

# ASK THE EXPERTS

## Leveraging Supply Chain Execution Solutions to Navigate Ongoing Uncertainty

### M A D E 4 N E T

As supply chain disruptions related to geopolitical conflicts, inflationary pressures, a possible recession, extreme weather, and other issues continue to impact daily operations, it's important to take stock of the actions one can take today to combat the ever-lingering uncertainty of tomorrow. That's why we recently sat down with a team of four industry experts to discuss ways today's supply chain leaders can navigate ongoing volatility and uncertainty. The discussion landed on four main areas of focus:

- 1 Labor
- 2 Automation
- 3 Planning
- 4 Supply Chain Integration

Read for a summary of the main takeaways or listen to the full discussion [here](#).

### MEET THE EXPERTS

Bob Bowman, Editor-in-Chief  
[SupplyChainBrain](#)

Amit Levy, Executive VP of Customer  
Solutions and Strategy  
[Made4net](#)

JP Wiggins, VP of Corporate  
Development  
[3Gtms](#)

Michael Wohlwend, Managing Principal  
[Alpine Supply Chain Solutions](#)

## 1: LABOR

Labor generally accounts for 60–65% of the total operating cost of warehouse and fulfillment operations. While hourly labor rates have increased 10% to 15% in the past five years, overall DC productivity has remained flat—so the cost per unit worked has increased. As a result, we must continue to invest in our human resources, but also augment people with the right technology.

Investing in our resources involves hiring right, training, providing good feedback, and offering incentives. Tracking turnover is also key, as you can't pinpoint what is working and what is not without tracking metrics.

Augmenting labor with technology will help you create less dependency on human resources. This could be in the area of selection, packing, storage, sortation, and so forth. There are tons of technologies out there worth evaluating, including Autonomous Mobile Robots (AMRs) and Automated Guided Vehicles (AGVs) that allow your associates the flexibility to focus on the most valuable responsibilities that require the human element.



## 2: AUTOMATION

No discussion of warehouse technology can avoid the mention of automation. Research indicates that 80% of warehouses today have no automation at all. Another 15% have some automation, and a small portion – just 5% – have implemented more advanced technologies. It's a growing market.

Panelists agree that automation in warehouses has been out there for the past four decades. It just had a different name - material handling. However, over the past 10 years, we've seen more smart robots. Autonomous Mobile Robots (AMRs) are truly becoming the future of warehousing.

In the past we had Automated Guided Vehicles (AGVs) which were known for moving pallets and replacing manned forklifts. Now, we see AMRs working in conjunction with AGVs to move goods around the warehouse. And we see AMRs being utilized for picking and inventory control and visibility (drones and bots with video-based technology).

The automation market is going in new directions and this will require an additional layer of technology - a multi-agent orchestration platform. This is basically a software that can look at all the different types of automation components that live and operate in a warehouse. A multi-agent orchestration platform can synchronize automation and optimize the usage of it in a more productive way. This includes all types of automation, including bots and assets like elevators or conveying systems in the warehouse. It's all about having a single platform that manages and optimizes all the components.

### 3: PLANNING

Both short and long-term planning can help with improving labor efficiencies, achieving sustainability goals, and fostering customer satisfaction. Panelists agreed that better connectivity between planning and execution can be achieved with dependable integration between your TMS and WMS.

The data shared between these two systems is extremely important. It supports improved procurement and distribution processes. For example, in a warehouse, a two-hour delay from a carrier can dramatically change the day. When you can see a delay like this in advance, you can proactively work to minimize its impact. Labor can be better utilized. You can focus on picking the right orders vs. the ones that are being delayed. Door utilization can be improved. And, outbound staging areas can be better utilized and be more productive. At the end of the day, better data leads to better planning and better execution when systems are integrated.

### 4: SUPPLY CHAIN INTEGRATION / VISIBILITY

In the past, we focused on integrating systems around our ERP systems and did not look too far beyond the four walls of our operations. But to succeed today, we need fully integrated supply chains. We need visibility into customers, vendors, and partners.

Many of the solutions we are using today were built for linear supply chains. This results in silos and creates unnecessary and confusing segmentation. For instance, ten years ago, most supply chain execution solutions offered an analytics dashboard that provided information about what is happening within the warehouse, so you knew things like if you had enough inventory and if your orders were in the proper fulfillment status. But today, we need to see much more. Customers want to know if their orders have been picked, shipped, when they will be delivered, and more. When you build visibility and connect systems, you provide a better way to manage your operations and ultimately offer exceptional customer service.

But, visibility on its own isn't enough. Panelists agreed you need a workflow that considers visibility. They offered the following example:



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If you have 10,000 shipments to execute, what good is knowing this detail if you don't have a system to manage exceptions and attempt to correct things? This is where inbound visibility and the ability to react can make a big difference. If you were to ship those orders on Thursday, there might only be 20 pieces of inventory available. But, if you could see that more inventory was due to arrive on Thursday and you could pivot to ship on Friday, you would be able to ship a full order. Visibility on its own only gets you part of the way there, you need to be able to act.

## QUICK WINS

Everyone is looking for a quick win today! So, all panelists weighed in at the close of the discussion on the one action you should take today to make a difference in your supply chain.



**Amit Levy, Executive VP of customer solutions and strategy at Made4net, focused on sustainability.**

Do everything you can to drive sustainability. Implement processes and technologies with the objective to optimize labor, working hours, and space. Get more efficient about power usage, use less plastic, etc. And go a little bit beyond that, look at fuel consumption on the transportation side. Sustainability is what I see it all coming down to.



**JP Wiggins, VP of Corporate Development at 3GTMS, focused on TMS solutions.**

It's simple for me. Put in a cloud-based TMS so that you can consolidate, optimize planning, automate execution, and solve any order shipment problems stopping you. It's about creating actionable data.



**Michael Wohlwend, Managing Principal at Alpine Supply Chain Solutions offered two practical solutions.**

Number one, put your transportation out to bid. Number two, re-slot your warehouse.

## CONCLUSION

We live in a far more integrated world these days, which is mostly good, but it also means that when disruptions occur, the impact is wide. Supply chain resiliency is what's needed to combat these pitfalls. Resiliency is characterized by the ability to:

- ▶ See what's happening, which is visibility
- ▶ Quickly analyze those events or data, which is intelligence
- ▶ Properly respond, which is the agility afforded by having proper systems or technology in place

### About Made4net

Made4net is a leading global provider of best-in-class, cloud-based supply chain execution and warehouse management software for organizations of all sizes to improve the speed and efficiency of their supply chain.

The company's end-to-end SCExpert™ platform offers a robust WMS software that enables real-time inventory visibility, labor management, and equipment productivity with performance analytics that drive faster, more accurate order fulfillment and improved supply chain efficiency. In addition to the best-of-breed WMS, the platform offers integrated yard management, dynamic route management, proof of delivery and warehouse automation software solutions that deliver a true supply chain convergence.

For more information, visit [www.made4net.com](http://www.made4net.com).