A smart warehouse is the heart of digital supply chains in ASEAN

WAREHOUSE MANAGEMENT

The retail industry has undergone a massive transformation over the last few years. With high levels of smartphone ownership and mobile penetration, consumer behaviour is trending towards omnichannel marketing and online purchases. Indeed, eMarketer had previously projected e-commerce growth in the Asia Pacific to surge by 25% and reach US$2.271 trillion in 2020[1].

Though this impacts brick and mortar retailers the most, other industries and organisations will have to adapt their capabilities to cope. Specifically, the increase in goods going direct to customers calls for significant changes to the underlying supply chain, as well as how businesses manage their logistics and distribution.

The ever-evolving supply chain

Take the warehouse as an example: A regional hub that keeps supermarkets stocked operates very differently from a fulfilment centre shipping directly to homes. Indeed, B2B and B2C are traditionally handled as two distinct types of operations., but as demand shifts from pallet loads to individual items, warehouse operators must start thinking of how best to support both activities under the same roof.

Doing both B2B and B2C deliveries from a single facility offers multiple advantages, from the ability to utilise the same workforce, reducing transportation cost and shortening delivery times. This is especially noticeable in regions with deficient road networks or high congestion, and results can be lower fulfilment costs. Moreover, such flexibility also positions operators to support new and growing business models such as dropshipping or third-party logistics (3PL).

In addition, the recent shutdowns and global business disruptions of 2020 have accelerated the urgency for a further supply chain overhaul for the broader industry. From crucial assembly-line components produced only in shuttered factories to delays in essential pharmaceutical products, delays have roiled global supply chains globally and disrupted intricate supply chain networks.

The responsibilities of warehouse operators have evolved substantially from product storage and now contribute to the overall total cost of managing a supply chain. This includes supporting economies of purchasing, uninterrupted production, and even facilitating time-based supply chain strategies. In a nutshell, the warehouse can make a bad situation worse, or substantially alleviate and cushion the impact of untimely disruptions.

No time for delay

In Southeast Asia, most warehouses already have some system in place to manage their supply chain. From Excel spreadsheets to in-house ERP applications, these standalone warehouse systems might work quite well for B2B-only scenarios. Unfortunately, they are typically labour intensive and offer limited visibility of the real-time movement of goods. On top of that, they are simply unable to deliver the capabilities that help businesses keep abreast of today's evolving supply chain. Given that e-commerce will keep growing, the onus on warehouse operators is to invest for the future—or risk being left behind. A meaningful upgrade must begin with moving their ERP systems and WMS solutions to the cloud, allowing for rapid scalability and much shorter implementation times. Crucially, cloud systems allow in-house IT teams to stay lean as partners take care of its operation and maintenance.

With a new system in place, the road ahead is clear for a shift from manual processes such as stock takes, to optimisations in space usage and labour requirements. Labour agility is particularly important as a plethora of new hygiene measures are implemented in workplaces[2] and social distancing measures[3] that remain in force to address the COVID-19 pandemic. With greater automation, businesses are also better protected against labour disruptions stemming from potential lockdowns that may prevent employees from coming to work.

Breaking down barriers

The top concern around digitalising warehouse operations would undoubtedly involve having an adequately skilled workforce to manage the new systems. While the complexity of the modern warehouse will doubtlessly benefit from tertiary education, the average educational level of warehouse workers in Southeast Asia is lower than in places such as the United States or Europe.

Fortunately, these skill gaps can be addressed with appropriate ERP system customisations based on the preferred level of automation. Organisations who are new to digitalisation can opt to incorporate fewer features initially as associates learn the system. Moreover, modern digital ERP and WMS systems are highly intuitive and pose a lower barrier to smartphone-savvy workers.

The cloud also facilitates rapid deployment and the incorporation of the new systems, with no concerns around acquiring new server systems or future infrastructure upgrading. Implementation time is expedited since solutions are developed for the industry vertical, with minor tweaks for company-specific processes. As an added advantage, businesses get to move away from proprietary in-house systems to a common framework based on industry best practices.

Of course, the situation on the ground is often more complicated in the Asia Pacific. From the snarling jams of downtown Bangkok, the multiple days to reach a remote, rural part of Myanmar, or the challenge of covering thousands of islands in Indonesia, effectively managing the last mile of the supply chain can be daunting. Yet with the right ERP and supporting logistics systems in place, future capabilities such as artificial intelligence (AI), support for IoT and robotics can be implemented far more quickly, painlessly and, efficiently.

[1] Andrew Lipsman, "E-commerce Continues Strong Gains Amid Global Economic Uncertainty," eMarketer, 27 June 2019, (Ecommerce Continues Strong Gains Amid Global Economic Uncertainty,)
[2] Eva Dou, "Infrared cameras, personal towels: China factories go to extremes to fend off virus," The Washington Post, 08 April 2020, (China factories go to extremes to fend off virus,)
[3] Douglas Broom, "China is taking these steps to avoid a second wave of COVID-19" World Economic Forum, 28 April 2020 (China is taking these steps to avoid a second wave of COVID-19)

LEARN MORE →

Follow us: