Amongst the whirlwind of volatility that seems to spin from one crisis to the next, business leaders are looking for new skills and strategies that will help their organizations thrive in the new global economy. At the same time, in this era of unprecedented complexity, the study of resilience has emerged in which scientists, economists, government leaders and psychologists are working to understand how systems, organizations and people can adapt to stay fit within an environment of constant change.

In his new book, “Resilience, Why Things Bounce Back,” author Andrew Zolli draws from ecology and sociology to consider resilience “as the capacity of a system, enterprise, or a person to maintain its core purpose and integrity in the face of dramatically changed circumstances.” Zolli suggests that “if we cannot control the volatile tides of change, we can learn to build better boats.”

The notion of resilience is generally talked about in terms of economies, markets, ecosystems or people, but rarely in conjunction with organizational real estate. Leading real estate professionals consider how to create greater flexibility in their portfolios, but many overlook how they might better leverage these assets by developing strategies designed for resilience. At Steelcase we asked ourselves how the concept of resilience could be applied to the creation of the places where people within an organization come together. Could we construct a strategy designed to leverage today’s complexities and embrace the speed in which circumstances change? Could real estate become an adaptive system to better support an organization’s strategy, brand and culture by shifting fluidly while remaining economically viable? Could we develop that “better boat” through real estate? In each case, we believe the answer is yes.
Five years from now it’s projected to shrink to only about one-fifth of employees are engaged in alternative work programs. And some companies that have implemented AWS as a space-cutting strategy often leave real estate idling: 11% of workers who use alternative workspaces still have an assigned workplace.

AWS has resulted in modest reductions in real estate portfolios, but there is a steady shift happening. Ten years ago the average allocation of space per employee in the U.S. was 250 square feet; today it’s 185-195 and projected to just over 150 in five years. Europe posts similar numbers, according to global real estate firm Cushman & Wakefield: offices in Italy average 215 square feet, in France 180, Spain, 162, the United Kingdom, 170; Germany, 320; and Austria, 130.

While the cost-reduction trend is encouraging, there is a growing awareness that AWS can be effective only if it’s part of a broader approach that considers effectiveness as well as efficiency. This begins with understanding that work is inherently a social endeavor and that in order to be successful people need other people, they need access to technology and they need places that bring these elements together. As one of our research colleagues put it, “The workplace is the original social network.” Thus space is being recognized by executives as a key element of organizational success.

Places where people want to work

In the past, people had to go to the office to go to work. If they weren’t in the building they couldn’t connect with co-workers, the company’s IT system, or printed files; if they weren’t in the building, they weren’t working. Then technology cut the tethers to specific locations for work, the global economy became an inherently a social endeavor and that in order to be successful people need other people, they need access to technology and they need places that bring these elements together. As one of our research colleagues put it, “The workplace is the original social network.” Thus space is being recognized by executives as a key element of organizational success.

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Today some companies have started mandating that people come back to the office as a way to drive collaboration and rebuild a sense of connectedness to the organization.

A GLOBAL OPPORTUNITY

Space Per Employee 2013

Ten years ago the average allocation of space per employee in the United States was 250 sq. ft, five years from now it’s projected to shrink to 150 and other countries are moving in the same direction.

Global organizations have an opportunity to not only shrink their real estate footprint but also help builds trust and cooperation—what Zollo terms “people’s ability to collaborate when it counts.” It creates real estate that can help augment the interactions of people at work and build resilient workplace communities through strong social networks based on trust, that can flourish even in the most challenging situations.

To date, in an effort to respond to rapidly changing conditions, organizations have implemented alternative work strategies (AWS) such as teleworking, hotelling and mobile working. These have been implemented as a way to limit real estate costs while supporting organizational objectives, such as work-life balance for employees or reducing carbon footprints. The idea behind AWS was pioneered by BIM in 1989, but it’s only in the last five years that most companies—80% according to one recent study—took hold of it as a means of reducing real estate costs and supporting a more mobile workforce.

Overall, AWS reduced the size of real estate portfolios about 6-10%, according to CoreNet Global. While a broad implementation of alternative work strategies might have reduced portfolios further, currently only about one-fifth of employees are engaged in alternative work programs. Despite plenty of pros and cons cited for co-location strategies, most real estate professionals agree that the discussion has elevated the awareness of how much the physical environment drives organizational performance and business results. Leading organizations know this means more than just bringing people together in buildings that bear their names. It means going beyond the aesthetics of the environment to creating places that actually help people engage more fully in their work, build trust with distributed co-workers and allow people to innovate faster. “Companies have learned and now they’re asking how to create work environments where people really want to come to work,” says Shannon.

THE TENSIONS OF TODAY

Knowing how to create places that amplify the performance of people and the organizations they work for means understanding and designing for the tensions that exist today.

