

Warehouse Automation – Tread Carefully!

Retailers of every shape and size will inevitably be tempted to consider automation as part of their warehousing strategy. While picking, sorting and crane technology can bring significant benefits to the warehousing function, care needs to be taken when selecting a sourcing appropriate systems that will deliver actual benefits, warns Andy Keith, of specialist supply chain consultancy Total Logistics. Here, he looks at some of the practical and strategic issues facing retailers making decisions on warehouse automation.

“All too often logistics managers are criticised for spending too much time playing with warehouse automation solutions and not enough on the long-term strategic direction of their business. However, in our experience this is not usually the case – automation projects that fail do so due to poor planning, inappropriate selection of technology or unforeseen changes in the market.

“Our recent successes with some of the biggest names in retailing have shown that continuous attention through the life of the project is the only way to succeed. This focus of attention will gradually shift from challenging the design and equipment to operational planning and management. These projects have relatively long lead times. It is too easy to squander this time, which should be spent developing this detail.

“Specifically, we observe some automation projects go awry for two main reasons; either the senior team delegates responsibility too far down the business exclusively to operational managers, or the business undergoes a major change that was never anticipated.

“Typically, once an automation project has been given the green light, the ongoing responsibility is passed onto the operation team, who are then assigned the budget to negotiate with a myriad of suppliers. This is usually where the problems start, as equipment vendors are well-versed at highlighting the huge merits of their respective systems. Critically, this is the stage of the project that needs serious due diligence, but rarely gets it.

“It’s now that an experienced, almost cynical eye is needed to evaluate the true benefit of each prospective solution and how it will bring tangible benefit to the business’s supply chain function – not just tomorrow but in ten year’s time when the business may have a very different shape.. Unexpected changes to a business’s market, customer base, product range or demand spikes through the year can render a new automation system impotent.

“This is where sophisticated sensitivity analysis can give businesses a far more useful picture of the practical realities of buying a any automation, be it a new conveyor, picking or palletising system.

“What are the boundaries of the equipment? What can it deliver now – and what are the parameters of its capabilities in the future? Will the adoption of this system have a impact on other elements of the supply chain? These are all difficult questions that rarely get asked during the selection phase – and possibly indicate why many automation projects fail to deliver on their promise.

“To help put this into context, the retail sector has examples of businesses that have rushed into the automation investment decision, only to regret the investment soon after. More than one major retailer has reverted back to hand picking for a range of food items, having invested millions in an automated system. They found that those distribution centres could operate more effectively – and deal with rapid changes in product lines and demand - when set up as a manual operation. Likewise, one FMCG manufacturer de-commissioned part of its system and transformed the picking operation to a manual one, with resulting service and productivity gains.

“Interestingly, we are also seeing other market trends that are asking tough questions of standard automation solutions. For example, the trend towards supply chain consolidation, where multiple brands aim to share logistics platforms to provide an effective transport solution to retailers’ changing requirements. Barriers to sharing distribution platforms can include restrictions on pallet size and height and the number of picking locations provided. These fundamentals apply equally to manual and automated solutions, but a manual warehouse is likely to be easier to change. It is therefore important to ensure that all limitations of any scheme are clearly understood by the business prior to embarking on the project.

“It will always be important to look for ways to take cost out of the supply chain, and automated handling will be part of the solution. In the end, retailers need to focus on two central issues when considering new investment in warehouse automation. We advise clients to take a long term view of the project through rigorous analysis of the real benefits and limitations of any proposal. Similarly, retailers should think carefully about the future direction of their business and how the specified equipment can flex to accommodate ever changing market demands.

“Clearly, your choice of system integrator is not just about the equipment they supply and maintain, but how well they understand the current and future needs of your business.

While it’s often too easy to focus on the technology, we always stress to clients that the senior strategic team needs to keep a handle on the project to ensure it stays on track, within budget and meets the business’ strategic needs”.