Build Products That Don't Come Back

For Customers That Do

Three questions asked early and often during product development lead to customer satisfaction, market leadership and profit.

Have you ever been so frustrated with an electronics product that you uttered under your breath, "Who built this junk, anyway?" Maybe it had a complicated user interface, weak batteries that failed quickly, or a flimsy case that came apart in your hand. Even worse, maybe the product just didn't do what it was supposed to.   Whatever the reason, you won't be buying that brand again, and you may well pass on your bad tale to others. This is the nightmare scenario for the vendor who has spent huge effort convincing you to buy their product, only to disappoint you and turn a potential advocate into a probable critic.

For product development companies it is imperative to avoid this outcome, and there are many marketing tools to help: focus groups, beta tests, field trials.   Building products that bring customer satisfaction is everything and engineering plays a critical role in achieving that goal.   Guaranteeing customer satisfaction begins early in the product concept phase with three essential questions.

First, **"*What problem am I trying to solve?*"**

This question must be asked early and often; the response must be simple and clear. If the response is not simple and clear, then the problem is not worth solving and most likely there is no market for your product.

The answer to this first question must remain constant during development, and all aspects and features of the product must flow from it. The electrical functionality, the mechanical packaging, the user interface are all aspects of the product that solves a real world problem. Should the technology become more important than the product, the focus is lost, as is most likely the profit.

This is the first step in how we build products that don't come back for customers that do.

Innovation is about finding new ways to do things. Where innovation turns into profit is where a real world problem is solved in a new way, and the customer deems this new solution is worth paying for.

To achieve this next goal ask, *"Can I solve this problem in an affordable way?"*

The answer to this question must also be formulated early in the product concept phase. Building a beautiful product that solves the problem but is too expensive for the customer is a fundamental pitfall. There is little to gain from "designing a Cadillac when a bicycle will do,'' especially if the customer won't pay for it. Target costs for the bill of material, and engineering and manufacturing budgets need to be set early and kept on track as the product moves through the development cycle. Lower product cost is considered better, but not at the expense of the customer's experience.

This is the second step in how we build products that don't come back for customers that do.

Finally, we must ask, *"When do I need this?"*

Not surprisingly, this too must be answered early in the product concept phase. The default answer to this question is, "I need it yesterday," and often that is true. By the time a real world problem is apparent (the answer to our first question), a real world solution is already needed. In many situations the lifetime of profitable opportunity is short and mandates a speedy "concept to completion" development cycle to reach the market on time. To deliver profit from innovation, engineering development must keep on schedule as part of the critical path to a successful product. On-time execution leads to solving the customer's problem at an affordable price in a timely fashion.

This is the final step in how we build products that don't come back for customers that do.

As simple as all this may sound, it is not easy to keep the focus on these three fundamental questions as a complex product evolves. A testament to this is the amount of technological junk that frustrates us in daily life and in business.

Take action on this and your results will improve. You'll have more products that won't come back for more customers that will.

Egret Technologies is a superior electronic design partner to global vendors of technology products. We are an innovative, solution-driven, US-based engineering design firm specializing in optical, electronic, and mechanical hardware, as well as embedded software systems. We provide concept development, product design and project engineering. Contact Egret Technologies at (954) 518-9645 or Innovate@EgretTechnologies.com