

After the Storm – Preparing the Supply Chain for the Longer Term.

What next? We are weathering the immediate recessionary storm by maximising cash, driving down inventories and cutting operational costs. These urgent steps are necessary for crisis management but now we must start preparing our supply chains for the economic realities of inherent unpredictability and volatility. The demand-driven, “Agile” supply chain is not new (see Martin Christopher, Cranfield School of Management) but it is now more applicable in the chemical industry. However, the basic Agile model needs to be customised to reflect company-specific requirements, whilst greater emphasis is put on heightened visibility throughout the chain and the timely provision of operational/financial scenarios for tactical decision-making.

Responding to the Recession

It is now clear that the recession will be deeper and longer than first appreciated. It appears to be shaped like an extended U - although it is highly unlikely that we shall return to the same buoyant starting level. In the main, supply chain management has reacted quickly, focusing on what is important (key products and customers - not one size fits all) and on the need to do the basics well/efficiently. Programmes have been implemented to address:

- CASH, cash flow, cash-to-cash conversion cycle
- Working Capital, inventory management
- S&OP, matching supply to rapidly declining demand, mix
- Cutting operational costs without impacting service, reduce complexity
- Capacity management; closing down rather than idling or extended shuts

But these (re)actions are not sustainable long term. It is topical and perhaps clichéd, to quote Charles Darwin at this point, “In the struggle for survival, the fittest win out at the expense of their rivals.....because they adapt themselves best to their environment.” (On the Origin of the Species, 1859) Darwin’s main message comes in the second part of the quote. We must be both willing and able to adapt/change to the new economic realities to survive. Clearly, being big and strong with a massive balance sheet is no longer a guarantee of long term survival.

Adapting to the New Realities

The future that we must prepare for is volatile and unpredictable. We can no longer rely on the relative stability of exchange rates, nor of raw material prices, nor freight rates - and we still have to cope with the underlying increase in competitive intensity and the shortening of product life cycles etc. Even if demand recovers somewhat, it is likely to be lumpy and there may yet be some surprising shifts in the shake-out of supply capacity. The conundrum of course is that we cannot afford to consume capital by building inventory to protect against this volatility.

Demand-Driven S&OP

To counter volatility, our supply chains are going to have to become more agile – this means being more responsive to actual customer demand/orders and will result in shorter production runs or batch sizes. The key then becomes a revitalised and bespoke Sales and Operations Planning (S&OP) process designed to facilitate tactical decision-making. It is necessary to go back to first principles and design an S&OP process that is business-specific and which provides the rational basis for making decisions. This will entail the creation of scenarios, sensitivity analyses and financial outcomes (EBIT and WC). We can no longer depend on the single, narrowly-defined solution (invariably wrong) delivered via a meetings-dependant, standard S&OP process. We are not trying for an optimal solution but looking for the best balance from various trade-offs and our acceptance of risk.

Understanding demand is critical to the effectiveness of a system where the amount and mix of what is to be produced, is determined by what is confidently expected to be sold. The better the visibility of demand, inventories and lead times, from consumer all the way through the chain to feedstock, the less Working Capital has to be tied up in inventory. Additional factors to be considered include:

- Emphasis should be on known customer requirement (ie orders, ideally) rather than solely on a statistical forecast calculated using historical sales. As a rule, forecast for capacity but execute against demand.
- Seek to understand the nature of demand and the levels and lead times associated with inventories throughout the full length of the supply chain. This, in turn, should stimulate a more collaborative approach to planning with both customers and suppliers.
- The more that one is able to influence demand and reduce volatility (possibly by smoothing out spikes) the lower is the requirement for safety stock.
- Engage the commercial organisations on the need to understand and quantify demand. This can be achieved by incentivising the reduction of Working Capital or at least highlighting the correlation between forecast accuracy and Working Capital.

People and Tools

Reengineering the S&OP process alone is not sufficient; it is important to have supportive IT systems and people with insight and the right mindset. Ideally, the IT system needs to provide you with visibility of almost real time information across all operations. You need to be able to do what-if analyses and see the tradeoffs along the chain, together with the bottom line implications. This might appear intimidating; particularly as ERP systems do not generally have the flexibility and functionality required and Advanced Planning Systems are too heavy. Spreadsheets are a good place to start as this helps a deeper understanding of the dynamics, but they cannot be sustained for long. There are, however, a number of software packages that occupy the middle ground and which are compatible with the main ERP systems.

More important than having the ideal IT system is the judgement, acceptance of risk and decision-making capability of senior management. Even the best process/system combination will not produce the correct answer. Timely decisions will have to be made, based incomplete information in uncertain circumstances.

Conclusion

Supply Chain Management has reacted quickly to the severity and suddenness of the recession. Now is the time to consider the processes, people and tools that will be needed in to the future. The crystal ball is foggy but we know intuitively that the future is going to be rockier than before. The move away from previously perceived strengths such as asset ownership, “production push” and standard S&OP, is gathering pace. Although there are some macroeconomic factors that may be too forceful to be withstood, there is competitive advantage to be gained from being able to adapt to the new realities more quickly than your competition. More than Lean philosophies and regimented corporate cultures, agile minds and processes can make all the difference.

Tim Bett, Director Europe at Bisham Consulting
Wassenaar, the Netherlands. Tel: +31 (0)70 5110401
timbett@bishamconsulting.com
www.bishamconsulting.com