• The more mobile our devices allow us to be, the more we need fixed places to come together to connect and collaborate
• The smaller our technologies, the more we need scale to share and communicate effectively with others
• The more data we generate, the more we need places to help us make sense of it
• The more collaborative we became, the more we need time alone
• The more distributed we become, the more we need to be together
• The more virtual we need to be, the more physical we want to be

This is the role that place can and should play. In an increasingly interconnected and interdependent economy, the places where organizations come together matter more than ever. The opportunity is not to just build smaller offices, but to create destinations that attract people because it is where they can do their best work. Places that provide meaningful experiences for the people who use them, today and tomorrow. Workplaces where resilient organizations can grow and thrive.

A SUSTAINABLE APPROACH

Researchers define resilience as the ability to adapt to changed circumstances while continuing to maintain core purpose and integrity. Exploring and applying some of the principles of resilience provides a framework for real estate strategies to achieve this adaptive capacity.

When a real estate strategy embraces these ideas, it can create a more sustainable approach that is not only capable of withstanding volatile economic conditions, but also helps build trust and cooperation—what Zollo terms “people’s ability to collaborate when it counts.” It creates real estate that can help augment the interactions of people at work and build resilient workplace communities through strong social networks based on trust, that can flourish even in the most challenging situations.

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CONSTRUCTING A RESILIENT REAL ESTATE STRATEGY

Three principles from the study of resiliency form the framework we’ve developed for creating real estate that fluidly adapts to ever-changing circumstances and an evolving organization, while continuing to serve the company’s mission.

#1 CLUSTERING

Zolli writes that “resilience is often enhanced by the right kind of clustering—bringing resources into close proximity with one another...a special kind of clustering, one whose hallmark is density and diversity—of talent, resources, tools, models and ideas.”

A resilient real estate strategy is one that embraces this principle as a foundational element and promotes the cross-pollination of people, ideas, and experiences through places that bring them together. These places are designed to augment people’s interactions, whether working side-by-side or across continents.

Feedback Loops

A feedback loop for the physical environment allows an organization to know that choice and control over where and how people work is fundamental to satisfaction and engagement. Places that support the various modes of work in ways that consider physical, social and cognitive wellbeing help people be most effective at what they do.

Based on this understanding, we developed a concept that we deploy in our own spaces as well as with our customers: the interconnected workplace. It promotes choice and control over the places people work within an overall ecosystem of spaces with these key features:

- Palette of Places: a range of owned and shared spaces designed for both individual work and team work
- Palette of Presence: spaces designed to support movement
- Palette of Posture: spaces designed to support movement

This concept leads to workplaces that allow people to choose where and how they want to work, or as we call it, “best place.” The ideal place, anywhere on campus, based on the type of work that needs to be done and the environment required to be successful. The result is a global ecosystem of spaces designed to augment the interactions of people, while reducing the company’s overall real estate footprint and costs. This approach allows an organization to do more with less and challenges the company to leverage today’s complexities to rethink rather than merely shrink real estate. The return it yields can impact the bottom line and operational costs.

#2 MODULARITY

There are certain structural features of resilient systems that allow them to ensure continuity by dynamically reorganizing when circumstances require it. While these systems may appear outwardly complex, they often have simple internal modular structure with components that plug into one another, much like Lego blocks,” writes Zolli. “This modularity allows a system to be reconfigured on the fly when disruption strikes, prevents failures in one part of the system from cascading through the large whole, and ensures that the system can scale up or scale down when the time is right.”

A resilient real estate strategy mimics this principle when it has been intentionally designed to create a balance of spaces equipped for individual work and group work, some which are owned by individuals and teams and some which are shared. The ability for users to self-select places where they can be most effective allows the overall space to address the shifting needs of the organization.

In terms of the physical properties of resilient places, modularity integrates interior architecture, furniture and technology to allow for easy configuration and adaptation as required to support the types of spaces organizations need at any stage, especially during times of rapid change and disruption. As the needs of users shift and external factors impact business conditions, these spaces remain vital because they are capable of morphing and evolving as required, without increasing the overall footprint and operational costs.
The business cycle is so dynamic and elastic. The economy, ecosystems, virtually all resilient entities—particularly when those data are correlated with data from feedback loops—while collecting and analyzing feedback that informs where the business needs to go, so you have to...there are a number of ways to capture the data. The Real estate executives and the teams they work with...global real estate strategies can seem daunting, strategies. Advanced scheduling systems integrated with real estate technology...It shows who’s following hotelling agreements to monitor and measure the experiences their employees are having at work. Steelcase offers a wide range of workplace surveys to our clients, providing feedback data on mobility, collaboration, worker satisfaction and other measures. We use these surveys to measure the effectiveness of our own global real estate portfolio.

### #3 FEEDBACK LOOPS

“From ecosystems to economies, virtually all resilient systems employ tight feedback mechanisms to determine when an abrupt change or critical threshold is nearing,” Zott writes. “We are soaking in a world of sensors and the feedback data that these sensors produce are a powerful tool for managing systems performance and amplifying their resilience—particularly when those data are correlated with data from other such systems.”

