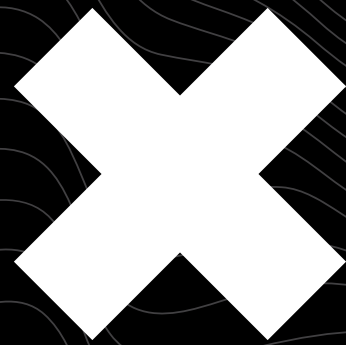


The image features a large, white, stylized number '6' on a black background. The number is composed of a thick white stroke. Inside the circular part of the '6', there is a dense pattern of thin, white, wavy lines that create a sense of depth and movement. The background is also filled with these wavy lines, which are more widely spaced and fade out towards the edges. In the upper right quadrant, the word 'ICONOCLASTS' is written in a bold, white, sans-serif font. Below it, the subtitle 'on the future of space and its impact on people' is written in a smaller, lighter, sans-serif font. In the bottom right corner, the word 'DIRTT' is written in a white, sans-serif font.

# ICONOCLASTS

on the future of space and  
its impact on people

DIRTT



**CONSTRUCTION, DESIGN,  
AND REAL ESTATE LEADERS  
ARE ACCUSTOMED TO  
NAVIGATING THE UNKNOWN.**

But today, there is a new kind of uncertainty few leaders have ever faced. In this series, we profile six big thinkers to better understand how designing and building space will change in the years ahead, and what that change means for people.





**TO ENABLE  
CERTAINTY  
EMBRACE  
ADAPTABILITY**



**Kevin O'Meara**  
Chief Executive Officer, DIRTT

Relevant and useful space should be fluid, simple to adapt, cause minimal disruption to your people and business and change with circumstances.

Sounds simple but breaking away from conventional decision making and approaches to construction requires a brave commitment to working together within our industry, instead of remaining fiercely isolated and protecting our ideas.

The future as we see it, is about collective intelligence and collaborative momentum. The force of many driving the same vision. A community of committed rule breakers, ready to question the status quo and share insight with each other that benefits all of us.

That's why we asked our network of big thinkers what they believe about the future of space and its impact on people. They talked to us about how the construction industry would be more efficient and sustainable if it embraced productization through prefab and

modular design. They said adding technology to flexible, adaptable spaces can unlock creativity and productivity for employees. And, that the workplace is the foundation of a company's culture and a valuable tool in attracting and retaining the right talent.

The needs and expectations of people and organizations will continue to dramatically change, placing new demands on spaces that render old models of design and building obsolete. By adopting new approaches to collaboration, construction and design, together, we can create spaces that can accommodate the future instead of trying to predict it.



**Betsy Vohs** Founder, Studio BV



# WHY YOUR WORKPLACE NEEDS TO BE RESILIENT NOW, MORE THAN EVER

The workplace is the foundation of a company's culture and an overlooked driver of employee engagement. Designer Betsy Vohs says spaces must embrace flexible designs to allow for evolving employee needs in the wake of the pandemic.

Photos by Corey Gaffer Photography

"COVID didn't make the office go away, it just made it more important," says Vohs, founder of Studio BV, an architecture and planning firm in Minneapolis. While some workplaces became ghost towns in the pandemic, many employees now crave a comeback after long hours sitting at the kitchen table, on video calls in pyjama bottoms, with screaming kids in the background. It's not just adult company employees want, Vohs says, but the togetherness that drives creativity and innovation.

"Space is the platform for cultural enrichment and engagement. It is the kind of bare facts of culture," she says. "If you don't have the things that tie you together, you're just a bunch of ... consultants. The world does not invent the next iPhone or cure cancer doing things that way. We have to be together, and we have to provide spaces where people can bond, connect, mentor, learn, grow, take risks, and be visible."

**"Space is the platform for cultural enrichment and engagement. The world does not invent the next iPhone or cure cancer [without shared spaces]." – Betsy Vohs**

## THE EVOLUTION OF THE WORKPLACE

Vohs has long been interested in how the body responds to its environment, in particular with interiors given her background in architecture and design. "I believe design can change everything for people. So whether you are a small not-for-profit, or you're world headquarters, that experience of being in a place is important," she says.

She believes employees will want the feel of their work environment to change moving forward, to fulfill a post-pandemic renewed desire for collaboration and in-person communication. "All that counts is coming together in the office. I hope that is inspiring a call to change. We need to do it together [as an industry] to make things better for people coming out of this," she says. "Our job's going to be that much more important now."







Cost savings and increased quality will allow for greater flexibility in design to respond to the evolving needs of employees due to the pandemic. Before, Vohs says, many organizations looked to provide employees spaces for “focus work” – quiet places to make calls, do research, and write reports. For the future, she sees the workplace as being more open, leaving the closed-door tasks for the home workplace.

“Right now, a lot of my workplace clients are talking about less personal space, and a lot more highly, specifically designed collaboration space,” she says. “It’s a complete change in priorities around collaboration, and being together, and workshops, and just the socialization – the 40% of work that really makes it real.”

She also sees a trend around space that’s more relaxing, with at-home comforts such as art, plants, blankets, and pillows in the meeting spaces – which she has in her workplace.

“I sometimes get asked, ‘what if someone steals them?’ and I think, ‘well, if someone is stealing your blankets, then you’ve got a bigger problem,’” Vohs says with a laugh. “I feel like these softer things change how people feel in a space, and they create opportunities for behavior to be impacted. That is going to be the expectation of the office. It’s more comfortable, it’s softer, it’s a place where you can have more conversations. And when people go back to work, they are going to want to have conversations that were never even remotely in the realm of what you talked about at work before. So that takes a different lens of an office. It can’t look like an art museum.”

The onus will be on the industry to create better “interior experiences,” Vohs says. There is an opportunity for companies that provide flexible workplace products that can easily turn a cubby into a conference room, and then back, as needed.

“I think this will finally be a game-changer for modular construction. Because we have to have resiliency in the office plan,” she says. “We must have spaces that are able to do something. They can’t just be static boxes anymore and have us change because we physically need spaces to support health and wellness in ways that aren’t predictable.”

