

Challenges & Opportunities

— Sushil Rathi —

Automation in logistics started worldwide with the boom in the E-Commerce sector, especially for logistics companies. Use of robots, high speed sorters, wearable devices or smart glasses for faster pick-ups are in the news. The increasing demand in service level from e-commerce companies with extremely skewed operation requirement, is compelling Indian service providers to enhance their technological and process capabilities.

The world is becoming ever-more digital and IoT is the next step on that journey – delivering better customer practices and helping organizations achieve a competitive advantage.

It is very important to identify a problem to find out automation requirement in any setup. Warehouse operators need to find out repetitive tasks that consume large amount of time or those that commonly lead to errors. Once these points are found in process, operators then can start to think about automating them. For instance, basic automation such as racking, use of Material Handling Equipment (MHE), use of Warehouse Management System (WMS), use of bar-code / scanning can be implemented and can save costs.

Secondly, it needs to be understood why automation is important. With any amount of automation, the goal is to increase profitability of operation, reduce errors, scale-up for peaks and increase the safety of operation. Following are few benefits of automation

- Lower rentals (due saving space)
- Reduction in labour cost (due to better productivity or replacing manual work by machine)
- Efficient material flow
- Safe operation
- Reduction in inventory
- Reduced operating cost

Automation leads to opportunities

- * **Scaling up** – with deployment of automation in your warehouse, you can scale up capacity or throughput of the warehouse without going through pain of shifting existing warehouse to a bigger one.
- * **Skewness handling** – Automation in the warehouse can enhance capability of the company to handle extreme peaks without any dependencies on labour
- * **Labour upgradation** – Adding automation systems support workers in their tasks while removing the monotonous,

non-productive, 'Low to No' value, reduction in fatigue or mistake-prone aspects of their jobs. These workers can be trained and can be used more effectively

Challenges to be overcome

- * **Selection of right product** – Now-a-days, there are lot of automation products available in market for every process in the warehouse. But one should identify which one is best suitable for the operation, because things that works well for one organisation, may create disaster for the other. Therefore, forming the right team to take call on automation product is very critical; and availability of such trained resource is very scarce
- * **Silo working** – Any company going for automation, must look at supply chain as a complete umbrella & not just a warehouse (where we are planning to implement automation). If your upstream suppliers can perform certain activities more cost effectively than you can at your warehouse, then your partners should perform these tasks and you should pay them a little extra. Similarly, if performing certain tasks at your warehouse (for a marginal increase in labour costs) results in significant labour savings downstream (e.g., faster receiving and shelf replenishment at the stores), then those tasks should be done at your warehouse
- * **Ever changing business requirements** – With frequent changes in SKUs, addition of new products, changes or fluctuation in demands, there is direct impact on design of automated system developed for warehouse. Therefore, it is very



important that you design automation system considering future demand of operation. Also, automation system should be easily scalable & modular, so that any changes in business can be catered smoothly & efficiently.

- * **Change Management** – One of major challenge in implementing automation in any warehouse is change management, because business processes, work flows need to be rewritten with implementation of automation. This means that all manpower who are involved in warehouse operation needs to learn as well as adhere to new processes. As a human tendency, there is always reluctance to change and lot of people come justifying, how current processes are simple & efficient.

Considering above, it may make sense to Start small and build a scalable solution – The path to advanced automation sometimes involves going through each level of automation sequentially as the business matures. When making the first upgrade decision, you should think ahead and pick an automation solution that is scalable and can be easily integrated with future solutions.



The Author is the Chief Operating Officer of Mahindra Logistics.