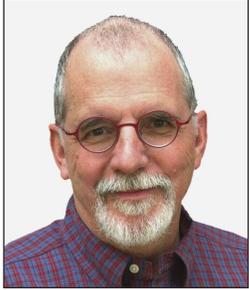




## Four myths exposed when developing products with time and materials estimates.



There are two ways to contract for design and engineering services: fixed price and time and materials. The former can give the purchasing department an idyllic vision of security and control, while the latter offers a vision of mayhem and runaway costs. When competing product development firms use different methods to bid on

the same project, uncertainty and false expectations can overshadow the real benefits of a well-considered time and materials estimate.

Purchasing departments want to capture all project costs with fixed bids to avoid issues like budget overruns. It sounds like a worthy objective, but from the beginning we've known that it is in our customers' best interest to specify a time and materials bid when developing a complex medical product. Here are four typical opinions purchasing and project managers have when choosing between fixed price bids and time and materials estimates:

### **Myth 1: "Time and materials contractors run amok, prolong the project, and hold us hostage."**

**Reality:** Yes, it happens, but developers who routinely lengthen the duration of projects tend to not stay in business. Old fashioned word-of-mouth, the Internet, and social networking expose the reputations of unscrupulous contractors, warning-off new customers.

Successful development companies deliver customer satisfaction by promoting a straightforward relationship with their clients. Frequent status meetings with the client, and weekly activity summaries are tried and true methods of sustaining this relationship. We work at the direction of our clients as a team, and communicate with checks and balances to insure we are on the right track to do what they hired us for.

### **Myth 2: "Keeping a time and materials project on time and under budget is impossible."**

**Reality:** Staying within an agreed budget is important for both parties. Our customers don't want un-planned bills, and we want to do business with them in the future. Monetary and time goals can be met if two key ingredients are addressed before starting a project: 1) A clear project definition with a description of what the bid actually does and does not cover, and 2) A realistic budget should be based on real world experience, not a sum of what needs to be done.

Both key ingredients refer to the confusion and misunderstandings that can occur when either our team or our customer doesn't fully appreciate the scope of the project. This is when bids from competing companies can be helpful. If two product developers bid on the same project, and there is a significant difference in their estimates, it's a yellow flag: Someone doesn't have a complete grasp on the overall scope, and it needs to be cleared up before anyone starts working (or paying).

### **Myth 3: "I need to know exactly what a program is going to cost to effectively manage it."**

**Reality:** Accurately predicting a fixed price for something that has not been done before is nearly impossible. There are too many variables like erratic marketing mandates, patent revelations, unforeseen design opportunities, component obsolescence, and not the least of all, the limitations of physics. Each can significantly impact the cost of a development program.

At best, a cost prediction is an educated guess based on available information, and things almost never go exactly as planned – that's the nature of developing new and unique products. On the other hand, breaking a project down into logical phases and establishing working budgets for each, is both practical and useful. Bottom line, budgets need a level of flexibility.

### **Myth 4: "If there are changes to the project scope, we'll just ask for a re-quote for the new work."**

**Reality:** Revisiting the project definition, recurrent proposal writing, purchasing negotiations, and sorting new P.O.'s result in non-productive reporting overhead. Re-working activities like this don't contribute to the task at hand and should not be an added burden for the people (the client and the contractor) who are trying to do the job. Of the two types of estimates only a T & M relationship allows for flexibility. If a new need arises, it is addressed and handled. It's as simple as that.

In summary, when working under a time and materials agreement, a simple process of weekly progress reviews, weekly billing reports, and close customer participation in the development process insures project transparency for all involved, and expediently allows the work to be completed in timely manner.