Vohs isn’t alone in thinking the time is now for modular construction. A [McKinsey & Company report from 2019](#) identified that the modular construction industry is poised to scale to more than \$100 billion in U.S. and European real estate, delivering \$20 billion in annual savings. It identifies the benefits of modular construction as:

- Reduced build cost and overall lifetime cost of the building
- Accelerated build schedules
- Greater certainty on both build times and costs
- Improved quality of the building



**“I think this will finally be a game-changer for modular construction. We must have spaces that are able to do something. They can’t just be static boxes anymore.”** – Betsy Vohs





#### THE EXPERIENCE-BASED WORKPLACE CULTURE

The future workplace will not only encourage employees to come together and collaborate, but be the center of the company's culture and experiences. It will be about the people, not what they produce.

"I think we're going to be in an experience-based world after this, because this virtual life is really killing us," she says.

A sign of progress for Vohs is an advertising agency client who decided, amid the pandemic, that its staff experience is more important than the client's. As a result, the agency moved out of the downtown core and into a larger space with a deck, located in a walkable neighborhood with many restaurants and cafes.

"They said, 'our clients will be there for us because we're talented, but our staff is the talent, and so we have to have a space that supports the staff first, client second.' I have never heard that. It's radical for an agency," Vohs says.

"Those are bold decisions that I don't think outside of COVID I would see. I just would have never expected it," she adds. "More people are asking, 'How can our office be something that's bigger than our office?'"





Old approaches to construction are waning while new building methods, like prefabrication, are on the rise. Making projects more cost-effective, safer, and competitive all while delivering a higher-quality product.

Rich Steimel is the first to admit that, at age 61, he's far from the youngest person on the construction projects he oversees. Still, the Lendlease executive often finds himself cajoling junior colleagues to consider new building methods to make projects more cost-effective and competitive.

"I find myself trying to convince people to open up a little bit and saying, 'let's not just lean back on how we did something five or 10 years ago. There's a better way out there,'" says Steimel, a senior vice president and principal in charge of the Healthcare Group at Lendlease, a large-scale construction manager and developer in New York.

Steimel is a "very strong proponent" of prefabrication as an alternative to the traditional, fully customized ways of building. Not only does prefabrication save time and

money on development projects, but it provides the kind of nimble building space owners – and space users – are seeking in today's fast-changing business environment.

"People are comfortable doing things the way they did before. It's a human characteristic, and we're going to break them out of that," Steimel says. "There's a new way. There's a new sheriff in town."

**PREFAB IS FASTER, MORE EFFICIENT AND SAFER**

Having worked in the construction industry for nearly four decades, Steimel knows how inefficient the old ways can be. He started off studying architecture before quickly realizing that sitting behind a drafting table all day wasn't his style. "But I always knew I wanted to build, in some way, some form, some shape," he says. "And when you finish a project it's very rewarding. You know it's going to be there for a while."



**Rich Steimel** Senior Vice President, Lendlease

**PREFABRICATION  
WILL SOON BE PART  
OF EVERY NEW  
DEVELOPMENT**





In 1984, he landed a job as assistant project manager for a large construction company in his home city of New York. His first assignment was working on a hospital. "I've been in hospitals ever since," he says.

Steimel started to introduce prefabrication into his projects several years ago, realizing the "dramatic improvement" in how his firm does business.

"We used to literally build a hospital or a room or a unit or a suite, one piece of material at a time – one stud, one piece of Sheetrock, one flooring tile, one ceiling tile, one light fixture," he says. "[Today] a lot of these products can be built remotely and delivered so that you're reducing the amount of physical labor that's taking place on the job. It's faster that way, it's more efficient and it is safer."

Healthcare facilities are among the fastest adopters of prefabrication and will be going forward, according to recent market data from [Dodge Data & Analytics](#). Its survey forecasts 82% of healthcare facilities will use "a high frequency" of prefabrication and modular construction over the next three years, followed by hotels and motels at 74%. Prefabrication is not only more efficient, but also higher quality. Steimel says that claim sometimes surprises skeptics, until they've seen it.

"When you compare the quality of a component that's built in a factory compared to one that's delivered in 300 pieces and then hand-erected, there's no doubt that the factory-built is superior in quality. No question," he says. When Steimel confronts critics of prefabrication he doesn't get deterred; he gets proactive.

"I'm very persistent," he says. "I've had people get on a plane and actually go see how we just built a machine room in South Dakota. How we can build headwalls in Calgary. How we can build headwalls in Georgia. They have to see it. And then when they see it and they touch it, they're like: 'Now I get it. Now I understand.' The finished product wins the day."

Prefabrication has been particularly important in his work during the COVID-19 pandemic, as hospitals are forced to negotiate their space to handle a sudden bed shortage.

Steimel cites an example at one New York hospital that needed its emergency department expanded due to an influx of COVID patients: "We'd probably still be there screwing in Sheetrock to the walls if we did it conventionally," he said. Instead, they were able to get custom-made headwalls delivered within weeks. "It couldn't have been clearer to anyone the value and flexibility of these modular products."



**"A lot of the products [for hospital construction] can be built remotely and delivered so that you're reducing the amount of physical labor that's taking place on the job. It's faster that way, it's more efficient and it is safer." – Rich Steimel**



PREFABRICATION IS 'A BETTER WAY OF DELIVERING THE PRODUCT' FOR THE FUTURE

Steimel sees a day where prefabrication is part of almost every new building plan, especially as developers look for ways to design and construct their properties quickly, cost-effectively, and with as much flexibility as possible for long-term use.

"I think that every day we're going to see more and more components, and eventually – I don't know when it's going to be – but I would like to think larger building components will be manufactured offsite, shipped to the job site, and put in place basically as a finished product," he says.

Some hotels are already being built this way, he says, but hospitals have different needs and layout requirements: "We're not quite there yet," he says, but believes it's not that far off. In the meantime, Steimel will keep trying to convert people into using prefabrication as a smart solution to the space, time and budget challenges faced by most new development projects.

"Some people reluctantly acknowledge it, and other people embrace it, and we're looking for the people who are going to embrace it because this is progress: You either get on or you get out of the way," Steimel says. "We're not going to debate this. It's a better way of delivering the product."



