

A Project Sponsor's Warp-Speed Guide: Improving project performance

Appendix H –Severe project risk situations

This appendix contains several lists of severe risks that will cause catastrophic project failure if one or more turn into reality. They are organized by high-level project risk categories. You can compare these severe risk statements to the contents of the risk register your team has prepared to help you confirm that your project risk register is reasonably complete.

The impact of these severe risks turning into reality is always the same. The project:

1. Schedule will elongate to the point where the organization's support evaporates.
2. Scope, typically functionality, will decrease to the point where the business case is no longer viable.
3. Cost will increase to the point where the organization can no longer afford the project.
4. Quality will decrease to the point where the deliverables are no longer acceptable.

Suppose a severe risk turns into reality or the number of looming threats becomes numerous. In that case, the project sponsor and the project manager should call for an immediate assessment of the risk situation. If a credible path forward cannot be determined, the project sponsor and the project manager should recommend the project's cancellation¹ to the project steering committee

¹ There is no benefit in dragging out this difficult decision. Letting a doomed project drag on wastes money and potentially ruins reputations for no value.

and the executive leadership team of the organization. A significant project restructuring can be considered if the project goal is sufficiently important.

This book discusses many topics that can lead to project success or failure depending on the actions taken by the project sponsor, the project manager, and the project team. In essence, all the topics discussed in the book are project risks. The many high-risk descriptions illustrate situations where project risks have turned into reality. The team can mitigate many of these risks with mitigation tasks. The example risks below provide another perspective on project risk by explicitly describing severe risks.

Time or schedule risks

Examples of severe time or schedule risks include:

1. Widespread inadequate, inaccurate or under-estimated effort estimates for project tasks.
2. A significant number of missing project deliverables or tasks.
3. A completely unrealistic imposed deadline.
4. Committing to an overly optimistic project completion date.
5. Not enough team capacity, and efforts to close the gap have failed.
6. Insufficient team skills and experience, and efforts to close the gap have failed.
7. Multiple resources, typically difficult to replace, are not available when needed.
8. Repeated staff turnover leading to onboarding and orientation effort that creates material delays.
9. Multiple vendor commitments that are unlikely to be met.
10. Changing project priorities that cause some completed deliverables to be abandoned and impact the project schedule.

11. Repeated client delays in approving deliverables.
12. Multiple procurement and legal processes elongate the project schedule.
13. Missing schedule allowance for effort underestimation in the project plan creates a significant shift in the project completion date.

Scope risks

Examples of severe scope risks include:

1. Multiple general, generic or vague scope statements.
2. Accurate but complex scope statements.
3. Significant parts of the scope will likely change due to requirements discovery or external events.
4. A growing project size, as measured by the number and size of unexpected deliverables beyond the scope statement in the project charter.
5. The inability of the team to understand and defend the project scope.
6. The failure of the project sponsor to defend the project scope.
7. Missing allowance for approved changes in the project plan that creates a material project cost overrun.

Cost risks

Examples of severe cost risks include:

1. Multiple inadequate, inaccurate or low-cost estimates for subcontracted project components.

2. Multiple cost overruns. Examples include inflation, supplier price increases, and exchange rate changes.
3. Insufficient funds to start or continue the project.
4. Insufficient funds to continue the project without adversely impacting quality or materially reducing scope.
5. Missing allowance for cost underestimation in the project plan that creates a material forecasted cost overrun.

Quality risks

Examples of severe quality risks include:

1. Schedule pressure on the team and subcontractors resulting in quality reductions.
2. Multiple uneven or incomplete design descriptions.
3. Multiple instances of inadequate testing of components.
4. Inadequate testing of component integration.
5. General, generic or vague quality definitions.
6. Failure of the prime contractor or major subcontractor to perform to the quality specification.
7. Repeated sloppy performance of QC and QA tasks.

External environment risks

Examples of severe risks arising from the external environment of the organization include:

1. Marketplace changes that invalidate the project goal or business case.
2. Competitor actions that invalidate the business case.

3. Government policy changes that eliminate or materially revise the initial requirements that led to the original project approval.
4. Failure of the prime contractor or major subcontractor to perform as contemplated. The reasons for failure include bankruptcy, merger, integrity lapses or legal disputes.
5. A rapid technology evolution that obsoletes the planned project approach.
6. Infrastructure failure. Examples include closed roads, electricity interruptions, natural gas interruptions, and lack of clean water.
7. Logistical and supply chain disruptions.
8. Theft of materials, intellectual property or equipment.
9. Acts of God and Force Majeure. Examples include earthquakes, government overthrow, and disease outbreaks.
10. Extended labour strikes or work stoppages at the contractor or significant subcontractors.

Internal organization risks

Examples of severe risks that are internal to the sponsoring organization include:

1. Significant political opposition to the project.
2. Resistance to process changes by departments and powerful individuals that creates project delays.
3. Significant infrastructure gaps. Examples include inadequate team facilities that undermine productivity, insufficient data center capacity and contention for manufacturing space.
4. The project's business case is deemed unjustified by an internal review.

5. Project sponsor resignation. A resignation will result in the appointment of a new project sponsor with different priorities and a different management style.
6. Low morale in the organization spills into the team to create a poor attitude that undermines productivity.
7. No prompt resolution of significant conflicts, typically related to project priorities and resource requirements.
8. A corporate takeover or amalgamation. This event will change the organization's priorities and culture.
9. Multiple project assumptions, documented during planning, that turn out wrong later. This situation materially revises the project cost, project schedule and undermines the business case.
10. A major departmental reorganization that affects the project's client or primary stakeholder. This event will affect departmental priorities.
11. Project sponsor inadequacy or negligence. This reality will impede project progress at a minimum and can easily lead to failure.
12. Project management incompetence, dishonesty or failure to recognize reality. This dysfunction will limit project progress and can easily lead to failure.

Technology risks

Examples of severe technology risks include:

1. Unanticipated complexity beyond the technical capability of the team.
2. New or unproven technology that is incomplete or inadequately tested.
3. Unavailability of required technology.

4. Significant technology problems impacting integration with other deliverables.
5. Unanticipated software/hardware interdependencies.
6. Unplanned schedule delays arising from software/hardware product releases must be implemented.