

# An automatic choice?

*Andy Keith, founder of supply chain consultancy Total Logistics, looks at some of the practical and strategic issues facing those making decisions on warehouse automation.*



Logistics managers are often criticised for putting too much focus on the technology involved in warehouse automation and not enough on the long-term strategic vision of their business. However, in our experience this is not usually the case.

Recent projects we have carried out with some of the biggest names in retailing and manufacturing suggest that while most businesses go into warehouse automation projects with their strategic eyes wide open, problems occur further down the track. Typically, issues only come to the fore once capital expenditure is approved and the implementation stage of the project is reached.

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Specifically, we see major 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.

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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. Decisions on automation systems can take just a few months, but often remain as part of an organisation's logistics infrastructure for over a decade.

Secondly, 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 more sophisticated sensitivity analysis can give businesses a far more useful picture of the practical realities of buying 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 so many automation projects fail to deliver on their promise.

To help put this into context, the retail and manufacturing industries are littered with examples of businesses that have rushed into the automation investment decision, only to regret the investment soon after. For example, one major retailer finally reverted back to hand picking for a range of food items, having invested millions in an automated system. The retailer found that the distribution centre could operate more effectively when set up as a manual operation. Likewise, one FMCG manufacturer de-commissioned part of their 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.

In the end, businesses need to focus on two main issues when considering new investment in warehouse automation. They need to take a long term view of the project with rigorous analysis of the real benefits and limitations of any proposal. Similarly, companies should think carefully about the future direction of their business and how the specified equipment can flex to accommodate ever changing market demands.