

The background of the slide is a dark blue, semi-transparent image of a warehouse interior. It shows tall stacks of shipping containers in various shades of blue and grey. A forklift is visible in the center, lifting a container. The overall scene is dimly lit, with the primary light source being the text and logo.

THE MODERN **WAREHOUSE**: 5 WAYS THEY
HAVE EVOLVED

THE RISE OF E-COMMERCE AND THE WAREHOUSE

All facets of the supply chain are in state of ongoing change. Customer demands and corresponding technological advancements mean that evolution is continually taking place. This is especially true for the warehouse. In recent years, with the unprecedented explosion in the realm of e-commerce, warehouses have had to undergo significant and, in some ways, foundational change.

With that in mind, here are 5 of the most prominent ways in which warehouses have transformed in recent times.



SIZE

Warehouses have gotten considerably bigger. This is simply because customer demand has gone up so drastically that bigger, more complex, and technically sophisticated warehouses are required to meet it. The more business companies get, the more space they require in their warehouses to accommodate it.

An article from Supply Chain Dive explains:



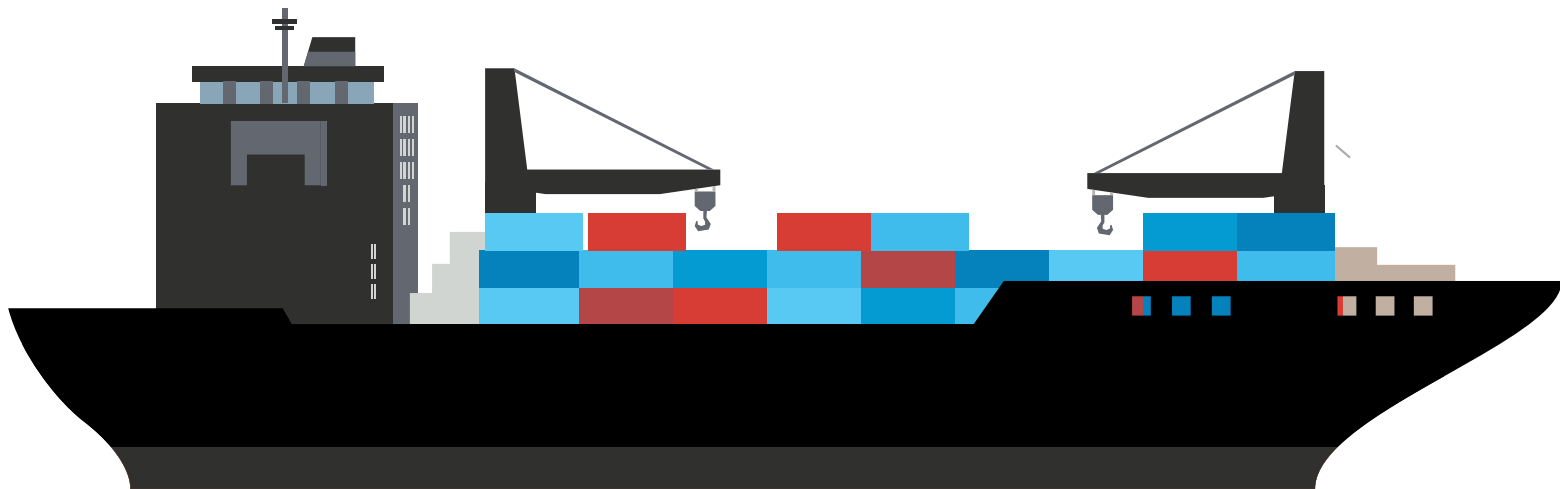
THE SIZE OF WAREHOUSE PROJECTS HAS BALLOONED AS THESE FACILITIES HAVE MORPHED FROM SIMPLE SHIPPING AND RECEIVING FACILITIES TO HIGH-TECH, AUTOMATED PROCESSING CENTERS. IN FACT, THE NUMBER OF WAREHOUSE PROJECTS OF 1 MILLION SQUARE FEET OR MORE INCREASED FROM 23 TO 48 FROM 2007 THROUGH 2018, ACCORDING TO DODGE DATA & ANALYTICS.



