

# Lessons in Managing Demand from the Toy Industry

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**T**hink of an industry where time to market and product turnover are vital; where most products have a very short life and are sold in brief, well-defined selling seasons; where few products last for two seasons and all experience significant markdowns at the end of product life.

Finally, add the fact that much of the manufacturing is performed in Southeast Asia with

long transit times and information lags between manufacturing and the target markets in Europe and North America. While these features could describe many high-tech products, we are talking about toys.

The toy trade is one of the oldest industries. Over the past two decades, the industry has steadily matured, with an underlying annual growth rate of about 5 percent. Yet with this stable growth, the industry is far from tranquil. A key feature that has long characterized the toy business is its rapid change and uncertainty. Constant product innovation, short life cycles and high cannibalization rates are typical.

Two key features that define many of the challenges in the toy industry for both large and small firms are the seasonal demand and short product life. Toy sales and volumes grow exponentially the last few days before Christmas. November and December alone represent nearly 45 percent of toy sales. Shipments from manufacturers to retailers follow the same lop-sided activity.

Fourth quarter shipments have steadily grown over the past 10 years. The effect is exacerbated service level requirements at a point when all available distribution resources are overloaded with product.

This strong seasonal demand is only one com-

ponent of the toy makers' challenge. While thousands of toys are brought to market every year, only a small fraction of them succeed and become the "hot" toy. Even fewer have what it takes to last longer than one or two years. Classics, such as Mattel's Barbie and Hot Wheels, are examples of products that have stood the test of time. As John Handy, vice president of product design at Mattel Inc., stated, "We're just one good idea away from going out of business."

Faced with these challenges, toy companies are endlessly searching for new product development strategies that reduce both the risk and the effects of seasonal sales. Over the years, the toy industry has adapted to this environment of risk and rapid change. There are many lessons that supply chain managers can learn from toys. One important lesson is demand management.

Major toymakers are proactive in seeking out new ways to stabilize the high demand variability associated with toy sales. New products often face the largest uncertainties. As in other industries, advertising is one way to control the market. However, toy makers often seek alternative methods for assuring that customers will be familiar with their products. For example, licensing agreements have become a tool to ensure product performance. Movie and toy releases are coordinated to preempt demand patterns through product familiarity. For example, the Christmas hit, *A Bug's Life*, created predictably strong demand for the toys released with the movie. Such films are particularly effective because they not only make children aware of the toy, but also establish play patterns before the product is ever purchased. Toy companies also use product extensions to help flatten out demand, by building on familiarity instead of fashion.

However, these efforts are not enough. The industry is cyclical with a persistent group of hit toys that just cannot be anticipated.

Another successful approach to reduce demand variability is a rolling mix strategy. For example, prior to 1994, sales of die-cast cars, including Hot Wheels, were relatively flat. However, demand for individual styles was hard to predict and highly variable. Starting in 1994, Mattel incorporated a new marketing strategy to sell die-cast cars. Mattel determined that variety was the key driver of sales. If customers saw new products every time they went into the store, they were more likely to buy. The company implemented a rolling mix strategy that changed the physical 72-car assortment mix by 7-8 percent every two weeks. Over the course of a year, the product line changed over two times

entirely. This strategy developed an organized, non-reactionary method of new product introduction and old product obsolescence. By rolling the mix, Mattel was able to market a much broader range of SKUs without requiring any additional retail shelf space. The strategy created urgency among consumers to buy the products while they were available. Over the course of the next three years, demand for the Hot Wheels skyrocketed while many competitors, like Matchbox, remained flat. Besides boosting sales, the approach pro-

vided supply chain dividends. Through its rolling mix strategy, Mattel no longer had to rely on point-of-sale data to forecast market demand for specific SKUs. Rather it used the information to plan the changes to the mix. Ty's Beanie Babies is another case of an immensely successful application of a rolling mix strategy. The approach not only created a frenzied collectors' market, but also nearly eliminated the need to forecast the performance of any particular style.

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