Issue in Focus: The ROI of Product Portfolio Management

The “How to Guide” for Predicting Return on Investment for PPM
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Introducing the Issue

A headline in BusinessWeek stating “Chrysler and the Innovation Basement” in 2007 may not have been a surprise. More recent statements such as Sony’s CEO public declaring an innovation problem and declaring that “Sony Corp is focusing on innovation as the next phase of its recovery, pinning its hopes on new products with the wow factor” might raise a few eyebrows. Sony, by most counts, is an innovator. Likewise Forbes’ article on “Motorola’s Innovation Problem” shows how the mighty can (and do) fall if they are not focused on properly managing their product portfolios.

What these companies are likely experiencing is a poorly balanced portfolio, one that does not properly balance the investment in innovative new products with enhancements and extensions of existing products. Many companies recognize the need to improve their product portfolio management (PPM) processes even without a crisis in their headlines. These companies want to improve the way they identify, select, and oversee the collection of products that they take to market. They can rightfully expect to achieve higher levels of profitability through a number of means, including:

- Selecting higher value products
- Making better – and more timely – decisions to correct or cancel product development projects with limited return
- Improving time to market
- Improving product development efficiency
- Aligning their product portfolio with company strategy
- Balancing product development work with available resources
- Balancing the risk in their product portfolio

This “Issue in Focus” is intended to help guide companies in developing a realistic ROI based on a conservative financial model

Manufacturers recognize that these operational improvements will help improve the profitability of their product portfolio and the value provided by new products. These companies are frequently challenged, however, when they are required to develop a credible, supportable financial model to determine the benefits of the intended improvements. This “Issue in Focus” is intended to help guide companies in developing a realistic ROI based on a conservative financial model.
Calculating the Benefits of Product Portfolio Management

One interesting aspect of the goals stated above is that they include both top-line and bottom-line benefits. Grossly simplified, product profitability is equal to the sales revenue for the product less the product cost. Expanding this view to a product return on investment (ROI) takes into account product development and product launch costs. Product Lifecycle Management (PLM), and Product Portfolio Management (PPM) as a subset, addresses both sides of this “profitability equation.”

The benefits calculation for PPM should include both revenue enhancement and cost reduction. While cost savings are often calculated, many companies choose to reinvest product development cost reduction into product innovation and product development. This provides additional investment for top-line, profitable growth.

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Growing the Top Line

The primary top-line benefits from improved portfolio management come from revenue enhancement (growing the top line) and margin lift (growing percent profit). These are significant business benefits that translate directly to the bottom line.

- Selecting better portfolio mix resulting in more competitive products in the market, raising market share and resulting revenue
- Accelerating time to market means a larger percentage of revenue from new products, where new products capture premium prices and drive higher margins

In essence, PPM drives both higher sales volume and higher profit margins from those sales. Aberdeen Group’s Product Portfolio Management benchmark from August, 2006 points out the advantages PPM can bring to product margins, indicating that “companies that are best in class at product portfolio management are four times more likely to achieve margin premiums of 75% or higher from new products.”

In essence, PPM drives both higher sales volume and higher profit margins from those sales.
Calculating Cost Savings

In addition to growing the top-line, PPM also helps companies improve the bottom-line through cost reduction. These cost savings come in the form of reduced product development expenditure, which can be captured and transferred directly to the bottom line. Alternatively, many companies choose to recognize the cost savings by applying the newfound resources to accelerate more valuable products or to invest in more R&D and new product development. Cost savings come from a combination of sources, including:

- Avoiding expense of initiating non-strategic projects
- Avoiding cost through early termination or correction of low value or floundering projects
- Reducing labor cost by more effective resource planning and improved staff utilization, reducing project clutter and resource “thrashing”
- Improving efficiency of the strategic planning process

**These cost savings come in the form of reduced product development expenditure, which can be captured and transferred directly to the bottom line**

Incorporating the “Soft” Benefits

The benefits discussed above are tangible benefits that can be tracked and connected to bottom-line financial impact. In addition to these benefits are a series of “softer” but highly strategic benefits. While it is very hard to track soft benefits directly to the bottom line, they may provide even greater value to the corporation. For the purposes of developing an ROI, however, most companies will recognize a substantial return on investment without including these less tangible benefits:

**While it is very hard to track soft benefits directly to the bottom line, they may provide even greater value to the corporation**

