

The Process Trap

Wayne Turk

From a project management view, process can be defined as “the methodologies used to produce specific interim and final results; it can include individual roles and responsibilities, activities, techniques, procedures, deliverables, workflows, tools, and measurements and metrics.” Quality assurance (QA) and configuration management (CM) are normally the arbiters of standardization, but the project manager must be the person who oversees all processes.

The Good ...

Standards and processes set the structure, framework, and baseline for a project. They ensure that things are done the same way each time. Processes keep you out of the doghouse. According to the experts, the following are among the positive attributes of good processes:

- They build credibility in the products and outputs.
- The project staff can be more proactive, rather than reactive.
- Once process, templates, and procedures are in place and proven, they can be reused (sometimes with small changes) over and over.
- They create a shorter learning curve for personnel transitioning between projects or working multiple projects.
- Scope can be managed better.
- Planning is usually better.
- Problems can be resolved more quickly.
- There is better risk management because risks are identified early, strategies for mitigating them can be put in place, and risks are monitored.
- Financial management is better.
- It is easier to collect metrics; therefore, decision making is better.
- Staff morale and confidence are stronger because employees know what they are doing and how to do it.
- Testing, one of the most critical processes, provides better quality and products that work the first time around.

The Bad ...

Because of the positive attributes of processes, projects should be cheaper and faster to accomplish—but it just doesn't always work that way.

A common complaint about strong processes, especially when the processes include paperwork of any kind, is that they are cumbersome, paper-intensive, and take too much time away from the real work of getting

Good, strong, repeatable processes are the salvation of a project manager—right? In most cases that's true. Processes make the pieces of the puzzle fit together. Knowing that things are done the same way every time gives the team and customer confidence that nothing is missed and that the results are trustworthy, useful, and usable. But at the same time, there are some pitfalls out there with processes as the bait. This article will examine the good, the bad and the ugly (apologies to Clint Eastwood), as well as some suggestions to prevent or mitigate process problems.

Let's start with some definitions. What is “process”? The dictionary says it's “1. A series of actions, changes, or functions bringing about a result. 2. A series of operations performed in the making or treatment of a product.”

Standards and processes set the structure, framework, and baseline for a project. They ensure that things are done the same way each time.

Turk, a retired Air Force lieutenant colonel and defense contractor, is an independent consultant. He has supported information technology projects, policy development, and strategic planning projects for DoD, other federal agencies, and non-profit organizations. He is a frequent contributor to Defense AT&L.

a product out the door. People complain that processes are sometimes too rigid and not tailorable or flexible. For example, to meet a process requirement, it is ludicrous if your project has to develop a large document or set of documents like a full project management plan, configuration management plan, quality assurance plan, etc., when you have a total of only 300 hours, six people, and two weeks to complete the project. Admittedly that's an extreme example, but it's not out of the realm of believability. Just talk to some of the PMs out there, and they will tell you tales of equally bizarre requirements from real projects. You may have even run into them yourself.

More and more contracts require contractors to have a Capability Maturity Model or Capability Maturity Model-Integration rating of level 3 or higher. Strong processes and a CMM or CMM-I rating of level 3 or 4 is a great idea. The strong and consistent processes are in place for good reasons and have good results. It's just that they can have negative impacts too—things like a requirement for more resources and more time for reviews and for following the organizational processes. While that should not necessarily be the case in theory, in practice it is. Good processes should shorten time lines, and sometimes they do—but not always.

As Quaid and Ward pointed out (“Heroes II: Attack of the Process Clones,” *Defense AT&L*, September - October, 2004), “Process is singularly ill-suited to doing something new, creative, or unanticipated. Process is designed to propagate yesterday's success rather than craft tomorrow's breakthrough.” That lack of flexibility is another common complaint from PMs. The emergencies, the unanticipated, the problems that pop up in any project need a certain amount of flexibility to allow success. Quaid and Ward go on to point out two more problems in an over-reliance on process: process-dependent organizations are failure-averse (not always a good idea), and they limit personal responsibility (a boon to some folks).

Other problems with strong processes include:

- Fear by employees of a loss of control, loss of creativity, and taking the fun out of work
- Fear by management of loss of control (while it sounds contradictory to the last bullet, both sides fear a loss of control)
- Processes not fitting a specific project
- Extra and unneeded artifacts being created
- Potential for projects to cost more and take more time (already mentioned, but very important).

And the Ugly

Then we get to the final and worst potential problem with a process-driven organization: process over product. An-

other way to say it: form over substance. Although he wasn't describing project management, Sir Winston Churchill summed it up perfectly when he said, “However beautiful the strategy, you should occasionally look at the results.”

