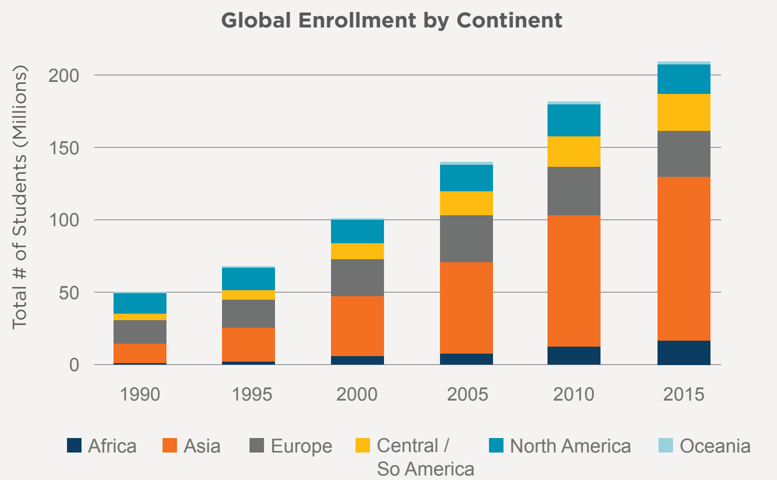
Higher education institutions are facing increased competition for students while experiencing lowering enrollment, increased tuition, and reduced public funding. Within that climate, high-profile universities are focused on attracting the most talented professors and students. Creating an appealing environment for students today is a major challenge as changing technology, lifestyles, and business environments impact what students are looking for in college.

Additionally, the breadth of the university's mission is broadening and the makeup of its students is becoming more diverse. According to the National Center for Education Statistics (NCES), the non-white student population for all U.S. postsecondary institutions increased from 29.2% in 2000 to 42.4% in 2015. During that same time, the number of non-U.S. residents attending these schools has increased by 86%.

There is pressure to find cost savings, as government funding has been declining, but also a need to keep up with student demands and expectations for how a 21st-century education should look and feel. The competition for outstanding students in higher education mirrors the war for talent in the business world. Corporations are increasingly focused on their employees' physical spaces in order to attract and retain young talent, while increasing productivity and collaboration. And, just as companies are investing in workplace design to create a 'wow' factor that differentiates them to the labor market, higher education institutions are also focusing on facilities, culture, technology, and land use strategies as critical components in meeting growth and success goals.



Source: NCES



Source: NCES

In less than 15 years, global postsecondary enrollment more than doubled from 100 million to 208 million students. This growth is driven by the tripling of postsecondary students in Asia, which increased by 76 million from 2000 to 2014 and now accounts for more than half of all such students.

Six university trends we're seeing as a result of these market-shaking global forces

01
CONNECTION TO SOMETHING BIGGER

Universities can often feel like their own little cities, whether they are in a small town or part of a Gateway city. However, there are a myriad of benefits linking the daily life of a college with its surrounding community. This connection offers opportunities for students to connect with the business and cultural communities outside the university walls, and provides resources for partnership between corporations, students, faculty, and civic institutions. And, it helps connect students' ongoing learning with real-life application.

02
COLLABORATION

It may have been at one point that the main benefit of postsecondary education was to spend time learning from professors who lectured on their areas of expertise. However, now learning is more active and collaborative, which means that professors are less founts of knowledge and more mentors, subject matter experts, and facilitators. In addition to rubbing elbows with professors, the value of an education is increasingly found in the connections that are made with:

> Other students from diverse backgrounds

> Alumni

> Industry experts and current professionals in students' field of study

> Business incubators

> Extracurricular activities and groups / societies

03
RESORT-STYLE AMENITIES

Universities spend millions of dollars on student "consumption" amenities like rock-climbing walls and lazy rivers. New residence halls often have infinity pools, putting greens, fitness centers, gaming rooms, fire pits, grills, and saunas. One private dorm in London offers a cinema room and concierge. These features can significantly add to the cost of a college education, but studies indicate that such features help to attract students regardless of the added cost. The desire for new and better is not limited to residence halls. Universities are also spending billions of dollars on upgrading classrooms, libraries, computer labs, and athletic facilities.

In a 2017 survey of college and university deans conducted by 2U and The Academy for Innovative Higher Education, 91.5% of respondents indicated their institution will provide more online programs in 10 years than they do today.

04
STATE OF THE ART TECHNOLOGY

Students entering college these days were born in the 2000s, and they have never known a world without mobile phones, public WiFi, and flat screen televisions. In fact, they may not even remember a world without smart phones and internet-connected home appliances. Their expectations are that the technology offered on and around campus will be seamless and streamlined. Beyond just the staples of WiFi and cell service, today's students expect video conferencing tools and modern A/V options around campus. Schools have to fight to keep up with technology amenities, and are also essentially mini-tech companies with responsibility for data security and growing provision of education services via online formats.

05
SUSTAINABILITY

Students are concerned about the environment, and so universities are as well. Advancement of Sustainability in Higher Education (AASHE) reports that at least 330 U.S. institutions feature solar power that collectively generate about 250,000 kilowatts. In addition, colleges increasingly look to adaptive reuse of older buildings rather than taking the un-ecological approach of demolition and replacement. As noted by the World Economic Forum, consumers (and students alike) around the globe are increasingly concerned with a broad range of issues that impact their decisions: impact on environment, carbon footprint, labor standards, animal welfare, and school's ethical trade track record.

> Growing universities erect glitzy libraries, housing blocks, and research facilities to accommodate new students; shrinking ones do so in an effort to turn the tide.
>
> - The Economist, Feb 23, 2017

06
INTERNATIONAL PARTNERSHIPS

Prestigious universities have been operating overseas campuses for many years, but as this trend expanded, some institutions found it difficult to navigate the logistical, political, and cost challenges involved in planting their flags on foreign soil. In recent years, the trend has been toward partnerships with existing universities as a way to attract students in those countries. The trend is also becoming multi-directional. For instance, Tsinghua University of Beijing – known as the "MIT of China"– has worked with the University of Washington in the U.S. to start a graduate institute near Seattle that can accommodate up to 3,000 students.

65%

of children entering primary school will work in jobs that don't exist today

-"Shift Happens", Scott McLeod and Karl Fisch

8 million

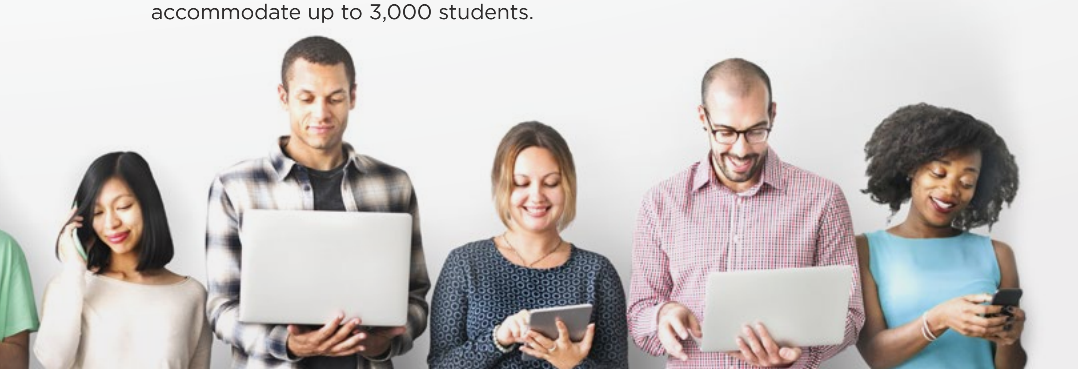
students will graduate from Chinese universities in 2017

- World Economic Forum

£2.4 billion

is spent by universities on construction annually across the UK, nearly double the pace of spending a decade ago

- The Economist



RETHINKING EDUCATION SYSTEMS

By one popular estimate 65% of children entering primary schools today will ultimately work in new job types and functions that currently don't yet exist. Technological trends such as the Fourth Industrial Revolution will create many new cross-functional roles for which employees will need both technical and social and analytical skills. Most existing education systems at all levels provide highly siloed training and continue a number of 20th-century practices that are hindering progress on today's talent and labor market issues. Two such legacy issues burdening formal education systems worldwide are the dichotomy between Humanities and Sciences and applied and pure training, on the one hand, and the prestige premium attached to tertiary-certified forms of education–rather than the actual content of learning–on the other hand. Put bluntly, there is simply no good reason to indefinitely maintain either of these in today's world. Businesses should work closely with governments, education providers and others to imagine what a true 21st-century curriculum might look like.

- An excerpt from World Economic Forum's Future of Jobs Report (2016)

CRAIG CASSELL
Executive Managing Director
Global Leader
Education Sector
craig.cassell@cushwake.com

DAVID C. SMITH
Senior Research Director
Global Occupier Services
Americas
david.smith4@cushwake.com

Retail Revolution: Shop Smarter, Not Harder

Today's shopper is much busier and more impatient. Thanks to advancements in technology, they are used to getting what they want, when they want it - simply with the click of a button.

DAVID GORELICK
Head of Retail Services, Americas
david.gorelick@cushwake.com

In fact, the rise of technology has literally reshaped how consumers shop, and has been increasingly critical to driving innovation, efficiency, and customer engagement. Whether buying online and picking up merchandise in-store or purchasing an item online while in an actual physical store, the user experience is much more seamless, simpler, and interactive these days. And shopping has not only become simpler and savvier through the help of technology, but the advancements have also helped retailers become much smarter about their customers in the process – a real win-win.

