Project Management and the Law of Unintended Consequences

Wayne Turk

You read the title and maybe wondered if the Law of Unintended Consequences is something that I made up. No, it goes back for centuries. It was described, although not named, by Adam Smith in *The Wealth of Nations* in 1776. Smith talked about an individual being "led by an invisible hand to promote an end which was no part of his intention." Rob Norton, in the *Concise Encyclopedia of Economics* article on "Unintended Consequences" defines it by saying that the "actions of people—and especially Governments—always have effects that are unanticipated."

Now you are probably wondering how that fits in with project management. The bottom line to those of us in the project management field is that any decision we make about the project or any action we take will have both intended and unintended results. Most of the time, the unintended consequences are relatively minor and have no real impact. However, they *could* have grave consequences to your project—and your career.

The Law in Action

Before we get to the specifics of the law and project management, there are many, many examples of the law in history (most of them politically charged) and in everyday life. I'll present a few examples.

One of Norton's examples is Social Security. He points out that Social Security has helped alleviate poverty among senior citizens. However, he also says that many economists argue that it has carried a cost that goes beyond the payroll taxes levied on workers and employers. Martin Feldstein, a noted economist, maintains that today's workers save less for their old age because they know they will receive Social Security checks when they retire. If Feldstein and others are correct, it means that less savings are available, less investment takes place, and the economy—and wages—grow more slowly than they would without Social Security.

Another example is the automobile. It was intended simply as transportation to replace the horse and maybe the wagon. Over the years, there have been many unintended

THERE ARE GOING TO BE UNINTENDED CONSEQUENCES FOR EVERY DECISION THAT YOU MAKE OR ACTION THAT YOU TAKE, AND SOME OF THEM ARE GOING TO BE BAD.

Turk *is a retired Air Force lieutenant colonel and defense contractor. He is currently 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.

and unforeseen results. Someone in the early 1900s with vision might have foreseen the need for a network of roads and maybe even service stations. But I doubt that person would have had the vision to see the number of automobiles that would eventually come, the smog and pollution, or the number of deaths from accidents.

One simpler and much more recent example is the unintended result of Securities and Exchange Commission rules and regulations after the broker and mutual fund management scandals. The SEC instituted conflict of interest rules on what brokers could tout. The SEC doesn't want brokers hyping stocks or investments in such a way as to make themselves an undeserved profit. The unintended consequence was that brokers cannot now promote stocks or investments that they personally own. There is a perceived, if not real, conflict of interest. This was certainly unintended.

Project Management: It's Results That Count

Now let's look at some unintended consequences of actions in the project management field. Strong processes and a CMM [*Capability Maturity Model*] or CMM-I rating of level 3 or 4 is a great idea. The processes promote consistency, credibility, and stability, among other things. The strong and consistent processes are in place for good reasons and have the intended good results. But they've had some negative unintended results too, such as more required resources (read cost impacts) and more time (read schedule impacts) for reviews and following the organizational processes. People didn't always take into account those unintended results, and anything that has an unplanned negative impact on cost or schedule can be deadly to a project.

Performance-based contracting is another good idea that can sometimes have significant unintended consequences if you're not careful. As you are aware, performance-based contracts use specific metrics as measurements of the level of success of the contractor. That is good. What is bad is that good metrics are hard to identify and define. In the end, some people choose metrics that are easy to track rather than those that are really meaningful. What is measured is what becomes important. If you aren't tracking or measuring the right things, you may not be moving toward success. And what is worse, you may not know it. You may pay a contractor lots of money and not end up with the product that you wanted.

What the Law Means to Managers

In looking at the impacts of the Law of Unintended Consequences, the two biggest, most visible, and most important impacts can be cost and schedule. Anything that has a negative impact on project costs or schedule is bad. We all know that. And it is very easy to make a decision—for the best of reasons—whose unintended consequences impact those areas. Other areas where negative impacts can show up are quality, product capabilities, or personnel.

Examples abound in DoD projects, but rather than point fingers or embarrass anyone who might read this article, I'll give two examples from the Treasury Department—glaring examples of unintended consequences that led to failure: the Susan B. Anthony dollar coin and the two-dollar bill.

Both were potentially good ideas, but neither was a success. The primary reason for the failure of both was an unintended consequence: the need to change cash register drawers. Cash registers didn't have a slot for dollar coins or two-dollar bills. People weren't willing to spend the money to redesign cash registers and retailers weren't willing to buy new cash registers just to be able to use the new denominations. Yes, there were other problems, but cash registers spelled doom for both. The same kinds of things frequently can—and do—happen in DoD and throughout government.

Minimizing the Impact

So how do project managers stop or minimize unintended consequences? It takes thoughtful planning, coordination, and work. The first step is to start thinking long term rather than focusing on immediate results. When a decision has to be made, try to ascertain possible impacts two, three, or more steps into the future.

For example, you determine that you need new servers for your program. The current servers are old, slow, and don't have the capacity that you need. Don't just look at cost, speed, and memory, although those are critical. You also need to look at such things as footprint, power requirements, uninterrupted power source requirements, cooling, whether the applications that you currently have (and those coming down the road) will work on the new servers, and how the servers will fit in with the overall enterprise architecture. Otherwise, there could be real problems. Take just the simplest of these other considerations—footprint. How large are the new servers? Will they fit in the same space? The time to worry about that is not when the trucks roll up, but long before.

In planning considerations, don't fall into the trap of groupthink (according to Irving Janis, "a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action"—see "Hive Mind and Group Think," *Defense AT&L* November-December 2005). If the people that you bring into the considerations all have the same perspective or are afraid to say anything if they don't, you will not see the potholes (or the tank traps) down the road. By including people with other perspectives, you can make better decisions.

A VIABLE RISK MANAGEMENT PROGRAM IDENTIFIES THE RISKS, PROVIDES THE PLANNED MITIGATION STRATEGIES, AND TRACKS THE RISKS.

Some of you are saying, "But I don't have time for that." Well, you need to take the time. Rushing into a decision can cost you and your project if you don't. Even small decisions can have a large result.

Another thing that you need is a good change management process. There are many books and articles written on change management. Most of them have some version of the same general rules—in summary:

- Do your research and have the justification down solid.
- Ensure that the desired results are achievable and the undesired results are avoidable (or minimized).
- Get the stakeholders (and there are always lots of them) on your side.
- Have a "champion"; friends in high places can really help.
- Communicate the change to all involved, including the "why."
- Have a good implementation plan.
- Monitor the change.

Risk Management is Key

Finally, make sure that you have a good risk management program in place—and use it!

A viable risk management program identifies the risks, provides the planned mitigation strategies, and tracks the risks. Risks should be assessed continuously and used for decision making in all phases of a project. Risks should be carried forward and dealt with until they are resolved, or they turn into problems and are handled as such. Too many projects "fill the squares" of risk management rather than having a program that really works.

It Comes Down to You

There are going to be unintended consequences for every decision that you make or action that you take, and some of them are going to be bad. You can't get around that. However, with good planning, coordination, and good processes, you can minimize the bad. Having good contingency plans helps, too.

The Law of Unintended Consequences is a basis of criticism of many of our projects. It is, in part anyway, the cause of many project cost overruns and schedule slips. To paraphrase Smokey Bear, "Only you can prevent unintended consequences!" It takes time, effort and the cooperation of many people, but it is certainly worth it—for you and your project.

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