

**GLOBAL
OUTLOOK
2030**

The Age of Responsive Real Estate

**TEN WAYS YOU'LL EXPERIENCE REAL ESTATE
DIFFERENTLY IN THE NEXT DECADE**



CBRE

A LETTER FROM THE GLOBAL HEAD OF RESEARCH

Welcome to the Age of Responsive Real Estate

In the Digital Age, people, places and businesses became more interconnected than at any point in human history. Now, patterns of real estate use that have been unchanged for decades are evolving and we are entering the Age of Responsive Real Estate.

By 2030, buildings will quickly and flexibly respond to the demands of those who occupy them. They will be more intuitive to user needs—more “human”—and will deliver personalized experiences that support our increasingly on-demand lifestyles. Innovations like artificial intelligence (AI), self-driving cars, next-generation mobile technology and continually growing e-commerce will accelerate the transformation of how real estate is used and traded.

The rapidly rising Gen Z population, which has never known a world without technology, will quickly have an outsized influence on our culture, business and politics.

Workplace design will transform from compartmentalized to a collaborative, open and flexible environment without hierarchical distinctions. And corporations will adjust their outlook, management style and workplace amenities to better motivate and retain top talent. The Age of Responsive Real Estate will foster more creativity, productivity, happiness and well-being for new generations of users.

How will this manifest in the places we inhabit? We'll see a total integration of work, life and play into a single place—with countless options for individual personalization. The interaction between people and buildings will change—with buildings anticipating and instantaneously responding to the needs of people who occupy them. Environmental standards will move from superficial to fundamental, and the value of a property will be perceived as much more than the price per square foot. Critical data will be transparently at our fingertips. Multifamily properties will take center stage for real estate investment. And countries in Asia will provide more investment opportunities than ever before.

At CBRE, real estate and places are our passion. And how places empower people and the world at large is why we come to work every day. So, we put our experts and research to work to imagine what places can and should be in 2030—and beyond—to keep pace with how we all will live, work and play. The result: 10 big trends that capture the transformation ahead for everything from the workplace to the role of automation in real estate investing.

In the year ahead, we'll be sharing unique perspectives and conversations to help define the future of place. Together, we can create a vision that guides our collective transformation—today and tomorrow.

Richard Barkham

Global Head of Research
CBRE



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WORK
01

The Fluid Workspace

The end of fixed workplace attendance will unlock productivity growth and personal creativity.

BY JULIE WHELAN, ANDREA CROSS AND SOHIN CHINYOY



Notice that the stiffest tree is most easily cracked, while the bamboo or willow survives by bending with the wind.

Bruce Lee

The word “agility” implies the ability to adjust as circumstances change. But it also suggests a never-ending need to twist and change with the wind, just as the legendary martial artist suggested.

In our day-to-day lives, the rise of flexible office spaces and modern, experience-driven workplace environments has been a huge shift from the traditional real estate model. But it also foreshadows more of what’s to come. Today’s workers enjoy new choices and new spaces to cultivate their creativity, increase their productivity and improve their health and wellness.

Unshackled from cubicle farms and assigned work stations, workers today are setting up at coffee shops, in coworking spaces, on couches and at backyard picnic tables—even when they travel. Over the next decade, CBRE predicts this radical reimagining of the workplace will accelerate.



In the U.S., the number of people who identify as conducting some of their work outside a traditional workplace grew by

38% since 2004

And, the number of people who identify as conducting most of their work outside a traditional workplace grew by

79% since 2004

Data from the Bureau of Labor Statistics

In the coming years, the ability to work from anywhere will enable a full-scale mobile workforce.

The biggest change has been technology. And it has given “the office” a serious identity crisis. The physical environment used to serve as the place where workers engaged one another, carried out work process and stored the tools and files necessary to be productive. Technology has, in most ways, replaced the physical environment with a virtual one that can be accessed anywhere. It’s the differentiator that is providing that workplace flexibility. And because of that, tech is a much greater dependency for people today than a physical workplace.

BY 2030, CBRE PREDICTS, NEARLY ALL EMPLOYEES WILL BE MOBILE AND REQUIRE A NETWORK OF LOCATIONS TO MAKE THEM AS PRODUCTIVE AND ENGAGED AS POSSIBLE.

Employers will have to offer a menu of working locations that are flexible enough to meet the varied personal and professional needs that employees juggle. This is a big leap from the rigidity of limiting employees to a single location and putting the burden on them to make that location fit their life.

One data point underscores the movement: Global shipment rates for laptop computers have outpaced desktops by more than 50% for at least a decade, according to International Data Corporation. Additionally, tablets have become the preferred personal device, with 2018 sales up by more than 600% from 2010— illustrating the highly mobile culture that has developed



600%

Sales increase of tablets in 2018 from 2010

over the past decade. And of course, smartphones and ever-increasing network speeds have created the always-plugged-in state of people who respond to work messages while in line at the grocery store, brushing their teeth or taking a break from the surf in Maui.

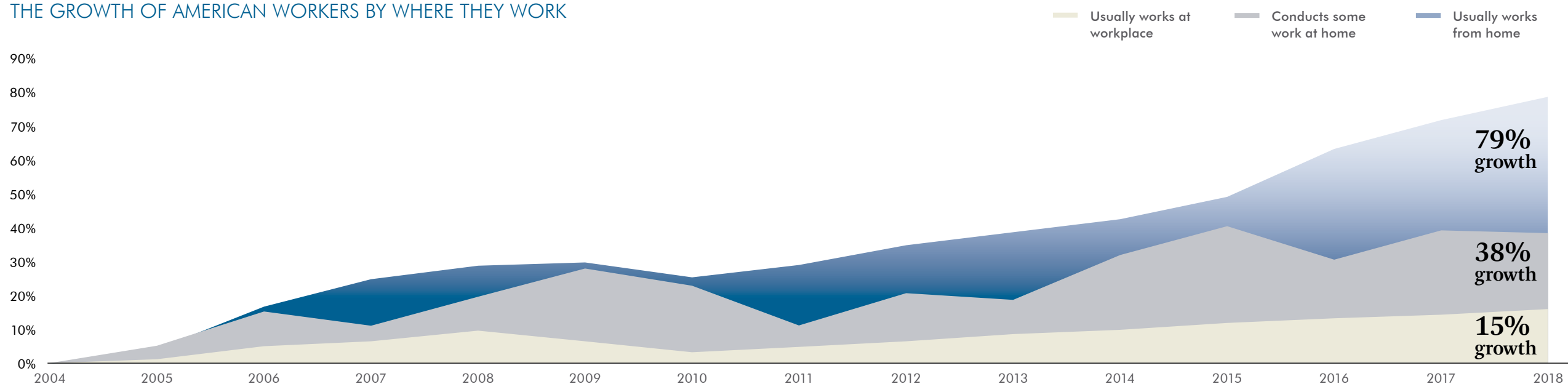
But this transformation is also a result of changes in how work gets done: Task-oriented, process-driven work streams are evolving into ones that require knowledge workers armed with creativity and critical thinking.



The 2030 workplace will compete for use among an even more diverse and mobile workforce. To contend with myriad flexible office options and the ubiquitous connectivity available in a 5G world, it must be the best venue to connect with colleagues, experience brand and mission, and get work done.

Lenny Beaudoin
Executive Managing Director
Project Management, CBRE

THE GROWTH OF AMERICAN WORKERS BY WHERE THEY WORK



Source: American Community Survey, American Time Use Survey, 2018.

THE DECENTRALIZATION OF CORPORATE TALENT

The concept of the remote workplace—at least one that is branded as “telecommuting”—[dates back to 1973](#), when a former NASA engineer proposed a network of small offices close to people’s homes that would allow them to walk or bike to work.

Thanks to technology and the rise of the highly skilled knowledge worker, telecommuting has advanced in recent years to where many workers see the world as their office. They are increasingly moving fluidly between offices in different cities, between client sites and every airport, hotel, coffee shop and Uber in between, ultimately taking the opportunity to work from a place of choice that is more convenient to their personal life when their schedule permits.

This doesn’t mean that the corporate headquarters will go by the wayside. Workers may visit less frequently but when they do, they will expect to collaborate with co-workers for intense, uninterrupted periods during which certain projects must get done.

To meet those demands and to encourage that degree of face-to-face interaction, employers must create spaces that cultivate the creative output of high-skilled workers and make them feel valued and productive while they’re there. That means providing employees a greater feeling of welcome and belonging, and a real chance to engage with the culture of the organization.

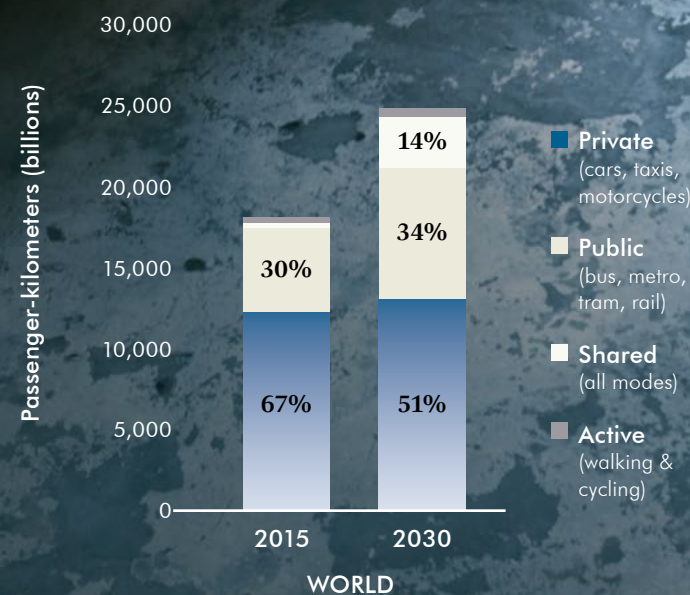
DENSE URBAN-CORE OFFICE SPACE WILL INCREASINGLY BE MORE CLUBHOUSE-LIKE.

Part of this involves basic amenities that are becoming commodities in modern workspaces, such as easy access to food and beverages, tech-enabled meeting spaces, huddle rooms and other amenities that maximize productivity. But it’s also the little things that provide a seamless experience for any employee who walks through the door: no-wait security features like biometrics for easy building access, and intuitive technology that helps find restrooms and provides Wi-Fi passwords. This will allow building owners to concentrate on higher-end amenities such as concierge-style services and access to an adjacent health club or wellness center.

Similarly, as more employees are decentralized from HQ—whether they’re traveling or are remote employees untethered from any centralized location—the likelihood they’ll need to find a familiar, appealing space to be productive will increase, and will push the boundaries of what an office is. CBRE predicts productive flex spaces will continue to proliferate near fitness centers, malls, urban cores and client sites, and will become a key offering under this new work model. In effect, new spaces will appeal to workers because they’ll make them feel less like a guest and more like a member when moving between locations.

URBAN TRAVEL BY TYPE OF TRANSPORT

Source: CBRE Research, OECD (International Transport Forum), May 2019.



This “just-in-time” real estate model means companies and workers may choose to work at one of thousands of locations worldwide on a full-time, part-time or a pay-as-you-go basis. And that means people will pay only for what they need, when they need it. As such, companies that are reimagining their spaces also must invest in technology to keep track of these moving parts. This intelligence will better help organizations understand what portion of their portfolios is best suited for long-term committed space is flexible, just-in-time space—all the while providing a sense of place for their employees.

Many companies already are optimizing their space usage through the deployment of internet-enabled sensors in lights and cameras throughout the workplace. In the future, these tools increasingly can be utilized to make qualitative evaluations and recommendations—

often through [the use of artificial intelligence](#)—such as noting that one team is more productive and experiences fewer sick days when working remotely. Or another team performs better in a collaborative space equipped with good ergonomics and natural light.

The work-from-anywhere trend is also showing up in the housing market. For new residential construction, the home office is igniting design obsession [akin to the chef’s kitchen](#). While it’s true some homebuyers simply desire a comfortable sofa where they can commune with their laptops, others want a defined room with a pleasant backdrop for video conferencing, an interior door that closes and—at the high end—an exterior door that opens to the garden terrace. Even small apartments, where every square foot counts, are being built with alcoves that serve as dedicated work stations.



Providing flexibility in where and how people work is a trend that will continue to grow through employee demands. There are a variety of macro trends that will impact how people work, including the proliferation of technology-enabled connectivity and collaboration, as well as the introduction of self-driving vehicles. Over the next 10 years, employees will further demand the ability to work from a variety of locations, including at home, an office environment, in transit and more. Companies would be wise to not view workplaces in a binary capacity—home or the office. They should provide employees with a portfolio of technology-enabled solutions and locations to work where and how they choose.

Andrew Kupiec
CEO, Hana



THE COMMUTE IS ALSO AN OFFICE

Of course, working from anywhere also means working in trains, planes and—in the coming decades—autonomous vehicles (AVs). Already, workers in many markets have become more productive while traveling in technology-enabled transportation networks. People who live outside large cities can answer email on commuter trains, then zip to the office using a bike or scooter share. Or they can keep at it after transferring to a rideshare service like Uber or Lyft.

