

Managing Risks and Issues

Risk and issue management is one of the most fundamental parts of a project manager's job. It is an activity which needs to be attended to weekly, or sometimes even daily or hourly. Risk and issue management is an area where your positive and proactive mindset will really be put to the test.

“The effective management of risks is all about being proactive as you need to identify and tackle potential concerns before they turn into problems. The effective management of issues requires you to stay focused and calm whilst deciding on the best option for moving forward.”

As a project manager you are ideally positioned to pick up and address potential or real blockages, so that the project can continue as planned. But this is not a mechanical process to be carried out on a spreadsheet behind your desk. It is something you need to do in close cooperation with your team and stakeholders if you want to succeed. Although you are responsible for the facilitation and management of the risks and issues process, you cannot and should not do it in isolation. When you involve your team and stakeholders, not only do you improve the quality of the process, you also help promote a shared sense of responsibility for the project's successes and failures.

Test Yourself ...

- How would you describe the difference between a risk and an issue?
- Which steps would you say are involved in managing a risk?

A **risk** is a potential problem which could affect the success of your project and which has not yet occurred. It has a certain probability of occurring in the future and, if it occurs, could have a material impact on your project's success criteria such as time, cost and quality. An example of a risk is the possibility of key team members leaving the project, or that your proposed solution will not meet the customer's performance expectations.

An **issue** is an actual problem which is affecting the project. It concerns a specific difficulty or set-back which has occurred and which is impacting one or more of your project's success criteria right now. This could be a key team member who *has* left the project with no one to take over the work, or the fact that your solution has been proven to not meet the customer's performance criteria. Those are real issues. Often a project issue is a risk which has not been fully mitigated and which has now materialized.

The process for managing a risk is different from that of managing an issue. First, let us look at how to manage a risk.

Risk Management

The importance of proper risk management cannot be overemphasized. When you proactively identify and mitigate risks it means that fewer issues arise on your project. That is a good place to be in as it is always much easier and effective to manage a risk than an issue. As Tim Lister puts it *"risk management is how adults manage projects"*.

The key to good risk management is to discipline yourself to take some time out on a regular basis, on your own and with your team and stakeholders, to assess everything that could come in your way and impede on the success of the project. You need to understand the nature of each risk you identify and its potential impact, and determine how to best deal with it. You also have to assign an owner and follow up any actions agreed in order to reduce the probability of the risk materializing.

The first step in risk management is to *identify* all possible risks. Think through everything you are supposed to deliver and identify the things that could go wrong on your way to achieving a successful outcome. Consider your success criteria, assumptions and dependencies. Set up workshops with your team and stakeholders to identify and add further risks which you did not think of yourself. If you exclusively work on your own you will not be able to identify all possible dangers to your project. Use a combination of brainstorming and reviewing standard risk lists and lessons learnt from other projects to identify your risks.

Some of the risks you come across will be specific to your project whereas others will be generic risks that affect all projects, for example, users not being available at the time of user acceptance testing. Pay equal attention to both sets of risks as they could all turn up as issues if not properly mitigated. Do not make the mistake of deliberately omitting certain risks, for instance because they are too precarious to discuss. It is always much easier to manage a risk than waiting until it becomes an issue.

Also consider that risks can be positive. This can be relevant, for instance if something happens ahead of time, like an early delivery. You need to know how you would handle that situation.

As you identify your risks, add them to your risk register with a unique reference number, date you logged it, risk category and description as illustrated below.

Risk Log / Register									
Reference Number	Date Registered	Category	Risk Description	Probability	Impact	Owner	Risk Response	Actions	Risk Status
1		Resourcing	Risk that lead architect may leave project.	High	Medium				Open
2		Budget	Risk that allocated budget will not be sufficient to complete project.	Medium	High				Open

Use the category field to subsequently filter on risks that relate to the same category, e.g. resourcing, budget or a specific vendor or user group.

Step 1 ...

