

Risk management plan



Figure 1. SEI Risk Process

- We have identified all the risks pertaining to our system. We plan to mitigate the risk based on its priority and dependency with respect to other risks. Each iteration our objective is to decrease the risks in the system. By reducing the risks in the system we intend to provide value to the customer. Risk management involves the following:
 - **Identify:** Risks pertaining to the system are identified based on the stakeholder interactions. Risks could be pertaining to the project, process and the people.
 - **Analyze:** Once the risks are identified, they have to be analyzed. Analyses would include the probability of the risk, the impact of the risk, classification, ranking the risk in terms of priority.
 - **Plan:** After the analysis is done, there has to be a plan on how to deal with each of the identified risks. Some of the ways to tackle the risk would be to bear possible consequences or identify mitigation strategies.
 - **Track:** We are tracking the risk to understand whether the effect of the actions taken, changes to the probabilities of the risk, whether there are any new risks that are identified.
 - **Control:** After planning and tracking of the risks are done we decide on how to proceed with the risks further. The risk could be closed if it is no more a risk. If we feel that the mitigation strategy is not working, we would replan the

risk again. If the risks mitigation is according to the plan, tracking would continue and execution of current plan will proceed further.

- **Communicate:** Communicate the risk status to the stakeholders after each cycle/iteration.

Risk Identification

<p>Cause:The team didn't accord with the customer regarding the scope of the project and success criteria.</p> <p>Consequence:The customer would have a different view of the scope of the project and milestones and might not be satisfied with the product that would be delivered</p>
<p>Cause:Team is inexperienced and identifying all the requirements are challenging.</p> <p>Consequence:Requirement defects would migrate into design and implementation causing rework, and cost and schedule impacts</p>
<p>Cause:The technologies that would be used for the project have not been identified.</p> <p>Consequence:Scope of the project might have to be changed in future as effort estimates would be inaccurate because for effort estimation, familiarity of the team members in the chosen technology is required</p>
<p>Cause:The team is not familiar with the chosen technologies.</p> <p>Consequence:There would be schedule slippages in the project.</p>
<p>Cause:Architectural is not complete</p> <p>Consequence:There would be schedule slippages in the project</p>
<p>Cause:Standard processes may not be suitable for the project.</p> <p>Consequence:Project schedule would be delayed</p>
<p>Cause:The team is new to process customization.</p> <p>Consequence:Project schedule would be delayed</p>
<p>Cause:The team would end by developing a product which is already available</p> <p>Consequence:Budget spent in developing the product would be of no value</p>
<p>Cause:Post Architectural estimates have not been done</p> <p>Consequence:There would be schedule slippages in the project</p>
<p>Cause:The team doesn't know whether the chosen connectors between various components are suitable for the product.</p>

Consequence: Schedule would slip because the system needs to be re-architected.
Cause: The team doesn't know whether the chosen technology is suitable for the product. Consequence: Schedule would slip because new technologies have to be identified and team should become familiar with them.
Cause: The system does not have the ability to manage project model and properties. Consequence: Success criteria of the project would not be met.
Cause: The system does not have the ability to manage traceability linkages. Consequence: Success criteria of the project would not be met.
Cause: The system does not have the ability to manage users Consequence: Success criteria of the project would not be met.
Cause: The system does not have the ability to view traceability linkages. Consequence: Success criteria of the project would not be met.
Cause: The system does not have the ability to generate reports based on traceability. Consequence: Success criteria of the project would not be met.

Risk Planning

RISK	MITIGATION
Cause: The team didn't accord with the customer regarding the scope of the project and success criteria. Consequence: The customer would have a different view of the scope of the project and milestones and might not be satisfied with the product that would be delivered	The team produces SOW and customer would sign it. So the scope of the project and success critical would be finalized.
Cause: Team is inexperienced and identifying all the requirements are challenging. Consequence: Requirement defects would migrate into design and implementation causing rework, and cost and schedule impacts.	Validate the requirements with the customer using prototyping techniques.Also, more time is allocated to understand the requirement process and capture all the correct requirements.

<p>Cause:The technologies that would be used for the project have not been identified.</p> <p>Consequence:Scope of the project might have to be changed in future as effort estimates would be inaccurate because for effort estimation, familiarity of the team members in the chosen technology is required</p>	<p>The team has to do detailed analyses of the possible technologies that would be used for the project and based on the project attributes shortlist technologies.</p>
<p>Cause:The team is not familiar with the chosen technologies.</p> <p>Consequence:There would be schedule slippages in the project.</p>	<p>The team could develop a sample application in the chosen technology</p>
<p>Cause:Architectural is not complete</p> <p>Consequence:There would be schedule slippages in the project</p>	<p>Once the architecture is stabilized, post architectural estimates have to be done</p>
<p>Cause:Process is not customized and standard processes may not be suitable for the project.</p> <p>Consequence:Project schedule would be delayed</p>	<p>The team has to identify and customize the process according to the project needs</p>
<p>Cause:The team is new to process customization.</p> <p>Consequence:Project schedule would be delayed</p>	<p>The team has to come up with reflection regarding what is working well and what is not working well. Based on the reflections, the process could be customized further</p>
<p>Cause:The team would end by developing a product which is already available</p> <p>Consequence:Budget spent in developing the product would be of no value</p>	<p>The team has to do the research about the available products and check if same product is already available</p>
<p>Cause:Post Architectural estimates have not been done</p> <p>Consequence:There would be schedule slippages in the project</p>	<p>Once the architecture is stabilized, post architectural estimates have to be done</p>
<p>Cause:The team doesn't know whether the chosen connectors between various components are suitable for the product.</p>	<p>Implement one scenario and checks whether the connectors fit well for the context and satisfy all the requirements and constraints.</p>

