2020 FORECAST

Contents

Ten trends you need to know about for 2020

#1 Lower for longer p4

How investors are dealing with a low inflation, low interest rate world – and whether they should be concerned about the possibility of a downturn.

#2 Power to the people p6

Landlords, developers and occupiers need to pay increasing attention to local political activism, as today's street protests increasingly signal tomorrow's policy initiatives.

#3 (De)globalization p8

The pace of globalization is slowing, and in some areas is starting to reverse as nearshoring and the localization of supply chains gathers momentum.

#4 Building resilience p10

Cities across the world are leading the charge in responding to climate change, to ensure economic, social and environmental sustainability.

#5 (Place)making an impact p12

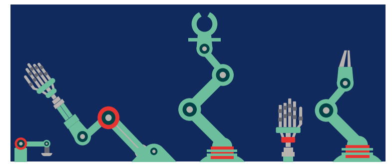
Placemaking creates great environments for people, organizations and communities. It is becoming the focus of socially responsible investors looking for impact investment opportunities.

#6 The rebirth of retail p14

Urban design initiatives, an explosion of technology-fuelled experiential retail and the emergence of new omni-channel strategies give an insight into the future of physical retail.

#7 Let's talk about flex p16

Forget what you may have read in the newspapers, flexible offices are here to stay and will remain one of real estate's hottest growth areas in 2020.

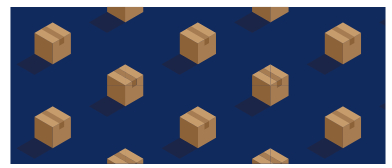


#8 AI p18

Augmented intelligence? Your new best friend could be your cobot, a collaborative robot who will make your life easier by helping you work quicker – and smarter.

#9 Wishing well p20

Wellness is the new front in the war for talent, and buildings have a huge part to play in supporting companies' efforts to look after their staff.



#10 Heavy lifting p22

Logistics is currently a labor-intensive business, and the sector is facing the twin challenges of staff shortages and a growing volume of e-commerce product returns.

And finally... Future growth p24

With political and social easing over cannabis leading to policy changes worldwide, medical legalization presents the real estate industry with new opportunities in 2020.

Sources p26

#1

Lower for longer

LIVING WITH LOW INTEREST RATES

With inflation seemingly nailed to the floor across most of the western world, there are few signs that interest rates are set to rise any time soon[1]. "Lower for (even) longer" remains the mantra for investors.

On the surface it's a great environment for property investing; low interest rates offer a warm bath for real estate, keeping it competitive against other asset classes[2]. Capital continues to flow into the sector, as investors seek out the unique combination of income return and capital preservation that real estate offers over time[3].

But with the real estate cycle slipping into its second decade, the uncertainty felt by many investors about whether current pricing is sustainable seems justified. Real estate might be enjoying an extended period of popularity, but in large part this is due to the backdrop of economic weakness (hence low interest rates) and heightened political uncertainty across the globe – issues which also bring risks for the property sector.

A slowing global economy, with few signs of a sustained pickup in global trade, will impact occupier demand. Productivity growth has been low and while unemployment levels have fallen sharply in many countries, inflation has not risen meaningfully[4].

Central banks currently have little ability to raise interest rates, robbing them of room to manoeuvre if – or more likely when – a slowdown turns into a recession[5]. With governments seemingly devoid of effective policy initiatives, the impact on rental income in the event of a protracted recession could be significant and prolonged.

So, what's the answer for real estate? Avoid investing at these historically high prices? We think not, for several reasons.

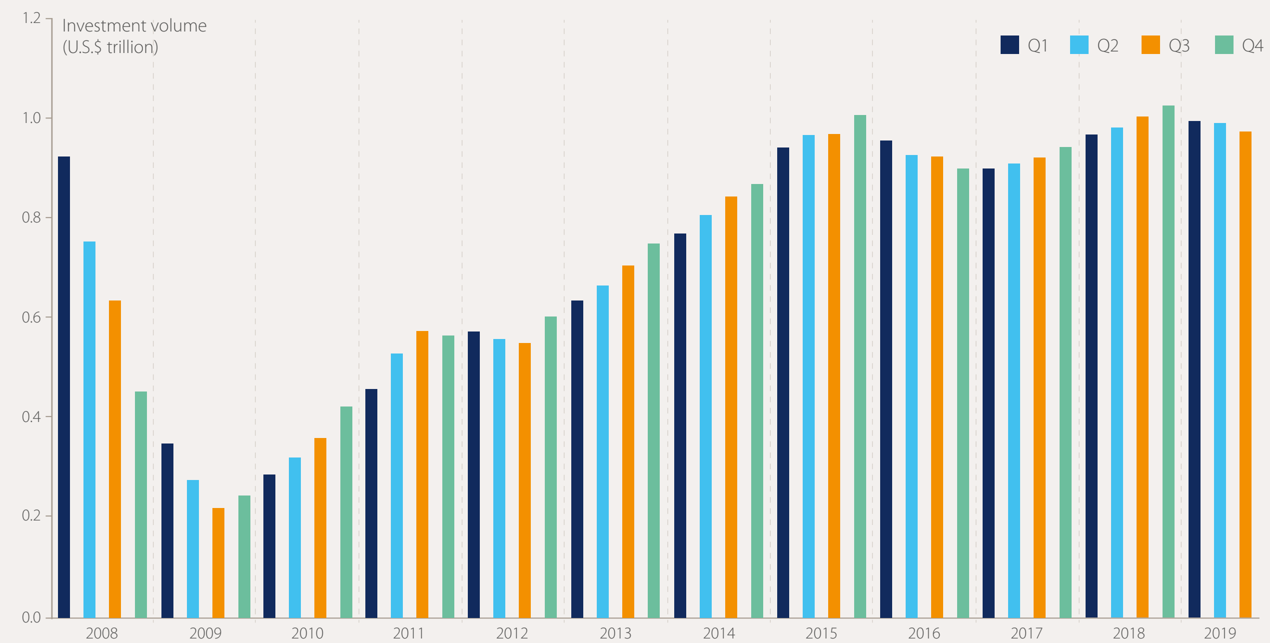
First, while risks are apparent, a significant recession does not look imminent. Downturns are most often triggered by interest rate rises, following a bout of inflation due to excessive growth, which is hardly the case at present[6]. Shocks are always a possibility – but the risk of an all-out trade war seems to be receding. Markets may fluctuate, but a huge pool of Asian capital lies waiting to invest in good quality assets when the opportunity arises, which will help provide a floor for values[7]. Conditions hardly appear "set fair" but the external drivers pushing investors towards real estate are likely to remain in place for a while yet. Second, in most markets there are few signs of overbuilding or "irrational exuberance" in the structuring and financing of real estate transactions. The triggers for the periodic self-destruction that characterised many previous real estate cycles are largely absent. Real estate remains vulnerable to economic and political events, globally and at home, but the same is true of other asset classes. Income is king, so investors should go "back to basics" with a laser focus on managing properties and tenants well, and stress-testing their financing against future turmoil in the credit markets.

Third, savvy investors are seeking out new channels of opportunity. Climate change, impact investing, placemaking, the technological revolution and a host of other issues are reshaping our economies and cities. They bring new challenges, but also new opportunities to create sustainable long-term value in the built environment[8]. Those who accurately detect the current shifting of the tides, and swim with the stream rather than against it, will prosper.

The search for yield continues. Indeed, further yield compression is expected on secure, long-duration assets that still look attractively priced relative to fixed income. But investors need to enter the market with their eyes wide open to the potential downsides, and with clear strategies in place to weather the turbulence that may be lurking over the horizon.

On the surface it's a great environment for property investing; low interest rates offer a warm bath for real estate, keeping it competitive against other asset classes

12 MONTH ROLLING GLOBAL INVESTMENT VOLUME



Source: Real Capital Analytics

#2

Power to the people

HOW POPULISM IS CHANGING THE WORLD

With the U.S. in election mode, Britain still struggling with Brexit negotiations and discontent still rife across huge swathes of the global political landscape, 2020 will be another year when the fallout from populism will be distracting governments from attending to some of its root causes.

When the Developed World Populism Index concluded in 2017 that populism was at its highest levels since the late 1930s[1], many feared an impending avalanche of political extremism. The successes of U.S President Trump and Nigel Farage, leader of the U.K.'s Brexit Party, gave new impetus to the populist coalitions emerging across a range of countries – but a series of subsequent national elections failed to deliver the dramatic changes of government that once looked likely[2]. Europe, in particular, breathed a sigh of relief.

The sense that a bullet had been dodged was, and remains, misplaced. The underlying issues which drove populist movements haven't gone away – quite the opposite. Populist politicians typically prosper during periods of general discontent by focussing on one or two key issues that resonate most strongly with the electorate: big business, big government, immigration, regional independence, climate change…whatever happens to be the issue du jour[3].

This explains why populism often creates coalitions which transcend conventional political divides; the far Right and far Left coalesce around something they have in common, albeit for different reasons - politics does indeed make strange bedfellows. If anything, the range and strength of populist groups is increasing.

The fact that such movements rarely end up forming a national government misses the point. Mainstream parties are scrambling to claw back support, and thus the populist agenda becomes incorporated into mainstream manifestos. The objectives may be watered down a little to appeal to a broader cross-section of the electorate, but the populists are succeeding in changing the focus of the political agenda.

Where the shift in position is measured, thoughtful and strategic in nature, this process should be welcomed. However unpalatable the rhetoric may be to some, this is democracy in action: politicians responding to the "will of the people". But problems can arise when knee-jerk policies are introduced to tackle specific issues, not recognizing – or wilfully ignoring – the unintended consequences that may follow.

Real estate often finds itself caught up in this process, which is increasingly playing out on the local rather than national stage. City authorities are stepping in where central governments fear to tread. Housing affordability is a case in point: Berlin has already announced a residential rent freeze for five years and New York has expanded its housing rent controls to cover around one million units[4]. In London, Mayor Sadiq Khan intends to make rent controls a cornerstone of his 2020 re-election campaign[5].

