

Project Case Study:

Digital Transformation Project

The students are expected to plan and prepare a typical digital transformation project. The presentation of the planning results should be considered as an example of a project kick-off presentation or a customer presentation before the project starts. The goal is to convince the project sponsor or a customer that the project is feasible, well-planned and leading to the desired outcomes and ultimately to the result of a successful digital transformation in a certain area.

Digital Transformation Projects:

Digital Transformation (DT) projects are not an exactly defined project type but cover a very wide scope, depending on the domain where the digital transformation is done, e.g. in construction (BIM or VDC projects), IT projects (e.g. introduction of a new ERP system), eCommerce (e.g. launching a new merchandising platform), product development (e.g. an software or a digital gadget), business process automation, or developing a new digital business model (or an startup). This variety cannot be covered with a general way of defining and planning DT projects. Nevertheless, some aspects are common and methods can be selected from a portfolio of DT methods, processes and tools. This includes:

- Analysis of an As-Is-Situation which should be digitally transformed by introducing digital technologies or digitalized processes and methods. If an existing as-is-situation is to be transformed, use cases, scenarios and process descriptions might be tools for describing it.
- Definition of a To-Be-Situation is another very relevant aspect. A DT project is still a project with a defined goal, start and end date. It is therefore only a step in a more general and continuous transformation process. This requires a definition of the step that this particular project is intended to take. Scenarios, use cases, business models etc. might be useful to describe the to-be-situation.
- Usually, aspects like a business case (defining the feasibility of the project from a financial point of view), a business model, or a marketing plan help to describe the business view on the transformation. Business Model Canvas is a common to visualize the business view.
- A DT project is usually also a change project and a change management plan has to be described.
- The people view is relevant which includes not only the formation of the DT project team but also aspects like the competences of the target audience, e.g. including a training concept.
- If organisations are digitally transformed, the goal is to achieve a higher digital maturity level. Maturity and capability models help to describe the move from one maturity level to the next.
- The sustainability of a DT project is another major aspect since many transformation projects do not achieve the intended impact. Sustainable project management is a relevant topic in this field.
- For most DT projects, technology assessment, selection and the description of a technology stack or a technology chain are relevant. Also, the modelling of the to-be information supply chain or digital ecosystem is helpful.
- Finally, the project execution needs to be planned, including the definition of tasks or work packages, the selection of a project management model (e.g. V model, iterative, agile, hybrid) and the definition of the respective (IT-)tools, methods, roles and processes.

Students are expected to tailor theses aspect to the respective DT project type and case study. The results should be summarized in a project kick-off presentation, e.g. a powerpoint presentation.

~~The development of the DT project kick-off presentation should be performed as an agile project, too, using Scrum, Atlassian Jira and Confluence (use the free licenses available on the web page).~~

The DT project should be planned with the help of Digital Transformation Maturity Models (DTMM).

Planning a DT project with maturity models:

As a starting point, please read the paper “guideline_DTP_with_DTMM_v001”.

As the paper describes, you need to conduct the following steps (see step 1-7 in the guideline):

- Assess the type of DT project: please use the taxonomy provided with the material (“Taxonomy Table Application Guide for Case Studies”) as a starting point. Depending on the type of DT project, do further reading in the scientific literature. Please describe the relevant characteristics of your DT project.
- Assess the DT journey and select one or more relevant maturity models. Use the scientific literature to read about maturity models and justify why you select a specific maturity model. You can use the document “DTMMs_v3” to find an overview of maturity models. One model is provided (PwC model) and should fit well to the task.
- Assess the case study with the help of the maturity models: define as-is and to-be, derive the objectives of the DT project
- Select the methods, tools and processes for the DT project => justify with your assessment results

Project Cases:

The DT projects should be conducted on realistic DT cases and scenarios. For this purpose, a real DT project case is provided in the document “UNITY_FOM - Case Description ProDiT”. Please use this case study and plan a DT project for the transformation required in this case.

Prepare a presentation for the final project review of maximum 5 minutes including e.g. a powerpoint presentation. The review is directly followed by a 5 min discussion.

In addition to the materials provided in the web folder, you are expected to search for material and literature by yourself. The cases are not exactly defined, so your creativity is necessary to (reasonably) invent the relevant facts, aspects and constrained.

Team setup:

You should form teams of 2-3 students and you should split the work amongst you.

Evaluation & Retrospective:

One part of your presentation should be a reflection and team retrospective on the usability and helpfulness of the guideline, the taxonomy and the maturity models. In addition, you will need to fill an online questionnaire.