

# Should Opportunity Management be Added to my Programs Acquisition Strategy?

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**A** question that faces every DoD program manager is how to get more bang for the buck. Is opportunity management a tool that can be applied with a return on investment? Before we get to the question of adding opportunity management to a program's acquisition strategy, let's start with what opportunity management is and what it is not. Then we'll go on to discuss the potential benefits of the concept; how the process might be tied to a program's risk management effort; and how the process might be leveraged as part of an aggressive acquisition strategy to possibly buy back program cost, schedule, and performance.

First, what does "opportunity management" mean, and is it in any way tied to program risk? As we all know, risk management has been an established practice for years in DoD and industry. Regardless of which model of risk management you subscribe to, they all fundamentally focus on risk identification; analysis of expected impacts; likelihood of occurrence; decisions on methods for responding/handling the risk; and monitoring and controlling risk over a project or program life cycle. In application, the objective of risk management has been to decrease the probability and impacts to program outcomes: cost, schedule, and technical performance. The emphasis is on the probability of something occurring that will have a negative impact on program outcomes.

What if this were only a portion of the story when it came to risk? What if there were things that, if known, could increase our probability of success? In fact, such things *do* exist—they're called "opportunities." More important, these opportunities—if understood and managed within the context of your overall risk management program—could improve the likelihood of achieving program goals, through more effective trade-offs of cost, schedule, and technical performance. To appreciate the potential benefit, we need to come to a common understanding of how risk and opportunities complement each other under the overall umbrella of risk management.



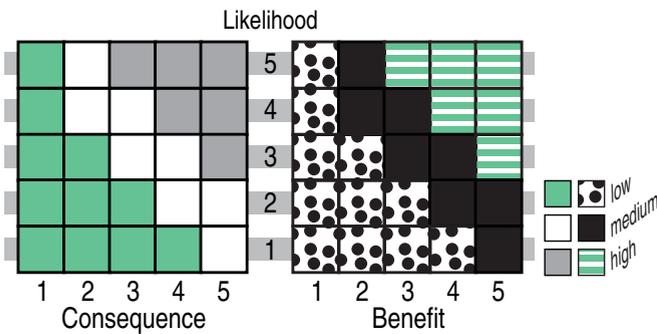
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## Two Kinds of Risks

The Project Management Institute, founded in 1969, is the largest global professional association for project management. Their *Guide to the Project Management Body of Knowledge (PMBOK®)* is developed with contributions from every major business sector, including the defense industry. One of the nine knowledge areas of the guide is risk management, which consists of six primary processes: risk management planning, risk identification, qualitative risk analysis, quantitative risk analysis, risk response planning, and risk monitoring and control. These processes can be aligned to other risk management models including the *Risk Management Guide for DoD Acquisition*. The *PMBOK* departs, however, when it proposes that both negative risks or threats (the ones whose likelihood and impact we seek to *decrease*) and positive risks or opportunities (ones whose likelihood and benefits we actually seek to *increase*) will exist on every project or pro-

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## Risk and Opportunity



gram. Both types of risk are identified and assessed through the same processes in any model you choose to follow. The differences lie along the path you take when choosing your risk response strategies.

In the typical DoD risk management plan, you will see well-documented risks—clearly written risk statements with root-cause discussions—accompanied by a graphic cube that shows the assessment of likelihood and consequences of the risks, and a series of identified handling steps (most often a mitigation plan). This plan is used often as the daily guide to risk management and touches upon every aspect of the program from technical performance to the budget processes. We have embraced this plan as a tool, and any PM worth his or her salt uses it alongside techniques like Earned Value Management and other plans such as the Systems Engineering Plan to judge the overall health of the program. These risk management plans however focus solely upon dealing with the negative risks or threats the program must face. They don't provide for a systematic approach to dealing directly with the positive risks or opportunities that the program might also encounter and desire to leverage. Just as with negative risks, opportunities can be managed successfully only with dedicated effort on the part of the program.

### Adding Opportunity Management to Your Toolkit

To include opportunity management into the overall program management toolkit, we have to address several fundamental questions. How can we work towards incorporating opportunity management into the overall risk management program? How do we rate an opportunity, and how is it different from rating a risk? What approaches can we take to developing an opportunity-response strategy?

To incorporate opportunity management into overall risk management, you must formalize both risks and opportunities into the same processes of your risk model. You will be looking at those risks that clearly have the potential to positively impact your program, and applying your program's management plan to assess them in terms of

likelihood and impacts. In the case of opportunities, you will need to adopt additional definitions to describe both of these assessments.

Negative risks are rated in terms of their likelihood of occurring and the consequences. Opportunities are rated in terms of likelihood and—in contrast—benefits. Both are typically displayed on a three-color cube consisting of a 5x5 Likert-scale matrix. In the graphic to the left, you see a comparison of the two—negative risk on the left and opportunity on the right. Both require definitions of what the various ratings equate to and what each color in the scheme signifies. Cost, schedule, or technical performance are still the key tie-ins for assessing the impact of an opportunity; however, the larger the scale step (5 vs. 1), the greater the value/benefit to the program if it is achieved. Lastly, the three areas of the matrix for risk correspond to low, medium, and high risk to the program; a combination of likelihood and consequence ratings. In contrast, the three areas of the matrix for opportunity have different color schemes and meanings based upon their ratings for likelihood and benefit: low—minimal benefit with minimum oversight to achieve; medium—limited benefit, requires low to moderate attention of management; high—major benefit to program, requires significant management attention.