- Choose a project you are working on for this exercise.
- Create a risk register, for instance in Excel, which you can use to log all the risks you identify. In creating the register, include fields for a unique reference number, date, risk category, description, probability, impact, owner, risk response, action and status. We will cover each of these fields in more detail below.
- Spend time with the project's key team members or stakeholders and brainstorm all current risks on your project.
- Identify risks to do with requirements, scope, technology, resources, materials, budget, quality, stakeholders, suppliers, testing, roll-out, business processes, legislation etc. Include any item which *could* potentially become an issue for your project in one way or another.
- Add all identified risks to your risk register with a name and brief description.

The second step in risk management is to analyze the risks have you identified. To do this properly, consider the *root cause* of each risk. Keep digging until you find the ultimate source of this risk. This will make it much easier for you to identify how best to deal with it and mitigate it. As an example you may be presented with a risk of key team members leaving the organization, and feeling that the best way of dealing with it is to cross train staff and line someone else up. Whereas that is definitely a good idea which will help lessen the impact of the risk, you will really only be able to mitigate the probability of this risk by investigating *why* they might leave.

“Carry out a thorough analysis of your risks and identify what their ultimate source is. Get to the root cause and take action at that level.”

In addition to carrying out a root cause analysis, it is equally important to analyze and understand the potential *impact* of the risk. What will happen if this risk materializes? How will it affect time, cost and quality, business benefits and resourcing of your project?

Step 2 ...

- Explore the root cause of each risk you have identified. To get to the root cause keep asking why, why, why.
- Analyze the impact of the risk on time, cost, quality, business benefits and resourcing.

- Add these findings to the description field of your risk log.

Once you understand the nature of your risk, what its root cause and potential impact is, the next step is to determine the *probability* of the risk happening as well as the level of impact in case it does happen. In other words, you need to assess how serious this risk is.

Assign a high, medium or low rating for its probability of happening and a separate rating for its impact. The criteria for what is high, medium or low could be determined in the following way;

