PROPERTY REPORT

Smart Warehouses Speed Up E-Commerce in China

Trend promises to add enormous costs to warehouse development and raises question of who will pay for it

Autonomous robots carry shelves at a Suning.com Group warehouse in Shanghai on July 18. The Chinese online retailer recently began implementing autonomous robots in one of its warehouses to help save time and labor costs for faster deliveries.
PHOTO: DOMINIQUE FONG/THE WALL STREET JOURNAL

By Dominique Fong
July 31, 2018 2:06 p.m. ET

SHANGHAI—China's e-commerce giants are starting to build a new crop of smart warehouses that can keep up with the surging growth of the world's largest online retail sales market.

But that trend promises to add enormous costs to warehouse development. Modern robot and conveyor-belt systems require a multitude of upgrades not found in traditional warehouses like higher ceilings, more air conditioning, the amount of mezzanine space and other infrastructure.

GLP, China's largest owner of warehouse and distribution space, began offering tenants financing for smart upgrades and expansion two years ago, the company said. Other warehouse landlords may soon feel pressure to follow suit, market participants say.

In May, GLP created a private-equity fund to invest 10 billion yuan ($1.5 billion) in robotics, automation and big-data sectors that could complement its logistics real-estate business. It's "not sufficient to focus just on the facility itself," says Victor Mok, co-president of real estate at GLP China. "Our focus is to build a logistics ecosystem which considers every aspect of the supply chain, not just warehouse space."

To be sure, smart warehouses still make up just a sliver of the Chinese market.

But both foreign and domestic investors are carefully watching the smart-warehouse trend because the logistics property market is one of the fastest-growing sectors in the Chinese commercial real-estate industry. Last year, investors acquired $4.4 billion worth of warehouses and distribution centers, up from $3.2 billion in 2016, according to data firm Real Capital Analytics.

Big foreign players in the market include San Francisco-based Prologis Inc. ; Singapore-based ESR; Canada Pension Plan Investment Board, which has purchased a stake in Goodman Hong Kong Logistics Partnership; and Toronto-based Brookfield Asset Management Inc., which has been focusing on cold storage. Warehousing stock increased about 80% over the past five years in China, according to CBRE Group Inc.

In the U.S. logistics market, the question of whether the landlord or tenant pays the additional costs of building smart has become "a difficult conversation," according to Eric Frankel, an analyst with Green Street Advisors. The upshot of these conversations could have a major impact on the economics of owning and leasing warehouses.

Smart warehouses can cost $150 to $200 a square foot for the interior work alone, according to Mr. Frankel. By comparison, interior expenses for traditional warehouses can be less than $10 a square foot.

A worker at a Suning.com Group warehouse in Shanghai sorts through packages brought to him by autonomous robots.
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Big e-commerce companies in markets like the U.S. and U.K. increasingly are pressuring landlords to share the additional expense. In some cases landlords are sharing the upfront expense and getting partially paid through higher rents over the course of the lease. "It's all negotiable," Mr. Frankel said.

China isn't as far along as U.S. and European markets in shifting to smart warehouses because labor costs are cheaper there, reducing the benefit of automation. But as leading industrial landlords begin to make the transition, the topic of who's going to pay for it is coming up more, market participants say.

In China, like other markets, demand from online retail companies currently dominates the market. "A structure change in demand took place in 2010 when e-commerce players came into play," said Claire Tang, LaSalle's head of acquisitions for China. "They were taking up 30,000, 50,000, 100,000 square meters of warehouses at a time." One square meter equals about 10.8 square feet.

Chinese e-commerce giants, such as JD.com Inc., Suning.com Group Co. and Alibaba Group Holding Ltd. , are now making big investments into the smart-warehouse real-estate sector as they look for an edge over rivals to deliver packages faster. In October, for example, JD.com began operating its first fully automated warehouse that it owns in Shanghai.

On a recent tour of a fully automated sorting area at one of JD.com's warehouses, hardly any human workers were in view. Small sleek red robots with packages on their backs zipped to different holes in the platform marked for different regions and dropped the parcels down into the holes. Other robots tied up the bags and carried them to the loading dock. It is 10 times more efficient than a traditional warehouse, JD says.

"It's the efficiency of using real estate," said Hui Cheng, head of JD-X Silicon Valley Research Center. "If we want to do very fast deliveries to customers in metro areas, the fulfillment center has to be closer to those places."

For now, China is a landlords' market, making it easier for them to fend off requests from tenants to put up money to upgrade smart warehouses. Vacancy rates are at a record low, analysts say. In 2017, developers added 4.6 million square meters of new warehouse space, a 52% increase from the year before, according to CBRE.

Still, landlords may want to invest in smart warehouses to increase chances of approvals from local governments, as Beijing positions China as a global leader in artificial intelligence and other high-tech development.

Also, some market participants say expectations are changing rapidly. "We're definitely entering an era where it's no longer, 'Come and lease my building,'" said Stuart Ross, head of Chinese industrial property for JLL. "It also has to have high-level tech."

—Peter Grant contributed to this article.

Write to Dominique Fong at Dominique.Fong@wsj.com