At some point in certain areas, AVs will become an appealing option. The U.S. likely will be a leader, having accounted for 56% of global venture capital funding for automotive tech since 2010 according to CBRE Research and CB Insights.

lot of safety considerations. Nor can we discount Asia’s technological ambition: Singapore already has live-tested a drone taxi, planned for rollout within two years.

Elsewhere, metropolitan areas with temperate climates and easily navigable road systems, such as Phoenix, Dallas/Fort Worth and Las Vegas, are the most likely places for AVs to take hold. In the long term, a corporate HQ’s proximity to public transit may become less important, as people customize their point-to-point journeys using AVs.

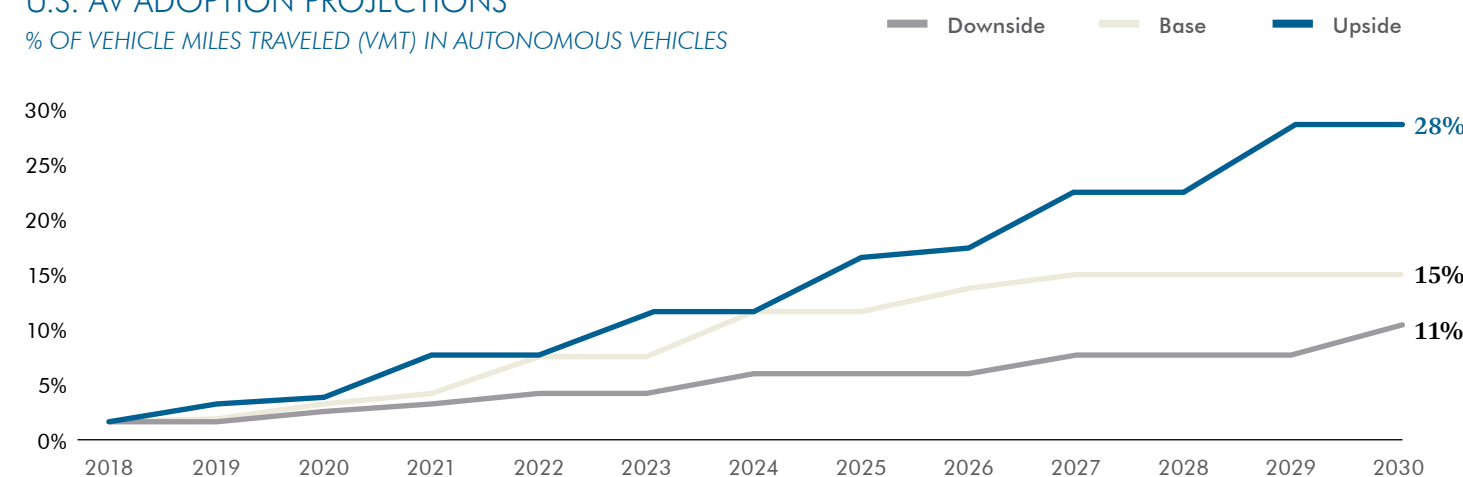
Despite these near-term uncertainties about transportation, there’s one certainty: Offices have switched from passive adaptor to proactive responder mode to meet the demands, preferences and lifestyles of emerging generations—the exact opposite of the one-size-fits-all “paper factory” of the past.

CBRE EXPECTS AUTONOMOUS VEHICLES TO ACCOUNT FOR 15% OF U.S. VEHICLE MILES TRAVELED BY 2030.

We will see lots of differentiation in how quickly AVs roll out across the world. For instance, a progressive city could decide to shut down its urban core to all vehicles but AVs. That’s a big step, and it comes with a

U.S. AV ADOPTION PROJECTIONS

% OF VEHICLE MILES TRAVELED (VMT) IN AUTONOMOUS VEHICLES



Source: 99 MPH, CBRE Research, July 2018.



WHAT WILL THE WORKPLACE LOOK LIKE IN 10 YEARS?

There have been massive changes in terms of office space over the past few years. Coworking is no longer trendy but solidified. Unwieldy, long-term real estate contracts are simply not possible for agile companies—the landscape has changed dramatically.

Because more and more people are working remotely, many will want to work wherever they are at any given moment to maximize productivity and maintain work/life balance. We're seeing it already: retail locations, airports, train stations, restaurants, etc. People are demanding more workplace options outside of the traditional corporate office, but they must be productive and conducive to getting business done. The power is shifting from employer to employee and these changes will continue to be an emphasis in the industry and will likely lead to a major change in how we think about office locations and environments 10, 20, 30 years down the road.

The interesting part of the conversation remains how to bridge the gap between owners in real estate and the demands from their customers. The big win as an experienced operator is creating a conduit between and adding value for all.

Michael Berretta

VP of Network Development, IWG

By 2030, there will be a dramatic increase in the number of tasks, jobs and processes that will be performed by AI, not humans. The implications of this for the workplace and, indeed, for the broader real estate industry will be profound. Corporate real estate organizations must prepare for this eventuality by building nimbleness and flexibility into everything they plan and every decision they make around occupancy commitments because companies will need far fewer employees than they do today.

Sarah Abrams

SVP of Global Real Estate, Iron Mountain

Businesses will rely on flexible workspace for a competitive advantage due to automation and the increase in remote working. The result will be that flexible workspace grows to at least 20% of the office market by 2030. We expect the key functions of routine office management will be wholly replaced by robots and automation to create the ideal office environment for workers. Other big changes will be access to buildings (think mobile), visitor access and security (think biometrics), mail service and food & beverage ordering and fulfillment (think detectors and automatic order placement and fulfillment). We also expect that virtual reality meetings will replace the conference call, resulting in a completely changed office layout and significantly reduced need for travel.

Bryan Murphy

CEO, Breather

Rather than work-from-anywhere capability further dispersing people, I believe it will actually bring people together more regularly by giving them real choices over the environment that best suits the work at hand from within a far broader ecosystem of space types than just office, Starbucks and home.

Jonathan Speary

Global Workplace Director, Honeywell

The flex space industry will continue to see widespread evolution over the next 10 years. It's likely we'll eventually see a new, more collaborative business model emerge where landlords, tenants and flex space providers work together in close partnership to create the right win-win-win outcomes for all.

Ryan Simonetti

CEO, Convene

Companies will need to support a 'work-anywhere' workforce, which will place increased pressure on their human resources, real estate and technology teams. With decentralized tasks and the growth of digital collaboration tools, the office as we know it today will transform to become a community huddle and experience center. Today's highly desirable 'off sites' will become tomorrow's 'on sites.'

Denis McGowan

Global Head of Property, Standard Chartered Bank

The Race for Talent

How we fill the jobs of the future will shift as much as where they're based.

The work-from-anywhere trend is a liberating development, but it comes with a caveat: The world is experiencing an increasing shortage of skilled knowledge workers. Global companies soon will compete even more fiercely for top talent among Generation Z (people born after 1997) and millennials (born 1980-1996).

Automation will continue to lessen the need for middle management and administrative jobs and will increase the need for highly skilled, specialist occupations in software and network engineering, data science, artificial intelligence, augmented reality, automation and other emerging fields. Such work is suited to flexible locations and is expected to surpass total employment growth by a substantial margin.

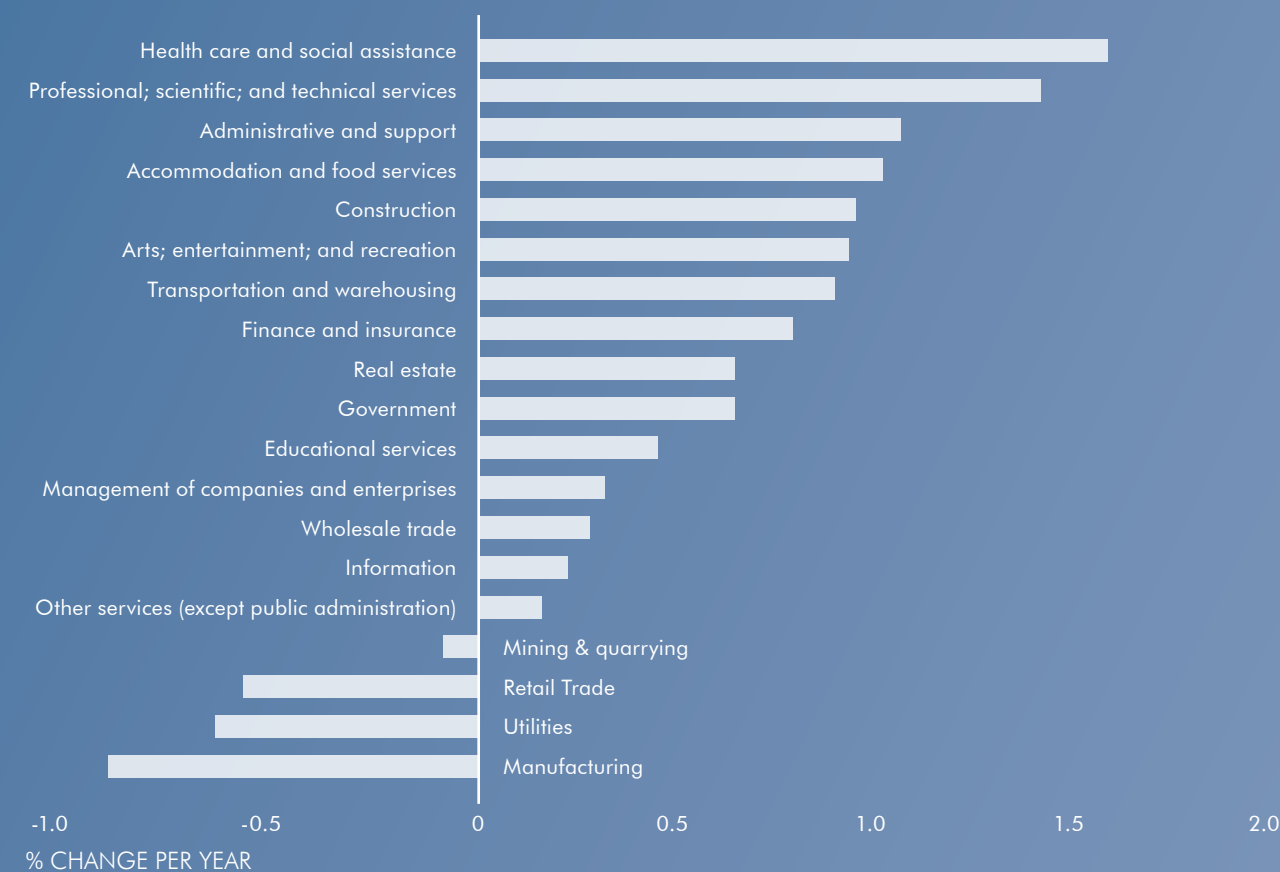
While birth rates have slowed in many developed nations, including in Europe, Australia, Japan and the U.S., Gen Z is booming in India and Africa. It's set to be the world's largest cohort.

CBRE RESEARCH PROJECTS GEN Z WILL COMPRISE AS MUCH AS ONE-THIRD OF THE GLOBAL PRIME WORKFORCE BY 2030.

This means more organizations will cross geographic boundaries to source talent. More hard-to-get prospective employees will demand to write code from the comfort of their couch or a stylish coworking space, depending on their work style or mood. Instant messaging and video conferencing already make it easy to exchange quips and conversation with those on the other side of the world.

One key countertrend centers on the needs of growing elderly populations in the advanced economies. The growth of "caring occupations" will power a separate real estate category: assisted-living communities and health-care buildings, from hospitals to research centers.

U.S. EMPLOYMENT GROWTH BY INDUSTRY 2019-2030



Source: CBRE Research, 2019.

WORK

02

Welcome to the '5G+' Workplace

Companies must embrace an unprecedented generational convergence—with a big tech twist.

