



## RISK MANAGEMENT: A REVIEW

Nirmal Yadav\*

Nishant Sharma\*

Rahul Sharma\*

Prashant Sharama\*

---

**Abstract:** *This research paper is about risk. This plan documents the processes, tools and procedures that will be used to manage and control those events that could have a negative impact on the Project RISK MANAGEMENT. It's the controlling document for managing and controlling all project risks. This plan will address:*

- *Risk Identification*
- *Risk Assessment*
- *Risk Mitigation*
- *Risk Contingency Planning*
- *Risk Tracking*
- *Reporting*

**Keywords:** *Risk Identification, Risk Assessment, Risk Mitigation, Risk Contingency Planning, Risk Tracking, Reporting, Risk evaluation, Risk management.*

---

\*Student, Department of Computer Science & Engineering, Dronacharya College Of Engineering, Gurgaon, India



## **INTRODUCTION:**

Risk management is any procedure or practice that nonprofit and charitable organizations use to reduce exposure to liability. Managers at nonprofit and charitable organizations may not think they have enough time to develop organizational and structural policies that protect the organization from exposure to financial liabilities. But developing and implementing good policies and procedures can minimize the risk faced by boards of directors, staff, and volunteers. Although they will not entirely eliminate the risk of financial liability, risk management procedures can reduce the exposure to an acceptable level.

This planning guide is based on the responses to our survey and is supported by information that we gathered through a review of existing literature. We have included a section of promising practices that we think will be helpful to nonprofit and charitable organizations.

We hope that this planning guide will enable managers and board volunteers to better understand the importance of risk management and to learn how easy and inexpensive it is to implement risk management policies and procedures.

## **WHAT IS RISK MANAGEMENT?**

Risk management is a process of thinking systematically about all possible risks, problems or disasters before they happen and setting up procedures that will avoid the risk, or minimize its impact, or cope with its impact. It is basically setting up a process where you can identify the risk and set up a strategy to control or deal with it.

It is also about making a realistic evaluation of the true level of risk. The chance of a tidal wave taking out your annual beach picnic is fairly slim. The chance of your group's bus being involved in a road accident is a bit more pressing.

Risk management begins with three basic questions:

1. What can go wrong?
2. What will we do to prevent it?
3. What will we do if it happens?

## **WHY DO RISK MANAGEMENT?**

The purpose of risk management is to:

- Identify possible risks.
- Reduce or allocate risks.



- Provide a rational basis for better decision making in regards to all risks.
- Plan.

Assessing and managing risks is the best weapon you have against project catastrophes. By evaluating your plan for potential problems and developing strategies to address them, you'll improve your chances of a successful, if not perfect, project.

## **HOW TO DO RISK MANAGEMENT?**

First we need to look at the various sources of risks. There are many sources and this list is not meant to be inclusive, but rather, a guide for the initial brainstorming of all risks. By referencing this list, it helps the team determine all possible sources of risk.

Various sources of risk include:

- **Project Management**
  - Top management not recognizing this activity as a project
  - Too many projects going on at one time
  - Impossible schedule commitments
  - No functional input into the planning phase
  - No one person responsible for the total project
  - Poor control of design changes
  - Problems with team members.
  - Poor control of customer changes
  - Poor understanding of the project manager's job
  - Wrong person assigned as project manager
  - No integrated planning and control
  - Organization's resources are overcommitted
  - Unrealistic planning and scheduling
  - No project cost accounting ability
  - Conflicting project priorities
  - Poorly organized project office
- **External**
  - ❖ Unpredictable
    - Unforeseen regulatory requirements



- Natural disasters
- Vandalism, sabotage or unpredicted side effects
- ❖ Predictable
  - Market or operational risk
  - Social
  - Environmental
  - Inflation
  - Currency rate fluctuations
  - Media
- ❖ Technical
  - Technology changes
  - Risks stemming from design process
- ❖ Legal
  - Violating trade marks and licenses
  - Sued for breach of contract
  - Labour or workplace problem
  - Litigation due to tort law
  - Legislation

## **RISK MANAGEMENT STRATEGY**

### **Risk Identification:**

A risk is any event that could prevent the project from progressing as planned, or from successful completion. Risks can be identified from a number of different sources. Some may be quite obvious and will be identified prior to project kickoff.

Others will be identified during the project lifecycle, and a risk can be identified by anyone associated with the project. Some risk will be inherent to the project itself, while others will be the result of external influences that are completely outside the control of the project team

Risk identification consists of determining which risks are likely to affect the project and documenting the characteristics of each. Risk communication involves bringing risk factors or events to the attention of the project manager and project team.



