

In the last 50 years, workplace productivity has more than doubled, and businesses have office technology to thank for their increased output. As time goes on and developers make even more advancements in workplace tech, employees will be more successful and managers will be able to more accurately measure and optimize productivity.

What's next in office technology and what does it mean for you as a commercial real estate professional? This is a guide to the future of office technology and how it will affect the CRE industry.



# Virtual reality

Virtual reality has the potential to completely revolutionize the way we meet with colleagues and individuals in other locations. Instead of traveling to another city—or even just across town to another office building—you'll be able to "plug in" to meetings in virtual meeting spaces.

Facebook is already taking the steps to make virtual business meetings possible. In 2014, Facebook acquired VR company Oculus for over \$2 billion. At the time of the acquisition, Facebook

founder Mark Zuckerberg said, "This is really a new communication platform. By feeling truly present, you can share unbounded spaces and experiences with the people in your life." Further news about how Facebook plans to use VR slowed until recently, when they announced Spaces, a social virtual reality platform. Facebook's further advancement indicates a huge VR disruption on the horizon.

The company describes Spaces as "a new VR app where you hang out with friends in a fun, interactive

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virtual environment as if you were in the same room." Just as the original Facebook platform has creeped into the business world, Spaces and similar programs are expected to become a valuable tool for virtual business meetings and other collaboration.

VIRTUAL REALITY'S IMPACT ON OFFICE CRE

Some might theorize that with the advent of virtual reality for business, employees will never leave their homes and will just "commute" virtually, entirely eliminating the need for office

buildings. However, this isn't necessarily the case.

Even if virtual commuting becomes more popular among the workforce, there will continue to be a need for offices and physical meeting spaces outside of homes. As some company workforces choose to commute virtually, many offices and meeting spaces will likely be refurbished and rented on an hourly basis, rendering annual and multi-year office leases obsolete in some areas.

"By feeling truly present, you can share unbounded spaces and experiences with the people in your life.

MARK ZUCKERBERG

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# Artificial intelligence

According to Accenture, with the help of workplace automation and artificial intelligence, office employees will gain another 30 to 40 percent in productivity within the next three to five years. Tools like predictive analytics, natural language processing and speech recognition will be the primary Al tools driving this productivity gain.

With natural language processing and speech recognition tools at their disposal, employees will be able to more easily and quickly take notes and transcribe meetings, cutting down on the time it takes to debrief and actually hold the meetings themselves.

Additionally, predictive analytics, which powers tools like email and document automation, will cut down on hours spent drafting emails or creating the same tedious documents over and over. With these tools,

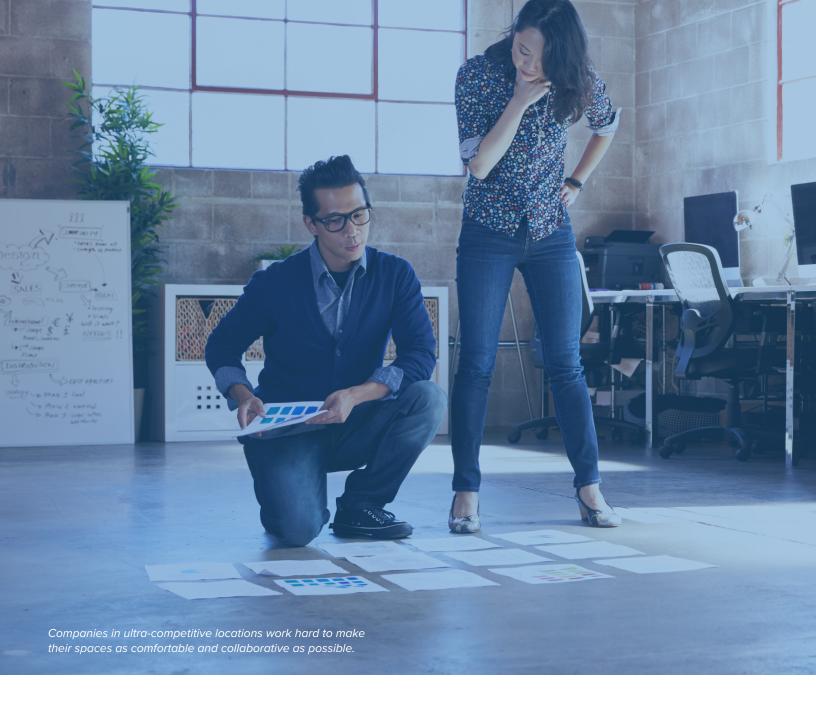
employee output will increase without any further effort from the employees themselves.

