

8 Mistakes in Supply Chain Management

There are many mistakes we see companies making in their supply chain management efforts. Here are the top eight that could be limiting the effectiveness and efficiency of your supply chain network. The good news is, you can fix these (and more) at a fraction of the cost of what it is costing to maintain the status quo.

Copied Data

Do any of your systems use copies of data from other systems and tries to keep them in synch through messaging or other means? Almost all apps or app-groups touch the same supply chain network models. For example, manufacturing, replenishment, warehouse management systems (WMS), manufacturing planning, multi-echelon inventory planning, etc., all need access to some part of the bill of materials (BOM). Essentially, they all replicate some portion of it and then "someone" has to synchronize these and keep them in sync. Multiply this picture across item, order, shipment etc. which are all logically connected, and then expand across your suppliers and customers, and you have a real problem on your hands! This is why your multi-party and multi-tier business processes can't scale. A digitized supply chain network designed using a graph-based architecture eliminates this problem.

Stale Data

This comes in two flavors, delays in moving data upstream and downstream in the supply network and copies of execution data used for planning purposes as part of the inmemory models in Advanced Planning & Scheduling (APS). First information delay is a huge problem given it generates a bullwhip effect from a demand perspective for volume and mix, along with the downstream effect of not being able to optimize limited or scarce supply to omnichannel customers. Second, the fact that in memory APS planning systems are using copies of execution data to recommend decision support actions back to the execution systems means that by the time this decision support is available the world of execution has already shifted, sometimes in a meaningful way which invalidates the recommendations from the planning systems.

Multiple Part Numbers for the Same Item

Master data as a service has been a goal for companies since information systems were first introduced in business. The problem has gotten much worse as demand hubs in networks typically own 20% or less of the trade ecosystem and thus must work with data supplied by many other hubs across the network to be effective. Companies have struggled to implement a common or integrated data model across their own many and varied ERP instances, so coordinating this effort across the trading partner ecosystem seems like an impossible task. It isn't, and ONE Network is solving for this problem today, including a complete MDM deployment across supply classes for the Air Force.

Fragmented Workflow

Again easy to check, just look to see if there are any tools used to bridge between internal or trading partner systems such as spreadsheets, point optimization algorithms, and planning tools using stale data. RACI charts can tell the tale and when viewed across the trading partner ecosystem it is quite evident that there are too many cooks in the kitchen with overlap, second guessing, inflated requirements, delayed responses, inefficiency, and just poor overall process flow.

Point to Point Integration

Integration is something that will always be required from a solution standpoint, but shifting the lion's share of the activity to a hub-based subscription model is certainly the future. Imagine the flexibility and adaptability you can create in your network if you remove the integration shackles between your company and your trading partners. You now have the freedom to deploy business logic that will drive competitive differentiation, customer service, and lower costs without a static IT architecture holding you back. Just check the backlog in IT for change requests related to business process improvements and you can easily see the problem. A hub-based network architecture will solve for this problem while still providing a strong integration framework for legacy systems to interoperate with the network.

Planning and Execution are Two Separate Processes

We see logistical problems related to this issue in the news just about every night. Our upstream supply chain networks are executing while downstream we are still planning based on the physical lead times to move goods. With the master data problem solved as described above, being able to establish a common and integrated data model for execution and then be able to roll that data up based on attributes for planning purposes makes all the sense in the world. Roll up/ roll down in one system rather than separate planning and execution which leads to plans that can't be executed even with all the excess inventory, cost, expense, and labor baked into the plan.

Analytics Based on Averages Rather than Root Cause

Is there anyone still out there that thinks netting orders in ERP is a good idea? The goal of netting is to reduce both over and under production which is clearly not working in today's environment. The gross to net calculation in ERP uses a set of averages that do not reflect what is actually happening based on the state of the network. Only a state-based network with full visibility on a real time basis can effectively net gross demand into orders. Using ERP would be like using map software that averaged the traffic from the past month to decide your route today, makes absolutely no sense. For example, today we have ML algorithms calculating lead time master data on a real time basis and bringing reality into our gross to net calculations. Otherwise, you are stuck with an ERP system trying to apply a 30-day lead time when upstream shipping constraints reflect a 40-day lead time based on today's situation. The chaos created by running ERP gross to net to react to changing conditions and applying 40 days given the amount of demand, supply, and lead time variation in today's market is not a process anyone should want. It just makes things worse when you are reacting to try and make things better.

Decisions Made in a Silo

The days of optimizing for the enterprise to the exclusion of the upstream trading partners are over. We have known for many years that the sum of the local optima do not produce a global optima, which in the network case is highest customer service levels at the least landed cost. The design of our ERP and APS systems have prevented us from taking action to resolve for this problem where we can create a win/win scenario. At One Network we have many case studies where upstream inventories and costs have come down 50% or more while downstream customer service levels have actually increased – basically having your cake and eating it too.

Solve These Problems and More

You don't have to continue living with the solution and system architectures of the past which are limiting your business effectiveness. You can leverage the gold mine of data in your legacy systems as part of a dual platform strategy with a network capability that solves for these eight mistakes and many more. If you find that you are experiencing any of these mistakes which are really reflecting nothing more than trying to run on an outdated system architecture to solve for today's more complex business problems, please contact One Network Enterprises.

Transform your supply chain and lead your industry with the Digital Supply Chain Network™: Email: inquiries@onenetwork.com Web: www.onenetwork.com Call: +1 866-302-1936