**"[T]here's no doubt that the factory built is superior in quality. No question."** – Rich Steimel





**Kristi Woolsey**  
Associate Director & Lead, Smart Environments Group, BCG

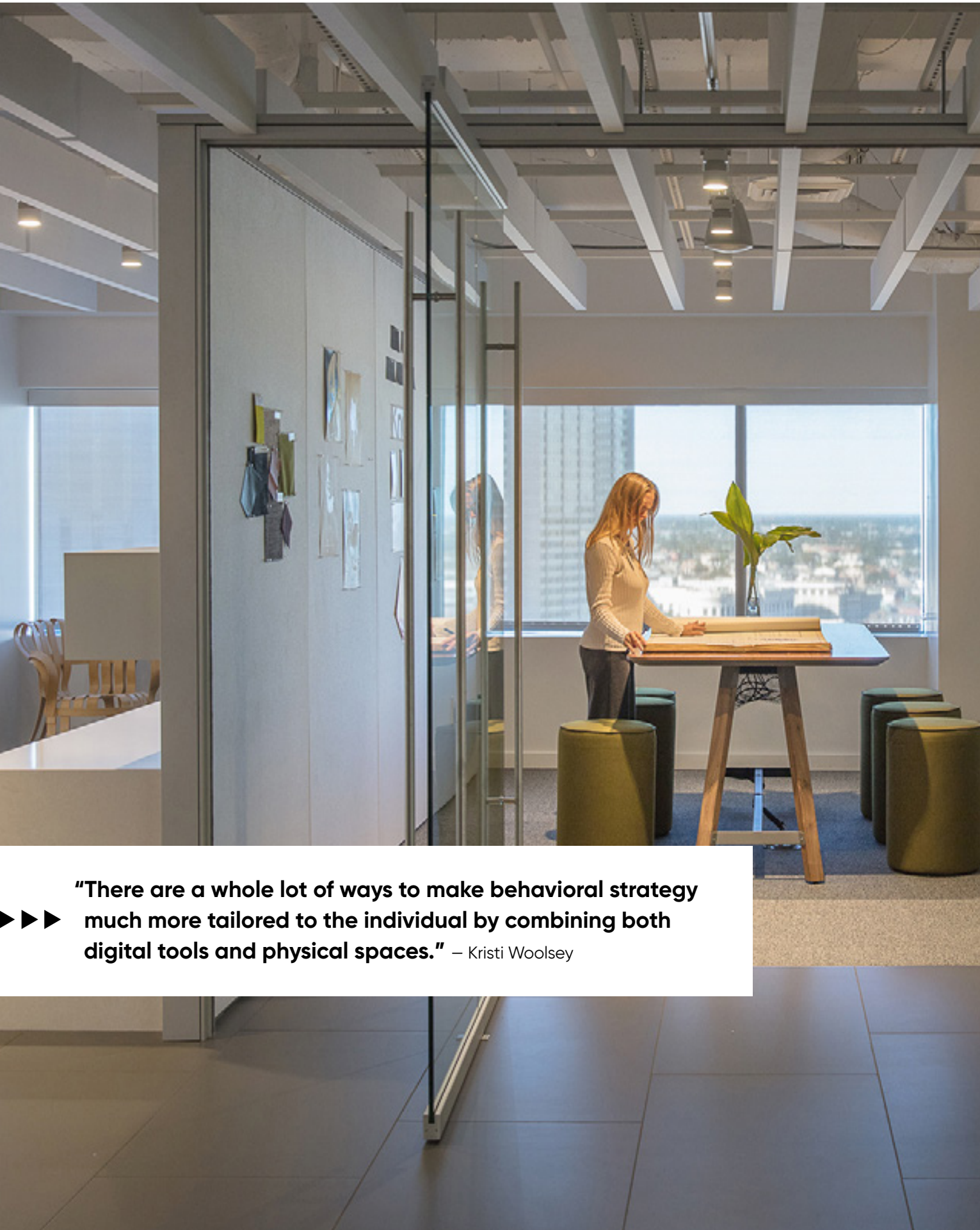
# THE WORKPLACE WILL BE REINCARNATED TO FOCUS MORE ON EMPLOYEES

Employers need strategies to attract talent to their workplaces. For architect, designer, and consultant Kristi Woolsey, that means looking at behavioral strategy and combining digital tools and physical spaces to allow companies to thrive in the future of work.



If you've ever wondered why grocers keep milk in the back of the store or why car showrooms have such high ceilings, Kristi Woolsey can tell you: These are intentional space designs created by behavioral strategists – like her – to influence what you buy. Woolsey, an architect, designer, and consultant, has spent much of her career helping organizations unlock their potential through what she calls “the power of sentient space.”





►►► **"There are a whole lot of ways to make behavioral strategy much more tailored to the individual by combining both digital tools and physical spaces."** – Kristi Woolsey

How someone feels about their environment influences how they behave. For example, milk in the back can lead to shoppers purchasing other items on the way to the fridge. While high ceilings in car dealerships influences conceptual thinking, allowing you to more easily imagine yourself in a new car. These behavior strategies are critical not just for selling products and services, but also for fueling productivity and employee engagement in the workplace. Woolsey started focusing on workplace space about a dozen years ago, when Wi-Fi started to become ubiquitous, driving the gig economy and enabling more employees to work remotely.

"I realized that work was about to need the same kind of behavioral strategy that retailers had been using," says Woolsey, the associate director and lead for the Smart Environments Group at Boston Consulting Group (BCG), based in Pittsburgh.

Just as a retailer or restaurant needs to entice a customer to come to their location, Woolsey saw that employers would need strategies to lure employees to work in their workplace particularly when they had a choice to work from almost anywhere else with a laptop.

"I did a lot of teaching people about what the future would look like, and what the implications for them might be," she says.

As technology advanced, Woolsey's work evolved to include the role technology and physical space play together in attracting and retaining workers. Her job today is helping organizations figure out what spaces, designs, and technology they need to thrive in the future of work.

"There are a whole lot of ways to make behavioral strategy much more tailored to the individual by combining both digital tools and physical spaces," she says.

The COVID-19 pandemic thrust many organizations into that future of work a lot faster whether they want to be there or not, Woolsey says.

"It accelerated the world into the scenarios that I was painting for people 10 years ago. And what's interesting about this moment in history is it's just like 10 years ago: We don't really know what's coming," she says.





## START WITH THE EMPLOYEE EXPERIENCE

For organizations struggling with how to structure the future workplace, Woolsey recommends focusing on the employee first: What does he, she, or they, want in their working environment both in the workplace and from home?

"Thinking about the employee is creating an employee experience," Woolsey says. "Technology and physical space have to work together to enable that experience."

She encourages organizations to start with research, understanding the opportunities and pain points for employees for both in person and remote work. The second step is to design the ideal experience. The third is to think through the enablers of that experience.

