



How to survive the crises: Ten ways to Reduce your Inventory

A significant number of companies are starting to feel the impact of the current global financial crises. Under the current scenario, it's not a result of inefficient business practices; but instead, a shortage in cash flow which could lead some to bankruptcy. This article, written by Rob Clarijs, introduces ten ways to reduce your working capital, mainly focussing on the amount of inventory.

Because of the dire need for quick results, the solutions are categorized as either short term or midterm realizations.

Short term solutions:

- **Inventory centralization**

Most companies associate this with only the centralization of actual warehouses. In the short term however, the focus should be placed on central inventory management. By doing so, it is possible to switch from (sub)optimal inventory positions in each separate warehouse, to an optimal inventory position across all warehouses. One of our clients, a company which markets (mostly expensive) laboratory materials, now only keeps an article in stock at the warehouse where the demand for that product is the highest. This change resulted in a significant saving in total logistics costs.

- **Optimization of safety stock**

Safety stock can be reduced by decreasing the amount of weeks coverage for fast movers (these can be accurately forecasted because of the large amount of customers and high demand volume) and increasing the coverage for slow movers (a relatively small amount of customers and intermittent demand patterns cause inaccurate forecasts). These strategies lead to higher service levels achieved with less inventory.

- **Move the customer-order-decoupling point (CODP)**

Certain articles are typically produced for several customers. By producing these universally and by stocking them generically, the total safety stock can be reduced. A typical example can be found at one of the largest Dutch companies in the chemical sector. This company produced product based on customer orders and minimal batch size constraints. This practice led to inventory for every customer-product combination. By reorganizing the make-to-order process for several products, to a generic make-to-stock process, the amount of different articles was reduced. The significance was such that no expansion of storage is anticipated for the next five years. In the new set-up, the article will only be made customer specific upon customer order.

- **Tuning with upstream supply chain**

Employing e.g. vendor managed inventory or contingency stock has a favourable impact on the height of the working capital. The working capital of the upstream party will however increase, as it decreases at the downstream party. The question arises whether this is a feasible solution in the current situation, since the upstream supplier probably copes with financial scarcity similar to the downstream party.

Midterm solutions:

- **S&OP processes (Sales & Operations Planning)**
While S&OP is still regarded as a forecasting tool, its impact goes far beyond just this. By conducting S&OP processes the correct way, companies will realize improved synchronization across different departments. This improved communication leads among other things to a reduction in inventory levels. By applying S&OP, a producer of fresh goods was able to enhance the process of incorporating forecasted demand with production planning. This resulted in more accurate anticipation of excess stock and less scraped product, which in turn had a very positive effect on the sales price of products.
- **Backward scheduling instead of forward scheduling**
Positive results in relation to inventory and working capital levels are achieved when a part is produced as late as possible. Thus, expensive finished goods are kept in stock for a shorter time and raw materials purchases can be delayed as long as possible. Moreover, due to the postponed production date, the period in which customers can alter their order is increased.
- **Modular engineering**
By producing different articles out of the same raw materials and semi-finished products, demand can be satisfied with less products and thus with less inventory. A well known example can be found in the automotive industry, where one engine is used for various brands and models.
- **Tuning with downstream supply chain**
When possible, a make-to-order strategy can be aimed for instead of a make-to-stock strategy. By doing so, lower inventories of end-products can be achieved, and raw materials purchased only as they are actually needed. As a compensation for the decreased flexibility, part of the savings can be shared with the customer, by means of a discount.
- **Improve cash-to-cash order cycle**
Cash-to-cash problems are quite often shifted to externals, by both paying the supplier as late as possible and prodding the customer to pay as soon as possible. Actual solutions however can be found by decreasing the throughput time. This can be achieved for the supply chain as a whole, by among others increased synchronisation. Then again, internal improvements can also be made. For example, a large supplier of ingredients for the food industry is currently reducing its working capital by €1 million, by shipping their make-to-order products to the customer on the production date, and therewith decreasing the throughput time by one day.
- **Unconventional solutions**
Aside from the above mentioned solutions, one can still identify various different possibilities that can be used to overcome the current crises. Think for instance of sharing the production capacity of machinery or units with other companies or selling obsolete stock.

As you can see, there are sufficient possibilities to overcome the crises. Of course, the effect of the chosen solution will vary by company, and although not every solution can be applied to every company, they certainly produce some food for thought...

If you would like to receive more information about simulation tools, please contact Alain Beerens, Beerens@groenewout.com or +31 76 5330440.