What Do Shooting Down Enemy Airplanes and Solving Business Problems Have in Common? - Part 2

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Introduction

As I indicated in Part 1 of this post, there are similarities between solving the fire control problem and solving business problems. The basic problem and the basic process are almost exactly the same: hitting a moving target and the absolute necessity of having a running or continuous solution in order to do so. The easiest way of comparing the two is via a civilian version of the flowchart used in Part 1 (see Figure 2).

Got Problems?

There is no shortage of targets (i.e., problems) in the civilian world. Unlike the military, very little time is spent waiting around for the action to begin. In the civilian world, action is ongoing.

Prioritize & Select

There are always more problems to be solved than there are resources available to devote to solving them. As with targets, business problems must be prioritized and then selected. As with targets, the level of threat posed might be one criterion for setting priorities. Return on investment (ROI), that is, the ratio of the payoff of solving the problem against the cost of solving it might be another. Regardless of the criteria used, business problems, like targets, must be prioritized and selected for resolution. In a word, they, too, must be "targeted."
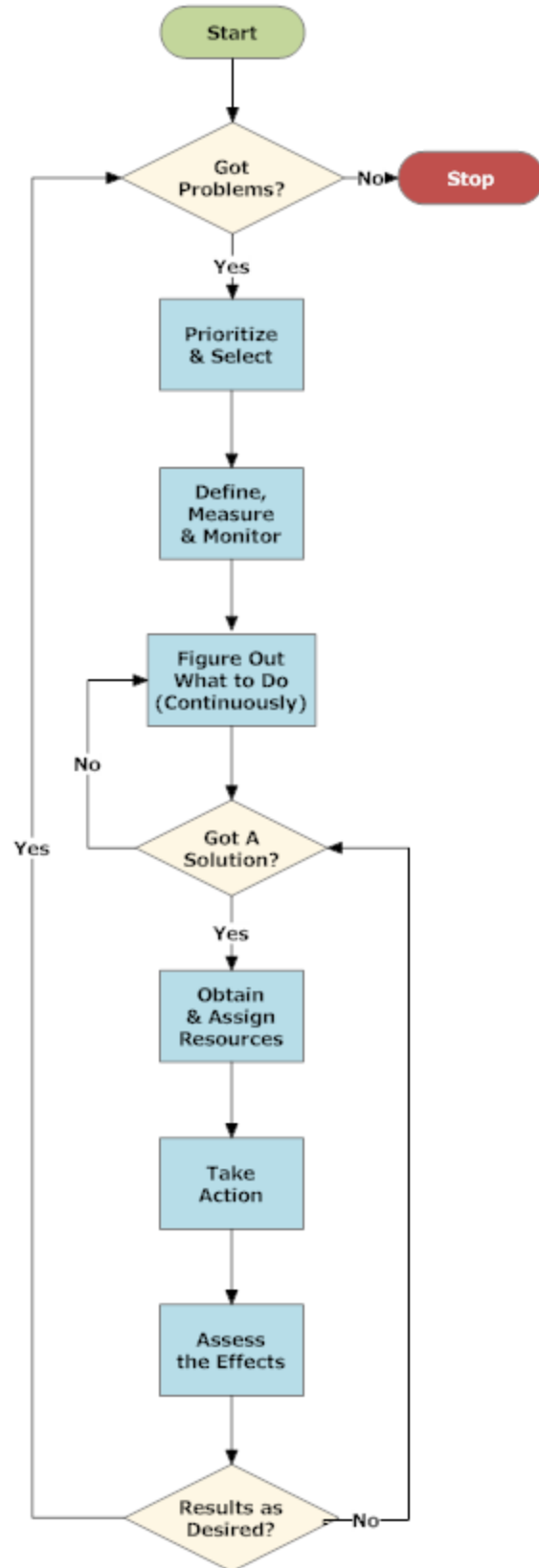

Figure 2: Solving Business Problems

Define, Measure & Monitor

This is the counterpart or equivalent of "acquire and track" with respect to a target and here is where a great many civilian problem-solving efforts go astray. Business problems are rarely defined (i.e., isolated, located and articulated); they are more rarely measured in terms of their costs and the benefits of solving them; and, rarest of all, business problems are hardly ever monitored on an ongoing basis so as to know at all times their status, their costs, the benefits of solving them and the effects actions taken are having on them. Making matters worse, problems are often asserted at the executive level, wrestled with at the middle management level and actually tackled at the line management and workforce level – all with very little two-way communication and even less mutual understanding.