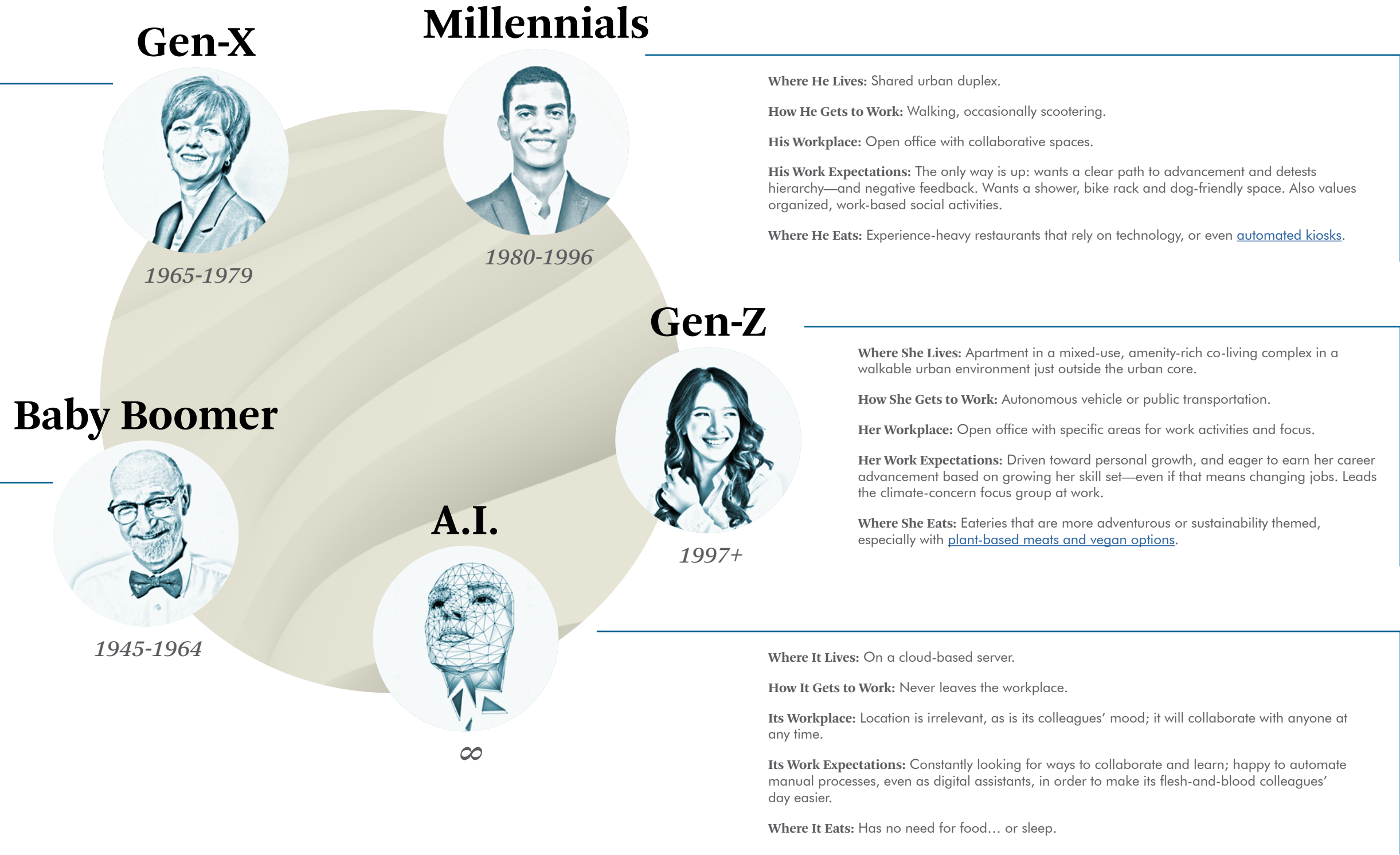
BY IAN ANDERSON

For the first time in history, four generations will occupy the workplace simultaneously. By 2030, Generation Z (those born after 1997) will occupy a third of the workforce. But they'll have lots of company in the three generations that preceded them. Across the globe, baby boomers are living longer than previous generations and they're retiring later in life—in 10 years, the youngest of them will be in their 60s and likely still working.

MILLENNIALS AND GEN X WILL STILL BE IN THEIR WORKING PRIME, AND SOON THEY'LL ALL BE JOINED BY ARTIFICIAL INTELLIGENCE "COLLEAGUES"—A SCENARIO CBRE CALLS "5G+."

Each generation has defining characteristics and life and work preferences. For employers, keeping those cohorts engaged, satisfied, productive and harmonious will be increasingly challenging. Here's a 2030 look at a workday in the life of a representative of each of these generations—even the one that runs on code instead of free snacks.

GENERATIONAL CONVERGENCE



WORK
03

The New C-Suite Power Player—Chief Places Officer

Changes in the workplace require a new leadership role to take them on.

BY JULIE WHELAN

Between new technology, new jobs, emerging generations and evolving corporate priorities, business is changing fast. And that means corporate leadership must respond, adapt and evolve at the same speed. There are more paths to the C-suite than ever, according to a recent study by LinkedIn, as companies are filling an ever-diversifying portfolio of new roles at the highest levels.

It's not just Chief Privacy Officer, Chief Sustainability Officer and other trendy new titles that take aim directly at the latest challenges confronting the corporate world. Responsibilities that traditionally fall under the more traditional C-suite roles are diversifying and becoming more complex. That's why so many companies are hiring a Chief Growth Officer (a slight pivot from the CFO role) or a Chief People Officer (a new twist on the CHRO).

This also holds true for the workplace. In the digital age, it's no longer just a physical place, but a nexus for the fulfillment and growth

of employees where technology has changed the stakes for what success looks like. Leadership roles that previously focused on just real estate or financials have begun to intersect with these shifting employee needs for productivity and job satisfaction. At the same time, the emergence of Generation Z and of sustainability as a corporate value will move the goalposts even further in the coming decade. And the C-suite must re-envision how to manage through it all.

“Major employers—who put talent at their core—will continue evolving their workplaces to differentiate

IN THE COMING DECADE, MORE ORGANIZATIONS WILL SEE THE CRUCIAL VALUE OF HAVING ONE GO-TO ROLE ELEVATED TO THE C-SUITE LEVEL.





themselves,” explains Karen Ellzey, CBRE Executive Managing Director of Global Workplace Solutions.

The shift is already happening within some forward-thinking organizations that are hiring executives for such senior roles that vary in title: Senior VP of Corporate Real Estate, VP of Workplace Solutions, General Manager of Business and Internal Services, to cite a few examples. Many companies have gone so far as to add a newer C-suite role—Chief Experience Officer—that fills some of those roles in addition to more product- and customer-facing responsibilities. This is just the beginning. In the coming decade, more organizations will see the crucial value of having one go-to role elevated to the C-suite level.

Enter the Chief Places Officer. With the battle for talent heightened in an AI-influenced, knowledge worker-focused future, the deployment of space will be a critical strategic weapon: a recruiting, efficiency and effectiveness tool that will pull corporate real estate functions closer to corporate strategy, HR and talent management—including an emphasis on how workspaces contribute to the general happiness and wellbeing of those who occupy them.

The Chief Places Officer also must wield significant executive muscle to go with expertise across multiple core competencies. On any given day, she will need to

This is a unique role that is a bit of glue between finance, human resources, legal, operations, procurement and more. It will have lots of masters to please, but none more important than the business itself.

Karen Ellzey

Executive Managing Director of Global Workplace Solutions, CBRE

wear a variety of hats from meeting to meeting, discussing a range of issues that affect all corners of the organization. In the morning, she may meet with facilities and finance leaders to discuss office design strategies across the company’s real estate portfolio. Over lunch, she’ll chair a workplace transformation committee that includes stakeholders from IT, brand and human resources. And by mid-afternoon, she’ll have to shift focus to talent acquisition in a meeting with various business unit leaders.

Above all, this person will be more than a connector and stakeholder. In an increasingly fragmented workplace, people still must feel a sense of belonging to a strong corporate culture that values ethics as well as performance. That requires someone who is at the cutting edge of how business is changing to meet these challenges—especially in how technology is infiltrating every part of the business.

“This person must embrace a deep understanding of digital at every level,” says Ellzey. “How it transforms not just businesses and buildings, but also how people

work together and how you build a workforce to be truly digital. In the end, every company will become a tech company.”

As if that weren’t enough, this new C-suite executive must make sure the workstreams she’s overseeing are sustainable from a business perspective. Ellzey estimates as many as half of executives currently occupying such a role report directly to the CFO. That organizational structure might not be the case as this role elevates to the C-suite in the coming years. But the Chief Places Officer will still need to toe that line between effecting institutional change and staying true to shareholder value.

“The winners will do both,” Ellzey explains. “They won’t sacrifice that vision and growing workplace need, but they’ll figure out how to innovate in a cost-effective way that is both economically and environmentally sustainable. It’s a complicated job to satisfy all those priorities.”

The Top 5 Skills of the Chief Places Officer

01 SUPERIOR COMMAND OF THE CORE BUSINESS

Able to track the macro and micro trends and drivers affecting the industry, including the competitive landscape and all regulatory and geopolitical issues.

02 FINANCIAL ACUMEN

An MBA is a good place to start. Must make business cases for any employee-centric or talent-acquisition strategies, and do so in ways that are economically sustainable.

03 EXCEPTIONAL COLLABORATIVE AND PARTNERING SKILLS

Able to leverage key strategic partners and easily form coalitions with colleagues and peers, especially cross-functionally.

04 A NATIVE VISIONARY

Able to bring together multiple generations in the workforce and develop strategies to satisfy all. Sees technology in a disruptive way and recognizes the benefits of adopting it.

05 LEADERSHIP SKILLS BORN IN BRICK AND MORTAR, BUT WITH AN EMPHASIS ON HEARTS AND MINDS

Able to communicate the idea that “place” is more than a location. Must be the whole experience instead of just “keeping the lights on.”

LIVE
04

The ‘Hotelification’ of Real Estate

Branded live, work & play places are set to have their moment.

BY JAMIE LANE

Upscale hotels have long represented a beautiful escape from daily routine, but the real expertise of the sector is in providing a consistent experience at any price point. So it makes sense that “hotelification”—the reinvention of residential, retail and office space based on inspiration from the hospitality industry—is shaking up real estate’s business-as-usual model.

By 2030, the “hotelification” trend will be cemented among larger global players offering branded and bespoke spaces for an increasingly mobile population of international knowledge workers who want spaces that offer a variety of short-term functions from living and working to events, communal dining and much more.

Guests know and trust hotel brands; that’s what we expect will play out within office and apartment space.

Branded hotels have had higher occupancy rates than independently owned ones since the 1980s. Today, 70% of new hotels are branded,

and they’re successful because travelers can expect a consistent experience—from New York City to Beijing and all the places in between. And the scale of big hotel brands enables loyalty programs that cement repeat business.

Hotelification already is a disruptive force as emerging companies introduce proprietary technologies, innovative business models and elevated experiences that promise higher building usage and revenues.

On the residential front, hotelification means more properties are wooing apartment dwellers with travel-inspired concierge-style services, often



available through apps that supply housekeeping, laundry, grocery delivery, pet care and even fresh flowers. At many of these spots, the term “highly amenitized” has become the new white-glove service. One Manhattan property firm partners with a room service-like app that [delivers cappuccinos and avocado toast](#). Another, the [WhyHotel](#) brand, has carved out a unique niche by operating within new luxury apartment buildings solely between the time construction is complete and when all units in the building are leased—usually a two-year window. WhyHotel operates essentially as a pop-up hotel during that time, fully furnishing the unsold units and renting them out as temporary luxe hotel rooms.

BENEFITS OF HOTELIFICATION

OCCUPIERS

- Speed to occupation.
- Lower up-front capital costs.
- Lease flexibility (add or remove space as company growth dictates).
- Talent attraction and retention.
- To establish collaborative environment/ innovation hubs.
- Ability to test market for labor quality, quality of life, transportation; and potential for future operations.
- Mitigate risk/lessen lease obligations (e.g., 100,000-sq.-ft. tenant taking 70,000 sq. ft. long-term and 30,000 sq. ft. of flex space).

OWNERS

- Ability to more quickly meet flexibility mandate of market.
- Lighter impact to environment (cuts down on number of unique spaces and build-out for each).
- Less leasing risk/downtime.
- Provides higher service levels to tenants.
- Broader array of space uses translates to greater financial diversity (residential, office, hotel, retail).
- Lower tenant management burden.
- Fewer recurring leasing costs and commissions to pay.
- Additional revenue from service provision.



In the office world, hotelification is most evident in stylish coworking spaces that cater to untethered digital workers and the gig economy’s creative class. Some high-service models offer babysitting, an onsite accountant for startups, even banking partnerships for business loans.

Inventive design often is key. The aim is to win a loyal worker who falls in love with space at first sight. One building in Lisbon, Portugal, is built [entirely from recycled materials](#), including colorful shipping containers and double-decker buses. In London, you can polish your sales deck in a space that looks more like a greenhouse than an office thanks to a jungle of oxygen-exuding houseplants. In India, you can brainstorm [while gently swaying](#) on the type of rough-hewn wooden swing that typically hangs from a sturdy tree branch.

Source: CBRE Research, 2019.