Shopping made simpler...

There's no doubt about it - technology makes shopping easier. For one thing, it helps save time, which is a top priority for many shoppers. In fact, according to a recent Forrester retail survey, shoppers ranked "saving time" as the number one reason to use in-store technology.

From in-store robots to digital payments to omni-channel marketing, technology is expediting the shopping process – all while making the experience more engaging and interactive. And it's big business. According to the International Data Corporation, the global robotic market will be worth $135 billion by 2019. Just last fall, Lowe's introduced LoweBot, an autonomous retail service robot in 11 of its stores. The robot answers simple questions, enabling more time for employees to focus on delivering personalized service. In addition to helping customers, the robot also captures real-time data that ultimately helps influence future business decisions.

In terms of digital payments, according to Juniper Research, their value will approach $3.9 trillion in 2017 – that's an increase of more than 14% over last year's total. With smartphones in the hands of both shoppers and retail staff, the days of waiting in long lines at the checkout are over. The convenience of paying with a mobile device without handling cash or a card, coupled with a fast transaction time, leads to an enhanced – and more secure – customer experience at the point of sale.

Additionally, more and more retailers are striving to build a true omni-channel experience that merges at-home, in-store, and mobile commerce into one seamless and frictionless experience. It's all about true continuity of experience – the mobile app should match the responsive design of the website, which should thematically reflect the look and feel inside the store. And each interaction becomes a seamless extension of their previous interaction, enabling customers to use the channel of their choice for each step along the journey, simplifying the entire process.

Good examples of retailers offering an omni-channel experience include Wal-Mart, who recently announced same day in-store pickup of items bought online, and Macy's who recently installed a system that will integrate all of its inventory systems and give store associates almost complete visibility of the items available across all channels.

Shopping made savvier...

Advancements in technology have also allowed smart retailers to better customize the retail experience for the savvy customer. After all, the more interactive the experience, the more engaged the shopper will be. Interactive interfaces, augmented reality, and social media integration are just a few examples of the types of technology that create a unique experience for each individual consumer. From virtual mirrors that allow users to try on boots without actually putting them on their feet to window and storefront displays projected in 3D, these experiential retail trends are emerging in stores everywhere and making a real difference to the savvy consumer.

The best part? Having the ability to interact with customers in real-time, providing them with more personalized and memorable experiences. Japanese-based retailer Uniqlo, for example, installed smart fitting rooms, allowing the shopper to choose the clothing they want to try on and then overlaying different colors to help them make the best choice. And Neiman Marcus now offers a digital 'Memory Mirror' in one of its stores that allows shoppers to view outfits side by side and then share snapshots with friends to solicit their feedback. How's that for personalized service?

newCommerce
/n(y)ookämərs/
noun
A business and thought leadership collaboration connecting Cushman & Wakefield's Retail Services platform with our Logistics, Industrial and eCommerce expertise.

Shopping made smarter...

Advancements in technology have also helped retailers become smarter about their customers and what they truly want. For instance, location-aware technologies, such as GPS, geo-fencing and beacon technologies, can welcome the shopper back to the store and then trigger notifications such as mobile coupon offers based on which aisles a shopper has recently visited, as well as past purchase data. Combining these technologies with back-end analytics can provide retailers with much more information about their customers' behaviors, preferences, and needs.

Additionally, information collected from retail applications enables retailers to create a customized in-store shopping experience while also catering to the demands of an increasingly digital age. For example, a mobile app could allow consumers to tag an item they see in a store and have it immediately placed in their online shopping cart. In this case, the consumer benefits from in-person customer service, as well as the convenience of purchasing at home.

Customer loyalty programs are an effective way to market to a group of targeted customers by offering sales and discounts based on past purchases. When done correctly, target marketing based on data derived from a loyalty program can drive many more customers into your store.

Through advancements in technology, the whole retail experience has become much simpler, savvier, and smarter for both customers and retailers alike. And these changes aren't about to slow down anytime soon. Whether you're whipping together a party in minutes by having items sent to your home by drone or virtually trying on new looks at a local store event with friends, technology will continue to deliver unique and engaging experiences that will keep consumers coming back for more.

newCommerce

With the retail world continuing to evolve though advancements in technology, it is difficult for retailers to keep up. Cushman & Wakefield's newCommerce team offers a unique set of collaborative retail consulting services to help Retailers develop the best go-forward selling strategy for their needs – including the consumer-facing purchase experience, back-end logistics functions, and everything in between.

Whether you're building a physical bricks-and-mortar presence, trying to optimize your distribution network, or choosing between self-perform fulfillment and third party, Cushman & Wakefield's newCommerce experts can help you find the right solution to maximize your infrastructure and offer your consumer the best shopping experience. Our track record partnering with hundreds of retailers to develop alternative ways to leverage their store and supply chain footprint is a market-leading resource.

It's not eCommerce. It's newCommerce.
And it includes it all.

RETAIL SERVICES

#1 Ranking in the U.S. By Retail Square Footage Leased

20.2M Aggregate Square Feet

90+ Markets

800+ Retail Professionals

cushwakeretail.com

INDUSTRIAL & SUPPLY CHAIN SERVICES

#1 Top Market Share of U.S. Industrial Leasing

200+ Global Office Locations

650+ Dedicated Industrial Professionals

cushwakeindustrial.com

Re-spacing: Bringing Back Forgotten Spaces

In a bipolar economy, one of the most valuable commodities one can possess is space. Yet, in a world with an ever increasing population where more than 50% have lived in urban areas for almost 10 years – space is underutilized.

The capitalization of space is inescapable, providing boundaries and limits to how and when we use it. But what if there was a way we could make use of the vacant space which lies empty?

That is where the newly coined term 'Meanwhile Use' comes in to play. The term relates to using space temporarily to provide an interim solution to vacant commercial space, providing social and/or economic benefits. Meanwhile uses have grown to include a diverse range of pop-ups, affordable space for startups, guardianships, charities, teaching spaces, and artist studios, to name a few.

The conception of "meanwhile use"

For centuries, we have defined use limitations for space, leaving a growing proportion dormant when a use becomes redundant. The result and effect is producing pockets of disused and neglected spaces, in turn impacting the immediate environment. However, advances in technology have made forgotten space, useful again. This has redefined perceptions of space, leading us to expect much more from it.

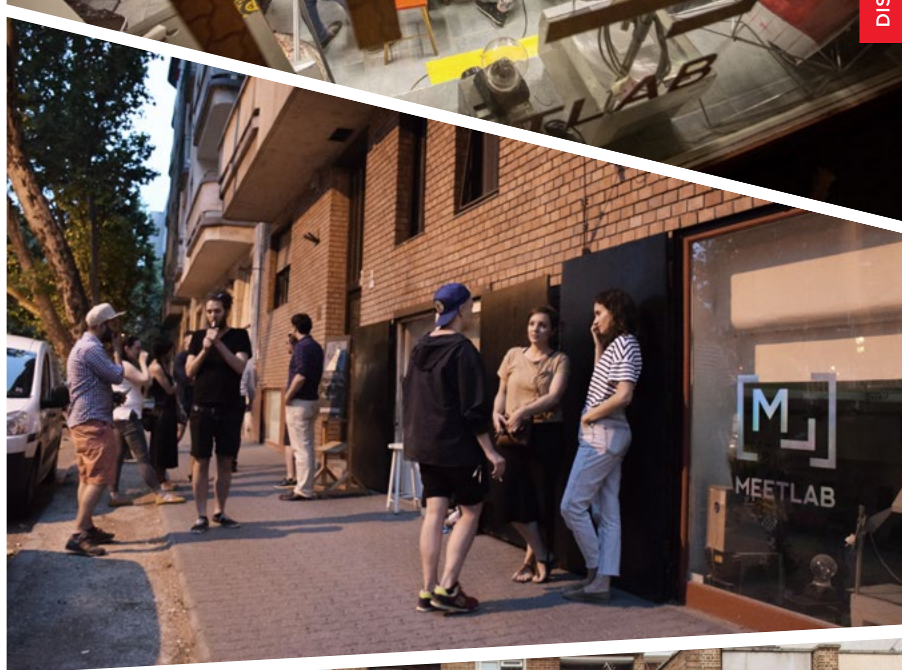
Often occupiers have vacant onerous space which has been 'mothballed,' often unlettable due to quality, location, the inability to subdivide, or an unmarketable term. We are also evidencing more and more occupiers encountering exponential growth requirements which is often difficult to predict at the outset of projects.

REBECCA WEBB
Graduate Surveyor
Global Occupier Services
rebecca.webb@cushwake.com

As such, occupiers acquire additional space to allow for expansion or swing space, resulting in excessive initial day one costs. By introducing meanwhile uses, occupiers are provided with a refreshing and innovative option to mitigate costs and provide occupational agility.

A smaller group of occupiers which include startups, charities, and low-income initiatives often require affordable space while they develop their businesses. Meanwhile uses can provide them with flexibility, access to markets they would otherwise be priced out of, and the ability to experiment new business ideas with lower commitment, risk, and costs.

While corporations mull over how best to resolve this issue in the most cost effective and efficient way, innovative companies have sprung up across the globe. For instance, the likes of Headbox and Peerspace operate as an Airbnb-type provider of commercial event spaces, Storefront facilitating retail pop-ups, and the Creative Space Agency promoting meanwhile use by creatives and artists. Not to mention government initiatives facilitating such uses, some of which offer grants to occupiers.