- Reducing portfolio risk prevents major disruptions and unpredictability in revenue, which helps with corporate valuation
- Improving the ability to gather data and execute more frequent planning cycles, moving from traditional annual cycles and allowing the company to be more responsive to customer and market dynamics
- Conducting more frequent portfolio reviews to drive midcourse portfolio optimization based on current project status and expected value
- Increasing budget and timeline accuracy results in greater predictability and less “fire fighting”
• Providing better portfolio visibility throughout product lifecycle (ability to cut product/projects, early in the process, not meeting target schedule, budget, and market requirement goals)
• Adopting a faster, efficient and more visible strategic planning process
• Implementing consistent project methodologies across the organization, enabling the use of best practices and continuous improvement
• Improving requirements change management processes ensures that customer and market requirements are always met
• Enabling better product/project decisions through visibility of all initiatives, its weighted importance to company strategy, cost, return, resources
• Spending less time on gathering data and fighting about which version is accurate through automation and centralization

Example
The following example is a sample benefits calculation using a fictitious company. The data used is based on real experience with industry companies and actual benchmark data, and has been derived to provide a realistic example. The benefits for your company will vary based on your unique industry, market, company, and your current portfolio management maturity.

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In order to make this example as realistic as possible, we have gathered some base financial information from census and benchmark data. For the purposes of this example, we will use the following assumptions:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
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<tbody>
<tr>
<td>Company revenue</td>
<td>1 billion</td>
</tr>
<tr>
<td>Revenue from new products</td>
<td>15%, or 150 million</td>
</tr>
<tr>
<td>Net profit margin on products</td>
<td>5%, or 50 million</td>
</tr>
<tr>
<td>R&amp;D spend as a percent of revenue</td>
<td>5%, or 50 million</td>
</tr>
<tr>
<td>Percent of NPD projects failing</td>
<td>50%, or 25 million</td>
</tr>
<tr>
<td>Cost of NPD spend early in lifecycle</td>
<td>50%, or 25 million</td>
</tr>
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Table 1: Sample Data for Fictitious Company
Given these highly conservative assumptions, and using a similarly conservative approach to define the improvement opportunity available, the following benefits can be achieved through PPM by our fictitious company.

<table>
<thead>
<tr>
<th>Area of Improvement</th>
<th>Base $/€</th>
<th>Improvement</th>
<th>Increased Profit $/€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased revenue by 10% through increased market share</td>
<td>1 billion in revenue</td>
<td>10%</td>
<td>100 million in new revenue, 5 million in net profit</td>
</tr>
<tr>
<td>Increase percentage of revenue from new products by 60% (conservative margin advantage for new products is 10%)</td>
<td>150 million new product revenue</td>
<td>60%</td>
<td>90 million in revenue converted to higher margin revenue, resulting in 9 million in new profit</td>
</tr>
<tr>
<td>Higher margin advantage for new products (conservative increase from 10% to 20% margin advantage, or 100% increase)</td>
<td>150 million new product revenue</td>
<td>100% margin increase</td>
<td>15 million in new profit</td>
</tr>
<tr>
<td>Cost savings from killing failing projects</td>
<td>50 million, 25 million on failures</td>
<td>kill 20% of failing projects, saving 50% of spend on each</td>
<td>2.5 million in direct cost</td>
</tr>
<tr>
<td>Improve product development efficiency by 5%</td>
<td>50 million</td>
<td>5%</td>
<td>2.5 million in cost savings</td>
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| Total Profitability Improvement | 34 Million |

Table 2: Sample Improvements from PPM
Source: Tech-Clarity, 9/2008

Note 1: Example was based on US Dollars or Euros, and might require scaling to your currency
Note 2: R&D spend, net profit margin, and percent revenue from new products are highly dependent on industry
Note 3: Percent of NPD projects failing is conservative, most benchmarks exceed this
Note 4: Cost of NPD spend early in lifecycle is conservative, many companies spend significantly more in later stages of product lifecycle
Recommendations

- Understand both the hard financial benefits and the soft benefits of implementing PPM
- Develop an ROI statement based on a combination of increased revenue from higher sales volume and margin lift alongside reduced costs from efficiencies, better resource utilization, avoiding spending on low-value projects, and improved efficiency.
- Use the example above to calculate the benefits of your PPM initiative, adjusting the financial assumptions to your company, industry, and geography
- Use the example above as the basis for the return on your PPM investment, factoring in software and implementation costs to develop a full ROI
- Adjust the financial improvements based on your level of PPM maturity. If you have a highly mature PPM process, you may already be operating at a high level of maturity and your results may be lower. Likewise, if you are operating a low level of maturity then your results may be higher.

About the Author

Jim Brown is the President and founder of Tech-Clarity, an independent research and consulting firm that specializes in exposing the true business value of software technology and services. Jim has over 20 years of experience in application software for the manufacturing industries, with a broad background including roles in industry, management consulting, the software industry and research spanning enterprise applications such as PLM, ERP, SCM and others.

Jim is an experienced researcher, author and public speaker and enjoys the opportunity to speak at conferences or anywhere that he can engage with people that are passionate about improving business performance through software technology.

Footnotes

1 BusinessWeek, Jessie Scanlon, August 8, 2007
3 Forbes.com, Jack Gold, February 1, 2008