When the focus is strictly on the process and not on the end result or product, everyone loses. QA and CM may be ecstatic about documents, procedures, and configuration items, but quality can go down, things take too long to accomplish, and end users don't get what they want or need. Please don't get me wrong. I am a strong supporter of QA and CM processes, but not when they have a negative impact because of a poor focus on what is really important.

Here are two examples I observed myself—minor I admit, but they show early vestiges of the “ugly.”

On one project I was associated with, the QA branch chief held weekly meetings, in which he projected an outline of all ongoing activities from a laptop to a screen. He then went through each item with questions. However, he stated that he only wanted to hear one of three answers: yes, no, or a date. He filled the information in as the meeting progressed—although I use the term “progressed” loosely. The meetings were agony to attend. His focus was on updating his activities outline and not on where we really were in the project.

Process over product.

Processes should be guidance and not necessarily set in cement.

As a part of another project, I had to turn in a report documenting our actions at different sites. The document (in Microsoft Word®) was basically the same for each site, so we developed a template, which greatly eased the preparation and review—a good thing for us. However, as the overall project began to use templates for all documents, our template became formalized with an assigned template number. We made changes to the template, and it was given a new number. I made the changes to the documents, but I neglected to “attach” the new template to the documents (a check box that shows up only when you look at the properties of the document). The next few documents submitted were rejected because they were not in “the right template,” even though the content and format were exact.

Form over substance.



You're the Judge

In this column, we feature cases that center on an ethical dilemma and invite you to be the judge.

Some of the cases involve agencies outside DoD, but the issues they present are equally applicable to the defense acquisition community.

Demetris Johnson was employed in the administrative office of the U.S. Department of the Interior's Geological Survey. Her official responsibilities included purchasing office supplies and services using a government-issued credit card. Between October 2000 and March 2001, Johnson received approximately \$500.00 in retail gift coupons from a vendor from whom she ordered supplies for the government. These she used to buy personal items.

You're the judge:

Is it okay for Ms. Johnson to take advantage of this commercial practice, or does she have an ethics problem?

The verdict is on page 47.

The Solution: Balance and Common Sense

As an Air Force officer, I was taught never to bring a problem to my boss without bringing a solution. A process-driven organization can be excellent if the following suggestions are integrated as a part of the organizational culture. The suggestions all work together to build an attitude and a "process" (if you can accept that term here) that make strong processes work.

The first is tailoring the processes. That is the capability to adjust processes based on certain parameters, such as the size, type, or length of the project. Tailoring deletes certain requirements that are not appropriate—for ex-

"However beautiful the strategy, you should occasionally look at the results."

Sir Winston Churchill

ample, lengthy, complex plans for a short, simple project. My previous employer, SRA International, a CMM-I level 3 company, had an excellent tailoring process for use when setting up projects and project requirements. The different parameters were set in a spreadsheet. When you checked the right size, type, and length of the project, the first level of tailoring was automatically applied. Then the PM, in conjunction with his boss, made any other tailoring adjustments required. The final result was a list of required actions and products. It worked very well. While something that complex is not necessary in many cases, the idea of tailoring processes is.

The second is flexibility. By this, I mean that processes should be guidance and not necessarily set in cement. PMs and their people should have the ability to bypass or modify some processes in certain cases. This is not a license for the PM and his people to do what they want when they want; the departure from a given process should be approved by the overall manager (or at least he or she should be aware of deviating) and coordinated with those involved. An example might be an emergency engineering change proposal. It might go through an abbreviated process that would still include testing, but some of the other process steps would not be required. There are many other examples. In cases where there are going to be frequent deviations, a modified process could be developed, publicized, and implemented.

"Always change processes and structures while they still function" is a quote from that famous PM, Anonymous. The best idea is continuous improvement. All processes should be reviewed periodically. Don't wait until the process breaks. Change and streamlining for improvement should be ongoing. Circumstances change. Requirements change. Funding changes. The people involved change. Any of those could generate a change in the processes in a project. Processes that are based on "because we've always done it that way," may or may not be worthwhile and should be considered for change. Also looking at others' processes for best practices can lead to change.

The bottom line is to search for balance and common sense. Admittedly, common sense can be *uncommon* and sometimes hard to find. There need to be processes—good, strong, repeatable processes that work. The processes need to be tailorable, flexible, and continually improved. Processes can be the salvation of a PM, but they can also be a dagger to the heart if they are poor or structured so that they negatively impact the project.

The author welcomes comments and questions. Contact him at rwturk@aol.com.