According to the *PMBOK*, the strategy best suited to handle a negative risk can fall into one of four basic categories: avoid it, transfer it, mitigate it, or accept it. When you consider the approaches to take in handling an opportunity, you have a different set of strategies: exploit it, share it, enhance it, or accept it. The last strategy is the same as that of a negative risk, so let's look more closely at the first three.

### Exploit It

The strategy of exploitation is pursued if the program wishes to ensure that the opportunity is realized. By seeking to eliminate the uncertainty associated with the opportunity, the program seeks to ensure that the opportunity occurs. An example cited in the *PMBOK* is to assign more talented resources to the program to reduce the time to complete activities or to provide better quality than originally planned. In such cases, the program office has the ability to show how, with proper management involvement, there is a significant likelihood of achieving a return on investment.

### Share It

The strategy of sharing requires shifting the ownership of the opportunity to another element of the organization or perhaps to an external resource (the contractor, for example). The rationale is that the other party is better suited to reap the benefit of achieving the opportunity than the program itself. An example would be to have the government take responsibility for conducting a test

since it has a world-class facility that the contractor could also access, but at a much greater cost to the program.

### Enhance It

Enhancement, in the *PMBOK* description, is modifying the “size” of an opportunity by increasing its probability and/or positive impacts and by identifying and maximizing key drivers of these positive-impact risks. In comparison, it is the polar opposite of the negative risk management-handling strategy of “mitigation.”

### Opportunity Knocks

Opportunities exist in nearly every program; however, they are rarely thought of as an overall part of actively managing our systems development or sustainment processes. Frequently, opportunities fall unexpectedly into our laps from such sources as our prime contractor or a field-activity support organization. Even if we’re made aware of opportunities, we too often don’t afford them adequate management attention, since we don’t examine them for benefits or understand the actions necessary to improve their likelihood.

A large program involved in a systems development and demonstration phase will normally have hundreds of identified and monitored risks that are being actively worked. There are also a significant number of known and yet-to-be-discovered opportunities that could be exploited.

Consider a tactical aircraft that is equipped with numerous systems to provide data and voice communications. Decisions are made every day about requirements, functionality, and design. The systems engineer and director of logistics of the aircraft program integrated (government and contractor) project team engage their team members to actively seek ways to reduce overall aircraft weight, decrease aircrew workload, and decrease life-cycle costs, along with other initiatives. The IPT takes this guidance and in parallel with its design activities, identifies specific opportunities that can be assessed for their potential benefits to the program. Further discussion can identify the best strategy for obtaining the potentially positive impacts, and the cost associated with carrying out the appropriate strategy (exploiting, sharing, or enhancing). A digital radio system is analyzed and selected, based upon its potential to reduce by up to 15 percent the overall life-cycle cost to the user in the areas of maintenance-personnel hours and reliability.

An opportunity may also provide a benefit that could reduce the impact of another programmatic risk. Here’s one very generic example: You’re the director of logistics on a major aircraft acquisition. Test and evaluation has shown that in the desired configuration, the center of gravity is so far aft that nose wheel steering becomes a problem. Risk identified. Simultaneously, the customer has identified that the cockpit deck and sides are insuffi-

ciently armored to risk going into a small arms environment. Your analysis shows that there is a commercial off-the-shelf armor system available for the cockpit, which, when added to the weight (up forward), would negate the center of gravity problem without any appreciable loss in performance. You’ve just performed a simultaneous opportunity management (identifying a positive program impact), which minimized a risk (negative impact to program). This is simplistic but readily shows how the process can be applied across the board. Whether it is a cost-to-funding tradeoff or the decision to make or buy an assembly, the basic tenets are there. Adopting a uniform approach to measuring both opportunity and risks associated with any program opens the door for easily identifiable tradeoffs within each.

So let’s come back to the original questions. Should I as a program manager look to incorporate opportunity management into my program’s acquisition strategy? Can the process provide a return on investment, thereby allowing me to get the best bang for the buck on my program? We would suggest yes.

Can it be merged with my current risk management program to minimize manpower and resource outlay? Again, the answer is yes.

Are there experts in industry and within current DoD programs who are using the process effectively? Yes, there are efforts currently under way from both sides of the acquisition team using some form of opportunity management process and using it quite effectively.

Can the opportunity management process be used as a potential tool to allow the program IPTs to buy back program cost, schedule, and performance by capitalizing on the opportunities that are present in DoD programs? Yes it can.

So what do you do if you want to follow the path of opportunity management? Is there a guidebook? Is there a list of best practices? Could this become a joint program with the DoD Risk Program? Good questions and ones that every PM needs answered to have a level of comfort before proceeding with the process. Now that we’ve given you the “what,” in the next issue of *Defense AT&L*, we will focus on these and other, related questions to give you the “how.”

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