

How to manage risks in **Agile**?

"Classic" risk management does not suffice when dealing with Agile methods. After all, Agile methods approach project risks in a much more assertive way, both in terms of considering and resolving them. An Agile project is fully organised to eliminate the greatest risks as quickly as possible, in order to ensure a smooth continuation.

Knowing how to manage risks is a good project management practice that has been taught for many years ... has anything changed today? Well, in the meantime, Agility has given risk a prominent place again. Risks steer the project and the content of iterations, and thus influence the activity of the project team.

More specifically:

- **Agile best practices** - recognised for short iterations, incremental delivery, daily scrums, visual reporting and continuous integration - are powerful weapons for dealing with risks inherent in any project;
- In practice, a risk analysis must be carried out, which requires real awareness;
- We always underestimated important activities. Risk management was considered a strength. The analysis was carried out well, as appropriate, and served as a basis for prioritising the work to be carried out;
- **Risk management** ultimately applies everywhere: within small or large projects, IT or not, as defined by **AFNOR** (Association Française de Normalisation): risk is an event that is uncertain to occur and likely to affect the objectives of the project.



First things first: categorising risks

Let's get started! Before managing, controlling and addressing risks, they must be categorised. The most common risk types are:



Project Organisation Risks:

when the costs are higher than estimated or in case of a lack of budget.



Technical Risks: when there is no access to the required technologies or when dealing with a complex project or lack of resources.



Business Risks: when there is a lack of skills or in case of absenteeism, dismissal or conflicts within the team.



Supplier Risks

- Delays from subcontractors or suppliers
- Poor estimation of deadlines
- Failure of key supplier
- Increase in purchase prices



Client Risks

Socio-economic issues:

- Strikes
- Economic difficulties or bankruptcy

Contract termination

- Due to force majeure ;
- For non-compliance with agreements (e.g. deadlines and means).

RISK BOARD: the key to manage risks in Agile

The risk management will be divided by the team and by the SCRUM Master throughout the project by using the RISK BOARD. **The most important steps in managing risks are:**

- Carrying out the risk analysis of the project based on, for example, the checklist, grids, criteria and brainstorming. To delineate everything even more clearly, you can work with these 5 risk categories: **Client / Project organisation / Business / Technical / Supplier in the case of subcontractors.**
- Assessing the risks in terms of **severity of impact** (deadlines, costs, quality, etc.) and likelihood of occurrence, which provides a criticality indicator for each risk.
- Documenting a risk sheet for the 8 to 10 most important risks.
- Making sure the risks do not escalate into a problem. So, organise the project to “remove” major risks as quickly as possible by, for example, addressing use cases and stories that contain the riskiest elements. In addition, you can use the most appropriate Agile best practices and then choose to apply one of the 3 risk following strategies: **Avoidance, Transfer or Acceptance.** Try to reduce the impact and switch to your back-up plan if necessary.
- Monitoring and adjusting the risk list and estimating and planning iterations and arbitrations. All these practices will ensure that risks remain at the forefront of the project team’s concerns.
- Updating the risk list and communicating about it at each start and end of the iteration. Be sure to include verbal and written communication at each key milestone as well.
- Capitalising at the end of the project: the outcome of your risks may be variable, but know that they will be well-tracked and that you have been collecting valuable indicators.



How do Agile ceremonies facilitate the integrated design of risk management?

The most important non-agility risks of project teams are:

- Risks of not trusting the team;
- Risks of commanding the team;
- Risks of doing the team’s work;
- Risks of not letting the team assess the risks itself.

The nature of these risks can be avoided or mitigated by applying a series of Agile ceremonies. This makes it easy to adhere to the Agile principles or Agile mindset and apply the integrated design of risk management. This integrated design of risk management benefits from the Agile approach by relying on anticipation, teamwork and the phasing of concurrent tasks. The result? Continuous optimisation throughout the project.

Risk monitoring via Agile ceremonies is done as follows:

- **Daily SCRUM:** enable the team to ensure that their sprint forecast is still up-to-date and that the sprint target is maintained. This reduces the risk of a poor or non-existent delivery.
- **Retrospective:** allow the team to improve themselves so that the risk of losing commitment is reduced.
- **Sprint Planning:** allow the team to choose their stories and commit to a common goal. This reduces the risk of delivering the wrong features.
- **Sprint Review:** avoid delivering a functionality that is not in line with the specified requirements.

