Risk Management Plans for Small Business

Bill Carswell

Embry Riddle Aeronautical University

Abstract

This paper outlines a risk management plan template for small projects and small organizations based on the PMBOK qualitative risk management process. The probability and impact assessments use a 1-5 scale and a stop-light classification scheme in which red and yellow risks are actively worked, red risks are reported to the customer and senior management weekly, and green risks are monitored. The first section of the risk management plan template is the "Project Risk Overview," which contains a version of the scope statement emphasizing risk, stakeholder tolerance and a brief description of the qualitative risk management approach and process. The next section is "Roles and Responsibilities." Two roles are outlined, the project manager and the risk owners. The section on "Risk Identification" outlines sources that should be considered in identifying project risks. The "Risk Register" section describes the three sections of the risk register: 1) the risk register summary, 2) the probability and impact definitions and 3) the individual risk item data sheet. Templates are provided for each of the three risk register elements. The "Risk Reporting" section defines the risk register as the weekly reporting form, with red risk item data sheets being actively briefed and yellow risk item data sheets being held for back-up. The "Integrated Change Management" section outlines the process to be followed for integrated change management to incorporate all risk response plans into the project plan and provides a change form template.

Introduction

Risk management is a critical cornerstone of any successful project. Reduced to its essence, risk management is the process of second-guessing your project plan BEFORE things go wrong, then avoiding the disastrous pitfalls proactively instead of waiting for disaster to strike and responding when it is often too late. This paper outlines an approach to risk management planning that enables a simple but effective risk management approach to risk management for small businesses and in the small project environment. The approach outlined herein will also work for larger companies and in larger project environments, but larger companies and larger projects often have risk management processes already in place. This paper is to guide the small business and small project manager in developing a successful risk management plan with a minimum investment of time and resources.

The Elements of a Good Risk Management Plan

Risk Management Approach

This risk management plan uses qualitative risk management practices as outlined an abbreviated version of qualitative risk management as outlined in the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK) (PMI, 2008). Risks and response plans will be identified and tracked in a risk register. Risk probability and impact assessments will be done on a 1-5 scale and classified on a traditional stoplight chart. All "red" and "yellow" risks will be actively worked, with "red" risks being reported to the customer and senior management during weekly briefings. "Green" risks will not be actively worked, but response plans will be developed and the risks will be monitored.

Project Risk Overview

The plan should begin with an overview of the project, usually a version of the scope statement. This overview can be a verbatim form of the scope statement, of a modified scope statement with an emphasis on known risk categories or concerns. For example, if the project involves developing a particularly risky technology the scope statement can be elaborated on to point out the technology risk. Risks that might be elaborated on at this point might include supply chain concerns, potential schedule conflicts, organizational challenges and funding obstacles. This section will also include any assessment of stakeholder risk tolerance if any particular sensitivities need to be pointed out. The overview should be kept short since the plan is not the place to elaborate on individual risks, but to set the stage for risk identification and establish the approach for developing risk response plans.

This section of the plan should also establish the preferred approach for risk management. In the case of small businesses and small projects qualitative risk management is often preferred over quantitative risk management. The following is typical boilerplate paragraph for risk management approach:

"This project uses a qualitative risk management approach. As individual risks are identified they are captured in the project risk register. Each risk will be assigned to a responsible individual, who will use the processes laid out in this plan to 1) develop a risk statement, 2) evaluate the risk's probability and impact, 3) develop response plans with a goal to reducing both the probability and the impact,

4) implement the response plans as appropriate and 5) provide weekly risk register updates for project reporting purposes."

Since this recommended risk plan is aimed at small businesses and small projects this overview section should conclude with a paragraph specifically stating that due to the relatively small scale of the project there will be no separate charge code for risk management work. All risk work will be conducted by team members as part of their normal project duties and charged accordingly.

