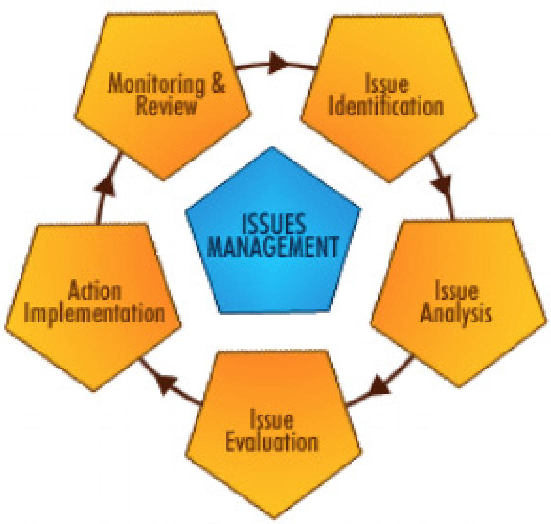
White Paper

Issues Management

An issue is a current problem that was previously a risk to a project (whether identified or not), that will negatively impact the successful delivery of the project. In other words, each issue is a significant problem arising from a ***realised risk***. Issues should not be confused with:

- **Potential problems**; these are not issues they are risks (an uncertain event or condition that may affect the project)[1] and should be managed through the 'risk register'.
- **Required decisions**; while the resolution of the problem giving rise to an issue will require decisions to be made, the vast majority of decisions are not issues. Provided a decision can be made by the appropriate people in an appropriate time frame it is just another decision[2].
- **Action items**; while in many respects action items are similar to issues, they should not be confused. Action items simply require someone to take the appropriate action (see the section on 'Action Items' below).



Issues are identified problems that **will** have a detrimental impact on the project if left unresolved and by definition, the solution is not known until the issue is resolved. Some issue will have an immediate impact on the project; others will be a future event that will impact on the project if not resolved.

However, not all 'problems' are issues. An issue is a formally defined problem that will impede the progress of the project and cannot be resolved within the routine project management process, generally issues either require some 'special effort' by the project team, outside help, or both to resolve[3]. To facilitate this management effort, issues are recorded in the issues log.

Fortunately, not every issue requires immediate action; certainly, by the time it is identified many issues will have a fully developed impact that has to be dealt with quickly. Other issues will be emerging, their impact is yet to be felt by the project meaning there is time to address the problem. This allows some level of prioritisation.

The analysis and prioritisation of issues allows for effective management:

- Issues should have the same consequence (or impact) rating as the risk from which it was realised. This allows prioritisation of action based on severity and cross links to the risk register.
- The time window for action is also important; issues with less significant impact ratings that are impacting the project right now may need prioritising over issues with more significant impact ratings that will not impact the project for some time.

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1 For more on ***risk management*** see: https://www.mosaicprojects.com.au/WhitePapers/WP1047_Risk_Management.pdf

2 For more on ***decision making*** see: https://www.mosaicprojects.com.au/WhitePapers/WP1053_Decision_Making.pdf

3 Identifying and resolving issues is a key part of the **Project Controls 3.0** management of Work Units. For more on ***Project Controls 3.0 (PC-3.0)*** see: https://mosaicprojects.com.au/PC-3-00-Overview.php#PC-3-Overview

The use of an issue matrix, similar to the traditional risk matrix, allows an overall issue rating that takes into account the timing of the realised impacts. The matrix (below) retains the consequence or impact ratings from the risk assessment. However, instead of probability[4], the rows now relate to ranges of time in which the issue needs to be resolved before the impact negatively affects the success of the project.

	Insignificant	Minor	Moderate	Major	Severe
Immediate	Medium	Medium	High	High	Extreme
Urgent	Medium	Medium	Medium	High	Extreme
Important	Low	Medium	Medium	High	High
Timely	Low	Low	Medium	Medium	High
Convenient	Low	Low	Low	Medium	High

As a default position, the following definitions may be appropriate for the different time ranges:

- **Immediate**: Resolution needed within the next 5 working days or project success will be impacted
- **Urgent**: Resolution needed within the next 10 working days or project success will be impacted
- **Important**: Resolution needed within the next month or project success will be impacted
- **Timely**: Resolution needed within the next month or the uncertainty over resolution will disrupt other activities or decisions
- **Convenient**: Decision not needed for more than one month.

The above matrix and definitions ensure that minor and moderate impact issues requiring immediate resolution will receive the same issue rating, and hence the same level of attention, as major or severe impact issues that do not need to be resolved for a month or more. And, if an issue is left unresolved it would automatically advance up the rows, from convenient to immediate, as the date on which resolution is required approaches, ensuring that issues that were initially assessed as having a low ranking due to their lack of proximity to the current date are not forgotten.

