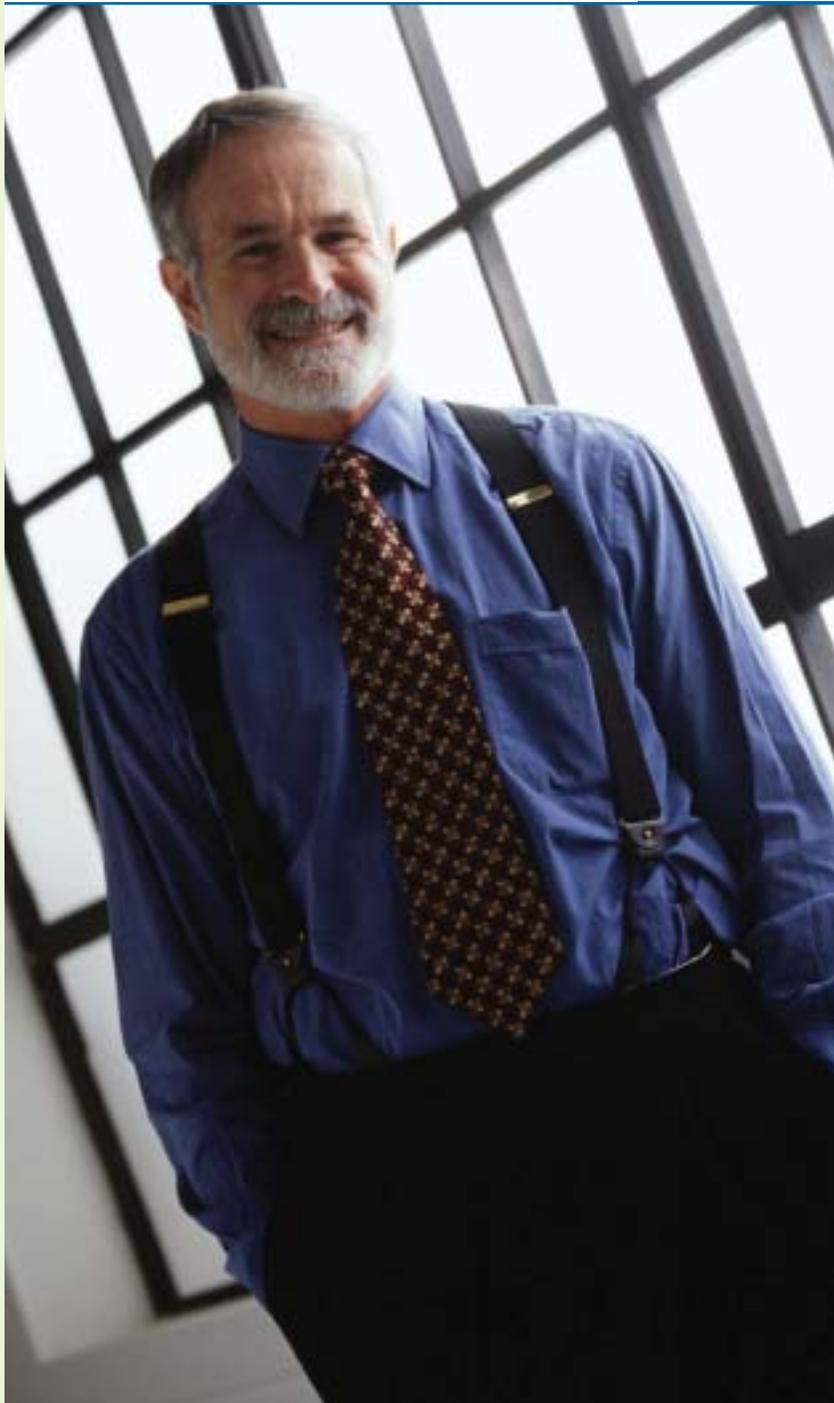


New product



Every aspect of business today must focus on maximizing returns and minimizing risk. Nowhere is this more prevalent than in new product development. Best practices must be followed. However, just as important is the order in which each set of best practices is executed. Also, it is essential to distinguish between new product development and product lifecycle management. NPD is from concept to about three years post launch. PLM overlaps this and extends to the end of the sales cycle. In certain cases, it can extend even further (parts management).

