

Project Risk Management

What are risks and who shoulders the most risks? Different jobs and the job holders carry different types and levels of risk. So do project managers, who manage different risks in projects with a systematic approach, which is known as project risk management.

What is risk?

Risk can be defined as potential for loss or injury, unwanted set of uncertain outcomes, or probability of not receiving what is expected or planned. When uncertainty is unfavorable to a project, it is considered a risk.

Risk management

The process systematically identifies, assesses and responds to risks to increase the opportunities for project success. The first step is to identify potential risks that may happen such as interest or exchange rate fluctuations, availability of resources, and change in regulations or political leadership. This is followed by an assessment of their probabilities and impacts on project objectives. A set of measures is then developed and implemented to remove or reduce the risks, followed by monitoring and control.

1. Risk management planning

When planning for a project, a risk management plan should be developed to identify who (roles and responsibilities), what (activities and actions to be done), when (timing), and how (tools, technologies and methods) for implementation. This plan serves as a road map and guideline for the project team to conduct risk management and is crucial for enhancing successful risk management as well as success of the project itself.

2. Risk identification

This step is to determine what risks may affect a project, eventually generating a risk registry, which is a table covering all the risks identified with their unique codes, sources and categories. For example, productivity risk can be triggered by labour fatigue or safety issues. In this case, fatigue or safety issues are categorised as a risk factor under productivity risk and a unique code can then be assigned.

3. Risk analysis

After potential risks have been identified and classified, their likelihoods and impacts should be analysed both qualitatively and quantitatively. The main purpose of the qualitative analysis is to first prioritise the more critical risks from among the risks identified. For this purpose, a number of experts can be invited to evaluate the likelihood and impact of each risk. The outcome from this analysis serves to narrow down the number of risks that the project team should focus on.

4. Risk mitigation

The essence of this step is to develop a set of options, responses and action plans to be taken when the risks identified become real or when their symptoms of occurrence are observed. Proactive preventive actions are to be taken before the risks are activated. On the other hand, reactive containment actions focus more on recovery and corrective actions.

5. Risk monitoring and control

This keeps track of and controls the risks identified and analysed. Through monitoring and control, new risks, which include residual and secondary risks, can also be identified and reflected correspondingly in the existing risk management plan. This marks the end of the first round and the start of the second round of the risk management process because risk management should be an iterative process to ensure continuing project success.



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