Real estate executives and the teams they work with need to apply this same thinking to make sure they employ feedback mechanisms that offer regular, ongoing feedback that can signal when change is required or critical issues need to be addressed.

“The business cycle is so dynamic and elastic. The environment changes and you can’t always predict where the business needs to go, so you have to increase your capability to respond. Flexibility is so much more important in real estate now,” says Shimmon of JLL.

While collecting and analyzing feedback that informs global real estate strategies can seem daunting, there are a number of ways to capture the data. The spaces themselves should provide organizations with feedback that can help inform their real estate strategies. Advanced scheduling systems integrated into individual and group spaces can track space utilization with real-time analytics that measure and report reservation patterns, lighting, temperature, etc. The PricewaterhouseCoopers real estate group closely monitors workplace performance data for each of its member-owned firms by tracking when staff members access PwC’s network, check-in to the hotelling system from digital devices or use an access card. Data is captured daily and segmented by lines of business (tax advisory, assurance, etc.) and types of employees (partners, directors, staff). “Detail is key,” says Steve Adams, PwC’s director of workplace strategy in the U.S. “Who is coming in the office? Are people taking advantage of our mobility programs?”

Each month, updated workplace performance information is made available via an internal web-based dashboard and document repository for PwC’s senior leaders and partners who manage markets and facilities. It shows who’s following hotelling protocol in their office, conference room usage, even how other firms are responding based on their client list, where they’re located and their mix of business. “If you don’t have this information to manage your workplace, it’s like running a business without a balance sheet. It’s essential to understanding how our office environments are working,” says Adams. (For another innovative way to measure workplace performance, see “Moneyball for Business” on the opposite page.)

Like every balance sheet, workplace performance data reveal only part of the story. Adams says that, like most organizations involved in the knowledge economy, “our people are our product. They’re the ones who serve our clients, so we want to make sure they have the best workplace experience possible.” This experience translates into support for mobile workers and a workplace that attracts and engages talent, communicates the company brand, and supports the relationship-building that sustains collaboration, trust and company culture.

Workplace surveys can be an effective way for organizations to monitor and measure the experiences their people are having at work. Steelcase offers a wide range of workplace surveys to our clients, providing feedback data on mobility, collaboration, worker satisfaction and other measures. We use these surveys to measure the effectiveness of our own global real estate portfolio.

**RESILIENT ORGANIZATIONS**

A company’s people and its real estate are its two greatest expenses—and its greatest resources. The two are inextricably intertwined. Real estate can and should do more to create value for the organization by amplifying the performance of people at work. We can analyze the data to see how people are engaging with their workplace, how they relate to others, how they’re located in the work environment, what spaces they use and the interactions they have. By analyzing this data, we can track how information flows around the company, the diversity of connections, what types of employees (partners, directors, staff) are more, both face-to-face and via email, video and text, according to CoreNet. At Steelcase’s global headquarters, the current average is 155.

While this is almost 30 square feet less than it was two years ago, the more important question is, how well do these spaces support communication and collaboration and adapt to new technology, new work processes? How resilient will they be over time? These are difficult questions for any company to answer,” says Dave Lathrop, director of WorkSpace Futures and strategy at Steelcase.

But the company is using new research methods to gauge workplace performance, “and the results we’re seeing are more accurate, detailed and nuanced than ever,” says Lathrop.

For example, the research reveals that conversations in the morning are more process-related conversations, while more informal interaction happening in the later afternoon, even though both take place in the same location. Lathrop believes “people hit the ground running and are task focused in the morning. As projects peak and wind up, there’s more back-and-forth discussion, more sharing of what happened and discussion of results.”

In the new workplace people are communicating more, both face-to-face and via email, video and text, according to CoreNet. At Steelcase’s global headquarter, the current average is 155.

With their teams and only aggregate data is analyzed. Individual information is kept confidential.

“Since much of the value that a company produces comes out of the interactions that people have with each other, it’s critical to know the kinds of spaces that best support interactions.”

Lathrop’s team works with Sociometrics Solutions, a firm begun by people from MIT Media Lab, an organization with which Steelcase has had a working relationship for many years. Sociometrics developed the sensors and the software that analyzes the collected data.

Ben Waber, Sociometrics CEO, likens the work to how baseball teams switched from using intuition and observation in player evaluations to using detailed statistics, a game-changing idea featured in the movie “Moneyball.” “We’re applying Moneyball to business. We’re taking what’s been a very qualitative process for a long time and using data to inform and drive decisions. If you ask people, for example, who they talked to yesterday, their responses will be about 30% accurate. You’ll respond to the people they know best, or who they like. People aren’t being dishonest, they just don’t remember that kind of detail. By tracking their interactions, we get very fine-grain, accurate data.”

Individuals are not identified; people are linked to teams and only aggregate data is analyzed. Individual information is kept confidential.

“At the end of the day, this information gives us the ability to fine-tune our designs and applications like never before,” says Lathrop.

**Moneyball for Business**

Using big data to develop better workplaces