

Case Study Alignment of Business and IT

Objective

The objective of this work is to create a case study that describes part of an enterprise architecture of a company or an organisation for the alignment of business and IT. Thereby you will gain experience in the application of the methods and techniques that we deal with in the lecture. The case study should provide a coherent and consistent description of (part of) an enterprise covering several views.

Parameters

The enterprise architecture to be developed within the case study is for the model company Swiss Bikes. In the following the term “enterprise” is used synonym for the Swiss Bikes.

Scenario

The case study shall be in the context of a transformation project. This is a usual way enterprise architectures are developed and adapted. Typical projects are the re-organization of the company, the re-engineering of a business process, the implementation or migration of an information system. A focus for the project is on the digitalisation of a business process with alignment of business and IT.

Group Formation

The work has to be done together by 2 students. An individual work is possible, too

Modeling

You can use any modelling tool or combination of tools which allows to model ArchiMate, Business Processes and UML..

Overview of the Case Study

The case study follows a step-by-step approach. The first steps deal with the modelling of the as-is situation. The students should apply the modelling techniques to a concrete but simplified real scenario. Later the enterprise architecture is used in the aforementioned business transformation scenario, where the objectives of the transformation and the to-be situation are modelled.

Here is a description of the steps:

1. In the first part of the case study you make the business model canvas. Focus on the core business, i.e. the production and distribution of standard and customized bikes.
2. The as-is situation is modeled with a focus on the business and application layer.
 - a. In a general overview the relevant part of the enterprise is to be modeled according to the business and application layer of ArchiMate. Model the layer view of ArchiMate of the core business (production and distribution of standard and customized bikes) containing the services, processes, roles, actors, business objects, application components, IT systems etc that are relevant for the core process(es).
 - b. A model of the sales process of serial bikes and customized bikes is created. In addition the relations of the process to its context are modeled. In particular the following models are expected: The organization model, a data/document model of the data objects and documents used in the process models. For the data/document model you can use UML class diagram.
3. The third and final part deals with the transformation project
 - a. The business transformation should go into the digitalisation of the business. It can either go into online sales or in a more sophisticated production of individual bikes - or a combination of both. Influencers could be a change in behaviour of the customer (online shopping, availability of information, technologies for measuring/scanning the body of people, new design methods, new production like 3D printing, ...).
 - b. Make a business motivation model which should allow answering questions like:
 - i. Why do we need the change? For this you need to model the internal and external drivers/influencers and assessments in form of strengths, weaknesses, opportunities and threats.
 - ii. What are the goals of the change? The goals and outcomes as well as principles are modeled to answer this question.
 - iii. How can we achieve these goals? Here you can model the Course of Action and also Principles or Requirements. And Capabilities and Resources.
 - c. Make the target model.
 - i. Make changes of the Archimate architecture model with services, processes, roles, applications and infrastructure.
 - ii. Create the new or adapt the existing business process(es), organization and data which are affected by the change. If for a model no change is necessary, please mention it.

