

Distribution System Dilemma: Whether Robots or People, Process is the Key to Success

You've probably heard about drones delivering packages in the not-too-distant future, and I believe it. There is so much technological capability available to distribution centers these days, it's almost scary.

I've seen some amazing distribution centers – dimly lit rooms with unmanned machines cruising around grabbing widgets and dropping them into predetermined boxes to be conveyed to the loading dock with military-like precision.

And not just to the dock, mind you. The inventory was placed in precise sequence to be palletized efficiently, and the pallets were perfectly sequenced for ideal loading and unloading for company-owned and common carriers. The picking machines also stocked incoming inventory based on data gathered throughout the day that revealed which products were selling the most, so every order could be ready to ship in minutes.

But who has the budget to implement these amazing people-free systems? There are few small businesses that can spend millions of dollars on anything, let alone a high-tech system that requires managers with advanced engineering and computer degrees just to maintain. But all is not lost when it comes to competing against the technology of the Amazons and Walmarts of the world. Distribution systems that rely on people are actually easier to implement, and they can prove to be very efficient and cost effective.

There are some key basics to successful distribution which include a solid process, decent racking and the ability to manage volatility. While purchasing new racking may be preferred, it is easy and virtually free to acquire used racking from a variety of sources if you are willing to pick it up. And volatility management is a function that should be addressed and built into the distribution process that you create. Assuming you have covered racking and volatility, the focus should be on developing the ideal process.

A solid process, not technology, is the most important part of the distribution channel and the most challenging by a long margin. Clients will often anticipate that a new computer software solution will fix their broken distribution system, or make it better or faster. But without a solid process, even the most technologically advanced distribution system will fail.

It's easy to forget that robots and machines require a stringent process. Every activity that a robot or machine does is based on a human process. Even when the smallest thing goes wrong, if the system fails, the machine stops.

Building a solid distribution process

Consider these guidelines to help you create a distribution process you can count on.

- **Collect feedback:** Build your process by engaging the people who are on the front line. Poll them with open-ended questions to identify what works and what doesn't.
- **Your system design must be intuitive:** A solid process is one that anybody can understand and execute easily and naturally. An easy test is to grab somebody from the front office and ask them to pick an order. If they can't do it, your process is probably flawed and costing you time and money.
- **Rinse and repeat:** A solid process is also one that is repeatable to the point of 99% accuracy, which rivals the 99.5% accuracy rate of machines, and is a whole lot cheaper. An efficient process is organized and leaves little, if anything, to chance or discussion. In fact, the only time the system should break down is if somebody makes an unauthorized change.
- **Keep up to date:** Since products and customers change constantly, your process will require a method to accommodate change and enable consistent updating. Implementing periodic tests that introduce variables that stress the system will enable you to keep the system up to speed as your needs grow or vary.

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- **Analyze and act on trends:** Build analysis into your plan, whether you derive it from computer data or staff input. For instance, while software programs can provide excellent data to determine the ideal slotting configuration of your process, even an average picker can tell you when they haven't touched something in a while.
- **Test new ideas:** Distribution is a dynamic process that requires constant tweaking. Your staff is a terrific source of new and relevant ideas that can be considered and tested. They do the job every day and have a natural tendency towards efficiency. Your best ideas will come from them.

If you plan carefully and build a thoughtful process, you can count on maintaining an effective and efficient distribution system, with or without utilizing significant technology. For instance, Momentum Advisors is currently helping a client run their distribution center successfully without the benefit of technology. They utilize a simple accounting package for inventory, and that's it! While their full-time staff is very good, the system works just as well when they add seasonal part-time staff. They have been able to increase capacity, keep costs and errors to a minimum, stay up to date and prove that people can still be the solution to efficient distribution. Whatever direction you determine is best for your warehouse – relying on people or the latest technology – remember that building a solid process first is the heart of the solution.