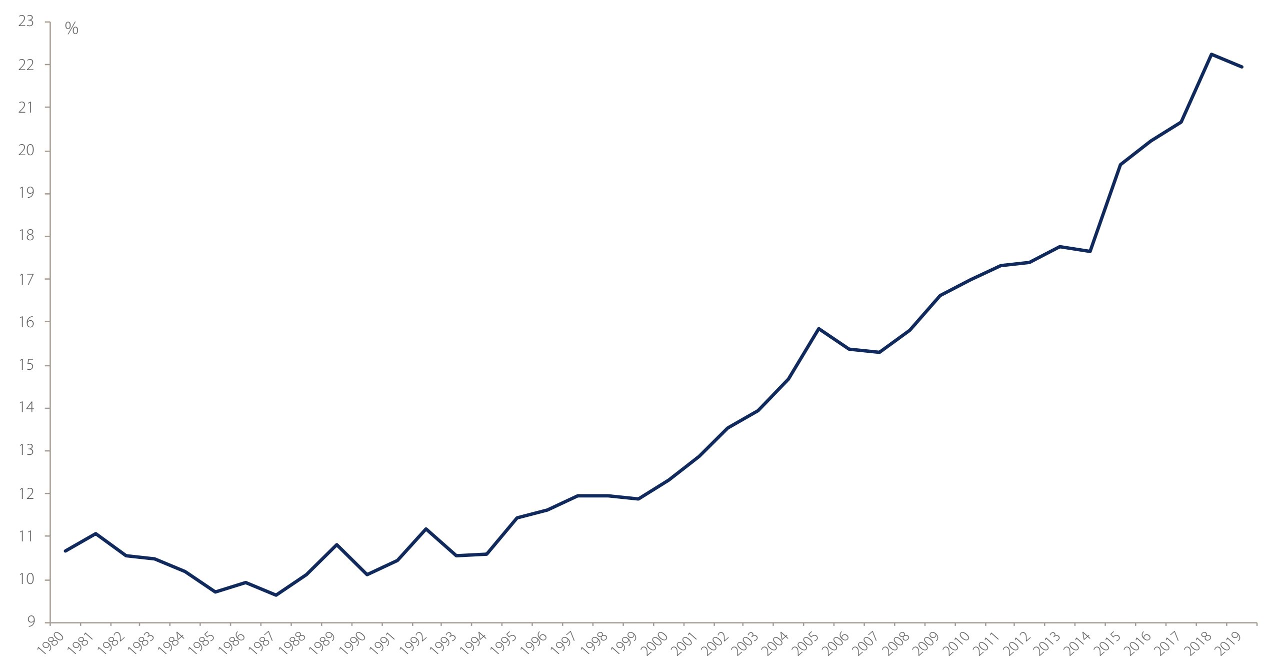
Economists may continue to debate the effectiveness of such measures – the research evidence is mixed[6] - but landlords are left dealing with the immediate impact on the market.

Cities will also continue to take the lead on climate change, bypassing central government inertia on the topic. CDP, a non-profit organization, which supports environmental reporting by cities and corporates, notes that five cities including Paris, San Francisco and Canberra have set 100% renewable energy targets city-wide, while thirteen cities including Boston and Sydney plan to be climate or carbon neutral by 2050[7].

Whatever their views on the issues concerned or the effectiveness of particular policies, landlords, developers and occupiers need to pay increasing attention to local political activism, as today's street protests increasingly signal tomorrow's policy initiatives.

Landlords, developers and occupiers need to pay increasing attention to local political activism, as today's street protests increasingly signal tomorrow's policy initiatives

AVERAGE VOTE SHARE OF POPULIST PARTIES IN ELECTIONS ACROSS EUROPE



Source: Timbro Authoritarian Populism Index (2019)

#3

(De) globalization

A PARADIGM SHIFT?

Globalization's most significant impact on the real estate sector has been the rapid growth in cross border flows of capital into investment markets around the world[1]. While they may fluctuate in the short term, these flows are set to accelerate over the coming years as rising wealth in Asia targets investment grade real estate in the west.

Occupational markets have also been transformed. Globalization has been the defining feature of the business environment of the last 50 years, as corporates have expanded into new markets, production and back-office functions have been offshored and supply chains have internationalized. Here, however, the longer-term trend may be shifting. Heading into 2020, multinational companies are rethinking global footprints to find a new balance between cost-efficiency and business effectiveness[2]. Consumer demands for greater social and environmental awareness from the companies they buy from are encouraging a shift in priorities[3].

On average, affluence and living standards have benefitted hugely from the rapid internationalization of almost every aspect of trade and commerce[4]. But averages can be misleading. Many parts of Western Europe and North America continue to struggle with the impacts of de-industrialization. The benefits of economic growth have not been uniform; perceived inequality has risen sharply[5] and the financial crisis has left lasting scars.

Reactions against the "globalization of culture" used to be viewed as a distinctly xenophobic phenomenon – yet consumers across the globe are seeking out authentic local products and pushing back against the uniform array of multinational brands that typify many shopping centers. The frustration of dealing with a call center halfway round the world is felt by many.

Even from a purely economic standpoint, globalization feels past its peak[6]. The world has already wrung most of the "quick wins" from expanding the reach of World Trade Organization (WTO) rules. The same can be said of the efficiencies to be gained from off-shoring manufacturing and streamlining global supply chains[7].

Political calls to "bring home our manufacturing" play well to a populist audience, but they echo thinking already taking place in many boardrooms[8]. The fact that those new facilities may house more robots than traditional employees gets less publicity. But global companies who are seen as destroying jobs in their home country, unfairly avoiding taxes or ignoring the carbon footprint of their activities are damaging their brand in the eyes of a new generation of customers.

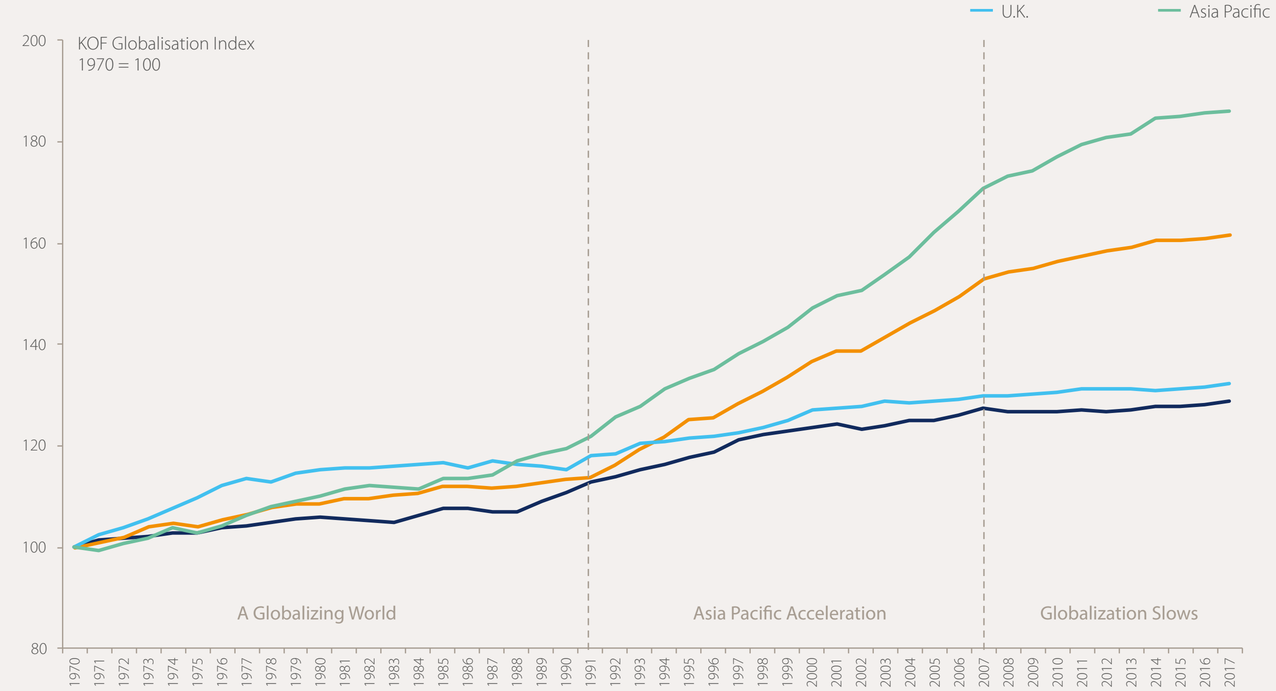
The resulting shift in favor of localization – or at least regionalization – of activities may only be evident at the margins for now, but it is gathering pace. Nearshoring has a commercial imperative; it enables shorter delivery times and greater localization of products, allowing companies to meet consumer demands and react to trends more quickly.

The implications for real estate are profound. Manufacturing facilities (if not necessarily employment) will see renewed demand. Logistics networks will focus more on integrating local and regional hubs, rather than simply connecting efficiently to major ports that are the gateways from Asia. Shopping centers offering a wider range of locally sourced food and beverage, products and services will be differentiated from their competitors, breathing new life into a retail sector desperately in need of reinvigoration.

Globalization is not dead, but it is changing. Investment capital will continue to flow around the globe. But for occupiers, integrating operations in different parts of the world will focus on maximizing quality, access to talent and innovation rather than solely on cost reduction[9].

Nearshoring has a commercial imperative; it enables shorter delivery times and greater localization of products, allowing companies to meet consumer demands and react to trends more quickly

THE PACE OF GLOBALIZATION IS SLOWING



KOF Globalisation Index[10], Avison Young

#4

Building resilience

CITY RESPONSES TO CLIMATE CHANGE

As warning signs of an ongoing climate emergency are becoming more dire and harder to ignore, it is no longer just the scientific community sounding the alarm. Radicalized social protest movements, climate activists young and old and even municipal politicians and bureaucrats are joining the vast majority of the world's climate scientists in reaching a consensus and understanding of the potential social and economic costs of climate change.

