

Project Change Orders: Happy Customers & Effective Change Control



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Summary: Badly handled change orders cause not only overruns on budget and duration but also undermine customer/user satisfaction. The article details the mistakes project managers make on change orders and describes a methodology for doing it the right way.

On far too many projects, the project manager cannot control the scope of the project. As a result, the PM faces a never-ending stream of additions that begins five minutes after the project plan is approved and continues right up until the completion date. Often, change control works something like this.

A Change Control Story

A project manager runs into a customer in the parking lot and the customer says, "Our project is really coming along well but I do need to add a couple of things." At this point, the customer hands the project manager a page from a yellow pad with 35 items on it and then continues, "These items are really vital to what we're trying to achieve on our project."

The project manager responds looking down at the piece of yellow paper, "Oh, we couldn't possibly make any additions at this point. The due date is in danger now and if we keep adding things we'll never hit it."

The customer says, "But these are necessary! Without these additions, this whole project will certainly fail. Besides, these were really part of the original requirements. You must have missed them."

Project manager replies, "I'm sorry but these items were definitely not on the original list of requirements or I would have included them in the project plan. Besides, we don't need to add them for the project to be a success."

The customer snaps back, "I'm the one who's doing this work and I know what's necessary." The customer points to the yellow sheet of paper and says, "If we don't do items 1- 6, I think we will be in violation of state law. Items 7 -14 are an absolute technical necessity for this project. The rest of the items on the list are essential if we're to maintain competitive levels of customer satisfaction." The customer takes a breath, smiles and says, "These items really won't take much work so they shouldn't hurt the schedule or the budget, except maybe a little. I know you can squeeze them in."

The project manager counters with, "I beg to differ. These items will have a tremendous impact on our completion date and the cost of this project. And those overruns won't be my fault because these items were never in the requirements."

The customer says, "I distinctly remember telling you about these items and so do several of my subordinates. Now if you won't add these items to the project schedule I'm going to have to bump this problem up the line to my boss."

With One of Several Endings...All Sad

At this point, the story can take several different twists. In the first twist, the project manager wants to avoid conflict and agrees to add the items. The project manager knows from experience that support will not be forthcoming from higher levels because the project manager cannot make a case about the impact of the changes or prove that they aren't a necessity for project success.

Second, most projects have vague and un-measurable scope definitions. They are often so vague that stakeholders can make a case that a tunnel underneath the Pacific Ocean was in the original scope. As a result, the project manager can never win the argument about what was and what was not included in "the original scope." Therefore, the project manager caves in and adds the items to the project.

In the third twist, the project manager lets the customer escalate the problem to higher levels. A few days later, the project manager gets a phone call from his or her boss who says, "I just heard from the vice president who chewed me up and down about our project managers not being responsive to customers. Why are you stirring up trouble with the customers? We need their support!"

The project manager answers, "But they want to add a couple of dozen features that were never in the original requirements. That's gonna push us way behind!"

The boss makes a few soothing noises and then says, "I'm sure you can squeeze a few additional items into the project without doing much damage. It's important to have good relations with those customers."

The project manager says, "I'm trying to be customer-oriented but those changes could set us back a couple of months and cost lots of money."

The boss says, "Can you show me exactly how much this will put the project behind schedule and how much it will cost so I can show the vice president?"

The project manager thinks for a long moment and says, "Well, it'll take quite a bit of time to put that together."

The boss grunts in exasperation and says, "I need something to show the vice president today. So you'd better just add the changes they want and have everybody work harder, use your leadership skills."

Those are three sad endings. Now lets see the correct way to handle change orders.

Control Changes and Have Happy Customers/Users

When we at 4PM work with companies doing projects for outside customers, we get a quick fix on the strength of their project management processes by exploring the profitability of client change orders. If change orders are a source of profit, instead of loss, it's because the project management and change control processes are strong. And the customers are most often happy and a source of ongoing revenue.

For organizations performing projects for internal customers, assessing the change management processes is a bit more difficult. We look at the frequency of changes to project budgets and finish dates due to change orders. Then we talk to the project sponsors and stakeholders about their satisfaction with the project management process. Interestingly, project managers who add lots of features to projects without compensating changes to the completion date and or budget do not get high levels of customer/user satisfaction with their projects. They have both dissatisfaction and lots of overruns.

Organizations with high success rates in terms of on-time and within-budget completions have good change control and make changes to the budgets and the schedule when they add new requirements. They also have more satisfied customers/users.

One key to this success is project planning that develops quantifiable and verifiable definitions of the project scope in terms of the business benefits the project must produce. That kind of scope definition lets project managers win the argument about whether changes are necessary to project success. When the customer/user has agreed to a very specific and quantifiable scope definition, the argument about whether or not something was included largely goes away because everybody knows what was originally included.

Another key to success is that project managers have the tools to quantify the impact of a change. They need to be able to quickly estimate and then model in project software exactly what effect a change will have on a project's cost and duration. With this modeling capability, the conversation with a customer/user is quite different. Let's review that situation.

Change Orders Handled the Right Way

A customer stops in at a project manager's cubicle and says, "Our project is really coming along well but I do need to add a couple of things." At this point, the customer hands the project manager a page from a yellow pad with 35 items on it and then continues, "These items are really vital to what we're trying to achieve on our project."

The project manager looks down at the piece of yellow paper, "OK, let's look at the impact of these items," and opens the project schedule on the PC. The customer and project manager discuss the changes and make some rough estimates. Then the project manager models the impact of the changes by adding them to the current project schedule.

Five minutes later, the project manager leans back and says, "OK. As you can see these changes add five weeks to the project duration and will increase our costs by more than \$36,000."

The customer, surprised at the cost, says, "But these are necessary; they are all very good and worthwhile additions."

The project manager gives the customer a big smile and says, "I'm sure they are very good ideas or you wouldn't have brought them to me. Nevertheless, our question has to be; can we hit our project's measured achievement without them? In other words, we shouldn't add items that aren't necessary for us to hit our measured project result. If we included every good idea we'd never finish."

The customer said, "Well, I want you to include these items in the project."

The project manager smiles again and says, "As you know from our change control process, this is not my decision. We have the data now so let's you and I go speak to the project sponsor and see if they are willing to add five weeks to the project duration and \$36,000 to the cost. But I'll tell you now I don't think we need any of these changes to hit the measured outcome we've committed to for this project."

A Consistent Methodology

For project managers to have the tools to control changes to the scope of a project they must apply a consistent methodology. The methodology begins with the initial planning of the project and gives the PM tools and processes to identify the measured business achievements the customer/user wants the project to produce. Step by step, the methodology guides the PM through the development of a dynamic schedule and budget. Those tools allow project managers to quickly calculate the impact of a change order. Finally, the methodology covers status reporting with the same modeling of the impact of corrective actions on variances.

Our Achievement-driven Project Methodology (AdPM™) meets all of those requirements and provides project managers with both the soft and hard skills necessary to control the scope of their projects and have satisfied customers/users. We teach this methodology in all our project management courses. The courses are available online with one-on-one personal instruction and hands-on practice of all the techniques. We also teach the methodology in our customized in-person training seminars for organizations and groups. The in-person programs include tailoring of the methodology to fit each client's personnel and projects.