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THE LAST MILE

From Fulfillment Centers to The Last Mile, Logistics are Undergoing Massive Change

By Michael Hoban

When famed bank robber Slick Willie Sutton was asked by a reporter why he robbed banks, he is alleged to have replied, "because that's where the money is."

With the explosion of e-commerce and the ongoing trend towards urbanization, online retailers are increasingly directing their efforts to "where the money is" – namely, densely populated, affluent metropolitan areas. By 2025 – in less than a decade – approximately two-thirds of the global economic growth will come from just 600 cities, which will be home to approximately 25 percent of the world's population, according to the McKinsey Global Institute.

That shift in the retail business model is having a massive impact on logistics real estate throughout every segment of the supply chain. From adapting the million square foot-plus fulfilment centers (including the integration of automation/robots into distribution facilities) to accommodating rapidly changing customer needs, to devising creative ways to secure sufficient urban infill space for critical last mile delivery stations, the once bland industrial sector is transforming into a hotbed of innovative thinking. It's also achieving favored status among institutional investors.

"The days of having one big distribution center somewhere on the outskirts of the city to serve the entire city are over, because customers are expecting faster and more agile delivery," says Dr. Matthias Winkenbach of the MIT Center for Transportation and Logistics, who delivered a presentation on urban last mile logistics at this year's SIOR Spring World Conference in New Orleans. And while those million square foot distribution/fulfillment centers still play a large role in supply chain logistics, the demand for dramatically shortened delivery times by consumers has radically altered the industrial real estate landscape.

"You need to move closer to the customer and to identify the necessary spaces within that urban and congested environment to place the right inventory for the right customers at the right time," says Winkenbach.

Not surprisingly, the real estate strategy now being employed by Amazon best exemplifies how logistics have evolved in recent years. According to Mark Hickey, economist at the CoStar Group, "while every market penetration has been different," Amazon's early distribution strategy began well outside city limits with large fulfillment centers, where the primary function was to fill customer orders. In the early-to-mid-2000's these facilities were in 600,000-square-foot range, but soon mushroomed to over a million square feet. Around 2010, they began to add sortation centers, typically 300,000-square-foot facilities, which take in shipments from one or more fulfillment centers, then sort and ship them to designated zip codes within their region.

In 2013, Amazon began utilizing 100,000-square-foot delivery stations, which sorts packages for outbound routes for last mile delivery in urban areas, usually by local courier service. And in 2014, Amazon moved directly into last mile territory, establishing their 25,000-50,000-square-foot Prime Now Hubs and Pantry and Fresh Distribution

Centers. By the close of Q2 in 2017, Amazon was operating 244 facilities in the U.S. alone (400 worldwide), totaling over 94 million square feet, including 105 fulfillment centers, 52 Prime Now Hubs, and 14 Pantry and Fresh centers. Amazon currently offers Prime Now (free two-hour delivery in select zip codes) service in 32 cities, and continues to build up its same day delivery capabilities in major markets, as demonstrated by its recent moves in Miami-Dade County. In late June, the retailer broke ground on its 855,000-square-foot fulfillment center in Opa-Locka (13 miles from Miami), and the same week opened a 50,000-square-foot Prime Now Hub in the city's Wynwood Art District.

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Amazon opened its first Miami-Dade distribution center in 2015, a nearly 300,000-square-foot facility in the Doral area (16 miles from Miami), and in March of 2016, broke ground on a 117,000-square-foot delivery station on the west side of Miami International Airport, effectively covering all of their distribution channel bases in the market – at least for now.

It is the last mile that is most critical to the new logistics model, according to Winkenbach. So Amazon, UPS, and FedEx continually analyze data to optimize routes to improve last mile efficiencies, and innovative technologies such as locker systems and smart locks emerge to eliminate the need for customers to be present to receive their goods ("The major threat to last mile efficiency is the unavailability of the customer," says Winkenbach). But the demand for warehouse facilities in the heart of the cities does not have a tech-based solution. Instead the application of old-fashioned real estate skills – locating suitable properties in a tight market – are helping Amazon and the parcel carriers fulfill space requirements, and landlords of aging Class B, C, and D manufacturing product are reaping the benefits.

"You're seeing more of the infill warehouses that might have been functionally obsolete or perhaps not been the type of building that an Amazon might rent, but because it happens to be close in to major high net worth neighborhoods, they'll lease that building," reports industrial specialist Allen Gump, SIOR, CCIM, (Dallas/Fort Worth/North Texas Chapter), of Colliers International. So in order to make good on the Prime Now two hour delivery window, "they're keeping a certain level of inventory in these scattered buildings in addition to the million square foot buildings that they're renting."

Finding warehouse space in some of the major markets – even subpar product – is becoming increasingly difficult, according to brokers. "For infill L.A. between the harbor, downtown, and LAX, one of the most interesting transportation triangles there is anywhere, space is extremely tight, and almost impossible to find in any size range," says Jim Klein, SIOR, president of Klein Commercial Real Estate and member of the Greater Los Angeles SIOR Chapter. "It's very hard to find anything to buy if you're a user, because investors are paying even more now, and developers are solely building (new product) for institutions and REITS. If there's any kind of limited development anywhere, (companies like UPS and FedEx) are first in line to take those buildings." As a result, smaller players are forced to share space or rely on third-party logistics providers (3PLs), says Klein.

One creative solution to the last mile urban infill space problem is being explored by Prologis, which announced in November of 2016 that it will build the nation's first multi-story warehouse just outside of downtown Seattle. Scheduled to be completed in 2018, the three-floor 580,000-square-foot warehouse will essentially be two warehouses stacked on top of each other, with a truck ramp to loading docks on the second level and a third floor, accessible via freight elevators, for lighter-scale warehouse operations.

The facility is characteristic of the fundamental changes in thinking that have been taking place within the logistics development community as a result of the e-commerce boom. "What we're really seeing is the total transformation of the supply chain – everything from the large fulfillment centers, which are highly technical and automated, to sortation centers, to the last mile," says Martin O'Hara, vice president of Strategic Projects for CenterPoint Properties, who presented on the same panel as MIT's Winkenbach at the SIOR 2017 Spring World Conference. "In terms of building specifications, it's really a different world. A lot of the properties we're developing now look a lot different than they did 10 years ago."

O'Hara adds that CenterPoint constructs new facilities with e-commerce in mind – even if the build-to-suit tenant going into the new building is not an e-commerce user. "Specifications for e-commerce facilities typically include higher parking counts, more container storage, increased HVAC requirements throughout the building, and additional mezzanine space," he says.

Winkenbach seconds the forward-looking strategy. "Since these are long-term investments, developers should take into account the technological advances of what might happen inside of those four walls in say five to 10 years from now," he asserts. "So you might also want to have the flexibility to increase the clear height (to 36-40 feet) because the warehouse is going to be more and more automated, and less and less driven by humans in the future."

Looking to the future, it should be noted that as profound an impact as e-commerce is currently having on real estate logistics, the retail trend is still in its infancy. According to the U.S. Department of Commerce, global online sales in the U.S. accounted for only 8.1 percent of total retail sales in 2016 (although minus automobile and fuel sales, the figure was calculated to be 11.7 percent), and that figure will increase dramatically in the coming years.

Supply chains are just now beginning to modernize facilities, and keeping up with the demand is going to be a monumental challenge for the real estate industry. ∇

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