The demand for a response is growing, and cities around the globe are developing urban resilience strategies to ensure economic, social and environmental sustainability. They are recognizing their responsibility to mitigate the impacts of extreme weather events on local people, property and infrastructure. By 2030, according to the UN, unless there is significant investment to make cities more resilient, natural disasters may cost cities worldwide $314 billion annually and climate change could push up to 77 million more city residents into poverty[1]; lower income groups tend to be worst affected by climate change, and least able to recover from the effects[2].

Urban authorities also need to adopt meaningful regulation to compel more sustainable development, and to champion the use of technology to measure and reduce energy consumption and emissions from buildings.

Cities have started working together on the issue. The C40 Cities Climate Leadership Group, comprising 94 cities around the world that represent a quarter of the global economy and 70% of the global CO_2 emissions[3], is one such powerful agent for change. Canadian cities including Montreal, Toronto, Vancouver and Calgary have appointed chief resilience officers (CROs) and are developing localized strategies thanks to their involvement in the 100 Resilient Cities Network[4].

The World Green Building Council and the International Energy Agency have highlighted the need for the built-environment sector to significantly reduce its carbon footprint and emissions[5]. New York City's Climate Mobilization Act, which was passed in April 2019, could prove a game changer for North America. It sets a carbon emissions limit for large NYC buildings, and will provide a model for other global cities to emulate[6]. In 2019, the U.K. became the first major economy in the world to pass laws mandating net zero greenhouse gas (GHG) emissions by 2050 and cities such as Nottingham, Bristol, Oxford, Cambridge and Manchester all have ambitions to reach net zero GHG emissions through more localized initiatives[7].

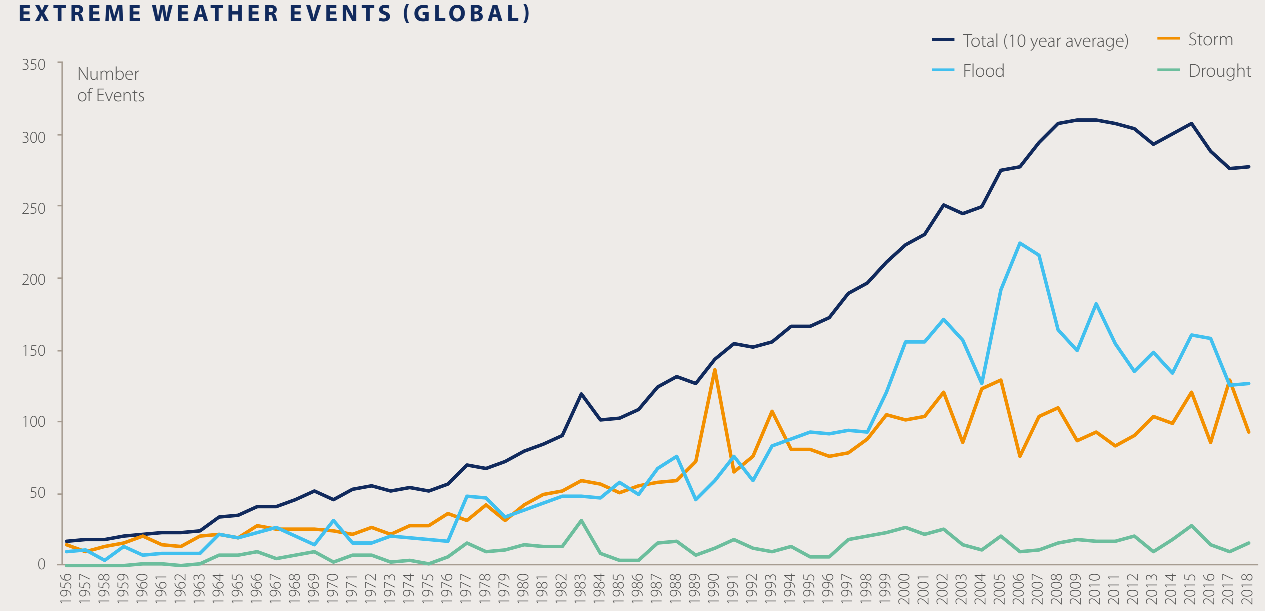
Adopting urban resilience strategies represents a fundamental shift in how we build cities. It will require substantial funding from both the public and private sector, creating significant finance and investment opportunities for private and institutional real estate investors.

It will also need specialized construction and project management expertise to tackle new technologies, building codes and materials[8]. Existing assets will need to be refurbished and retrofitted to meet updated emissions targets. All this will drive demand for new service offerings; from benchmarking of new technology and construction standards to educating the investment industry on which assets will not only deliver strong returns but contribute to the sustainability and health of our built environment.

The introduction of new policies and regulations may be a challenge for the unprepared. However, the real estate industry is perfectly placed to lead a major component of our response to the climate emergency. Around 70% of the global population will live in cities by 2050[9], yet 60% of that new urban settlement has yet to be built[10]. The challenge is also a huge opportunity.

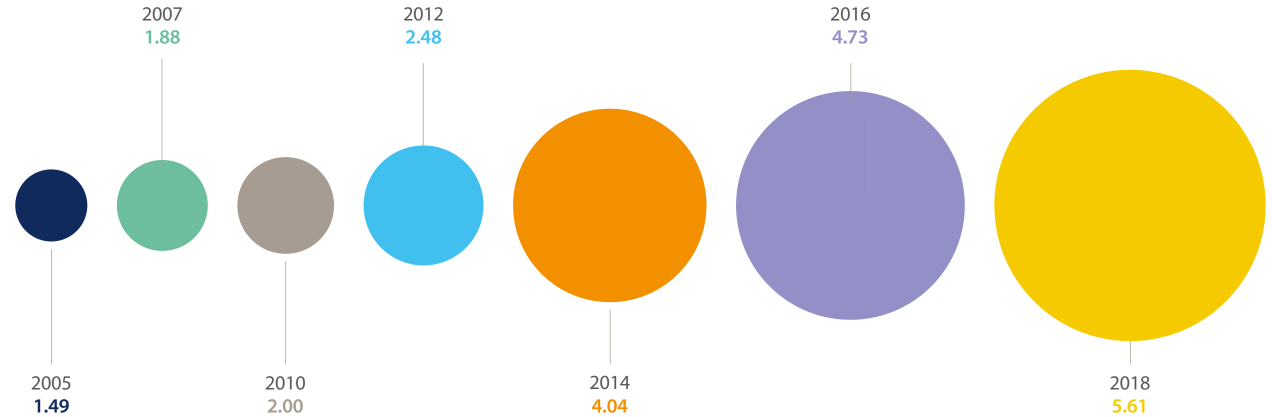
The demand for a response is growing, and cities around the globe are developing urban resilience strategies to ensure economic, social and environmental sustainability

EXTREME WEATHER EVENTS (GLOBAL)



Source: The Emergency Events Database (2019)

ASSETS MANAGED UNDER ESG* CRITERIA BY U.S. INSTITUTIONS (U.S.$ TRILLION)



Source: US SIF Forum for Sustainable Investing (2018)

**ESG: Environmental, Social, Governance*

#5

(Place)making an impact

SOCIALLY RESPONSIBLE INVESTING

In recent years, we've seen growing recognition of the power of good placemaking in creating vibrant and successful developments and neighborhoods. In 2020 the focus on "place" will increase, accelerated by an emerging priority amongst institutional investors: impact investing.

Successful placemaking requires a deeply considered, multi-dimensional response to the factors that come together to create liveable, sustainable and vibrant neighborhoods that are embodied by – and rooted in – the built environment[1].

Mixed-use schemes have long sought to capitalise on the potential benefits of combining multiple occupational uses within a single development. Contemporary thinking now recognizes that a new property development offers opportunities to go further in providing a local response to issues of growing community concern[2].

They can address concerns such as the environment and climate change; housing affordability and social exclusion; and a pushback by corporate occupiers and individuals against inauthentic, sterile environments with no "sense of place".

Private sector recognition that this can enhance rather than detract from return on investment parallels a shift in government policymaking on both sides of the Atlantic. In the U.S., the government is encouraging investors to consider social impact by offering tax breaks for development in 8,700 "opportunity zones" to support underserved communities[3].

In the U.K., the Social Value Act commands the public sector to deliver social, economic and environmental benefits with each project[4]. As a major client and partner for placemaking and regeneration projects, the public sector is beginning to influence the delivery of social outcomes at scale.

More broadly, we are seeing a societal shift in attitudes towards the very nature of capitalism. The ongoing aftermath of the financial crisis coupled with rising concern over climate change and social equality are fuelling a surge in populist politics that is challenging conventional free-market economics[5]. Consumers, clients and employees – particularly from younger generations – increasingly demand that the organizations they deal with recognize their wider obligations to society[6]. Companies that have a "sense of purpose" embedded in their culture will increasingly be at an advantage. Last year, over 180 top U.S. CEOs signed up to a new Statement on the Purpose of a Corporation, committing their companies to operate not just for their shareholders, but for the benefit of all stakeholders – including customers, employees, suppliers, and communities[7]. Corporate attitudes are clearly changing.

Interestingly, this parallels a shift which is starting to occur within the real estate investment community. The growing interest in socially responsible investing is now being focused on "impact investing" – investment undertaken in order to generate specific social or environmental benefits in addition to financial gains[8]. At present, investors seeking such opportunities are leaning into sectors such as later living, affordable housing and healthcare, all of which have obvious social outcomes but are still within the traditional sphere of investing.

