

Economic Downturns Usually Show Need for Supply Chain Execution Flexibility

DC Consolidation Becomes More Common; It Is Important to Understand the Different Options and Their Trade-Offs for Making WMS Modifications Now Required

SCDigest Editorial Staff

Agility in supply chain execution is always at a premium, but how the need for that flexibility can manifest itself can be much different depending on the economic circumstances.

So says **Mark Fralick**, SCDigest's Technology Editor and an expert on supply chain execution software systems.

During normal or good economic times, companies often grow through acquisition, Fralick says. That often means acquiring new product lines, new sales channels and new operating requirements that go with them, as well as new facilities and systems.

While there may be plans from the beginning to consolidate facilities at some point, when volumes are high and profits good, the urgency to do so may not be high. Many companies simply continue to operate existing DCs and their supporting systems for many years after acquiring a company.

But in an economic downturn, that equation can change rapidly. Suddenly, the opportunity to cut costs by consolidating operations moves to the top of the supply chain priority list.

"A severe economic downturn often means there is no longer the luxury of having these different operations in place," Fralick says "This sort of consolidation may lead to a number of challenges, some of them significant. These can include integration issues - system and mechanical - and operational issues."

Those issues, among many possible ones, can also include:

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- Compliance requirements for the new customers being served
- Handling new modes of transportation (e.g. more heavy parcel shipments, or moving from full truckloads to more LTL
- New picking and packing requirements
- New inbound processes, such as QA services
- Product postponement operations

All of these things put pressure on both human and system resources.

But Fralick says that if "you are lucky enough to be armed with an execution system designed to be nimble and designed to have extensible borders, then you are equipped to whether the storm."

Fralick says execution systems such as Warehouse Management (WMS) and Transportation Management (TMS) that are built on Service Oriented Architecture (SOA) principles should make the required system changes much easier to achieve.

If you have an older system or one not based on SOA, making the changes will take longer and have some negative impacts down the road. Changes in one area can ultimately impact other

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areas, negative results which may not be clear immediately.

How should distribution managers proceed?

"One of the keys in all of this will be to have frank discussions with your IT staff or the staff that does modifications on your systems, such as your WMS vendor. Explain clearly your directives and objectives. Make sure they understand the timeframes," Fralick says.

He adds that, "On their side of the equation, your IT partners will need to sign up to "Stretch the Field" when it comes to their thinking. They will need to think more creatively and be flexible when needing to implement these changes on tight timeframes."

He says the less nimble the system is, the more creativity it will generally take. That may necessitate taking some shortcuts around standard software techniques – and distribution managers and the IT support staffs need to make sure they understand those trade-offs.

"When trying solving a problem, especially one that seems urgent such as a new requirements from a DC consolidation, it's important to under-

stand all the alternatives, and what the trade-offs are to get the WMS functionality you need," says Fralick.

For example, if using a commercial WMS, a system upgrade may be one option. If doing modifications to the existing system (internal or commercial), there may be "fast and cheap" options which deliver some functionality quickly, but that might break" more easily or have to be re-written later. Doing the modification more formally might be a more lasting solution, but take longer upfront.

Fralick says that in one recent project he worked on, the short term answer was to actually continue to use a small piece of the system in the closed DC just to perform a function the company's own WMS didn't support.

"We had to build a bridge to integrate just that piece of functionality, but that was the best answer in the short term," Fralick said.