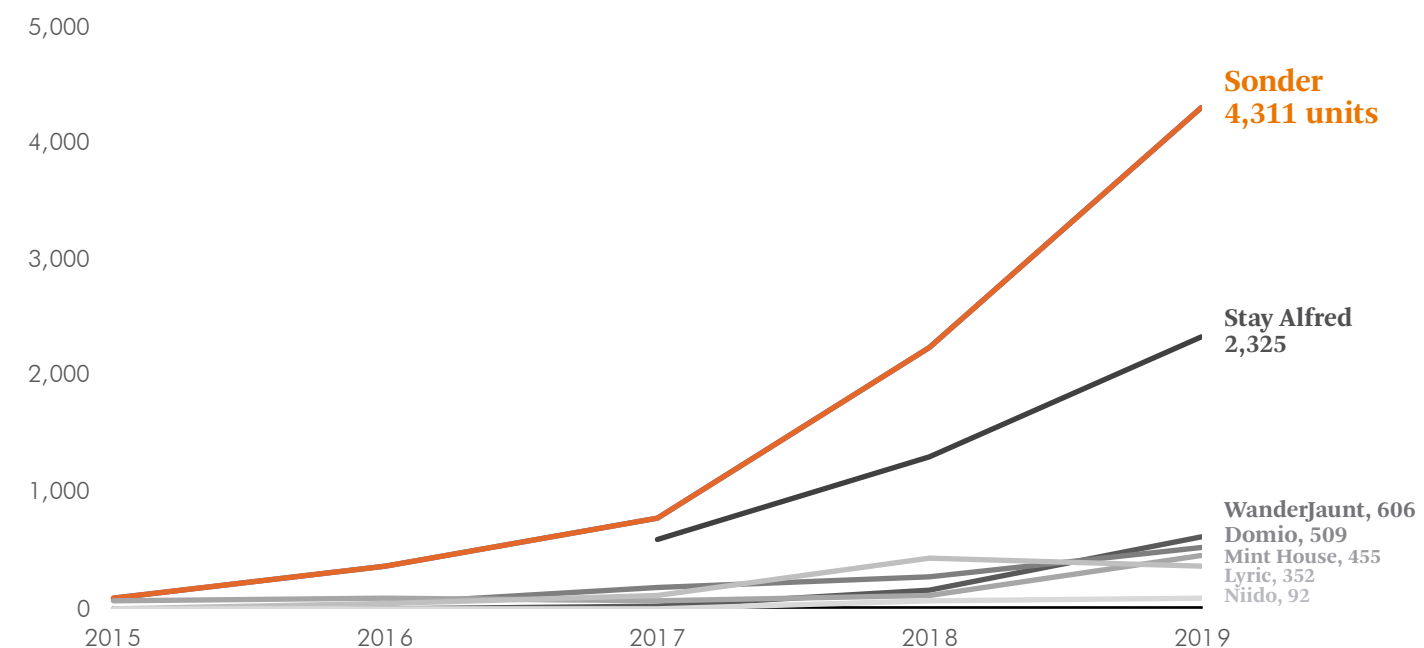
The hotelification movement represents an intersection of several different trends, all expected to intensify in the coming decade. Most prominently, the rise of the tech-based marketplace for home stays has forever changed the hospitality landscape, producing 6 million new rooms worldwide in a single decade. This alternative accommodations sector, including short-term rentals and apartment-style hotels, generated more than

US\$127 billion
in worldwide revenue in 2018

Data from the travel marketing firm Skift

Additionally, what started as person-to-person movement is now attracting new operators leveraging technology and venture capital to scale quickly and build brand awareness. San Francisco-based [Sonder](#) and New York-based [Domio](#) are startups that aim to supply the reliability of a hotel with the authenticity of a vacation rental, while the aforementioned WhyHotel has a unique business model.

U.S. GROWTH OF BRANDED APARTMENT/HOTELS



Source: Airdna, CBRE Research, 2019.

Essentially, housing is becoming more like a hotel even as lodging becomes more like home. The shift toward consolidation and branded plays already is evident in short-term rentals as larger operators buy up chunks of available real estate to run and market as hosted mini-chains within the larger lodging platforms. Vacation rentals help illustrate a market curve that CBRE sees playing across various real estate segments. Short-term leases and the highest level of service represent the extreme degree of hotelification.

THE MODEL IS BEING APPLIED TO OFFICES

As the economy becomes increasingly global, international companies already are on a [fierce hunt for the world's best human talent](#). Technology enables that talent to work from anywhere. The highly mobile workforce—combined with the need for companies to respond to fast-moving market conditions—means office space is all about flexibility.

Put another way, the rise of coworking spaces is not its own trend, but rather the future of commercial office space itself. Hence CBRE's enthusiastic step into the coworking market with [Hana](#), a wholly owned subsidiary with plans to expand in 25 cities over the next three years.

Intermediary operators are leading what's still considered the early stages of agile office transformation. WeWork's struggles have been well documented, but those growing pains point to a future evolution [where the business model will shift](#) to more partnerships, franchises and management agreements between operators and landlords. Here again, consolidation and branding will be evident as customers seek consistent service and a range of affordability.

DIFFERENT OPERATORS WILL COME IN WITH DIFFERENT PRICE POINTS AND DIFFERENT AMENITIES. FOR INSTANCE, AT THE MID-PRICED OPTION, YOU GET AN ORDINARY CUP OF JOE INSTEAD OF HAND-CRAFTED NITRO COFFEE.

Looking back at hotel trends reveals that consistency doesn't mean workspaces will adhere to boring formulas. Rather, many will follow the road map [laid out in the 1980s](#) when boutique hotels started disrupting the commoditized, heads-in-beds strategy of traditional chains.

The boutique approach aims to delight with charm, surprise and emotional connection. Often that means tailoring a given property with local flavor, which can be a labor-intensive process. Each property must offer a unique experience while also representing the consistent and recognizable character of the brand.



More creativity also is coming into play as retail brands partner with office spaces to bring extra spark to win consumer attention in innovative ways. For instance, outdoor-clothing retailer L.L.Bean [collaborated with a flexible space operator](#) to create “the first-ever mobile outdoor coworking space,” complete with free Wi-Fi, power hookups and active workspace furniture. Meanwhile, a direct-to-consumer furniture maker teamed up with retailers and coworking operators to [furnish interiors using their couches and chairs](#). Voilà—

instant showroom. The lines between traditional real estate categories will continue to blur, as hotelification is even beginning to seep into the industrial & logistics sector.

In the end, it's all about choices and affinity. After all, some people prefer a Ritz-Carlton lifestyle; for others, there's nothing wrong with the Hampton Inn. And for everyone in between, there are limitless options.

LIVE
05

Retail's Next Big Shift

The e-commerce explosion is just the beginning of industrywide changes.

BY MEGHANN MARTINDALE AND DAVID EGAN

It may seem like the entire world has gone next-day delivery crazy, with vans dropping off packages to you and your neighbors at all hours. Big retailers are encouraging you to do your holiday shopping online instead of visiting their stores. Some of your favorite goods might not even be available at a store.

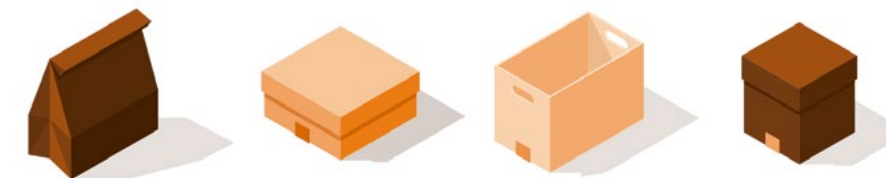
If you didn't know better, you'd say the e-commerce revolution has conquered the world. You haven't seen anything yet.

In the coming years, e-commerce will continue to drastically change not just how goods arrive at our doorsteps, but what an actual "store" really is. The physical size, shape and location of buildings that supply the entire retail ecosystem will shift, and artificial intelligence will be a touchpoint at nearly every step of the journey. The e-commerce revolution has only just begun.

It's been 15 years since Amazon unveiled Prime, a first-of-its kind subscription service that originally offered free, two-day delivery. Today, 101 million people are Amazon Prime members, according to [recent research](#), which means nearly a third of all American households now have access to a staggering [10 million products](#) and counting with what is now a one-day delivery model. And that's just from one online retailer—the world has been blanketed by ultra-fast delivery of goods (some within mere hours) from a handful of other giants such as Walmart, Alibaba, JD.com, Rakuten and others.



This titanic shift in the way we get our goods has transformed our expectations as consumers. On-demand shopping with the click of the “purchase” button, and the speed at which products arrive at our doorstep, are now the norm. This is perhaps the first point of no return for the e-commerce revolution, and it’s just the starting line. Traditional brick-and-mortar retail is healthier than most think: E-commerce currently only accounts for a little more than 14% of all retail sales in the U.S., according to Euromonitor International. But that ratio is set to change quickly.



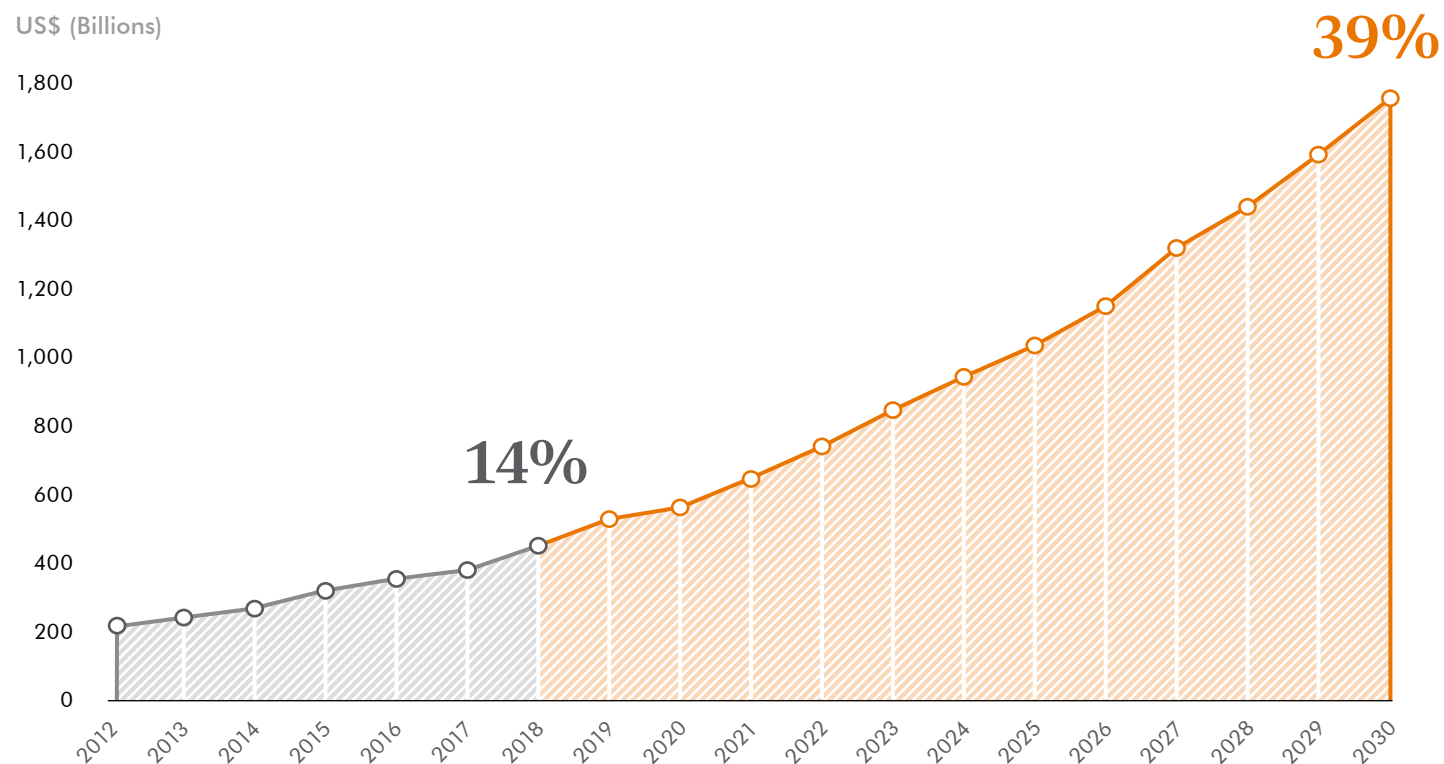
BY 2030, CBRE PROJECTS THE TOP 10 GLOBAL E-COMMERCE MARKETS COMBINED WILL ACCOUNT FOR 43% OF TOTAL RETAIL SALES.

In order to make the transition into this changing landscape, retailers must rethink their go-to-market strategies, including their real estate needs. This paradigm shift unfurling over the next 10 years will alter the retail model for how goods are sold, shipped and returned. Not only that, it will modernize the brick-and-mortar retail experience in general. As **Generation Z**—true digital natives who will account for 31% of the global workforce by 2030—enter their prime spending years, expect this shift to accelerate. Massive investment will be needed to improve infrastructure and solve the hurdles—especially the cost—of the last mile of rapid, low-cost delivery.

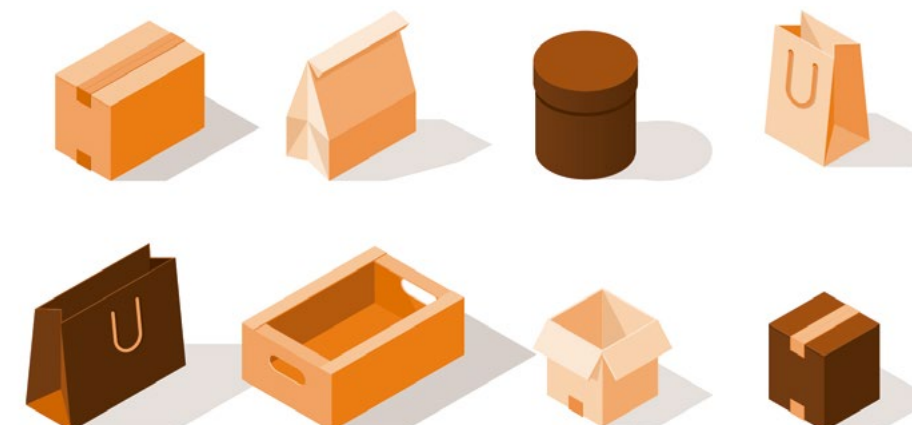
This shift toward e-commerce will have an ever more pronounced effect on brick-and-mortar.