More individuals are now focussing on the SRI credentials of the funds and organizations they choose to invest their savings and pensions with. As the level and sophistication of scrutiny increases, institutional investors seeking to tap into this growing pool of funds will have to make genuine efforts to balance social outcomes with financial ones.

The interests of various players therefore seem to be converging. Schemes and neighborhoods where placemaking has created positive environments, combining multiple uses and respecting local communities, are likely to be more commercially successful[9, 10]. Where they are also seen as socially and environmentally responsive, they will be doubly attractive to the talent occupiers are competing for. They therefore offer the kind of investments that tick multiple boxes for institutional investors desperately searching for yield in a market short on opportunities.

Impact investors seeking to capitalise on a growing pool of socially-aware investors could soon become the champions of social and environmental change in our cities.

Companies that have a "sense of purpose" embedded in their culture will increasingly be at an advantage

#6

The rebirth of retail

THE REINVENTION OF THE RETAIL SECTOR

Shopping is no longer just about getting goods into the hands of consumers. Retailing has grown to encompass a fully immersive and integrative experience that invites and holds the public's attention. It stimulates their desire to engage with brands, embark on sponsored journeys of the mind and body and interact with a like-minded community of fellow customers[1].

A reimagining of what retail engagement means for consumers has returned us to the modern equivalent of the traditional town square, a central destination that intentionally blends uses including retail, workspace and leisure with residential space and accessible rapid transit options[2].

The impersonal and transaction-focused nature of e-commerce, while efficient and appealing to cost-focused customers, has left many shoppers seeking to re-engage with experiential retail in search of a renewed sense of community[3]. This has sparked a renaissance of what it means to be a retailer in the age of online shopping.

Microsoft's first European store, in London, allows you to sit in a McLaren for a virtual driving experience

Experiential retail is incorporating digital and mobile technologies such as virtual and augmented reality and social media platforms in ways unheard of just five years ago

Experiential retail is incorporating digital and mobile technologies such as virtual and augmented reality and social media platforms in ways unheard of just five years ago[4]. These tools are being used to keep people engaged - specialized showrooms are integrating multiple offers, from food and beverage areas to hands-on opportunities for in-store product personalization. Curating brand experiences that build and reinforce customer loyalty in immersive environs represents a new phase of retailing the public is only now beginning to perceive[5].

While online activity remains a comparatively small portion of total retail sales[6], its impact on traditional storefront retail has been dramatic. Vacated shopping centers, high streets, strip malls and big-box power centers serve as highly visible victims of the rapidly evolving retail landscape. Yet many of these assets have appealing characteristics - from site configuration and building construction to proximity to rapid transit lines, arterial roads and high-density residential or employment areas[7]. Much of our former retail space is therefore ideal for adaptive reuse or redevelopment.

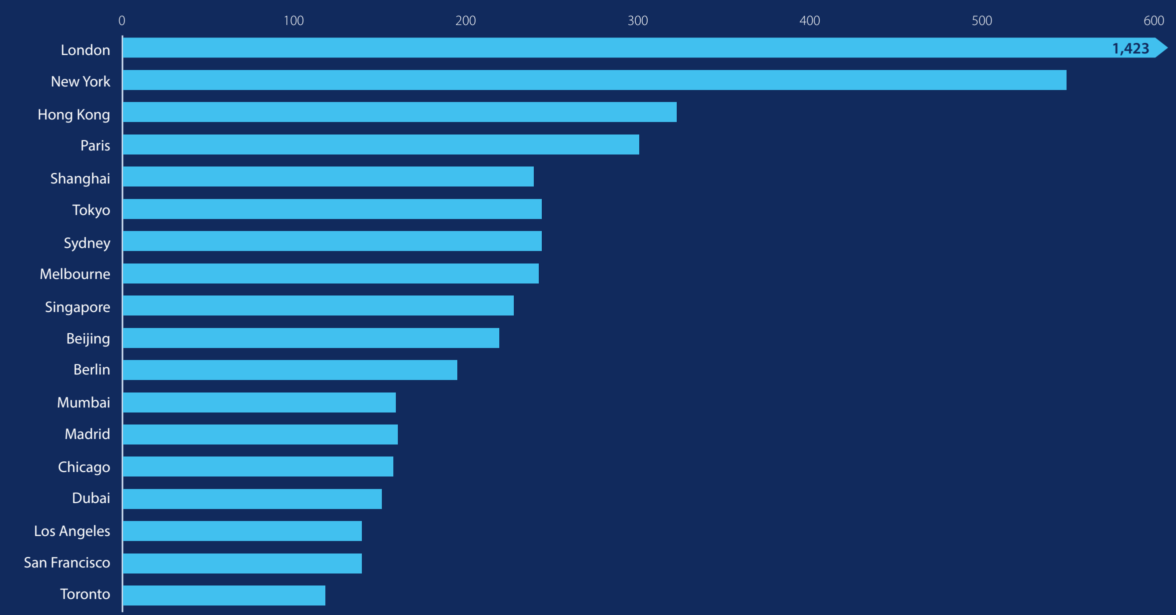
While retail generally remains a key component of any reimagining of the local environment, a complete community of complementary uses is required to boost public and consumer engagement. Investments in the public realm and a focus on walkability produce improved returns across the whole spectrum of stakeholders[8].

While internet sales will continue to expand, many pure-play online retailers are discovering the need for bricks-and-mortar locations as an essential part of an omni-channel strategy. While unlikely to roll out a traditional large-scale store network, many e-tailers are turning to physical locations as a way to promote and showcase new products, and as a channel for reverse-logistics[9].

Pop-up stores in a variety of forms are also driving demand for physical retail outlets. Short-term leases provide flexibility, with opportunities to experiment and to exploit unique spaces. Where these are tied to holidays, product launches or celebrity involvement they can attract publicity and boost consumer appeal substantially.

The ongoing evolution of existing retail-focused assets towards more complete communities of activity that better integrate residential and commercial uses will likely be the most influential retail trend for the next five years. Ongoing investment and visionary thinking are being employed to put communities back at the heart of projects in ways that will deliver long-lasting value for a wider range of stakeholders and facilitate the rebirth of retail.

NUMBER OF FLEXIBLE OFFICE CENTERS BY CITY



Source: The Instant Group (2019) Instant Insight.

#7

Let's talk about flex

THE FUTURE OF FLEXIBILITY

Forget anything you've read in the newspapers, flexible offices are here to stay and will remain one of real estate's hottest growth areas in 2020. The world is in the early stages of a transformational period as the technological revolution takes over from globalization as the primary driver of business change. For all sorts of reasons, workplace flexibility is at the forefront of occupiers' minds.

As a market disruptor, it's not surprising that WeWork received disproportionate levels of attention for cancelling its public offering. But we all know its instincts are correct. With shorter business cycles, innovation at a premium, and talent expecting workplaces that more seamlessly integrate with their lives, how office space is being used is in a major state of flux[1].

Flexible offerings currently account for up to 5% of space across most major office markets[2]. Within ten years, this is expected to make a transformative leap to 15-30%. That's because this is no longer just about freelancers and start-ups, this is smart thinking across all businesses. For occupiers and institutional owners, the future is the core-and-flex combo.

The talented individuals that employers want to target are increasingly drawn from the Millennial and Gen Z cohorts[3]. Like it or not, this talent is making new demands for, amongst other things, work/life integration and a more dynamic work environment[4]. Occupiers are having to respond by securing the right types of spaces in the right places, then managing them effectively to create the environments, plural, that the best employees are looking for. Cellular offices, cubicles, open-plan desks and quiet meeting spaces are not mutually exclusive; each is suited to a particular type of work[1]. Staff are looking to employers to provide the type of space they need, when and where they need it[5].

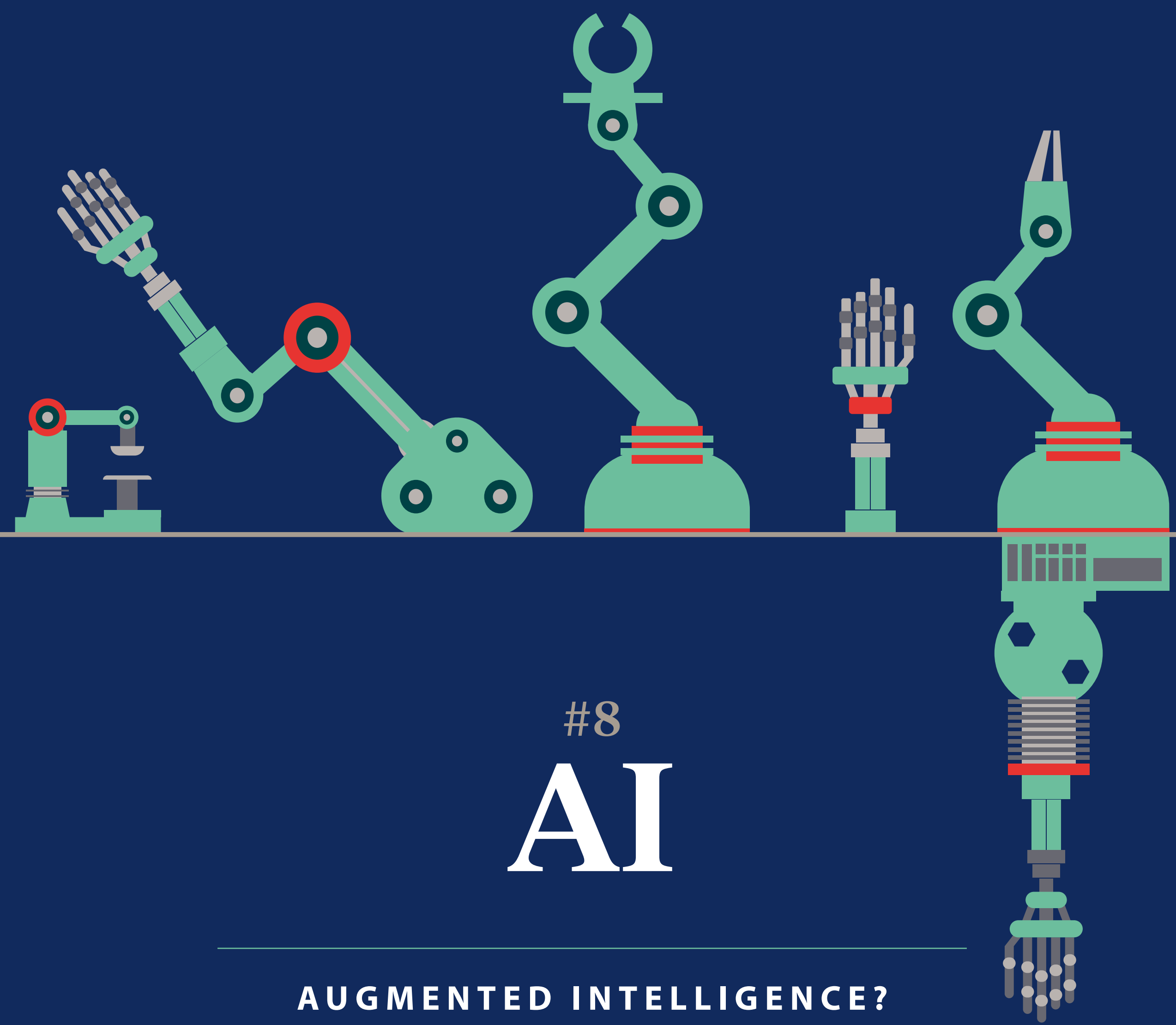
There is also a growing need for occupiers to flex in and out of space to react to economic cycles, to reconfigure it to drive efficiencies and to remain nimble by adapting space to special projects or assignments[6]. Integrating short-term solutions into their portfolio mix will generate efficiency savings, facilitate business responsiveness to new opportunities, fuel growth and reduce operational risks. Occupiers are willing to pay a premium for space that helps put this strategy into practice.