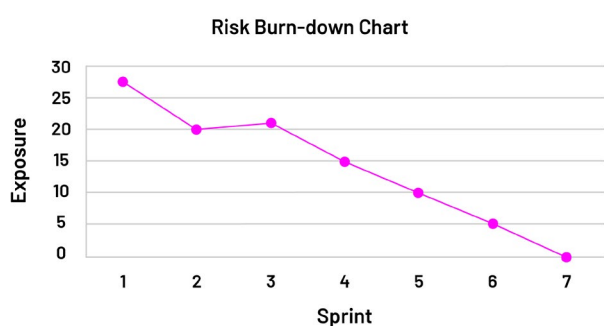
How can Agile artefacts help to monitor risks?

THE RISK BURNDOWN CHART

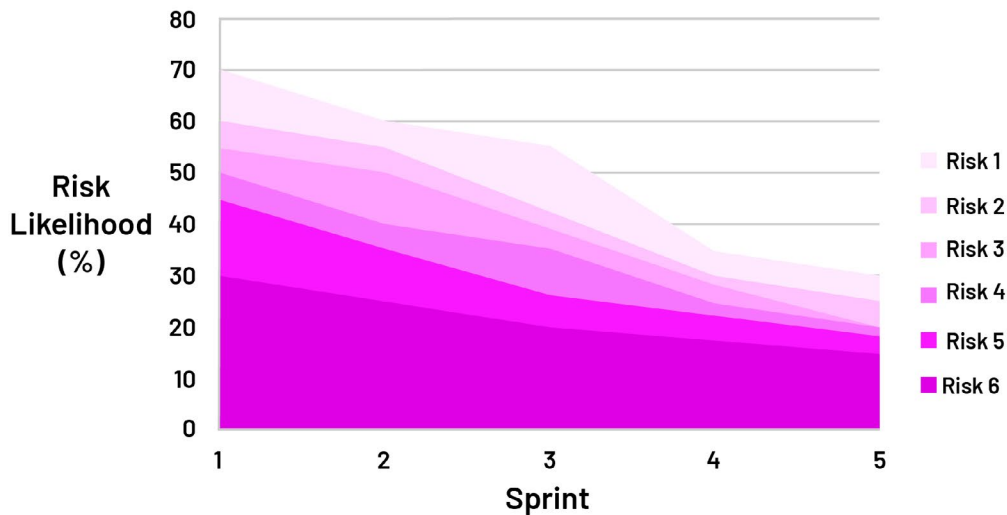
In Scrum, risk management activities are distributed over different roles, with certain responsibilities allocated to all members of the Scrum team and the Scrum Master facilitating the process. **Risk management is an integral part of value creation.** Therefore, risk management activities are carried out during the entire project lifecycle and not only at the project initiation stage.

Each risk can be assessed using different risk assessment tools. However, the instrument of choice for assessing risks – for the purpose of drawing up a risk allocation chart – is the **Expected Monetary Value (EMV)**.

The information gathered during the risk assessment can be used to create a risk allocation table. This table describes the cumulative severity of the project risks over time. The probabilities of the different risks are superimposed to show the cumulative risk on the y-axis.



First, the risks of the project are identified and assessed and the **Risk Burndown Chart** is prepared. Then, at predetermined intervals, new risks can be identified. The remaining risks must then be reassessed and updated in the chart. A suitable moment to do this is during the sprint planning meeting. By monitoring risks in this way, the team can recognise trends in risk exposure and take appropriate action if necessary.



Source: SCRUMstudy - Global Accreditation Body for Scrum and Agile Certifications

The ROAM Board

The ROAM board is a simple risk visualisation tool. It is commonly used during the Agile team planning meeting, when user stories are reviewed and estimated. **You can use the board to identify and analyse the risks and potential issues that may arise when executing the user stories, proposed in the product backlog.**

The board is divided into four parts as indicated in the previous paragraph:

**Resolved,
Owned,
Accepted,
Mitigated.**

Once identified and classified, you can address the different risks as in any Agile project. Any risks that cannot be addressed directly at the project team level should be escalated to a higher level. Think, for example, of risks related to the availability of an infrastructure that need to be addressed.

