

Course Project – Final Analysis

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The overall objective of this project is for SacTactical to develop, manufacture, and deliver 200 military grade Backpacks with built in refrigerated pouch and radio module for the U.S. Army, Ground Forces and Special Operations. Within the allocated resources budget of \$1.5 million dollars and processing timeline within 18 months to deliver final product. The U.S. Army, Ground Forces and Special Operations. We have run into a few issues in the initial phase of research and development and design. Please see the analysis below. It is of vital importance the team review this analysis to facilitate the course of action

Issue 1: It has been discovered that the refrigerator module developed by our research and development team is too large for the refrigerator backpack pouch. I am counting on the research and development team to work with the material design team to see if this refrigerator model will meet the specifications of the client and if it is more feasible to redesign the backpack to facilitate the size as opposed to redesigning a complete new refrigerator module. I assume the re-design of this module will take more resources and time, but I need definitive answer to this from both teams. I also would like estimates from the material design team on a new re-design, resources, document planning, and scheduling to facilitate the change difference.

Luckily only enough fabric to implement the initial prototype designs was ordered. We will need to reevaluate the refrigerator model and the material design then have a meeting by weeks end to discuss these possible changes, meet to implicate a final solution, and facilitate a sound design.

Therefore, we are going to have to tap into our 10% Reserve funds allocated by from \$1,500,000 awarded by the US Army. I have advised management to plan and reschedule work efforts accordingly. first, we will need to postpone any material orders until we can reevaluate a new design

plan. We will need management and R&D to design new mockups of the radio module for the material design team. We will need an estimate from the design team for the new prototype production. And project management will handle talking to the shareholders advising them of this issue. Due to the nature of our first payment of the contract being delayed for 3 months. We still have plenty of time to re-associate a new design and prepare for the initial program review. I suggest all departments discuss which resources they will need and how much time they realistically estimate. We will meet at the end of the week on Friday to go over the new analysis.

Issue 2: Unfortunately, the subcontractors assigned to build the radio module for the backpack have permanently shut down and are no longer in business. Given the time constraints in the financial constraints, we are going to have to think outside of the box on this one. I will need research and development to take 3 team members and allocate overtime resources as 2 project leaders and a project engineer. 2 team members will need to search for new vendors that qualify in military-spec radio equipment design. I will need these project leaders to contact and get estimates of 150 units that meet the specifications and price points outlined in the scope of the project budget. I expect the project leaders to get at least 10 estimate proposal in 2 weeks to compare. They will also need to make changes in document control by creating a new branch to track correspondence.

Furthermore, I would like to have an estimate of what it would cost SacTactical to develop these modules in-house to compare with the estimated proposals. I would like one of the project Engineers for research development to put together a proposal of cost, equipment, resources, and an estimated time(man-hours).

This will allow us to compare which possibility is more feasible and productive for SacTactical to pursue. With this data, we can evaluate a new critical path to determine the potential time and cost

impacts. Also, with this, we can follow a new plan of reassociation to build a new working schedule and compare it to the current milestone. Any alterations in the milestone deadline will have to be brought to the stakeholders and we will need to calculate the amount of slack for the proponent of the project.

Areas affected by these unexpected events:

- **Impact to project plan:** The overall plan will be re-adjusted based on the approximation of changes to the project plan. Finding and new adjustments will be worked in to effectively change the plan while meeting the requirements.
- **Changes to product design** the product will need to be re-designed. Calculations and planning will have to be adjusted and tested to facilitate specifications and standards of the client the US Army.
- **Changes to project budget:** These changes will have impact on budget, as we may be required to have higher budget for allocating cost of resources, time, and equipment associated with the project plan. The resources with cover these changes will have to be pulled out of the 10% reserve of the contract amount.
- **Changes to human capital:** The Human capital will not meet the specifications of the client's project. The radio module is a key requirement and that will affect the projects implementation.
- **Changes to project schedule:** These issues will have impact on the schedule due to the reallocations of planning and calculating critical paths to facilitate project change designs.

