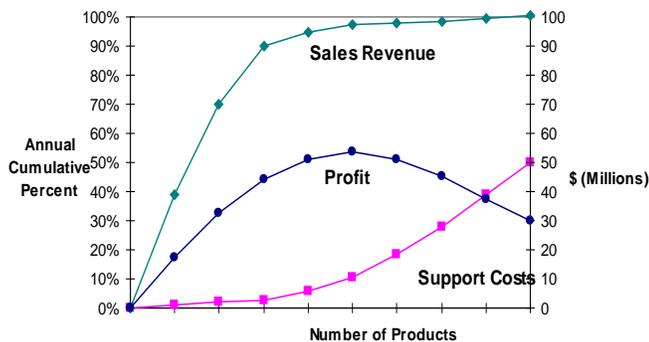


Most companies have a process for the development and introduction of new products to the market place. Yet once the product is launched, many companies do not have an established process or measurement system to optimize the financial returns of the existing product line. The absence of a proactive product management process typically results in an ever-expanding product line and ever-expanding support costs. A significant number of products will be losing money and support resources will be aligned based upon historical data instead of future plans. The support costs (factory overhead, sales, marketing, engineering, and administrative) dedicated to the existing product line are the majority of a company's cost structure. Alignment of support costs and related resources to the high return products can have a dramatic impact on the bottom line. Does this have a familiar ring? "March 1, 2008 — New CEO of Bobitt's, Inc. restructures company, cutting product line from 7,000 products to 4,500 products. December 31, 2008 — Bobitt's, Inc. announces its first profitable quarter since 2006, earning \$.25 per share on slightly lower sales."

Without a systematic product management process, many products become very low revenue/margin products and after support costs are losing money. The standard rule of thumb is that 80% of a company's annual revenue or gross margin will be produced by 20% of the products. In our pruning effort at XYZ Corporation, this rule of thumb was reasonably accurate. In one business unit 88% of the gross margin dollars were accounted for by 18% of the products.

The following graph (Figure 1) is adopted from a book *Manufacturing Competitiveness* by Hal Mather.

**The Relationship of Revenues, Support Costs and Profits**



**Figure 1**

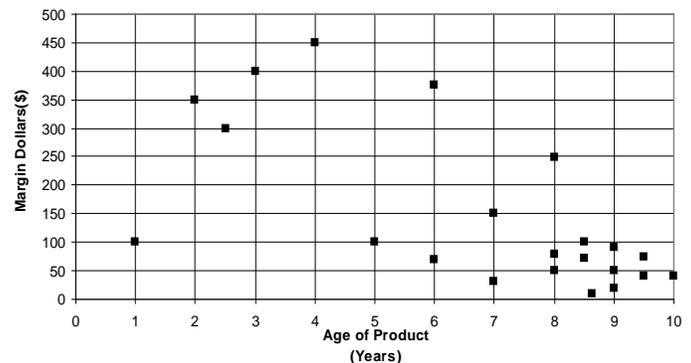
The revenue curve reflects the 80%-20% rule, with the first product contributing the most revenue and the last product the least revenue.

The support costs, which include all costs except direct material and direct labor, reflect a typical slope with the high volume/limited driving a product plan. The point is, however, that a significant profit and resource allocation opportunity can exist due to the lack of a product management policy and process.

If there are available data forecasting product cycles and related gross margin contributions over the life of the product; this data can be utilized in evaluating the future margin contributions of a product in the product management process. For example, if a product was introduced in the past year and is expected to have a ten-year product life with improving margins until year eight, the product would probably *not* be a candidate for pruning.

If a company does not forecast sales and margin contribution over the life cycle of the product, another approach is to plot the margin contribution and age of the products (Figure 2). This chart demonstrates that the products that are late in the product cycle are generally contributing little margin to the business.

**Product Life Cycle**



**Figure 2**

**Caveat Emptor...Culture Barrier**

Most companies that do not have a product management process will have a *strong cultural barrier* to eliminating products from the product line. Even after it is clearly demonstrated utilizing client cost data that certain products have a negative impact on profits you will encounter a number of arguments for not rationalizing products. Some of the more familiar are:

- This product is key to our cost base; when rationalized other costs will go up
- Product rationalization will result in a decline in revenue making it impossible for us to achieve our year-end targets

- We have key customers who require this product, therefore it can not be eliminated
- We want to offer the broadest product line possible so that our customers will not go to a competitor for a quote
- Even though the product is a loser, it is critical to our product strategy

The answers to these objections have to be carefully evaluated in each situation; however, they are in most cases an emotional justification for the lack of a product management process. Probably the toughest to deal with is the “we will lose revenues” argument. Depending on the particular circumstances, the answers to these objections are:

- Revenues will in fact decline but profits will increase
- As support resources (costs) are allocated from marginal products to high volume products, revenues from this additional support will increase sales and offset any decline

No matter how well-prepared you are to demonstrate that product rationalization makes *economic sense*, a strong cultural barrier exists. At XYZ Company, the establishment of the product management process on an ongoing basis provided cycles of learning about product management. The initial product rationalization addressed the low-hanging fruit. As the positive results were experienced from the first cycle of implementing the process, the business unit management became more aggressive in next round identifying low gross margin products and developing plans to either drive more sales or reduce the costs.