The retail business, CBRE predicts, will converge into a single model known as “phygital”—as in physical and digital—where online and brick-and-mortar stores merge to serve the ever-increasing demands of consumers for convenience, speed and cost.

U.S. E-COMMERCE SALES WITH % OF TOTAL RETAIL



The link between online and offline will be seamless and specific to the product type. Replenishment of regularly purchased goods—like milk, bread, paper towels, tissues and pet food—will be done exclusively online. Brick-and-mortar stores will become experiential centers and showrooms to burnish brands, or places to pick up or return goods ordered online.



SOME OF THE BIGGEST CHANGES WILL BE BEHIND THE SCENES— IN THE SUPPLY CHAIN

Given these trends, the size and location of fulfillment facilities must be rethought to satisfy same-day or next-day deliveries, which are already popular with 45% of consumers. For example, German e-commerce retailer [Otto](#) that uses machine learning to sort through billions of transactions to create an algorithm that predicts customer orders with 90% accuracy 30 days in advance. Its inventory stock fell by 20% in 2018 and returns fell by more than 2 million items.

By 2030, predictive ordering based on consumer behavior will help move inventory to the places that need goods before they're even ordered. But predictive ordering isn't just about anticipating grocery deliveries.

The next step will be about AI-built models of customers in certain areas based on their ordering history, brand preferences and other purchasing tendencies to direct inventory where it most likely will be ordered. Those products will then be sent closer to groups of customers who fit that AI-constructed profile, where they will sit for a time in a nearby fulfillment facility before being sent to customers who indeed order those products. This tamps down the cost of offering same-day delivery and serves as a lower-risk gamble to accelerate the supply chain in a very tech-driven strategic way.

To realize this vision, the size and locations of fulfillment facilities will shift.

CBRE PREDICTS THAT FEWER LARGE HUBS AND MORE LAST-MILE DISTRIBUTION CENTERS WILL BE NEEDED.

Those that remain, however, will grow larger and will exist for the sole purpose of feeding smaller warehouses that stock last-mile distribution centers and brick-and-mortar stores.

These smaller warehouses—50,000 to 300,000 sq. ft. in size—will be located within a 50-mile radius of where dense populations of buyers reside and will act as temporary storehouses of often-ordered goods. That, in turn, places less of an emphasis on brick-and-mortar locations holding large amounts of inventory.

RETAIL WILL FOCUS ON EXPERIENCE AND CONVENIENCE

To engage with modern retailers, CBRE predicts property owners will need to rethink lease terms. By 2030, revenues from leases will be based on both online and physical sales and on foot traffic, among other terms. Of course, this will require a greater degree of collaboration and transparency between retailers and property owners than currently exists. Not all will thrive in this new environment. Hubs in secondary markets have been growing and thriving because they help satisfy current demand for same- or next-day delivery, but they may be imperiled if predictive ordering takes hold.

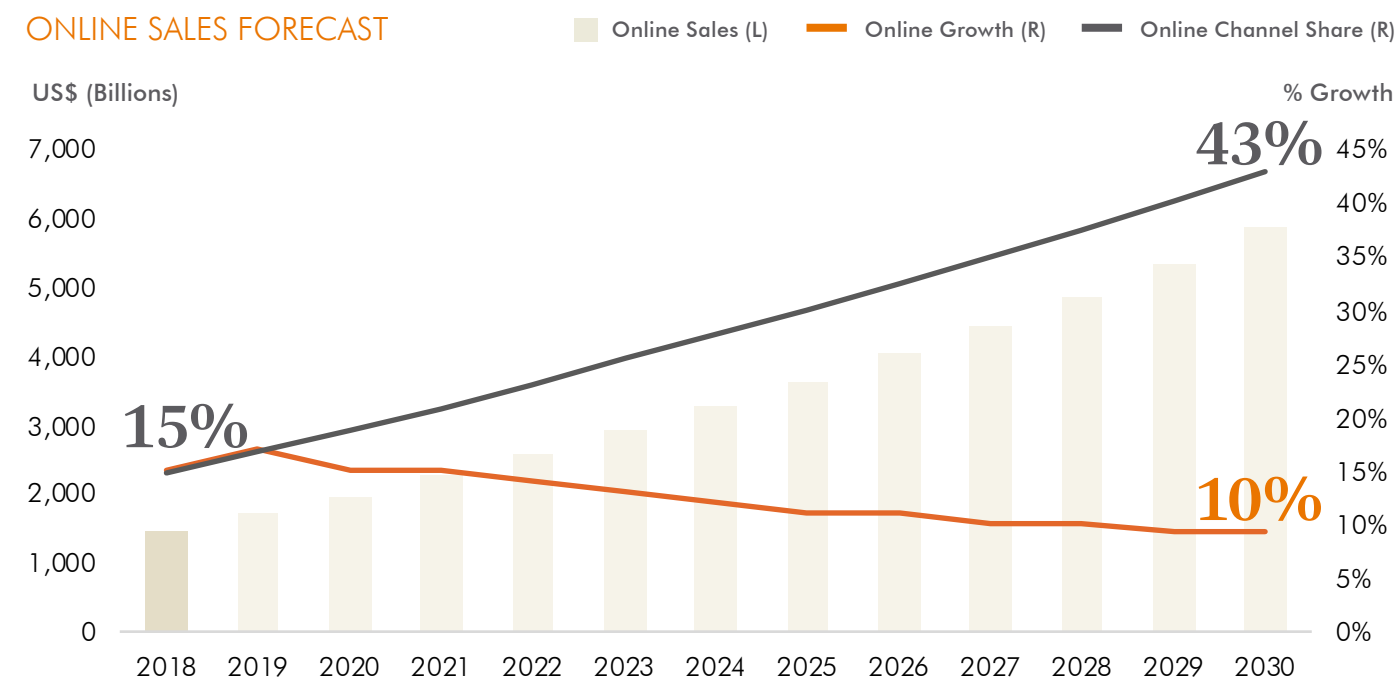
Given that it's now cheaper and easier for consumers to order anything online than it is to go to a store, retail locations must evolve to serve different iterations of the retail experience to thrive in 2030. There will be the flagship that offers an immersive brand and shopping experience, like Foot Locker's enormous "[Power Stores](#)," which the shoe retailer calls a hub for local sneaker culture, art, music and sports. Other iterations will be focused on customer convenience and ease of

purchasing, like [Target's urban locations](#), which combine a narrow product set covering perishables and popular locally tailored items. Then there's the storefront concept that serves mainly as a customer pick-up and order return center. The most recent buzzworthy example is [Nordstrom Local](#), which holds no inventory but offers great convenience to its customers—including tailoring services.

In all, consumers have rolled with the massive changes in the retail ecosystem at every turn, gaining greater benefits with each development. For some retailers, these changes have been devastating. But those failures have been case studies for how to evolve. Leading retailers increasingly will invest in advanced technologies like machine learning and image recognition to offer customers hyper-personalization in real time, whether online or in-store, and will keep costs down.

After all, in the modern digital world, the store never closes.

ONLINE SALES FORECAST



Source: CBRE Research, Euromonitor International, 2019.

Note: Forecast shown represents the U.S., China, Japan, India, Germany, France, U.K., Russia, Canada and South Korea.



LIVE
06

The New Boomtowns

By 2030, Generation Z will start inheriting (and changing) the economy—here's where they're congregating.

BY IAN ANDERSON AND NEIL BLAKE

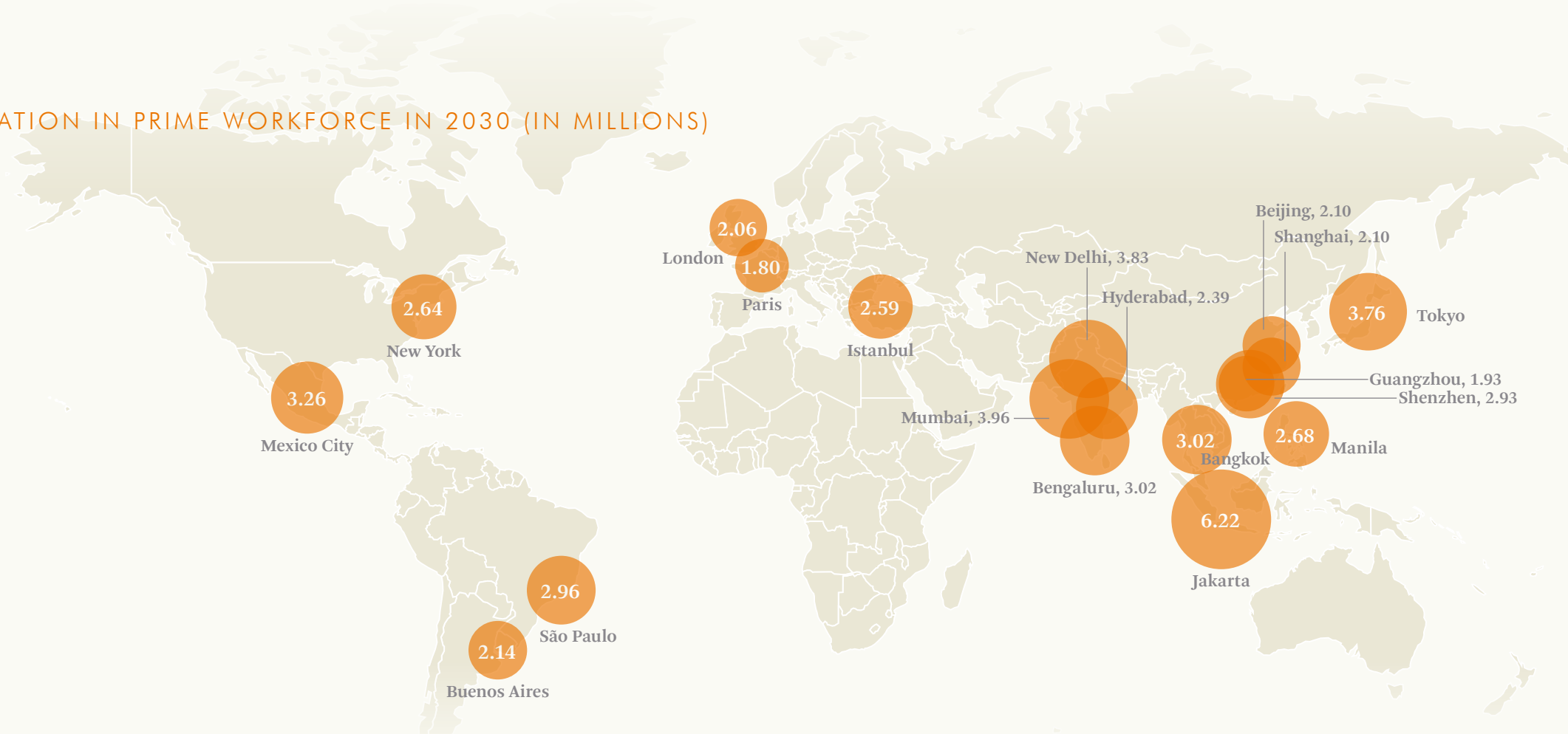
Gen Z is coming. And that's hugely significant to the workforce and the workplace. First, the numbers:

BY 2030, MEMBERS OF GEN Z—THAT IS, PEOPLE BORN BETWEEN 1997 AND 2012—WILL MAKE UP MORE THAN 1 BILLION OF THE WORLD'S POPULATION AND WILL COMPRISE 31% OF THE WORKING-AGE POPULATION OF THE WORLD'S MOST INFLUENTIAL BUSINESS HUBS.

That will make for a significant reset of some of the biggest metropolitan areas on Earth and will accelerate the rise of emerging markets as influential epicenters of the world economy. The Asia Pacific region particularly will see a huge boost thanks to swelling Gen Z populations. But it's not just about how many there are—it's also about how they go about their work. Gen Z are the first "digital natives" —they've never known a world without the technological tools many of us still marvel at. As such, they're at the forefront of redefining what productivity is, in everything from how the workplace is laid out to their expectations of how to get the job done by any means necessary. They're also environmentally aware, demand flexibility in their work and life options, and embrace fresh perspectives rather than falling back on the old workplace hierarchy. They'll still share the workplace with three other generations by 2030 (and even [artificial intelligence "colleagues"](#)), but they are truly set to inherit the economy. Here's a look at the world's new boomtowns by 2030, driven by the explosion in Gen Z numbers.



