Managing single point of failure risks

Previously, you learned how to use various tools and strategies to identify and manage risks as you plan your project. In this reading, we will discuss how to manage risks with the highest potential of impacting your project.

Single point of failure risks

Once you have identified your risks and ranked them, give special attention to the risks that could have a catastrophic effect on your team's ability to complete the project. A **single point of failure** is a risk that, if it were to materialize, could cause a significant amount of disruption to your project and could even shut it down. You should plan for these risks early on in the project.

For example, a lot of projects use **subject matter experts** (**SMEs**)—team members with a deep understanding of a particular job, process, department, function, technology, machine, material, or type of equipment. SMEs are involved to advise you throughout the project life cycle. Having only one SME familiar with a critical system on your team is an example of a single point of failure risk. This SME will only offer one perspective, and if they are the only person advising on the system, there is no one to offer another perspective.

Case study: Using mitigation strategies to manage single point of failure risks

Let's imagine that Office Green uses plant seeds from a company in South America for the majority of its offerings. The plants produced by these seeds are in high demand by Office Green's customers. However, the local government on the suppliers' end just announced that it would be imposing a new tax on the exporting of seeds and produce. As a result, the price of the seeds suddenly becomes so high that it is difficult for the company to supply the seeds to Office Green, putting the project at risk of not having these seeds available to purchase.

Let's look at how these four risk mitigation strategies can be used for managing single point of failure risks in the Office Green example:

Four types of risk mitigation



Avoid

This strategy seeks to sidestep—or avoid—the situation as a whole. In the Office Green example, the team could avoid this risk entirely by considering using another seed that is widely available in several locations.

Minimize

Mitigating a risk involves trying to minimize the catastrophic effects that it could have on the project. The key to minimizing risk starts with realizing that the risk exists. That is why you will usually hear mitigation strategies referred to as *workarounds*. What if the Office Green team decided to use both the original South American supplier and another supplier from a neighboring country? More than likely, the change in taxation and regulation wouldn't affect both companies, and this would provide Office Green some flexibility without having to completely eliminate their preferred supplier.

Transfer

The strategy of transferring shifts the responsibility of handling the risk to someone else. The Office Green team could find a supplier in North America that uses the seeds from several other South American countries and purchase the seeds from them instead. This transfers the ownership of South American regulatory risks and costs to that supplier.

Accept

Lastly, you can accept the risk as the normal cost of doing business. **Active acceptance of risk** usually means setting aside extra funds to pay your way out of trouble. **Passive acceptance of risk** is the "do nothing" approach. While passive acceptance may be reasonable for smaller risks, it is not recommended for most single point of failure risks. It is also important to be proactive and mitigate risks ahead of time whenever possible, as this may save you from having to accept risks. In the Office Green scenario, the project manager could schedule a meeting with project stakeholders to discuss the increase in South American taxes and how it could impact the project cost. Then, they might decide to actively accept the risk by setting aside additional funds to source the seeds from another supplier, if necessary, or to passively accept the risk of not receiving the seeds at all this season.

Key takeaway

If you have strategies you can rely on for avoiding, minimizing, transferring, and accepting project risks—including single point of failure risks—you will be in a better position to protect your project from the possible impact of these risks.