Additional data regarding XYZ Corporation products was as follows:

**Variable Margin Contribution**

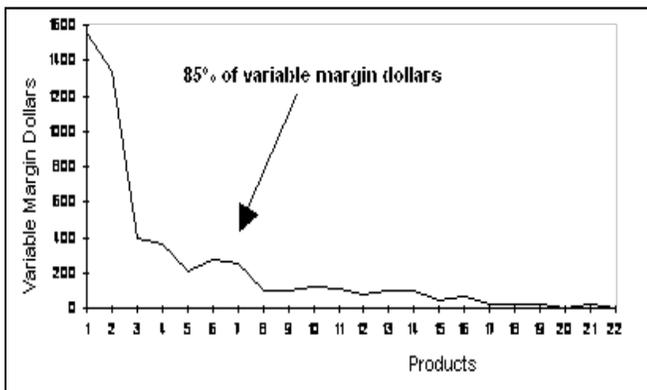


Figure 3

**Variable Margin Percentage**

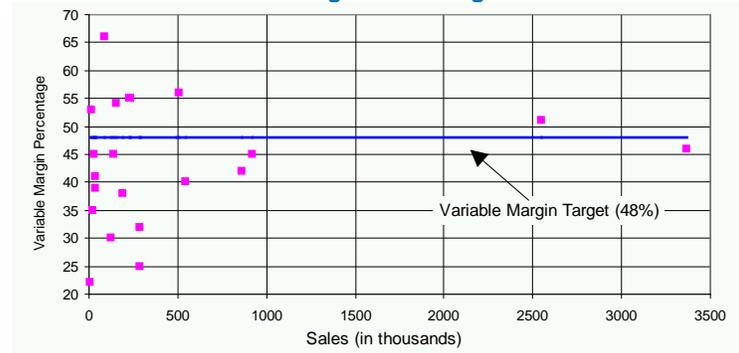


Figure 4

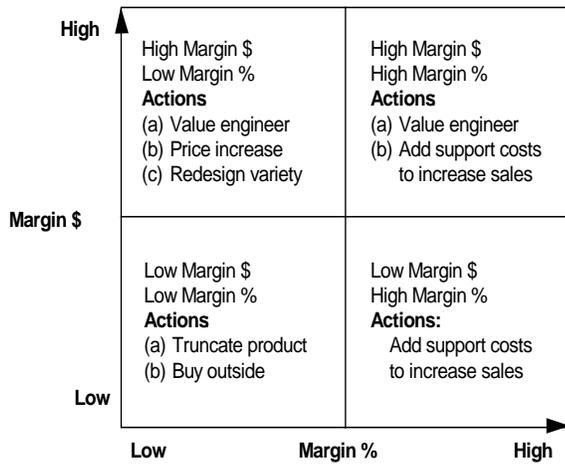
The data in Figures 3 and 4 (which represented the product line in one of the business units) indicated the following:

- Eighty-five% of the variable margin dollars were accounted for by seven products (32% of the products). The remaining 15 products contributed 15% of the variable margin.
- Eight products contributed less than \$50,000 per year in variable margin and were obviously losing money on a fully loaded basis.
- The variable margin percentage ranged from 66% to 22%.
- A significant number of products were substantially below the target margin of 48% for the product line.

The choices that exist for products that do not achieve the hurdle rate are varied; however, it is not an easy decision. Many real and imagined problems will appear as you attack product management. The choice that must be aggressively challenged is “do nothing.”

A good tool to help the team focus on pruning actions is to develop a pruning matrix as indicated in Figure 5. This approach utilizes a scatter chart to plot all the products in the product line and focuses actions on products that have potential for increasing margin dollars or improving the margin percentage to move these products to the upper right of the quadrant.

**Margin Improvement Matrix**



**Figure 5**

**Bottom Line**

The gross margin opportunities of a proactive product management process are significant at most companies, but to actually drive the impact of effective product management to the bottom line requires a very clear understanding of the product strategy and the identification of costs specifically related to products both direct and support costs. The strategies could consist of a number of actions that would enhance gross margins as follows:

- Plot all the products and focus actions on products that have high gross margin \$ or high margin %
- Can low gross margin % products be improved by price increases or cost reductions?
- Can sales of high gross margin % products be increased by introducing into a new market
- Redesign to achieve variety without adding cost
- Do not tie up assets on low margin products – buy and resell them
- Sales/marketing resources reapplied from low gross margin \$/low gross margin % products may accelerate entry into new markets

The identification of costs and assets related to specific products will *not* typically be identified neatly in the accounting records. Therefore, it is critical to identify the product, the strategy, and the expected specific impact related to the product management action plans in order to ensure that the hard work of an effective proactive product management effort is actually achieved on the bottom line.