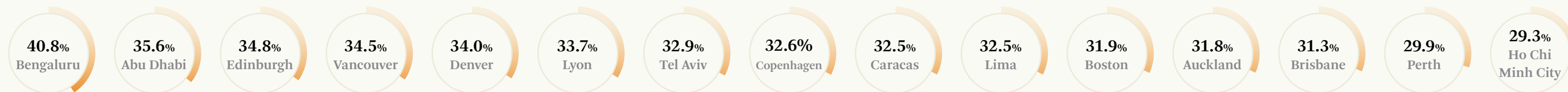
LARGEST GEN Z POPULATION IN PRIME WORKFORCE IN 2030 (IN MILLIONS)



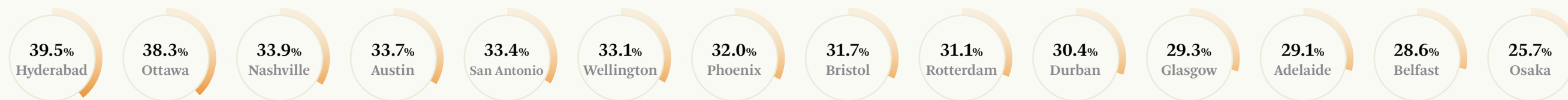
LARGEST PERCENTAGES OF GEN Z IN THE PRIME WORKFORCE IN 2030 **ALPHA** MARKETS (cities that link **major** economic states and regions to the world economy, as defined by GaWC)



LARGEST PERCENTAGES OF GEN Z IN THE PRIME WORKFORCE IN 2030 **BETA** MARKETS (cities that link **moderate** economic regions to the world economy, as defined by GaWC)



LARGEST PERCENTAGES OF GEN Z IN THE PRIME WORKFORCE IN 2030 **GAMMA** MARKETS (cities that link **smaller** economic regions to the world economy, as defined by GaWC)



Source: CBRE Research, Globalization and World Cities Research Network, Oxford Economics.

INVEST
07

Early Morning in the Asian Century

Multiple trends are converging to give Asia a big advantage over the rest of the world.

BY RICHARD BARKHAM AND HENRY CHIN

The Asian Century is well underway. The region isn't just at the leading edge of the emergence of Generation Z—several economic, technological and demographic trends have Asia Pacific positioned to jump to the forefront of the global economy by 2030.

Over the next decade, Asian countries are projected to account for four of the world's 10 largest economies, according to Oxford Economics, a first for the region. That will be headlined by China's long-anticipated leapfrog of the United States to claim its place at No. 1 with a forecast GDP of US\$24 trillion. Despite recent trade tensions, the Western world will seek to remain fully engaged with Asia because of the opportunities its large and growing markets will provide.

■ THE ASIAN REGION WILL ALSO EXPERIENCE THE WORLD'S FASTEST URBANIZATION RATE, WITH A HUGE 414 MILLION PEOPLE MIGRATING TO CITIES BY 2030, ACCORDING TO THE UNITED NATIONS AND CBRE RESEARCH.

That will give the region an unprecedented 22 megacities with populations of more than 10 million.



To keep up with that boom, CBRE projects that Asian governments will invest

US\$ **23** trillion in transportation infrastructure by 2040.

This will have a profound effect on real estate, as Asia's share of the world's properties will soar

9pts TO **35%**

due to higher rates of construction, faster economic growth, increased transparency and liquidity, and sustained investor demand due to high savings rates.

But it's not all about economic opportunity: Rising sea levels and increasing pollution are forcing Asian countries to rethink how they're deploying capital and developing their cities. That comes right in line with the more sustainability-minded Gen Z, who will make ideal stewards to drive toward a different future. In all, it makes for a golden age for an Asia that will be greater than the sum of its parts. Here are some of the proof points.

**SMART CITIES
HANGZHOU**

Alibaba isn't just using its tech to dominate Asian e-commerce, it's also helping its home city run better. Its "City Brain" has eased Hangzhou's choking gridlock through AI that [optimizes traffic signals and improves commutes](#) for the metropolis' 7 million residents.



**MEGA-CITIES
NEW DELHI**

China may have the most cities with populations of more than 10 million, but India is gaining quickly. By 2030, it will have seven of them—including its capital. New Delhi projects to be the world's fastest-growing mega-city, swelling by 35% beyond its current size to 39 million residents.



**ALTERNATE
TRANSPORTATION
SINGAPORE**

The Lion City is at the forefront of Asian innovation in many categories, but it's one of the few cities to [experiment with sky taxis](#), which could blossom as a high-tech—and potentially automated—way for workers to commute without hitting the city streets at all.

Photo: © John Deere / Volocopter



**ENVIRONMENTAL
CHALLENGES
JAKARTA**

Indonesia's economy is booming, but its capital is [sinking](#)—exacerbated by more than 5,000 commercial buildings extracting their own groundwater. One of the solutions is relocating the government itself—900 miles northeast across the Java Sea—to East Kalimantan by 2024.



**PUBLIC
TRANSPORTATION
SEOUL**

The South Korean capital has big plans for its metro, with a [10-year plan](#) for a high-tech upgrade of the system and six new lines to the 212 miles of currently existing track. The goal is to put 75% of the city within a 10-minute walk of a station.



**URBAN REBIRTHS
SHENZHEN**

No major city will experience a youth takeover quite like "China's Silicon Valley"—Gen Z will comprise nearly half the population by 2030. Youngsters with a strong entrepreneurial mindset will keep flocking here to work for both startups and multinationals like Huawei, DJI and Tencent, and to enjoy a variety of civic projects that are making it one of the more desirable cities in Asia.



**"HOTELIFICATION"
HONG KONG**

It's a [global trend](#), but Asia is on the leading edge of branded spaces for live, work and play. Hong Kong has several, including Hongkong Land's [Centricity](#) offering and Swire's innovative business-centric [blueprint](#) concept.



**GREEN BUILDINGS
MELBOURNE**

Australia has made progress after lagging its Asian peers in committing to more net-zero construction projects. Nike built the country's first truly [carbon-neutral commercial facility](#): a high-tech 194,000-sq.-ft. suburban warehouse.

INVEST

08

The Rise of the Machines

With AI, commercial real estate investing will become more accessible.

BY DEEPAK DEWANI

At the outset of the past decade, when experts talked about the future, artificial intelligence and machine learning were positioned as “the next evolution”—technological innovations that had the potential to revamp our economy. That prediction was accurate. But the speed at which AI and machine learning have found their way into almost every industry, transforming everything from health care to finance to telecom, has been striking.

Thanks to the proliferation of data, as well as decreasing costs in computing, mundane tasks that took weeks to complete are now finished in a snap, efficiencies are maximized, costs are lowered and revenues spurred thanks to the automation brought on by machine learning.

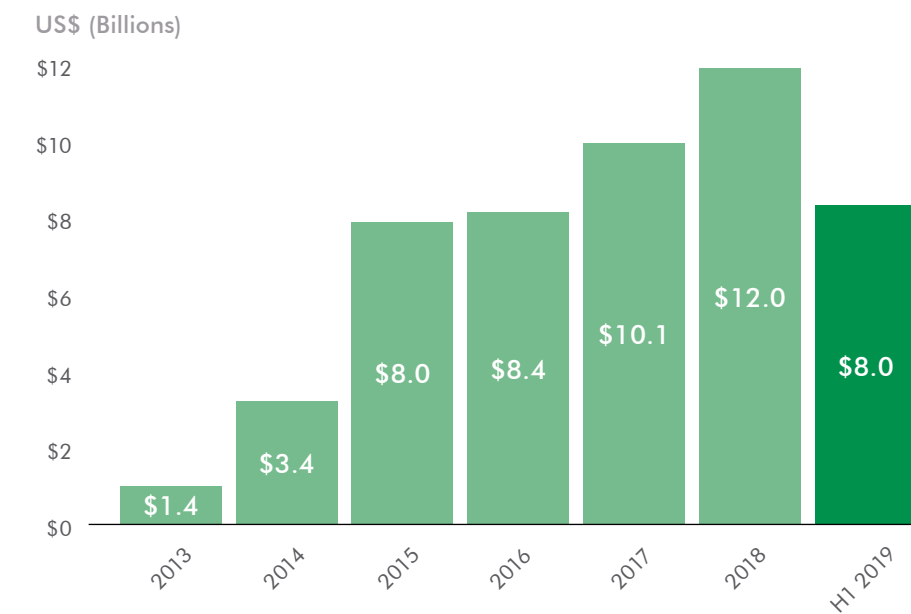
Even traditional real estate has been turned on its head. Thanks in part to the success of residential-property platforms such as Zillow, Redfin, Domain, SRX and GharValue, venture capitalists have poured nearly US\$80 billion over the past half-decade into more than 1,800 startups that create technological innovations to help manage, assess and transact commercial real estate, according to [VentureScanner](#). These so-called PropTech companies are revolutionizing how real estate is bought, sold and managed by solving one of the most pressing issues in the real estate industry: the timeliness, accuracy and transparency of commercial real estate appraisals.



In the U.S. alone, real estate appraisals are a **US\$9 billion** industry with **65,000** appraisers manually assessing the value of the second-largest asset class in the world.

Why is this important? In today's hyper-efficient capital markets, where investors demand accuracy, efficiency and transparency in exchange for their cash, commercial real estate is lagging its residential counterparts. The process of information-gathering is still extensively manual and the buyer pool is largely local.

ANNUAL GLOBAL FINANCING IN REAL ESTATE TECH



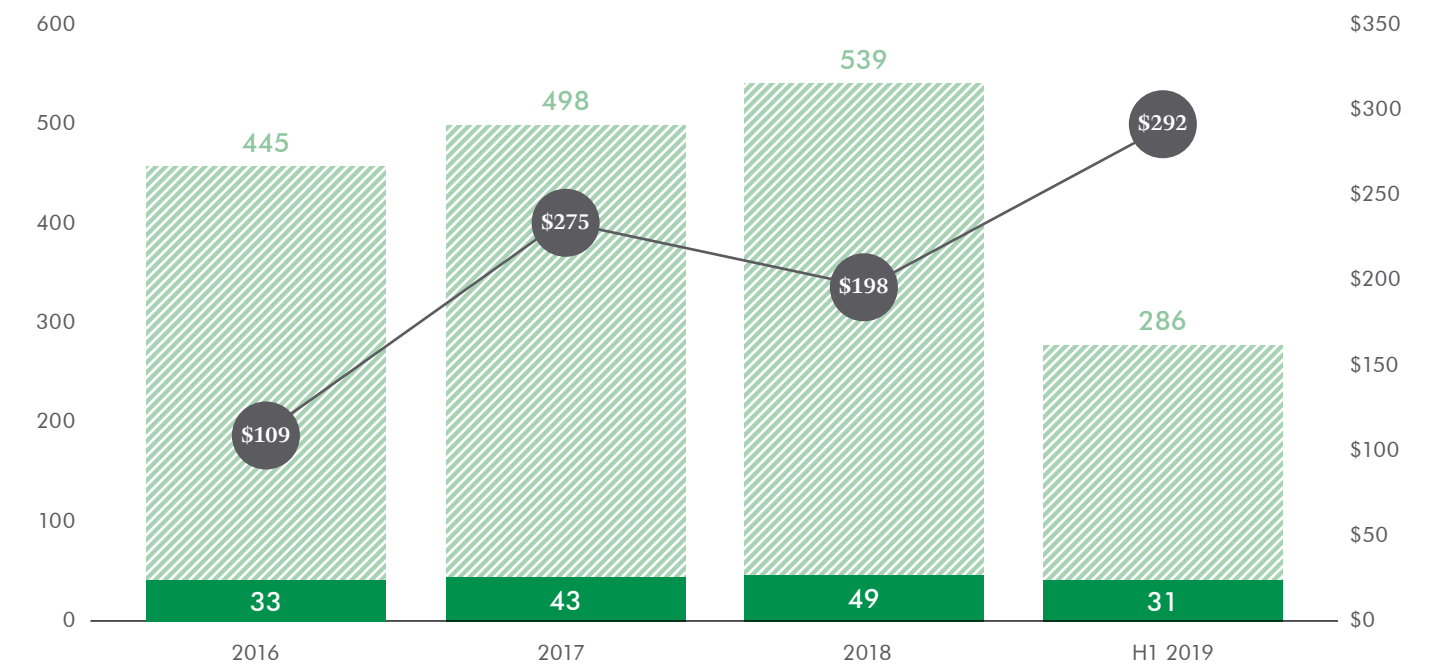
Source: PitchBook, CBRE Research, 2019.

Without access to key data, as is the case in most real estate sectors, it's difficult to achieve price discovery or accurately appraise and underwrite assets. But the advent and success in the residential market of automated valuation models (AVMs)—particularly Zillow's *Zestimate* product, which estimates the market value of residences using proprietary data and public information—has ignited the imagination of entrepreneurs to their potential in the commercial real estate sector. Modern AVMs are AI-powered algorithms that scour public and private databases for pertinent information that goes into formulating a valuation of a specific property, much like *Zestimate* does for homes.

GLOBAL VC FUNDING ACTIVITY IN REAL ESTATE DATA, ANALYTICS AND VALUATIONS

Number of VC-funded PropTech Companies Globally

Global VC Investment in RE Data, Analytics and Valuations (US\$ Millions)



Source: PitchBook, CBRE Research, 2019.