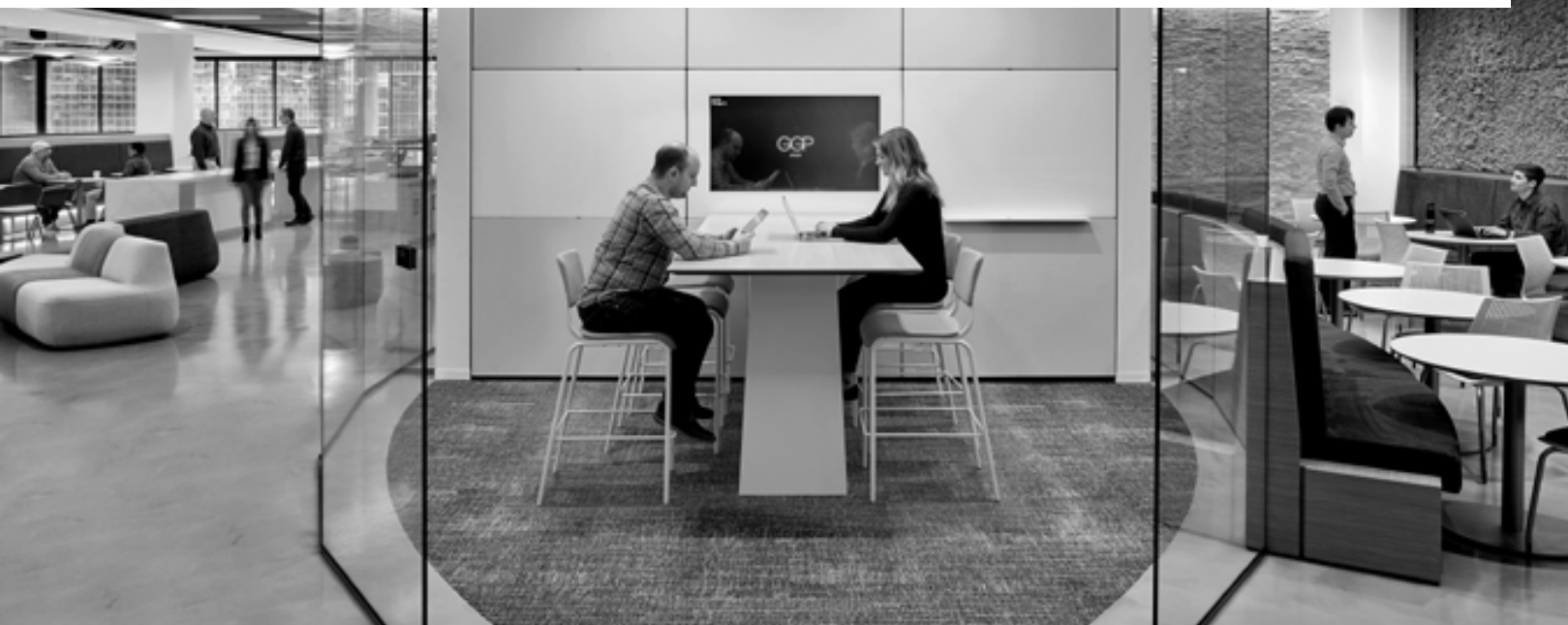
"What is the best way to deliver it? Is it through placemaking? Is it through a digital tool? Is it through a service? Is it through a combination of all three?" she asks.

Regardless of the answers, Woolsey says the experience needs to be "the driver and the touchstone" for how the space is designed.

"If you have more physical space, maybe you need less digital space. With more digital space, you might need less physical space. But you're thinking about those two kinds of space as the one continuum," she says.



▶▶▶ **"There's almost an imperative that people think about adding flexibility to the way that they work so that they can attract and retain the people they want."** – Kristi Woolsey



## SPACE AS A RECRUITMENT TOOL

A recent global BCG survey shows 60% of employees are looking for flexibility in work schedule, location, or both.

"Lots of people miss the social interaction. They miss the collaboration. Most people don't want to work completely remote, and they also don't want to go back to five days a week," Woolsey says.

It's results like these that have many organizations scrambling to figure out what the hybrid future of work should look like so they can find and keep top talent.

"When we think about the talent strategy side of it, there's almost an imperative that people think about adding flexibility to the way that they work so that they can attract and retain the people they want," Woolsey says. "It's also a real opportunity for diversity and inclusion."

One solution Woolsey sees is a trend towards activity-based workplaces, where there are different places and spaces to work, from assigned desks to café-style seating areas to private meeting rooms.

"You have to have a much more flexible use of space," she says, as well as the right technologies to enable the hybrid home and workplace options.

For instance, some organizations are investing in software that enables employees to book workplace space from home, so they have a designated desk when they arrive. The technology might also have sensors to show when a person has left a space, so it can be cleaned and sanitized for the next user.