Roles and Responsibilities

Project Manager

The project manager is responsible for leading the risk management process and ensuring integrated risk management. Although other team members will be responsible for risk response planning and execution, the project manager is responsible for ensuring that the risk response plans are integrated into the project plan. This involves schedule updates to include scheduled risk response activities, budget updates to reflect updated costs associated with risk responses and scope/quality modifications required by risk response activities. All risk response plans must be fully integrated into the project plan and the plan changes must be implemented using the formal project change control process.

The project manager also coordinates a risk kick-off meeting. This meeting introduces the team members to the risk approach, provides them with the risk register templates, emphasizes the use of integrated change management for implementing risk response plans, and gets a first set of inputs from the team for risk identification and

response plans. This meeting can be a stand-alone meeting, or be part of another meeting, such as the project kick-off meeting or a weekly team meeting.

The project manager should also facilitate risk identification and response planning in other meetings on an ad-hoc basis. Any time new activities are planned, significant milestones are being reached, or changes are being discussed or implemented the project manager should ask the team where the failure points are.

The project manager is responsible for having at least one one-on-one interview with each key team member and stakeholder to elicit specific risk concerns and potential response plans. It is essential that all key stakeholders be given the opportunity to privately and confidentially voice their concerns to the project manager. These concerns are often valid risk issues that might not get expressed in group settings.

The project manager will receive weekly updates from risk owners and created an updated, integrated risk register each week. This register will then be used to brief senior management and the customer.

Risk Owners

Since this is a small business/project the project manager is the only specific individual with dedicated risk management responsibilities. All other team members are responsible in a general way for bringing risk concerns to the project manager. The project manager will then identify project team members to own individual risks. When a risk has been assigned to a risk owner that person is responsible for developing the following items and capturing all related risk information in an individual risk item data sheet:

1. Writing a risk statement in the "If... then..." format.

- 2. Evaluating risk probability and impact on a 1-5 scale.
- 3. Developing risk response plans with a goal to reducing both probability and impact.
- 4. Implementing risk response plans as appropriate.
- 5. Provide updated risk item data sheets to the project manager on a weekly basis.

Risk Identification

They key method for risk identification is evaluating the project plan for weaknesses. This can be done in team meetings and in individual interviews. Since the project plan contains the project objectives, and risks are evaluated in terms of how they impact project objectives, reviewing the project plan with an eye towards identifying risk is extremely valuable. At the very least the project scope, schedule and budget baselines should be evaluated with the specific question in mind,

"Why are we going to deviate from this baseline?"

Any other project documents can also be scrutinized for weakness, including

- Project charter, contract or statement of work
- Project requirements
- Quality documentation, including the quality plan, quality metrics and quality control reports
- Project staffing plans and job descriptions
- Procurement documents, including statements of work, make-or-buy decisions, source selection documents and subcontractor performance reports
- Change requests all change requests should be evaluated for potential risk

The Risk Register

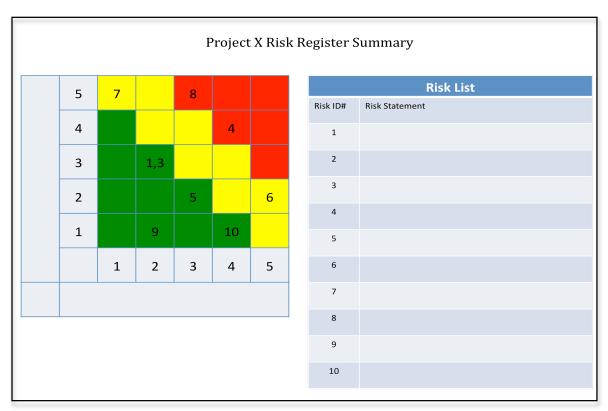


Figure 1: Risk register summary page.

Probability/Impact Definitions									
	Level	Probability	Cost	Budget or	Budget or	Budget or	Budget or	Budget or	
Probability	Level	of Occurence		unit cost production increase <1% of budget	unit cost production increase 1%-2% of	unit cost production increase 3%-10% of	unit cost production increase 11%-20% of	unit cost production increase >20% of	
	5	61% - 99%	Schedule	Schedule	budget Schedule	budget Schedule	budget Schedule	budget Schedule	
	4	41% - 60%		Impact <1%	impact 1% - 5%	impact 5% - 10%	impact 10% - 20%	impact >20%	
	3	21% - 40%	Technical	Scope decrease barely noticeable	Minor affect on scope	Major areas of scope affected	Scope reduction unacceptable to sponsor	Project end item is useless	
	2	11% - 20%							
	1	1 - 10%	Level	1	2	3	4	5	
	Impact								

Figure 2: Risk register probability and impact definitions.