Figure Out What to Do (Continuously)

Just as with the fire control problem, a solution to a business problem must be determined. And, just as with the fire control problem the solution must be kept current. Business problems are not fixed, static math problems with fixed, static solutions. When it comes to solving business problems, it is not so much a matter of coming up with a solution as it is a matter of making sure your solution keeps up with the problem.

Solving business problems is a matter of crafting an intervention, of changing things in one or more places so as to have the desired effects as measured somewhere else, often on the bottom line. In a Gun Fire Control System (GFCS), the solution is configured by a computer designed and built for that purpose. In a business, solutions are configured by people, and the solutions they configure vary with their skills, experience, biases and the problems themselves. So, if the heart of a gunnery system is the computer, the heart of a business problem-solving system is people. Moreover, instead of solving just one kind of problem, which is all that is expected of a GFCS computer, people must tackle and solve a wide range of problems. They are general problem solvers.

Got a Solution?

In a GFCS, the computer operators can tell if the computer has a solution to the fire control problem. Making that call with respect to business problems isn't nearly as easy. If a solution is an intervention, a course of action intended to bring about certain effects, it's important to understand just how the planned course of action will indeed produce the desired effects. If the linkages between the course of action you're contemplating and the effects you're seeking aren't clear, you probably don't have a solution.

Obtain & Assign Resources

Just as the gunnery officer on board ship cannot take a target under fire unless and until the ship's guns have been released to his control, it is often the case that managers who are working business problems will require more and different kinds of resources than they ordinarily have under their control. There is, then, a requirement to obtain and assign resources to roles, tasks and responsibilities that must be fulfilled in order to solve the problem at hand. Frequently, this requires making a case for those resources.

Take Action

Taking action in a business setting is not a simple matter of loading and firing the guns (although it often looks that way and "hip-shooters" can be found in just about every organization). The actions necessary to solve important business problems often entail complex, multi-layered courses of actions – interventions that must be orchestrated and coordinated over time (often long periods of time). And, just as is the case with the fire control problem, these solutions, these courses of action, these interventions, must be kept current, which is to say they must be kept aligned with what is an ever-changing problem situation. Too often, I fear, we are guilty of solving the problem that *was*, not the one that *is* and certainly not the one that is about to be.

Assess the Effects

This should be an easy, almost automatic step but, unfortunately, it isn't. This is because, as noted earlier, we often fail to adequately define, measure and monitor the problems we set out to solve. Were we to do so, noting the effects of our actions would be comparatively simple. Instead, we push measurement and assessment to the back-end of the process and there it languishes for want of interest and resources. Consequently, instead of a steely-eyed assessment of the effects of actions taken, what frequently happens is that those in charge declare victory; they announce that the problem has been solved and all concerned move on to whatever situation is now center stage.

Results as Desired?

As the preceding item suggests, this decision is often made in a *de facto* manner, the consequence of declaring victory. Successes are claimed, failures are buried and the problem is swept under the rug until such time as it resurfaces, often bearing a new label and just as often being made the target of old solutions also bearing new labels. But, if the decision is an honest one, the problem either has been solved (or affected to an extent such it is no longer a priority) or it remains a focal point for action. Again, the importance of maintaining a "running" solution is apparent.

Summary & Conclusions

As I asserted at the beginning of this two-part post, I am convinced that much of what I know about solving problems I learned as a Fire Control Technician (FT) in the Navy. The lessons I learned go well beyond the Fire Control problem itself. I also learned to troubleshoot complex systems, a form of problem solving known as "fault isolation" and which lies at the heart of the much-vaunted Kepner-Tregoe approach. The two most important lessons I learned are these:

1. Problems are dynamic and solutions must be dynamic as well; moreover, solutions must keep pace with the problems they are meant to solve;

2. All problems are embedded in some larger structure and the solution to the problem lies somewhere in that larger structure.

Can what I learned be passed along to others? I think so. I've tried to do that with many of the articles I've written about problem solving, solving problems and an approach I call "Solution Engineering." I hope others find this post and my other articles helpful in honing and otherwise improving their own problem solving skills.

Click here to read Part 1.

About the Author: My name is Fred Nickols. I am a writer, an independent consultant and a former executive. Visual aids of one kind or another have played a central role in my work for many years. My goals in writing for SmartDraw's Working Smarter blog are to: (1) provide you with some first-rate content you can't get anywhere else, (2) illustrate how important good visuals can be in communicating such content and (3) illustrate also the critical role visuals can play in solving the kinds of problems we encounter in the workplace. I encourage you to comment on my posts and to contact me directly if you want to pursue a more in-depth discussion.