Project Risk Analysis

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## What is a project risk?

Project risks are unforeseen events or situations that can have a negative effect on the success of the project as a whole or on particular project activities or objectives. A risk is a problem that has yet to arise Project risks can be characterised further by a) the probability to become a problem and b) the severity of the damage the problem might cause to the project.

Good project planning is half the battle for risk management. The task of project managers is to take precautions to ensure that project risks do not become problems. This can be done by the help of a risk analysis in the planning stage of the project.

## How can project risks be analysed?

A risk analysis does not only include the identification of project risks, but also decisions on how to avoid problems or react to them in case they arise.

The first step of a risk analysis is to identify project risks. Illustration 1 shows five different areas, where project risks can occur:

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| --- | --- | --- | --- | --- | --- | --- |
| **Risk** | **Root Cause** | **Damage** | **Probability** | **Impact** | **Precaution** | **Response** |
| Example: Hosting an international conference | | | | | | |
| *keynote speaker won’t come* | *visa could not be obtained* | *conference session will be cancelled* | *medium* | *high* | *- leaflet on visa process*  *- provide invitation letter, hotel reservation etc.*  *- contact embassy* | *- find substitute*  *- reschedule programme*  *- get slides from speaker for website* |
| Example: Implementation of a qualitative study with the help of student assistants as interviewers | | | | | | |
| *results are of low quality* | *untrained interviewers* | *project fail* | *low* | *very high* | *- train student assistants*  *- provide interview guidelines* | *- repeat interviews* |

Illustration 1: Different kinds of project risks (own illustration based on Schiersmann & Thiel 2000).

To identify the project risks, some simple questions have to be answered:

* What can possibly go wrong in the aforementioned areas?
* What could be potential root causes for the risk to arise? (To think about possible root causes can particularly be helpful to come up with precautions to avoid problems.)
* How likely is it that the risk will become a problem?
* If the problem arises, what would be the concrete damage?
* How severe would the impact be the problem has on the project? Will the provision of delivery be delayed (low impact) or will the whole project fail (high impact)?

## How can project risks be taken into consideration in the planning and implementation phase of a project?

The second step would be to think about a) possible precautions that could be taken to prevent the risk from becoming a problem or b) possible reactions to a problem, in case it arises. A so called risk-response-log can help a project team to think about project risks in the planning and implementation phases of a project:

## In a nutshell

* Good project planning is part of risk management and reduces the probability of risks becoming problems.
  + A risk analysis is best carried out on the basis of as much information as possible, i.e.
  + after stakeholder analysis,
  + after time-planning,
  + after (1st draft of) resource planning,
  + together with the project team (and other stakeholders).
* The task of the project manager and her/his team is to monitor risks before and after project start.
* Not all risks need to be monitored; not for all risks a response plan is needed.
* A positive attitude towards mistakes and an atmosphere without fear in the project team support risk management.

## Reference

Schiersmann, C. & Thiel, H.-U. (2000). Projektmanagement als organisationales Lernen, Opladen.

## Risk Response Log

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| --- | --- | --- | --- | --- | --- | --- |
| **Risk** | **Root Cause** | **Damage** | **Probability** | **Impact** | **Precaution** | **Response** |
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