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Global Research

Resilience in the built environment

How can organizations prepare for future disruption and thrive?

Part 1: Decoding resilience in the built environment

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Introduction

Corporate clients are shifting towards a long-term organizational transformation to reach a state of normal operations.

Organizations are starting to put aside their continuous readjustment to the return to office strategies. However, the process is not going as smoothly as anticipated and all evidence indicates that systemic resilience will be fundamental to sustain the future of work. The entire ecosystem of organizations has been affected by the global health crisis, the climate crisis and geopolitical turmoil. Without robust organizational resilience, the long-term survival of businesses could be negatively impacted. We need to use collective intelligence to make better decisions around resilience, so that we are best prepared to survive and also thrive.

In this two-part publication, we define resilience as an ecosystem's ability to absorb shocks and disruptions, to cope with uncertain situations through rigorous preparedness, mitigation and adaptation, and to recover from it to flourish.

Resilience in the built environment relies on this complex and often ambiguous ecosystem. In this first part of the publication, we decode resilience in the built environment around three pillars: **Enterprise resilience, Societal Resilience and Personal Resilience**. How we leverage them together could be extremely powerful if activated tactically and strategically.

This paper brings together a perspective on the current forces at work and what levers our corporate clients should consider and activate to drive greater resilience through their CRE strategies and operations. We define the components of resilience in the built environment and introduce an ecosystem of resilience that corporate clients in real estate can rely on to build and sustain business continuity.



Key takeaways



The pandemic has forced organizations to rethink their real estate ecosystem and transform its structure to cope with systemic risks by bringing more resilience to their model.



Corporate resilience continues to be tested by the elongated global crisis, but many companies have now transitioned from survival mode to preparing for a permanent change to their operational outlook - including their real estate portfolio.



Being future fit goes hand in hand with resilience.



Resilience in the built environment needs to rely on a robust and flexible ecosystem around enterprise, societal and personal resilience.



Climate change is shifting priorities and demanding more sophisticated solutions for real estate to be more sustainable in the long run.

What is driving the need for resilience in the built environment?

“ This pandemic is revealing systemic environmental, energy, economic, and political challenges; therefore, we must have concepts to be based for the discourse of a systemic resilience.

Science Direct, 2020¹

The complexities of the current global crisis are heavily impacting organizational dynamics and new ways of working and living. Yet, these complexities and disruptions are far from new and have become more frequent and more severe since the 1980s, giving organizations numerous warnings that greater preparedness and responsiveness would be needed ahead. In May 2021, McKinsey argued that “firms cannot afford to be either inflexible or imprudent”, and “those unwilling to take sufficient risk will not respond or innovate to meet changing circumstances”.

CRE professionals are addressing both short-term and long-term constraints



Continued uncertainty resulting from the COVID-19 pandemic



Budget allocation / financial investment



Accelerating innovation strategy and investments



Change of strategic business direction



Access to effective data and analytics

Q: In your opinion, what will be the top three constraints that limit CRE's ability to add strategic value in your organization between now and 2025? – Top 5

Source: The Future of Work Survey 2022, JLL, July 2022. 1,095 decision-makers across 13 markets



Surviving and, more importantly, thriving in a VUCA (Volatility, Uncertainty, Complexity and Ambiguity – inherent factors of the system) world will have to be enabled through a clearly articulated vision that frees and directs the innovative capacities of knowledge workers in the ongoing stages of recovery

and renewal. Robust resilience will be required to steer through the turbulence, particularly for those operating in the built environment, where multiple forces make the route ahead particularly challenging. Systemic risks in our society are raising risks for real estate.



Examples of risks in our societies:

- A financial crisis or economic downturn
- Geopolitical tensions
- Cyber threats
- A natural or environmental disaster
- A war or military conflict
- Terrorist attacks or threats
- A diplomatic conflict
- A pandemic
- Energy crises (like in 1970s, 2008, 2022)
- Reputational
- Civil unrest
- Collapse of global satellite communications networks

Examples of risks in real estate:

- The destruction of critical infrastructure
- Bankruptcy
- Leadership collapse, departure or death
- Resignation at scale
- Contagion at scale (SARS, COVID-19, MERS, Flu)
- Supply chain disruptions
- Energy supply, cost fluctuations and shortage
- Climate change and climatic event – storm, flooding, fire, earthquake
- Cyber threats
- Skills shortage or scarcity
- Collapse of the Internet network

What are the forces at work today?