At any time during the project, any risk factors or events should be brought to the attention of the Insert Project Name Here project manager using Email or some other form of written communication to document the item. The project manager is responsible for logging the risk to the Risk Register. Notification of a new risk should include the following Risk Register elements:

- **Description of the risk factor or event** e.g. conflicting project or operational initiatives that place demands on project resources, unexpected study outcomes, delays, etc.
- **Probability that the event will occur.** For example, a 50% chance that the vendor will not have an animal colony that meets the criteria available.
- **Schedule Impact.** The number of hours, days, week, or months that a risk factor could impact the schedule. As an example, the animals require an additional 3 months to meet age requirements.
- **Scope Impact.** The impact the risk will have on the envisioned accomplishments of the project. Delayed animal delivery may result in a reduction in the number of studies that can be completed within the contract period of performance.
- **Quality Impact.** A risk event may result in a reduction in the quality of work or products that are developed. As an example, lack of funding caused by cost overruns may result in the reduction of the study size and impact statistical empowerment
- **Cost Impact.** The impact the risk event, if it occurs is likely to have on the project budget.

#### **Risk Responsibilities:**

The responsibility for managing risk is shared amongst all the stakeholders of the project. However, decision authority for selecting whether to proceed with mitigation strategies and implement contingency actions, especially those that have an associated cost or resource requirement rest with the Project Manager who is responsible for informing the funding agency to determine the requirement for a contract modification. The following tables details specific responsibilities for the different aspects of risk management

- Risk Activity Responsibility
- Risk Identification: All project stakeholders
- Risk Registry: Project Manager
- Risk Assessment: All project stakeholders
- Risk Response Options Identification: All project stakeholders



- Risk Response Approval: PM with concurrence from CO/PO/COTR
- Risk Contingency Planning; Project Manager(s)
- Risk Response Management; Project Managers
- Risk Reporting; Project Manager

**Risk Mitigation:**

Risk mitigation involves two steps:

- Identifying the various activities, or steps, to reduce the probability and/or impact of an adverse risk.
- Creation of a Contingency Plan to deal with the risk should it occur.

Taking early steps to reduce the probability of an adverse risk occurring may be more effective and less costly than repairing the damage after a risk has occurred. However, some risk mitigation options may simply be too costly in time or money to consider.

Mitigation activities should be documented in the Risk Register, and reviewed on a regular basis. They include:

- Identification of potential failure points for each risk mitigation solution.
- For each failure point, document the event that would raise a “flag” indicating that the event or factor has occurred or reached a critical condition.
- For each failure point, provide alternatives for correcting the failure.

**Risk Contingency Planning:**

Contingency planning is the act of preparing a plan, or a series of activities, should an adverse risk occur. Having a contingency plan in place forces the project team to think in advance as to a course of action if a risk event takes place.

- Identify the contingency plan tasks (or steps) that can be performed to implement the mitigation strategy.
- Identify the necessary resources such as money, equipment and labor.
- Develop a contingency plan schedule. Since the date the plan will be implemented is unknown, this schedule will be in the format of day 1, day 2, day 3, etc., rather than containing specific start and end dates.
- Define emergency notification and escalation procedures, if appropriate.
- Develop contingency plan training materials, if appropriate.
- Review and update contingency plans if necessary.



- Publish the plan(s) and distribute the plan(s) to management and those directly involved in executing the plan(s).

### **Tracking and Reporting:**

As project activities are conducted and completed, risk factors and events will be monitored to determine if in fact trigger events have occurred that would indicate the risk is now a reality. Based on trigger events that have been documented during the risk analysis and mitigation processes, the project team or project managers will have the authority to enact contingency plans as deemed appropriate. Day to day risk mitigation activities will be enacted and directed by the project managers.

Contingency plans that once approved and initiated will be added to the project work plan and be tracked and reported along with all of the other project activities. Risk management is an ongoing activity that will continue throughout the life of the project. This process includes continued activities of risk identification, risk assessment, planning for newly identified risks, monitoring trigger conditions and contingency plans, and risk reporting on a regular basis. Project status reporting contains a section on risk management, where new risks are presented along with any status changes of existing risks. Some risk attributes, such as probability and impact, could change during the life of a project and this should be reported as well.

### **CONCLUSION:**

We through our work in research on this topic "RISK MANAGEMENT" can conclude by stating that through times and over decades the risk evaluation techniques have changed and become more and more advanced but with it what has also increased is the competition in the market. Hence under such circumstances it becomes even more integral for an organization to not only avoid such risk by proper forecasting of the market but to try and completely prevent it by eliminating the root cause of such problems namely the factors that contribute towards the increase in the level of risk.

### **REFERENCES**

1. [http://en.wikipedia.org/wiki/Risk\\_management](http://en.wikipedia.org/wiki/Risk_management)
2. <http://www.slideshare.net/search/slideshow?searchfrom=header&q=risk+management>



3. <http://www.phe.gov/about/amcg/toolkit/Documents/risk-management.pdf>
4. <http://www.hse.gov.uk/risk/risk-assessment.htm>
5. [http://www.cfapubs.org/toc/rf/2011/2011/3?s\\_cid=researchfoundation\\_Google\\_Ad\\_group\\_Risk\\_Management&gclid=Clf8u5rSjLoCFU4F4god0UkABQ&](http://www.cfapubs.org/toc/rf/2011/2011/3?s_cid=researchfoundation_Google_Ad_group_Risk_Management&gclid=Clf8u5rSjLoCFU4F4god0UkABQ&)