This isn't as easy as it sounds. The commercial real estate market, with its wide array of property types, is much more heterogeneous than the residential market, which is one of the reasons why it's difficult to formulate a commercial real estate AVM. And the value of commercial real estate is dependent on lease terms, which are highly idiosyncratic and usually kept private. In 2018 alone, venture capitalists invested approximately US\$200 million globally to create AI tools that mine data for AVMs, according to PitchBook and CBRE Research.

Additionally, CBRE is tracking about 150 companies focused on mining a wide swath of data that can help quickly, continuously and accurately estimate the value of commercial real estate. And those categories of data are diverse: mass mobile and geospatial, credit card, shipping/logistics, traffic patterns, drones, job listings, sharing economy, permitting, leasing, carbon emissions, sustainability and another dozen or more subcategories.

All this suggests that commercial real estate is poised to catch up quickly to the data revolution. CBRE Research projects traditional data and appraisal firms will increasingly license their proprietary databases to PropTech companies creating commercial real estate AVMs. Take for example Dutch startup [GeoPhy](#), which in 2019 introduced “Evra,” a product it says is the first AVM for multifamily properties. The technology utilizes a machine-learning algorithm to scour its proprietary database of leases and transactions, as well as public data on quality-of-life measures such as public safety and incomes, to estimate asset values. Another startup, San Diego-based [Biproxi](#), recently launched a valuation product for 32 million off-market commercial properties in the U.S. with values of US\$25 million or less.

While traditional real estate appraisal will remain essential to create a full picture of the asset,

CBRE RESEARCH ESTIMATES THAT BY 2030, 90% OF COMMERCIAL REAL ESTATE ASSETS WILL BE APPRAISED USING AVMS, AT LEAST AS A STARTING POINT.

This will lead to real-time price discovery, securitization of real estate assets and the ability to trade those assets as if they were stocks or bonds. In turn, the increased availability of this new information should widen the buyer pool, spur transactions and ultimately lead to higher valuations for real estate assets.

If you’re investment-minded, you’re probably already wondering if a trading platform isn’t far behind. It’s already happening: In 2019, the International Property Securities Exchange ([IPSX](#)) was cleared by U.K. regulators for launch. On the platform, commercial property owners may list a vetted, securitized version of their asset as an IPO on the IPSX, where qualified investors can buy and sell these securities as if they were stocks or corporate bonds. In the U.S., startups like Cadre and [Ten-X](#) have rolled out similar platforms to offer qualified investors around the world direct investments in vetted institutional-quality commercial U.S. real estate. Other platforms surely soon will follow.

There are other implications of real-time valuations brought about by AVMs, according to CBRE Research. For one, it could help banks’ risk officers see through the short-term effects of market downturns by helping them better assess the vulnerability of the property they’re evaluating, which should help reduce the number of loans at risk of foreclosure. Another implication of the new technology is in the way commercial real estate is leased by making it easier for tenants to find the right property online.



All told, this rise of machine learning, AI and data in the commercial real estate market should revolutionize an industry that is still lagging in the digital age. It’s unlikely machines will completely replace humans’ role in the commercial real estate market. But professionals in this field will have to embrace the power of AVMs if they want to remain competitive in what will be a much-changed marketplace by 2030.



REAL ESTATE TECHNOLOGY & DATA INVESTMENT LANDSCAPE

TREND	VC US\$	EXAMPLE STARTUPS
Workflow Improvement Solutions	\$4B+	Alice Technologies, Assignar, AxiomSL, BuildSafe, GoCanvas, Caremerge, GeoLens, Ion, Katerra, ServiceChannel, SMS Assist, XO!, VTS
Online Brokerage Platforms and Investment Platforms	\$5B+	Cadre, CREXi, Fundrise, RealBlocks, Realty Mogul, Truss
Smart Building and IOT	\$6B+	Aquicore, BuildingIQ, Datch, enModus, Envairo, FogHorn, Iotas, ITecha, Redaptive, Scanalytics Inc., 75F
Coworking	\$10B+	Common Desk, Convene, Copass, GoWork, Industrious, Knotel, Kr Space, Proximity, Serendipity Labs, Spaces, WeWork
Blockchain	\$600M+	Blockchain, ConsenSys, Ethcore, Harbor, Propellr, Propy, RealBlocks, Securitize, Tierion, Ubitquity
CRE Analytics	\$500M+	Bldbox, CareLogic, CityBldr, Enodo, Envelope, IdealSpot, redIQ, Reonomy, Skyline, Uptake
TWO CATEGORIES BLENDING		
Data Providers	\$500M+	CareLogic, Cherre, Cityzenith, CompStak, Cuebiq, Gridics, Komreal, Orbital Insight, Reonomy, UberMedia, VTS

Source: PitchBook, CB Insights, CBRE Research, 2019.

INVEST

09

The New Math

The formula for real estate valuation is changing, starting with the retail sector.

BY RICHARD BARKHAM AND MEGHANN MARTINDALE

The walls of commercial real estate are breaking down fast. Not in a literal sense—at least not entirely—but in that the long-time conventions defining who and what occupy buildings are, in many cases, going away. Professionals aren't limited to plush corporate offices. Fulfillment isn't done only in massive, exurban facilities. Retail isn't confined to a physical store.

By 2030, those distinctions will be on their way to blending entirely, and the old ways for how we value real estate will shift dramatically in the coming years. Changes are already happening.

Ten years from now, there will be new methods of valuation across all property types as uses merge into more mixed-use, digital and adaptive environments.

But retail is leading the charge. Brick-and-mortar isn't going away, but traditional store metrics are actively being redefined to include factors like omnichannel sales, micro fulfillment, media influence and data collection.

What exactly will that mean for traditional metrics like market value vs. appraised value, sales per square foot or a shift toward flexible lease terms? It's about holistic value: trying to determine how a building creates brand value based on who and what's inside it, what happens there and how the physical integrates with the digital.

There's no one answer yet, as this is new math the entire real estate industry is striving to define. But if you're looking for a way to begin to quantify it, the rapidly changing retail sector is the right place to start—particularly with the physical store (for more on this trend, see our feature on [Retail's Next Big Shift](#)). Here's a look at the factors that will differentiate the new valuation model from the old one.





SAME STORE SALES & SALES PER SQUARE FOOT

Traditional formulas that measure productivity and determine total occupancy rates.



CREDIT & RISK

Retail has been classically high-credit and low-risk, particularly with established chains.



OLD RETAIL STORE METRICS



MERCHANDISE

Customers traditionally went to stores to experience products before purchasing them and taking them home.



PROTECTED DATA

Landlords and retailers traditionally haven't shared proprietary sales figures and shopper traffic with one another beyond what is contractually required.



TRADITIONAL LEASE TERMS & CLAUSES

5-10 years plus options to renew has been standard, as are clauses like permitted and exclusive uses and percentage rent.

CREDIT VS. COOL

Startups and digital brands that can differentiate a retail property often have little to no credit, which means investors and lenders must decide whether they assume the risk for the "cool" factor.



INTERACTION

Stores have gone from product-driven to experiential and interactive to better engage the customer on the purchase journey.



NEW RETAIL STORE METRICS

SHARING DATA

More transparency between landlords and retailers is becoming paramount, as data becomes more readily available and the driving force impacting the bottom line.



CROSS CHANNEL

Potential revenue now goes beyond four walls to e-commerce and an evolving fulfillment system, while customer value comes from engagement across all those touchpoints.



FLEXIBLE & DYNAMIC LEASE FORMS

Between pop-up shops and brand collaborations and more modular retail formats, many retailers want shorter terms (1-5 years, even month-to-month) and fewer restrictions.



INVEST
10

The Asset Class of the Future

Multifamily will take center stage in real estate investment.

BY JEANETTE RICE AND JENNET SIEBRITS

Urban populations are booming, and cities are grasping to improve housing, transit and environmental sustainability.

In the U.S., investors have created a robust multifamily real estate industry that provides efficient and affordable housing solutions. But elsewhere in the world, this hasn't been the case—until recently. In a world with excess private capital, not enough housing, cash-strapped governments and increasing emphasis on sustainability, the American multifamily model provides a way forward.

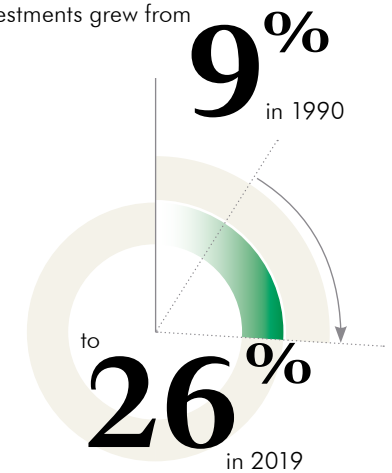
The term “multifamily” refers to apartment blocks or campus-style developments in single ownership with market-level rents and professional management. Such properties provide favorable investment returns. They also avoid reputational risk that can come from bad landlords.



Two government-backed lending agencies—Fannie Mae and Freddie Mac—are a unique boon to the U.S. market. In 2018 alone, they financed more than US\$140 billion of multifamily development and refurbishment. The U.S. also benefits from scale and efficiency as companies build portfolios using the same currency, regulatory framework and cultural backdrop.

The numbers help tell the story:

Of total U.S. commercial real estate institutional holdings, multihousing investments grew from



Source: CBRE Research, NCREIF.

THE NEXT DECADE'S OUTLOOK

BY 2030, ABOUT 2 BILLION PEOPLE LIKELY WILL LIVE IN PRIVATE RENTAL HOUSING, WITH MUCH MORE DEVELOPMENT INSPIRED BY THE U.S. MODEL.

To meet this demand, institutionally owned multifamily rental housing will account for one-fifth of global investment volume, and cross-border capital will help power the shift.

What's driving the rest of the world to adopt the American multifamily model? Countries previously held back by regulations and less favorable market conditions are starting to respond to demand pressures: young workers in the booming millennial and Gen Z populations opting to rent instead of buy due to high property prices. This trend is compounded by cultural shifts toward delayed marriage and smaller households, as well as increased migration to cities (where affording pricey rents can be almost as challenging as home ownership).

Globalization is another factor. In many places, private capital is more welcome than in the past. Rental housing in much of the world has been more of a 'ma and pa' model than a professionally managed industry. Now, we're starting to see multifamily take hold as a serious asset class. And improvements in banking have made it easier to move capital across borders, while technology enables smarter revenue management and better-informed pricing models.

In 2018, US\$38 billion of cross-border capital was allocated to residential, accounting for more than 10% of total cross-border investment volume. Residential investment across Europe, including the U.K. and Ireland, totaled US\$58 billion in 2018, up from just US\$5.5 billion in 2010. And this looks set to continue.

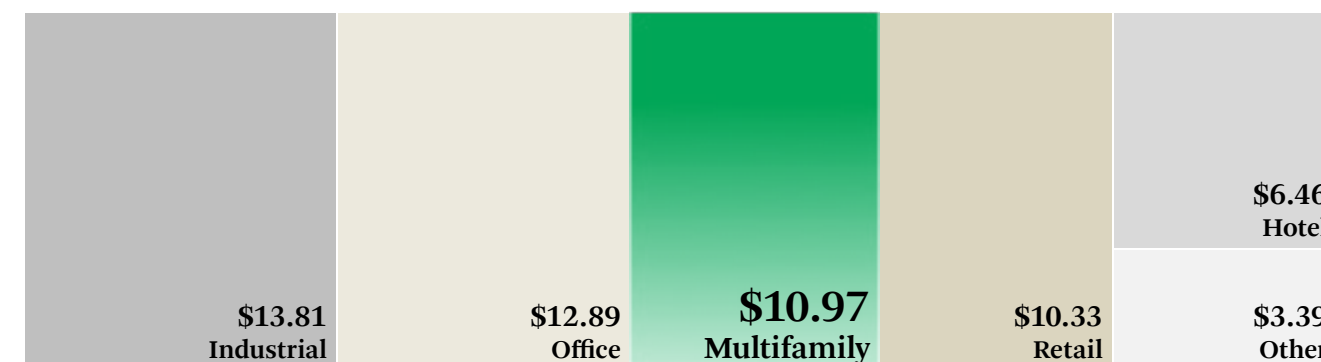
[CBRE's 2019 Global Investor Intentions Survey](#) notes that a quarter of investors cited residential as their most favored investment sector, surpassing offices for the first time. In many cases, U.S. investors are driving global expansion with an aim on Great Britain. South Carolina-based Greystar has moved into the U.K. and Latin America. Georgia-based Cortland acquired a U.K. property manager to meet a strategic goal of 30,000 multifamily homes in the U.K. Investors in the Asian region are also showing a strong interest in deploying capital into this sector. Japan ranks as one of the largest, and will continue to see a high level of investment in multifamily. Real Capital Analytics reports [Japan has seen US\\$2.4 billion of apartment deal volume in 2019](#). Multifamily is just beginning to emerge in Australia and New Zealand, as well, but a significant pipeline of new construction has been established for delivery in the coming years. In China, demand drivers are strong and global institutional investors are exploring local partnerships.