MeetLab, Budapest
A community workshop and experimental space. Its mission is to innovate the development of visual and other forms of culture, to make such knowledge accessible through design pedagogy and incubation of student projects.

Central Parade, London
A former council direct centre that has been transformed into a mixed use creative hub of retail, office workspace, studio space, and a bakery, for two years while the long-term future of the site is decided upon.

The project was jointly funded by London Borough of Waltham Forest and the Greater London Authority's High Street Fund, designed by Gort Scott Architects and is being managed by Meanwhile Space CIC.

OPPORTUNITIES

Risk reduction

- For fast-growing companies, real estate can't keep up with their growth, offering their 'swing space' as a meanwhile use until they require the space, providing an interim income stream
- For occupiers of meanwhile uses, both in terms of cost and commitment

Culture
A dynamic flexible space defined by the people who occupy the space, fostering a sense of place and distinctiveness

Collaboration
Occupiers of meanwhile uses taking advantage of the sharing economy

Brand building/corporate social responsibility
Reflection of company culture

- For head-tenant who subleases to a meanwhile use
- Meanwhile use occupiers

Opportunity of failure
To experiment with new businesses and ideas with lower commitment, cost and risk

Affordable workspace
Opportunity for occupiers to operate in markets previously inaccessible to them

Employment
Employee attraction and retention of top talent – Generation Z who see work as an experience, and desire a unique and flexible working culture

Financial

- Improved brand and CSR, indirectly improves profits
- Cost savings for head tenants
- Opportunity for occupiers to monetize excess 'swing space'
- Affordability – reduced workplace costs, grants
- Tapping into night time economy – maximizing capitalization of space
- Meanwhile uses may not begin as a financially beneficial option, but they often end up evolving into successful businesses

Why doesn't "meanwhile use" work for all occupiers?

As ever, there are various hurdles when disruptive ideas come to the forefront. One of the first issues to overcome is the legal framework surrounding meanwhile uses.

Often, the real challenge is a change of mind-set. With disruption comes resistance; the real estate industry being a strong culprit of this. In an industry which constantly analyses risk and reward, how can you promote a new concept with many unknowns and potential risks:

> Cost exceeds value derived

> Disgruntled landlords or nearby tenants

> Wasted time and resources

> Increased reinstatement exposure

> Increased insurance premiums

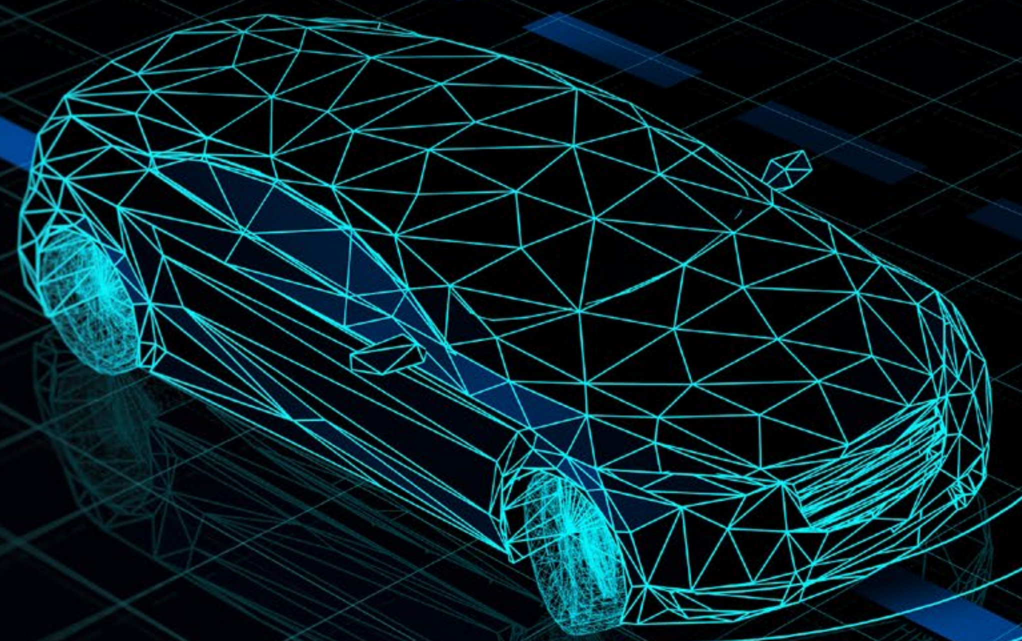
> Damage to PR and brand

> Success is very location/building specific

Despite the risks, the success stories speak for themselves – with great risk, comes great reward.

Peerspace, America
An online marketplace connecting professionals and businesses to short-term space easily. They offer underutilized spaces for photo shoots, offsite meetings, product launches, and charity events in locations such as San Francisco, San Jose, Los Angeles, New York, Seattle, Austin, Chicago, and more.

Driverless Vehicles are Coming – and they're Coming Fast



Imagine a world where a driverless vehicle delivers you from your front door to your office every morning. No driving, no parking, and no hassle required. You can work, eat breakfast, read a book, watch television – or even sleep – during your commute.

Sound too good to be true? Well, thanks to modern technology, driverless vehicles are coming – and they're coming fast. Estimates vary as to when they will dominate the landscape, but many experts believe they will be a major presence on U.S. roads by 2025.

In fact, several automakers, including Volvo, Mercedes-Benz, Volkswagen/Audi, Tesla, and BMW, are already well on their way toward making the driver's role less important. Elon Musk, co-founder and CEO of Tesla, is planning a coast-to-coast demo drive in November or December 2017, from California to New York, with no controls touched at any point during the entire journey. Tesla has also announced that its customers would be able to summon a car across the country by 2018. General Motors is now testing its self-driving Bolt in Arizona, and BMW and Nissan have joined Mercedes-Benz in announcing plans to offer cars with self-driving capabilities by 2020.

With so much growth and change on the horizon, this technology is sure to have major implications across the board, including on corporations. Although the technology is still a work in progress, it's never too early to start thinking about the impacts the new technology will have on the workplace.

It's no wonder these companies are all jumping on the driverless technology band wagon. Last year, Goldman Sachs projected the market for advanced driver assistance systems and driverless vehicles would grow from about $3 billion in 2015 to $96 billion in 2025 and $290 billion in 2035.

JEFFREY GREEN
Managing Director
Global Occupier Services
Lead - Automotive Sector Group
jeff.green@cushwake.com

NEIL GORMAN, MRICS
Partner - EMEA
Global Occupier Services
neil.gorman@cushwake.com

Driverless vehicles are expected to:

Increase employee productivity. According to McKinsey & Company, we'll all have an extra 50 minutes per day for work or relaxing because we won't have to drive ourselves to or from work. This equates to productivity gains of $507 billion annually in the U.S. where Americans spend some 75 billion hours a year driving, according to the Morgan Stanley article "Autonomous Cars: The Future is Now." Whether drafting documents or conducting a video conference, driverless vehicles will enable employees to conduct business seamlessly to and from work – all while on the move. This increased productivity is sure to have a profoundly positive impact on corporations' bottom lines, both in the short and long term. And when not actively working during the commute, employees can enjoy some much needed down time, which can ultimately reduce the level of overall stress.

Free up space. Now, imagine that after working (or binge watching your favorite show) during your entire commute, you were then able to be dropped off right at your office's door, heading right into your morning meeting instead of wasting time parking (and potentially walking several blocks to your office). Upon dropping you off, your car could simply park itself either around the corner or in a free lot miles away. Or, in a world where Transportation-as-a-Service (TAAS) – think Uber or Lyft – is the new norm, the vehicle you took to work just keeps going, moving from passenger to passenger, stopping only to refuel or for repairs. With a reduced or eliminated need for parking, developers and owners are freed up to use current parking structures and lots in whole new ways – be it housing, retail, healthcare, urban farms, or parks. In fact, some experts predict that driverless vehicles will have erased the need for up to 90% of our current parking lots 15 years from now. To quantify that impact, just consider that the European Parking Association estimates there are nearly 250 million parking spaces across Europe and a study conducted by researchers at UC Berkeley estimated the count in the U.S. is potentially three times higher. Now that's a lot of land that will need to be repurposed.

For those buildings that plan to keep parking within their structures, the automation of driverless cars will allow more cars to be parked in less space. In fact, according to McKinsey & Company, we'll have 61 billion extra square feet of parking space, partly because driverless vehicles will park consistently and closer together than they do now. Some architecture firms and developers are already changing the way they create new buildings that accommodate for current parking needs, but have the flexibility to easily transition if parking demand drops dramatically. One example of this is creating parking decks with flat floors (instead of the typical slanted design) and putting the ramps on the outside of the structure. At a later date this design will allow for easier transition to other uses. In addition to the change in parking, the ingress / egress infrastructure of buildings may need to be modified to accommodate occupants' mass use of driverless vehicles. Envision a building with less parking and much larger pickup and drop-off sections. And, what parking does exist will likely need to accommodate car charging as electronic vehicle (EV) technology is likely to become more prevalent.

Whether constructing new commercial real estate with reduced parking or revamping an older building's parking garage into modern office space, driverless vehicles will ultimately alter the demand for parking, freeing up space in and around existing commercial real estate. This will offer myriad challenges and opportunities for owners and occupiers.