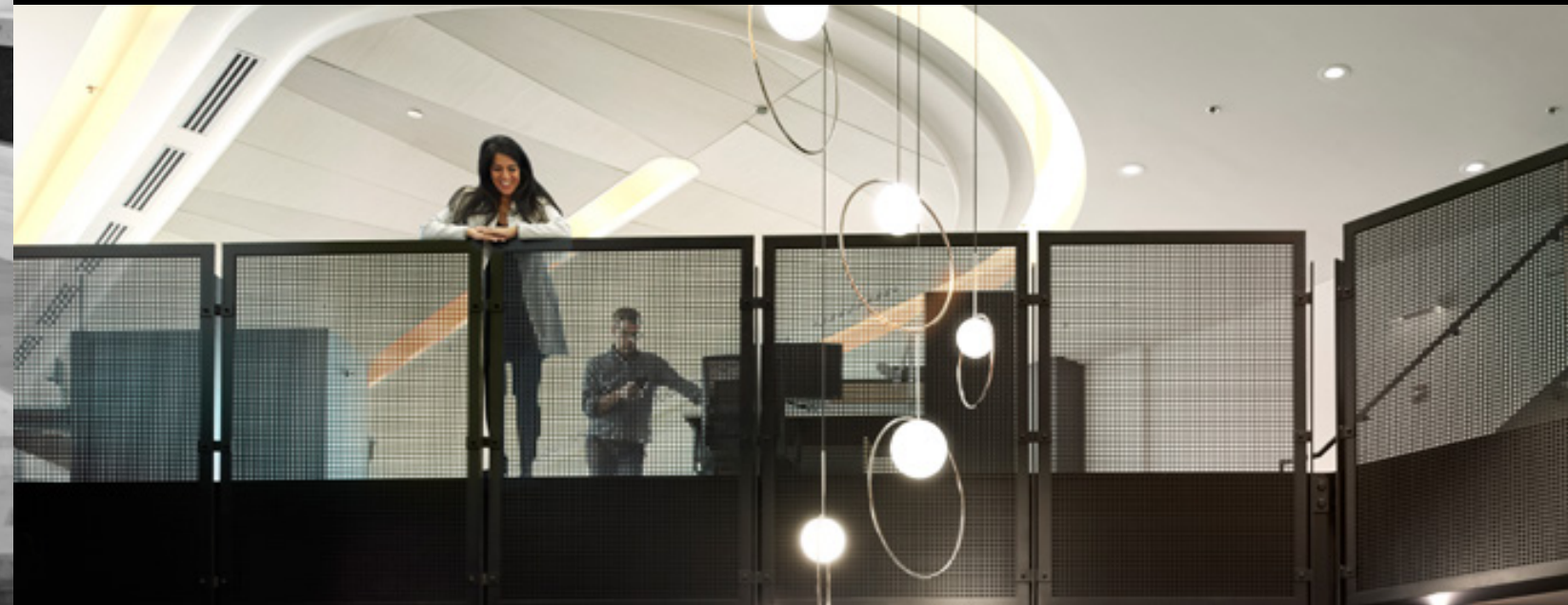






"Real estate is an enabler – it's not the goal," she says. "Some of the more progressive organizations are paying attention to this notion that employees now have way more choices of where to work. And that they're going to have to

deal with competition for employees, coming from a lot of new places. If you want to keep the best and brightest, you're going to figure out how to keep them."



The data from that technology can also help organizations figure out their space needs and make adjustments as required. For example, if you put in two couches and the data shows only one is being used, the other one can be replaced with a desk or a conference room, she says. The space and technology will also need to be used to engage employees working from home, so they still feel like they're part of the team.

"It's easy to have everybody at the office in person and feel like a team and it's really easy to have everybody remote and feel like a team. It's really hard to level the playing team [in a hybrid model]," Woolsey says. "To do that, you need to be thinking about the experience."

That adjustment could be a second screen in a conference room so that remote participants aren't

turned off when a PowerPoint presentation goes up, or more than one camera in the meeting room so remote workers can see the speaker and the reactions.

"Again, this comes from really thinking about the employee experience," Woolsey says. "What is it like to be hybrid, where some people are in person, and some people are remote? And what are the pain points? What does not work? And how might we solve that, to stay front in technology? You really have to think about those questions."

Some organizations are even giving employees a budget, and some recommendations, to set up their home workplace in a way that helps them be comfortable and productive. For Woolsey, the solutions should go back to thinking about what employees want before changing the real estate.







#### BECOMING MORE EXPERIENCE-FOCUSED

The challenge for organizations in the near term will be bringing back employees who may have become accustomed to the routines of working from home amid the pandemic.

"I think changing behavior will be way harder than changing the building," Woolsey says. She recommends organizations start communicating the comeback well before the pandemic is over.

"This is a moment of opportunity, if you want to grab it," she says. "There are so many companies right now that have internal or external teams that are already thinking about this: what is the future of work post-COVID? And then what does the workplace look like in that future? This is the time. You need to be having these conversations right now."

As for the building industry, Woolsey says the successful architects and developers in the workplace market will be those who have an employee-first strategy.

"At the end of the day, this isn't about real estate: It is about creating employee experiences that deliver value to both the employee and the organization," she says. "And so we have to become, in many ways, less object-focused and more experience-focused."



# HOW PRODUCTIZATION WILL REVOLUTIONIZE HOW WE BUILD



**Amy Marks** Head of Industrialized Construction Strategy and Evangelism, Autodesk

Amy Marks has a red high-heel shoe on display in her home office to make a point about the benefits of productization. It was custom-made, which Marks argues isn't very efficient. Why buy a custom pair of heels when you can easily buy them off the shelf quicker and probably pay less?







### THE RISE OF PREFAB

[McKinsey & Co. research](#) shows that permanent modular construction market share of new North American real estate construction projects grew by 50% between 2015 to 2018. Research and development spending among the top 2,500 construction companies globally has risen by approximately 77% since 2013. What's more, about two-thirds of companies surveyed by McKinsey believe that COVID-19 will lead to an acceleration of the transformation, and half have already raised investment for that purpose. [Research the company did in 2019](#) shows that projects using prefabrication can accelerate timelines by as much as 50%, and real estate companies who make the shift and optimize for scale can see more than 20% in cost savings.

Looking ahead, a [2020 report from Dodge Data & Analytics](#) forecasts increased use of prefabrication and permanent modular construction over the next three years. In addition, 75% of trade contractors and two thirds of general contractors and construction managers report

having experience working with multi-trade assemblies over the last three years.

"It's not hard to prefabricate. It's hard to create a culture, a process and a leadership that enable it," Marks says. "You're talking about a space where people mostly came out of working with their hands in the trades without integrating technology or digitizing. It takes a long time to change the DNA of the industry and the culture, especially one that has been insular and disconnected from other industries that have progressed."

Companies that don't make the shift could eventually become like the Blockbuster videos of the construction business, Marks warns, amid intensifying competition and cost pressures. The fallout from COVID-19, which has many companies questioning the way they work and their integration of technology, is expected to challenge the industry even more in the years ahead.

The story illustrates a point Marks has been making for years as the world's pre-eminent prefabrication consultant, who also goes by the nickname "Queen Of Prefab." Marks believes – and has a growing number of supporters who agree – that the building industry would be more efficient and sustainable if it embraced productization through prefabrication and design for manufacture and assembly.

"The environment has changed, the technology has changed, the labor force has changed," she says. "You can't do the same thing you've been doing and expect to get better results. That's just crazy."

Marks' perspective comes from a long history in the building industry: Her parents ran a successful general contracting construction management firm in Long Island, New York. After a stint in the family business, Marks executed a \$40-million turnaround of a modular construction company. She then ran her own consulting firm, XSite Modular, for

nearly a decade, helping to optimize prefabrication across many building types in industries ranging from healthcare to high-tech.

