



GAINING AN OPTIMUM RUN STRATEGY

Lean planning will always have a creative and human element to it. No computer or algorithm can substitute for the intuition and knowledge inherent in a good supply planning team. Run Strategy Planning acknowledges this while at the same time puts structure and rigor into the process. Proactive planning focuses the organization on thinking in terms of overall profitability rather than reacting to emergent challenges. The bottom line goal of Run Strategy Planning is to service demand at the highest cash flow/least landed costs.



What is a run strategy and why should I care?

A Run Strategy is the central “playbook” an organization is going to follow when it executes its week to week tactical production. It consists of the cycle and sequence of production as well as the deployment plan and safety stock targets for the products. The economics of creating an optimum run strategy are straight forward:

1. Run increasingly shorter cycles to cut cycle stock
2. Cluster products in their optimum sequence to reduce changeover costs
3. Manufacture your product with the asset that has the lowest manufacturing costs
4. Service your demand from the plant that has the lowest transportation cost
5. Don't over commit lines in order to avoid reactionary planning and expediting costs
6. Ensure you hit your service levels by calculating the appropriate safety stock

Well, you can see the problem; these decisions do not always lead in the same direction. In fact these decisions have the complication of being made simultaneously and by different people or groups in the organization. This begs the need for a single decision making process.

The goal of a good run strategy is to first, find the least landed cost solution to these decisions. Then, second, execute a stable planning cycle with consistency and rhythm. This is the most basic lean solution a company can find.

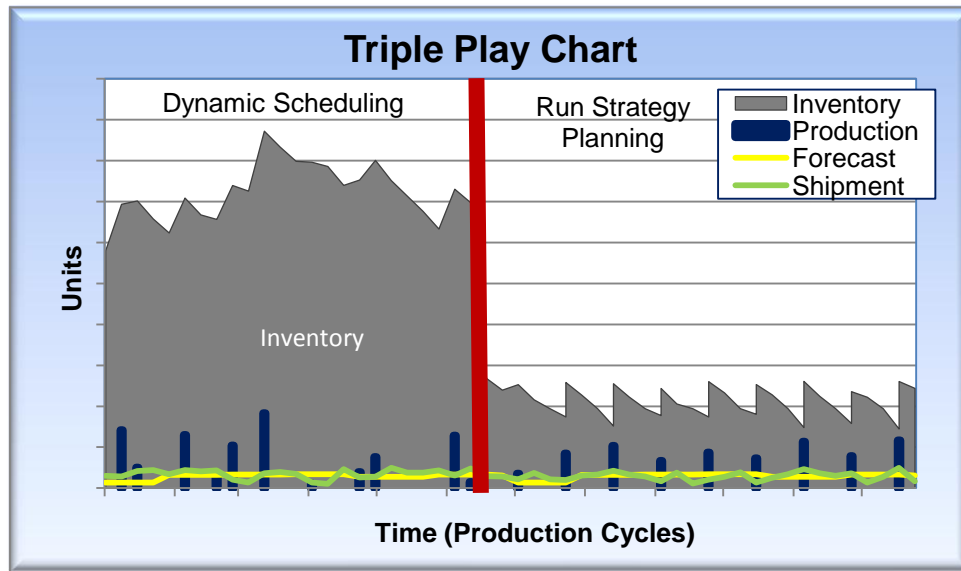


Companies that embrace the run strategy concept first see stability in their service levels and reduction in operational costs: changeovers, inventory, and expediting. Then they see an improvement production performance and schedule adherence.

Where do the efficiencies come from?

Run Strategies are developed using a predictive model. This model determines the cost and risks in satisfying demand using a variety of optimized scenarios. The bottom line is to run products on their most economic cycles and to use statistical probability calculations to meet capacity, service level, and ship life constraints. Everyone is familiar with the Supply Chain 101 saw tooth diagram; it is just that it is rarely seen in practice unless someone follows a conscientious run strategy.

Figure 1 – Frozen Foods SKU – before and after



In figure 1 we show an example of a system that was converted to Run Strategy Planning. This is a frozen dinner company that had an ERP system in place running on economic order quantity (EOQ) principles. They were frequently adjusting their schedule and their planners were using their best judgment on production times and quantities. They effectively were dynamically scheduling the plant. The right hand side shows what they went to with Run Strategy Planning. You can see that inventories are reduced by half or more for this particular system.

A further cost advantage derives from the rhythm and predictability itself. A repeating production cycle creates a stable environment that can be exploited by both the plant, through cost and performance improvement, and purchasing, through purchasing closer to demand.

What tool can I use to gain an optimum run strategy?

The optimum run strategy requires math and lots of it. All the decisions made to determine a run strategy are interrelated both by cost and by constraints such as service level, shelf life, and the biggie, effective capacity. These are all statistically driven variables.

Supply Chain Toolworks has developed a solution called the Operations Strategy Planner (OSP) which encapsulates the workflow and analytics required to develop a run strategy. It facilitates the operations component of Sales and Operations Planning (S&OP). This tool communicates with standard ERP systems by providing the production and deployment templates and rules that determine production



frequencies, sequences, and safety stock targets. Additionally, it helps build a playbook for contingencies of capacity surplus, shortage, and other eventualities.

OSP is a predictive model where an intelligent team of planners are led through a workflow and shown the possible and probable impacts of these decisions. They are also guided towards the least risk, least cost solution through “Facilitated Optimization.” We say facilitated optimization because it is our experience that “black box” solutions, ones that generate a single answer based on input data, ignore the human component of planning and often hide small errors in historical and operational data. You will use this tool to formulate a strategy and strategy requires human intuition and knowledge.

OSP is scenario based so that alternatives can individually optimized and weighed against one another in terms of risk and cost. The result of improvement assumptions can be seen immediately to understand how significant the impact is. For example,

What happens if I add products to the portfolio—what is the cost advantage of SKU reduction?

What is the impact of changeover reduction in terms of cost and capacity?

Network optimization has 3 possible plans, what is the best one from a Run Strategy standpoint?

What is a typical project timeline and what will it take to get it up and running?

OSP is fully web deployed. A planning team can have a model loaded and generating run strategies within one week. Most organizations are realizing their ROI benefit in their first quarter of operation. Run Strategy Planning is first and foremost a business process. OSP provides the workflow, analytics, and optimization but it is the organization’s skills and discipline that will reap the benefits.

What are the typical results?

The application has helped our clients to:

Eliminate \$1MM annually per plant in total landed operational costs

Create a process that runs consistently to fill rate targets

Gain a proactive stance in supply planning—ending the cult of “plan harder”

Establish a consistent rhythm in their operations environment facilitating continuous improvement.

Consolidate several initiatives into a unified “Lean” methodology

Our process and solution allow decision makers to eliminate the confusion of fragmented supply chain analysis and focus their organization on the important improvement goals needed to meet customer demand and reduce total net landed cost.