
CASE 7

QUESTION 1

ZIZAX is a production company specializing in the supply of specialized paint products to the maritime industry. The company is structured into distinct departments, including product development, production, sales, finance, IT, and HR. Currently employing 80 individuals, ZIZAX achieved a turnover of 90 million NOK last year, accompanied by a profit margin of approximately 10%. Over the past few months, the organization has been strategically planning a project aimed at developing an advanced IT solution to streamline and enhance internal workflows. The overarching objective is to bolster annual profitability by 20% through the reduction of administrative costs and the implementation of more effective marketing strategies.

ZIZAX's aspiration is to create a cutting-edge technological solution that is equally adaptable and customizable to accommodate evolving needs. The task of crafting the solution's specifications has been entrusted to the company's IT department, although participation from all departments is envisaged. The specification will encompass functional requirements, integration with other systems, as well as projected timeframes and cost estimates. The subsequent development and integration efforts will be contracted to an external supplier, selected through a competitive tendering process.

- a) Explain what a mandate is and what a mandate usually contains? Develop a mandate for the project with emphasis on the formulation of the project name, purpose (outcome) and goals (objectives) for the project.
- b) Identify four (4) stakeholders of the project and perform a stakeholder analysis of these four. Explain what we mean by stakeholders, and why stakeholder analysis is important in projects. Discuss also briefly what the project can do to strengthen the trust of the stakeholders?
- c) What characterizes a milestone? Create a milestone plan consisting of five (5) milestones for this project. Why is it appropriate to start with a milestone plan and then create an activity plan?
- d) ZIZAX must choose a project manager for the project. Discuss what qualities should be emphasized when choosing the project manager. Managing such a project can be challenging. Discuss some of the project manager's pitfalls that can occur on the road to a successful project.
- e) Discuss how the project should be tied to the base organization (external organizational structure). Draw an illustration showing the structure. What are the main advantages and disadvantages of using the suggested organizational structure?

QUESTION 2

The following information is given for a project. The work includes activity A-I.

Act.	Predecessor	Duration (days)	Resources
A	None	4	Smith
B	A	2	Smith
C	A	4	Ross
D	A	3	Jones
E	B	5	Smith
F	B, C	3	Ross
G	D	3	Jones
H	E, F	5	Smith
I	C, G	5	Jones

- Draw the network. How long will it take to complete the project? Identify the critical activities and the critical line(s)/path(s). Which activities have slack (float) and how much?
- Develop a Gantt-chart for the project where the activities start at the Latest start. Mark the critical activities.
- The client wishes to reduce (crash) the total project duration by four (4) days. The following information is given:

Activities that can be reduced (crashed)	A	C	D	G	H	I
Normal time	4	4	3	3	5	5
Crash time	3	3	2	2	2	4
Normal cost	18 000	20 000	12 000	12 000	15 000	5 000
Crash cost	24 000	30 000	20 000	15 000	30 000	10 000

How much will this minimum cost? Find critical path(s) and activities with slack.

- Disregard the information in question c). After 10 days Mr. Jones gets ill. Mrs. Ross claims that she can do Mr. Jones work on the project. What are the consequences of this regarding project duration and critical activities?

QUESTION 3

A project consists of activity A to F and has the following budget.

Activity	Budget	Week							
		1	2	3	4	5	6	7	8
A	500	100	300	100					
B	400		200	200					
C	1400		400	600	400				
D	1700			200	800	400	300		
E	1300					700	300	300	
F	600							300	300

- Discuss the purpose of project control, how it can be done and important control factors that need to be followed-up.
- Summarize the total cost for each week and calculate the accumulated cost. What is the total planned cost for this project (the budget)?
- The project is followed-up after week 3. Then activity A is 100% completed, activity B 80% completed, for activity C 60% work remains, while activity D is 10% completed. Actual cost is 2000. Calculate the following after 3 weeks: PC, EV, CV, BV, SV, CPI, SPI, ECAC, and ETAC. Evaluate the project's development.