

Marketing Emerging Technology Products: The Customer Buyer is Always Right!

Badri Lokanathan

In a study of 197 product innovations (including 111 successes and 86 failures), investigators analyzed factors that could serve as predictors of new product success or failure.[§] Not surprisingly, the successes had some or all of the following characteristics:

- They were moderately new to the market
- They were based on proven technology
- They saved money
- They met customers' needs
- They supported existing practices

The investigators also correlated six identified *idea factors*, or where the ideas for the innovations came from, with the success-to-failure rate of the innovations. Their conclusions are illuminating:

- Trend Following (3x likely to fail)
- Mental Inventions (3x likely to fail)
- Need Spotting (2x likely to succeed)
- Market Research (4x likely to succeed)
- Solution Spotting (7x likely to succeed)
- Taking advantage of random events (13x likely to succeed)

The results of the study strongly suggest that products driven by market/customer needs or events are far more likely to succeed in the market place than those driven by creative invention alone. Although identifying such needs or events is typically a product-marketing responsibility, product marketing is an afterthought for most early stage companies. This is especially the case with companies that are developing products based on new technologies. Frequently, technologists are over-enamored by their technology and turn a proverbial Nelson's eye to the reality that buyers need and expect much more than half-baked gizmos. The consequence of purely technology-driven development is usually a hard to sell product because it does not address the real needs of the customer. By the time the company decides to bring in a product

marketing team to address the needs of paying customers, it is usually too late.

The Roles of Product Marketing

Product marketing has three distinct roles:

1. Guiding product development towards genuinely meeting customer needs,
2. Producing marketing collateral and sales tools for building customer awareness, and
3. Setting up sales channels in which the product is likely to succeed

Good execution on all three fronts is vitally important for a product to succeed in the market.

While it is obvious that market needs should drive product development, identifying true customer needs is often not easy, especially when new technologies are involved. Customers typically have a hard time identifying, communicating, and/or prioritizing their most pressing issues. Product companies having foresight will anticipate this problem and address it by making marketing an ongoing effort in parallel with product engineering. Underestimating the time and commitment required to market a product is a common mistake of technology-oriented companies.

Are You Developing Product or Technology?

Early stage companies often confuse technology development with product development. If you have entered a product development phase, ask yourself the following questions:

- Can you list the buyers of your product?
- Have you talked to potential users of your product? Are they fully representative of the market that you wish to address?
- Have you identified what the product will do and even more importantly, will not do – or are you hesitant to postpone new functionality requests to a future release?
- Have your potential customers explicitly advised you of the immediate value that your product can provide them? (Conversely, are you aware of features that are not of immediate customer interest?)

[§] Goldenberg J., Lehmann R. Donald, and Mazursky D., "The Idea Itself and The Circumstances of Its Emergence as Predictors of New Product Success", *Management Science*, Vol. 47, No. a, January 2001, p. 69-84.

- Can most, if not all of the features that your team is currently implementing, be traced to clearly expressed customer needs (or even better, do you have a letter of intent to purchase if your product meets those needs?)
- Do your product feature milestones map into potential purchase orders?
- Are you prepared to demonstrate your product to your potential customer in the customer's environment?

If the answer to one or more of the above questions is no, chances are that you are not entirely prepared for product development and are still developing technology. A clear distinction can be made between these two phases:

An internal research and development (R&D) team typically drives the technology development phase, which serves as a feasibility test bench. Any prototypes or mock-ups developed are for demonstrating the capabilities of the technology; they generally are not and therefore should not be regarded as product prototypes.

If technology development can be viewed as driven "inside-out" by technologists within the company, then product development should be viewed as being driven "outside-in" by market and customer needs.

What Is a Market Driven Product Development Process?

Product development begins with a product concept, followed by a product specification. On paper, this may initially look like a potential product buyer's Christmas wish list. Product marketing, based on interactions with the market place, maps customer needs into a functionality requirements list that is classified in categories such as must have, good to have, should not have. The product engineering team then develops an implementation specification that meets the requirements in the product specification. Product development commences only when the marketing and engineering teams agree upon the match and feasibility of the two specifications. Critical decisions such as build versus buy, project budgets, marketing budgets, and early sales objectives, are made before starting product development. Product development will include not only engineering development tasks, but also several concurrent marketing tasks:

- Monitoring the market and potential customers to continually validate the product specification

- Ensure that engineering progress tracks the product specification
- Develop marketing collateral such as datasheets, white papers, documentation, and training programs
- Develop publicity programs such as tradeshow, advertising campaigns
- Build sales channels for taking the product to the buyer

Most successful product development programs will have elements of all of the above-mentioned marketing efforts, although the amount of effort for each of these tasks varies depending on the market and the product.

Proof of the Pudding

Economics dictates that the product objective should be to attract the largest possible amount of revenue while minimizing costs of development, sales and support. Typically, at the beginning of a development project, management has to make a strategic choice of product direction from among several possibilities, with differing cost/revenue implications. Selecting the target market segment and identifying representative customers is a critical decision factor. One of the myths of business is that the customer is always right. Some "customers" can be wrong – for your business – and it is critical that these customers do not have undue influence on product development. Customer needs differ and it is usually impossible to satisfy everybody. Besides, *there always will be customers who, for an assortment of reasons, cannot or will not buy your product.* Focusing on customers who need **and** will buy the product will maximize chances of product success.

Recipe for Product Success

The key to successful customer-need driven product development is to start market planning before, and continue concurrently with development. Typically, product-marketing schedules are dictated by variables outside the control of a company: very rarely does a company have the luxury of imposing its will upon the marketplace. Market planning is a necessity, not a luxury. It is affordable when worked early into the product development cycle: delaying the market planning process can only make it more expensive and ineffective, thereby jeopardizing chances of success.