Figure 3: Individual risk item data sheet.

The risk register contains each identified risk, along with response plans and status updates. As much information as possible should be captured for each risk, including enough detail to understand why changes may have been made to the scope, schedule or budget plans.

The risk register consists of three main sections, the summary page, the probability and impact definitions page and the individual risk item data sheets.

Risk Summary Page

The risk summary page is shown in Figure 1. Each risk statement is written in the risk list column on the right. The risk ID number for each risk is then entered into the "stop light" chart on the left. This serves as a snapshot of project risk, quickly showing

how many risks are being tracked or worked, and how many "red" risks the project is facing.

Probability and Impact Definitions

The probability and impact definitions are shown in Figure 2. These definitions are examples only and not meant to be recommendations for every project. These are definitions the author has found useful in the past. Also, the percentages are placeholders that should be replaced with real numbers when a project budget and schedule are established. When a project develops a proposed definitions table, those definitions should <u>always</u> be vetted with the customer for their approval prior to approving the risk management plan.

Individual Risk Item Data Sheets

The individual risk item data sheet template is shown in Figure 3. The risk owner is responsible for filling out and maintaining this data sheet and making sure the project manager always has the latest version. Specific instructions include:

- <u>Probability Justification</u>: Document why the 1-5 ranking was assigned.
- <u>Impact Justification</u>: Document why the 1-5 ranking was assigned.
- <u>Stoplight Chart</u>: Place an "X" in the appropriate box in the stoplight chart corresponding to the probability/impact assessment.
- Risk Response Plans: Identify two plans if possible, one to reduce the probability of the risk event ("if" portion of the risk statement) occurring and another to reduce the impact on the project ("then" portion of the risk statement) if the risk comes to pass.

• <u>Updates</u>: As a risk response plan is worked and the probability and impact values (1-5) change update the justifications accordingly and move the "x" indicator in the stoplight chart accordingly. Also be sure to track the progress in the "status" section of the "Risk Response Plans and Status" box.

Risk Reporting

Risk reporting should be part of the regular weekly reporting to the customer.

The customer will be briefed using the following risk register items:

- 1. Risk Summary Sheet
- 2. "Red" Individual Risk Item Data Sheets
- 3. "Yellow" risk item data sheets will be kept as back-up for the briefing.

Integrated Change Management

To ensure that all risk response activities are integrated into the project plan the change form shown in Figure 4 shall be used to implement all risk response plans. The change forms will be processed in accordance with the project's change management process. Change requests should reflect all necessary updates to the schedule, budget scope and other documentation necessary to implement the risk response plans.

Affected Item/Document	Tracking Number:					
Name of Submitting Organization:						
Organization Contact:	Phone:					
Email Address:						
Change Request Description:	Date:					
Proposed change:						
(Describe in sufficient detail for senior managers to understand. Do NOT include background information such as rationale and impact. Only describe the change requested. Use attachments if necessary)						
Rationale for Change:						
(In this section describe the need for the change, the impact and consequences of the change, any risks that may be associated with the change, a rationale for any resources required to make the change and a projected timeframe to implement the change. Use attachments if necessary)						
Disposition: Approved or not approved						
Rationale (if not approved)						
Change implementation assignee (if approved)						
Resources required (if approved)						
Personnel						
Budget						
Other (equipment, etc)						
Targeted completion date (if approved)						

Figure 4: Change request form to be used to incorporate all risk response activities into the established project plan, including, scope, schedule, budget and quality changes.

References

Project Management Institute. (2008). *Project management body of knowledge* (4th ed.).

Newton Square, PA. PMI Publications.