

Managing Risk as Opportunity

With uncertainty comes opportunity. But if a project manager is consumed with managing the risks, there is little time to manage the opportunities. Good risk management is not about fear of failure; it is about removing barriers to success. This is when opportunity management emerges.

In the project management domain, the subject of risk management ranges from addressing the political risks of a project's outcome, to the risks of a supplier failing to deliver on time, to the technical failure of a product in the marketplace, to the nearly endless possibilities that could disrupt the path to success.

As well, risk management is applied in diverse disciplines. Statistics, economics, psychology, social sciences, biology, engineering, toxicology, systems analysis, operations research, and decision theory, have risk management disciplines.

Although risk management as defined in PMBOK is useful, a better paradigm to manage both risk and opportunity is "Managing in the Presence of Uncertainty." Uncertainty is created when risks appear along the path to success. With uncertainty comes opportunity. If the project manager is busy managing the risks, there is little time to manage opportunities ignoring half the management in the presence of uncertainty equation.

Before going further, let's discuss some definitions and background. Project management, naturally, is success oriented, focused on producing products and services for customers. Risk management is focused on failure modes of the project and can be easily pushed aside by a success culture. It is critical that all project participants, not just project managers, understand that risk management is a process to identify and mitigate the barriers to this success. When the success orientation is combined with risk management, opportunity management emerges.

Some useful definitions for risk/opportunity management:

- **Risk** – a potential problem or threat that could affect a project's ability to meet its operational capability and performance, technical, cost, schedule, financial, or other objectives.
- **Risk Management** – the continuous, proactive process of identifying and assessing program, risk, defining appropriate risk handling strategies and plans, and monitoring those actions to completion.
- **Opportunity Management** – the identification of opportunities to help attain project goals, and the identification and implementation of actions to capture those opportunities.

What is the Intention of Risk Management?

Actively managing risks can increase the probability that a project or program will have a successful outcome. This motherhood statement makes it clear that risk management is part of a successful project management is a strategy. Risk management is not an event performed along the way; it is a continuous process.

There are many books, papers articles and professional associations describing how to manage risk. One phrase used by project a manager is risk buy down that is, the buying of information to reduce risk. The purchasing of this information can be explicit: buy a report that compares three products being considered as an off-the-shelf solution rather than analyze them as part of the project. Or, spend money building a prototype to test the structural integrity before committing to manufacturing. Or, pay for a public survey of constituents before rerouting a bicycle path.

Risk Management Needs Hierarchy

Project risk and opportunity management requires more than the intent to manage risks, it requires cultural changes, processes and their use, tools, and the consistent application of all of these. ¹

- A Risk Management Culture in which the success of the project is understood to be based on delivering the planned results and managing risks that interfere with those plans.
- Effective risk processes from simple identify, assess, plan, control, and communicate to complex probabilistic risk assessments.
- Risk tools from simple list to complex software system integrated across the enterprise.

- Consistent practices are in place when risk management becomes part of the everyday routine rather than an additional task to burden the project.

Successful Risk & Opportunity Management

Once risk and opportunity have been identified as a critical factor in delivering project success the responses to each need to be defined in terms useful for the project domain.

Keys to Successful Risk and Opportunity Management

These keys to success have been extracted from a recent Space Risk Management Symposium [3]:

Risk Response	Opportunity Response
Avoid: alter the approach to the problem and bypass that path in the project network.	Capture: align the work activities with the current path in the project network and incorporate the opportunity in the deliverables.
Transfer: assign the risk to team that can mitigate the risk	Transfer: assign a team that can own the opportunity and incorporate it into the deliverables.
Assume: the risk with no further action other than to watch for a change.	Ignore: the opportunity with no further action other than to watch for a change.
Mitigate: the risk by executing the tasks needed to reduce its likelihood and any consequences from its outcome.	Pursue: the opportunity by advancing the likelihood and consequences of it occurring.

- Sound risk and opportunity management cannot save a poorly planned program with bad processes.
- Prevent competition between risks and opportunities.
- Prevent unhealthy competition between teams.
- Risk and opportunity management provide diminishing returns if overused.
- Costs of pursuing opportunities and managing risks must be weighed against the expected benefits.
- An environment should be created to encourage risk and opportunity management.
- Risks and opportunities are not just normal variations in plan.
- Recognize the difference between risks and opportunities.
- Opportunities are not "positive risks".

- Defined outcomes result of risk buy down and management tasks are made visible through accomplishment criteria or some form of qualitative assessment.
- Assessed for compliance to specification through a risk buy down chart showing risk reduction as the project proceeds.

This makes risk management part of the normal project planning and control processes. Once in place, the risk management plan is no longer a separate event represented solely in a document, but part of the project management teams responsibility.

Putting This to Work

Risk Management must be an integral part of planning and execution. PMBOK® [1] defines 6 processes for managing risk. To make risk management explicit the tasks for managing risk must be:

- Embedded in the schedule – flagged as risk management tasks with predecessors, successors, durations, and priorities.
- Assigned resources – risk manager and technical assessment staff, cost accounts, and WBS numbers, performance targets, and exit criteria.
- Budget – apportioned to the risk level, cost baseline, and actuals against the project baseline.
- Tracked in the normal status review – risk manager reports risk reduction status as percentage complete or 0%/100% complete.

Bibliography

- [1] Integrating Program Risk Management into the IPPD Environment, Robert Cvetko and Harry Jabaghourian, *Third National Symposium on Risk Management*, November 28 – December 1, 2000, McLean, Virginia.
- [2] *Continuous Risk Management Guidebook*, Audrey J. Dorofee, et al, Software Engineering Institute, 1996.
- [3] Risk & Opportunity Management: Program & Project Management Success Factors, Harry Jabaghourian and Robert Cvetko, *Fourth National Symposium on Space System Risk Management*, May 21 – 24, 2002, McLean, Virginia