

By John P. Collins, CFPIM, CSCP, and Eric P. Jack, Ph.D., CFPIM, CSCP

Lessons in Postponement

Analyzing another competitive dimension for world-class manufacturers

One of the distinguishing characteristics of world-class manufacturers lies in how they effectively leverage flexibility. The *APICS Dictionary* defines flexibility as “the ability of the manufacturing system to respond quickly, in terms of range and time, to external or internal changes.” It goes on to describe the six different categories of flexibility associated with manufacturing systems: mix, design changeover, modification, volume, rerouting, and material.

The organizational emphasis and tradeoffs involved in deploying these flexible strategies determine both how effectively and how quickly a manufacturer will respond to customer demands. For example, many flexible manufacturing approaches have led to such advancements as quick die switchovers, routing interchangeability, and all sorts of waste-reducing measures that speed response to customers. Yet, most of these approaches are significantly challenged in the current business environment, which is characterized by highly fluctuating customer demand.

So, how does one provide highly customized products at mass-production prices?

Put it on hold

One approach used by world-class manufacturers is to leverage product postponement strategies. A 2003 survey by Oracle and Cap Gemini Ernst & Young describes postponement as a systematic approach to designing and developing standard, configurable products that can be differentiated quickly and inexpensively once actual demand is known.

Here is another example. Company leaders at a computer manufacturer want to offer customization at

the component and service levels. Achieving this goal could be as simple as having a nameplate attached at the end of the assembly process that announces a specific computer was especially made for Mr. John Q. Public. Or, it could be more complicated—perhaps involving configurations of components, such as choices and sizes of display monitors; a particular internal processor; various storage devices; and colors of external items, such as carrying cases.

Interestingly, both of these examples of customization happen at different conversion points along the transformation process—from component sourcing to manufacturing and then channel distribution. The nameplate example happens at the end of the cycle, possibly even by the distributor or retailer. The component-choice example may challenge the supply chain’s ability to correctly anticipate demand in order to have the correct component available within the promised delivery time frame. However, there are several companies doing postponement reasonably well. Dell and HP are oft-cited examples.

The key to postponement is to move the irreversible product differentiation point as close to the end customer as possible. Such a strategic decision takes strong leadership and organizational commitment. But, as one learns in APICS Certified Supply Chain Professional coursework, in order to fully evaluate the system-wide ramifications, company leaders should look to their integrated supply chains. Cross-functional team members should critically examine the integrated processes that run across the extended supply chain. Examples include distribution, channel assembly,

vendor-managed inventory, design configurations, modularization, design for manufacturing and assembly, and supplier relationship management for key components and materials.

Perhaps the most critical part of postponement implementation is the technology infrastructure. Here, the good news for managers is that recent advancements in telecommunications and the wide availability of customer relationship management planning systems offer many potential solutions.

The waiting game

The survey by Oracle and Cap Gemini Ernst & Young suggests that, when properly executed, postponement strategies bring about 30 percent to 40 percent reduction in inventory costs along with reduced order fulfillment cycle times and improved customer satisfaction.

The domestic furniture industry has made inroads with postponement strategies as a means to compete with lower-cost manufacturers shipping furniture from overseas. Other diverse product lines, such as men’s shoes and women’s clothing, have adopted postponement strategies. Yet, there are still numerous marketplaces—automotive comes to mind—where there are many untapped opportunities to leverage postponement. Are there similar opportunities in your industry? 

John P. Collins, CFPIM, CSCP, is chief executive officer for operational and organizational consultancy Sustainable Solutions International LLC. He may be contacted at jcollins@ssi-spm.com.

Eric P. Jack, Ph.D., CFPIM, CSCP, is associate professor in the department of management, marketing, and industrial distribution at the University of Alabama at Birmingham. He may be contacted at ejack@uab.edu.