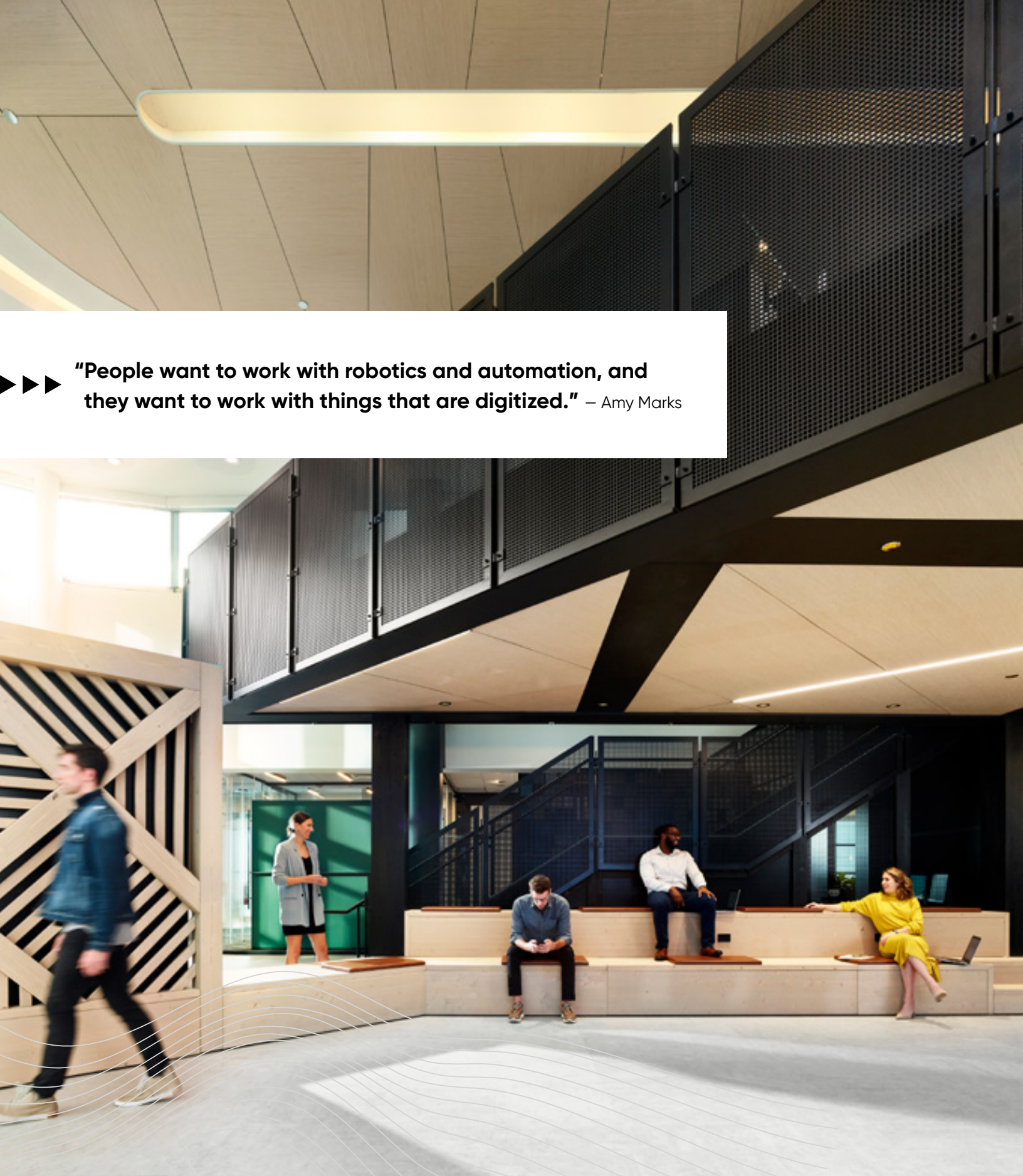
Her latest gig is head of industrialized construction strategy and evangelism at tech company Autodesk. It's a cool title and another powerful platform for Marks to "open source" her prefabrication passion. She spends her days spreading the word about the need for the industry to transform through the convergence of design, construction, manufacturing, and operations, driven by technology.

"The lines are completely blurring," Marks says. "Traditional players in the architecture, engineering, and construction space are not staying in their lanes and breaking down the silos of existing business models. Owners get more involved in leading design and build, general contractors are fabricating, subcontractors are engaging directly with owners – we're seeing convergence across the ecosystem."



**"It's not hard to prefabricate. It's hard to create a culture, a process and a leadership that enable it." – Amy Marks**





▶▶▶ **“People want to work with robotics and automation, and they want to work with things that are digitized.”** – Amy Marks

#### PREFAB FOR SUSTAINABILITY

Prefabrication is not only more efficient, but also more sustainable, according to Marks, and in more ways than one.

For starters, there’s environmental sustainability. “We have the opportunity to do a lot of reuse in our space, and designing for life cycles of buildings in a different way where we can really take advantage of things like decoupling the technology for the circular economy and for reuse,” she says referring to what she calls Design for Manufacturing and Assembly – and Disassembly and Reuse (DfMA-DR).

There’s also an industry sustainability angle around attracting the next generation of skilled workers to drive innovation and creativity: “We’ve got to attract new, diverse talent and diversity of thought to this ecosystem, and this does it,” Marks says of the prefabrication trends powered by data and technologies such as artificial intelligence and machine learning.

“People want to work with robotics and automation, and they want to work with things that are digitized,” she says. “They want to understand technology and software and

fabrication. It’s just interesting. You’re going to bring in a fresh set of people if you can move towards designing and building like this.”

And there’s the broader economic sustainability that keeps the industry profitable which, in turn, gives it the financial capacity to invest in its future: “We need economic sustainability to enable companies to stay alive and keep creating and designing buildings based on more complexity,” she says.

For Marks, the surefire way to make her industry more sustainable is to promote participation, innovation and advancement across all segments. It’s what inspires her to put that prefab crown on top of her hardhat every day.

“This is a revolution,” Marks says. “We have to think creative destruction – burn down some silos and enable new skills and growth in order to achieve the new possible.”



# THE PEOPLE-FIRST WORKPLACE IS HERE TO STAY



**Tim Kay**  
Managing Director, Jones Lang LaSalle Inc.

A massive shift in how office space gets used is underway. Tim Kay of Jones Lang LaSalle explains why adding flexibility and adaptability to these spaces is the way to embrace the demand for hybrid workplaces.



As a commercial real estate leader, Tim Kay gets asked the same question a lot lately: Is the workplace dead? His answer: Yes. At least, the workplace as we know it.