High probability - almost certain to occur

Medium probability - likely to occur

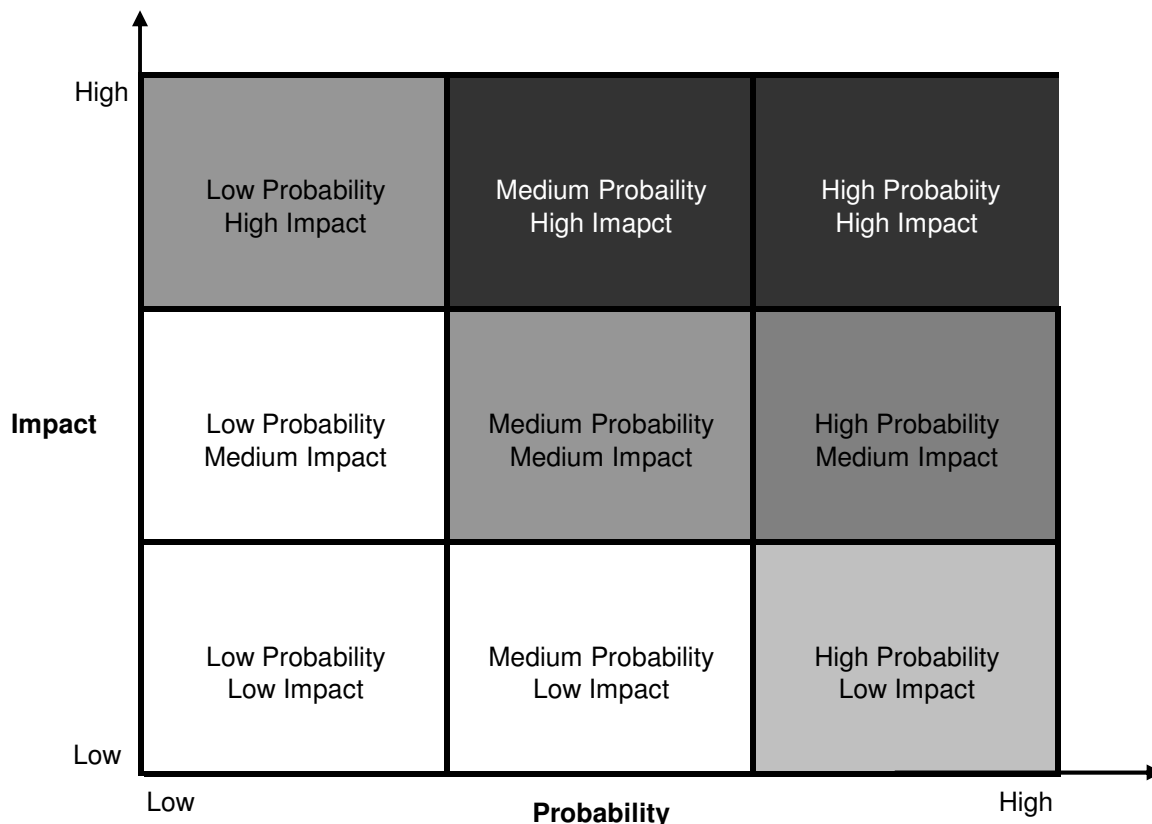
Low probability - unlikely to occur

High impact – would stop the project

Medium impact – would cause serious delays or rework

Low impact – would cause minor delay or rework

Note that a risk with a high impact and a low probability is more serious than a risk with a high probability and low impact. A low chance of a catastrophe warrants more attention than a high chance of a hiccup.



Step 3 ...

- Determine if each risk has a high, medium or low *probability* of occurring.
- Determine if the impact of each risk is high, medium or low if it were to occur.
- Add this to your risk log.

Now focus on the risks with the highest probability and highest impact and determine what the risk response should be. What is the best strategy for addressing each risk and which actions need to be taken to lower the probability and lessen the impact? Encourage feedback from your team and listen to their suggestions. The actions should include what needs to be done, who is to do it and when it should be completed by.

Some high risk items may require you to add extra tasks to the project plan in order to fully mitigate it (for instance build a prototype to mitigate the risk of using new technology). If these tasks affect your plan negatively by pushing out agreed milestones, but you still deem them to be worthwhile activities, make sure you raise it to the steering committee for approval.

Sometimes the only thing you can do is to accept a risk and prepare a plan B (i.e. a contingency plan) in case it materializes. In that case, make sure everyone understands that the risk is outside of your control and that there is nothing you can do to prevent it. An example of this would be new government legislation which would change the requirements of your project. You may not be able to impact the probability of this happening, but you may be able to lessen its potential impact by anticipating new legislative features in your project.

Step 4 ...

- For each of the risks you identified, determine what the risk response should be. What can be done to lower its probability and lessen its impact?
- Add your findings to the risk log.
- Assess if any of your risk responses impact your project to such an extent that you would need them to be signed off by the steering committee.
- If so, add them to the agenda for the next steering committee meeting.

Next in line, you need to assign an owner to each risk. The owner should be the person who is best suited to take mitigating action and monitor its progress. It could be anyone from within the team or steering committee but make sure the owner accepts responsibility.

Although you are responsible for facilitating the risk management process that is not to say that you should be the owner of each individual risk. Who you end up assigning as the owner depends entirely on the nature of the risk and who is best placed to deal with the risk response and mitigating actions.

Some risks are best dealt with by the sponsor or business owner, such as items external to the project or organization, or anything which relates to the business case. Deal with as many of the low and medium size risks as you can at a team level and escalate the remainder to the steering committee for ownership and resolution. Use your sense of judgment. Some risks are simply too significant to be left to the team to monitor.

Secure ownership from the most suited executives and chase for actions that have been committed to as you would a team member. When you ask an executive to deal with a risk you make them share the responsibility and ownership of the project. Do however make sure that you do not overwhelm senior executives with bad news or items you want them to resolve all at once. Give them an early heads up and manage their expectations before you ask them to take action and own a specific item.

Step 5 ...

- Assign an owner to each risk. The owner should be the person who is best placed to deal with the risk and monitor it.
- Let the risk owners know that you have assigned a risk to them and get their buy-in to owning it.
- Agree with the risk owners which actions need to be taken and by when.

The final step is to continually monitor the risks you have identified along with the actions which have been agreed.

Schedule regular risk reviews with your team and stakeholders to talk through outstanding actions, remove risks that have passed and identify new ones. Also beware of any changes to the nature of the risk and if it turns into an issue.

Remember to always mention your main risks and mitigating actions in your progress reports and to highlight them during steering committee meetings. Not only will this show your stakeholders that you are being proactive, you might also get valuable feedback which will help you manage and mitigate the risks even better.