#### ARTIFICIAL INTELLIGENCE'S IMPACT ON OFFICE CRE

Workplace automation will make companies more productive, allowing employees to reduce hours spent on tedious tasks and allocate newfound time to more thought-provoking tasks that can be mentally explored outside the office.

If employees have more opportunities for mental brainstorms during their workdays, with the help of automation, restaurant and retail could see a boom around office locations, particularly in office-centric city neighborhoods.





# Smart buildings and the Internet of Things

Sometimes, business success is not just about the actual work output, but how employees are using a space to get the work done. That's why many companies with locations in the ultra-competitive Silicon Valley work so hard to make their spaces as comfortable and collaborative as possible. If they miss the mark, competing for talent becomes next to impossible. Soon, all companies will be able to use the Internet of Things to measure and optimize the efficiency of their office layouts by sensing and tracking workflow behaviors and patterns.

One tool already using sensors and behavior tracking is CoWorkr. CoWorkr tracks how spaces are used in an office and helps owners and office managers optimize the workplace accordingly. For example,



consider whether an employee is actually using their desk or only using communal work areas. Could that unused area be repurposed? Is there a need for more communal work space or, alternatively, more private offices?

The Internet of Things will not only optimize offices for productivity, but make them safer and more energy efficient. Smart building technology, paired with AI technology like facial recognition, will ensure office buildings are only accessible to those with clearance. Offices equipped with smart technology will also allow employees to customize their own personal work spaces and recognize patterns in active hours to cut back on energy use.

#### THE INTERNET OF THINGS' IMPACT ON OFFICE CRE

With better data on how office spaces are actually used, building owners may see it fit to downsize or expand their spaces. Opportunities may also present themselves to partner with other companies to efficiently share spaces based on each company's needs.

Because most employees will prefer to work for companies with customizable offices and top tier security, tenants will soon seek office buildings already equipped or ready to be equipped with these technologies, and owners will have to keep up.

# Employees will be able to work while in transit, potentially reducing actual office hours.

### Autonomous vehicles

Driverless cars will completely disrupt how we move from place to place, especially our daily commutes. Ubiquitous driverless cars will likely operate similarly to public transportation. They'll constantly move and rarely be parked in centrally-located areas near their passengers' actual destinations, including offices.

Once drivers can focus on things other than the road as they travel, employees will be able to work while in transit, potentially reducing actual office hours. And because driverless cars will be smarter and travel more efficiently than human drivers, commutes will be shorter and employees will be less concerned about living close to their offices.

#### AUTOMATED VEHICLES' IMPACT ON OFFICE CRE

Driverless cars will make location a non-issue for many offices. Faster, more productive commutes will allow companies to move their office locations outside of city centers for cheaper rent or additional space.

Additionally, office building owners will need to consider how to refurbish parking garage areas because they'll no longer be necessary on site. In fact, some developers are already designing parking garages with future uses in mind, and even architect Norman Foster wishes his firm done the same when designing Apple's new campus.







# What you can expect from your clients and investors

Your clients might already be asking questions about how to prepare for the future. They may be concerned about the impact of driverless cars, how artificial intelligence should affect their buying decision or the benefits of investing in smart buildings. If they're not already, they will be soon.

As their strategic advisor, if you arm yourself with knowledge and insights on future tech, you'll be able to answer questions even before major changes come. Stay in the know on upcoming trends. Actively educate yourself so you can pass crucial information on to your clients.

The future of technology is rapidly approaching, and office spaces will drastically change as a result. Want to learn more about how to prepare to market these changing properties? Contact us today. 1

