



## NEW MARKETS, NEW CUSTOMERS AND NEW SUPPLY CHAIN PROBLEMS

### SEVEN MITIGATION STRATEGIES TO TACKLE HIGH SALES VARIANCE

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Micro marketing, social media and big data are powerful tools in identifying new consumer segments and capturing new market trends.

Used well, this information can help companies optimize product offerings and, more precisely than ever, help them tailor products based exactly on what consumers want. Given micro marketing companies may even customize their approaches almost to an individual level and reach new, micro consumer segments, which were (economically) inaccessible before. So far, everything sounds good.

However, micro marketing tools, a blessing for some companies, are only one side of a shiny new coin.

On the flipside, product portfolio proliferation and customization often cause significant headaches, which are strongly felt in the operations and supply chain departments. Shattering traditional customer segments, catering to diverse service expectations, increasing the supplier base to provide more choice and supporting a multitude of delivery channels are all adjustments that come at a price.

With such changes, demand forecasts may no longer stabilize and Sales & Operation Planning can turn into guesswork. Indeed, there is well-established relationship between sales variance and sales volume per SKU (stock keeping unit) as illustrated in Figure 1. The lower the sales volume per SKU in a given time period, the higher sales variance. In Figure 1 this is present where B&C items always entail more uncertainty than A items.

**In operations, uncertainty is the enemy.** Uncertainty causes product obsolescence or lost sales, delivery delays, poor customer service, and ultimately higher costs. As companies target smaller and smaller market segments, the product portfolio is broadened and the average sales volume per SKU typically decreases due to this range extension. Products specifically tailored to new customer segments are often also likely to have shorter life cycles and thus higher sales variances compared with products that have an extended sales history.

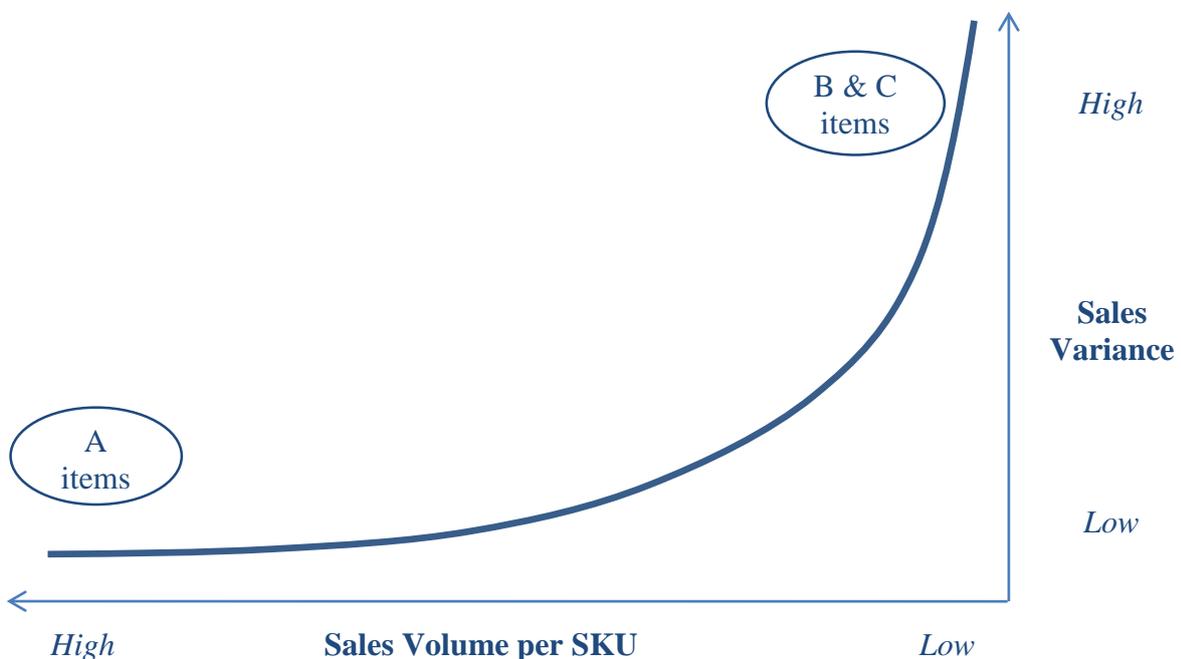


Figure 1 : The relationship between sales variance and sales volume per SKU

So how might you resolve the dilemma between the need for differentiation and limiting harmful operational uncertainty?

There are **seven mitigation strategies**, which managers can use to tackle the issue of high sales variance. Though not every concept is equally adapted for every company, these seven points provide a useful starting point.