SIZE

KEY TAKEAWAYS:

- Warehouses are getting bigger
- The number of 1 million square feet or more warehouses has gone up significantly
- This is a result of increased demand



LOCATION

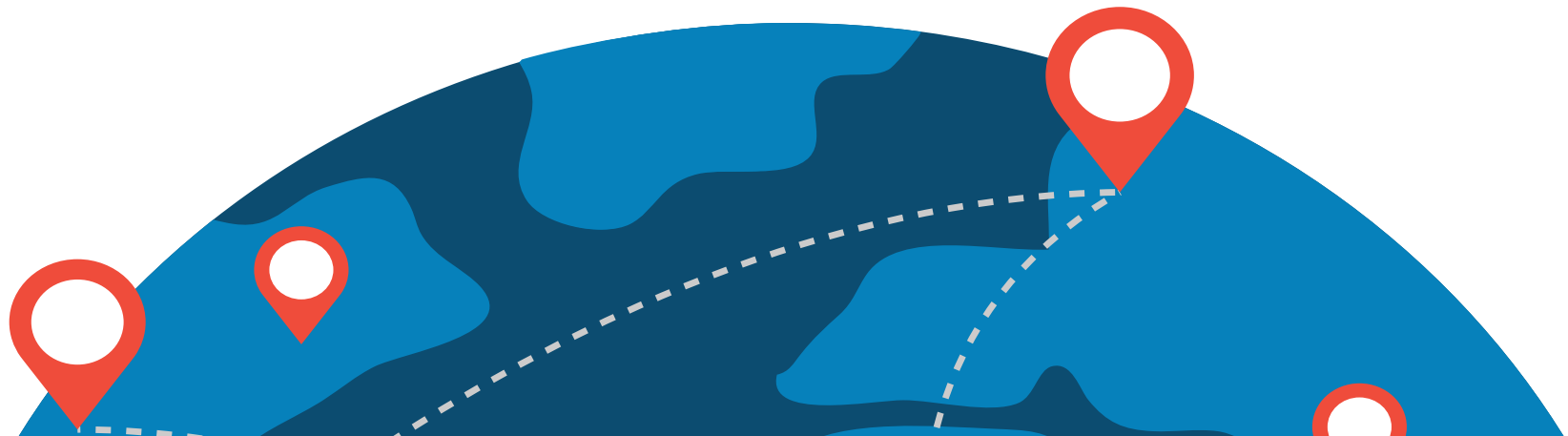
With the rise of e-commerce has also come the rise of faster delivery or a focus on last-mile logistics. What this has resulted in is the growth of warehouses located in urban centres. This is because the vast majority of online orders come from urban environments, as they are densely populated.



LOCATION

KEY TAKEAWAYS:

- E-Commerce growth has resulted in the need for faster delivery
- There are now more warehouses located in urban centres to meet that need
- This is because the vast majority of online orders come from urban hubs



