

Mastering Projects Series

Stuff Happens: Dealing with Risks

Visits from Murphy

Murphy gleefully surprises all projects, causing significant peril to schedules, budgets, and other business objectives. Disciplined risk management is crucial to preventing these perils, but few companies are capable of it. According to research by Kwok and Ibbs, most technology companies are less mature at risk management than at any other knowledge area listed in the Project Management Body of Knowledge (PMBOK).¹

Murphy's Law
If anything can go wrong, it will.

Despite this grim statistic, good risk management is not complicated. In this article, I will look at a tried and true risk management process, sharing tips from my clients and students. A future article will cover several advanced risk management techniques for today's turbulent project world.

What is Risk Management?

My definition of risk management is simple. Risk management attempts to maximize the good stuff and minimize the bad stuff that may happen to your project. It is deliberate and proactive, not gambling. Figure 1 shows the traditional risk management process.

Step 1: Decide how to manage risk. The PMBOK calls this step "risk management planning." Agree on your risk tolerance, and then tailor your risk management approach to the type of project and the consequences of

failure.^{2,3} For example, a project to relocate ten cubicles requires a very different approach than a project to implement a new triage process at a busy hospital's trauma center. Tips for this step:

1. Risk tolerance varies by phase. The earlier stages of a project can often tolerate more risk.
2. Favor simplicity. A fancy, highly analytical risk methodology is worthless if its high overhead or complexity means that people don't understand it or use it consistently.
3. Get many perspectives. You'll get higher quality results and better buy-in if you involve the project team in all steps.
4. Include positive risks (we usually call them opportunities) as well as negative risks (threats).

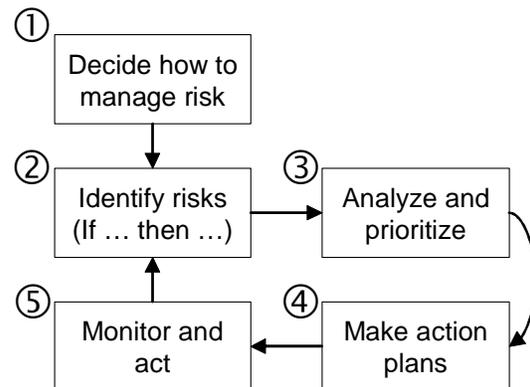


Figure 1: Traditional Risk Management Process

Step 2: Identify risks. (PMBOK name: "risk identification") Uncover potential risks across the breadth of the project by researching and brainstorming. Cast a wide net. For example, look for risks related to technology, the business,

competitors, vendors, and customers.

Tips:

1. Start identifying risks early, as soon as the project is a glimmer in the sponsor's eye. Use a checklist of risk sources to spur your thinking.
2. The objective of this step is to identify a wide range of risks. Don't get bogged down analyzing the risks or getting the wording perfect.
3. Interview "undercover experts." These are frontline people who may not be highly visible but who learned the hard way on similar projects.
4. Write risks in *if-then* format so that subsequent analysis and prioritization is easier.

If-Then Example

If the pilot manufacturing run reveals a reliability flaw in the new product,
Then first shipments and revenue will be delayed by 3 months.

Step 3: Analyze and prioritize. (PMBOK name: qualitative risk analysis and quantitative risk analysis) You must prioritize the risks identified in the previous step, because your project team doesn't have the time or money to respond comprehensively to all of them.

Tips:

1. Look at each risk's probability, impact, and timing attributes to help you decide where to focus.
2. Resist getting overly analytical. It's easy to lose momentum during this step, arguing too much about unimportant details such as whether the probability of a risk is 67% or 53%. Instead, use a simple visual tool such as a PI Matrix^{4,5} (Figure 2) to encourage vigorous discussion.

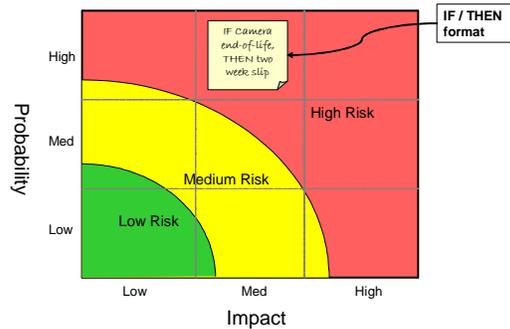


Figure 2: PI Matrix

Step 4: Make action plans. (PMBOK: risk response planning) Decide how to handle the highest priority risks, including who will do what. Typical action strategies are avoidance, mitigation, transfer, acceptance, and monitoring (see sidebar). Effective action plans include the following components for each high priority risk:

1. Proactive (mitigation) plan: what are you going to do in advance to try to influence the risk event in your favor?
2. Reactive (contingency) plan: what are you going to do to ensure your project's success if your proactive plan turns out to be insufficient?
3. Owners: plans will fail unless there are clear owners who are responsible for implementing them.

Step 5: Monitor and act. (PMBOK: risk monitoring and control) Each risk owner implements his action plans, continuously monitors his risks, and immediately acts when a trigger occurs.

Tips for this step are:

1. Fight for enough time and resources to implement the action plans immediately. Short-term project issues distract many teams and sponsors before they can implement their plans. They lose their best prevention opportunities.

2. As a project team, frequently review the landscape of risks and action plans to determine whether to make changes. Make it a brief agenda item at every team meeting.

Classic Action Strategies

Avoid the risk by changing your plan to eliminate the threat. For example, manufacturing of your new product will be shut down if the sole source supplier of a crucial component goes out of business. One way to avoid this risk is to eliminate its cause by redesigning the product to remove the component.

Mitigate the risk before it happens by lowering the probability of its occurrence or reducing its impact should it occur. For example, instead of removing the sole sourced component from the design, buy the supplier to improve its business stability. This reduces the probability that supplies of the critical component will be interrupted.

Transfer the risk by moving the burden of it to someone else who is better able to handle it (financially, expertise, or in other ways).

Accept the risk by planning to accept the consequences if it does occur. This may be an appropriate tactic when the costs of managing the risk outweigh its impacts or probability.

Monitor the risk, deferring a decision on how to handle it. This is a holding action and is different than accepting the risk.

Conclusion

There are many sophisticated variations on this basic process, but using even simple risk management techniques will

reduce the havoc that Murphy can wreak on your next project.

Today's turbulent project environments have led to new thinking about risk management. The next article in this series looks at advanced methods of managing risk, including flexible project methodologies and the influence of change on risk.

For free templates that support this risk management process, get the *Project Development Workbook* from the *Resources* area of www.spspro.com.

About the Author

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¹ Ibbs, C. William & Kwok, Young Hoon (March 2000): *Assessing Project Management Maturity*, Project Management Journal, pp 32-43.

² See "How Projects Differ", Shenhar, A. J. and D. Dvir, in *The Wiley Guide to Managing Projects*, John Wiley & Sons, 2004

³ See framework for evaluating IT projects in McFarlan, F. Warren. "Providian Trust: Tradition and Technology (B) TN." Harvard Business School Teaching Note 399-089.

⁴ Verzuh, Eric (2005): *Fast Forward MBA in Project Management*, 2nd edition, ch. 5, ISBN 978-0471692843

⁵ Milosevic, Dragan (2003): *Project Management Toolbox*, ISBN 0-471-20822-1