To Have or to Hold –

Managing Product Portfolios to Avoid SKU Proliferation and Gain Profits

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Introduction

The interest in managing SKU proliferation—rationalization and often cutting SKUs—has peaks and valleys, often in sync with the economy. During down times companies seek to cut costs. *But today's story is different.* New geographies, new channels, and new customer segments mean lots more products. "Gone are the days when our 'A' products accounted for all the profits," one executive told us. Customers want unique products that enhance their brand and sales. And consumers have access to so much choice; you don't want to lose them to your competitor.

In addition, there are many manufacturing and wholesale distribution mergers of late. As a result, these companies face the challenge of evaluating and rationalizing their newly combined product portfolios.

Yes, today's market is a complex multi-channel, multi-market world where companies are exploring and entering new markets like never before. Unfettered by limited access to new customer opportunities, they can design and sell products all over the world. But channel diffusion also impacts the cost of managing all that choice. Facility capacity, inventory, catalogues, unique web pages, promotions, and administrative process and data management costs impact margins. The challenge becomes, then, how to *profitably* manage the many product options that might result from these quite complex opportunities.

> A Cautionary Tale
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> "Our board challenged our company to become more profitable. We needed to free up working capital for new investments. The management team's mandate was to evaluate all products and that were not profitable and cut them from our product line. Turns out that some of those were our biggest sellers. The board would not tolerate shrinking the revenue of the company.
>
> Our Supply Chain team had a different perspective. Let's focus on operating costs and see if we can make the unprofitable profitable?
>
> Both sides had to give up a lot of favorites: special side deals with old customers; nonperforming products; and closing down poorly utilized lines in manufacturing.
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> In the end we had to cut some products and facilities and inventory, but we learned that cutting products alone was not the path to profit."

Most supply chain articles focus on SKU proliferation as something to banish. They typify the introduction of more SKUs as a pitched battle between over-exuberant marketing and cost-focused supply chain. That might be an outdated perception. *The SKU management myth sees managing the portfolio as a cutting exercise rather than sculpting to reveal the real wealth in the product portfolio.* In fact, many companies have found large, emerging or previously underserved profitable segments through SKU rationalization.

In this article we will look at two distinct examples and see how companies manage the richness of offerings. Two great companies who exemplify these challenges are Intertape Polymer Group (IPG) and American Hotel Register Company (American Hotel).

We will walk through their stories and the lessons they have learned: how they enabled growth through new channel and product offerings, increased their service levels and, yes, reduced costs while managing their mounting product portfolios.

Sealing Up the Product Line: Intertape Polymer Group

Intertape is a recognized leader in the development, manufacture, and sale of a variety of paper and film-based pressure sensitive tapes. They operate in highly competitive markets.

The sheer diversity of customers and markets, advancements in materials research, and multiple acquisitions presented Intertape with opportunities for more growth. But they also the needed to simplify their product offerings to reduce costs and gain more profits from the broad portfolio. Today they have about 25,000 SKUs with the top 1,500 stock items representing 50% of sales; the balance of the products are make-to-order. Visualize product lines that span from masking and duct tape to plastic wrap to printed tapes with custom logos, to waterproof roofing and building flashing for the construction industry, to composite bonding for aircraft and you begin to glean the challenges faced by IPG.

Intertape learned early on that a seemingly straightforward approach to cutting low revenue or profitable products was not very simple. Vance Tyler, Director, Supply Chain, told us, “What we found was that marketing and sales felt some of these products were needed to fill out the portfolio to serve a market or important customer.” Tyler went on to add, “This approach only produced a small number of reductions.” So stepping back and “looking at the business overall to better understand what was driving costs, proved a better path forward.” That meant looking across the whole business to understand what was driving costs. At the product level, Intertape had to look at what they call their product styles. “Each class and sub class of products has certain applications and chemical properties that have to be understood. We have to ask ourselves where are the overlaps, vs. which are unique offerings and is there demand for these applications? Even product characteristics such as width, length and so on were part of the equation,” said Tyler. In addition, IPG had to look at where the products are made and if this drove complexity in product conversion. Did they have redundancy or over capacity in manufacturing, therefore increasing the cost of the product lines? In essence, Intertape had to look top down—from the end-consumer and industrial markets, middle-out—internal costs, and bottom up—the chemistry of the products—to understand the initial portfolio. With all of this in mind, Intertape set out to reduce the portfolio by approximately 4,000 products while enhancing the product profitability of the remaining offerings. This rationalization effort leveraged a variety of product and market attributes beyond the classic velocity-based A-B-C analysis companies have used in decades past.

