

THE RISE OF SMART WAREHOUSING IN INDIA

The next decade of warehousing and the supply chain is set to witness the best in emerging technology. **Aditya Vazirani** shares more on the trend.

For a fast-evolving global economy like India, a sophisticated logistics, and warehousing system is a key driver for consistent growth. The Indian warehousing and logistics sector is estimated to attract nearly \$10 billion investments over the next 4-5 years, with an addition of around 200 million sq ft of warehousing space, across major ports, airports, and tier 2 cities. Further, while this capacity is expected to double by 2020, the average size of warehouses in the country is also estimated to increase from around 20,000 sq ft to 2-3 lakh sq ft in a few years, thus putting the entire sector on an accelerated growth track.

While this massive potential is largely driven by a rise in Indian economy and globalisation of businesses, the shifting trend of warehousing from a commoditised expense to a smart asset is changing not just industry perceptions but is also transforming the old 'godowns' into well designed and 'smart' warehouses. As demand for high-quality, sophisticated warehousing rises, several players in the supply chain business is leveraging the opportunity to upgrade and transform their warehouses into infrastructure assets. Some key trends to measure this transformation can be listed, as under.

Use of technology

Technology advancements have disrupted several industries while positively transformed others. The logistics and warehousing industry has



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also come a long way since the bar code reader of 1950s. Adoption of Warehouse Management System (WMS) and other IT-driven solutions have resulted in increased efficiency and competitiveness in the industry. Further, technology adaptations in the form of automatic identification and data capture (AIDC) technology, Real Time Locating Systems (RTLS) and Radio-Frequency Identification (RFID) is receiving widespread popularity. While the bar code readers are still widely used, newer inventions like Quick Response (QR) Code are gaining prominence to encode data to computer-compatible digital data and accelerate the flow of a shipment among its beneficiaries. Considering the cost-effectiveness and easy adaptability, the sector has

been prompt in adopting these technology innovations that are facilitating optimum utilisation of resources, inventory management, tracking, and seamless distribution of cargo, warehouse management is transforming into a valuable infrastructure.

Outsourcing opportunities

As logistics and supply chain management assumes the function of a profit driver instead of an 'overhead cost' for industries like manufacturing, e-commerce, etc, many businesses are opting for outsourcing a significant part of their operations to warehousing companies. Just-in-Time techniques have put a large responsibility on warehouses of maintaining optimum efficiencies thus enlarging their role.

Even as the size of individual warehouses increases, many of them are transforming into large cargo hubs for multiple clients. This has led to the efficient management of resources and cost-effective 'smart' warehouse services that are managed by one contract manager. Additionally, warehouse owners and clients enjoy a win-win partnership where they can effectively leverage their resources. For a warehouse owner, a lean period for one client could be the peak period for another while clients can save on costs and resources that would have otherwise been required to maintain a warehouse and its operations, even in a lean period.

Strategic infrastructure development

The year 2018 witnessed a 22 per cent Y-o-Y growth in total stock in Grade A and B warehousing space while the absorption clocked an unprecedented growth of 60 per cent Y-o-Y, to nearly 32 million sq ft in 2018 from around 20 million sq ft in 2017. The robust growth in absorption further reflects that the demand for warehousing is outstripping the supply significantly, with vacancy rates dropping below 10 per cent, for the first time ever! However, even as technological adaptations are driving smart operations and drastically improving in-house infrastructure, rising real estate and construction costs are pushing warehouse operators to maximise utilisation of each available square feet of space and to also, explore more economical structures. As a result, alternative construction systems like pre-engineered steel buildings are becoming more popular and feasible. Further, coupled with the high demand, pro-development government policies, and grants to develop specialised 'logistic parks', are helping the sector to overcome supply challenges, while also attracting large scale investments from Indian as well as international players. Developments



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of logistic parks and warehouses at strategic locations, around ports and airports are facilitating free cargo movement, ensuring effective, time-bound, and efficient operations, at economical costs.

Value-added services

The current warehouse industry in India broadly comprises of three categories - the Laggard or traditional warehouses, the Leader warehouses, and the Niche or the specialised, high-investment, warehouses that cater to very specific demands of certain industries/clients. While the Niche warehouses offer the highest degree of perfection, due to accurate customisation, they usually come at an astronomical price. However, with the advancement in technological and physical infrastructure, coupled with the rise in multi-client, multi-site warehouses that offer premium third party (outsourced) services, more and more 'smart' warehouses are evolving to offer specific value-added service that

can be customised to suit the needs of high-end clientele. From specialised temperature sensitive storage requirements for pharmaceuticals to value-added 'kitting' services for automobile manufacturers, modern warehouses are evolving to meet the versatile the demand of the global economy while retaining a 'customised', client-focused, service approach.

With a rising global presence, large scale domestic and international investments, and disruptive technology innovations, the next decade of warehousing and the supply chain is set to witness the best in emerging technology, from AI and Robotics to ML, becoming one of the key drivers for India's global businesses and the overall economy.



Aditya Vazirani is the Director of Robinsons Global Logistics Solutions, a warehousing and distribution company having a network of 40 warehouses in 20 states.