Step 6 ...

- Schedule time in your diary for reviewing your risk log on a weekly basis and to monitor the progress of all logged items.
- Chase risk owners for any outstanding actions.
- Schedule follow-up meetings with your team to identify new risks and to review previous actions and risk descriptions.
- Ensure all medium and high risks are listed on your status report.
- Encourage a discussion of the top 10 risks at the steering committee meetings for executive direction and input.

Issue Management

As mentioned above, an issue is a specific problem which is affecting your project in a negative manner right now. It could be that a supplier has failed to deliver on time or that you have identified unexpected problems in the solution which you have built for the customer.

Large projects may encounter many problems and your ability to deal with them effectively could well be the determining factor for the make or break of your project.

Issue management has many similarities to risk management. You need to liaise with the team when you analyze the impact of an issue and when you determine the best possible resolution for it. You also need to identify an owner and a plan of action – all of which is little different to dealing with a risk.

But there are also differences. In particular, the urgency is greater when it comes to addressing an issue as opposed to a risk. To resolve an issue effectively, you need to move fast in understanding the problem and how it impacts your project. Which possible solutions are there and how would each of them affect cost, time and quality? You often have to make a rapid but informed decision and you may need to escalate to the steering committee for urgent advice and approval.

Some issues can be very serious and politically challenging and your reputation may be at stake as well as your sponsor's. This is when you really need to leverage your good stakeholder relationships and play with open cards. If senior executives feel that you are hiding major issues it can easily damage your reputation.

“When faced with a major issue you need to show strength, determination and good negotiation skills. Maintain a calm and positive mental attitude and think strategically.”

When presented with an issue, avoid making reactive and kneejerk decisions just to be seen as doing something. Gather the most capable team members and brainstorm the impact of the issue and ways of resolving it. Take your time, seek information and then make an informed decision. Be mindful however that you do not delay the decision out of fear of making the wrong one or because you want consensus from everyone. Good decisions tend to be based on analysis rather than consensus.

Bear in mind that issues are not necessarily big or catastrophic – especially not when you manage to catch them before they get out of hand. As with risk management, you need to spend time with people in order to find out what is going on and what is holding them back. This is by far the best way of identifying issues before they spiral out of control.

Once you have identified an issue, however big or small, add it to your issue log. Thoroughly analyze its impact on time, cost and quality and brainstorm options for resolving it with your team. Provide the issue with an impact rating of low, medium or high and assign an owner who is best placed to deal with it. As with a risk, the owner could be a team member or a senior executive depending on its nature, seriousness and urgency.

Some issues have trivial resolutions whereas others require a change of plan and approvals from the steering committee before you can move forward. Provide as much transparency as you can to everyone involved and follow up on the action plan until the issue has been resolved.

Once you have taken action and dealt with the urgency of the situation, you can start to ask *why* the issue came about in the first place. Look at its root cause and what you can do to prevent a similar issue from happening again in the future.

Exercise ...

1. Spend as much time as possible with your team and start to log all the issues you come across. List anything which is preventing your project or any of your team members from moving forward, however big or small.
2. Carry out a thorough impact analysis of each issue with the most suited people. How is this problem affecting your plan, team, budget, deliverables and milestones? What are all the negative (or positive) consequences of this issue?
3. Brainstorm options for resolving the issue and discuss what each of the options entails. The best resolution is one which addresses all of the negative consequences of the problem.
4. Decide on concrete action steps and who is to take action. Formally agree who the owner of the issue is and schedule the actions you have agreed on.
5. Follow up and check that action is being taken and that the issue is being resolved.
6. Bring all major issues to the attention of your key stakeholders and ask for direction and approval where necessary. You may need to schedule an emergency steering

committee meeting if the issue is urgent and large enough to potentially derail your project.

7. Update your issue log and status report so that there is transparency around current issues, agreed actions and ownership.
8. Examine *why* the issues occurred and what you can do to prevent similar problems from happening going forward. Only investigate this after you have taken action to resolve the issue. Otherwise you could end up in a blame situation without addressing the real problem.

ⁱ Said by Tim Lister and Tom DeMarco in the article "Risk Management During Requirements", IEEE Software, 2003.