“Today, at Intertape, we apply SKU rationalization across all our products,” Tyler continued. Though this is a data intensive process requiring cross-functional commitment, the rewards have been so powerful that “we continue to experience incremental improvement,” he added. “Application of this process was part of a comprehensive plan that contributed to an approximate doubling of our gross margins over a multi-year period.” Sales have also increased at the same time. Today, the on-going portfolio rationalization process has become an integral part of the Intertape S&OP process.

Don’t Sleep on Your Product Portfolio: American Hotel Register Company

American Hotel Register Company is a premier provider of supplies for the hospitality industry. The company’s growth has been spurred by the hotel industry’s renewed focus on providing guests with a premium experience. (You know that great bedding you experience in hotels today?) American Hotel, like other companies, sells direct to customers through promotional catalogues and its website. With roots that date back to the Civil War, the company’s product lines have continually evolved to meet a changing society and business world. With 150 years of success, American Hotel does much more than supply the world’s hotels. It supplies and services government, healthcare, education and other markets.

American Hotel moves our story of SKU management along—from the decisions to launch or discard products discussed in the previous section, to *how to manage SKU-rich portfolios*. Management includes sourcing as well as fulfillment—so stocking the right levels of inventory based on accurate demand becomes part of the challenge.

“Once our merchant team determines new products to add to our portfolio, the supply team assumes management of the process,” said Kyle Marx, Director, Supply Chain Analytics at American Hotel. “That means managing 50,000 items procured from over 450 global suppliers.”

Stocking a high mix of products for a diverse customer base over hundreds of thousands of locations has caused American Hotel to develop a multi-level product segmentation approach that allows it to not only stock inventory accurately, but also allows its sales teams to see which products are selling better than expected and which are underperforming.

“We manage 158 segments from furniture and bedding to amenities and cleaning supplies,” said Marx. “These products have attributes which become important for stocking strategies such as weight, size, and so on.”

For example, a pillow has larger dimensions, but is low weight. The complexity is hard to visualize at first, but when you think about the combination of item and quantity, customer, size of item (weight and dimension), DC locations (3PL vs. internal DC), category (liquid vs. linens), velocity of SKU (high versus slow moving) plus 15 other attributes, the enormity of what American Hotel manages becomes quite apparent, and very daunting. Beyond this, its teams have defined 18 policies that help them automate managing demand characteristics such as faster turning or low-demand products. Additional complexity, of course, comes from the actual customer. Each customer is also diverse in their demand, based on their properties. Often, companies only segment at a customer level.

“The really strong insights we are getting at this lower level of segmentation allow us to not only provide a higher level of customer service with a minimum amount of inventory but also help the salesperson work more effectively with the customer.”

Demand/consumption rates differ by each property—not just by product or customer—driving Marx and the team to strive for a deeper level of analytics to manage and understand products and ensure service levels, yet control working capital.

Another benefit they have derived from this pursuit is improving productivity. Though initial efforts require a lot of thought and work to design and implement the data structure, ultimately, it frees up time from lower-level work to manage more by exception. For example, according to Marx, American Hotel has now been able to put a third of its 450+ suppliers on an auto purchasing and replenishment process. That is progress customers can believe in.

Managing Product Portfolios: Lessons Learned

Though serving very different sectors, Intertape Polymer and American Hotel Register can provide some common and important lessons for those who need to rationalize and effectively manage their product lines. Companies grapple with the balancing act of pursuing new markets vs. managing costs.

