## What is a Negative Margin Launch?

The negative margin launch is not necessarily a bad thing. In fact, we may even go negative for a brief time in order to accomplish the higher order goal of outstanding customer satisfaction. So what is a negative margin launch as we see it? It has the following characteristics:

- The MRP system lot sizes are set to a small number, with one being acceptable
- We bring in material the quickest possible way, including air
- We do not necessarily concern ourselves with lean manufacturing as yet
- We set a time limit on how long we proceed at potentially negative margin

Why do we use this approach?

During the launch and for about 6-8 weeks thereafter, our systems will be stressed because we most likely have not anticipated all the issues that can arise during manufacturing, even with a process failure mode and effects analysis. After launch, we are dealing with the realities of actual production. One of the most common side effects of a weak launch is lack of order fulfillment. Hence, we are using this approach to assure ourselves of reasonable, if not excellent, customer satisfaction.

Why do we put a time limit on this approach?

We don't want to have negative margin for any length of time. By setting a time limit, we force ourselves to deal with the materials and production challenges that *always* arise in real production. This negative margin period should be factored in to any payback, internal rate of return, net present value, and any other financial calculations as a cost of doing business.

Why do we have materials problems?

When we switch from manual purchase order maintenance, repair and operations (MRO) purchasing to MRP purchase, we experience a discontinuity in the materials supply attributable to the way each system handles orders. With manual purchasing, we order just what we need; with MRP we order parts based on reorder points, lot sizes, delivery variability, and other computable issues. We are using air shipping and small lots to minimize shortages while eliminating the situation which often occurs after launch, namely, a customer modification to the product. If we are using economic order quantities (EOQ), we will most likely be driving large lots through MRP purchasing, leaving us vulnerable to a customer modification, and thus, having significant overstocking.

What if we have a common part with another product?

Common parts are not what kill our inventory, at least, most of the time. These parts will eventually be consumed by other products during the normal course of production. Unique parts, on the other hand, can end up being surplus stock and unusable on any other product (they **are** *unique*, you know!).

What about air freight?

We air freight because we do not have huge stocks of unique material. Intelligent planning should eliminate part of the cost and we know LTL (less than loaded) shipping is not exactly inexpensive, either. At the end of the launch period, we can see if slower delivery is warranted, although we will still not be running a lean process. We know that Apple uses air freight extensively.

Who must authorize this approach to launch?

Company/corporation leaders are the prime candidates, since we are talking about a period where we will be taking a loss on this specific product. We must walk into this process with our eyes open, knowing that we will see negative margin for a brief period. The payoff occurs in two ways:

- Our customers are thrilled when they receive their products on schedule
- We are not accumulating large stocks of potentially surplus material that must be discarded

Resource:

Pries, Kim H., and Quigley, Jon M. *Project Management of Complex and Embedded Systems*. CRC Press, 2008.