<p>Consequence: Schedule would slip because the system needs to be re-architected.</p>	
<p>Cause:The team doesn't know whether the chosen technology is suitable for the product.</p> <p>Consequence:Schedule would slip because new technologies have to been identified and team should become familiar with them.</p>	<p>The team would have to implement a sample application using the chosen technologies and verify whether the chosen technology is suitable for the product</p>
<p>Cause:The system does not have the ability to manage project model and properties.</p> <p>Consequence:Success criteria of the project would not be met.</p>	<p>The system would provide facility for the user to manage project model and properties.</p>
<p>Cause:The system does not have the ability to manage traceability linkages.</p> <p>Consequence: Success criteria of the project would not be met.</p>	<p>The system would provide facility for the user to manage traceability linkages</p>
<p>Cause:The system does not have the ability to manage users</p> <p>Consequence: Success criteria of the project would not be met.</p>	<p>The system would provide facility for managing users</p>
<p>Cause:The system does not have the ability to view traceability linkages.</p> <p>Consequence: Success criteria of the project would not be met.</p>	<p>The system would provide facility for the user to view traceability linkages</p>
<p>Cause:The system does not have the ability to generate reports based on traceability.</p> <p>Consequence: Success criteria of the project would not be met.</p>	<p>The system would provide facility for the user to generate reports based on traceability.</p>

Risk Monitoring and Risk Control

We are tracking the risk to understand whether the effect of the actions taken, changes to the probabilities of the risk, whether there are any new risks that are identified.

RISK	Status & Comments	Risk Mitigation
<p>Cause:The team didn't accord with the customer regarding the scope of the project and success criteria.</p> <p>Consequence:The customer would have a different view of the scope of the project and milestones and might not be satisfied with the product that would be delivered</p>	Closed. The mitigation strategy worked	The team produces SOW and customer would sign it. So the scope of the project and success critical would be finalized.
<p>Cause:Team is inexperienced and identifying all the requirements are challenging.</p> <p>Consequence:Requirement defects would migrate into design and implementation causing rework, and cost and schedule impacts.</p>	Closed. The mitigation strategy worked	Validate the requirements with the customer using prototyping techniques.Also, more time is allocated to understand the requirement process and capture all the correct requirements.
<p>Cause:The technologies that would be used for the project have not been identified.</p> <p>Consequence:Scope of the project might have to be changed in future as effort estimates would be inaccurate because for effort estimation, familiarity of the team members in the chosen technology is required</p>	Closed. The mitigation strategy worked	The team has to do detailed analyses of the possible technologies that would be used for the project and based on the project attributes shortlist technologies.
<p>Cause:The team is not familiar with the chosen technologies.</p> <p>Consequence:There would be schedule slippages in the project.</p>	Closed. The mitigation strategy worked	The team could develop a sample application in the chosen technology
<p>Cause:Architectural is not complete</p> <p>Consequence:There would be schedule slippages in the project</p>	Closed. The mitigation strategy worked	Once the architecture is stabilized, post architectural estimates have to be

		done
Cause: Process is not customized and standard processes may not be suitable for the project. Consequence: Project schedule would be delayed	Closed. The mitigation strategy worked	The team has to identify and customize the process according to the project needs
Cause: The team is new to process customization. Consequence: Project schedule would be delayed	Closed. The mitigation strategy worked	The team has to come up with reflection regarding what is working well and what is not working well. Based on the reflections, the process could be customized further
Cause: The team would end by developing a product which is already available Consequence: Budget spent in developing the product would be of no value	Closed. The mitigation strategy worked	The team has to do the research about the available products and check if same product is already available
Cause: Post Architectural estimates have not been done Consequence: There would be schedule slippages in the project	Closed. The mitigation strategy worked	Once the architecture is stabilized, post architectural estimates have to be done
Cause: The team doesn't know whether the chosen connectors between various components are suitable for the product. Consequence: Schedule would slip because the system needs to be re-architected.	Closed. The mitigation strategy worked	Implement one scenario and checks whether the connectors fit well for the context and satisfy all the requirements and constraints.
Cause: The team doesn't know whether the chosen technology is suitable for the product.	Closed. The mitigation strategy worked	The team would have to implement a sample application using the chosen

<p>Consequence:Schedule would slip because new technologies have to been identified and team should become familiar with them.</p>		technologies and verify whether the chosen technology is suitable for the product
<p>Cause:The system does not have the ability to manage project model and properties. Consequence:Success criteria of the project would not be met.</p>	Yet to be done. Mitigation strategy identified	The system would provide facility for the user to manage project model and properties.
<p>Cause:The system does not have the ability to manage traceability linkages. Consequence: Success criteria of the project would not be met.</p>	Yet to be done. Mitigation strategy identified	The system would provide facility for the user to manage traceability linkages
<p>Cause:The system does not have the ability to manage users Consequence: Success criteria of the project would not be met.</p>	Yet to be done. Mitigation strategy identified	The system would provide facility for managing users
<p>Cause:The system does not have the ability to view traceability linkages. Consequence: Success criteria of the project would not be met.</p>	Yet to be done. Mitigation strategy identified	The system would provide facility for the user to view traceability linkages
<p>Cause:The system does not have the ability to generate reports based on traceability. Consequence: Success criteria of the project would not be met.</p>	Yet to be done. Mitigation strategy identified	The system would provide facility for the user to generate reports based on traceability.