Provide more location flexibility. When it comes to driverless vehicles, the old saying, "location, location, location" takes on a diminished meaning. Sure, location will always matter, but driverless transportation has the power to reduce the stresses of a daily commute and provide opportunities for commute time to be used more productively. Both of these factors will make it increasingly less important to live close to the office for some employees. This may increase the demand for housing, and with it supporting retail, in the exurbs of cities as the distance from ones work can be increased with a lesser impact on one's quality of life. Companies can open offices more easily in less expensive secondary markets and draw from a larger talent pool as location becomes less critical. The relationship with public transportation may also change as immediate proximity is also not as important since driverless cars are plentiful and can easily and cost effectively get people from the train or bus to their final destination.

Industrial real estate users – manufacturers, fulfillment centers, and warehouses – will also see changes from the advent of driverless technology. Just as the advent of new energy sources allowed for mills to move away from rivers, an abundance of low-cost, unmanned vehicles will open up manufacturers to less costly areas less reliant on air and sea ports or train lines. The reduced and/or eliminated labor costs associated with moving materials will allow for companies to take advantage of lower real estate costs that come with less convenient locations. This will, of course, dramatically impact the trucking industry as driverless vehicles are able to carry freight 24/7 with reduced labor involvement. In fact, Reuters reported recently that Tesla is developing a long-haul, all electric semi-truck with autonomous driving capabilities that moves in "platoons" and automatically follow the direction of the lead vehicle.

Secondary impacts. Beyond the automobile industry and the consumers of various modes of transportation, there are other constituents who will be greatly impacted by the proliferation of a driverless vehicle economy. As with any technology breakthrough that redefines the culture, there will be winners and losers. A few examples of areas that may be positively and/or negatively impacted include:

Local governments: How are driverless cars regulated? Do roads and highways include driverless and driver-led vehicles in the same locations? Does traffic increase in certain locations because of the increased ease, and decreased cost, of driverless transportation? How much rezoning of real estate–parking lots, gas stations, etc.–needs to take place? How is public transportation ridership impacted?

Public safety: To what degree will automobile accidents, and related injuries and deaths, be minimized or eliminated? Where are police and highway patrol resources reallocated if speeding and other infractions are no longer common?

Labor: Which skill sets and occupations will be reduced or eliminated (e.g., cab, truck, and delivery drivers, traffic rout administrators, emergency room personnel)?

Other questions: Will driverless cars be owned by its users – as most vehicles are today – or will it be a TAAS economy with manufacturers, ride share services, or other companies being the on-demand providers of the majority of vehicles on the road? Will driverless cars also be heavily weighted towards EV technology, thus greatly reducing the need for gas stations, emissions testing, and combustion engine mechanics?

Although there are still a lot of unknowns when it comes to the future of driverless vehicles, here's what we do expect: driverless cars will be game changing technology that changes more than just how we get around town. It has the power to increase employee productivity, free up real estate for more productive uses, lower the costs of technology, and greatly reduce automobile accidents. And with 1.3 million people dying every year worldwide from auto accidents – most of them caused by human error – and anticipated savings of up to $190 billion a year from reduced health costs, driverless cars can't come fast enough.

Cushman & Wakefield is the first commercial real estate service firm to the market with a global comprehensive automative SPG offering. Its mission is to deeply understand and address the distinctive challenges of the automotive sector from labor issues, logistics, infrastructure, technology, credits and incentives, to the unique requirements of the real estate itself.

Cities worldwide are jumping on board

How cities around the world are preparing for the driverless future

Driverless vehicles will have a major impact on transportation globally going forward. From increased productivity to cleaner air to reduced traffic and auto accidents, the benefits are undeniable. Although legislative and regulatory roadblocks exist in some areas of the world, no city wants to get left behind.

Here's a quick snapshot of progress that's being made around the world:

NORTH AMERICA

Beyond all the work taking place in California and Michigan, seven U.S. cities - **San Francisco, Austin, Columbus, Denver, Kansas City, Pittsburgh, and Portland** - are taking the wheel, having received a $100,000 grant from the U.S. Department of Transportation after submitting a proposal detailing how they would transform their city's transportation systems.

In addition, here are a few cities making traction:

EUROPE

Although legislation regarding the testing of self-driving cars on public roads has been restrictive and complex within the European Union to date, road testing of autonomous vehicles is still taking place with several countries making incremental progress on the driverless front.

HELSINKI, FINLAND: Versions of a driverless bus, the Easymile EZ-10, recently roamed suburban Helsinki during a month-long trial.

GOTHENBURG, SWEDEN: Volvo plans to test 100 driverless cars in 2017 with testing limited to certified roads, weather limitations, no traffic lights, no pedestrians and no bicycles allowed.

LONDON: Nissan trialled autonomous technology in London this spring, using three LEAF electric cars. The GATEway project is trialing autonomous pods on the Greenwich Peninsula; and Volvo is assessing a proposal to trial level 4 (high automation) technology as part of their 'Drive Me London' program.

PARIS: Self-driving buses were recently tested in Paris with the goal of having autonomous buses parked near overland train stations to shuttle travelers to and from their suburban homes.

ASIA

Asia has been moving forward rapidly with its efforts to develop driverless cars and street networks as well. From Singapore to Shanghai to Tokyo, these countries are ahead of the curve when it comes to driverless technology.

SHANGHAI: This city created a 100-square-kilometer closed course for testing of autonomous vehicles called the National Intelligent Connected Vehicle Pilot Zone. Shanghai has ambitious goals, which include becoming a hub of 10,000 driverless vehicles by 2020.

TOKYO: In addition to doing trials with a modified Lexus GS autonomous vehicle on Tokyo's Shuto Expressway, Japanese leaders are working to outfit Tokyo for the 2020 Olympic Summer Games with a self-driving vehicle force.

SINGAPORE: MIT-based NuTonomy has launched a self-driving taxi service in a 2.5 square mile area, while Delphi has an on-demand ride service on a dedicated test route, featuring six self-driving Audi SQ5s.

Meet TAMI: The Changing Face of the Technology Industry

Technology, Advertising, Media, and Information (TAMI) companies have long led the way in creation of modern, innovative offices. They introduced activity based working before it was ready for 'prime time' and found ways to use offices to display their brand and values. While their creative goals haven't changed, other industries have clearly caught-up. Particularly the fast-learners in the technology industry with their amazing success have brought some key differences.

Top talent, top of mind

TAMI offices are designed to focus on people and results that drive even greater business success. Compared to the financial and insurance sector, they are much less about cost saving. Yes, agility, innovation, and productivity are important like everywhere nowadays, but the bias of technology firms is for talent attraction and retention. It's the scarce, young talent that is responsible for technology executives' sleepless nights. And as every economist will tell you, and many psychologists too, there comes a moment when a lot more money will have very little impact on a person's job satisfaction. Investment in the quality of the workplace and in well-being programs can have a significant influence an employee's decision to stay or go. When losing a highly compensated software engineer can cost the company up to three times their salary, and when that departing engineer inspires others to leave too, technology leaders search for many ways to keep them engaged. They want the experience of work to inspire connections to the company and its people so that key personnel would rather stay than go.

At Cushman & Wakefield, our studies show that when the work environment supports the full range of experiences from bonding and teaming to focus, learning and renewal, engagement is high and strong. After all, we spend one third to one half of our waking hours at work – it impacts our general life quality greatly.

For that reason, in the technology industry, the sit/stand desks have become a standard. So are amenities and perks like gyms, healthy food choices, on-site yoga classes, or massages.

Location matters too: a survey of 400 business students in Paris (ESSEC) showed that 93% didn't want a traditional office and 87% wanted to work in a city center. Everyone is taking notice.

Technology is becoming the cheapest component of work and people the most expensive.

But it's not only the "T" of TAMI. Advertising firms too are increasingly dependent on talented technologists and luring them than keeping them matters. A Cushman & Wakefield client and the CEO of an advertising agency in London said most tellingly, "I'm not worried about my employees moving to a competitor. We're competing against them flying to Thailand and working freelance from the beach. Our office needs to be more appealing than that. It needs to be a place they love. Their home, their community." And as I'm writing these words floating on a big pink flamingo in a swimming pool, overlooking the Ibiza Marina, I must say that I understand his concerns.

> **Virtual work will require both appropriate space and the reassurance provided by direct access and connections to peers and partner workers. Organizations will have to create a new balance between collective and individual spaces.**

Brand my office

Advertising firms also lead the way in using their workplaces as selling tools. Another London advertising agency client had a stimulating, buzz-filled, and creative office yet they pitched and presented to clients in an elegant-boring client suite downstairs. With much encouragement, we convinced them to first tour clients through the office, purposefully walking them around the vibrant and exciting space. The result? "Clients tell us that they've made their decision to work with us before even reaching pitch room."

The TAMI sector is on the forefront in acquisitions of start-ups, which creates interesting challenges in merging the cultures. A large American technology firm we worked with across EMEA developed robust, but flexible workplace and change guidelines that allow an easy incorporation of new firms into the company culture.

In a way, again, the TAMI firms lead the way. How to use your workplace to build engagement and staff satisfaction? How to wow your clients? Watch that space.

MACIEJ MARKOWSKI
Partner, Head of Workplace Strategy CEE
Global Occupier Services
maciej.markowski@cushwake.com

DISRUPTION

The Heightened Cyber Risk Environment and the Implications for Commercial Real Estate

Demand for modern, efficient, and secure data storage is disrupting data center footprints, pricing models, and location selection tactics on a global scale.