COLD STORAGE

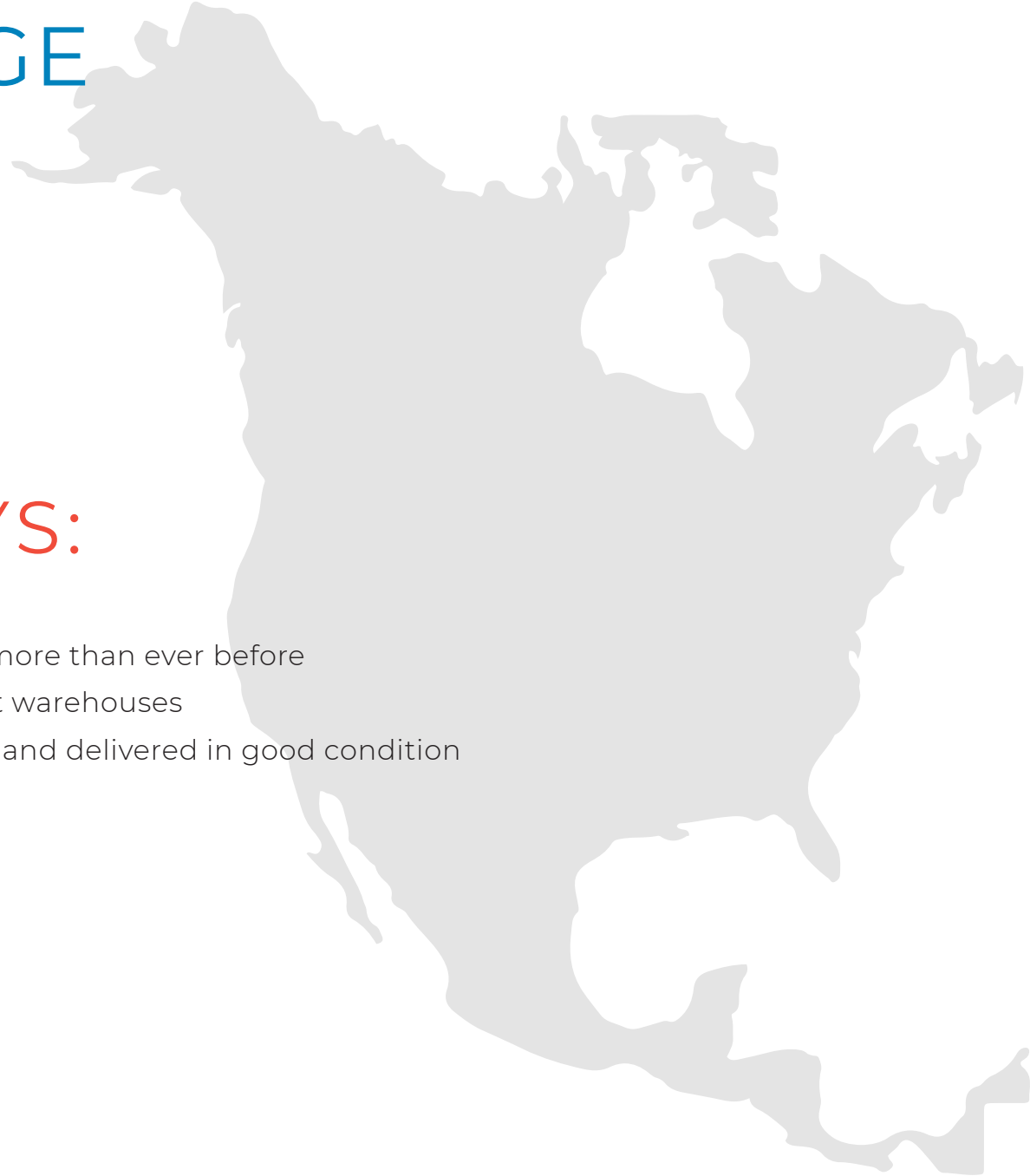
A noticeable part of the online boom has been groceries. Groceries have joined the long list of things customers want delivered. And, of course, they expect the food, including freezer items, to be delivered as it would be if they picked it up from a nearby market.

This is where cold storage comes in. As a consequence of this development with online groceries, warehouses need large cold storage space as a key part of their cold supply chain.

