Gillum Strategy Partners



V I E W P O I N T

Supply Chain Alignment

s global competition intensifies, heads of operations are focusing balancing production costs, on inventory and customer satisfaction. Beyond achieving this balance. sometimes manufacturers can identify unmet market lead time requirements which, if fulfilled, can lead to revenue and share gains. Revenue and share gains aside, it is important for companies to optimize the tradeoffs of on time delivery (OTD) performance, inventory levels and capacity, as well as maintain outstanding quality and customer service.

Supply chain alignment focuses on understanding several strategic factors:

- Customer requirements
- Demand profile
- Inventory policy
- Scheduling process
- Current capacity

Only through analysis of these key factors is a manufacturer able to achieve the strategic advantage of consistent OTD performance, as well as optimal inventory and operating costs.

Gillum Strategy Partners ("GSP") has helped many manufacturing clients assess the optimal inventory / capacity / OTD balance and build an implementation plan to bring these factors into alignment with customer requirements. This paper summarizes the process GSP employs while working with manufacturers on this goal, as well as some of the key considerations involved in the process.

1. Understand Customer Requirements

Understanding customer requirements is critical if your company desires to be a market leader. In particular, lead time is an important factor because, more and more, it is influencing customer purchase decisions. The chain optimization supply process will determine how to adjust your operating model to maintain a high level of customer satisfaction. In some cases, GSP has found lead time to be a differentiator and that there is an opportunity to satisfy unmet market needs and gain revenue / market share. Hence, the first step in supply chain alignment is to use the voice of customer feedback to understand market requirements for lead time and determine if it can be a differentiator in the purchase decision or merely table stakes. With this information, you can also determine whether there is alignment between customer requirements, your company's current lead time policy and actual performance, as well as where your company stands vis-à-vis your competitors.

2. Understand Demand Profile

In addition to customer requirements, a full understanding of the product demand profile is critical. Key questions include:

- What is the inherent variability of demand by product family and manufacturing process?
- Is demand seasonal? What is the magnitude of seasonal swings?
- Is seasonality or variability associated with a certain product line, manufacturing process, customer or channel?

- How complex is your product mix?
- Are new products being rolled out? What is their anticipated impact?
- How is the demand profile trending?
- Is the demand profile likely to change in the future?

Answers to these questions can be found by analyzing monthly and quarterly seasonality, variability in terms of standard deviation of demand as well as the mean, minimum and maximum of demand and order frequency. Ultimately, the question then becomes, "how manageable is your demand profile?" Untangling these value streams can unlock potential value by improving manufacturing costs, lead times and quality as well as reducing inventory levels.

3. Understand Inventory Policy

Supply chain alignment requires a clear understanding of your company's inventory policy. The latter directly impacts lead times, available capacity surge and OTD performance. A comprehensive analysis of the current inventory profile, inventory policy, and both its implied and actual inventory levels is required. Additionally, you need to understand the root causes of OTD shortfalls as well as your current made-to-stock (MTS) (MTO) versus made-to-order rationale. Revisiting standard and non-standard product classifications, and MTS and MTO policy may be warranted. The 80 / 20 rule holds very true here, as does the value of product modularity.

4. Understand Scheduling Process

A thorough understanding of your company's order release through ship process is required, as well as an understanding of how it links to the production scheduling process for both MTS and MTO products. With regard to scheduling processes, inventory levels can be significantly affected by whether spike orders are filled from inventory or are consciously scheduled taking available capacity into consideration. Again, this decision can affect OTD performance.

5. Understand Current Capacity

One of the most illuminating steps in supply chain alignment is examining current capacity and determining how well it aligns with current needs. Capacity must be assessed by process in order to determine current constraints. Tooling, changeover capabilities, preventative maintenance requirements, work rules and labor skill set requirements must also be considered. Available outsourcing options need to be understood and included as potential options in scenarios to be evaluated.

6. Test Inventory / Capacity / OTD Tradeoffs

Supply chain alignment cannot be achieved without using the data collected in steps 1 - 5 to perform a tradeoff analysis that will optimize OTD, inventory and capacity. This robust model allows the testing of a wide range of scenarios which will give the team a strong understanding of the relative tradeoffs between these three key variables.

7. Determine Optimal Inventory / Capacity Posture to Maintain Desired OTD Performance Level

Using this powerful model, GSP will work with you to determine the optimal inventory and capacity posture to maintain the desired OTD. Trade-offs associated with choosing the optimal OTD level will be generated and compared to other potential scenarios. For instance, one will be able to determine the required inventory adjustment to achieve a 5% improvement in OTD performance. By using the understanding of relative tradeoffs, typically manufacturers choose an OTD performance level and set it as a requirement. Once this constraint has been set, we can begin to test the relative tradeoff between inventory levels and further capacitization. ROI analysis is a valuable tool in understanding if and where further capacity expense will pay out. By iterating through multiple scenarios, the team can narrow in on the optimal OTD / inventory / capacity scenario which will give your company an edge in the marketplace.

8. Build Implementation Plan

Once the optimal inventory and capacity position has been identified, an implementation plan needs to be built to reach this future state. Key considerations include the speed at which excess inventory will be burned off and new inventory can be built existing plant capacity. Robust given processes need to be defined and developed to ensure adherence to the production model, scheduling process and inventory targets.

Gillum Strategy Partners (GSP) is a boutique strategic consulting firm providing services to top tier clients in a broad base of industries, including technology, manufacturing and services. GSP's areas of expertise include operational improvement, go-to-market strategies, marketing effectiveness, channel and alliance management, growth strategies and sales productivity. We emphasize pragmatic solutions with measurable results and often work with our clients through implementation.

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