Markets and industries across the globe are becoming increasingly integrated due to the improvements in infrastructure, technology, connectivity, and accessibility of information. While this greater integration undoubtedly presents opportunities for companies, it has also increased the risks of doing business.

Cushman & Wakefield – in conjunction with CoreNET Global – undertook a survey of global occupiers across different industries to understand their perceptions of risk and to find out how important security issues are to them in this progressively integrated world.

Cyber risk identified as the number one risk vector among global corporates

Cyber risk was identified by 53% of the corporate respondents as the top risk facing their organization.

While the results of the Cushman & Wakefield/CoreNet survey are consistent with PWC's global CEO survey from January 2017, which revealed 61% of global CEOs are concerned or extremely concerned with cyber threats, interestingly despite the increasing levels of cyber breaches, the Cushman & Wakefield/CoreNet survey found that operational security was of significantly lower concern to many. This is surprising when we look at some of the other survey findings.

With the widening gap between threat and protection becoming a growing concern, especially with specialist security expertise in short supply, many corporations are now increasingly looking outside of their own infrastructures to third party cloud service providers for secure storage solutions. A trend that is re-shaping the demand for data storage facilities across the globe.

76% of respondents believe that a comprehensive security plan and a secure working environment were very important or critical (30% indicated that it is critical) in raising brand reputation, improving the quality of life for employees and helping to attract and retain skilled staff.

93% of all respondents indicate that a robust security infrastructure - if deployed correctly - can create an advantage over competitors at times of increased risk.

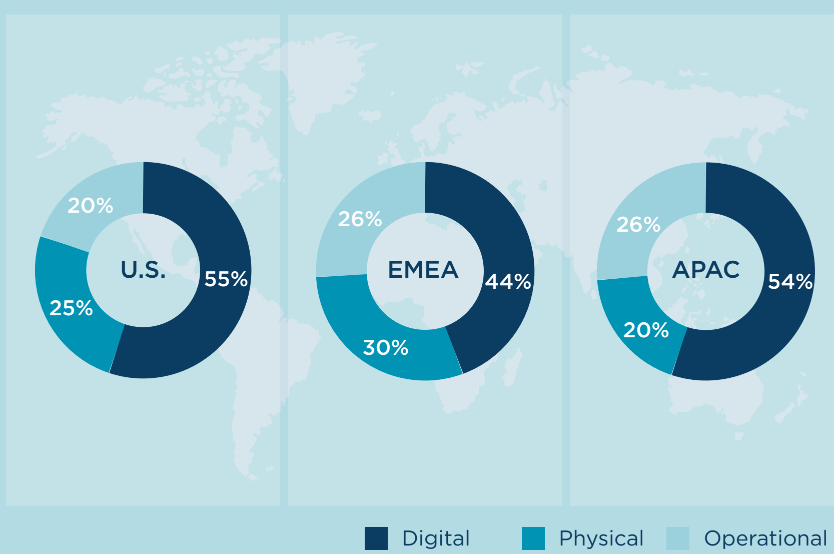
63% of respondents described their work security infrastructure as good or excellent, but 40% indicated that their organization only offered adequate or poor training and guidance to staff in relation to implementing these plans and on how to deal with security risks or breaches appropriately.

25% of occupiers were either unsure if a risk strategy was even in place or felt that there was actually no mitigation strategy for risk.

The survey asked corporate occupiers their view on three primary risk classifications:

- PHYSICAL SECURITY
- DIGITAL SECURITY (CYBER SECURITY)
- OPERATIONAL SECURITY

GLOBAL MAP OF RANKING THE RISK



Source: Cushman & Wakefield Research

Data for ransom

Digital security as the #1 risk to corporate occupiers

In the era of digital business, timing is everything. The ability to launch applications quickly and add capacity as soon as the need arises is critical for corporations that want to compete with data-driven peers and fast-moving startups. Infrastructure that enables business agility and the ability to up-scale quickly to meet growing data needs remains critical to business success or failure, while the requirements to future proof networks in a secure manner against a rising number of risks continues to challenge traditional means of operation. But, too often static infrastructure remains a stumbling block for many organizations.

Demand for cloud-based storage and service providers and their superior technologies that promise low capital output and high business value is therefore a trend that is escalating at pace. Traditional data center demand, as a result is coming into question with the asset class "losing some of its stickiness" for investors seeking to capitalize on occupier expansion, with many now relocating and capitalizing on efficiencies of cloud operator procured space at lease renewal as more data is stored online.

Hyperscale cloud providers, such as Microsoft, Google, Oracle, and Amazon, are quickly growing their share of key cloud service markets as a result, which are themselves growing at impressive rates.

Hyperscale cloud-service operators typically have hundreds of thousands of servers in their data center networks, while the largest, such as Amazon and Google, have millions of servers. These new data centers typically require a lower footprint than traditional centers to cater for storage, due to enhanced server utilization and efficiency, but crucially greater IT loads. While these efficiencies allow for a more productive footprint the rise in data being generated on a global basis has meant that cloud provider requirements are now however on an industrial scale, given the sheer volume of data in today's society. The relatively limited supply of stock to meet demand has meant build to suit is often becoming the only route to new supply.

With hyperscale players committing to build to suit schemes will traditional data centers remain a focal point of a cloud-centric world or fast become a dying asset class?

While the evolving data marketplace is subject to much change one thing remains the same - *data still needs a home.*

In the current climate, cloud adoption is, in its simplest form, shifting which data centers host the data, and in which geographic locations. As such, while the traditional data center may seem under threat it is not a dying asset class, at least not yet.

Clouds live in data centers. And while it is easy to be wrapped up in developments of market leaders, in the nearer-term with the exception of the hyperscale requirements, most cloud providers don't want to build or operate their own data centers. It isn't their core business and a 20-year data center investment doesn't match their operating time frames. It's too limiting.

Not all workloads belong in the public cloud. Public cloud is great for some workloads, such as web servers and streaming media however many other workloads, especially legacy transactional systems are less suited. For organizations that remain more risk adverse, such as banking and financial services, insurance and health care cloud adoption is still treated with great caution and riddled with third-party trust issues.

Regulatory compliance is an issue
This includes not only security but also change management, data localization and taxation. For many organizations, where the transaction occurs and where the data lives can have large financial implications. We see this most especially in financial and health care companies, but it also applies to e-commerce companies and any business generating or storing confidential personal data.

Data growth is certainly outpacing storage capacity. According to IBM research, 90% of the data in the world today was created in the last two years, and 80% of that data is unstructured. It's been said that up to 80% of the data being generated remains untapped because the systems / storage / bandwidth required is not yet available. This is the world created by the Internet of Things (IoT), Big Data, mobile and social. There is simply no limit to the number of devices we can and will connect to the network. And they all need servers and storage.

All of this continues to underpin demand for data center space, albeit via a rearrangement of where requirements are coming from, with no near-term end in sight.

OVER THE NEXT 12 MONTHS:

Expect more mergers & acquisitions – Easing the cost burden on new market entrants which are struggling to keep pace in the competitive landscape.

Expect demand to centralize around sites offering greater connectivity – Both for those servicing small and hyperscale requirements.

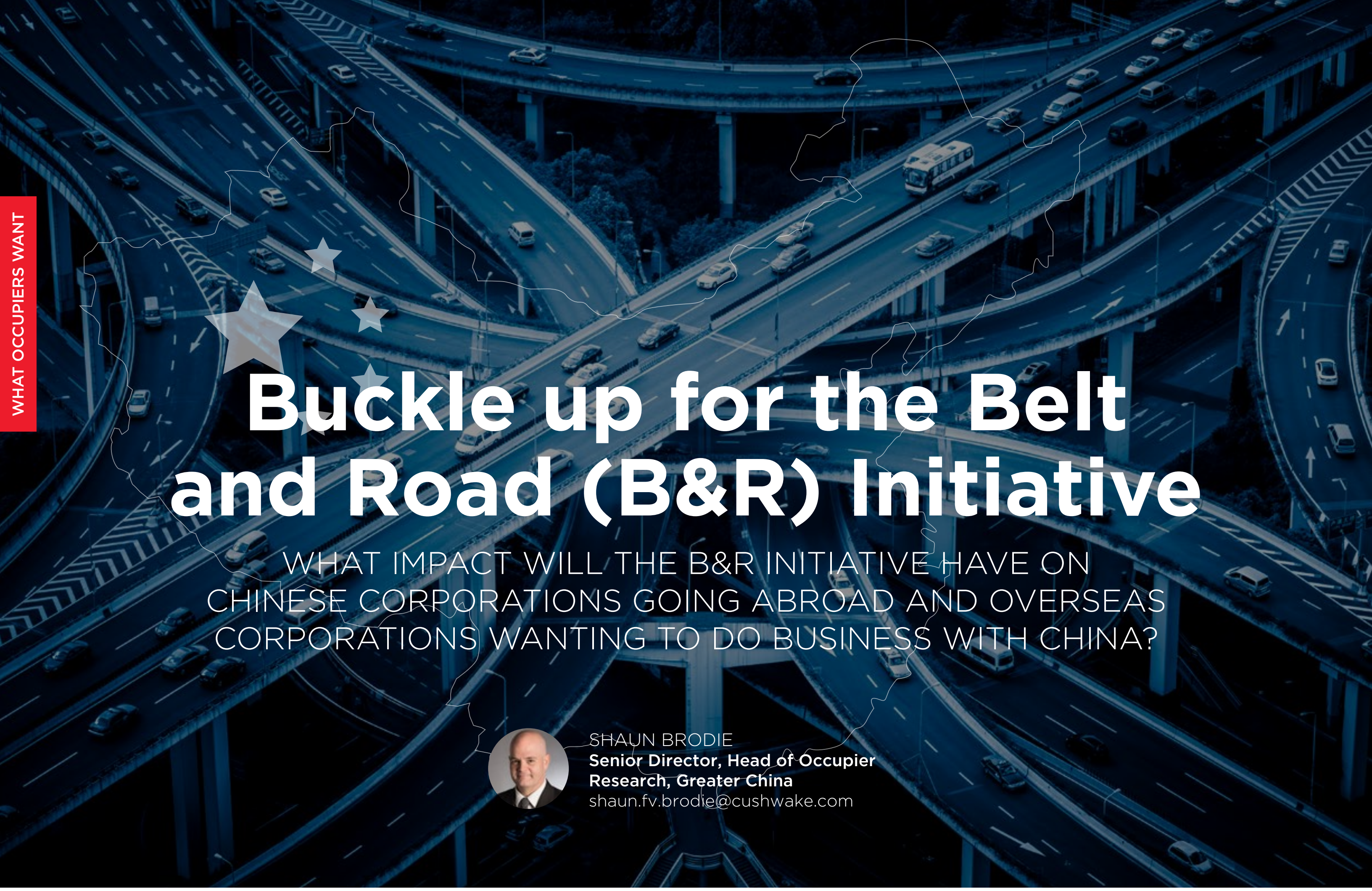
Expect tighter regulation to come to the fore – Impacting how and where data is stored and associated location strategies.

