Product Profitability Analysis
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Abstract: This paper summarizes how product profitability analysis can help make better decisions in marketing and product management. A brief case study is included.

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1 Introduction

Spreadsheets led the “desktop revolution” that freed business experts to experiment and self-serve with less dependence on IT professionals. A Customizable Spreadsheet Solution is a spreadsheet model that you can adapt to your situation by filling in a simple form, without editing a spreadsheet or its formulas. You get a customized spreadsheet that matches your needs better than any conventional template. In small to medium-sized companies, a customized spreadsheet solution and the necessary input data are often all that you need to get estimates of product profitability that can help you make better decisions in many parts of your business.

2 Case Study

2.1 Case Situation
A company with many products had to allocate resources (most importantly product development headcount) to existing products. As the company grew, top management no longer knew all the products well enough to “guesstimate” product profitability. Product managers in marketing and development sometimes felt that resource decisions were subjective or determined by communications skills instead of business substance, and they often did not buy in to decisions to deny their headcount requests.

2.2 Challenge
The first challenge was to assemble the input data and to compute product contribution margins.

The second challenge was to coach management on how to use product profitability information in decision-making while balancing it with strategic factors and opinions of experienced experts. The importance of profitability in making investment decisions depends on the strategic situation.


1 This paper: http://templates.modelsheetsoft.com/my/getfile.aspx?name1=whitepaper-product-profitability
The third challenge was to use the analysis to identify goals for product teams that significantly improved customer satisfaction and financial results.

2.3 Solution

The marketing, development and finance departments collaborated to produce product contribution margins. The key elements of cost were product development staff, dedicated marketing staff, and customer support staff.

2.4 Case Outcome

The company introduced product contribution margins into the resource planning process. The analysis revealed some surprises. The biggest surprise was that all software products that interfaced with hardware (e.g. boards) or operating systems had low margins because of the cost of customer support services.

Management learned when to make headcount decisions based on profitability, and when strategic considerations overrode profitability (for example, a product with very high growth rate would probably be forgiven for losing money).

The analysis was used extensively in semi-annual headcount allocation meetings. If management denied requests for resources for an existing product, the project champions knew why, and they knew what to do about it – either raise the contribution margin, or articulate a strategic rationale for the added resources that trumped the profitability metric. These factors improved the acceptance and perceived legitimacy of numerous resource decisions.

Management made good use of the support cost information outside of the resource planning meetings. If product contribution margin was low, and support cost was driven by installation problems, then the development team was assigned the goal of improving installation. If customers did not understand some product features, the designers and documentation writers were assigned the goal of reducing customer difficulties with these features.

3 Spreadsheet Solution

Spreadsheet applications can analyze product profitability for a product line of several hundred products. The ModelSheet application “Product Profitability” computes contribution margins for a line of products by deducting cost of sales and allocated expenses in three departments from product revenues.

a) Cost of sales
   - Cost of goods. You can specify cost of goods as a combination of cost per unit, percentage of revenue, and fixed period cost. Cost of goods is segmented by manpower costs, program costs and overhead costs.
   - Royalty expense. You can specify royalties as a combination of cost per unit, percentage of revenue, and fixed period expense.

b) Operating expense
   - Engineering expense. You can specify engineering expense in terms of equivalent staff headcount, programs expense, and overhead.
   - Directly attributable marketing expense. You can specify marketing expense in terms of equivalent staff headcount, programs expense, and overhead.
   - Customer support expense. Customer support is often the most complicated area in which to allocate expense to products. The model includes a distribution of support call times. It also allows you to track support expense by support issue (such as installation, maintenance, applications assistance).

In each department, you can specify hours and manpower costs for several job levels.

Each customized spreadsheet comes with a Quick Start Guide that gives you terse, step-by-step instructions on how to turn your spreadsheet into a profitability analysis of your products.

Product C has a very low contribution margin %, in spite of a healthy gross margin %, because its support costs are too high. Also, Product B started with a low contribution margin % and recovered, because its expenses stayed relatively constant as its revenues more than doubled.
4 Conclusion

The Customizable Spreadsheet Solution for Product Profitability can help you estimate product profitability. This is powerful information for making business decisions in many areas.

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