“ *The foundations of future growth are often laid as societies respond to the weaknesses crises expose. History shows that in times of disruption, resilience depends on adaptability and decisiveness.*

McKinsey, 2022

There are many forces at work around our world. The past two years have brought to the surface many invisible factors and flaws in the system. Influences far outside the sphere of real estate are impacting normal operations, sometimes in an uncontrollable way. It is crucial to decode and understand them.

Economic stability

Organizations are affected by government policies and decisions. Relying on economic stability will be key to planning for the long term and maintaining a solid pipeline of investments despite the high level and unevenness of disruptions around the world.

Geopolitics

Geopolitical issues and tensions are creating instability. An uncertain geopolitical future provides the backdrop in a world more interconnected than ever before.

Talent war

The war for talent is raging and driving organizational dynamics. Employees now have a net zero tolerance for employers who are not engaged on all fronts. They want to work for a responsible and resilient enterprise.

Adoption of hybrid work

Hybrid work is here to stay. The terms and conditions of where, when and how work is happening have been turned upside down. Hybrid has a durable presence and there will be no return to the old ‘normal’.

Remote working capabilities

The ability for all to remote work is needed and will be crucial. Operating in a hybrid environment is becoming a reality. Coping with long-term disruptions that impact work and the workforce will require organizations to continuously adapt to fluctuating patterns of work.

Health & wellness of the workforce

Uncertainties are impacting the morale and health of workers. Employers are accelerating their investments in new and enhanced health and wellbeing amenities for employees. The negative effects of the pandemic have sunk through the workforce and materialized in significantly high levels of burnout and, in turn, the Great Resignation wave.

Supply chain disruption

Reliance on a robust supply chain is critical. We have witnessed considerable disruptions to procurement patterns since the beginning of the pandemic and they remain a major threat to normal business operations.

Climate change

Responding to and managing the climate crisis is the right thing to do as climate risk is also a financial risk. The commercial real estate industry has accelerated its focus on responsibility and social purpose, to decarbonize the built environment and build spaces for a resilient future.

Technology advancement

Reliance on integrated technology platforms is critical to manage collective intelligence. Real estate without a robust technology and data investment strategy will not be competitive, resilient and forward-thinking. The transformative power of technology to accelerate changes in a dynamic working model has been very evident over the last two years.

Renewed urbanization

Responding to rapid changes in the urban landscape. The reimagination of traditional urban cores and appealing urban areas is necessary. Smaller and talent-rich cities are where people want to live, work and play.



How do we define resilience and embed it in the built environment?

“ *More than five decades of research point to the fact that resilience is built by attitudes, behaviors and social supports that can be adopted and cultivated by anyone.* ”

HBR, June 2016

The OECD contends that recovery and adaptation in the aftermath of disruptions are a requirement for interconnected 21st-century economic, industrial, social and health-based systems, and that resilience is an increasingly crucial part of strategies to avoid systemic collapse. In 2011, Cisco reasoned that “resilience has become invested with a larger and more important meaning of cultivating the assets, culture, and capabilities that render systems less vulnerable to risk, more agile and adaptable, and therefore better prepared for successive waves of change and disruption. It means not only bouncing back, but also bouncing forward.” More recently in May 2021, McKinsey argued that “firms cannot afford to be either inflexible or imprudent. Those unwilling to take sufficient risk will not respond or innovate to meet changing circumstances.

But at the same time, those too focused on financials, growth, or expansion may take on risk that kills their long-term success. Today’s world demands more than financial resilience.” Both financial and organizational resilience are therefore fundamental to maintaining the stability of an organization. But, what is the role and influence of the built environment in developing resilience to an organization, and what does this mean for the numerous and various stakeholders in the sector? How should we define resilience to best meet their needs - whether they are occupiers, owners, cities, governments or others (such as their advisers)?



77%

of CRE leaders expect their mandate for change to be stronger by 2025

The Future of Work Survey 2022, JLL, July 2022.
1,095 decision-makers across 13 markets

We define **resilience in the built environment** as an ecosystem's (an organization, society, community, network, institution, city, or country) ability to absorb shocks and disruptions and to cope with uncertain situations through rigorous preparedness, mitigation and adaptation, to recover and flourish.

