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Pigs, Chickens, and Marriage Proposals

The somewhat surprising foundations of effective postponement

Our last department ended with a question: Is mass customization a design strategy or an operational one? Any Certified Supply Chain Professional designee knows the answer is “yes.”

In order for a postponement strategy to be effective, certain foundational requirements must be in place from both design and operational perspectives. If the overall supply chain is poorly designed, postponement strategies may help meet the variety of customer demands; however, they cannot do so as efficiently and effectively as a well-designed system. Managers must be concerned with both the design of their product and the design of the networks and relationships supporting critical flows in the supply chain.

A truly effective postponement strategy begins with good product design. Recall that the basic idea behind postponement is to meet high variability in customer demand by delaying the final customization of the product. To systematically accomplish this task, designers must wrestle with complex technical issues such as

- standardization and component commonality to minimize sourcing
- modularization and configuration to support product differentiation as late as possible in the process
- customized packaging and various assembly options to accommodate more differentiation in the distribution channel.

Today's world-class product designs are accomplished by cross-functional teams made up of members representing key departments. They enable businesses to optimize design at the system level. Team members can focus on manufacturing, environmental considerations, logistics, assembly, or other elements. Along the way,

they can attempt to optimize system design by minimizing the trade-offs that may be required in these critical functional areas.

Supply chain partners experience the same need for cross-functional collaborations and real-time information flows. Managers must rationalize the design of their supply chains to ensure each entity is adding value that customers are willing to pay for. Such decisions have communication-support requirements and significant resource implications. It also is important to make the proper investments in information systems in order to be informed about customers' changing needs and to share these requirements in real time (if possible) throughout the supply chain.

Implementing the designs


Of all the dimensions of customer value, cost can be the key differentiator. Consider the following examples, which illustrate both customized product strategies and the cost impact of postponement.

In the first case, Mercedes orders its wiring harnesses from a plant in Mexico for its Alabama site. However, in order to meet customers' individual tastes, the company offers thousands of different harnesses. Because of the distance, a wiring harness is ordered early in the fulfillment cycle, thereby making the point of differentiation at the *start* of the order fulfillment. Costs associated with this early differentiation are either offset by close coordination of the supply chain (which bears a cost as well) or deemed acceptable due to the focus on product customization.

At the opposite end of the postponement strategy is Tata Motors and its quest to build a “People's Car” that

costs only \$2,500. In determining customer preferences in India, firm leaders discovered that two-wheeled and three-wheeled vehicles were very economical and effective. However, a basic four-wheeled vehicle not only carries a load of pigs or chickens, it also lands marriage proposals.

Indeed, research showed that having a car with four wheels enhances a man's ability to get married. Thus, Tata created a basic vehicle with common components and allows the buyer to differentiate certain parts after the purchase. Design is left to the new owners, many of whom paint panels in bright colors, install teak wood trim, and decorate the upholstery in fashionable Hindu shades. The point of differentiation is at the *end* of the order fulfillment cycle—a postponement tactic that may prove to be both strategic and cost effective.

Although the results are different, both companies undertook their postponement strategies after carefully listening to customers, translating what was said into a coherent business plan, and using cross-functional teams internally and externally to execute that plan throughout the supply chain—all of which are important points to keep in mind as you establish the proper foundations for postponement in your supply chain. 

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