COLD STORAGE

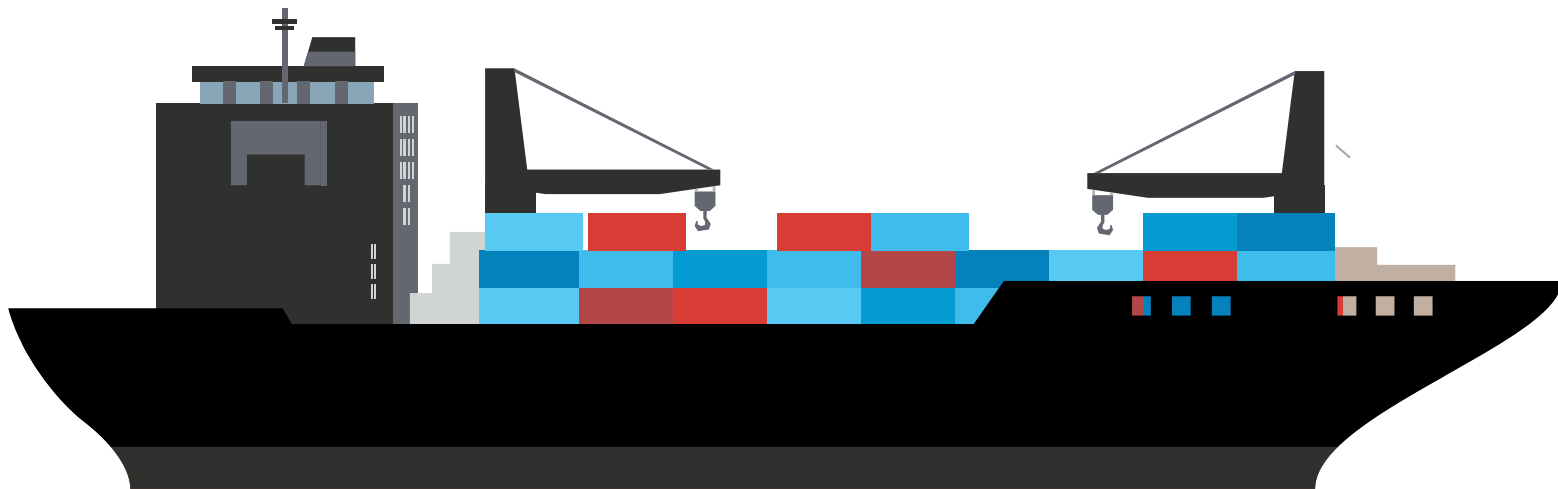
KEY TAKEAWAYS:

- Groceries are being delivered online more than ever before
- This means cold storage is required at warehouses
- This is so the food can be maintained and delivered in good condition



WAREHOUSE MANAGEMENT

Given all the changes warehouses have experienced over the years, naturally, the way in which they are managed has evolved too. This evolution has come in the form of warehouse management systems (WMS). WMS have simplified the size and complexity of the modern day warehouse, providing warehouse managers access to analytics, insights, and precise tracking of inventory.



WAREHOUSE MANAGEMENT



KEY TAKEAWAYS:

- As warehouses have changed, so has their management
- This evolution has come in the form of warehouse management systems (WMS)
- They simplify warehousing, providing access to analytics, insights, and precise tracking of inventory

AUTOMATION

Automation, facilitated by artificial intelligence, has become a crucial component of the modern day supply chain. It's place in warehouses has become indispensable. In large part, this is because automation has a wide variety of roles in warehousing. Generally coming in the form of robots, machines, or drones, automation is able to boost efficiency in a number of areas by working alongside and collaborating with warehouse workers, as well as doing tasks that it's uniquely equipped for.

AUTOMATION

KEY TAKEAWAYS:

- Automation has become an important component of warehousing
- It has a number of uses that boost efficiency
- Robots are able to work in place of, collaborate with, and work independent of warehouse workers

SOURCES

<https://www.supplychaindive.com/news/8-ways-warehouse-construction-has-evolved/560532/>

<https://www.storage.summitsteelinc.com/blog/warehousing-logistics-trends/>

<https://6river.com/what-is-warehouse-automation/#:~:text=Warehouse%20automation%20takes%20many%20forms,labor%20costs%20and%20improve%20safety.>