Expect more compliant-driven offerings – The hyperscale players are moving quickly to take issues like data sovereignty off the table.

We anticipate greater demand for smarter data center solutions, while operators will feel the heat to deliver more data facilities, faster, more flexibly, and most importantly more securely than ever. With numerous changes and trends currently impacting the data center landscape, the future of the industry will continue to expand, but will most likely fall to a few key players.

MITCH WICKLAND
Chief Information Officer
Global Occupier Services
mitchell.wickland@cushwake.com

MARK TREVOR
Partner
Data Centre Advisory Group
mark.trevor@cushwake.com



Buckle up for the Belt and Road (B&R) Initiative

WHAT IMPACT WILL THE B&R INITIATIVE HAVE ON CHINESE CORPORATIONS GOING ABROAD AND OVERSEAS CORPORATIONS WANTING TO DO BUSINESS WITH CHINA?

SHAUN BRODIE
Senior Director, Head of Occupier Research, Greater China
shaun.fv.brodie@cushwake.com

The $8 trillion question: "What is the Belt and Road initiative?"

The B&R could become either a source of great-power competition or a force for stability.

It's a confusing name, but it could turn out to be the largest infrastructure project with close to one trillion dollars being invested across the globe.

The much-talked-about Belt and Road (B&R) initiative is a massive infrastructure and economic development plan put forward by President Xi Jinping. At an estimated investment cost of up to U.S. $8 trillion, the initiative centers on connectivity and cooperation between China and Eurasian countries via the overland "Silk Road Economic Belt" (SREB) and the oceangoing "Maritime Silk Road" (MSR).

Since its announcement in 2013, the B&R initiative has garnered a huge amount of interest in China and across the globe. Countless governments, Chinese corporations, and overseas-based corporations have all expressed a willingness to get involved in this massive infrastructure plan, which will be built to ease connectedness and better facilitate global trade. When pieced together, the B&R initiative will be one of the largest trade collaboration schemes the world has seen for many years. No corporation, be they China or overseas based, can afford to ignore this mammoth step change for future global investment and trade.

B&R has been offered as an innovative mode of cooperation in global governance against the backdrop of a worsening economic situation and simmering geopolitical problems worldwide. The strategy underscores China's drive to take a larger role in global affairs and its wish to synchronize economic activity with other countries. Chinese corporations now comprise a larger part of the commercial universe. The composition of the Fortune Global 500 list exemplifies this change in corporate geography. In fact, the number of Chinese firms on the list climbed from 43 in 2010 to 103 in 2016, making China's representation second only to that of the United States. Among the world's billion-dollar firms, around 900 are from the Greater China region.

Having grown to a considerable size at home, many Chinese corporates, be they state-owned enterprises (SOEs) or privately-owned enterprises (POEs), are expected to use the B&R initiative as a strategic platform to further expand their commercial presence and activity globally in the form of either organic growth or via mergers and acquisitions. But, what does the future hold?

The Belt and Road initiative: Will it reshape global trade?

The plan was revealed in September and October 2013 in pronouncements disclosing the SREB and MSR, separately. The strategy underscores China's drive to take a larger role in global affairs, and its wish to synchronize economic activity with other countries.

To cap it all, overseas corporations are also expected to see business opportunities come their way via the B&R initiative. As further details of the initiative are revealed, success will greatly depend on thorough due diligence on what the grand plan is all about and marrying any expected opportunities with any business leadership advantage(s) they enjoy.

The B&R initiative is planned to encompass six overland routes and one oceangoing route:

> **The New Eurasian Land Bridge:** Traveling between western China and western Russia

> **The China–Mongolia–Russia Corridor:** Traveling between northern China and eastern Russia

> **The China–Central Asia–West Asia Corridor:** Traveling between western China and Turkey

> **The China–Indochina Peninsula Corridor:** Traveling between southern China and Singapore

> **The China–Bangladesh–India–Myanmar Corridor:** Traveling between southern China and India

> **The China–Pakistan Corridor:** Traveling between south-western China and Pakistan

The one oceangoing route will be:

> **The Maritime Silk Road (MSR):** Traveling between the coast of China via Singapore to the Mediterranean Sea

The proposed B&R initiative grand infrastructure plan

The scale of the initiative is immense, encompassing around 60 countries and chiefly covering Asian and European regions. In the plan, the regions of Oceania and East Africa will also be integrated. Investment needed for the overall initiative to be fully operational is anticipated to cost between U.S. $4 trillion and U.S. $8 trillion.

Sweeping new markets for business growth

Going abroad in the pursuit of new markets is of interest to many Chinese corporations, including Chinese manufacturers, which have a number of particular motivations. Many manufacturing corporations in China are seeing their sectors deregulating, are mired by overcapacity production, and are encountering strong pressure on profit in their home market. Consequently, this specific group of Chinese corporations are unsurprisingly seeking new markets abroad where they can enjoy less fierce competition and earn higher profits.

Obtaining the latest technologies and advanced management skills

Innovation as a means to stay ahead in the business world is paramount for any company, and Chinese corporations are no different in realizing the importance of this concept. For some time, Chinese corporations (manufacturers in particular) have competed with other corporations on the global stage on low labor costs and forceful pricing, instead of on inventive, branded products with profit margins that are higher. A growing number of Chinese corporations are now certainly developing their own technologies and management know how to enhance their global competitiveness. Other Chinese corporations, however, have gone abroad and have sought global partnerships and/or foreign acquisitions to fill any existing technological and/or management skills gap that they perceive exists between them and other global corporations operating in the same business environment.

M&A activity – A means to an end

The number of mergers and acquisitions (M&A) of overseas business entities by Chinese corporates has not seen any let up of late. Buoyed by the B&R initiative, 2016 saw a rapid increase in the number of overseas M&A deals executed by corporations from China.

According to the Hurun and DealGlobe report, the number of these deals in 2016 increased 21% from the previous year to reach 438 deals.

The report found that China's top location of interest was the U.S., with 84 transactions completed in 2016. What's more, the amount of actual investment involved during the same time period, jumped by a larger 148% to U.S. $215.8 billion. According to the same report, these deals were concentrated in a number of specific sectors, including, manufacturing, financial services, and health. Highlight deals included:

> China National Chemical Corporation's (ChemChina) U.S. $43 billion acquisition of Switzerland's Syngenta AG.

> State Grid Corporation of China's U.S. $12.4 billion acquisition of Brazil's CPFL Energia SA.

> Bohai Financial Investment Holding's U.S. $10 billion acquisition of CIT Group's aircraft leasing assets.

Additionally, Chinese private-owned companies (POEs), as well as private equity and asset management firms, have been participating much more in overseas M&A deals. For instance, POEs and asset management firms from China denoted 66% and 21%, respectively, of the total investors who invested into overseas markets in 2016. By contrast, the total number of M&A deals made by China's state-owned enterprises (SOEs) in 2016 stood at 13%.

SOEs in particular

China's SOEs commenced their internationalization strategies decades ago and much has been achieved in the years since. In September 2015, the Central Committee of the CPC and State Council issued a de-facto plan for SOEs to further reform (titled "Guidelines to Deepen Reforms of SOEs"). The blueprint stated that, "SOE reforms aim to achieve a socialist market economy and improve the modern enterprise system." In essence, what this entails, is that China's SOEs, particularly the big SOEs should:

> Participate and contest in global markets.

> Assign resources around the world.

> Improve operational efficiency.

The B&R initiative plays a big part in this overall scheme and will serve as a major stepping stone as China-based SOEs 'feel the stones as they cross the global economic river.'

The B&R initiative will undoubtedly create more promising external circumstances for China's SOEs to invest abroad and therefore herald a new age of China's SOE sector internationalization. By taking advantage of the B&R initiative, it is expected that the internationalization of China's SOEs will alter emphasis from simply expansion to enhancing operations management and improving global competitiveness.