For institutional owners, the threat is not that core leases will be consigned to history, but that the market is now more nuanced; 'space as a service' requires a combination of offerings – not just in terms of lease length, but in the level of landlord servicing provided[7]. A string of major owners including Tishman Speyer, British Land, EQ office, WashREIT, Landsec, Irvine Companies, Boston Properties and Hines have already turned over parts of their portfolios to flexible offices, and more will follow[8].

We think owners will eventually commit up to 20% of their portfolios to flexible space, and at these levels the capital markets don't currently think it materially impacts valuations. Certain institutional owners will push deeper than others into the sector; those that get it right can expect to reap the rewards. New products, operating models and partnerships are evolving to support diverse business needs and provide differentiation around factors such as workplace experience, branding and security. While the lease arbitrage model at scale might have been called into question, new management/partnership agreements are likely to smooth the way for future opportunities. Additionally, we predict more operators will look to own the real estate.

Flexible office providers already account for more space take-up than any other sector in every major market around the globe. At some point, consolidation is inevitable. During 2020, this transformation of the office sector will continue apace.

Flexible offices are here to stay and will remain one of real estate's hottest growth areas in 2020



#8

AI

AUGMENTED INTELLIGENCE?

Get ready to make new friends in 2020 - your cobot will soon be on its way. Robotic process automation (RPA) won't – necessarily - take your job, but it will transform it. A collaborative robot will make your life easier, helping you work quicker and smarter by willingly taking on those lower-value tasks clogging up your working day.

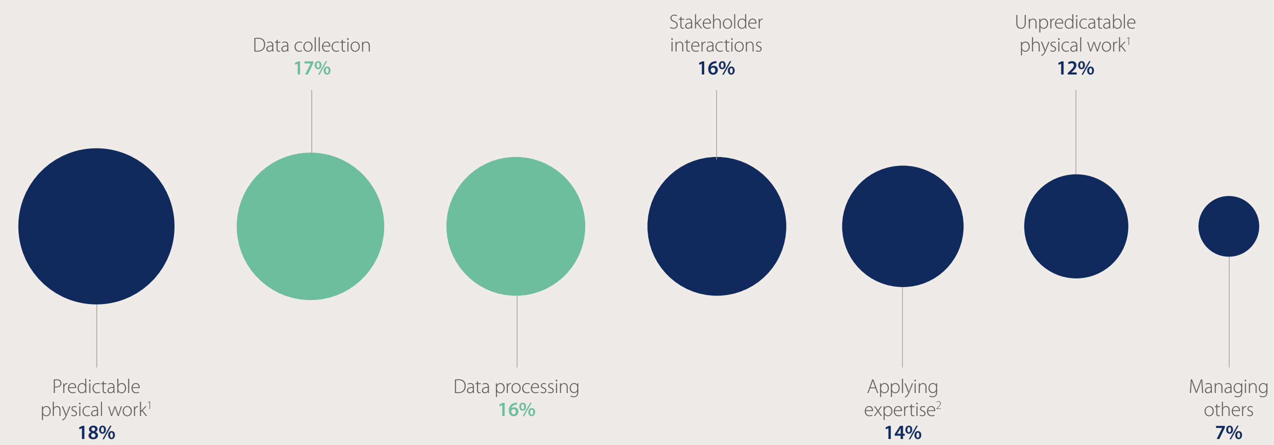
Disappointingly, not everyone will be sitting next to their very own C-3P0 or BB-8. There will be some physical automation, akin to the robots we already see in warehousing and manufacturing. But for workers who focus on knowledge rather than products, most RPA is likely to be software or app based, enabling you to automate workflows across multiple interfaces[1]. Either way it's near future now… RPA is getting cheaper, more efficient and more embedded in cutting-edge organizations with every passing year.

RPA adoption is a fast-emerging trend that crosses all industries[2], with major real estate implications due to the cumulative effect on the type and number of jobs required across different businesses. The McKinsey Global Institute estimates about 30% of the activities in 60% of all occupations could be automated[3].

Back-office functions, which tend to be clustered in more cost-effective secondary and tertiary cities around the world, will be significantly affected; think of the routine information processing that goes on within banking, insurance and accounting[4]. Hot-bed offshoring locations will also be substantially impacted; offshoring is not going away, but robotics will replace some elements of human behavior and activities.

Less obvious is the impact on organizations, or individual jobs, where such processing is currently intertwined with more client-facing tasks. Separating the wheat from the intellectual chaff of everyday work will boost productivity and creativity, with as yet unforeseeable implications for organizational structures and working practices.

TIME SPENT IN ALL U.S. OCCUPATIONS



[1]Unpredictable physical work (physical activities and the operation of machinery) is performed in unpredictable environments, while in predictable physical work, the environments are predictable.

[2]Applying expertise to decision making, planning and creative tasks.

Source: McKinsey & Co (2016)

A collaborative robot will make your life easier, helping you work quicker and smarter by willingly taking on those lower-value tasks clogging up your working day

For real estate in particular, the scope and pace of these advances should cause us to focus on the processes embedded in our industry. From research and investment decision-making to project management and building engineering, our use of technology and automation to process and manage information is in its infancy[5]. That's in addition to staple company activities where opportunities to deploy RPA abound - such as financial management, invoicing, recruitment and HR. One of the big four management consultancies already uses RPA in the onboarding of thousands of new employees each year[6].

Before the real estate sector can benefit from the transformative efficiencies and profitability improvements that RPA and AI will deliver, there is some less glamorous blocking and tackling required. As an industry we need to be much better at collecting and taking back control of the data we have access to, and combining it with third party sources in order to unite the currently fragmented real estate data landscape.

Technology will help, but the first step is a change in mindset.

Transparency of data about our urban environment has a long way to go. As an industry, we don't yet have clarity over what meaningful information we have and what other data potential strategic partners within real estate might own. The increasing availability of such data has seen prices fall, and the current focus on Smart Cities is rapidly accelerating the range of public and private providers[7].

If the industry is going to optimize its use of automation and artificial intelligences, it needs to start assessing its data needs and acting on them. Within those organizations that are already doing so, the cobots are coming…

#9

Wishing well

THE NEW FRONT IN THE WAR FOR TALENT

This is how it used to work just a few years ago: the real estate industry provided the building, the tenant provided the people to put in it every day. The office was a shell within which people got on with their jobs. At the end of the day the workers went home – maybe via the gym, depending on their personal choice. Coffee machines and on-site canteens helped reduce time "wasted" away from the desk. Hours worked was the unofficial metric of employee commitment[1]. Employers were concerned about absence, but mainly in the context of productivity and efficiency.

Not anymore. In recent years, revolutions in working practices have driven a radical shake-up in office design and fitout, forging new relationships between landlord and tenant[2]. Changes in technology and the rise of the sharing economy have transformed our thinking about the nature of work and the workplace. "Space as a service" is now in common parlance[3], but most often thought of in the context of flexible lease terms. In truth, offices are now a joint venture partnership within which owners and occupiers collaborate to provide workspace as a service to their most important customer: the employee.

As the "war for talent" heats up, wellness has become the new frontier for HR departments around the world. Property managers and landlords are becoming their key allies. Employees generally, and younger generations in particular, are becoming more health conscious . The global wellness market has expanded to be worth U.S.$4.2 trillion[4].