One of the business world's most respected consultants, Bradford Goldense, recently shared some of his insight with me. He counsels that the following steps, in specific order, are imperative in optimizing the new product development process. The process can be broken down into three phases, or benchmark periods.

1- Capture the concept in its rawest form on paper. This may sound simple and obvious, but you would be surprised at how many do not fully commit their concepts to writing, or, delay doing so. Every aspect of the concept must be detailed.

2- Use Voice of Customer (VOC) to make sure you understand the market requirements or customer requirements. In other words, bring the concept to a test batch of consumers. Have them tell you if it meets their needs and if not, what needs it does meet and what must be changed in order to optimally meet their needs.

3- Separate active product requirements and product specifications. Active product requirements are the human element and set in customer terms; product specifications are the technical side (math and facts).

development

Key Elements for Success

By: JM Schuler

Some think that getting senior management buy-in is most important. Many even think it should be the first or second step taken. However, the current best practice methodology, through execution, has shown otherwise. Once steps 1-3 are finished, Phase 2 may commence.

4- Assess Technical Feasibility and Market Feasibility. Can the project be accomplished with technology at hand? Will additional employees be required to produce it? Is there a worthwhile and ready market for the product? What are the barriers to entry into the marketplace? What kind of competition is there or will there be and when can competition reasonably begin?

5- Early Up-Front Product Pricing & Costing. Outsourcing is a best practice imperative. As early as possible, all vendors, suppliers and outsourcing partners should be brought in for consideration.

6- All Pre-Final Product Approval. It is critical to handle this now and not later. One of the biggest mistakes companies make in the development of any new product is the delay of this phase.

Another key element in new product development is the use of electronic testing and imaging. The old, "make and break" model simply is not feasible anymore. If a company does not have the expertise or technology to handle this, outsourcing is strongly advised.

In order to develop a properly structured design

proposal best practice, three different meetings need to take place. This follows its own best practice in establishing optimum product decision-making. There must be a "go – no go" at each step. Also, the more input from those that are ultimately involved in the product lifecycle management, the better.

The next phase focuses on creating the prototype. 7- Electronically analyze simulations of the product to discern design flaws and production shortfalls. This prototyping step is usually called build and break. However, for obvious reasons, creating it electronically saves critical time, money and resources. The only area where product simulation does not approach 100% accuracy is in the area of RF/Analog devices. While technology is close and approaches perfection, it not quite there yet.

8- Early proactive review of Design. This is human work and input vs. the computer. Once the product is built, it becomes quality control.

9- Outsource the building or design building technology. At this point all suppliers must be on board. It is highly recommended that all suppliers and outsourced partners are included in this process at pre-development approval, or even day one, but no later than here.

At this point, if you have a final "GO" on the product, begin the pre-launch. Determine your test markets, final product price and finalize all of the "who, what and where's."

While all of these steps and phases are important, they can all go for naught without follow-up. At one, three and in some cases five-year intervals, review reality vs. your simulations and expectations. See how close your NPD program came to the mark. This way you can revise your systems and increase accuracy and assurance of success.

As mentioned earlier, outsourcing is a business imperative. One area in NPD as well as PLM where outsourcing works wonders is business practice consulting. There are a myriad of companies and individuals in place to help. I incorporated the time and expertise of Bradford Goldense in helping to craft this article. Mr. Goldense is recognized as the leading expert in this field and is often a keynote speaker at major industry conferences. His work can be found at the Product Development & Management Association (PDMA) website. Visit the PDMA website (www.pdma.org) and www.goldensegroupinc.com for a list of advisory services, seminars, speaking engagements and credentials.

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