
CASE 5

QUESTION 1

Office

Office is a Norwegian firm that develops, manufactures, markets and distributes office furniture. Their products mainly include chairs, tables, writing pads, bookshelves, cabinets and lamps. The products are offered primarily in the Nordic market, but in recent years there has also been a demand from customers in the European and American markets. At the same time, competition has become tougher, primarily from foreign competitors. For this reason, the company has been through several processes to become more cost effective. Since the Office was established in the 1960s, there has been a major development in the products that the firm offers. In addition to various trends from time to time, the products have become more flexible and adjustable. In recent years they have specialized in offering highly ergonomic products.

In August, the Board of Office decided to initiate the development of an office chair with new ergonomic solutions. The project started in September this year and the Board decided September 30, next year as a deadline for completion. Project Manager is Karen, and in her project, she has four full-time employees - Peter, a physiotherapist, Anne who has design and form as her specialization, William, an engineer and technical specialist, and Ben, the creative idea generator. It has been decided that the development should follow the Agile PM/Scrum method. That is, developments will take place in sprints; initially solutions on the drawing board, later as physical models. Within the deadline, the team will have developed a complete prototype of an office chair that can be put into production. The Board of the Office has stated that they are confident that project manager Karen and her team are capable of developing a new best-selling office chair that they expect will improve company earnings by 5%.

- a) Describe briefly what a mandate is and what it should include. What is the purpose and goal for this project? Discuss the role and importance of a clearly defined and understood project goal.
- b) The project team has chosen to work according to the Agile PM/Scrum method. Explain what this method is about. Discuss what benefits this method gives.
- c) Project manager Karen will start a stakeholder management process. Describe briefly the several stages of the stakeholder management process. Identify four (4) stakeholders and perform a stakeholder analysis of these four. Suppose a stakeholder suddenly becomes strongly negative to the project, what would you recommend Karen to do to handle such a stakeholder?
- d) Discuss three (3) things project manager Karen should emphasize to make the project a success.
- e) In the course literature, several internal team structures are presented. Describe the one you think will be mostly applied in this project and argue why. Discuss also the advantages and disadvantages of this team structure.

- f) Discuss what project control is and why it is important. Describe briefly five (5) control factors/criteria that should be reported on. Suppose project manager Karen realizes that it is not possible to finish the project according to the completion date, what are the possible alternatives she can implement?

QUESTION 2

The following information is given for a project:

Activity	Predecessor	Duration (weeks)
A	-	3
B	A	4
C	A	3
D	B	5
E	B; C	4
G	D	4
H	E	4

- a) Develop a network (plan) for the project. When is the project finished, what is the critical line (path) and slack? Explain what a critical activity is. Explain also what slack is.
- b) Create a Gantt-diagram for the project assuming that each activity starts as late as possible. Mark the critical activities.
- c) The client wishes to reduce (crash) the total project duration with three (3) weeks. Information about activities that can be reduced is given in the table below. Which activities will you reduce (crash)? Explain your answer. How much will this acceleration of the project cost a minimum. Find critical path(s) and activities with slack after the acceleration of the plan.

Activity	Normal time	Crash time	Normal cost	Crash cost
A	3	2	20.000	40.000
B	4	2	35.000	50.000
C	3	2	25.000	45.000
D	5	3	40.000	50.000
E	4	2	15.000	35.000
H	4	3	30.000	45.000

QUESTION 3

A project has the following work-packages, schedule and budgeted. Assume that costs are linear for each work-package.

Work-package	Months												Budget
	1	2	3	4	5	6	7	8	9	10	11	12	
Start-up	■												100
Design		■	■	■									450
Development					■	■	■	■					800
Tests									■	■			300
Implement											■	■	200

The project is being cost controlled after 8 months. Then 25% of the development work remains. Actual costs are 1400.

- Summarize the total costs for each month and calculate the accumulated costs. What is the total planned costs for this project (the budget)?
- What is EV, AC and PC after 8 months?
- What is CV, BV and SV after 8 months? Describe the project's status after 8 months.
- How much work remains after 8 months? Calculate CPI, SPI, and new ECAC and ETAC. What is the crucial assumption this calculation of new total cost and duration is based on?
- What must CPI be during the rest of the project to not exceed the original budget?