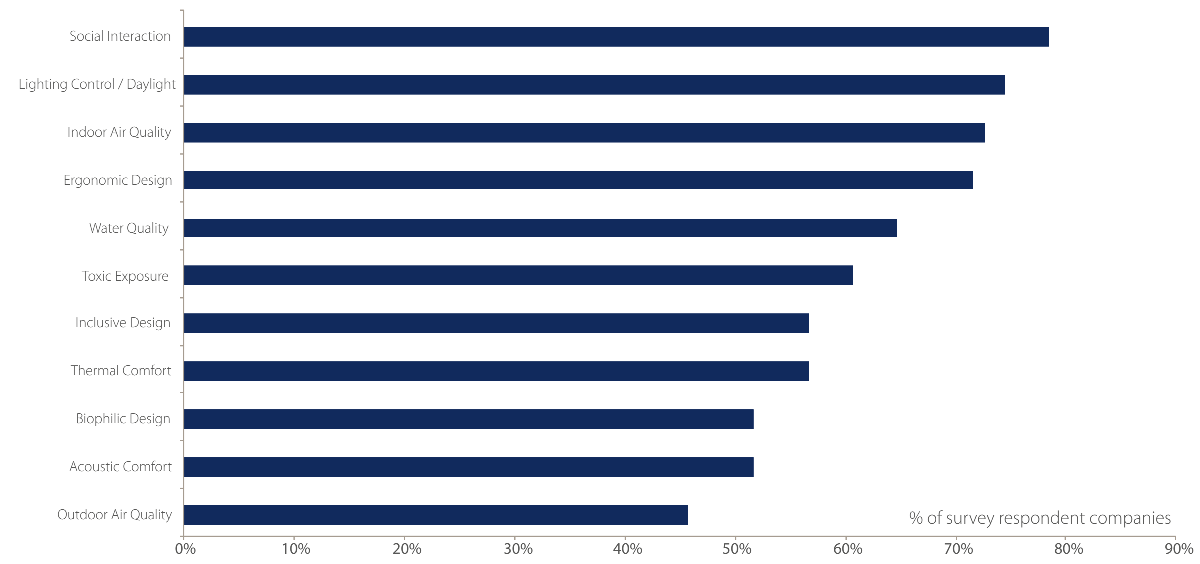
Lifestyle, diet, exercise and work-life balance are recognized as key contributors to mental as well as physical health.

As the boundaries between our work and private lives have become more blurred, so we now expect our employers not just to focus on our wellbeing, but to really care about it. The physical structure and location of a building have a huge part to play in helping companies look after their staff. This includes the creation of spaces that support neurodiversity and those with neurological differences or mental health issues[5].

Good natural light and air quality – preferably using environmentally friendly natural ventilation - are essential[5]. Buildings should also support active lifestyles: an attractive staircase to encourage people away from elevators, cycle racks and showers, maybe a gym[6].

This is particularly crucial in multi-tenant buildings where occupiers have limited opportunities to tailor space to their needs. Catering outlets that provide a range of healthy products are increasingly valued – either within the building or close by - accommodating individual dietary preferences and sustainably sourced from local suppliers rather than multinational chains.

STRATEGIES TO PROMOTE EMPLOYEE HEALTH AND WELLBEING

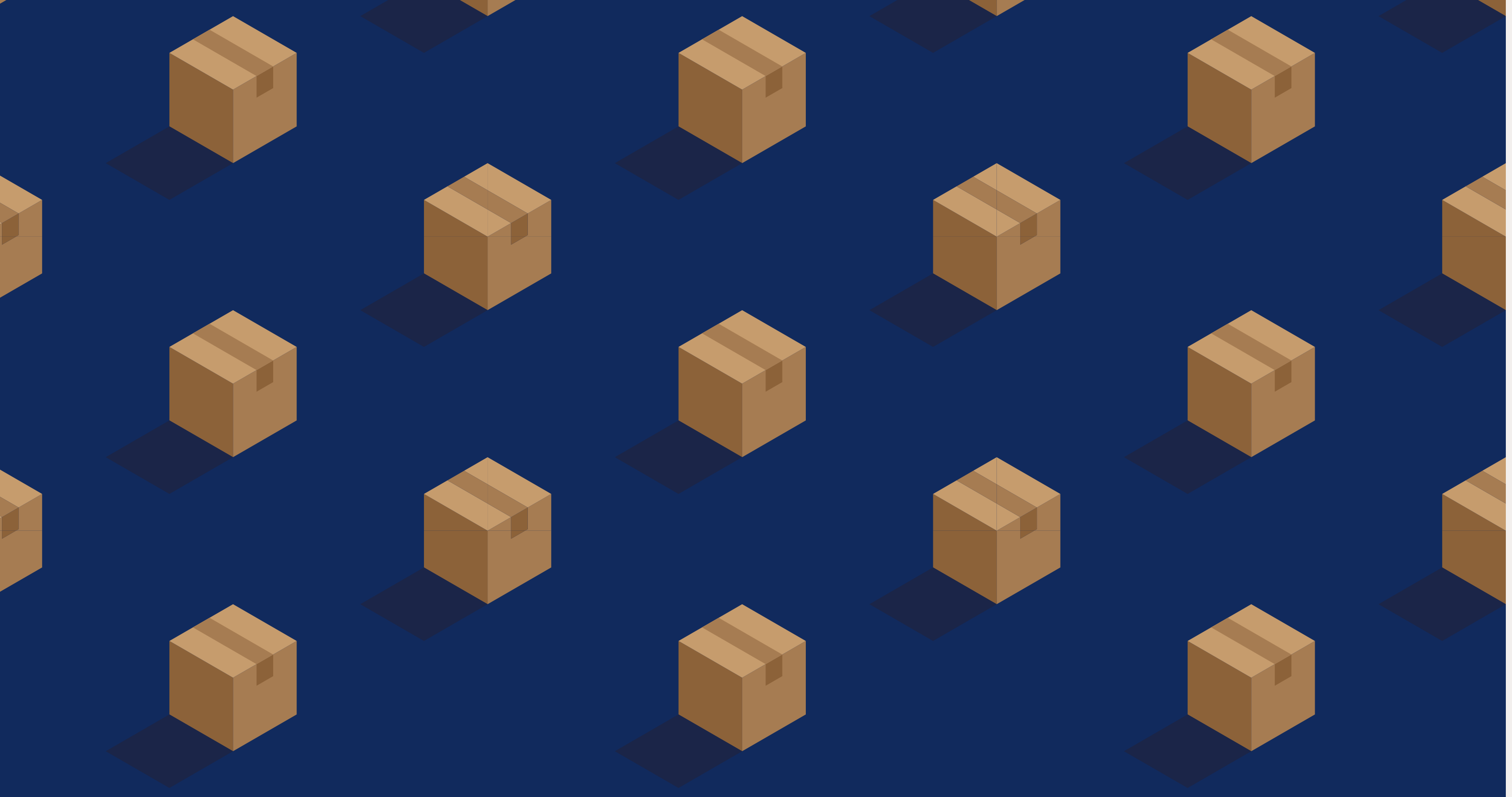


Source: Green Health Partnership & GRESB (2019) [10]

Community building is also critical[7]. It's predominantly been mixed-use buildings that have understood that connectivity of people is key to the holistic success of places. But now we see single occupier and multi-let offices striving to create a sense of place and community. Companies want spaces that instil a sense of pride in their workforce and provide an environment in which people thrive[8].

It is easy to be cynical about corporate initiatives to improve employee wellbeing. But "enlightened self-interest" is a true win-win for both forward-thinking employers and their staff. Happy, healthy employees are more engaged, more productive and less likely to leave[9]. Happy companies are less likely to walk away from a co-operative landlord and a building that supports their efforts. For owners and occupiers alike, a focus on wellness will be increasingly key to maintaining a healthy bottom line.

The physical structure and location of a building have a huge part to play in helping companies look after their staff



#10

Heavy lifting

LOGISTICAL CHALLENGES

Logistics may be the darling of the investment market but, as we all know, it's tough at the top. Viewed superficially, it seems a simple story: booming demand for robot-filled warehouses to support an ever-expanding array of online retailers. The reality is more complex.

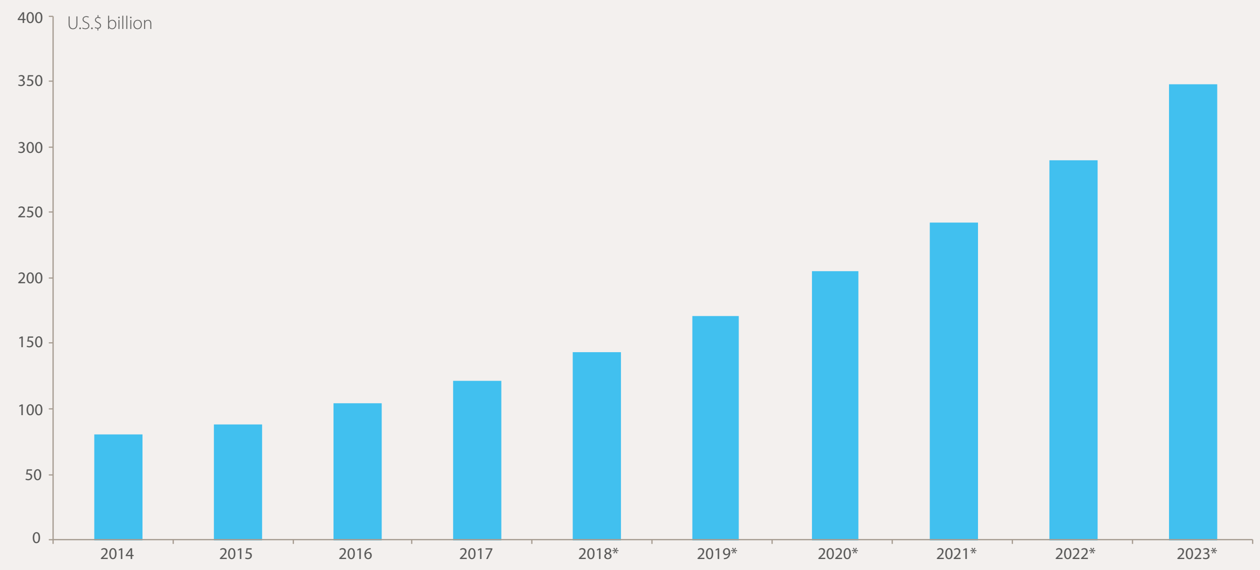
Automation is undoubtedly coming but, for now at least, e-commerce warehousing is a labor-intensive business… and it's short of people[1]. In the U.S., the largest facilities need 2,000 to 3,000 FTE workers, which is difficult to sustain with unemployment at record lows[2]. The U.K. is already short of warehouse workers - and with eastern Europeans making up 15% of the workforce[3], this is likely to worsen with immigration levels falling sharply ahead of Brexit[4].

