
CASE 1

QUESTION 1

Festival

In a city in Norway, some investors (project owners) are planning a new music festival with both indoor and outdoor concerts. They have rented a location for the festival, but it is close to houses, apartment blocks, a kindergarten, and an old people's home. The festival will take place over three days from Friday to Sunday at the beginning of August. The festival has a budget of NOK 15 million and the investors expect a profit of NOK 1 million. Peter is hired as project manager and will work 100% with the festival until it is finished. In addition, Peter has five employees who will work part-time with the festival. However much of the effort is based on contributions from volunteers, such as volunteer groups from local football clubs. While local suppliers of food and drink will be paid after the event is over. The municipality will not sponsor anything, but the investors expect to find others to sponsor the festival. The project is challenging, and the investors have said they want to undertake detailed monitoring of the project. Peter must deliver detailed progress reports every week to the investors. The investors have also claimed that all plans must be approved by them.

Make necessary assumptions if you feel like some information is missing.

- a) Explain the difference between a project's goal and purpose. What is the goal and purpose for this project? Discuss and argue why it is important to have a clear and well understood project goal.
- b) Identify 4 stakeholders to the project and perform a stakeholder analysis. Select one stakeholder and discuss 4 ways the project manager can develop trust with this stakeholder. Discuss briefly why trust is important between the project and the stakeholders.
- c) Discuss the project owner's role and responsibility in this project. Discuss 3 effects if the project owner interferes in the management of the project.
- d) Explain 3 different reasons why budget overruns occur in projects. The project owner is concerned about budget overruns in this project. Discuss how to prevent or avoid a budget overrun.
- e) What qualities should Peter have as the leader of the project? Discuss how Peter can create motivation and commitment among the project personnel.
- f) Develop a milestone plan consisting of 6 good milestones for this project. Develop a milestone responsibility chart using the 6 milestones and 5 involved actors where you apply the most common types of responsibilities/roles. Discuss briefly why the use of a responsibility chart can be advantageous to the project.

QUESTION 2

The following information is given for a project:

| Activity | Predecessor | Duration (days) | Workers needed each day |
|----------|-------------|-----------------|-------------------------|
| A | - | 4 | 5 |
| B | A | 4 | 4 |
| C | A | 2 | 2 |
| D | B, C | 4 | 1 |
| E | C | 2 | 3 |
| F | C | 4 | 2 |
| G | D, E, F | 3 | 3 |

- Draw the network. How long will it take to complete the project? Identify the critical activities and critical line(s)/path(s). Which activities have slack (float), and how much?
- Develop a Gantt-chart and a resource table for the project where the activities start as early as possible. Mark the critical activities in the Gantt-chart. In the resource table summarize how many workers are needed each day.
- Assume that the project has access to maximum 6 workers each day. How will this resource limitation affect the project's schedule?
- Disregard the information in question c). Assume the project's duration needs to be crashed/reduced by 3 days, but with the lowest costs possible. Activity A can be reduced by 1 day and it will cost 8000. Activity B can be reduced by maximum 2 days and each day will cost 4500. Activity D can be reduced by 1 day and it will cost 2500. Activity F can be reduced by 1 day and it will cost 3000. What is the new duration? Which activities will you crash/reduce and by how many days? Argue why. How much will this minimum cost? Find the critical path(s)/line(s) after the crashing.
- Disregard the information in questions c) and d). Assume that each worker costs 1000 each day. Develop a table where you summarize the total costs each day and calculate accumulated costs each day. What is the total planned cost for the project (the total budget)?
- The project is followed-up and controlled after 7 days. Then the following information is collected:

| Activity | % completed | Actual costs |
|-----------------|--------------------|---------------------|
| A | 100% | 20000 |
| B | 80% | 14000 |
| C | 100% | 4000 |
| D | 0 | 0 |
| E | 40% | 3000 |
| F | 30% | 2000 |
| G | 0 | 0 |

Find/calculate PC, AC, EV, CV, BV, SV, CPI, SPI, ECAC, and ETAC after 7 days.
 Discuss the development and status of the project after 7 days.