POEs in particular

With the rising economic might of Chinese POEs and the government's encouragement for "going out," a diminishing share of China's cumulative outward foreign direct investment (FDI) is stemming from China's SOEs. To illustrate this, by the end of 2015, China's outward investment flow from its SOEs stood at a 34.7% share of total outflow However, outward investment flow from the country's non-SOEs (essentially POEs) accounted for a massive 65.3% of China's total accumulated outflow.

With their business flexibility, fast-paced growth, investment diversification, and being somewhat less affected by clampdowns on investment in the host countries, China's POEs have the potential to ride the B&R initiative and gain even better investment results and benefits. Having said this, however, China's POEs do and will continue to face obstacles in being able to "go out." One of these is financing as POEs often have to work that much harder to gain the financial backing for their overseas ventures from banks.

There are some POEs in China that have a lack of experience in dealing with overseas business strategy and the management of their business entities overseas. For instance, some do not possess adequate knowledge on:

> Long-term overseas business strategy development and risk appreciation.

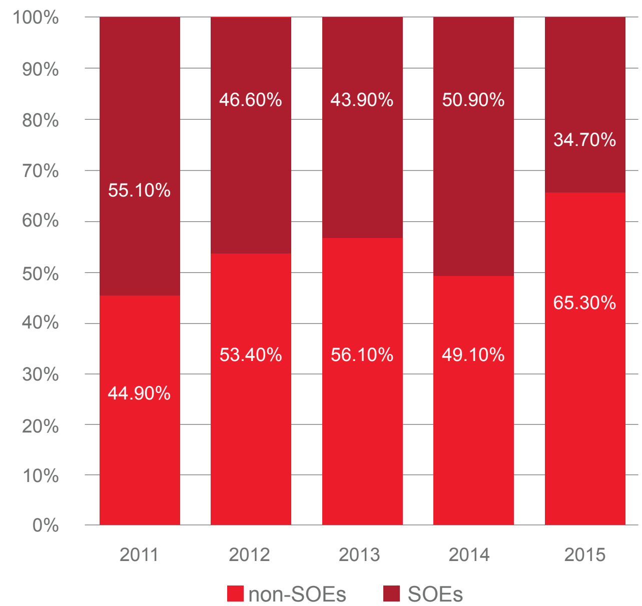
> The investment environment and culture of the countries they are investing in.

> Simply general experience in overseas investment.

The unanswered question: What are the business opportunities for Chinese corporations?

The infrastructure initiative could create new markets for Chinese companies. Corporations from China will certainly be able to use the B&R initiative as a platform to expand their businesses globally. The reasons for these corporations to go global are many, including penetrating new markets for business growth, procuring natural resources, and obtaining the latest technologies and advanced management skills. Today, many Chinese corporations are some of the largest in the world and have, therefore, a huge amount of financial firepower at their disposal to ensure their global visions are a success.

SOEs/non-SOEs (POEs) investment outflow (2011–2015)



Source: Ministry of Commerce, www.comnews.cn, Cushman & Wakefield Research

The B&R initiative: Top business opportunities for overseas corporates

- Outbound capital projects and infrastructure
- Equipment / technology / intellectual property
- Engineering, procurement and construction / project finance
- New client developments
- Chinese partnerships abroad for accessing the Chinese market
- Chinese funding for divestment, fundraising, etc.
- Outbound financing / private equity funding
- Enhancement of trade with markets which have good infrastructure

Source: PwC, Cushman & Wakefield Research

Vested Outsourcing: Five Rules that will Transform Outsourcing

Everyone agrees that collaboration is great and necessary, but the secret sauce is in making the shift from simply saying "collaboration" and "strategic supplier" to truly creating a real win-win outsourcing partnership with your supplier of choice.

How do you make the leap and put the theory into practice? That is the question researchers asked not to ask when they began to study highly successful outsourcing deals that had created a paradigm shift in how they were outsourcing. Researchers codified their learnings into what they have coined as the "Vested Outsourcing" (or simply Vested) methodology.

First, start with a "What's in it for We" mindset that demands a win-win approach. Next, apply five "rules" that are designed specifically to create a flexible relational contract backed by shared value principles where the parties become vested in each other's success. A successful supplier drives the results for the buying organization.

Rule 1: Focus on outcomes, not transactions. The underlying construct of the business model shifts from focusing on "transactions" to focusing on mutually defined desired outcomes. Outcomes are typically big ticket and boundary spanning business goals. In most cases, the outcomes are future focused, meaning the buyer in and supplier are contracting for the hope of a better future, not simply contracting for the supplier to do the work at predefined SLA.

Rule 2: Focus on the "what," not the "how." If you have picked a partner that is truly an expert in what they do, then you should avoid the Outsourcing Paradox (outsourcing to the expert and then telling them how to do the work). A strategic outsourcing deal is not out-tasking or labor arbitrage. Therefore, it is essential to trust the supplier to help you solve your problems. If you think you can do the work better than a supplier can, bring it back in house. Otherwise – focus on the what, and not how!

Rule 3: Agree on clearly defined and measurable outcomes. Make sure everyone is clear and on the same page about the desired outcomes. Avoid Measurement Minutiae by limiting metrics to clearly defined and measurable desired outcomes. Just because you measure how many times someone cleaned the restroom in a day doesn't mean it adds value to the relationship. In fact, it is likely leading to the Activity Trap to create billable work that is easy to measure and charge for.

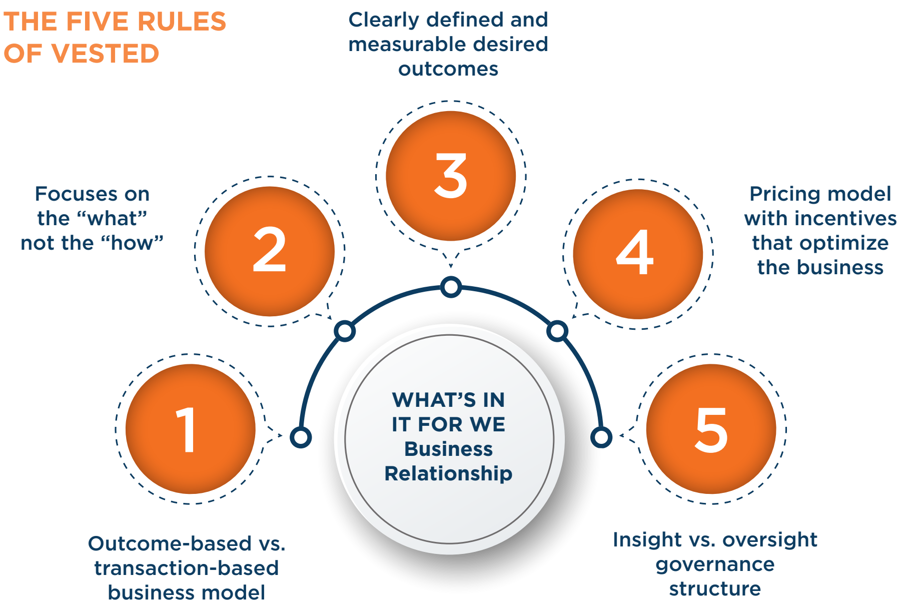
Rule 4: Pricing model with incentives that optimize the business. A Vested agreement does not guarantee higher profits for service providers, but it does link incentives to their success when they achieve your desired outcomes (Rule 3). Simply put, a well-structured Vested pricing model will reward your supplier for making strategic investments in processes that can generate a greater ROI and value over time than a conventional cost-plus or performance-based contract will produce over the same period.

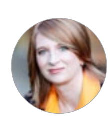
Rule 5: Governance structure should provide insight, not merely oversight. A flexible and credible governance framework enables all the rules to work in sync. The structure governing an outsource agreement or business relationship should instill transparency and trust about how operations are developing and improving in the quest to achieve the desired outcomes.

Does it work? The answer is yes. The book *Vested: How P&G, McDonald's and Microsoft are Redefining Winning in Business Relationships* shares the success stories for these companies and more.

It pays to play by the rules or you will not get the results you need.

THE FIVE RULES OF VESTED





KATE VITASEK
Faculty, Graduate & Executive Education
University of Tennessee
kvitasek@utk.edu

Vested Outsourcing

IT'S TIME TO TRANSFORM OUTSOURCING

A paradigm shift is occurring within outsourcing procurement and corporate real estate (CRE), and at the heart is an increasing focus on outcomes. There is an increased realization that both outsourcers and service providers will achieve mutual success if the business relationship is structured as a partnership. In procurement parlance, this is Vested Outsourcing.

Here are six key reasons why Vested outsourcing should be considered for your next corporate real estate outsourcing model.

1. Building a high-performance business relationship focused on partnering. The foundation of Vested outsourcing is structuring the business relationship as a partnership – both parties have an equal standing. Not only does this reduce potential sources of conflict, but allows both parties to focus on what is truly important. Time is invested in delivering outcomes aligned with the client's corporate strategy, rather than meeting arbitrary metrics that may not necessarily lead to a better solution for the client.

2. A flexible approach leads to flexible solutions. All outsourcing requirements are subtly different. Adopting a Vested approach allows for greater exploration of problems and solutions prior to defining tasks and outcomes, and so avoids a textbook approach. The model therefore is one of flexibility, not rigidity.