Managing an Issue

The processes used to manage issues can be simpler or more rigorous depending on the size of the project, the following process is appropriate for large projects.

1. **Identify the issue and document it**: Actively seek potential issues from any project stakeholders, including the project team, clients, sponsors, etc. The issue can be surfaced through verbal or written means, but it must be documented.

2. **Determine if the 'problem' is really an issue.** Many items may be risks (potential problems that should be managed as a risk) or just action items that must be 'actioned' and followed-up. Issues involve a degree of uncertainty either in relation to the action (or non-action) of a stakeholder or in determining the best solution to the problem. The project manager determines whether the problem can be resolved immediately (and takes the appropriate actions - see below) or whether it should be classified as an issue. If a large issue looks too difficult to be resolved in a timely manner, break it down into logical sub-issues.

[4] For more on ***probability*** see: https://www.mosaicprojects.com.au/WhitePapers/WP1037_Probability.pdf

3. **Avoid conflict!** The issue is a problem to resolve; adding additional layers of complexity by introducing conflict, blame or other emotions will not help the resolution of the issue. If a level of conflict is already occurring between some of the involved parties, work quickly to resolve the conflict and focus everyone on solving the problem[5].

4. **Enter the issue into the Issues Log.** If the problem is an issue, the project manager enters the issue into the Issues Log (see below).

5. **Allocate an owner – the issue manager.** You can't manage everything, so it's important to be able to delegate tasks[6]. Choose someone who has the skills to help resolve the problem and ask them to be the issue manager. This means that they will have to follow up progress on resolving the issue, track the actions and provide you with status updates.

6. **Determine the impact.** Using the same scale defined for the risk register (if the issue was an identified risk, transfer the relevant information from the risk register), carry out an impact analysis to assess the scale of the problem. Think about the areas of the project and the stakeholders that are affected and how long the problem will take to resolve. It is a good practice to encourage people to help identify solutions along with the issues. When a team member identifies a potential issue, ask the person to also suggest one or more possible solutions.

7. **Determine the solution date.** A 'resolve by date' should be defined and recorded for every issue.

8. **Prioritise the issue.** Using the matrix above. Based on the prioritisation then……

9. **Determine who needs to be involved in resolving the issue.** The issue manager determines who needs to be involved in resolving the issue. It is important to understand up-front who needs to be involved in, or can contribute to developing the final issue resolution. Provide guidelines for when team members can make decisions and when more senior people need to be involved. Team members should be encouraged to make the decision themselves if:
   a. Is there no significant impact to effort, duration or cost
   b. The decision will not cause the project to go out of scope or deviate from previously agreed upon specifications
   c. The decision is not politically sensitive
   d. The decision will not cause you to miss a previously agreed upon commitment
   e. The decision will not open the project to future risk.

10. **Apply problem solving techniques[7] to develop a solution.** The project manager assigns the issue to a project team member for investigation (the project manager could assign it to himself or herself but in most cases, delegation is essential). The team member will investigate options that are available to resolve the issue[8], and for each option, the team member should also estimate the impact to the project in terms of budget, schedule, scope, risk and other pertinent factors such as identifying any environmental impacts.

[5] For more on ***conflict management*** see: https://www.mosaicprojects.com.au/WhitePapers/WP1041_Managing_Conflict.pdf

[6] For more on ***delegating actions*** see: https://www.mosaicprojects.com.au/WhitePapers/WP1091_Delegation.pdf

[7] For more on ***problem solving*** see: https://www.mosaicprojects.com.au/WhitePapers/WP1013_Problem_Solving.pdf

[8] For more on ***root cause analysis*** see: https://www.mosaicprojects.com.au/WhitePapers/WP1085_Root_Cause_Analysis.pdf

11. **Gain agreement on resolution.** The various alternatives and impact on schedule and budget are documented on the Issues Form or Issues Register. The project manager then takes the issue, alternatives and project impact to the appropriate stakeholders (eg, a project control board or sponsor) for discussion and resolution[9]. The project manager should make a recommendation and may have the authority to select from the alternatives. Each resolution should involve a set of agreed actions, and if the agreed solution involves changes to the project, the agreed solution is formalised through the change control process[10].

12. **Add the action plan to the project management plan**. Once a resolution is agreed upon, the appropriate corrective activities are added to the schedule and other documents to ensure the agreed resolution to the issue is actually implemented (particularly if the change control processes are not required).

