



# The ElmTree Edge

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## Tech and Mortar

**The role of new technology tools and sophisticated solutions in building and operating successful industrial facilities**



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For an industry with a longstanding reputation as lagging somewhat, industrial space has made enormous strides in a relatively short period of time. New challenges and new pressures have spurred a widening ripple of innovation, and today an industry that was formerly somewhat reluctant to abandon its steel-and-steam roots is embracing new technology and automation solutions with impressive enthusiasm.

Much of the innovation in the convergence of traditional industrial real estate with technology and automation is a response to macro global supply chain issues, as well as to the continuing strain of a persistent-and-worsening labor shortage and dislocation. Evolving consumer demand is also playing a role. The competitive pressure of an e-commerce marketplace—where immediacy is a top priority along with the ability to quickly and efficiently manufacture and deliver products to the end user—is becoming non-negotiable, driving the need for efficiency. This factor combined with continuing geopolitical considerations has led companies to focus on enhancing and modernizing their existing supplying chain infrastructure.

Many industrial tenants are subsequently moving away from standard warehouse designs based on RFID technology, a traditional model of sorting, storing, and retrieving goods manually. This decades-old system is being replaced by a growing number of robotic warehouses where employees work in concert with automated assistance. It is not just individual technologies, but full suites of automated solutions designed around tenants' specific demands and supply chain footprint.

Automation and efficiency directly address the core challenge in the industrial logistics space: labor market constraints and the operational limitations that follow. Industrial tenants are recognizing the importance of technological advances and how they afford tenants the opportunity to manufacture and transport goods faster with less reliance on shifting labor markets, thereby reducing costs and maximizing operational efficiencies.

## **An evolving industrial tech landscape**

Process automation has been on the rise in the industrial arena for over a decade, with leading e-commerce retailers making way with significant investments in robotic environments throughout their supply chains.

This post-pandemic environment has made it clear that automation is not only a competitive advantage, but a competitive necessity. The pandemic exacerbated long-term structural labor market challenges, and the relatively new industrial technology momentum we are seeing is being driven in part by both necessity and an increasingly clear calculus of the value proposition of industrial robotics and automation moving forward.

Change on this scale requires significant investment. We are now observing many Fortune 100 companies investing \$200-\$400 million in upgrading to 1-to-1.5-million-square-foot industrial parks. Because investments by corporations in their underlying automation and supply chain system infrastructure are significantly more complex than that of traditional brick-and-mortar owners, it is imperative that the design and development process happens in a thoughtful and strategic manner. Additionally, to implement such technological advances in their existing supply chain infrastructure, it is crucial for corporations to partner with a development and/or capital partner with the requisite experience to capitalize and manage these sophisticated projects in the context of a build-to-suit project.

## **Ground-up innovation**

Today, we are seeing entire warehouse facilities being designed up front to accommodate new technologies and 24/7/365 operational capabilities.

From the number of dock doors to enhanced power and electric infrastructure to larger site acreage, which are changing to accommodate more outdoor storage and operational flexibility, new industrial facilities are designed to adapt to the growing automation trend. Tenants in today's market expect facilities to support EV fleets as well as ever changing freight vehicle requirements.

## **Construction management shifts**

Developers are adapting to the automation movement by integrating tenants' specifications for enhanced robotics with construction schedules that now must coincide with the need for tenants to commence their upfit of facilities in development at earlier stages in the construction cycle.

For build-to-suit projects, expanded tenant requirements have extended the average construction timeline. What might have formerly been 6-10 months from construction start to substantial completion, have now been extended by several months to accomplish a tenant's specific needs. With automation on the rise, developers and capital partners must proactively work in tandem to identify the right consultants, specialists, and engineers at the optimal phase in a project to ensure that a tenant's needs are timely met.

Developing these next-generation industrial spaces is necessarily becoming a bespoke process,

different for each industrial tenant, and developers and capital partners that thrive in this new tech-driven industrial landscape will need a high level of coordination, experience, and agility to meet tenants' needs.

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