1. **Not enough time (30%)**

**Assumption:** In this project, the use of a new software has created risk and it threats to complet the project on time. The likelihood of not enough time is 30%.

1. **Risk Exposure** = Likelihood • Impact

= 30% \* $500k

= $150k

1. **Response plan**:

**Mitigation / transfer action(s):**

Send three core team members to take a interrelated training course and learn about this software. After finishing this course, they can teach the rest of the team. It will optimize the project and decrease risk. This education cost is $5k and the likelihood will decrease to 10%.

**Estimated response cost and revised exposure:**

Responese cost = mitigation cost = $5k

Revised exposure = initial exposure – mitigate exposure

= $150k – 10% \* $500k

= $150k – $50k

= $100k

**Statement of cost vs. benefit:**

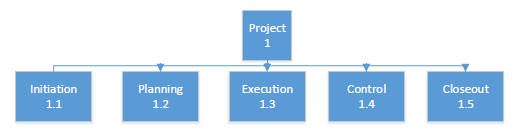
cost vs. benefit = $5k VS. $100k

Hence, it will be a good plan.

(3) **Monitor plan:** Although this project’ likelihood has decreased and become 10%, the risk still exits. To make sure to deliver the project on time, we should monitor the progress of the project and the resolution of the risk items, taking corrective action when necessary.

* 1. **Metrics collection:**

Track the application of the software during the process and check if it affect delivering the project on time or not. This means we should set up a WBS (work breadkdown structure) for this projec, break it down into many pieces in chronological sequence and build some milestones. Each milestone has a due date.



The project’s WBS

In the part of execution, we can break it down, build milestones:

1.3.1 project Kickoff meeting ;

1.3.2 verify & validate user requirements;

1.3.3 design (**Milestrone**: design plan approval; Time: 14 days);

1.3.4 come into product (**Milestrone**: product approval; Time: 7 days);

1.3.5 test (**Milestrone**: test approval; Time: 7 days);

1.3.6 install;

1.3.7 user training;

1.3.8 go live;

We should hold weekly status meetings and communicate with the team members to check these milestones. If this new software lead the project late, take a contingency plan.

* 1. **Contingency plan:**

We will add human resourses which include hiring a technical consultant to teach members how to use this software and adding two new members to catch up the progress. The cost of this consultant will be 10k and the cost of the new staff will be 20k.

1. **Insufficient funding (20%)**

**Assumption:** This project is designing a new product. Because of no comparable projects, we forget to add the cost for a new equipment and some test to the budget. The unrealistic budget has created risk and it threats to complet the project on time. The likelihood of insufficient funding is 20%.

1. **Risk Exposure** = Likelihood • Impact

= 20% \* $500k

= $100k

1. **Response plan:**
   1. **Mitigation / transfer action(s):**

Detail milestone cost and schedule estimation, design the cost and add budget $50k. Then, the likelihood will decrease to 5%.

* 1. **Estimated response cost and revised exposure:**

Responese cost = mitigation cost = $50k

Revised exposure = initial exposure – mitigate exposure

= $100k – 5% \* $500k

= $100k – $25k

= $75k

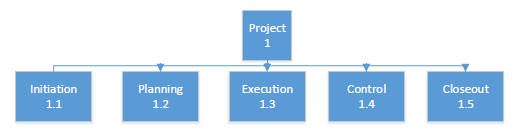
* 1. **Statement of cost vs. benefit:**

cost vs. benefit = $50k VS. $75k

Hence, it will be a good plan.

1. **Monitor plan:** Although this project’ likelihood has decreased and becomes 5%, the risk still exits.We still need to make a monitor plan.
2. **Metrics collection:**

Track the cost during the process. This means we should still set up a WBS for this projec, break it down into many pieces and build some milestones. Each milestone has a detail budget to compare the actual cost.



The project’s WBS

In the part of execution, we can break it down, build milestons:

1.3.1 project Kickoff meeting ;

1.3.2 verify & validate user requirements;

1.3.3 design (**Milestrone**: design plan approval; Budget: 50k);

1.3.4 come into product (**Milestrone**: product approval; Budget: 50k);

1.3.5 test (**Milestrone**: test approval; Budget: 20k);

1.3.6 install;

1.3.7 user training;

1.3.8 go live;

We should hold weekly status meetings and communicate with the team members to check these milestones. If cost is higher than budget in any milestone, take a contingency plan.

1. **Contingency plan:**

We will scrub some requirements to cut some budgets for testing.

1. **Insufficient effort (25%)**

**Assumption:** In this project, developing some wrong functions and properties created risk and it threats to complet the project on time. The likelihood of insufficient effort is 25%.

1. **Risk Exposure** = Likelihood • Impact

= 25% \* $500k

= $125k

1. **Response plan:**
   1. **Mitigation / transfer action(s):**

Reanalyze user’s requirements, formulate operations-concept and do more prototyping. This kind of cost will be 35k. Then, the likelihood will decrease to 5%.

* 1. **Estimated response cost and revised exposure:**

Responese cost = mitigation cost = $35k

Revised exposure = initial exposure – mitigate exposure

= $125k – 5% \* $500k

= $125k – $25k

= $100k

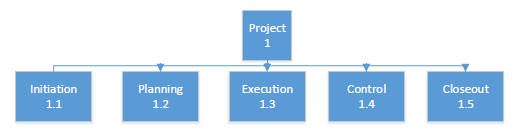
* 1. **Statement of cost vs. benefit:**

cost vs. benefit = $35k VS. $100k

Hence, it will be a good plan.

1. **Monitor plan:** Although this project’ likelihood has decreased and becomes 5%, the risk still exits.We still need to make a monitor plan.
   1. **Metrics collection:**

Track the effort during the process. This means we should still set up a WBS for this projec, break it down into many pieces and build some milestones. Each milestone has a list of use’s requirments to compare. If finish these reqirments, the effort will be 100%.



The project’s WBS

In the part of planning and excution, we can break them down, build milestons:

1.2 Planning

1.2.1 Create Preliminary Scope Statement;  
 1.2.2 Determine Project Team;  
 1.2.3 Project Team Kickoff Meeting;  
 1.2.4 Develop Project Plan;  
 1.2.5 Submit Project Plan

(**Milestone:** Project Plan Approval; Effort requirement: 100%);

1.3 Execution

1.3.1 project Kickoff meeting ;

1.3.2 verify & validate user requirements;

1.3.3 design

(**Milestrone**: design plan approval; Effort requirement: 100%);

1.3.4 come into product

(**Milestrone**: product approval; Effort requirement: 100%);

1.3.5 test (**Milestrone**: test approval; Effort requirement: 100%);

1.3.6 install;

1.3.7 user training;

1.3.8 go live;

We should hold weekly status meetings and communicate with the team members to check these milestones. If the effort is not 100%, take a contingency plan.

* 1. **Contingency plan:**

We will invite user to attend the meeting and confirm the requirments. Then add new staff to finish the missing parts.