13. **Monitor progress.** Use the action plan and project schedule to monitor progress towards resolving the issue. Follow up with the issue owner on a regular basis. When each action has been completed successfully, you can mark the task as complete on the task list and update the issue log with the latest progress.

14. **Review and Close the Issue in the Log.** The project manager documents the resolution or course of action in the Issues Log, reviews the overall effectiveness of the solution and where appropriate records the lessons learned[11].

15. **Communicate through the Status Report.** The project manager communicates issue status and resolutions to project team members and other appropriate stakeholders through the methods established in the Communication Management Plan, including the project Status Report.

Smaller projects may not need all of these discreet steps. For instance, the issue can be documented and rated directly in the Issues Log without the need for the separate Issues Form but all well managed project should develop a process that manages issues from identification through to completion and closure.

Issues Log

The format and contents of an issues register needs to be adapted to the project and should be based on an organisational standard (organisational process asset). Most issues logs contain the following information:

- The issue name (unique and short)
- Classification or type (usually based on what aspect of the project's work is affected; safety/quality/etc.)
- Status:
    - Pending (the issue is not fully defined yet)
    - Open (its being worked on)
    - Closed (it has been resolved)
- Who raised the issue (normally this person needs to know when it is resolved)
- Date the issue was raised or logged
- A concise description of the issue and references to other relevant documents
- Priority (see matrix above)

9 For more on ***decision making*** see: https://www.mosaicprojects.com.au/WhitePapers/WP1053_Decision_Making.pdf

10 **Note:** if the issue cannot be resolved by the project team in a reasonable timeframe, it should be escalated to the appropriate management level for resolution. Unresolved issues will damage the project.

11 For more on ***lessons learned*** see: https://mosaicprojects.com.au/WhitePapers/WP1004_Lessons_Learned.pdf

- Analysis of the issue potentially including: root cause / consequence / key stakeholders
- The issue owner or manager (the person tasked with resolving the issue)
- Resources assigned to work on the issue
- Target resolution date
- Progress information: trend in list position / time in the list
- Final solution (this should be distributed and actioned) including updates to the project plan and action list
- Date closed (the solution has been successfully implemented).

The log can be set up in a database, spreadsheet or 'Word' document.

Action Items

An action item is an ad-hoc work activity that requires follow-up. By their nature, action items arise on an *as needed* basis during meetings or as a by-product of working on something else. By their nature, specific action items normally cannot be planned for in advance, but you can include an allowance in the plan for the occurrence of some action items. An action item is created because there is not enough knowledge, expertise or time to resolve the item at the time it originally surfaced.

- Action items are relatively small work items that need to be assigned to a person, worked on later and completed in one or two reporting cycles. (If they are not going to be completed, they should not be called action items. Instead, simply note that the item will not be actioned and then forget about it.). Examples of action items include forwarding specific information to someone, arranging a meeting, or providing a quick estimate on a piece of work.
- ***Action items are not the same as issues***; an issue is a problem which will have a detrimental impact on the project if left unresolved and consequently requires careful managing (discussed above), action items are straightforward work items that just need to be competed in a timely way. Sometimes an action item is established to investigate an area where there may be a potential problem and the outcome of the action may be to raise an issue, but the action item itself is not an issue.
- To ensure the work is done, action items need to be assigned to someone, worked on and completed.
    - Major 'action items' should be transposed into the schedule and become a normal part of the work management processes. The action item is to update the schedule with the new work. The schedule update and approval processes then ensures the work has a resource assigned, logical dependencies determined and where necessary an end-date set. The schedule activities are then managed and tracked as any normal activity on the schedule. This approach allows the project manager to see the impact of the new work on the schedule.
    - Smaller / trivial actions (less than 4 hours or those that will be resolved within the next 1 to 2 days) need recording and reviewing for completion either:
        - In the minutes of the meeting where the 'action' was identified[12]. If you use this technique you can start each meeting with a review of the prior action items to validate that they are completed and then cross them off the list.
        - In the agenda of a specific meeting that includes an item for the reviewing and updating action items on a regular basis (eg, a weekly team meeting).
        - Alternatively, in a 'to-do list' or simple action item log. However, if you develop a separate log, make sure the 'action information' is readily available to the people assigned to complete the action.

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[12] In many cases ***action items*** can simply be included in meeting minutes to ensure the problem is quickly resolved. For more on ***managing action items*** see: https://www.mosaicprojects.com.au/WhitePapers/WP1075_Meetings.pdf

Managing action items is important to the smooth running of the project. Projects tend to generate lots of them and you need a defined approach to tracking and closing each one to ensure the rest of the project work continues to run smoothly.