Alongside "last mile" delivery, the current hot topic is reverse logistics – the process of dealing with unwanted goods returned by online purchasers.

These can run to 40% or more of goods sold in some segments, representing a huge financial and operational headache for retailers[5].

Some run dedicated warehouses or outsource the process to specialist operators. Reintegrating returns into the supply chain is highly labor-intensive, requiring careful handling of goods that arrive in various conditions and irregular volumes. Where processing costs are simply too high, products can end up being discarded[6].

VALUE OF U.S. E-COMMERCE PRODUCT RETURNS



Source: Business Insider Reverse Logistics Report (2018)

**estimate/forecast*

Retailers are recognizing the problem and starting to take action. Some price the costs into their products or charge for returns, others block customers with a history of "excessive" returns[7]. Consumer sentiment is changing, recognizing the carbon costs associated with deliberate over-ordering of goods – but this will take time to permeate through the population as a whole. Ease of returns is currently a key factor in consumer willingness to shop online, so the problem is likely to get worse in the years ahead.

Logistics companies are addressing their employment problem by shifting their attention to locations offering cheaper and more available labor. The trend of moving to non-prime locations is set to continue, securing access to new labor pools as well as greater pre-let property opportunities. In the U.K., Amazon has been responsible for 20% of all distribution space of over 100,000 sf leased in the past three years, and most of this has been outside core locations[8].

Companies are also adopting new initiatives to make logistics facilities more attractive places to work. Health and wellbeing may be discussed more often in an office context, but concern has rightly spread to sheds[9] with many now offering exercise areas such as outdoor gyms and running tracks, and better access to healthier food via in-house restaurants or food trucks[10]. In the warehouse environment, there is a growing focus on better ventilation and air quality, in some cases including the use of moss in "living walls" to absorb airborne contamination.

With labor shortages and cost reduction a perennial challenge in an industry where margins are tight, many companies are already looking at investments in automation and robotics. Both technologies are growing fast; the logistics sector accounts for almost two thirds of all robotics units sold globally, a market which is forecast to grow rapidly.

The technology is now easier to install, helped by modular building designs, and continual software advances are rapidly making all forms of automation more effective and energy efficient.

The technology is not yet at a stage where it's materially reducing staff numbers – and the investment required is not small. Further moves towards automation could prompt consolidation as those companies with stronger balance sheets operating at scale develop a competitive advantage. For the time being, the battle to attract and retain the right employees at an acceptable cost continues in the logistics sector just as it does elsewhere.

Reintegrating returns into the retail supply chain is highly labor-intensive

And finally...

One other issue we think it's important to know about going into 2020.

Future growth

THE OPPORTUNITIES AND CHALLENGES OF CANNABIS LEGALIZATION

"Oh, the times they are a-changin' …"

In March 1992, then U.S. Presidential candidate Bill Clinton created headlines around the world with his admission that he had experimented with cannabis but didn't like it and "didn't inhale"[1].

Fast forward to the U.K. General Election last December and the Liberal Democrats, one of the U.K.'s main political parties, pledged to legalize cannabis and tax it to raise £1.5bn to fight crime[2]. Party leader Jo Swinson admitted smoking the drug at university, saying "and I enjoyed it[3]. "The revelation barely rated a mention in the press.

With political and social easing over cannabis leading to policy changes worldwide - in particular for medical use – this presents the real estate industry with a new opportunity in 2020[4].

Canada kick-started the process back in 2018 when it became the first G20 country to fully legalize cannabis.

Meanwhile, in the U.S., a patchwork of state legislation has resulted in 33 states and the District of Columbia legalizing the drug for medical use. Across the Atlantic, the European Union is considering harmonizing rules around a legalized medical cannabis industry - tipped to be worth €116 billion by 2028[5].

A whole range of by-products is already filling shelves around the world. Cannabidiol (CBD), a non-psychoactive chemical extracted from the plant, is a popular ingredient in food, drink and beauty products. This market is expected to be worth $22 billion in the U.S. alone[6].

The big opportunity for the real estate industry in 2020 is centered on how the expansion of the drug for medical use will open up new markets. National governments are starting to issues licences; Germany agreed three in 2019, which will take the market in the country from €135 million to €1 billion this year[7].

Where regulation allows, real estate opportunities range from research and development through to cultivation and manufacturing facilities. Science parks are likely to house sophisticated lab space and offices. There will be increased take-up of facilities to support plant growth, product manufacturing and distribution.

Canopy Growth, the world's largest publicly traded cannabis company, is a good example of the real estate potential[8]. It has 5.4 million square feet of operations in Canada, which includes indoor and greenhouse cultivation, as well as processing and manufacturing spaces for products that include vapes, food and beverages[9].

Potential opportunities are not restricted to those countries that legalize cannabis for use - medical or otherwise.

The U.K. is currently Europe's largest exporter of the plant for medical purposes, despite its existing tough stance on usage[10]. Countries such as Malta, Greece, Denmark, Spain, Portugal, Israel, and Australia are expected to emerge as large exporters – but as more licences are issued, there will be more focus on domestic growing and manufacturing.

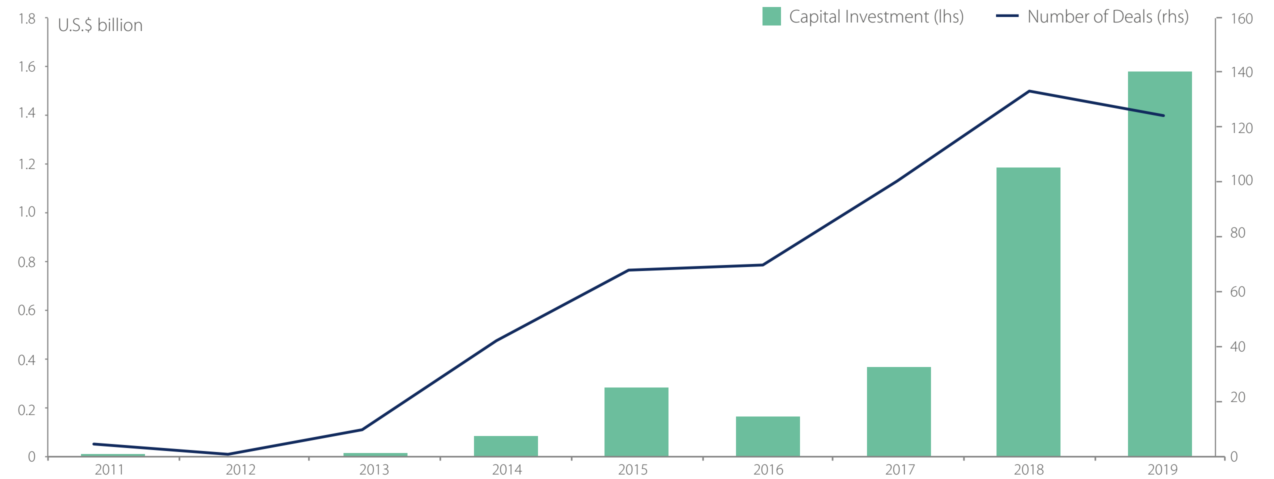
Another sign of the sector's potential is the interest from venture capital. Investments in the U.S. cannabis market hit record levels in the first five months of 2019 when U.S.$1.6 billion was raised across 126 deals[11]. Today's venture capital targets tomorrow's institutional investments.

For those with an eye on future opportunities, Canadian companies are the ones to watch. In 2019, Canopy Growth bought German medical cannabis company C3, Spanish producer Cafina and U.K. skincare and wellness outfit This Works[12]. It also signed up to buy U.S. rival Acreage in a $3.4 billion deal which will finalize if – or more likely when - cannabis is fully legalized in the U.S.[13]. Also last year, Canadian medical company Tilray set up a Portuguese research and cultivation campus[14] while Canadian producer Aurora took over Portuguese competitor Gaia Pharma and won a tender to produce and distribute cannabis in Germany[12].

They are thinking ahead. Savvy real estate players are doing the same.

Potential opportunities are not restricted to those countries that legalize cannabis for use

VENTURE CAPITAL FUNDING FOR CANNABIS START-UPS



Source: Pitchbook (2019)[11]

Ten Trends for 2020

Our Ten Trends commentary has been prepared based on the market knowledge and experience of Avison Young professionals around the world, along with the following sources.

#1 Lower for longer

1. Wolf, M. (2019) How our low inflation world was made. Financial Times.

2. Bank of England (2019) How does the housing market affect the economy.

3. Thompson, J. (2019) Blue Noble joins crowded European property funds sector. Financial Times.

4. McKinsey Global Institute (2018) Solving the productivity puzzle.

5. BIS (2018) Monetary policy: a narrow normalisation path.

6. Taylor, J. B. (2016). Policy Stability and Economic Growth– Lessons from the Great Recession: Lessons from the Great Recession. London Publishing Partnership.

7. Evans, J. & Hammond, G. (2019) Hongkongers turn to Brexit Britain as a haven. Financial Times.

8. United Nations (2019) Impact Transforming Business, Changing the World.

#2 Power to the people

1. Bridgewater (2017), Populism: The Phenomenon.

2. Karnitschnig, m. (2019) Populist tide rises but fails to flood EU. Politico.

3. Goodwin, M. (2018) Why national populism is here to stay. New Statesman.

4. Knight, B. (2019) Berlin's new rent freeze: How it compares globally. DW.

5. Elgot, J. (2019) Sadiq Khan makes rent control key plank of mayor re-election bid. The Guardian.

6. Whitehead, C., & Williams, P. (2018) Assessing the evidence on rent control: an international perspective. RLA: Manchester.

