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

We recommend to use the ArchiMetric Enterprise Architecture Modeling Tool. We provide a licence for it. You can also use any other EA Modelling tools which allows to model ArchiMate, Business Motivation and Business Processes.

Feedback and Grading

The development of the enterprise architecture is divided into different parts – following the progress of the lectures. There will be milestones at which each group has to submit the intermediate result. The lecturers will give feedback and suggestions for improvement.

Only the final report is graded. Intermediate reports are not graded. The feedback is intended as hints for learning and improving the work.

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]:

1. In the first part of the case study 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 containing the services, processes, roles, actors, business objects, applications, IT systems etc that are relevant for the identified core process(es). Focus on the core process, i.e. the production and distribution of the bikes, both customized and individual.
    b. Consider the Business Motivation Model of SwissBikes. It should allow answering questions like: Why do we offer these services/products? What are the goals of the business unit? Why do we have these goals? Therefore the business motivation model includes the internal and external Influencers as well as their assessments in form of strengths, weaknesses, opportunities and threats. Then the Vision and the Desired Results (Goals and Objectives) are derived as well as the Courses of Action (Strategy and Tactics) which are means that channel efforts towards these ends.
2. The second part deals with the as-is business model
    a. 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 (organization structure and interactions), a data/document model of the data objects and documents used in the process models, and an IT systems model with applications and infrastructure. A product model shall be made if the product is composed of subcomponents. The product model shows the bikes and its component, it can be modeled using a 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. You should extend and adapt the beforehand developed enterprise architecture in order to cover all elements from the business and IT perspective that are relevant for the transformation project.
    c. Adapt the new or adapted business process(es). Model the new organisation, data, product, applications and IT infrastructure that are affected by your project and relate them to the business process. If for a model no change is necessary, please mention it.

[1] Subject to changes depending on the progress of the teaching.