GLOBAL INVESTABLE UNIVERSE BY SECTORS

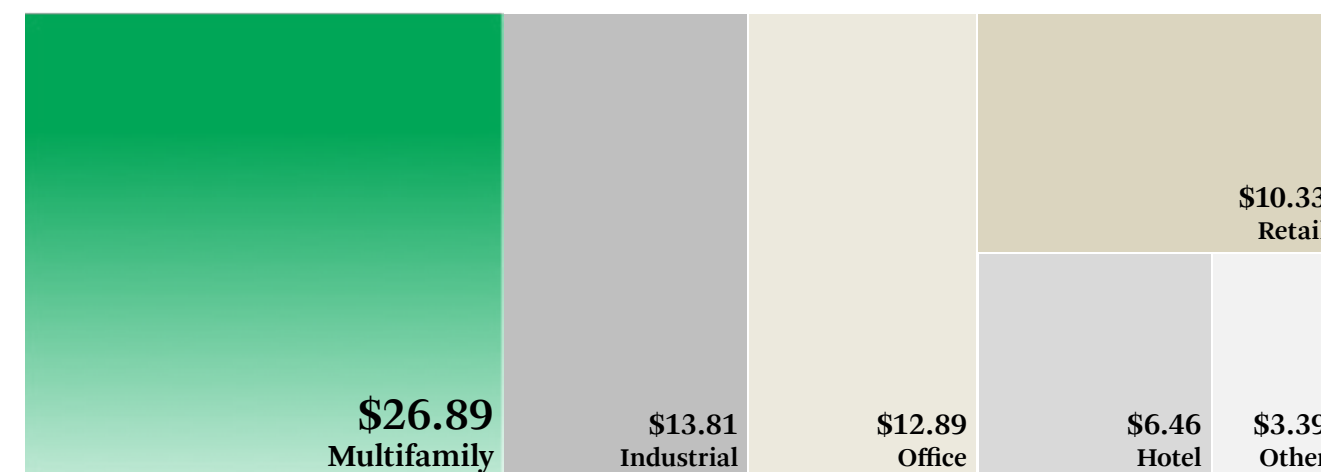
2019 (US\$ Trillions)



2030 BASELINE SCENARIO



2030 WHAT-IF SCENARIO



Source: CBRE Research, CBRE Econometric Advisors, 2019.

RENT CONTROL THREATENS MARKET GROWTH

Ultimately, the globalization of the multifamily sector will be dictated by how different markets are regulated and other local economic forces. One risk factor in particular looms for the multifamily category: rent control. It's increasingly popular worldwide, but could hobble cities interested in efficient and growing housing markets.

ABSENT ADVERSE LEGISLATION, THE VALUE OF THE MULTIFAMILY SECTOR COULD RISE TO US\$27 TRILLION, UP FROM US\$7 TRILLION NOW, ACCORDING TO CBRE RESEARCH AND CBRE ECONOMETRIC ADVISORS.

This would be a major boost to the global housing market and human welfare, and would provide an opportunity for global pension fund capital. However, rent control and other restrictive moves would substantially restrict the growth of this sector.

EFFICIENT DESIGN & ENVIRONMENTAL RESPONSIVENESS

From a development standpoint, multifamily investors will find opportunities in innovative new projects that combine more vertical or dense designs that use less land with cutting-edge sustainability features.

One recent example is The Interlace, a "vertical village" complex in Singapore named [building of the year](#) at the 2019 World Architecture Festival. Environmental sustainability is [a common theme in Singapore](#) and in [other pioneering projects](#) around the world.

In the Dutch city of Utrecht, an apartment complex called [MARK](#) has 1,000 units [slated for completion by 2023](#). The carbon-neutral development includes on-site greenhouses to provide food for residents, as well as a rooftop restaurant. Solar panels on nearby parking garages will produce enough energy to power the building, while residents can make use of an electric car-sharing service or stash their bicycle in a garage built to fit 3,500 of them. Additionally, around 60% of the units will be set aside for low-income and senior apartments.

When complete, MARK's three high-rise towers will become Utrecht's tallest residential community. The pioneering project is headed in the same direction as the rest of the global multifamily market: straight up.

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The rollout of the U.S. multifamily model across the globe has potential to make real progress in meeting global housing needs. Global expansion of the multifamily sector can attract patient long-term pension fund capital, of which there is a global surplus. A balanced and equitable policy framework is needed for professional multifamily managers to do their jobs. Rent control legislation is understandable in booming cities, but is not the way forward since it deters investment in the private-rental sector and prevents housing supply from catching up with demand.

Richard Barkham

Global Head of Research, CBRE



CBRE RESEARCH LEADERSHIP

RICHARD BARKHAM, PH.D., MRICS

Global Head of Research

Richard Barkham is one of the world's leading real estate economists and has advised numerous global investors on strategy. In his current role, he serves as CBRE's Global Chief Economist, Head of Americas Research and Global Head of Research. He manages CBRE's global platform of 650 professional researchers and oversees the firm's Thought Leadership worldwide. Richard has a distinguished academic track record as well as extensive consulting, fund management and real estate development experience. He holds a Ph.D. in economics and is an Honorary Professor of University College London.

+1 617 912 5215
richard.barkham@cbre.com
@RichardJBarkham

SPENCER G. LEVYChairman Americas Research
& Senior Economic Advisor

Spencer Levy is one of the most sought-after speakers in commercial real estate and is a frequent guest on business television, including CNBC, Bloomberg, Fox Business and PBS. As Chairman of Americas Research and Senior Economic Advisor for CBRE, he leverages his experience as a lawyer, investment banker and capital markets leader to advise clients on their real estate strategies and provide valuable insights on industry trends. He holds a bachelor's degree in industrial relations from Cornell University and a juris doctorate from Harvard Law School. Based in Baltimore, Spencer is the proud father of three children and sits on the boards of the Baltimore Leadership School for Young Women and Harvard Alumni Real Estate.

+1 617 912 5236
spencer.levy@cbre.com
@SpencerGLEvy

HENRY CHIN, PH.D.

Head of Research, APAC/EMEA

Henry Chin has an extensive track record in global investment management and how research can guide strategic and tactical real estate decision-making. He serves as CBRE's Head of Research for APAC/EMEA and sits on the company's APAC/EMEA Board, which oversees CBRE's strategic direction in both regions. Prior to joining CBRE, Henry was Head of Asia Pacific Research & Strategy at Pramerica Real Estate Investors and held several senior roles with Deutsche Bank. He is a visiting professor at Oxford Brookes University in England and an assistant professor at National Taipei University in Taiwan. Henry is frequently quoted in the press and is a regular guest on Bloomberg Television and CNBC.

+852 2820 8160
henry.chin@cbre.com.hk
@HenryChinPhD

JOS TROMPHead of Research, Continental Europe;
Head of Thought Leadership and Data Strategy, EMEA

Jos Tromp provides expert advice and analysis on commercial real estate trends and investment opportunities throughout Europe, the Middle East and Africa. As CBRE's Head of Research for Continental Europe and Head of Thought Leadership & Data Strategy for EMEA, he leads a team of more than 100 researchers in 40 countries and is a regular speaker at real estate conferences throughout the region. Based in Amsterdam, Jos spent nine years abroad for CBRE and lived and worked in Prague and Munich. He holds a master's degree in real estate from the University of Groningen in the Netherlands.

+31 20 626 26 91
jos.tromp@cbre.com

REPORT AUTHORS

IAN ANDERSON leads CBRE's office market research in the Americas, providing expert insight on the market's underlying drivers, emerging trends and supply-and-demand dynamics. His passion for the built environment reflects his broad educational background, which includes an undergraduate degree in business and political science from the University of Pittsburgh and a graduate degree in city planning from the University of Pennsylvania. He enjoys spending time with his two sons.

NEIL BLAKE, PH.D., is an economist with more than 30 years' experience in economic analysis and forecasting. By examining macro, micro, property, labor and regional economic trends, he specializes in providing theories that affect real-world decision-making. As Global Head of Forecasting & Analytics for CBRE, he develops and coordinates forecasting services across global markets to generate coherent and consistent global views of economic and property market prospects. Neil has extensive international consulting experience, including work for a broad range of international government and private-sector clients. He is an avid outdoorsman and has done several charity mountain climbs and cycle rides.

SOHIN CHINOY heads CBRE's global digital strategy, digital partnerships and data science functions. In this capacity, he partners with global business and technology leaders to manage the digital transformation roadmap and

is very engaged in the PropTech ecosystem. Sohini also oversees various corporate strategy and operations special projects. Prior to CBRE, Sohini held leadership roles in the management consulting industry. He lives in Dallas with his wife and two young children.

ANDREA CROSS is CBRE's Head of Americas Capital Markets Research and leads CBRE's Strategic Investment Consulting team, which provides actionable investment recommendations to clients. She has more than 20 years' experience in finance and real estate, including research, forecasting, consulting and governmental affairs. Prior to her career in research, Andrea pursued a career as a singer/songwriter and is a classically trained flutist. Andrea graduated with honors from Duke University, earning a degree in economics and music.

DEEPAK DEWANI serves as Head of Research Data Intelligence in the Americas for CBRE. He manages a team of 250 professionals who use a combination of data science and technology to support organic business growth. Deepak has worked with a wide array of commercial real estate investor and occupier clients in both U.S. and Asia-Pacific in roles ranging from leasing, investment banking, sales and research. He earned his MBA from Duke University and is a member of various professional property tech associations.

DAVID EGAN is a distinguished authority on global logistics and supply chain real estate. As Head of Strategy & Consulting for CBRE's Industrial Capital Markets business, he specializes in developing and offering strategic investment advice to many of the world's biggest institutional investors. David has degrees from Georgetown University and Northwestern University's Kellogg School of Management, and sits on the advisory board of the Georgetown Steers Center for Global Real Estate. In his personal life, David is a competitive golfer and has played more than 500 courses across 10 countries.

JAMIE LANE is a hotel industry expert who provides world-class data analysis and forecasts emerging trends across all real estate sectors. Based in Atlanta, he serves as Senior Managing Economist of CBRE Econometric Advisors and Hotel Research. He has published multiple reports on the rise and impact of short-term rentals on the hospitality industry in addition to speaking at numerous conferences on the subject. Jamie and his wife Alex spent three months "researching" European Airbnb units before having their first child, Elliot, in 2017.

MEGHANN MARTINDALE is Global Head of Retail Research for CBRE. In this key thought-leadership role, she generates industry-leading research, trends analysis and insights affecting the ongoing evolution of retail. Applying her leasing and development

experience, Meghann provides practical application of her research and thought leadership to portfolio optimization and value creation. She is an active committee member of the ICSC North American Research Group. Meghann served as an adjunct professor and is a frequent guest lecturer at NYU Schack Institute of Real Estate. She is passionate about leadership, education, training and development.

JEANETTE RICE, CRE, is CBRE's Americas Head of Multifamily Research. Her intellectual curiosity for understanding the drivers of urban structure led her to a 30-year career in commercial real estate economics. She writes extensively on market economics and investment dynamics and is a frequent speaker at professional and client events. Among many industry leadership positions past and present, Jeanette currently serves on the Executive Committee of Texas Christian University's Center for Real Estate. Outside of work, Jeanette enjoys world travel and has visited more than 40 countries.

JENNET SIEBRITS is a property market economist with more than 20 years' experience and oversees all of CBRE U.K.'s residential analysis, research, consultancy and publications. She provides both public and private-sector clients with valuable analysis of residential property data, which allows her to forecast trends for development, investment, rental, multifamily housing, co-living, and affordable housing. Jennet also produces a

wide-ranging program of thought leadership on issues such as placemaking, premium pricing and the impact of regeneration.

JULIE WHELAN is an authority on workplace trends driven by the evolution of demographics and technology in our society. As CBRE's Head of Occupier Thought Leadership, she regularly speaks at industry events and is frequently quoted in the media about the office and data center real estate markets. Julie is well-versed on the evolution of flexible office space in the real estate industry. As a "xennial" (caught between the Gen X and millennial generations), she understands firsthand why this evolution of the workplace is so critical to the future success of our workforce.

CONTRIBUTORS

Janet Abigail
Nathan Adkins
Kate Bailey
Scott Cabot
Tamba Carleton
Cynthia Chan
Ada Choi
Leo Chung
Jack Corgel
Travis Deese
Bram Gallagher
Connor Hall
Catherine He
Jonathan Hills
Richard Holberton
Liz Hung

Dan Hunker
Marie Hunt
Brandon Isner
Taylor Jacoby
Abhinav Joshi
Alex Krasikov
Nicole LaRusso
Wei Luo
Pol Marfà Miró
Ben Martin-Henry
Kevin McCauley
Hiroshi Okubo
James Pearson
Colleen Pentland Lally
Jordan Rainey
Brian Reed
Jing Ren
Colin Richardson
Raphael Rietema
Andres Rodriguez
Michael Rodriguez
Lexi Russell
Joe Stather
Desmond Sim
Dominic Smith
Allyn Thorpe
Tasos Vezyridis
Dan Wagner
Matt Walaszek
Thomas Westerhof
Sam Xie
Colin Yasukochi

**GLOBAL
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2030**

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