7. CDP (2019) 43 cities score an A grade in new cities climate change ranking.

#3 (De)globalization

1. PwC (2019) Emerging Trends in Real Estate.

2. Lawrence, T. & Vasak, D. (2014). Re-shoring Good, Reinvention Better: UK manufacturing need to take the long view, PA Manufacturing White Paper.

3. Unilever (2017) Report shows a third of consumers prefer sustainable brands.

4. Marangos, J. (2018). Alternative International trade policies and the role of Foreign aid for transition economies. In Marketing Strategies for Central and Eastern Europe (pp. 105-116). Routledge.

5. World Inequality Lab (2018). World Inequality Report.

6. Saval, N. (2017) Globalisation: the rise and fall of an idea that swept the world. The Guardian.

7. Nomura (2019) Globalisation: Stalling or reversing?

8. Moser, H. (2019). Reshoring Was at Record Levels in 2018. Is it enough? IndustryWeek.

9. Groom, B. (2018). Reshoring: bringing manufacturing home. Raconteur.

10. Source: Gygli, Savina, Haelg, F., Potrafke, N., & Sturm, J. (2019) The KOF Globalisation Index – Revisited, Review of International Organizations, 14(3), 543-574.

#4 Building resilience

1. UNISDR (2015) Making Development Sustainable: The Future of Disaster Risk Management. Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: United Nations Office for Disaster Risk Reduction (UNISDR).

2. Thomas, K., Hardy, R.D., Lazrus, H., Mendez, M., Orlove, B., Rivera-Collazo, I., Roberts, J.T., Rockman, M., Warner, B. & Winthrop, R. (2018) Explaining differential vulnerability to climate change: A social science review. Wiley Interdisciplinary Reviews: Climate Change, 10(2).

3. C40 (2011) Letter from C40 Sao Paolo Summit to Rio +20, UN Conference on Sustainable Development: Statement of the C40 Steering Committee on the role of cities in tackling climate change.

4. 100 Resilient Cities (2019) Team Canada: Planting the Seeds for a National Resilience Movement.

5. International Energy Agency and the United Nations Environment Programme (2018) 2018 Global Status Report: towards a zero-emission, efficient and resilient buildings and construction sector.

6. New York City Council (2019) Climate Mobilization Act.

7. UK Government (2019) UK becomes first major economy to pass net zero emissions law.

8. UK Green Building Council (2019) Climate resilience and embracing nature: An ambition for the built environment.

9. United Nations, Department of Economic and Social Affairs, Population Division (2019) World Urbanization Prospects: The 2018 Revision (ST/ESA/SER.A/420). New York: United Nations.

10. Elmqvist, T. et al (2013) Stewardship of the biosphere in the urban era. In Urbanization, biodiversity and ecosystem services: Challenges and opportunities (pp. 719-746). Dordrecht: Springer.

#5 (Place)making an impact

1. Dupre, K. (2019) Trends and gaps in place-making in the context of urban development and tourism: 25 years of literature review. Journal of Place Management and Development, 12(1), 102-120.

2. Hoffman, J. (2017). Mixed-Use Centers, Part I: The Economics of Place-Making. Los Angeles Times.

3. McKinsey & Company (2019) Making the most of US opportunity zones.

4. UK Government (2018) Social Value Act: introductory guide.

5. McPherson, S. (2019) Corporate Responsibility: What To Expect In 2019. Forbes.

6. Orlik, T., Johnson, S., & Tanzi, A. (2019) Tracking the Forces Threatening the World's Hottest Economies. Bloomberg.

7. Gelles, D. & Yaffe-Bellany, D. (2019) Shareholder Value Is No Longer Everything, Top C.E.O.s Say. The New York Times.

8. Sardy, M., & Lewin, R. (2016) Towards a global framework for impact investing. Academy of Economics and Finance Journal, 7, 73-79.

9. Cohen, M., et al (2018) Valuing creative placemaking: development of a toolkit for public and private stakeholders. NSW Government.

10. GVA et al (2018) Places That Work.

#6 Rebirth of retail

1. Mintel (2019) Global Consumer Trends 2030.

2. New London Architecture (2019) Future Streets.

3. KPMG (2019) Global Retail Trends 2019.

4. JP Morgan (2019) Global Insights Report.

5. Wiler, C. (2019) How Experiential Retail Can Rescue Struggling U.S. Retailers. Retail Touch Points.

6. Kantar (2019) Global online FMCG sales grew by 20% in 2018.

7. Forbes (2019) Shopping Malls Aren't Dying - They're Evolving.

8. Living Streets (2018) The Pedestrian Pound.

9. Big Commerce (2019) The Global Omni-Channel Consumer Shopping Research Report.

#7 Let's talk about flex

1. SpaceIQ (2019) Design Your Workplace for Employee Productivity.

2. Instant Offices (2019) Global Flex Market 2019.

3. Deliotte (2017) Future of Work.

4. Great Places to Work (2019) Managing Millennials.

5. The Instant Group (2019) The Growth of Choice.

6. Evans, J. (2018) UK landloards jump on WeWork flexible office bandwagon. Financial Times.

7. Vora, R. (2019) Why Companies Are Adopting the Space As a Service Business Model. Entrepreneur.

8. Hines (2019) Hines Introduces New Global Workplace Platform: Hines².

#8 AI

1. Waters, R. (2018) Businesses turn to software robots for office work. Financial Times.

2. Deloitte (2018) Robotic process automation (RPA) trends and to-do list for scaling across the enterprise.

3. McKinsey & Co (2016) Where machines could replace humans—and where they can't (yet).

4. AT Kearney (2018) Robotic Process Automation.

5. Kurzweil, R. (2006) The Singularity Is Near. Penguin Publishing.

6. Agnew, H. (2016) Technology transforms Big Four hiring practices. Financial Times.

7. Smart Cities World (2019) Smart cities require creative thinking on data centre real estate.

#9 Wishing well

1. Williams, J.C. (2013) Why Men Work So Many Hours. Harvard Business Review.

2. SpaceIQ (2019) Design Your Workplace for Employee Productivity.

3. Vora, R. (2019) Why Companies Are Adopting the Space As a Service Business Model. Entrepreneur.

4. Global Wellness Institute (2018) Global Wellness Economy Monitor.

5. International Well Building Institute (2019) The WELL Building Standard v1.

6. Design Council (2014) Active by Design.

7. WELL Building Institute (2017) Vision for healthy communities built through industry partnership.

8. Mairs, J. (2016) Office spaces should be more like hotels or cafés. Raconteur.

9. Mehta, D. & Mehta, N. K. (2013) Employee engagement: A literature review. Economia. Seria Management, 16(2), 208-215.

10. Green Health Partnership & GRESB; Health & Well-Being in Real Estate. Sept 2019.

#10 Heavy lifting

1. Philips, E.E. (2018) E-Commerce Driving Need for More Warehouse Workers. The Wall Street Journal.

2. McKinsey (2019) Automation in logistics: Big opportunity, bigger uncertainty.

3. BBC News (2018) EU migration: Which industries employ European workers?

4. Staton, B. (2019) Employers 'simply not ready' for post-Brexit immigration regime. Financial Times.

5. Magento (2019) The Journey of a Gift.

6. Optoro (2018) 2018 Impact Report.

7. Orendorff, A. (2019) The Plague of Ecommerce Return Rates and How to Maintain Profitability. Shopify.

8. Avison Young (2019) The rising warehouse: man and machine.

9. Song, Z. & Baicker, K. (2019) Effect of a Workplace Wellness Program on Employee Health and Economic Outcomes. JAMA 321(15).

10. Prologis (2019) Top Solutions to Source, Train and Retain Labor in Logistics Facilities.

And finally… Future growth

1. Waxman, O.B. (2017) Bill Clinton Said He 'Didn't Inhale' 25 Years Ago - But the History o U.S. Presidents and Drugs Is Much Older. Time.

2. Hymas, C. (2019) Legalising cannabis could raise £1.5 billion in tax, say Lib Dems, as they launch manifesto. The Telegraph.

3. Diver, T. (2019) Jo Swinson insists she will not resign even if Lib Dens lose seats at the election. The Telegraph.

4. Grand View Research (2019) Legal Marijuana Market Size, Share & Trends Analysis Report By Type (Medical Cannabis, Recreational Cannabis), By Product Type, By Medical Application (Cancer, Mental Disorders), And Segment Forecasts, 2019 - 2025.

5. Health Europa (2019) European Union history in the making with legalising medical cannabis.

6. Brightfield Group (2018) CBD worth $22 billion by 2022? That's crazy, right?

7. Prohibition Partners (2019) Germany awards domestic cultivation licences to Aphria, Aurora and Demecan

8. Reuters (2019) Canopy Growth Corp.

9. Canopy Growth Corporation (2019) Management's Discussion and Analysis of Financial Condition and Results of Operations.

10. Pasha-Robinson, L. (2018) UK world's largest producer of legal cannabis, finds UN body. Independent.

11. Pitchbook (2019) VCs smoke last year's record for cannabis funding.

12. Meyer, D. (2019) As Europe's Cannabis Industry Opens Up, Established Canadian Companies Are Pouncing. Fortune.

13. Dorbian, I. (2019) Canopy And Acreage Shareholders Approve $3.4 Billion Deal, But Don't Party Yet. Forbers.

14. Cherney, M.A. (2019) Tilray signs first deal to supply pot to Europe out of new Portugal Facility. Market Watch.

For further information about any aspect of Avison Young research, please contact:

Nick Axford
Global Head of Research
+44 (0) 20 7911 2939
nick.axford@avisonyoung.com

Contact details for all our research professionals can be found at www.avisonyoung.com/research-contacts

To access national and local market forecasts from across the Avison Young network, please visit: www.avisonyoung.com/2020-forecast

Visit us online
avisonyoung.com