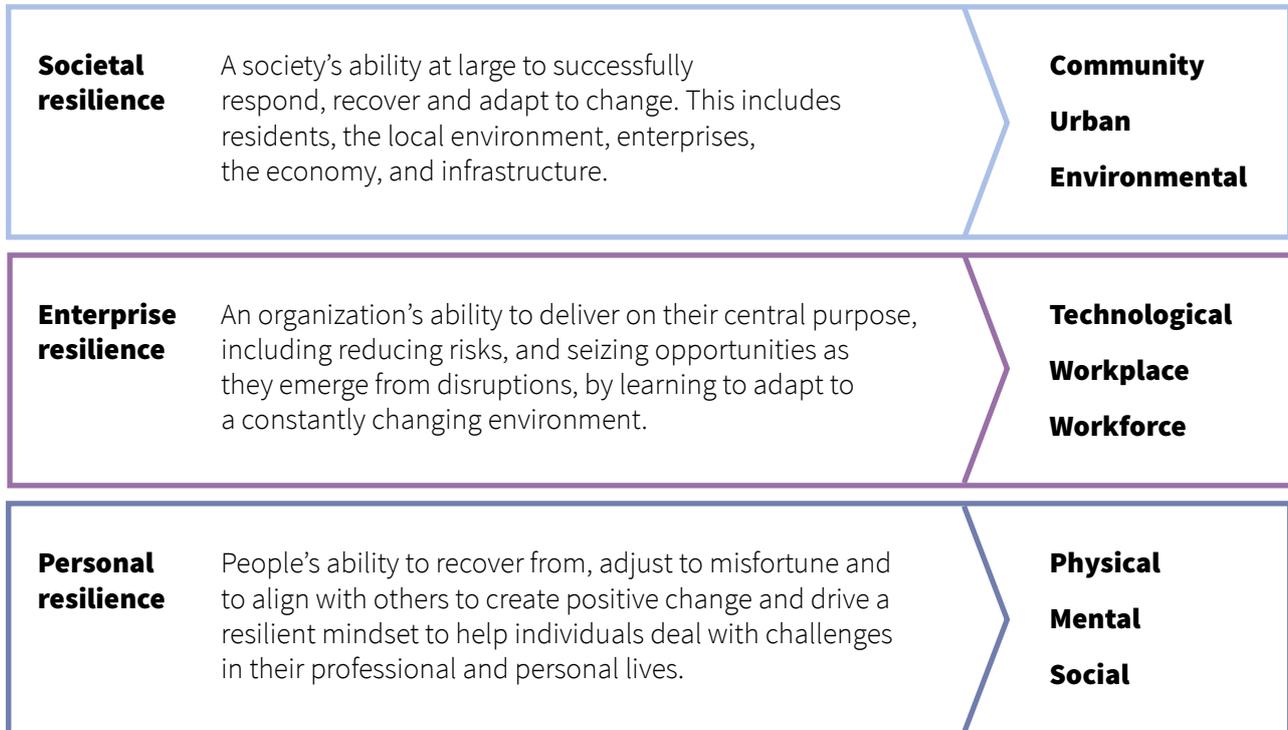


Figure 1: Resilience in the Built Environment



This resilience relies on an ecosystem which is complex and ambiguous, and we must consider it **across a network of interconnected entities** that support and rely on each other to sustain shocks and disruptions. It is an ecosystem built around **Enterprise resilience, Societal resilience** and **Personal resilience**.

The foundations of a resilience ecosystem in the built environment:



“ Resilient systems often repeat four phases of development: growth, stasis, decline and revival. The first phase is defined by a period of rapid growth characterized by readily available resources, the accumulation of structure, and high resilience. This period of growth eventually reaches a level of stasis and rigidity in which net growth slows and the system becomes increasingly interconnected, less flexible and more vulnerable to external disturbances. At some point, the period of stasis is disturbed by an external source be it artificial or natural, leading to the third phase, decline, and the fourth revival (or exit). There is small window of opportunity to act or inertia will take over.

Jeffrey Saunders, Nordic Foresight

What is the cycle of resilience in the built environment?

Resilience can help organizations break through these stages of ‘stasis’ and ‘decline’ to identify opportunities for renewal and growth. Our recommendation for real estate is to develop an approach around **four key principles: preparation, mitigation, innovation and transformation**, which each form a stage in the cycle of resilience.