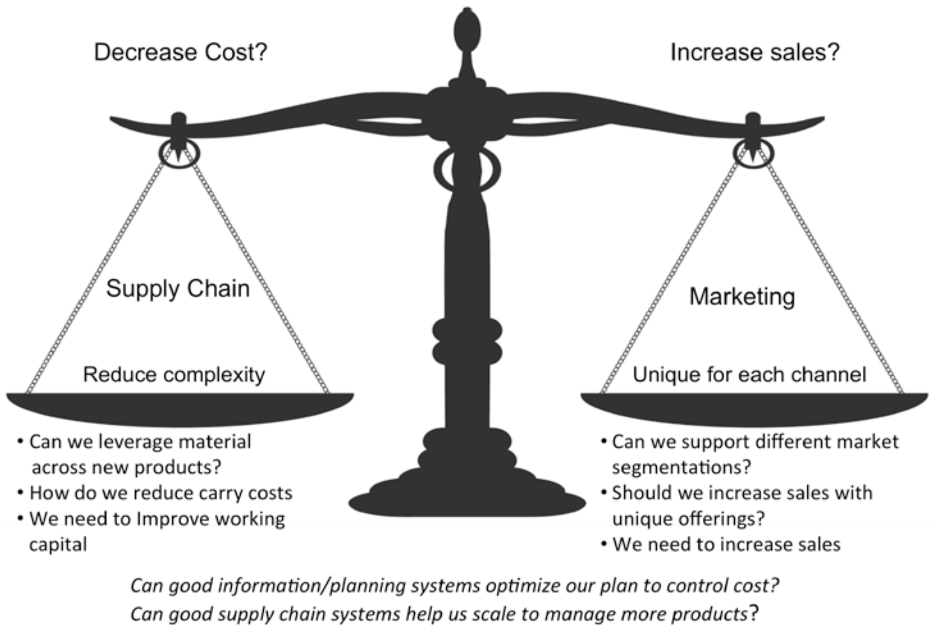

Figure 1

Key lessons:

Keeping the Product Lines Fresh to Compete—Intertape uses a metric called their *Vitality Index,* which looks at how much of their sales are composed of products that are 5 years or less old. “Our R&D and innovative new product introduction is the life blood of the business,” says Vance Tyler, “and at the same time we have to constantly streamline our portfolio.” The markets they serve are constantly innovating and Intertape wants to stay ahead of the competition.

Understanding Markets and Customers Needs—When embarking on rationalizing or ongoing portfolio management, taking customer needs into account is essential to managing uniqueness in a way that still preserves working capital. For example, Intertape ‘logos’ many customer products, so rather than stocking these, they become make to order. At American Hotel Register, they made the effort to understand the characteristics of product demand and the costs of inventory management so they can maintain service levels yet keep carrying costs down. More strategically, American Hotel Register actually provides a ‘supply chain service’ to their customers, enhancing customer loyalty.

Channel Collaboration—Intertape's lesson was that once they rationalized the portfolio, their distributor/channel partners were also able to simplify their categories and better explain to their customers the benefits and use of products. But, Tyler noted, that did not come without including those partners in the process *early on.*

Cost—Designing costly products or dealing with complexity, unto itself is not a bad thing, Tyler noted. The question is, "Is the market opportunity strong enough to warrant that complexity?" The answer is *yes,* "if the customer is willing to pay for it." But, cautions Tyler, "You have to listen to your customers. If the product is truly of value to them they may take a price increase or switch to another offering."

Evaluating Demand Data—Honestly seeing product demand by channel and customer, evaluating product overlaps, inconsistent pricing, etc., require having a system with the scalability to process all that product, sales, and cost data granularity. Doing scenario modeling so you can see how products perform, evaluate trade-offs, substitutions, and the impact of cancelling products is essential before making the choice. Both companies used Logility Voyager Solutions to create the product hierarchies that support scenario modeling for these types of critical decisions.

Supplier Collaboration—Part of many firms' SKU rationalization process should engage suppliers, as well, to change products as well as improve their data management. Both Marx and Tyler noted that these discussions with suppliers are not without pain, but ultimately, it allows the supplier to refresh their product lines, reduce their own redundancies, and also ride up market with their customers to increase sales, margins and reduce operating costs.