The ROAM board can be hung so that it is legible and visible to everyone at all times. In this way, all members of the project team constantly have an eye on the risks that have been identified, the risks that must be dealt with as a matter of priority, and the persons responsible for them.



How to operate if risks are officialised?

THE IMPEDIMENT BACKLOG

Once the risks described as possible events have become obstacles, they are tracked in the backlog impediment where obstacles are collected, grouped and prioritised.

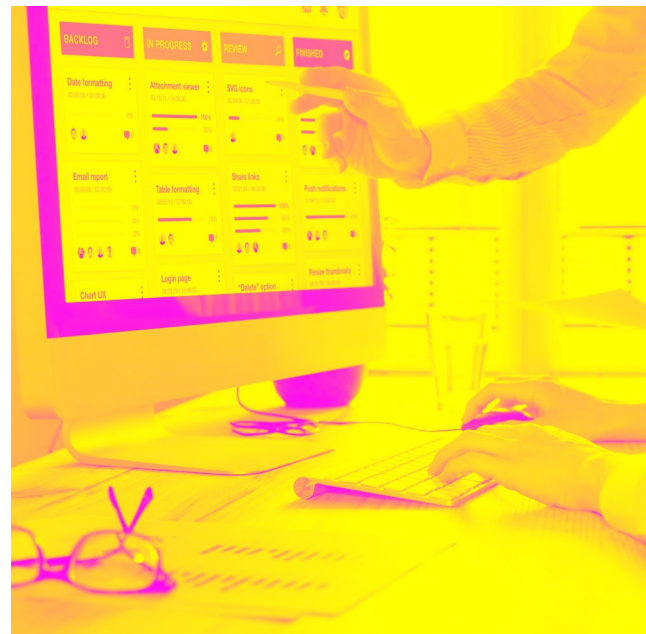
THE ISSUE CALENDAR

The Issue Calendar provides a history visualisation of issue changes as calendar events. It makes it possible to:

- Track work activity throughout the month at the issue level;
- Detect the duration of each issue in a given status;
- Mark the periods of events associated with important statuses;
- Configure a tool that is effective in monitoring your past and present tasks.

A calendar event starts when the status of an issue changes and proceeds until the issue is moved to the column with the status category “completed” or “to be done”.

- Track daily activity;
- Detect slow tasks visually;
- Colour events in the calendar to mark important statuses;
- Filter out problems through additional JIRA Query Language (JQL);
- Use timeline mode;
- View details of the problem in the pop-up window.



THE ISSUE SNAKE

The Issue Snake is a visual representation of a team's results over a period of time. **The idea is to set aside wall space and form a chain of tights.** Each time the team has to complete an assignment that they consider to be an issue, they write a sticky and add it to the chain. The longer the chain, the more the team experiences problems. Instead of an elongated snake, place the exit snake on a whiteboard and turn it into a block. It loses the snake effect, but the team can still observe the problems increasing during a sprint, which makes it a great information radiator. The Snake Issue can also serve as a memorandum that can be used to prepare retrospectives or even as the focus of the retrospective itself. This is why it is important not to let the issues pile up.

To sum things up

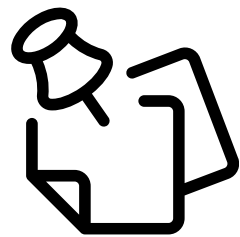
The most important keys to risk management in Agile are:

- 1 Start early;
- 2 Organise a collective workshop with all stakeholders for more diversity;
- 3 Be visible and stick the risk table on the wall;
- 4 Be omnipresent and make sure you evaluate risks at regular intervals;
- 5 Divide your organisation into steering committees, for example.

Whatever method is used for a project, identifying and dealing with risks is essential. But of course, we must not forget that a project is a day-to-day business. It is not enough to identify the risks at the start of the project and take the necessary measures. A periodic risk assessment is absolutely necessary, as the project may change.

The actions taken to control the risks must be regularly reviewed to see if they are effective. In addition, it is best to carry out a risk assessment to anticipate possible new difficulties that may be included in the above-mentioned series of Agile ceremonies.

Notes



Lined area for notes, consisting of 20 horizontal lines.

Valorising business, data and technology



Sandy Everaerts

Author & Program Manager at Tobania.Business