

Exercise 8: IT-based network planning

Motivation of the exercise

Planning in classic project management is an essential technique that is also used in other project management approaches. Therefore, mastering this technique is the basis for further understanding.

Aim of the exercise

In this exercise, you will learn how to structure a small project and plan it with project management software.

Task 1

You want to paint a room. Since you've done something like this before, you know that it makes sense to mask the windows and doors first and only then start painting. Of course, the pictures have to be taken down beforehand. While you're at it, you can also clean the pictures and then hang them up again when the walls have dried. In the end, of course, the masking of windows and doors has to be removed again.

Luckily, you can afford not to work yourself this time. You hired Toni and Susi for this. Both receive € 40 per hour, overtime (for more than 8 hours per day) costs 50% more. When it comes to colour, you have slammed € 1 per litre of standard white for a cheap offer. Of course, you will also need a paint roller.

- Estimate the duration of the tasks and the required quantities of resources, determine dependencies between the tasks and enter everything into a project management software MS Project.
- Create a network diagram and a Gantt chart.
- Create a resource deployment plan and resource overview.
- Create a cost summary plan with the projected total cost of the project.
- Make a list of activities planned for Toni and Susi.
- Create a monitoring plan for the ongoing activities.

Task 2

"This is an important project, Maria," Jonathan said seriously, "we have the kick-off meeting on July 1st and we have to finish by September." "What exactly do we have to do?" asked Maria, already knowing that this project would once again weigh on her shoulders. She had already heard rumours that it was going to be a small database application for managing wines. "We will develop a small database for Paulos Vinothek that will record and evaluate all wines and their growing regions." "Well, it won't be that difficult," said Lenny, who, as a programming freak, preferred to hack lines of code rather than deal with what he considered to be pointless specifications and endless meeting minutes. "Nevertheless, we have to comply with our quality guidelines," replied Maria, known for her strong management sense and penchant for documentation. "Oh dear, again goal-setting meeting with the client, protocol, send protocol, another conversation, another protocol, another coordination meeting, create specifications - coordination meeting - protocol ..." Lenny etched. "If I calculate even an optimistic 5 working days for each cycle, I already know that we won't be finished!"

"How about we do it in parallel this time," Jonathan suggested. "We do the kick-off, then of course the protocol, but then, after an internal meeting, Lenny starts developing a prototype, while Maria works out the specifications and refines them weekly in a jour-fixe with the client. Then she can take Lenny's prototype with her every time and show it off. Lenny can then refine it weekly with the client's ideas. After 4 meetings, we should actually be ready for the application. From then on, Maria can write the user manual."

"Yes, I'm happy to do that," Maria said, "I've never needed more than two weeks for the user manual anyway. But I can't finish it completely until we've tested it." "Then let's take Martin for testing again," Lenny suggested, "I can work great with him." "But Martin is on vacation for the first two weeks of August," Jonathan explained. "All the same. Dear Martin and just after the holiday than someone else. I'm sure it will give me such a detailed test report in three days that I only need 8 days to fix it," Lenny argued.

"All right," Jonathan said, "but don't forget, starting in the last week of August, I need you for at least half of your time on the web portal project. Maria, please make me a project plan and, based on this, an approximate calculation of what we will have in-house for this. You know our standard rates: planning and analysis €50, development and implementation €40 and testing €20 per hour."

Support Maria with a project plan in MS Project that records the project described. Also carry out the capacity balancing and show Maria what the project costs in total.