Marx, of American Hotel, said they also have benefitted from this improved supplier collaboration to maintain supplier inventory data. They can load the supplier's *on hand* inventory data into their own inventory (Logility) system. This accurate supplier inventory enables American Hotel to take advantage of real time visibility to allow for a holistic view of the inventory pipeline.

Managing Inventory—Another element we learned from Intertape is the need for effectively leveraging raw material inventory across products to maximize investment. This helps with service levels as well as preserving working capital. From a service level perspective both firms needed to project working capital/investments requirements to maintain sales, yet support the business's bottom line. This modeling requires systems to deal with the complexity of granular data. Intertape uses Logility in this more strategic role.

Working by Exception—Large product assortments are hard to stay on top of—another driver of simplification. But if your customers require rich choice, you have to find a way to scale. American Hotel also found that through designing and automating their segmentation, their purchasing and inventory accuracies were improving. They could then, Marx told us "put many products on auto release. Not only the team has more time to work on other issues, they also saw a 400 point improvement in services levels while growing the portfolio"!

Data/Information Management—SKU rationalization and the ongoing management is a rigorous process, unlikely to be of long term success without systems. Product and customer segmentation methods that work across processes from sales and inventory to supplier management are crucial, or the processes will be disjointed from the real business and won't be sustainable over time. Marx noted that "Although it is great to have all this data, it is best to present this data to the user in a way that lets them manage the business by exception." How the data is presented is critical; otherwise, people become overwhelmed. Tools to help with product hierarchy, segmentation, and demand analysis are essential to success.

Know When to Hold, Know When to Fold: Conclusions

SKU rationalization and segmentation are strategic opportunities for the enterprise. An objective review of what products to hold and sell vs. what products or markets to exit drives focus throughout the business. In addition, as pruning ultimately yields healthier trees, SKU rationalization, when managed smartly, yields top line growth and bottom line results. Likewise, applying precision to your inventory policies that consider specific channel, product and supplier attributes will boost service and synchronize inventory investments.

Both American Hotel and Intertape have experienced growth. For example, since Intertape embarked on their journey, they have increased sales with better margins, which has significantly increased shareholder value.[1] American Hotel has entered new markets, offered unique products for specific hotel properties, and managed growing complexity with better process definition and technology management to handle the routine with precision and allow their supply experts to deal with more challenging opportunities. Today, American Hotel uses the advanced analytics within Logility Voyager Solutions to automatically release more than 30% of their orders to suppliers.

Careful management has allowed both companies to also expand through acquisitions, which is a double-edged sword as far as SKU management is concerned. On one hand, it increases sales; on the other, they have to continue to rationalize the portfolios. Executives who 'make a habit' of doing acquisitions do so knowing they have the analytics to evaluate the investments, as well as post merger, the processes to assess how to gain the returns from the investment. Thus, a 'Product portfolio management' program needs to be embedded in the business and is not a process to be *buried in the depths* of a tactical team.

[1] You can read more about Intertape financial here http://www.itape.com/Investor-Relations/Press-Releases-and-Reports

Contentious and difficult issues such as cutting products/product lines or more dramatically, actually exiting a market that returns little value to the business can become data-driven discussions with the use of supply chain technology, rather than emotional opinion-driven processes. Creating the right foundation of information and then creating the right kind of 'discovery methods'—scenario and analytics—is essential.

Technology for this kind of process is a bit different and may require some additional thought on the information sources and what outcomes are required. What kind of questions should the information systems be answering? For managing the product portfolio, this includes looking at new product introduction opportunities and assessing their market viability; demand management to evaluate the current portfolio (overlaps, poor performers, and so on); and also looking at suppliers and what contributions they can make to creating a healthy portfolio of products.

One thing these two businesses clearly understood was that the vitality and growth of the business was at stake. These organizations therefore invested in technology and people with the know-how to deal with these complex yet vital issues. This is the question, often, of *who we are* as a business and *where we want to go.* So getting it wrong is not an option.

It is no stretch to claim that there are significant benefits from these types of programs—working capital, sales, margin and shareholder value. Freeing up working capital allows you to expand your existing business or go into new territories. Keeping products fresh, of high value, keeps customers interested. What could be more important than this?

Further Information:

http://www.logility.com/library/customer-videos

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