3. Driving innovation solutions through partnerships and flexibility. It is this flexibility that drives innovation as an environment of constant improvement is created. As a result, the service provider relationship shifts from "what can we do for you?" to "what can we do better together?" Once an outcome is achieved, the focus can shift to the next, higher level outcome and then the next and so on. Both parties are working together to develop industry leading solutions.

4. Ready for the long-haul: A foundation for a long-term relationship. The whole outsourcing procurement process is likely to take longer as both parties take the time to get to know and understand each other. Time is needed to develop innovative solutions, they are not created overnight. However, this is a key facet of Vested outsourcing. Both parties are on a common journey, underpinned by shared values and goals. Ultimately, this leads to a longer-lasting relationship, reducing, or even removing, the need to retender. Both parties then benefit simultaneously from reduced costs and greater stability.

5. Sharing probability: All for one. The sharp focus on outcomes, and not metrics, ensure that the outsourcer's most significant issues are addressed. The key is to identify and set outcomes that matter. The service provider benefits from this relationship too. Aside from financial remuneration, the service provider is working to develop industry-leading solutions to benefit the client, which also can be applied elsewhere. The flexibility not seen in traditional procurement approaches helps to ensure the operating model and commercial framework are optimal for both parties and are the source of securing much greater outcomes.

6. Shared values in a sharing economy. Adopting a Vested outsourcing approach is essentially a means for a first generation outsource contract to reach a third generation relationship without enduring the pain and costs normally associated. In a world increasingly characterized by the sharing economy, it makes sense for all business relationships to be based on shared values, culture, and objectives.

DR. DOMINIC BROWN
Head of Research, Australia and New Zealand
dominic.brown@cushwake.com

ROBERT KEMENY
Head of Transition and Facility Management SME, Business Operations Support Services
robert.kemeny@cushwake.com

BEN TRACEY
Director
Enterprise Solutions
ben.tracey@cushwake.com

PHIL HANCOCK
Operations Manager
phil.hancock@cushwake.com

FINANCE

Cushman & Wakefield Launches Interactive Lease Accounting Calculator

NEW LEASE ACCOUNTING RULES

The new lease accounting rules will fundamentally change the way leases are recognized on a company's financial statements.

For companies that report under International Financial Reporting Standards (i.e. non U.S. companies), the new rules apply from 2019. For U.S. companies, the introduction of the new U.S. GAAP rules is being phased in with public companies adopting in 2019 and private organizations in 2020.

These new rules will impact all future leasing decisions such as acquisitions, renewals and re-gears, so it is important that everyone is aware of these changes.

BALANCE SHEET CHANGES

From a Balance Sheet perspective, the treatment of leases under the new IFRS and U.S. GAAP standards is similar. In future, all leases will appear 'on-Balance Sheet' as an Asset and Liability. On implementation, Balance Sheets will balloon and companies will appear to have a greater asset base with higher levels of debt.

	Current Standard IAS 17 / US GAAP		New Standard IFRS 16 / Topic 842
	Finance Leases	Operating Leases	All Leases
Assets		-	
Liabilities	£ $ €	-	£ $ €
Off Balance Sheet Obligations			

Balance Sheet Impact

PROFIT & LOSS CHANGES

The Profit & Loss (Income Statement) is where the new IFRS and U.S. GAAP standards differ.

U.S. GAAP Topic 842 – Dual model

Companies will need to classify their leases as:

- **Finance Lease:** Similar P&L (Income Statement) treatment to IFRS 16.
- **Operating Lease:** Straight-lined lease expense is recorded as a single line in operating expenses in the P&L

Under the new U.S. GAAP standard, the existing Finance Lease / Operating Lease treatment for the P&L has been retained. As the majority of real estate leases will be classified as 'Operating Leases' under the new U.S. GAAP standard, the Profit & Loss will continue to be the **same as the rent paid.**

IFRS 16 – Single model

For companies that report under IFRS (i.e. Non- U.S. companies), the Profit & Loss will no longer equal the rent paid under the lease. Instead, lease payments will be split into:

- **Amortization** – Recognized on a straight-line basis over the lease term
- **Interest** – Front loaded at the start of the lease

The Profit & Loss will be **higher than rent** at the start of the lease. The P&L will **reduce** over the course of the lease term due to the lower interest charge. Companies will be seeking to minimize the 'P&L spike' at the start of the lease wherever possible by seeking shorter, more flexible lease terms.

LEASE ACCOUNTING CALCULATOR

To help you navigate these changes, Cushman & Wakefield has just launched an interactive and easy-to-use Lease Accounting calculator. It is designed to illustrate the impact of leasing decisions under both of the new accounting standards, IFRS 16 and U.S. GAAP Topic 842.

The Lease Accounting calculator is a user-friendly tool that will enable you to input the key terms of a lease and calculate the financial impacts under the new rules. If you are negotiating a new lease, you can easily change the lease term, include a break option or adjust the rent review mechanism and re-run the calculations to determine the best financial outcome for your client.

You are able to select either the 'IFRS' or 'U.S. GAAP,' so the tool can be used widely used across the Cushman & Wakefield global business.

The Lease Accounting calculator is available online as a part of Cushman & Wakefield's award winning Global Occupier Metrics website: **occupiermetrics.com.**

PAUL FRY
Partner, Occupier Finance
Strategic Consulting EMEA
Global Occupier Services
paul.fry@cushwake.com

HANNAH COLEMAN
Associate, Occupier Finance
Strategic Consulting EMEA
Global Occupier Services
hannah.coleman@cushwake.com

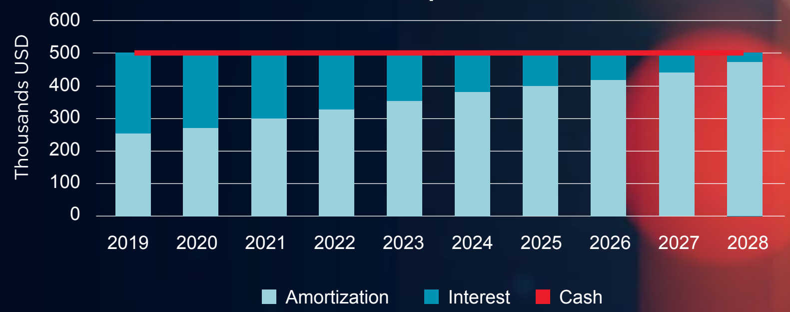
EMMANUEL BENCHETRIT
Partner, Head of Strategic Consulting France
Global Occupier Services
emmanuel.benchetrit@cushwake.com

PETER BROHOSKI
Senior Managing Director
Global Occupier Services
peter.brohoski@cushwake.com

US GAAP - Dual model

	Current Standard		New Standard Topic 842	
	Finance Leases	Operating Leases	Finance Leases	Operating Leases
Operating Costs	-	£ $ €	-	£ $ €
Amortization	£ $ €	-	£ $ €	-
Finance Costs	£ $ €	-	£ $ €	-

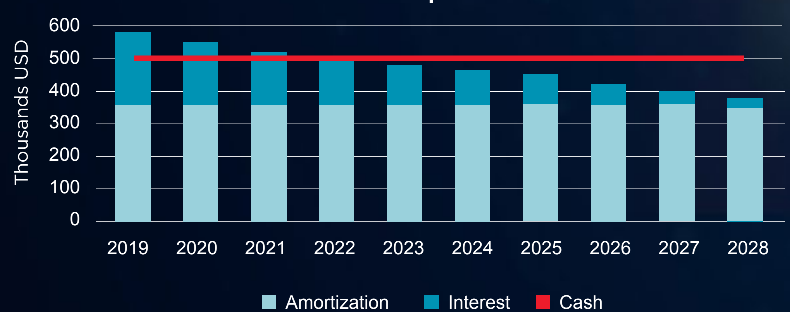
P&L impact



IFRS 16 - Single model

	Current Standard IAS 17		New Standard IFRS 16
	Finance Leases	Operating Leases	All Leases
Operating Costs	-	£ $ €	-
Amortization	£ $ €	-	£ $ €
Finance Costs	£ $ €	-	£ $ €

P&L impact



For more information please contact:

STEVE QUICK
Chief Executive,
Global Occupier Services
steve.quick@cushwake.com

JAMES MADDOCK
Head of Global Occupier Services
EMEA
james.maddock@cushwake.com

CHRISTOPHER BROWNE
Head of Global Occupier Services
Asia Pacific
chris.browne@cushwake.com

HERMES CREATIVE AWARDS

PUBLICATION OVERALL
Platinum Award
Winner

2017
KILLER CONTENT
AWARDS WINNER
Research-Based
Content

2017
23RD ANNUAL
COMMUNICATOR
AWARD
Marketing: Industry Publication
COMMUNICATOR
AWARD
WINNER ★

About Cushman & Wakefield

Cushman & Wakefield is a leading global real estate services firm that helps clients transform the way people work, shop, and live. Our 45,000 employees in more than 70 countries help occupiers and investors optimize the value of their real estate by combining our global perspective and deep local knowledge with an impressive platform of real estate solutions. Cushman & Wakefield is among the largest commercial real estate services firms with revenue of $6 billion across core services of agency leasing, asset services, capital markets, facility services (C&W Services), global occupier services, investment & asset management (DTZ Investors), project & development services, tenant representation, and valuation & advisory. 2017 marks the 100-year anniversary of the Cushman & Wakefield brand. 100 years of taking our clients' ideas and putting them into action. To learn more, visit www.cushwakecentennial.com, www.cushmanwakefield.com or follow @CushWake on Twitter.