How ecommerce is changing warehouses for the better

Technology



Warehouses have been a crucial component for retailers, manufacturers, suppliers and many other types of businesses for decades. As a place to store and ship inventory, however, they're highly susceptible to changes in productivity, efficiency and overall operations.

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In fact, astechnologyhas evolved to allow the , warehouses have been scrambling to keep up with industry changes. Yet the good news is, they're doing a darn good job of it. One big reason: Ecommerce is forcing warehouses to upgrade, for greater reliability, higher efficiency and a better fit for customers.

So, how are they meeting this challenge?

Responding to demand

Over the past two decades, warehouses have evolved in the following ways:

1. Innovative storage and shipping. People are placing orders instantly, and expect faster shipping times, thanks to high levels of competition forcing better and better shipping offers. Warehouses now store more diverse ranges of products, complicating the problem; so, in response, many institutions have developed innovative new systems that make storage and shipping seamless.

Amazon, for example, has, where new items are placed on any available shelving space to save time; the result is a floor layout that makes no logical sense but can be followed using technological tracking systems. Today, this

chaotic mode of storage is frequently described as one of the best, most efficient ways to approach warehouse inventory management.

2. Faster training. Warehouses have also, attempting to get employees up to speed faster and keep them moving. Overall, warehouses are more efficient these days, thanks to better technology and more innovative storage procedures. But, in order to realize that efficiency, workers must follow protocols.

These new hires at warehouses need to be trained quickly, so they can avoid disrupting the best practices and procedures that have already been established.

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3. Better software. Warehouse technology has advanced enormously, almost keeping pace with developments in the ecommerce arena. There are tons of inventory-management software systems available, from basic barcoding systems, to advanced, real-time data-streaming systems that connect everything (from initial supply to shipment) in one place.

Many warehouse workers now throughout the day to connect the real world with the digital one, and supervisors can easily access inventory data (often in real time) whenever they log in. Some types of software can even produce sales projections and form intuitive conclusions about what certain data patterns mean.

4. Better tracking ability. Everything in warehouses has become more trackable, thanks in part to advancing technology. For the most part, every product that comes in moves around or goes out, and is tracked instantly with a single scan or the push of a button. At any given time, almost anyone in the organization can find out where a specific product is -- with pinpoint accuracy.

This improved tracking makes it easier to avoid any product loss, which in turn keeps warehouses more efficient and enables the provision of more information to partners, suppliers and end customers.

5. Better supply relationships. Suppliers keep warehouses full of the products they need to continue operations, so good supply relationships are essential. Today's warehousing technology makes it easier than ever to run things smoothly. Assuming some degree of technological compatibility, warehouses can instantly update suppliers about their needs and the status of various orders, and vice versa.

This open, immediatecommunicationstreamlines the process, leading to fewer errors and demanding less human attention overall.

The future of warehousing

The power and function of warehousing has already changed dramatically since ecommerce started taking off, but? Certainly, better technology will continue to be introduced. Barcodes can (and probably will) be replaced with a more innovative, easier scanning solution to tie physical products to digital

information. And workers will be able to become even more mobile with wearable technology -- or even augmented reality programs.

You can also expect to see greater segmentation overall; warehouses may separate sections more fully, shrinking in size to specialize in efficient product storage and delivery. They may also split inventory tracking down even further, with more precise location information.

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Some of these changes will occur in sudden leaps forward (as when barcodes finally become obsolete). But for the most part, they'll occur as gradual iterations. Ecommerce isn't going away anytime soon, and as long as physical goods remain in circulation, warehouses will be necessary, so they're only going to become more advanced and technologically integrated in the years to come. And that's something for businesses to celebrate.