Kay is the managing director at commercial real estate service company Jones Lang LaSalle Inc. (JLL) and market leader for the Great Lakes Region, based in Detroit. He believes there will be a rebirth of the workplace that will reflect a new, post-pandemic work environment.

"The office will not go away. It will be different. It'll look different," he says, and it will be shaped by the pandemic, technology, and the growing work-from-anywhere realities of our world.



## THE FUTURE OF SPACE IS FLEXIBLE

Kay's insights on workplace design and functionality come from decades of personal and professional experience in the industry, including 14 years at a global furniture company before joining JLL in 2007. His father was also a carpenter and later a general contractor, which led to a natural curiosity around construction.

"I've always had an appreciation for how things are designed and built and the mechanisms behind it," says Kay.

In his current role, he is overseeing the development, design, and construction of buildings and space. He works on everything from hotels and healthcare facilities to workplaces and post-secondary institutions. Part of his job is talking to clients about designing space to accommodate the next inevitable change in how we work.

The workplace will need to be a lot more flexible, which is something Kay says his former company understood when it introduced the first cubicle workstation in the 1960s.

"That was all about embracing change – knowing that change will happen," he says. "It needs to be flexible and adaptable, rapidly and easily, to support the change in business."

Today, that change includes prefabrication and modular designs to create a more flexible workspace. "People have come to realize that they need a space to ebb and flow with their needs more easily and to move more fluidly than it did before," he says.

**"Office space needs to be flexible and adaptable, rapidly and easily, to support the change in business." – Tim Kay**







"I've seen some designs where you have a bunch of little U-shaped-like living rooms on a big floor plate. Workstations are shrunk and moved down. People can safely work in more of a study carrel kind of environment, or in a little phone booth, or in a mini conference room," he says.

The alternative layouts accommodate a growing number of hybrid employees who will spend part of the workweek at home and part in the corporate workplace, he says. The workplace will become more of a creative environment and a place for organizations to cultivate their corporate culture.

"The office isn't going anywhere. It's critical. It's where people learn and collaborate, where culture is formed and nurtured," Kay says. "People have to be together. We learn so much informally, simply by being in an office with other people and overhearing conversations. Maybe one idea is shared that leads to another idea that leads to another idea, and then – boom! – you've got some industry- or company-changing innovation that is so critical. That's not going to happen on a Zoom call."

### THE NEW HYBRID WORK SPACE

A reimagination of the hybrid workplace was in the works well before the pandemic hit. Organizations were already looking for ways to boost employee engagement, satisfaction, and productivity.

The pandemic sped up this shift, as organizations realized that employees are unlikely to be comfortable returning to the same physical workplace. "There were a lot of [these] trends around how people use space," Kay says. "COVID accelerated it. Company cultures that didn't embrace home-officing now know it's reality." Companies around the world have changed their policies to allow for more working from home, including Shopify, Twitter, Slack, Microsoft, and French automaker PSA.

A recent survey from S&P Global Market Intelligence found that nearly 80% of organizations surveyed say they implemented or expanded work-from-home policies because of the pandemic, while 67% say these policies will likely remain in place either permanently or for the long term.

When it comes to what the new hybrid work space will be, Kay sees a greater amount of "soft space" being created to resemble more of a collection of living rooms than a workplace. Imagine fewer workstations, more collaboration areas, and some private rooms.







**“What will matter most to people is having a complete, seamless transition of how they work, supported by technology” – Tim Kay**

#### TECHNOLOGY-ENABLED SEAMLESS TRANSITION

Technology will also continue to change how people work, including how they connect to their job from home and in the workplace.

“Going forward, I think what will matter most to people is having a complete, seamless transition of how they work, supported by technology,” Kay says. “People will say, ‘I want to go from where I’m at home, dash off to the office, start back up like I always was there. Or if I have to be on a client site, or have to travel across the country or across the globe, I want a seamless transition from workplace to workplace to workplace, driven by my technology and my ability to communicate.’”

For the workplace environment that means more space for video conferences, cloud-based platforms for accessing documents remotely, and anything else that makes an employee want to connect with colleagues and clients both at home and in the workplace.

“The employee experience is everything,” Kay says – and space needs to support it.





**Michael Ford**  
Vice President of Global Real Estate and Security, Microsoft  
Board Member, DIRT



# TEAM-BASED SPACE WILL DRIVE INNOVATION



When flexible spaces meet technology in Microsoft's workplaces, it unlocks creativity and productivity for employees, says Michael Ford.

Microsoft has built flexibility into its portfolio and is in a great position to support a hybrid work model – an approach that allows employees to work in the office and remotely. The company's Real Estate and Security team (RE&S) has been a leader in this. For nearly a decade, Microsoft has provided what it calls "team-based space" for employees. The areas are set up to accommodate groups of about eight-to-12 employees with collaboration space, "focus rooms" for four or five employees to meet, and "concentration zones" for one or two people to meet or code.

"We optimize space for the employee at Microsoft," says Michael Ford, Vice President of Global Real Estate and Security at Microsoft. "A lot of times, real estate teams just build a space, and then employees have to fit into that space. We want to build flexible space that adjusts to our employees' needs."

Ford underscores his point by talking about how the RE&S team creates space for employees to innovate and build software: It's all about creating an environment where people can work together, talk, and interact.

"Employees have fewer meetings, or spend less time in meetings, and they are more productive with release schedules," Ford says. "Employees are releasing products faster because of that interaction in the team-based space – you can overhear a conversation about a piece of code and that helps, instead of sitting in an individual office where you would never have heard that conversation to move things along."





## USING PREFABRICATION TO INCREASE FLEXIBILITY

The RE&S team uses some prefabrication and modular construction to create agile workspaces across its real estate portfolio – everything from phone rooms and focus rooms to small meeting areas “to help support our team-based space workplace concepts,” Ford says.

This approach to building construction allows the company to quickly add more collaboration and concentration spaces to adapt to business and employee needs. Not only is it more adaptable, but a lot faster. Ford says, “using prefabrication and modular elements has enabled Microsoft to build new spaces up to 30% faster, in some cases.”

The RE&S team is not alone when it comes to noting speed as a benefit of using modular construction. A [2019 McKinsey report](#) said modular construction can cut construction timelines in half, and reduce costs by 20%.

Ford believes more organizations will need to adapt or entirely recreate their work environments to focus on flexible spaces. Corporate real estate will need to offer more unassigned desk options and more collaboration space for employees who do the majority of their work remotely and come into the workplace for meetings.