### **1] Causal Factor Analysis of Demand**

Many firms create sales forecasts based on historical data, analyzing demand patterns and marrying this with macro-economic trends. For high volume, functional products with low demand volatility, this approach is perfectly adapted. But when new markets and customer segments are unlocked, sales volumes are low and customer needs are not yet understood, thus historical data has limited explanatory power. In this case, a more holistic approach has to be developed where the underlying reasons and causal factors of demand are analyzed in cooperation with customers and customers' customers. In 2014 Amazon.com deposited a patent called "anticipatory shipping", a method aiming to reduce delivery times by triggering the shipping process in anticipation of customer demand. Seven-Eleven Japan introduced an information system which allowed them to collect point-of-sales (POS) data from all their stores and learn about sales trends by customer profiles, date, store and item. They can monitor stockouts and scrap, optimizing their offering and allocation of shelf-space. Through the deep understanding of their customer base, they could raise inventory turn performance to unseen levels. Another example is Nestlé, the Swiss consumer goods company that managed to increase demand predictability by cooperating with distribution channels and linking sales to price discount promotions.

### **2] Lead Time Reduction**

Don't forecast what you cannot predict is the idea behind lead time reductions intended to reduce sales variance. Sales forecast accuracy is negatively correlated with the forecasting time horizon – the further in the future, the less accurate the forecast. The principle of this approach is to reduce go-to market time, so companies can react quicker and rely on shorter, more precise demand forecasts. The apparel industry is very dynamic, often altering fashion trends even within a season. This puts the corresponding supply chains to the test. Zara, the Spanish fashion retailer, bases their business model on this challenge. Thanks to a very agile and responsive supply chain, they can react to fashion trends or changing sales volumes rather than relying on forecasts. They achieve this through fast decision processes and manufacturing located close to their customer markets, which reduces the lead time of their supply chain.

### **3] Fast Product Rotation**

The consumer electronics and apparel industry both inherently have very short product life cycles. In such environments, firms only survive when they constantly launch new and innovative products. The demand of these products is quite impossible to forecast. Apple tackles this by constantly rolling over their product portfolio. Zara even goes one-step further actively limiting quantities for some of their products and thus artificially shortening the product life cycles for certain high fashion items. Based on strong differentiation and customer attachment, these companies can keep quantities at the lower end of their forecast range and smoothen out sales over the sales season.

### **4] Mass customization**

Mass customization aspires to combine the benefits of mass production (low costs through economies of scale) and customization (sales driven by targeting new customer segments), for instance by means of modularization. Customers get the chance to combine interchangeable modules to create a "customized" solution, whereas individual modules are standardized and manufactured in large quantities. In this scenario, the average sales per module are increased and demand variance is reduced. Sky Deutschland, the German pay-TV company, used a modular approach for their receiver boxes. A selected setup box could be clipped onto the hard drive, whereas different versions of the hard drives exist. This way, only the individual modules have to be kept in inventory, instead of all the possible combinations. Likewise, Nike id, allowing a personalized shoe design from within a predefined option selection, helps to reduce product variety in the sales channel while still serving individual consumer requirements.

## 5] Postponement

Customization of products as a principle to tap into new markets increases the breadth of the product portfolio and the complexity of supply operations. The decoupling point is the moment where a product becomes specific to a certain market or customer group. Based on this concept, postponement is the principle of delaying this point as close to the sales moment as possible. This way, the firm can rely on more accurate, short-term demand forecasts. This is a very common practice in the consumer goods industry for companies working across international markets such as Procter & Gamble and Unilever. Products are often sold in the same format in different countries, but their packaging has to be tailored in terms of the language. By sticking country specific labels on the standardized packaging, these firms decouple the manufacturing and postpone the moment where a product is attached to a specific market.

## 6] Portfolio Rationalization

Volkswagen differentiated in 1985 with only nine different segments in the automotive market. By 2005 this number increased to 40 categories. Driven by the intention to penetrate new market segments, firms constantly add new products. But additional products imply additional supply chain complexity and higher sales variances due to lower volumes. Companies such as Apple and Nespresso actively manage and limit product variety, amongst other reasons to pool demand and improve forecasting. Lidl and Aldi, the German discount retailers, limit their product portfolio to a couple of hundred SKUs (compared to several thousand which are standard in the industry), constantly taking out lower volume items.

## 7] Centralized Stock

Cutting down the product portfolio is not always a valuable option. The broad portfolio is one of the key competitive edges of Zalando, the European online retailer. Therefore they chose an approach other than portfolio rationalization to achieve demand pooling: centralized stock. They run a small number of large central warehouses, each handling large volumes. With this setup, they gather demand, move to the left on the sales volume curve, driving down sales variance (Figure 1).

Micro marketing, social media and big data are powerful marketing tools. Their full potential, however, can only be tapped if they are used to cater to new consumer segments AND to gain insights into the buying behavior of these consumers, which are useful to pilot the supply chains required to delight the consumers. Consumers always want more product variety but are not always willing to pay or wait for it. Thus, managers will need to take an integrated view on marketing and operations to employ the right mitigation strategy to limit sales variance and operational uncertainty.

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