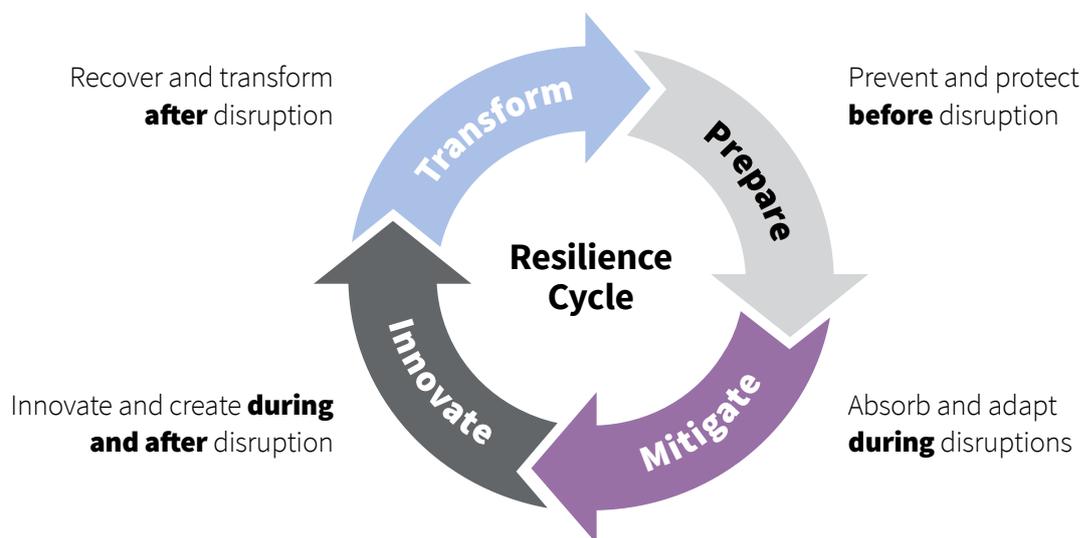


Figure 2: JLL's Growth Cycle of Resilience

Resilience - principles and processes for a science of change in the context of adversity:

1. Resilience occurs in the context of adversity;
2. Resilience is a process;
3. There are trade-offs between systems when a system experiences resilience;
4. A resilient system is open, dynamic and complex;
5. A resilient system promotes connectivity;
6. A resilient system demonstrates experimentation and learning;
7. And a resilient system includes diversity, redundancy and participation.

Source: Ungar, M. (2018). Systemic resilience: principles and processes for a science of change in contexts of adversity

Prevent and protect **before disruption:**

The terms and conditions of where, when and how work happens are changing. Hybrid work is here to stay, but the office will keep a key role in the ecosystem of work. Organizations need to embrace new ways of working now and prepare for the worst case disruptions, beyond what we have already been through with the pandemic.

72%

agree that in the long-term the office will remain central to their organization's ecosystems

Absorb and adapt **during disruptions:**

Finding the right mix in a hybrid model, which offers at one end choice empowerment and fulfilment for employees, and on the other end the flexibility to allow a business' operation to flex and adapt in disruptive times, is where the complexity lies.

53%

of organizations will make remote working permanently available to all employees by 2025

Innovate and create **before, during and after disruption:**

Engage with partners and value chains to accelerate the innovation pipeline and build on value creation. Partnerships can help organizations break through the stages of 'stasis' and 'decline' to identify opportunities for renewal and growth.

75%

of leading CRE functions anticipate more reliance on external partners

Recover and transform **during and after disruption:**

Activating and working through the ecosystem of resilience in the built environment will enable organizations to challenge the status quo and the old normal, and cope with disruptions at any given time and to maintain business as usual operations. It is the sum and the interaction of all parts which enables the resilience model.

77%

of CRE leaders expect their mandate for change to be stronger by 2025. 62% of CRE functions anticipate an increase in budget between now and 2025

Source: The Future of Work Survey 2022, JLL, July 2022. 1,095 decision-makers across 13 markets

In conjunction with this approach, robust engagement with value chains will be a necessary attribute of resilient organizations. The pandemic has demonstrated the importance of focusing on supply chains, because even if you have contingency plans, you may be vulnerable if your supplier does not.



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About JLL Research

JLL's research team delivers intelligence, analysis and insight through market-leading reports and services that illuminate today's commercial real estate dynamics and identify tomorrow's challenges and opportunities. Our more than 500 global research professionals track and analyze economic and property trends and forecast future conditions in over 60 countries, producing unrivalled local and global perspectives. Our research and expertise, fueled by real-time information and innovative thinking around the world, creates a competitive advantage for our clients and drives successful strategies and optimal real estate decisions.

About JLL Work Dynamics

JLL Work Dynamics partners with leading organizations across industry sectors, creating environments that achieve a more human-centric, resilient and responsible approach to shaping a better world of work. With more than 45,000 local and global specialists, the team enables clients to enhance the performance of their portfolios and people to realize their ambitions of a more sustainable built environment. Through technology enabled solutions, JLL Work Dynamics creates safe and inspiring spaces around the world for people to collaborate, innovate and drive meaningful change anywhere that work is performed. JLL Work Dynamics manages over 1.6 billion square feet of real estate and has averted more than 112,700 metric tons of CO2e by advising clients on renewable energy projects. For more information visit jll.com/FutureofWork