“It goes to the whole concept of a flexible workplace, flexible schedules, that are continuing to gain traction during the pandemic and in post-pandemic,” Ford says. “I think it’s super important in the future, because you can respond quickly if you’re going to use prefabricated or modular elements in your construction.”

## SPACE THAT BUILDS CULTURE AND EXPERIENCES

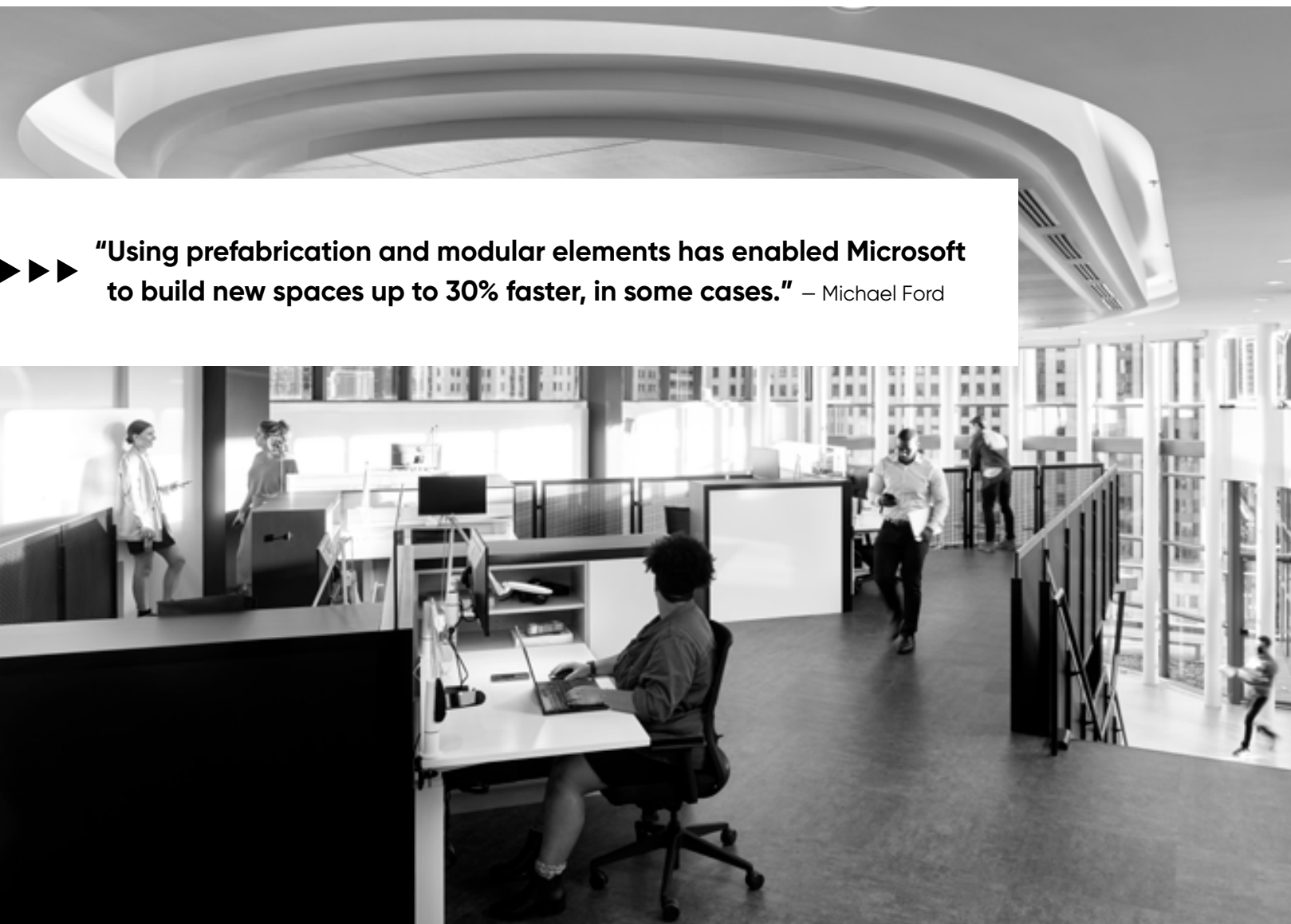
For the RE&S group, having moveable, technology-powered space is critical to deliver “connected – both physical and digital – accessible, sustainable, and secure workplaces that create the best employee experiences,” Ford says.

His advice to other organizations isn’t to build space and add technology, but rather, the design should reflect the organization and its vision and goals.

“You just can’t go build space and make it smart space. It needs to match the culture of the company and align with employee needs to ensure everyone can be successful,” he says.

It goes back to the employee experience: “Corporate real estate professionals will need to stay agile to address changing business needs and employee expectations,” he says. “You must understand what the employee needs to be successful and productive.”

▶▶▶ **“Using prefabrication and modular elements has enabled Microsoft to build new spaces up to 30% faster, in some cases.”** – Michael Ford







"It's about assisting the employee throughout their day," Ford says. "And that's where we're heading as a real estate and security organization. From the time an employee wakes up in the morning to when they return home, we want to give them choices."

For instance, he says Microsoft is implementing "smart parking" at some of their campuses to help employees find an open parking space near their workspace. It has company-provided connector buses – equipped with Wi-Fi – from all the major neighborhoods around its corporate headquarters in Redmond, Wash. to bring employees to work. Once there, employees can book a meeting or private space, or order lunch, through an app called MyHub.

For employees not in the company workplace, the company's Microsoft Teams business communication platform continues to improve how it connects those at home to those in the workplace. "We're working on the conference room models, so that a person working

remotely feels invited, included, and not forgotten because they're sitting in their home office," Ford says.

A new priority for the post-pandemic world is creating more unassigned space on its global campuses to accommodate employees that will work the majority of time at home in the future.

"Through the use of technology the employee can book a space before they leave their home and check into that space upon arrival. Microsoft is exploring technology that once the employee checks out of that space, the facilities team is notified to clean the space and make it ready for the next employee," he says.

Combining the physical and digital is the focus for Microsoft, and integrating technology into how employees interface with their spaces is how the company aims to unlock productivity, creativity, and innovation.

#### THE INTERSECTION OF TECHNOLOGY AND REAL ESTATE

"A company's real estate brings together the digital and physical aspects of the workplace to create experiences that, in turn, support employee productivity, innovation, and creativity," says Ford. That's core to what makes company spaces so critical to success.





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